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THE CHICAGO, MILWAUKEE, AND ST. PAUL RAILROAD: RECENT HISTORY OF THE LAST TRANSCONTINENTAL[1]

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The St. Paul Railroad was at the beginning of the present century one of the strongest roads of the Middle West (pp. 82–85). In the wave of consolidations which swept the country at that time, this railroad was, however, in danger of being walled-in by transcontinentals (pp. 85–88). In order to meet this contingency, and optimistic about the prospects of the Far West, the Company pushed on to the Coast (pp. 88–91). A section of its line in the mountains was electrified (pp. 91–94). The cost of these two projects was vastly greater than planned and plunged the road heavily into debt (pp. 94–96). The Company's earning power did not increase in proportion to its increased obligations (pp. 96–99).

Federal control only postponed the day of judgment (pp. 99–100). In 1920 the St. Paul—its physical condition on the down grade—bought two lines, the Terre Haute and the Gary, both of which proved unprofitable (pp. 100–101). Its debt was increased by new bonds for needed equipment (p. 102). Though there was some improvement from 1921 to 1924 in the ratio of operating expenses to revenues, the Company operated under a deficit (pp. 103–108). In 1925 the St. Paul was turned over to receivers (pp. 109–111). A plan was formulated for the reorganization of its financial structure (pp. 111–115), and in 1926 it was sold to a new company (pp. 115–116). The new company took possession in 1928 (pp. 116–117). Whether the St. Paul can recover from its past over-expansion is still problematical.

I

By 1900 the construction of the transcontinental railroads in the United States had apparently come to an end. In the South were the Atchison and the Southern Pacific. In the middle zone the Union Pacific, through its combination with the Oregon Short Line and the Southern Pacific,

[1] In addition to the usual sources of information such as financial and technical journals, especial emphasis has been placed for this study on the reports and briefs in connection with the receivership proceedings. These were for the most part examined at the library of the University of Minnesota, the James J. Hill Reference Library in St. Paul, Minnesota, and the Company's general offices in Chicago, Illinois; or obtained principally from several banks interested in the affairs of the Company and from the Interstate Commerce Commission. Various records at the Company's general offices in Chicago were placed at the disposal of the writer. Additional information, much of which is not available in printed form, was obtained through correspondence or personal interviews. The sources of material are listed in detail on pages 711 and 712 in the writer's doctoral dissertation, The Financial History of the Chicago, Milwaukee, & St. Paul Railway Company, submitted to the graduate faculty of the University of Minnesota in February, 1929.

reached the Coast at two widely separated places, while the Burlington and the Rock Island extended from Chicago to the foothills of the mountains. In the North the Northern Pacific and the Great Northern served the northwest Pacific Coast and the territory intervening between that region and the Great Lakes.

These railroads were in a strong position in securing long-distance freight traffic to and from the Pacific Coast. There were several shorter roads, on the contrary, which could participate in that traffic to any large extent only with the permission of the Coast railroads. Among these was the Chicago, Milwaukee, and St. Paul.[2] This road had an adequate network of lines in Wisconsin, northern Illinois, Iowa, northern Missouri, southern Minnesota, and South Dakota. It had excellent main lines radiating fan-wise from Chicago to Kansas City, Omaha, and Minneapolis and St. Paul. Beyond the Twin Cities it reached out with a line to the semi-arid zone in South Dakota, which ended at Mobridge. Valuable as this network was, the Railroad had no line to the Coast. It was only in 1905 that the St. Paul planned to build an extension to Puget Sound. Prior to this time the Northern Pacific and Great Northern had completed arrangements with the Burlington whereby an interchange of traffic at the Twin Cities was assured. This, it was feared, would weaken the strategic position of the St. Paul still more. Moreover, it must be remembered that the period between 1900 and 1915 was one of consolidation. In the early years of this century, Harriman began the rehabilitation of the Union Pacific and Southern Pacific railroads. The spirit of adventure in railroading was taking on new life after the disastrous years of 1893 to 1900. Business was increasing throughout the country (and nowhere more than in the plains region) and railroad traffic

