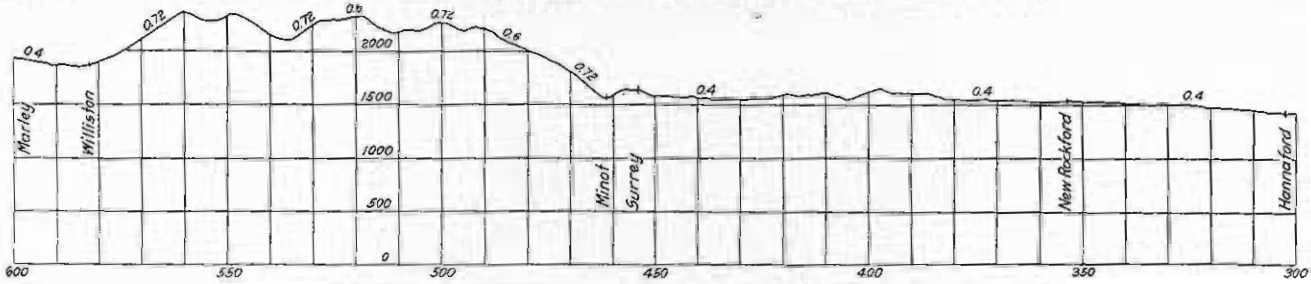


\$165,000 spent for land for transportation purposes. During the year \$1,062,000 was spent for new equipment, and equipment having a cost of \$713,000 was retired. A \$646,000 issue of Mis-

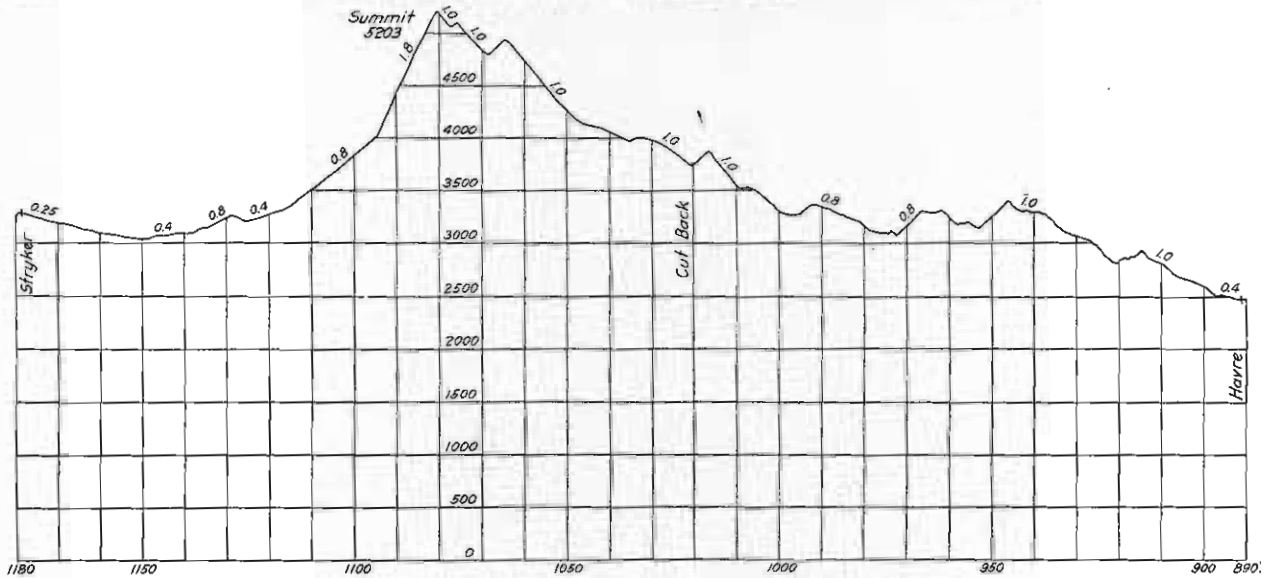
Kansas & Texas on September 26 have been discussed previously in these columns. The annual report which has been issued emphasizes the point which was made in that discussion, namely,



Profile of Great Northern Low Grade Line from St. Paul to Seattle

souri, Kansas & Texas, of Texas equipment trust 5 per cent notes was sold, and various issues of notes and bonds were retired or

