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CHICAGO, MILWAUKEE & ST. PAUL RAILWAY

and

THE NORTHWESTERN SITUATION

Roosevelt & Son,

FOUNDED 1797

30 PINE STREET, NEW YORK

Roosevelt & Son,

FOUNDED 1797

TELEPHONE JOHN 9562-5565

30 Pine Street

CABLE ADDRESS: ROOSEVELT

New York

TO ALL OWNERS OF RAILWAY SECURITIES:

This analysis was made to discover the cause of the decline in financial strength of the Northwest carriers, culminating in the receivership of the "St. Paul". We believe the evidence overwhelmingly convincing that this decline has been caused, not by losses in traffic or inefficient management or by reckless increases of capital, but by confiscatory rates.

Since the St. Paul General and Refunding bonds were first issued in 1914 the basic security of traffic and efficiency as compared with debt has improved. But since that time the bonds have changed from high grade securities, legal for the investment of trustees and savings banks, selling at par, to securities in default, selling for fifty cents on the dollar.

If railway securities are to retain their position as safe investments, and continue to attract supplies of new capital the full and complete facts in this matter must be established by the highest impartial tribunal.

We ask therefore all owners of railway securities to do their share in accomplishing this result by writing to their Congressmen and Senators and also to the Interstate Commerce Commission asking that this investigation take place without delay and that whatever measures shown to be necessary to re-establish the safety of railway securities be adopted as soon as possible.

ROOSEVELT & SON

June 29, 1925.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY

and

THE NORTHWESTERN SITUATION

Roosevelt & Son,

FOUNDED 1797

30 PINE STREET, NEW YORK

In this analysis of the Chicago, Milwaukee & St. Paul and the Northwestern situation, we have attempted to show **basic facts** in the simplest manner possible.

In order to get true comparisons of capitalization and efficiency with roads having a different rate structure we have selected methods by which the results are not distorted by rate factors.

The value of this study, we believe, would be lessened by statistics so voluminous as to obscure the basic factors and, therefore, we have made every effort to achieve simplicity. To those desiring more complete details we will be glad to furnish any additional information which our exhaustive study of the situation has developed.

Recourse has been had to all available original sources of information, in an effort to secure accuracy. The data have been prepared under the direction of Mr. T. A. Hamilton, formerly President of International-Great Northern Railroad Company, and formerly Operating Vice-President of St. Louis-San Francisco Railway Company; we believe them to be correct.

Roosevelt & Son,

June, 1925

CHICAGO, MILWAUKEE & ST. PAUL

and

THE NORTHWESTERN SITUATION

There has been a great deal of misinformation spread broadcast concerning the failure of the St. Paul. We believe we can give a clear picture of the real situation backed up by facts, figures and expert study.

In the accompanying Appendix there are set forth the figures upon which we base our conclusions. The basic data from which these figures have been prepared have been secured from compilations of the Interstate Commerce Commission, publications of the Bureau of Railway Economics at Washington, or from the Annual Reports of the carriers to their stockholders. The valuation figures have not all received the complete sanction of the Commission and been served on the carriers. However, we believe them a sufficiently accurate basis of comparison for purposes of this analysis.

The following are the principal reasons given for the Receivership:

1. Loss of Traffic
2. Over-capitalization, bad financial structure and bad financing
3. Physical condition of the property
4. Extravagant electrification
5. Inefficient operation and management
6. Insufficient freight rates in the Northwestern Territory.

We have exhaustively examined these alleged causes one by one, with the following result:

LOSS OF TRAFFIC The St. Paul has not lost traffic since the days when it was prosperous. Since the Puget Sound Extension was taken into System operations in 1913, freight traffic has increased from 8,570,000,000 tons hauled one mile to 11,004,765,000, in 1924. From 1915, the first full year of operation of the Panama Canal, to 1924, the tons hauled one mile have increased 34 per cent, and the tonnage of Forest Products (frequently specifically mentioned as having been diverted to the Canal) has increased 84 per cent. Of course the mileage of the road has been increased, but the volume of freight traffic has increased even more, as is evidenced by an increase in density (tons one mile per mile of road per annum) of 12 per cent since the Puget Sound Extension was taken over for operation (See Exhibit 1). In fact, since putting the new mileage into operation the St. Paul has fared much better in this respect than its principal competitors, the Northern Pacific and the Great Northern, the traffic density of both these lines showing a slight decrease in 1924 as compared with 1913.

It is true that passenger traffic has decreased, due in part to automobile competition (See Exhibit 14), but the freight traffic of the road has substantially increased.

LOSS OF TRAFFIC CANNOT BE THE CAUSE OF THE ST. PAUL'S TROUBLES.

OVER-CAPITALIZATION The par value of the capitalization of the St. Paul is less than the Federal Valuation of the property on basis of the cost to reproduce, new (See Exhibit 3). Since 1906 the stockholders have taken over 100 million new stock at par, also 80 million low interest-bearing bonds at par; and the general public has taken over 200 million low interest-bearing bonds at an average of 97½.

The total capitalization as compared with volume of traffic (per one thousand net ton-miles hauled) in 1924 was less than that of many prosperous railroads carrying a similar type of traffic. (Exhibit 4.) Likewise, a comparison with roads carrying all types of traffic shows the conservatism of the St. Paul's capitalization when measured by the yard-stick of Government valuation. (Exhibit 3.)

As one index of the soundness of the capitalization there is shown in Exhibit 5 the favorable change in the basic security behind the general and refunding mortgage bonds since their first issue in 1914. In 1924, as compared with 1914, total freight traffic volume had increased 36 per cent; operating efficiency as measured by average freight train load, had increased 52 per cent; total bonded debt per one thousand net ton-miles had increased only 2.4 per cent, and total capitalization per one thousand ton-miles hauled had decreased 10 per cent.

We agree with the contention that the Federal Valuation of the property is too low, but even accepting the Government's own figure of Reproduction Cost—new, the outstanding securities are very conservative.

The St. Paul's average annual interest rate on bonded debt is 4.65 per cent.

OVER-CAPITALIZATION, BAD FINANCIAL STRUCTURE AND BAD FINANCING CANNOT BE THE CAUSE OF THE ST. PAUL'S TROUBLES.

PHYSICAL CONDITION OF THE PROPERTY The St. Paul property, on the whole, is in good physical condition. A recent inspection by competent engineers indicates that there is no substantial amount of deferred maintenance. This is all the more remarkable because at the end of Federal Control, in 1920, the property was in a very run-down condition. There is at this time need of some capital money, principally for equipment, but the program does not differ materially from that of any large System for the normal development of its plant. The program of expenditures for the next ten years, outlined in the Coverdale & Colpitts Report, is approximately what the Chicago & Northwestern spent in the last ten years.

THE PHYSICAL CONDITION OF THE PROPERTY IS NOT THE CAUSE OF THE ST. PAUL'S TROUBLES.

EXTRAVAGANT ELECTRIFICATION The electrification only cost fifteen million dollars, of which the Federal Government, when in control of the railroads, spent approximately one-half in order to electrify one-third of the mileage; while the Company electrified two-thirds with the other one-half of the money. We believe the electrification has been advantageous.

THE ELECTRIFICATION HAS NOT BEEN EXTRAVAGANT AND CANNOT BE THE CAUSE OF THE ST. PAUL'S TROUBLES.

INEFFICIENT OPERATION AND MANAGEMENT Comparison of the St. Paul with some prosperous roads which have somewhat similar traffic (Exhibit 2) indicates clearly that for a number of years past the St. Paul has been efficiently operated. (Exhibit 6.) The roads with which comparison is made are all strong, well-operated properties, viz.: St. Louis-San Francisco, Missouri-Kansas-Texas, Atlantic Coast Line, Southern Railway, Northern Pacific, Great Northern, and Chicago & North Western. The St. Paul management has obtained results which compare very favorably with those of the other carriers mentioned, in car-loading, train-loading, average miles per freight car per day, and unit costs of transportation. The St. Paul's cost, in 1924, for direct out-of-pocket costs of freight train and engine service, was \$2.14 per one thousand net ton-miles hauled, as compared with the Atchison, Topeka & Santa Fe's cost of \$2.44. The Atchison is acknowledged as one of the most efficiently operated of American railroads. A comparison of the St. Paul with the Atchison, Topeka & Santa Fe as to traffic character and volume, operating results and freight rates, is set forth in Exhibit 13, and we believe that this comparison with the only other transcontinental line reaching from Chicago to the Pacific Coast over its own rails is thoroughly indicative of the real cause of the St. Paul's troubles.