[2] The Chicago, Milwaukee, and St. Paul Railway Company was popularly referred to as the Milwaukee in the West; and in eastern financial circles, as the St. Paul. Since the reorganization, for which purpose the Chicago, Milwaukee, St. Paul, & Pacific Railroad Company was formed, the road has been called the Milwaukee Road. Since the predecessor of the latter company, especially its financial aspects, is the subject of this account, the road will be referred to as the St. Paul

was increasing as a result. It must have seemed an auspicious time to the men in control of the St. Paul to open up a new territory south of the northern roads, and to place their road among the great transcontinentals.

Financially the St. Paul was in excellent condition. It had shared in the prosperity of the early years of the twentieth century and the territory traversed by the lines of the road was growing industrially. It had not only extended its mileage but also improved its equipment, adding heavier rolling stock and modernizing its plant. Its divisional bond issues with high interest rates were rapidly being refunded into bonds with lower rates. The latter were being issued on a general mortgage which was executed over the entire property in 1889. Since many old divisional liens, convertible into preferred stock, were maturing and since this preferred stock was being quoted considerably above par and was regarded as a gilt-edged security, it was issued instead of bonds to secure new funds.

On June 30, 1905, the capitalization of the Company was quite evenly divided between capital stock and funded debt. The capitalization and interest charges per mile of line compared favorably with those of the Great Northern and Northern Pacific, which were later to become the road's chief competitors. The St. Paul was earning over three times its interest charges. Seven per cent was being paid on both classes of stock with a substantial balance remaining for the property. Since in the course of the Railroad's history, a vast sum had been invested in improvements and treated as operating expenses, the property figure on the balance sheet was a conservative one. The Company in 1905, as a strong middle western system, controlled no subordinate lines. Instead, it absorbed them and made them a part of itself.

The management, regarded as one of the best in the country, had acquired distinct, well-recognized policies. The leaders of the St. Paul had come from the operator's key through all the intermediate steps even to the president's table. The St. Paul, like the Burlington, had come to be recognized as a railroad training school of the first order. The loyalty of the employees was remarkable. In the great railroad strike in 1894 there were whole divisions where the disturbance was never felt.

The management was eminently progressive. The St. Paul was one of the first roads to adopt the system of shipping grain in bulk, this practice marking the beginning of the grain elevator. It was the only American railroad which was operating its own sleeping cars in 1905. In a like manner it was keeping at home some of the necessary manufacturing in connection with its business by building in its own shops some of its locomotives and cars. This policy resulted in the development of new ideas in motive power and rolling stock relative to the system's needs. Readiness to experiment was shown in the sixteen years' struggle to perfect the lighting of passenger trains by electricity. The road was not only the first to apply electricity to train lighting, but the first to achieve satisfactory results, and at this time it was leading all American railroads with some 3,000 electrically lighted cars. The St. Paul had advertised South Dakota so long and so earnestly that it came to be looked upon by the State administration as a sort of advertising adjunct of its own, and was accorded, after a manner, official recognition.

Then certain developments came to a climax which were to have a vital effect on the road's destiny. As early as 1901 the St. Paul was considering the idea of building to the Pacific Coast. At that time E. H. Harriman was dominant in Union Pacific affairs, while Roswell Miller, who had previously been president of the St. Paul, was chairman of its board of directors and A. J. Earling was its president. Miller had, by this time, served the Company for over twenty years as general manager, president, and chairman of the board. He was recognized as a representative of the road with sufficient information, experience, and competence to handle large financial transactions and to determine large financial policies. Earling had entered the service of the Company in 1866. Starting at the telegraph key he had worked his way up through the ranks to the presidency in 1899.