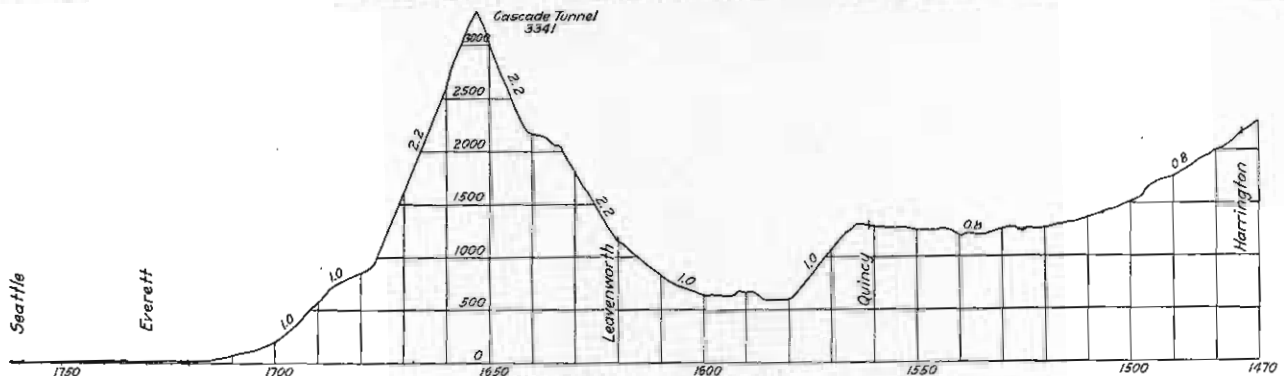
that the receivership was not because the results of operation of the property were bad, but because of special circumstances



Profile of Great Northern Low Grade Line from St. Paul to Seattle

bought for the sinking fund, making a net decrease in the outstanding funded debt of \$379,000. On June 30 there was a total

beyond the control of the management. The Missouri, Kansas & Texas is working its problems out. Its revenue freight train-



Profile of Great Northern Low Grade Line from St. Paul to Seattle

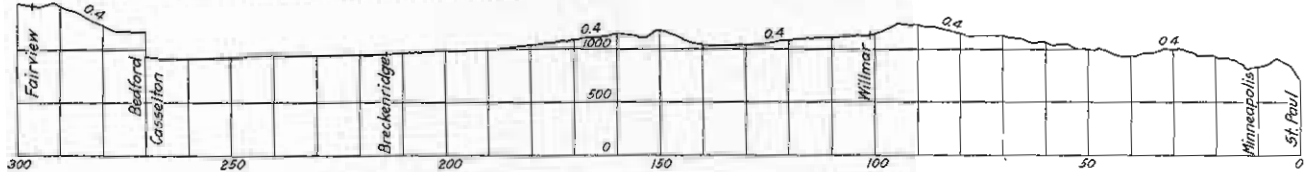
of \$1,039,000 cash, which included \$497,000 cash deposited to pay interest, and there was \$2,810,000 loans and bills payable. After paying expenses, taxes, rentals and all interest charges, the Missouri, Kansas & Texas had a net income available for dividends of \$1,475,000, an increase as compared with the previous year of \$936,000. No dividends were paid and this amount was carried to the credit of profit and loss.

The causes which led up to the receivership of the Missouri, Kansas & Texas load was uneconomically low. It has been increased by 38 per cent since 1911. Its relations with Texas have been friendly where they were previously hostile. The company has secured strong banking support, and what is now essential is that it should get a square deal from the state railroad commissions and state legislatures.