The ratio of transportation expenses to total operating revenues is not always a fair index of the quality of operating efficiency because such ratios involve a comparison of transportation expenses with revenues derived from rates charged for movement of traffic, which may be unduly low or unduly high. The St. Paul's transportation ratio has been adversely influenced for many years past by freight rates materially lower than those of many other carriers. That substantial improvement has been made by the St. Paul in its transportation ratio since the termination of Federal Control is evidenced by the fact that the ratio has been reduced from 51 per cent in 1920 to 39 per cent in 1924, although the average revenue per ton-mile received for freight transportation has been reduced since 1921. Concurrently it is true, there has been some slight reduction in the wage rates of railroad labor. Stated briefly, since the termination of Federal Control the St. Paul, while suffering a reduction of 14 per cent in freight rates, and securing the benefit of approximately only a 5 per cent reduction in wage rates, has succeeded in reducing by 14 per cent the transportation cost of earning a dollar of gross revenue. (See Exhibit 8.)

Compared with other representative roads in the Northwest the St. Paul is above the average. Few excel it in efficiency, and those only slightly. (See Exhibit 6.)

Every test of importance shows that for a number of years past the St. Paul has been most efficiently managed.

INEFFICIENT OPERATION AND MANAGEMENT CANNOT BE THE CAUSE OF THE ST. PAUL'S TROUBLES.

INSUFFICIENT FREIGHT RATES The average revenues per ton-mile of the St. Paul have been, and are, materially lower than those of many carriers in other territories; in fact, this is true of all the principal carriers in the Northwestern Territory. (Exhibit 9.)

The figures set forth in Exhibit 10 bring out the picture most strikingly. They show the actual income account of the St. Paul compared with what it would have been on the basis of the average revenue per ton-mile enjoyed by certain other carriers—the same carriers with whose efficiency of operation, as previously stated, that of the St. Paul compares favorably. The figures show that with the advantage in freight rates enjoyed by either the St. Louis-San Francisco, Missouri-Kansas-Texas, Atlantic Coast Line or the Southern Railway, the St. Paul, in 1924, would have earned a substantial surplus above all charges. On the other hand, as is shown in Exhibit 11, had the four lines with which comparison is made, been compelled to operate, in 1924, on basis of the average revenue per ton-mile received by the St. Paul, the substantial surplus above all charges earned by each of them would have been in one case very materially reduced, and in the other three entirely wiped out and supplanted by a deficit. Such comparisons cannot, on account of varying local conditions, be exact, but they are excellent guides.

The question of rates is both complicated and difficult, but some things are clear. The Supreme Court has held that it is unconstitutional for public rate-making authority to enforce rates that are confiscatory. The Transportation Act provides, in substance, that in each territory of the country, as divided by the Interstate Commerce Commission, rates shall be such that a fair return on investment shall be given to well-managed properties. The Commission has fixed 5.75 per cent as a fair return.

How far the results of the last three years have fallen short of this fair rate of return is shown in Exhibit 12. The carriers of the Northwestern Region earned, in 1924, but 3.12 per cent on their investment. In no Territory except the Pocahontas Region was the fair return, fixed by the Commission itself, earned in 1924, but particular discrimination against the Northwestern Region is obvious.

This is not a condition of recent origin. Going back over a period of fifteen years, ending with 1924, it is found that the average revenue per ton-mile of all Class I Railways in the United States increased 46 per cent in the interval, while the average revenue per ton-mile of the St. Paul and its two principal competitors, the Northern Pacific and the Great Northern, increased only 28 per cent. These Northwestern carriers had in the meantime, to shoulder the same burdens of increased wage rates, material prices and taxes as all other American carriers.

INSUFFICIENT FREIGHT RATES ARE THE CAUSE OF THE ST. PAUL'S TROUBLES.

During the hard times the farmers in the Northwest have been enduring, the railroad security-holders bore more than their share of the burden. The security-holders of the railroads in the Northwestern territory have continued to support their properties with supplies of new capital, but in spite thereof have been subjected to a tremendous loss.

The only reasons why this discrimination against the Northwestern Railroad group has not resulted in even more receiverships are:

- (1) That the Northwestern group has been stronger in capital structure, as measured both by traffic volume and Federal Valuation, than many other railroad groups in the United States.
- (2) That the Northwestern group has maintained a high standard of operating efficiency.

THE RESISTING POWER DUE TO THESE ADVANTAGES HAS NOW REACHED ITS LIMIT.

Since 1911 their security-holders have invested in the seven major Northwestern railroads, nine hundred and fifty-two million dollars to provide additional facilities for the public service, and on this investment they have been allowed to earn a return of only a fraction of one per cent—practically nothing. Included in this group of seven roads are the Great Northern, which earned but 3.83 per cent on an additional investment of \$131,000,000, the Minneapolis, St. Paul and Sault Ste. Marie, which earned but 1.21 per cent on an additional investment of \$43,000,000, the Chicago Great Western which earned less than one-quarter of one per cent on \$15,000,000 additional investment, the St. Paul, which earned nine-tenths of one per cent on an additional investment of \$399,938,000, while the other three carriers, the Northern Pacific, Chicago & Northwestern and the Chicago, St. Paul, Minneapolis & Omaha made additional investments ranging from \$22,000,000 to \$185,000,000 on which they not only earned nothing whatever, but on the contrary suffered decreases in their net railway operating income ranging from 8.3 per cent to 21.6 per cent. That this immense additional investment of these seven representative Northwestern carriers yielded them almost nothing or, in some instances less than nothing, was not due to any decline in volume of traffic or in operating efficiency, as is evidenced by the fact that their freight traffic volume showed increases ranging from 27 per cent to 113 per cent, and their average freight train load showed increases ranging from 50 per cent to 111 per cent. The St. Paul stands out conspicuously from the group with an increase of 113 per cent in traffic volume and 111 per cent in freight train load, whereas it secured a return of only nine-tenths of one per cent on its increase in investment of almost \$400,000,000. (Exhibit 7.)

The St. Paul, Northern Pacific and Great Northern formerly occupied a position of pre-eminent financial strength. They are no longer in this enviable situation. In Exhibit 15 there have been stated at some length the reasons for this loss of financial strength since the days of the so-called "Hill Regime" in the Northwest, and briefly, the troubles of these

three lines cannot be charged to any unfavorable change in the character and volume of traffic, in capitalization, or in efficiency of operation. On the other hand, it is plainly apparent that the whole trouble is inadequate and unduly low freight rates.

The reason why the Northwestern situation has reached the stage of receivership in the case of the St. Paul is because of the very fact that it surpassed all the other Northwestern roads in amount of additional investment in plant devoted to the public service during this confiscatory period. It was forced to borrow large sums for this purpose. The public has the benefit of this increased service and increased efficiency, but the road is not allowed to earn even simple interest on the investment, not to mention a reward for the risks involved.

Since 1906, the stockholders have bought over \$100,000,000 stock and also \$80,000,000 bonds, and the road sold over \$200,000,000 bonds in addition. Now, in spite of the doubling of traffic and doubling of efficiency these investors are threatened with a drastic reorganization based upon freight rates which the Receivers of the St. Paul, joining with sixty-six other western carriers in a petition for relief now pending before the Interstate Commerce Commission, have declared "were and are confiscatory."