In writing to Earling on March 29, 1901, Miller referred to a conversation with Harriman relative to the interchange of business between the Union Pacific and the St. Paul. Miller had recently resigned from the Union Pacific board because he believed that he was unable to help the St. Paul by remaining on it. He was not satisfied at this time with the existing arrangement between his road and the Union Pacific concerning passenger traffic. The Northwestern had a better arrangement with the latter than the St. Paul. Miller told Harriman that because of the situation the St. Paul would be compelled to build to the Coast and could do it for $45,000,000—one-sixth of the capitalization of the Union Pacific line. Harriman told him to start it tomorrow if he liked. In October, 1902, the stockholders of the St. Paul increased the common stock by $25,000,000. It was rumored at that time that the Company threatened to issue this stock and build a line to the Coast if the Union Pacific would not permit the St. Paul, by means of joint use, to establish passenger and freight service through to San Francisco. During that same month the two companies entered into a contract by which the St. Paul was allowed to run through passenger and freight trains to the Coast over the tracks of the Union Pacific. No doubt this contract eliminated the latter road as an immediate factor, at least in the plans for a coast extension.

There was another factor in the situation, however. In January, 1901, the common stock of the St. Paul advanced from $145 to $158; and 250,000 shares changed hands on the New York Stock Exchange. Several rumors were afloat. One was that the road was to be leased jointly by the Northern Pacific and Great Northern with a guaranty of six per cent and seven per cent dividends on the stock, and that the surplus was to be distributed among the stockholders prior to the lease. Another was that the road, together with the Erie, was to be joined in a system from New York to the Pacific under the control of the Hill-Morgan interests. A week later James J. Hill admitted having purchased some St. Paul stock but denied that control was being sought. Nevertheless he hinted at the probability of a traffic arrangement between the St. Paul and the Great Northern. Then a week later he denied having purchased stock and stated that a joint lease had never been considered. Early in February, 1901, it was a common report that J. Pierpont Morgan had met the executive committee of the St. Paul and made a tentative proposition whereby the Northern Pacific and the Great Northern should obtain control. The proposition, it was reported, was declined. No doubt Hill wanted to link his lines with the markets of the Middle West and with the eastern trunk lines at Chicago. It was said that Morgan favored the St. Paul, and Hill, the Burlington.

Then negotiations for the acquisition of control of the Burlington by the Northern Pacific and Great Northern followed. Miller, who was alarmed, wrote Earling on April 9, 1901, that he had told Jacob Schiff of Kuhn, Loeb & Company on that day that, if the Burlington were acquired by the two roads, the St. Paul would be compelled to build to the Coast. At that time the St. Paul officials had no clear idea which port on the Pacific they would reach. Various points were mentioned in the exchange of correspondence. At Miller's request Earling sent an engineer over the Northern Pacific to ascertain the cost of duplicating that line. Before the latter started on his trip, he wrote Miller that the Northern Pacific's line could be duplicated for less than $45,000,000. Miller replied that the board had authorized the expenditure of $10,000 in making a reconnaissance from Evarts, South Dakota, to Butte, Montana, and again pointed to the necessity of building to the Coast if the Burlington deal went through. In August, 1902, Miller submitted to William Rockefeller, then an influential director of over twenty-five years' standing in St. Paul affairs, a report on a proposed extension to the Pacific Coast at Eureka, California, to reach the vast timber lands of Humbolt County, California.

In April, 1905, a committee of directors was appointed to take action with respect to the acquisition of the right of way. On May 25, Miller reported to Earling that the Harriman and Hill interests had come to an agreement and would do all they could to prevent the St. Paul from building. However, at the same time, Hill wrote a letter to the president of the Burlington saying that if he were the head of the Northwestern or the St. Paul he would never be satisfied with a connection over some other line, but would build a line to Puget Sound which would go far toward putting the Sound ahead of San Francisco in commerce. He was of the opinion that the Great Northern would be more benefited than injured. Evidently neither Hill nor Harriman feared a new extension. As late as July, 1905, W. K. Vanderbilt and Rockefeller had discussed a line to be built jointly by the Northwestern and the St. Paul. Rockefeller favored the idea but Miller did not. On November 4, 1905, Miller advised Earling that, in view of a cable from Rockefeller, Earling should go ahead with arrangements for construction. On November 28, 1905, the board formally authorized the building of a line to Seattle and Tacoma. On September 28, 1906, Earling reported that, from the information then available, the cost of the entire extension, including equipment, would be \$60,000,000. The two estimates, the former one of \$45,000,000 and the latter of \$60,000,000, proved to be a small part of what was ultimately expended on the extension.