The following table shows the principal figures for operation in 1915 as compared with 1914:

	1915	1914
Average mileage operated.....	3,865	3,825
Freight revenue	\$22,397,364	\$20,228,337
Passenger revenue	8,096,063	9,105,242
Total operating revenues.....	32,898,759	31,917,924
Maintenance of way and structures.....	4,592,567	4,574,726
Maintenance of equipment.....	4,379,464	3,934,119
Traffic expenses	657,215	737,766
Transportation expenses	12,089,328	12,408,688
Miscellaneous expenses	267,515	504,713
General expenses	1,037,434	1,217,009

against which no securities have been issued. In 1915 apparently the Great Northern was under no necessity of making an uneconomically drastic cut in maintenance appropriations. Total operating revenues in the fiscal year ended June 30, 1915, amounted to \$67,163,000, a decrease as compared with the previous year of \$9,692,000, or 13 per cent. There was \$3,194,000 saved in transportation expenses; a cut in maintenance expenses



Profile of Great Northern Low Grade Line from St. Paul to Seattle

Transportation for investment-Cr.	186,932	150,188
Total operating expenses.....	22,967,592	23,226,832
Taxes	1,327,871	1,499,521
Operating income *	8,603,296	7,299,548
Gross income	8,818,130	7,516,927
Net income	1,474,985	539,227
Dividends		261,429
Surplus	1,474,985	277,798

* The figures for operating income, gross income, etc., are not absolutely accurately comparable because of changed rules regarding accounting put into effect by the Interstate Commerce Commission, but are approximately comparable.

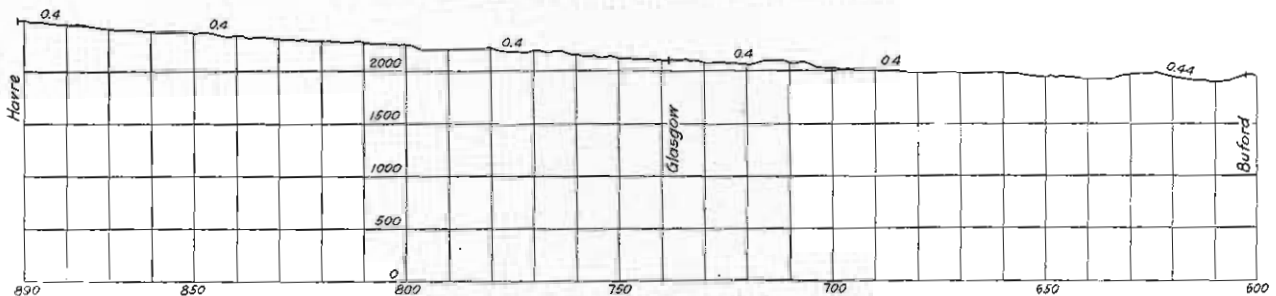
exactly in proportion to the falling off in revenue would have saved an additional \$3,000,000; the company had \$3,800,000 surplus above its dividend requirements; or a total of nearly \$10,000,000, while loss in revenue was but \$9,692,000.

In concluding his report in 1914, President Hill said: "The company's roadbed, tracks and equipment have been fully maintained and greatly improved. The season's track work was finished by the end of July, a large amount of delayed bridge work was completed, heavy shop forces, maintained during last winter, have been materially decreased, so that, for at least the first half of the coming fiscal year, the expenses of maintenance and betterments should be greatly reduced."

For a great many years the Great Northern has been working toward certain standards, both in trainloading and in main-

GREAT NORTHERN

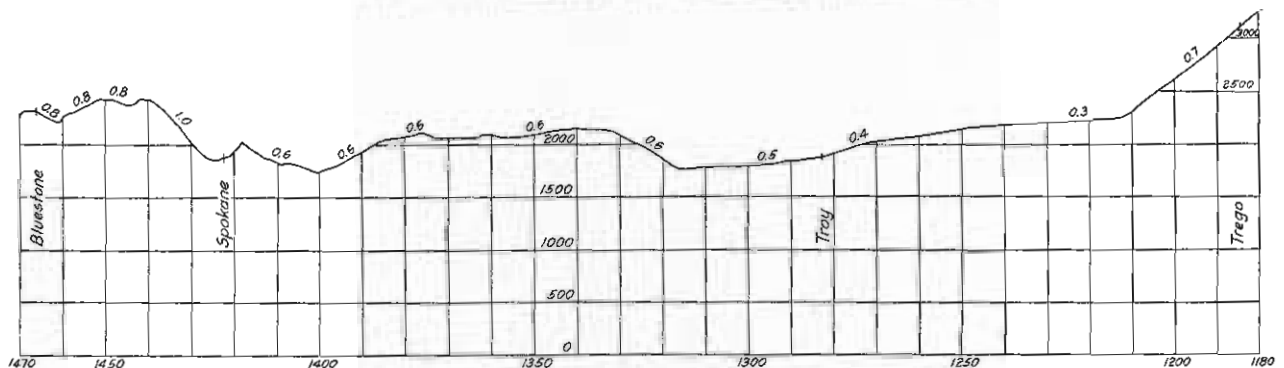
THE Great Northern is one of the few railroads in North America that could cut maintenance of way expenses 36 per cent and maintenance of equipment 31 per cent and not lay itself