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**EFFECT UPON THE TRAFFIC OF THE ST. PAUL, OF PANAMA CANAL COMPETITION
AND THE OPENING OF THE PUGET SOUND EXTENSION**

Year Ended June 30	T O N M I L E S		T O N S		
	Total (thousands)	Per Mile of Road	Total (thousands)	Forest Products only (thousands)	Forest Products Per cent of Total
1906	4,663,808	670,000	26,202	3,818	14.6
1907	5,155,662	731,400	28,596	3,794	13.3
1908	4,980,486	664,200	26,190	3,390	12.9
1909	5,051,527	672,400	27,500	3,711	13.5
1910	5,326,908	709,100	30,699	3,852	12.5
1911	5,323,535	708,700	26,794	3,622	13.5
1912	5,105,842	679,700	26,576	3,566	13.4
Puget Sound Extension—Taken into System January 1, 1913					
1913	8,570,061	891,500	34,805	6,186	17.8
1914	8,079,690	834,300	33,007	6,038	18.3
August 15, 1915—End of First Full Year of Panama Canal Operation					
1915	8,185,988	814,300	32,959	5,493	16.7
1916	10,043,236	991,400	38,313	6,004	15.7
Year Ended Dec. 31					
1917	10,545,443	1,028,200	38,444	6,430	16.7
1918	11,504,301	1,116,600	40,307	6,364	15.8
1919	11,501,514	1,080,300	40,295	8,281	20.6
1920	11,384,601	1,071,600	45,041	9,010	20.0
1921	8,283,212	766,300	34,067	6,087	17.9
1922	10,601,914	961,200	42,034	8,436	20.1
1923	11,922,244	1,082,700	51,314	10,914	21.3
1924	11,004,765	1,001,600	47,144	10,134	21.5

Since taking the Puget Sound Extension into system operations in 1913, the traffic density of the entire line has increased twelve (12) per cent.

Since the first full year of operation of the Panama Canal, viz., 1915, the freight traffic density (tons-one-mile per mile of road per annum) of the St. Paul has increased twenty-three (23) per cent, and the tonnage of Forest Products handled by the road has increased eighty-four (84) per cent.

(EXHIBIT 1)

CLASSIFICATION OF TONNAGE

Year Ended December 31, 1924

	Per Cent of Total Tons					Total
	Products of				Manufactures and Miscellaneous	
	Agriculture	Animals	Mines	Forests		
Seven Northwestern Roads						
Chicago, Milwaukee & St. Paul	16.5	5.5	34.0	21.5	22.5	100.0
Northern Pacific	23.5	1.6	25.1	36.3	13.5	100.0
Great Northern	20.9	1.7	56.2	11.0	10.2	100.0
Chicago & Northwestern	15.0	5.5	42.4	12.7	24.4	100.0
M. St. P. & S. S. M.	19.1	2.6	29.3	29.3	19.7	100.0
C. St. P. M. & O.	34.4	7.1	16.8	18.6	23.1	100.0
Chicago Great Western	25.8	9.5	24.0	7.4	33.3	100.0
Five Roads in Other Territories						
A. T. & S. F.	22.9	4.3	34.7	7.4	30.7	100.0
St. Louis-San Francisco	14.4	2.5	39.8	12.3	31.0	100.0
Missouri-Kansas-Texas	20.0	4.8	26.9	4.8	43.5	100.0
Atlantic Coast Line	12.5	1.1	29.2	29.8	27.4	100.0
Southern	9.9	1.0	42.1	18.2	28.8	100.0

(EXHIBIT 2)

FEDERAL VALUATION VERSUS CAPITALIZATION AS OF DECEMBER 31, 1924

	FEDERAL VALUATION	BONDED DEBT		TOTAL CAPITALIZATION	
	Reproduction— New	Amount	Per Cent of Valuation	Amount	Per Cent of Valuation
Seven Northwestern Railroads					
Chicago, Milwaukee & St. Paul	\$763,000,000	\$466,000,000	61.0	\$699,000,000	91.6
Northern Pacific	593,000,000	203,000,000*	34.2	451,000,000*	76.0
Great Northern	499,000,000	201,000,000*	40.2	451,000,000*	90.3
Chicago & Northwestern	709,000,000	259,000,000	36.5	426,000,000	60.0
M. St. P. & S. S. M.	198,000,000	141,000,000	71.2	206,000,000	104.0
C. St. P. M. & O.	114,000,000	47,000,000	41.2	77,000,000	67.6
Chicago Great Western	93,000,000	41,000,000	44.1	133,000,000	143.0
Average of Seven Roads			45.8		82.2
Average of Six Roads— St. Paul excluded			40.3		78.7
Fifteen Roads in Other Territories					
A. T. & S. F.	\$872,000,000	\$276,000,000	31.6	\$633,000,000	72.6
St. Louis-San Francisco	296,000,000	300,000,000	101.0	352,000,000	119.0
Missouri-Kansas-Texas	186,000,000	165,000,000	88.6	278,000,000	149.0
Atlantic Coast Line	231,000,000	121,000,000†	52.4	194,000,000†	84.0
Southern Railway	526,000,000	340,000,000‡	64.6	520,000,000‡	99.0
Chesapeake & Ohio	333,000,000	235,000,000	70.5	315,000,000	94.6
Chicago, Indianapolis & Louisville	38,000,000	27,000,000	71.0	43,000,000	113.0
§C. C. C. & St. Louis	224,000,000	136,000,000‡	60.7	193,000,000‡	86.2
§Hocking Valley	51,000,000	35,000,000	68.6	46,000,000	90.2
Louisville & Nashville	477,000,000	244,000,000‡	51.2	361,000,000‡	75.5
§Michigan Central	198,000,000	128,000,000‡	64.7	147,000,000‡	74.2
§St. Louis Southwestern	95,000,000	67,000,000	70.6	103,000,000	108.0
Missouri Pacific	371,000,000	277,000,000	74.7	432,000,000	116.0
Illinois Central	636,000,000	339,000,000‡	53.3	481,000,000‡	75.7
Wabash	163,000,000	88,000,000‡	53.9	227,000,000‡	139.0
Average of Fifteen Roads			59.1		91.9

NOTE:

* Excludes equity in C. B. & Q.

† Excludes equity in L. & N.

‡ Includes leased line rentals—capitalized at 5 per cent.

§ 1923 figures, in absence of data for 1924.

(EXHIBIT 3)

**CAPITALIZATION AS OF DECEMBER 31, 1924—COMPARED WITH VOLUME OF
TRAFFIC FOR YEAR ENDED THAT DATE**

	BONDED DEBT—PER 1000 NET TON MILES			TOTAL CAPITALIZATION —PER 1000 NET TON MILES
	Fixed Charge Obligations	Contingent Inter- est Obligations	TOTAL	
Seven Northwestern Railroads				
Chicago, Milwaukee & St. Paul	\$ 42.	—	\$ 42.	\$ 63.
Northern Pacific	31.	—	31.*	69.*
Great Northern	25.	—	25.*	56.*
Chicago & Northwestern	31.	—	31.	51.
M. St. P. & S. S. M.	41.	—	41.	60.
C. St. P. M. & O.	29.	—	29.	47.
Chicago Great Western	21.	—	21.	69.
Average of Seven Roads	\$ 33.	—	\$ 33.	\$ 60.
Average of Six Roads—St. Paul excluded	\$ 30.	—	\$ 30.	\$ 58.
Eight Roads in Other Territories				
St. Louis-San Francisco	\$ 46.	\$ 17.	\$ 63.	\$ 75.
Missouri-Kansas-Texas	35.	19.	54.	90.
Atlantic Coast Line	32.	—	32.†	52.†
Southern	45.‡	—	45.‡	69.‡
§Seaboard Air Line	48.	10.	58.	81.
§International-Great Northern	30.	25.	55.	66.
N. O. T. & M.	29.	7.	36.	55.
§St. Louis Southwestern	39.	—	39.	60.
Average of Eight Roads	\$ 41.	\$ 8.	\$ 49.	\$ 70.

NOTE:

* Excludes Equity in C. B. & Q.

† Excludes Equity in L. & N.