Rivalry between powerful groups was obvious. Miller, Rockefeller, and others controlling the St. Paul felt that they could not tolerate its being bottled up in South Dakota with the Hill lines to the north controlling the Burlington and the Harriman lines to the south working in harmony with the Northwestern. It was not necessary at that time to secure a certificate from the Interstate Commerce Commission to the effect that public convenience and necessity required the construction of such a line under provisions of law, such as would now be required under section 1 of the Interstate Commerce Act. The Interstate Commerce Commission, in its investigation of the road's affairs in 1925, pointed out that it had no voice in the momentous decision to build to the Coast.

At the time the prospect for such an extension seemed promising. In the closing years of the nineteenth century the gold discoveries in Alaska, the expansion of the lumbering industry, the increasing commerce with the Orient, and the revival of land speculation resulting from improving prices for agricultural products and higher land prices in the Middle West brought the beginning of a real-estate boom in the Pacific Northwest. This boom was well under way during the first five years of the twentieth century, and was accompanied by important mining developments and improvements of metallurgical processes which resulted in increased metal output in Montana and Northern Idaho. Federal, State, and private irrigation projects were under way, and there was a great expansion in hydro-electric power development. A means of entrance into this Eldorado was, no doubt, in the minds of the St. Paul people.

II

In the fall of 1905 the Pacific Railroad Company was incorporated in Washington in the interest of the St. Paul. At this time H. R. Williams, president of the new Company and former general manager of the St. Paul, was quoted as saying that the new Company was an independent enterprise with no connection with the St. Paul. Financial circles, however, knew better. Early in 1906 the name of the new company changed to the Chicago, Milwaukee, & St. Paul Railway Company of Washington. Late in 1905 and early in 1906 three more companies were incorporated with the same names in Montana, Idaho, and South Dakota to build the extension through these three States. Soon the St. Paul was advancing from time to time sums of money to these companies to aid them in constructing their share of the extension.

In the fall of 1906 the proposed route of the extenssion was made public. It was to run from Glenham, South Dakota, northwestwardly across the State, over the Missouri River, then across the southwestern corner of North Dakota and almost straight west across Montana to Butte, Montana, across northern Idaho, and into Washington to a point n that State called Maple Valley, where a connection was to be made with the Columbia & Puget Sound Railroad owned by the Washington subsidiary building the line on to Seattle. A number of large steel trestles over deep ravines and rivers and several long tunnels through the mountains were to be distinctive features of the new line.

From Chicago to Seattle the distance was estimated to be 2,305 miles, about 150 miles shorter than by way of the Burlington to the Twin Cities and the Northern Pacific to the Coast, and 80 miles shorter than by way of the Burlington and Great Northern to the Coast. Mountain grades were to be from 1.66 to 1.81 per cent, as against an average of 2.2 per cent on the Northern Pacific.

In November, 1905, before the subsidiary company had been organized in South Dakota, a contract was let for the construction of about 800 miles of the extension west from Mobridge. The work of constructing the line was carried on at a rapid pace. By the summer of 1908 the track was complete from the Missouri River to Butte.

The stock of the four subsidiary companies had been deposited with the St. Paul as security for advances. On December 31, 1908, the Idaho, Montana, and South Dakota organizations were acquired by the Washington organization. The name of the latter was changed to the Chicago, Milwaukee, & Puget Sound Railway Company. The stock of the latter company was increased to $100,000,000 and was conveyed to the St. Paul as security for advances made for the construction of the extension. Where the St. Paul was getting these funds will be related shortly. This capital stock of $100,000,000 would then permit the Puget Sound Company to issue $200,000,000 in bonds, as the State law in Washington permitted a railroad to be bonded up to twice the amount of its capital stock.