Profile of Great Northern Low Grade Line from St. Paul to Seattle

open to the suspicion of inadequate maintenance. This it did in 1915. The Great Northern, like the Southern Pacific, has never been through a receivership; it has never had to live on its own

tenance. These standards in maintenance were reached, apparently, in 1914. It was known, as will be seen from Mr. Hill's statement, that it would be much cheaper to maintain these



Profile of Great Northern Low Grade Line from St. Paul to Seattle

The profile from St. Paul to Surrey is via the new Surrey line, which gives better grades than the old St. Paul line via Fargo. The mileage is only approximately correct, nothing being allowed for a short connection between Casselton and Bedford, for which a profile was not available. The portion of the old main line between Surrey and Grand Forks is shown on the Duluth-Surrey profile on the following page.

fat, if the expression may be permitted. On the other hand, there has been invested in the property approximately \$80,000,000*

* This is arrived at by taking the sum of the fund for permanent improvements and betterments, the cost of additions and betterments made and paid for from that fund, and the profit and loss credit, and subtracting from it the cash on hand.

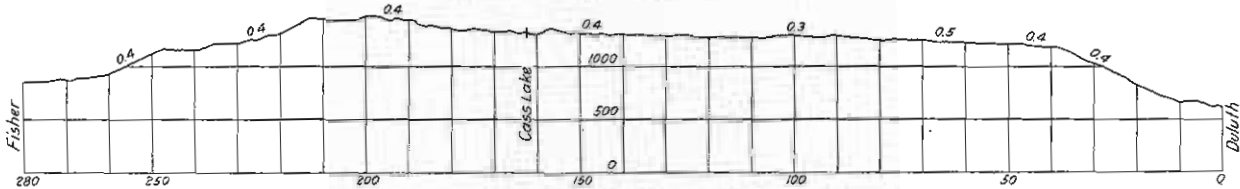
standards than it had been to attain them. How much cheaper it was, however, possibly came as a surprise even to the Great Northern management. This is the real explanation of the cut in maintenance figures.

In the fiscal year ended June 30, 1915, it would appear from

the railroad annual reports which have appeared so far, that there have been larger economies made in transportation expenses by railroads generally than in any year in the last decade. It has only been within the last few years that conditions on many roads were thought to permit the attention being given to heavier trainloading that has been the fundamental principle of Hill railroad operation. The comparison for many roads therefore between 1914 and 1915 is more favorable than it would have been had they set a "Hill" standard in past years. On the other hand, it is possibly the results obtained on the Great Northern in 1915 that made James J. Hill remark recently that he believed that if he were starting over again he would set the peg for trainloading higher than he did.

The ton mileage of freight on the Great Northern in 1915

the line running to Great Falls and Billings. This continuous movement of through trains from the Pacific ocean to St. Paul, with a minimum of service on branch lines and with an insistence on heavy carloading, is the explanation of the Great Northern's success. The vast sums of money which have been invested in the property have been spent with the single purpose of making a transportation machine which would perform its functions at the least possible cost for repairs, renewals or operation. In the carrying out of this scheme, complicated details have been avoided through the adoption of simple standards, and local conditions have been made to adjust themselves to these standards rather than compelling the modification or complication of the standards. An analogous development has taken place in the organization. At least four of the superintendents