‡ Includes leased line rentals—capitalized at 5 per cent.

§ 1923 figures, in absence of data for 1924.

(EXHIBIT 4)

**CHANGE IN BASIC SECURITY BEHIND THE GENERAL AND REFUNDING MORTGAGE
BONDS OF CHICAGO, MILWAUKEE & ST. PAUL—SINCE FIRST ISSUE IN 1914—
AS SHOWN BY CHANGES IN TRAFFIC VOLUME AND
OPERATING EFFICIENCY**

	Year Ended June 30		Year Ended December 31	
	1914	1915	1917	1924
Par amount of bonds sold	\$17,500,000	\$29,089,700	\$25,000,000	
Interest Rate	4½%	5%	4½%	
Price at which marketed	96.5	100.	96.5	
Capitalization at end of year—per 1,000 ton mile Rev. Frt. (thousands)				
Bonded Debt	\$41.	\$44.	\$36.	\$42.
Total Capitalization	70.	72.	58.	63.
Freight traffic volume—total tons hauled one mile Rev. Frt. (thousands)	8,079,690	8,185,988	10,545,443	11,004,765
Average number of net tons Rev. Frt. per train-mile	380	390	468	579

Purchasers took these bonds in 1914, 1915 and 1917 on the basic security outlined above, and since then traffic has increased in volume and Operating Efficiency has improved, as is shown by the fact that 1924 shows gains over the years in which the bonds were sold as follows:

Freight traffic volume—total tons hauled one mile Rev. Frt.
Average number of net tons Rev. Frt. per train-mile

1924 Increase Over		
1914	1915	1917
36%	34%	5%
52%	48%	24%

Capitalization per 1,000 ton miles fluctuated as follows:

Bonded Debt:

 Increased

 Decreased

Total Capitalization:

 Increased

 Decreased

1924 Compared With		
1914	1915	1917
2.4%	—	16.7%
—	4.5%	—
—	—	8.6%
10.0%	12.5%	—

There has been marked improvement in the basic security behind the General and Refunding Mortgage Bonds since their first issue in 1914.

Summed up—there was a substantial increase in the volume of traffic and substantial improvement in the efficiency with which it was transported; and concurrently, only a very small increase in the amount of Bonded Debt as compared with traffic volume.

(EXHIBIT 5)

FACTORS AFFECTING EFFICIENCY OF OPERATION

CHICAGO, MILWAUKEE & ST. PAUL COMPARED WITH OTHER RAILROADS

FOUR YEARS ENDED DECEMBER 31, 1924

	C. M. & St. P.	St. Louis-San Francisco	Missouri-Kansas-Texas	Atlantic Coast Line	Southern	Northern Pacific	Great Northern	Chicago and Northwestern	Average of Northern Pacific, Great Northern and C. & N. W.
Net Tons of Revenue Freight per Loaded Car									
1924	21.59	21.45	19.36	19.9	19.2	22.27	24.58	19.72	21.80
1923	21.96	21.35	19.01	20.3	19.7	22.14	25.31	20.48	22.43
1922	22.18	21.28	19.64	16.2	19.2	21.79	23.96	20.07	21.75
1921	21.27	21.62	20.94	15.8	18.4	22.02	23.31	19.35	21.28
Net Tons of Revenue Freight per Train-Mile									
1924	579	441	573	485	439	659	770	445	586
1923	551	402	498	488	438	623	712	456	571
1922	543	373	462	382	418	588	656	430	537
1921	483	363	453	338	388	595	607	383	495
Average Miles per Freight Car per Day									
1924	26.8	27.6	25.3	29.1	26.6	25.6	23.2	23.5	24.1
1923	28.8	24.8	24.2	29.7	26.9	30.5	26.9	25.1	26.9
1922	26.8	19.9	19.5	27.0	21.4	25.9	22.9	21.8	23.2
1921	24.4	21.2	22.3	22.5	21.4	21.3	19.2	21.7	20.8
*Direct (out-of-pocket) Transportation Costs per 1000 Net Ton-Miles†									
1924	\$2.14	\$2.85	\$2.11	\$2.57	\$2.58	\$1.96	\$2.05	\$2.49	\$2.19
1923	2.24	3.42	3.02	2.62	2.70	2.25	2.37	2.57	2.42
1922	2.51	3.52	2.93	2.77	2.90	2.08	2.51	2.82	2.50
1921	3.06	3.99	2.98	3.63	3.42	2.24	2.82	3.11	2.77
*Direct (out-of-pocket) Transportation Costs per Passenger Train-Mile									
1924	\$.810	\$.816	\$.785	\$.770	\$.767	\$.819	\$.785	\$.839	\$.818
1923	.841	.901	.936	.798	.815	.885	.880	.940	.908
1922	.918	.881	.892	.782	.798	.859	.869	.953	.905
1921	.979	.934	.968	.955	.895	.916	.966	.983	.962

*Direct, "out-of-pocket," or as they are sometimes called, "variable," Transportation Costs include, in both Freight and Passenger services, the following:

- Locomotive repairs.
- Wages—enginemen.
- Wages—trainmen.
- Fuel for locomotives.
- Other locomotive supplies.
- Enginehouse expenses.
- Train supplies and expenses.

†Includes all net ton-miles—both Revenue and non-Revenue.

(EXHIBIT 6)

INCREASE IN—INVESTMENT IN ROAD AND EQUIPMENT—TRAFFIC VOLUME—OPERATING EFFICIENCY AND RAILWAY OPERATING INCOME—SEVEN NORTH-WESTERN ROADS—1924 VERSUS 1911

	Investment in Road and Equipment		Net Ton Miles of Revenue Freight		Average Net Tons per Train (Rev. Freight)		Net Railway Operating Income†		
	Amount	Ratio of Increase	Total (thousands)	Ratio of Increase	Tons	Ratio of Increase	Amount	Ratio of Increase	Increased Net, Per Cent of Return on Increased Investment
Chicago, Mil. & St. Paul 1924 1911*	\$ 692,150,000 292,212,000		11,004,765 5,170,614		579 275		\$18,972,000 15,516,000		
Increase	\$ 399,938,000	137%	5,834,151	113%	304	111%	\$ 3,456,000	22.3%	0.86%
Average of: Northern Pacific Great Northern Chicago & Northwestern M. St. P. & S. S. M. C. St. P. M. & O. Chicago Great Western 1924 1911*	\$1,957,071,000 1,404,357,000		29,922,083 19,886,825		562 360		\$73,365,000 75,330,000		
Increase	\$ 552,714,000	39%	10,035,258	50%	202	56%	\$ 1,965,000	Decrease 2.6%	-- nil --
Average of all Seven Roads above: 1924 1911*	\$2,649,221,000 1,696,569,000		40,926,848 25,057,439		566 339		\$92,337,000 90,846,000		
Increase	\$ 952,652,000	56%	15,869,409	63%	227	67%	\$ 1,491,000	1.64%	0.16%
Northern Pacific 1924 1911*	\$ 566,765,000 411,892,000		6,548,671 5,159,155		659 438		\$19,961,000 25,496,000		
Increase	\$ 154,873,000	38%	1,389,516	27%	221	50%	\$ 5,535,000	Decrease 21.6%	-- nil --
Great Northern 1924 1911*	\$ 459,914,000 328,906,000		8,093,136 5,260,633		770 515		\$24,201,000 19,187,000		
Increase	\$ 131,008,000	40%	2,832,503	54%	255	50%	\$ 5,014,000	26.1%	3.83%
Chicago & Northwestern 1924 1911*	\$ 491,944,000 306,303,000		8,290,313 5,174,229		445 265		\$16,784,000 18,214,000		
Increase	\$ 185,641,000	61%	3,116,084	60%	180	68%	\$ 1,430,000	Decrease 7.7%	-- nil --
M. St. P. & S. S. M. 1924 1911*	\$ 212,308,000 169,365,000		3,407,219 2,033,244		506 331		\$ 6,776,000 6,257,000		
Increase	\$ 42,943,000	25%	1,373,975	67%	175	53%	\$ 519,000	8.3%	1.21%
C. St. P. M. & O. 1924 1911*	\$ 88,111,000 65,395,000		1,638,715 1,031,671		409 251		\$ 3,409,000 3,978,000		
Increase	\$ 22,716,000	35%	607,044	59%	158	63%	\$ 569,000	Decrease 14.4%	-- nil --
Chicago Great Western 1924 1911†	\$ 138,029,000 122,496,000		1,944,029 1,227,893		594 369		\$ 2,234,000 2,198,000		
Increase	\$ 15,533,000	13%	716,136	58%	225	61%	\$ 36,000	1.6%	0.23%

NOTE:

* Figures representing "Investment in Road and Equipment" are as of June 30, 1911. The other data is the average of the four (4) years ended June 30, 1911.