On April 1, 1909, the last rail was laid on the main line. The extension was opened for through transportation of freight on July 1, and for through passengers in August. But the completion of the main line by no means meant the completion of the entire project. Much work remained to be done. About 520 miles of branch lines were being constructed at this time. With the main line completed, the work on the extension from now on was in connection with the construction of branches and feeders, or the purchase of new lines in the West to serve as branches and feeders. Work of this sort was continued by the Puget Sound Company until it was merged with the St. Paul, and by the latter subsequently until the effects of the World War began about 1915 vitally to affect the road's financial condition. Railroad properties which were acquired as branches or feeders were acquired by the Puget Sound Company, usually through an exchange of securities, and operated as independent units with few exceptions. Then, after the extension company had been merged with the parent company, the latter continued to operate some of these as independent units, but, by the end of the year 1918, it merged these properties into its own.

As the Pacific Coast extension was substantially completed by the Puget Sound Company by the close of 1913, the St. Paul deemed it advisable on account of economy and efficiency in operation to take over the lines of the subsidiary company and make them a part of the system. So the Puget Sound Company conveyed all its railway, other property, and franchises to the St. Paul on December 24, 1912. On January 1, 1913, the St. Paul actually took possession of the extension, merging the accounts; and since that date it has been operating the line as a part of its own system.

Constructing an extension first under several subsidiary companies and later under one, and then absorbing the subsidiary company when the work was substantially completed, was nothing new in American railroad history. Where construction work is heavy and important, and where a road crosses a number of States with strict statutory requirements concerning railroad construction, the job is often broken up into a number of component parts tied together by a control exercised by officers of the parent company. The accounting operations are very difficult where much construction work is carried on along with regular operations. They must be separated properly. As it was, the St. Paul ran into difficulties with the Interstate Commerce Commission concerning the manner in which it accounted for the operating expenses on completed portions of the line and for the construction expenses. It was these administrative difficulties to a large extent which prompted the St. Paul management to incorporate the extension as a unit separate from the old company.

In January, 1913, there were public rumors that the progressive St. Paul system was planning the electrification of about 450 miles of the Company's lines through the mountains in Montana and Idaho. One of the advantages of electrification was the elimination, to a considerable extent, of the usual braking on descending grades through motors on the electric locomotive so constructed as to act as generators, returning current to the line and controlling the speed of the trains. In addition, there was more speed than by steam for both passengers and freight on the ascending grades, and also greater comfort to passengers resulting from the elimination of smoke and the reduction of delays in coaling, taking on water, cleaning fires, waiting for steam, and freezing conditions. The management was of the opinion that these advantages would lower costs and, through improved service and the attention drawn to the project, would attract traffic, thereby increasing the earning power of the property to such an extent as to make the investment in electrification a very profitable one. Furthermore, among those managing the St. Paul at this time were men who had a special interest in the electrification of the road's mountain lines and who had experience with electrical rail operation on a smaller scale than planned at this time for the St. Paul. An understanding of this situation is essential to an understanding of the course of certain events in connection with the electrification project.

John D. Ryan became a director of the St. Paul in 1909 upon the request of another director, William Rockefeller; he was president of the Anaconda Mining Company, and was also interested in water power. Rockefeller was of the opinion that the great familiarity of Ryan with the country through which the extension was about to operate made him a desirable addition to the board. For many years Rockefeller had a large interest in the Anaconda Mining Company, which had extensive properties in Montana, and he was a director of that Company during the St. Paul's electrification. Ryan was reported to have said that he was interested in railroad electrification in order to secure a new use for copper and an outlet for the great undeveloped water power controlled by him and his associates. As a director of the St. Paul during its negotiation of the necessary power contracts, he took no part in the board's discussion of the matter, and in framing the contracts he was the active negotiator for the power companies, while Earling, then president of the road, represented the railroad. The General Electric Company had electrified a short line, from Butte to Anaconda in Montana, controlled by the Anaconda Copper Company. While this project was under way, the General Electric Company was making various studies and investigations with regard to electrification of the St. Paul. This Company was evidently determined to sell the idea of railroad electrification.