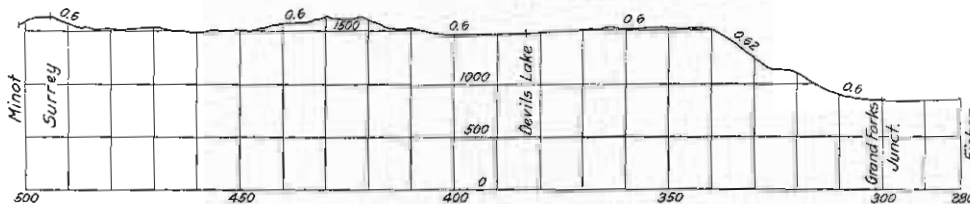


Profile of the Great Northern Line from Surrey to Duluth

was 6,598,341,000, a decrease as compared with the previous year of 17.80 per cent. There was a loss in iron ore tonnage of 4,341,000, or 31.57 per cent, and a loss in the copper ore tonnage of 1,398,000 tons, or 71.57 per cent. These, of course, are the heavy loading commodities. The average trainload in 1915 was 650 tons and in 1914, 663 tons. This is a decrease of less than 2 per cent. It is often pointed out in connection with the Great Northern's remarkably heavy trainload that it has a very large ore business moving from the Missabe range to Duluth. Grades and traffic conditions here permit of enormous trainloads, and when this tonnage is included in the general average make a comparison between the Great Northern and other northwestern transcontinental roads not entirely accurate. Excluding entirely the iron ore tonnage handled from the range to the head of the lakes, the average revenue trainload on the Great Northern in 1915 was 556 tons. The average trainload of revenue freight

now on the Great Northern began railroad work in the section house.

This brief resumé of the Great Northern's history is by way of saying that when the operations in 1915 compare very favorably with the previous year, a very high standard of comparison is being used. During 1915 the company spent a total of \$3,145,000 on additions and betterments, exclusive of additions to equipment. The total spent for equipment was \$1,771,000. A very liberal policy has been pursued toward charges for depreciation. The total to the credit of this account on June 30, 1915, was \$26,542,000, and when the annual report says that this represents "full depreciation to that date (June 30, 1915), on all equipment then in service," the statement may be taken at its full face value. The company had on hand, as was previously mentioned, at the end of the year \$11,591,000 cash and \$10,365,000 bills receivable, with no notes and bills payable, and total cur-



Profile of the Great Northern Line from Surrey to Duluth

The ore tonnage from the iron range passes over only about 75 miles of the eastern end of this line.

rent liabilities of \$6,884,000, which included the unpaid coupons due July 1, 1915, amounting to approximately \$2,769,000.

from and to the range was 3,174 tons. This is based on ore train movement both ways, that is, a combination of light and empty ore train mileage. It will readily be seen how much of a handicap in the average trainload figures a decrease of 32 per cent in ore tonnage was, and it is a high compliment to the management that average trainloading fell off less than 2 per cent. The Great Northern has a mass of branch lines which necessitate local freights and light trainloads, but so thoroughly has the principle of heavy trainloading been inculcated in the organization that, exclusive of ore tonnage, the trainload was 556 tons. The heavy movement of traffic is eastbound. Through freight trains are run from Seattle to St. Paul with a full tonnage rating, including equipment behind the drawbar, of over 3,000 tons. There is electric service on the 2.2 grade shown in the accompanying profile up to and through Cascade tunnel, and helper service on the .8 and 1.8 grade up to Summit. At one point only is it necessary to fill out and this is at Cut Bank, where there is ample opportunity to use cars brought in from

The following table shows the principal figures for operation in 1915 as compared with 1914:

	1915	1914
Average mileage operated.....	8,061	7,781
Freight revenue.....	\$47,147,314	\$55,084,925
Passenger revenue.....	13,164,857	15,224,463
Total operating revenues.....	67,162,858	76,854,938
Maint. of way and structures.....	8,270,354	12,831,671
Maintenance of equipment.....	7,152,302	10,322,198
Traffic expenses.....	1,167,536	1,360,564
Transportation expenses.....	18,261,030	21,454,754
General expenses.....	1,258,755	1,127,440
Miscellaneous expenses.....	815,184	673,147
Transportation for investment—Cr.....	96,886
Total operating expenses.....	36,828,275	47,769,774
Taxes.....	4,629,668	4,792,478
Operating income.....	25,704,915	24,292,686
Gross income.....	28,015,114	27,776,452
Net income.....	20,618,270	20,453,551
Dividends.....	16,796,857	15,063,048
Appropriated to "fund for permanent improvements and betterments".....	1,000,000	1,000,000
Surplus.....	2,096,762	3,311,572