† Comparable data for the Chicago Great Western for the years ended June 30, 1908 and 1909 have not been available to us, therefore data for that road for the year ended June 30th, 1911 have been used throughout.

‡ Net, after Taxes, Rents, and Hire of Equipment.

CHICAGO, MILWAUKEE & ST. PAUL

INCREASE IN INVESTMENT IN ROAD AND EQUIPMENT SINCE 1906—CONSIDERED IN CONNECTION WITH FREIGHT TRAFFIC VOLUME, OPERATING RESULTS, AVERAGE REVENUE PER TON MILE—AND RATIO OF PAYROLLS TO GROSS EARNINGS

Year Ended June 30	Increase in Investment in Road and Equipment	TON-MILES		OPERATING RESULTS AND FACTORS					Average Revenue Per Ton-Mile (cents)		Proportion of Each Dollar of Gross Earnings Expended for Payrolls—All U. S. Railroads
		Total (thousands)	Per Mile of Road	Net Tons (Rev. Frt.)		Average Haul of One Ton (miles)	Ratio of Transportation Expenses to Gross Earnings		St. Paul	All U. S. Railroads	
				Per Car	Per Train		St. Paul	All U. S. Railroads			
1906	\$ 8,222,653	4,663,808	669,991	14.3	282	178	35.5%	35.9%	.862	.748	40.0%
1907	8,494,637	5,155,662	731,403	14.7	290	180	37.6%	37.5%	.856	.759	41.4%
1908	5,712,006	4,980,486	664,153	14.8	274	190	37.5%	36.3%	.812	.754	43.3%
1909	9,607,430	5,051,527	672,461	14.6	274	184	36.3%	33.7%	.838	.763	40.9%
1910	6,360,016	5,326,908	709,001	15.2	276	174	40.6%	33.3%	.843	.753	41.6%
1911	11,383,551	5,323,535	708,671	15.0	275	199	43.0%	35.4%	.841	.757	43.3%
1912	9,381,164	5,105,842	679,691	15.4	308	225	41.1%	35.8%	.848	.744	44.1%
1913*	217,215,499	8,570,061	891,507	16.8	357	246	37.3%	35.1%	.793	.729	44.0%
1914	34,434,952	8,079,690	834,334	16.5	380	245	39.4%	36.2%	.808	.733	45.1%
1915	11,497,017	8,185,988	814,283	16.8	390	248	39.0%	34.9%	.781	.732	43.2%
1916	17,965,918	10,043,236	991,435	17.9	425	262	35.7%	32.0%	.757	.714	40.6%
6 Mos. Ended Dec. 31, 1916†	12,462,817										
Year Ended Dec. 31											
1916†		10,747,323	1,054,072	18.2	442	269	36.4%	32.3%	.741	.719	41.1%
1917	9,409,739	10,545,443	1,028,123	20.1	468	274	42.3%	37.6%	.758	.728	43.7%
1918	23,457,946	11,504,301	1,116,597	22.9	532	268	45.6%	41.5%	.848	.862	54.1%‡
1919	8,195,291	11,501,514	1,080,259	22.0	554	285	46.1%	42.0%	.924	.965	55.5%‡
1920	21,925,088	11,384,601	1,071,629	22.4	544	253	51.3%	46.8%	1.029	1.064	59.7%‡
1921	3,654,352	8,283,212	766,354	21.3	483	243	45.6%	41.2%	1.266	1.289	50.6%
1922	9,966,515	10,601,914	961,198	22.2	543	252	42.1%	37.8%	1.094	1.185	47.8%
1923	17,282,523	11,922,244	1,082,757	22.0	551	232	39.2%	36.3%	1.073	1.116	48.0%
1924	3,089,513	11,004,765	1,001,617	21.6	579	233	39.1%	36.4%	1.091	1.116	47.9%
TOTAL	\$449,718,627										

* Puget Sound Extension taken into system January 1, 1913.
 † End of fiscal year changed from June 30 to December 31.
 ‡ Federal Control Period.

From 1906 to 1924 there was put into the property Four Hundred and Fifty Million Dollars, including the cost of the Puget Sound Extension.

In the same period the freight traffic density (ton-miles per mile of road) increased fifty (50) per cent.

The use made by the management of the increased plant facilities furnished and the advantage taken of increased traffic volume is clearly indicated by the increase in freight train load—from 282 tons in 1906 to 579 tons in 1924—an increase of one hundred and five (105) per cent.

Efficiency of operation shows substantial gain since the termination of Federal control of the Railways. In 1921, with an average revenue per ton-mile of 1.266 cents and wages consuming 51 per cent of gross earnings (on the assumption that payroll ratio for all U. S. Railways is fairly representative in its application to St. Paul), 45.6 cents of every dollar of St. Paul's gross went for Transportation Expenses. In 1924, with the ton-mile rate reduced to 1.091 cents and wages amounting to 48 per cent of the gross, only 39 cents of the dollar of gross earnings was spent for Transportation Expenses.

Since the termination of Federal control, in spite of the fact that rates have been reduced 14 per cent and the wage scales reduced only 5 per cent, the management has succeeded in reducing, by 14 per cent, the transportation cost of earning a dollar of gross revenue; and from the face of the returns it appears that one of the chief factors in this accomplishment has been an increase in the average freight train load of 20 per cent.

(EXHIBIT 8)

AVERAGE REVENUE PER TON-MILE

Year Ended December 31, 1924

SEVEN NORTHWESTERN RAILROADS

	<u>Cents</u>
Chicago, Milwaukee & St. Paul	1.091
Northern Pacific	1.121
Great Northern	1.064
Chicago & Northwestern	1.249
M. St. P. & S. S. M.	1.096
C. St. P. M. & O.	1.222
Chicago Great Western	.965
Average of the 18 roads comprising the Northwestern Region	1.137

FIVE RAILROADS IN OTHER TERRITORIES

A. T. & S. F.*	1.333
St. Louis-San Francisco	1.390
Missouri-Kansas-Texas	1.379
Atlantic Coast Line	1.522
Southern	1.316
Average of these five roads	1.366

*NOTE:

Excludes Gulf, Colorado & Santa Fe Railway—comprising lines South of Purcell, Oklahoma and East of Sweetwater, Texas.

(EXHIBIT 9)

**INCOME ACCOUNT OF THE ST. PAUL RECONSTRUCTED ON BASIS OF
TON-MILE REVENUES OF OTHER CARRIERS
YEAR ENDED DECEMBER 31, 1924**

	ST. PAUL INCOME ACCOUNT				
	Actual	RECONSTRUCTED BY APPLYING TON-MILE REVENUE OF:			
		Frisco	M.-K.-T.	Atl. Coast Line	Southern
St. Paul's Average Revenue per ton-mile (cents)	1.091				
Average Revenue per ton-mile of other carriers (cents)		1.390	1.379	1.522	1.316
Freight Revenue—actual	\$120,070,603				
Freight Revenue computed by applying ton-mile revenues of other carriers to St. Paul's ton-miles		\$152,966,234	\$151,755,709	\$167,492,523	\$144,822,707
Freight Revenue, reconstructed — Increase over actual		\$ 32,895,631	\$ 31,685,106	\$ 47,421,920	\$ 24,752,104
Net available for interest and other charges	\$ 20,748,048	\$ 53,643,679	\$ 52,433,154	\$ 68,169,968	\$ 45,500,152
Total charges	22,616,654	22,616,654	22,616,654	22,616,654	22,616,654
SURPLUS	—	\$ 31,027,025	\$ 29,816,500	\$ 45,553,314	\$ 22,883,498
DEFICIT	\$ 1,868,606	—	—	—	—
Per cent of St. Paul's charges earned or which would have been earned	91.5%	237. %	232. %	301. %	201. %
Per cent earned or which would have been earned on St. Paul Preferred Stock	nil	26.7%	25.7%	39.3%	19.7%
Per cent earned or which would have been earned on <i>all</i> St. Paul Stock	nil	13.3%	12.8%	19.5%	9.8%

The St. Louis-San Francisco, Missouri-Kansas-Texas, Atlantic Coast Line and Southern in 1924 all enjoyed revenues per ton-mile materially higher than the ton-mile revenue of the St. Paul. The character of freight hauled on the four other lines in 1924 was not very dissimilar in classification to that hauled by the St. Paul. With the single exception of the Missouri-Kansas-Texas, Products of Mines and Forests combined constituted in each instance more than fifty per cent of the total tonnage. The proportion which Mine and Forest Products were of the total 1924 tonnage of each of these lines is as follows:

Chicago, Milwaukee & St. Paul	55%
St. Louis-San Francisco	52%
Missouri-Kansas-Texas	32%
Atlantic Coast Line	59%
Southern	60%

In the proportion of other classes of traffic to the total carried, the spread in 1924 between the St. Paul and the four other lines was not great, except that the Missouri-Kansas-Texas hauled a greater proportion of Manufactures and Miscellaneous tonnage than either the St. Paul, Frisco, Atlantic Coast Line or Southern.

With this general similarity of traffic in mind there has been computed the Freight Revenue which the St. Paul would have secured had it enjoyed the same basis of freight rates as the four other lines, respectively, on the assumption that there would have been no change in the volume or character of traffic. It is, of course, impossible to say what, if any, would have been the actual change in the volume or character of Traffic, if the different rates suggested had been in effect. However, in this connection it is to be remembered that the St. Paul originated on its own rails in 1924, seventy three per cent of its total tonnage.

Predicated on Freight Revenues thus "reconstructed" there is shown the increased amount of Net the St. Paul would have had available for Interest and Other Charges, and the resultant conversion of the St. Paul's 1924 **DEFICIT** in meeting charges, into a substantial **SURPLUS**.

**INCOME ACCOUNT OF CERTAIN OTHER CARRIERS—RECONSTRUCTED ON BASIS OF
THE TON-MILE REVENUES OF THE ST. PAUL
YEAR ENDED DECEMBER 31, 1924**

(These computations are made on the assumption that, had the other carriers listed, collected the same average revenues per ton-mile as were collected by the St. Paul, there would have been no resultant change in the volume or character of traffic.)

	INCOME ACCOUNT OF:							
	St. Louis-San Francisco		Missouri-Kansas-Texas		Atlantic Coast Line		Southern	
	Actual	Recon-structed	Actual	Recon-structed	Actual	Recon-structed	Actual	Recon-structed
Average Revenue per ton-mile—Actual (cents)	1.390		1.379		1.522		1.316	
Average Revenue per ton-mile of St. Paul (cents)		1.091		1.091		1.091		1.091
Freight Revenue—Actual	\$65,528,873		\$42,331,705		\$57,288,726		\$99,842,143	
Freight Revenue—Reconstructed by applying St. Paul's ton-mile revenue to the ton-miles of other carriers		\$51,442,374		\$33,482,223		\$41,061,214		\$82,756,430
Freight Revenue—Reconstructed—decrease as compared with actual		\$14,086,499		\$ 8,849,482		\$16,227,512		\$17,085,713
Net available for interest and other charges	\$21,683,954	\$ 7,597,455	\$13,070,645	\$ 4,221,163	\$20,578,749*	\$ 4,351,237*	\$35,285,381	\$18,199,668
Charges:								
Fixed Interest	\$10,439,740	\$10,439,740	\$ 4,725,955	\$ 4,725,955	\$ 6,974,772	\$ 6,974,772	\$14,250,185	\$14,250,185
Contingent Interest	4,542,432	4,542,432	2,790,085	2,790,085	—	—	—	—
Other Miscellaneous — including Rents of Leased Lines	671,579	671,579	46,167	46,167	328,132	328,132	3,266,056	3,266,056
Total Charges	\$15,653,751	\$15,653,751	\$ 7,562,207	\$ 7,562,207	\$ 7,302,904	\$ 7,302,904	\$17,516,241	\$17,516,241
SURPLUS	\$ 6,030,203	—	\$ 5,508,438	—	\$13,275,845*	—	\$17,769,140	\$ 683,427
DEFICIT	—	\$ 8,056,296	—	\$ 3,341,044	—	\$ 2,951,667*	—	—
Per Cent Earned or which would have been Earned:								
of Total Charges	138%	48%	174%	56%	282%	60%	203%	104%
of Fixed Charges only	208%	73%	277%	89%	—	—	—	—
on Preferred Stock	85%	nil	18.3%	nil	—	—	29.6%	1.1%
on Common Stock	12%	nil	4.8%	nil	19.2%	nil	12.3%	nil

* Includes dividends on L. & N. stock, and interest on A. C. L. (L&N) Collateral Trust Bonds.

In another table there is set forth the effect in increased Freight Revenue for the St. Paul in 1924 of applying to its traffic the ton-mile revenues of the St. Louis-San Francisco, Missouri-Kansas-Texas, Atlantic Coast Line and Southern, respectively, and the result in increased net available for Interest and other charges.

Conversely *this* table shows the effect on the respective Income Accounts of the St. Louis-San Francisco, Missouri-Kansas-Texas, Atlantic Coast Line and Southern of "reconstructing" their 1924 Freight Revenues by the application to their actual traffic of the materially lower basis of freight rates (average revenue per ton-mile) which the St. Paul received. Had these four lines received for transporting their freight traffic the St. Paul's lower basis of rates the 1924 SURPLUS after charges of the St. Louis-San Francisco, Missouri-Kansas-Texas and Atlantic Coast Line would have been converted into a DEFICIT and the SURPLUS of the Southern would have been reduced from Eighteen Million Dollars to less than One Million.

Stated another way—on the St. Paul's lower basis of freight rates, the St. Louis-San Francisco would have earned only 73 Per Cent of fixed interest and only 48 Per Cent of all charges, the Missouri-Kansas-Texas only 89 Per Cent of fixed interest and only 56 Per Cent of all charges, the Atlantic Coast Line only 60 Per Cent of all charges and the Southern 104 Per Cent of all charges instead of the 203 Per Cent actually earned.

(EXHIBIT 11)

**RATE OF RETURN EARNED ON INVESTMENT IN ROAD AND EQUIPMENT, PLUS
MATERIALS AND SUPPLIES AND CASH—ALL CLASS ONE RAILWAYS**

	Year Ended December 31		
	1924	1923	1922
	Per Cent.	Per Cent.	Per Cent.
New England Region	3.74	2.32	2.89
Great Lakes Region	4.84	5.30	3.29
Central Eastern Region	4.17	4.85	3.64
Pocahontas Region	6.03	5.73	5.00
TOTAL EASTERN DISTRICT	4.53	4.85	3.56
SOUTHERN DISTRICT	5.20	5.02	4.35
*NORTHWESTERN REGION	3.12	3.45	2.83
Central Western Region	4.21	4.50	4.11
Southwestern Region	4.34	3.65	3.14
TOTAL WESTERN DISTRICT	3.87	3.96	3.45
ENTIRE UNITED STATES	4.33	4.48	3.61

The "fair rate of return" fixed by the Interstate Commerce Commission, under the mandate of the Transportation Act of 1920, is 5.75 per cent.

*The Northwestern Region includes the following Class I Roads:

Chicago & Northwestern	Great Northern
Chicago Great Western	Green Bay & Western
Chicago, Milwaukee & St. Paul	Lake Superior & Ishpeming
Chicago River & Indiana	Minneapolis & St. Louis
Chicago, St. Paul, Minn. & Omaha	Minn., St. Paul & Sault Ste Marie
Duluth & Iron Range	Northern Pacific
Duluth, Missabe & Northern	Oregon-Washington R.R. & Nav. Co.
Duluth, South Shore & Atlantic	Spokane International
Duluth, Winnipeg & Pacific	Spokane, Portland & Seattle

(EXHIBIT 12)

**COMPARISON OF THE CHICAGO, MILWAUKEE & ST. PAUL—IN 1924—WITH THE
ATCHISON, TOPEKA AND SANTA FE**

Elsewhere in these tables, we have compared the St. Paul, as to traffic volume and density, operating efficiency, freight-rate structure and income account results, with certain strong, well-operated, dividend-paying roads—the St. Louis-San Francisco, and the Missouri-Kansas-Texas in Southwestern territory and the Atlantic Coast Line and the Southern in the Southeast. We believe that these comparisons clearly demonstrate that **THE INFERIORITY OF THE ST. PAUL, AS CONTRASTED WITH THE FOUR ROADS MENTIONED, IS IN THE MATTER OF FREIGHT RATES ALONE**, and that had the St. Paul been accorded a fair and proper basis of freight rates, its property would not be in Receivership today.

It may, however, be contended that the St. Paul might more properly be compared, for purposes of this analysis, with some strong, well-operated "Transcontinental" line. Such a comparison may fairly be made with the Atchison, Topeka & Santa Fe.

There are many points of similarity between the two roads in the character of territory served, and character of traffic handled. The St. Paul and the Atchison are the only "Transcontinental" lines furnishing service between Chicago and the Pacific Coast over their own rails.

A comparison of the classification of traffic for the year ended December 31, 1924, is as follows:

	PER CENT OF TOTAL	
	St. Paul	Atchison*
Products of Agriculture—Animals and products	22.0	27.2
Products of Mines and Forests	55.5	42.1
Manufactures and Miscellaneous	22.5	30.7
Total	100.0	100.0

* Includes Gulf, Colorado and Santa Fe Railway.

The St. Paul had the advantage of a greater proportion of the heavier-loading Products of Mines and Forests, which traffic lends itself most readily to economical transportation. On the other hand, the Atchison had the advantage of a greater proportion of higher-rated commodities embraced under the head of Manufactures and Miscellaneous.

All figures quoted hereinafter exclude the Gulf, Colorado and Santa Fe Railway, comprising the lines south of Purcell, Oklahoma, and east of Sweetwater, Texas.

In traffic volume, the Atchison in 1924 was only slightly superior to the St. Paul, its density being 1,085,200 tons per mile of road per annum, as compared with 1,001,600 tons for **the St. Paul.**

On the major portion of its mileage the St. Paul's operation has to contend with the handicap of a rigorous winter climate—a condition which does not confront the Atchison.

(Continued 1)

(EXHIBIT 13)

The average haul of freight traffic of the Atchison in 1924 was 308 miles, and that of the St. Paul, 233 miles. Every ton and every car of freight necessarily incurs a cost for terminal handling at both ends of its haul on a given railroad, and the shorter the haul, the greater, proportionately, is the element of terminal cost per ton-mile. It may be contended that longer hauls of freight traffic necessitate incurring additional cost for handling at intermediate or division terminals. These intermediate terminal costs, however, are in a large measure, simply the result of transfer from train to train or, in the case of less-than-carload freight in some instances, from car to car, and lack many of the elements of cost incurred at the originating or destinating terminal. In fact, the handling of freight traffic through intermediate terminals or division points involves in many cases nothing more than a change of engines and cabooses on solid through trains. It may fairly be stated, therefore, that the shorter average haul of freight traffic on the St. Paul constitutes an additional burden on operation as compared with the Atchison.

The average loaded car moved by the Atchison in 1924 contained 18.5 tons of revenue freight, as compared with 21.6 tons for the St. Paul.

The balance of freight traffic volume on the two roads in 1924 was not greatly dissimilar:

	PER CENT OF TOTAL	
	St. Paul	Atchison
Loaded Freight-Car Miles:		
Eastbound	59	61
Westbound	41	39

The average train load—tons of revenue freight per freight train mile—in 1924 was 548 for the Atchison and 579 for the St. Paul.

The average cost per 1,000 net ton-miles, for direct variable, or out-of-pocket, transportation costs, consisting of wages of Trainmen and Enginemen, Fuel, Train and locomotive supplies, Enginehouse Expenses and locomotive repairs, was \$2.14 on the St. Paul, as compared with \$2.44 on the Atchison, in 1924. The average cost per passenger train mile for the same character of transportation expenses, was 81.0 cents on the St. Paul as compared with 92.9 cents on the Atchison.

It has been suggested in some quarters, that the St. Paul's present troubles have been induced, at least in part, by loss of traffic due to its extension to Puget Sound, and to competition of the Panama Canal. This is not a fact. However, the rails of the Atchison extend to the Pacific Coast, and it also faces Canal competition.

With no marked dissimilarity in character and volume of freight traffic, and with the St. Paul (in spite of its winter climate handicap and its shorter haul of freight traffic), operated at least as efficiently as, if not more efficiently than, the Atchison, the latter road is prosperous, its financial strength pre-eminent, while the St. Paul is in Receivership.

(Continued 2)

(EXHIBIT 13)

It may, perhaps, be contended that the comparisons herein made, for the year 1924, are not sufficiently illustrative and that the St. Paul's failure to earn sufficient net has been due to cumulative conditions. In reply, it can be stated that the condition of similarity of traffic density and traffic character and volume, obtaining in 1924 we find extends back to and including 1922, and that in each of the three years ending with 1924 the average train load has been consistently greater, and unit out-of-pocket costs of transportation have been consistently lower on the St. Paul than on the Atchison; while throughout these three years the average revenue per ton-mile received by the Atchison has been materially higher than that of the St. Paul.

The average revenue per ton-mile received by the Atchison in 1924 was 1.333 cents, whereas the St. Paul's average was but 1.091 cents, an excess of 22 Per Cent in favor of the Atchison.

The real reason why the St. Paul has not been able to achieve results, in the shape of net income available for charges and dividends, such as were obtained by the Atchison, has been the distinctly unfavorable basis of freight rates under which the St. Paul has labored. We do not contend, nor do we for a moment believe, that the freight rate basis of the Atchison is too high, but we do take the firm position that the St. Paul, being economically and efficiently operated, is entitled to such an increase in its present freight rate basis as will enable it to earn a fair return on the capital which has been invested in it, for public service.

If the St. Paul had collected, on the freight traffic which it actually transported in 1924, the same ton-mile rate as was collected by the Atchison, the Net Railway Operating Income of St. Paul would have been increased, in round figures, \$26,000,000, and its DEFICIT of \$1,868,000 in meeting its charges, would have been converted into a SURPLUS exceeding \$24,000,000, after paying all charges.

(Concluded 3)

(EXHIBIT 13)

**RATIO OF PASSENGER REVENUE TO TOTAL OPERATING REVENUES
1924 VERSUS 1911**

	1924 Per Cent	1911 Per Cent
Chicago, Milwaukee & St. Paul	13.7	21.7
Northern Pacific	13.9	26.6
Great Northern	12.5	21.9
Chicago & Northwestern	19.3	25.5
Minn. St. Paul & S. S. Marie	13.7	23.1
C. St. P. M. & O.	20.5	27.8
Chicago Great Western	15.8	22.5
Average of 18 roads comprising Northwestern Region	14.8	23.3

**AVERAGE NUMBER OF PASSENGER TRAIN MILES OPERATED PER MILE OF ROAD
PER DAY—CHICAGO, MILWAUKEE & ST. PAUL AND
PRINCIPAL COMPETITORS**

YEAR ENDED DECEMBER 31, 1924

Chicago, Milwaukee & St. Paul	4.4
Northern Pacific	4.2
Great Northern	3.9
Chicago & Northwestern	6.3

The passenger revenue of the St. Paul is less than 14 Per Cent of its total operating revenues, and in this respect it is practically on a parity with the average of the eighteen roads comprising the Northwestern Region.

The passenger revenues are not a main issue in the matter under consideration, and it is not believed that it would be at all practicable to aid the financial situation of the St. Paul property by an increase in passenger rates, which are a direct tax upon the individual, and directly felt. The average revenues per passenger-mile in the Northwestern Territory, and on the St. Paul, are not out of line with those in the other territories, or in the United States as a whole. It is believed that the passenger business of the St. Paul is like that of a great many other carriers—somewhat unprofitable per se.

However, the management cannot properly be charged with extravagance in the volume of passenger train mileage operated, the average for the year 1924 being four train-miles per mile of road per day, as compared with a like number on the Northern Pacific and Great Northern, the St. Paul's direct competitors, and with an average of six train-miles per mile of road per day on the Chicago and Northwestern.

The management has stated that, in its judgment, the main line passenger business of the St. Paul is reasonably profitable, but the company has a considerable amount of branch line mileage upon which a certain minimum passenger service is obligatory, regardless of the volume of patronage. It is understood that an effort is being made to reduce, or if possible eliminate, the losses on this branch line passenger service by the inauguration of motor-car service, both rail and highway.

**ANALYSIS OF THE CHANGES SINCE THE DAYS OF J. J. HILL, TO DETERMINE THE
REASONS FOR THE DECLINE IN FINANCIAL STRENGTH
OF THE NORTHWESTERN ROADS**

For the purpose of this analysis we have selected the year ended June 30, 1909, as being a typical year of the so-called "Hill Regime," when the Northwestern Roads were unsurpassed in financial strength. In that year stocks of the Hill lines and the Chicago, Milwaukee & St. Paul sold up to:

St. Paul Preferred	181
St. Paul Common	<u>165</u>
Northern Pacific	159
Great Northern Preferred	157

Today the prices of these stocks are approximately:

St. Paul Preferred	16
St. Paul Common	9
Northern Pacific	65
Great Northern Preferred	68

7
9 90
5 70
3 400

The vital factors which might have caused this decline are:

1. Unfavorable change in character of traffic.
2. Unfavorable change in capitalization as compared with volume of traffic.
3. Unfavorable change in efficiency of operation.
4. Unfavorable change in rates.

1—CHARACTER OF TRAFFIC:

**COMPARISON OF COMMODITIES CARRIED—PER CENT OF TOTAL
(I. C. C. Classification)**

	1909			1924		
	St. Paul	Nor. Pac.	Gt. Nor.	St. Paul	Nor. Pac.	Gt. Nor.
Products of Agriculture	21.3	20.2	22.0	16.5	23.5	20.9
Animals and Products	6.4	2.2	1.4	5.5	1.6	1.7
Products of Mines	28.9	23.6	52.7	34.0	25.1	56.2
Products of Forests	13.5	36.3	12.3	21.5	36.3	11.0
Manufactures and Miscellaneous	29.9	17.7	11.6	22.5	13.5	10.2
	100.0	100.0	100.0	100.0	100.0	100.0

(Continued 1)

(EXHIBIT 15)

The two classes of freight traffic which, because of heavy car-loading and slight liability of loss or damage in transit, are more economically transported than any other class, are products of the mine and the forest.

These classes predominate in the tonnage of the St. Paul, Northern Pacific and Great Northern.

The percentage which these commodities, combined, contributed to the total tonnage of these three roads was greater, in each instance, in 1924 than in 1909.

The fluctuation in the proportion of other classes of traffic in the same period was not, in any instance, large or significant.

THERE WAS, THEREFORE, NO UNFAVORABLE CHANGE IN THE CHARACTER OF TRAFFIC.

2—CAPITALIZATION COMPARED WITH VOLUME OF TRAFFIC:

	CAPITALIZATION PER 1000 TON-MILES OF REVENUE FREIGHT					
	1909			1924		
	St. Paul	Nor. Pac.	Gt. Nor.	St. Paul	Nor. Pac.	Gt. Nor.
Bonded Debt	\$ 23.	\$ 33.	\$ 21.	\$ 42.	\$ 31.	\$ 25.
Stock	26.	47.	43.	21.	38.	31.
Total	\$ 49.	\$ 80.	\$ 64.	\$ 63.	\$ 69.	\$ 56.
Per Cent of Increase	—	—	—	29.	—	—
Per Cent of Decrease	—	—	—	—	13.	13.

It is true that the capitalization of the St. Paul in 1924 as compared with volume of traffic handled, did show an increase of 29 Per Cent over 1909, as contrasted with some decrease in the case of both the Northern Pacific and Great Northern; but on the other hand, as will be shown subsequently, the operating efficiency of the St. Paul, made possible in part by the increased plant and facilities secured from this increase in capitalization, made much greater gains than were achieved on either of the two "Hill lines" mentioned. It may therefore properly be said that, **THERE WAS NO UNFAVORABLE CHANGE IN CAPITALIZATION.**

3—CHANGE IN OPERATING EFFICIENCY:

AVERAGE TRAIN LOAD—NET TONS OF REVENUE FREIGHT PER TRAIN-MILE					
1909			1924		
St. Paul	Nor. Pac.	Gt. Nor.	St. Paul	Nor. Pac.	Gt. Nor.
274	435	502	579	659	770
Percent of Increase			111.	51.	53.

(Continued 2)

(EXHIBIT 15)

The best single test of railroad operating efficiency is the loading of freight trains.

The total expenditure for out-of-pocket transportation costs increases or decreases, in large measure, directly in proportion to the number of freight train miles run, i. e., these costs are incurred "by the train-mile."

The number of train miles required to move a given volume of traffic, decreases as the number of tons carried per train increases.

Therefore increased tonnage per train is reflected directly in savings in transportation expenses.

The gain in train loading of these three Northwestern roads since the days of J. J. Hill has been noteworthy—fifty one per cent on the Northern Pacific—fifty three per cent on the Great Northern—and one hundred and eleven per cent on the St. Paul.

THERE HAS BEEN NO UNFAVORABLE CHANGE IN THE EFFICIENCY OF OPERATION as measured by this vital factor.

Before commenting on the freight rate situation, we summarize the facts shown by the three preceding tables as follows:

- (1) Since 1909 the character of the traffic of these three Northwestern roads has apparently slightly improved—it certainly has not changed for the worse.
- (2) In capitalization as compared with volume of traffic the situation of the Northern Pacific and the Great Northern has improved. The St. Paul shows an increase in capitalization somewhat out of proportion to the increase in traffic volume, but the increase in operating efficiency of the latter line, secured in connection with the increase in capital expenditures, has been very great.
- (3) Operating efficiency as measured by the vital factor of freight-train load has shown substantial increases on all three roads.

THEREFORE, the decline in the financial strength of these Northwestern roads is apparently not due to unfavorable changes in traffic character or volume, capitalization or operating efficiency.

WE ARE CONVINCED THAT THE CAUSE IS:

4—UNFAVORABLE CHANGE IN RATES:

CHANGES IN RATE STRUCTURE

	Average of St. Paul, Nor. Pac., Gt. Nor.		Average of All Class One Railways in United States	
	1909	1924	1909	1924
Average Revenue Per Ton-Mile (cents)	.850	1.090	.763	1.116
Per Cent of Increase	—	28.	—	46.

These Northwestern carriers have lacked an increase in freight rates comparable to that accorded carriers in other sections of the United States to offset, at least in some measure, the large increases which have taken place in wage scales, material costs and taxes since 1909; and in this we find the real reason for the decline in the financial strength of these three Northwestern roads which formerly were among the strongest in the United States.

(Concluded 3)

(EXHIBIT 15)