In November, 1912, the St. Paul made a 99-year contract for power for the Rocky Mountain Division with the Great Falls Power Company. Ryan and his associates controlled a half interest in this power company. In February, 1913, the road made a similar contract with the Thompson Falls Power Company for the adjoining Missoula Division. Ryan was heavily interested in this company also. Shortly afterwards, the Montana Power Company was incorporated and took over these power companies. Earling, who represented the road in negotiating the contracts, was convinced that the road could not develop its own power so cheaply as it could purchase it. Through exchange of stock, Ryan's holdings in these power enterprises became Montana Power Company stock. The appreciation in a few years in Ryan's holdings brought him a handsome profit due primarily to these contracts.

The actual work of electrifying the two divisions, extending from Harlowton, Montana, to Avery, Idaho, was commenced in April, 1914. In November, 1916, with the completion of the work, electric operation began on the entire stretch of 438 miles.

In March, 1917, the St. Paul made a 98-year contract with the Intermountain Power Company to furnish power to the Coast Division, extending from Othello to Tacoma, Washington, 210 miles. This contract was similar to the others. Ryan and his copper associates owned this power company, which was based on another contract with the Washington Power Company for some of the latter's surplus power. Some years later the stock in the Intermountain was sold to the Washington Company for the latter's stock. Ryan and his associates realized a handsome profit, for, due to the power contract with the St. Paul, the stock of the Intermountain came to have a high value. Later, due to the failure of business to develop over the extension as anticipated, these power contracts became burdensome to the St. Paul. They were modified by the contracting parties in 1922. In fairness to the power people it may be well to point out that while the Interstate Commerce Commission did criticize the management for permitting the road to be used as a vehicle for profits, the contracts compared favorably with similar contracts which other lines had for power.

It was in the light of subsequent experience that the contracts became burdensome. This development led the Commission to advise their modification.

Work was commenced on the electrification of this section in March, 1917, and was continued while the road was being operated with other roads by the Federal Government early in 1920. The St. Paul route through the West became a favored one with many people, due to the electrically operated divisions over the mountains.

In 1917 H. E. Byram came to the St. Paul from the Burlington to serve as president after the death of Earling. It was said that he was brought in from the Burlington mainly because of his exceptional operating experience.

III

To finance the extension, the St. Paul first called upon its own stockholders. Such were the credit and reputation of the officers for successful management that approximately $100,000,000, two-thirds with preferred stock and one-third with common stock, was raised without increasing fixed charges. But in 1909 the Company resorted to issuing bonds to the stockholders and to the general public. The totals of the new issues sold in blocks from time to time to December 31, 1917, when the extension and most of the electrification were completed, are shown in the following table:

Chicago, Milwaukee, & Puget Sound 4's, due in 1949	$26,175,000
26-year gold 4's, due in 1934	33,286,000
15-year European loan 4's, due in 1925	13,076,000
Gold 4's, due in 1925	35,100,000
Convertible gold 4½'s, due in 1934	49,981,000
General and Refunding 4½'s and 5's, due in 2014	72,219,000

The Puget Sound 4's were issued on a first mortgage executed on the extension. Ultimately an additional amount of about $155,000,000 was issued by the subsidiary company to the parent Company for funds advanced by the latter to construct the extension. These bonds remained in the parent Company's treasury. The next four kinds of bonds were issued as debentures, which by the provisions of their indentures were to be included in the next mortgage executed on the property. Incidentally, the 4's of the European loan were sold before the World War through a French syndicate to French investors. Later, during the war, the Company arranged with its banks for the sale of gold 4's in this country and the redemption of the European bonds with the proceeds. In 1913 the St. Paul executed a general and refunding mortgage on its entire property, including the extension, and thereby made their various debentures into mortgage bonds. This mortgage closed the previous general or blanket mortgage on the old lines exclusive of the extension, executed in 1889, except for refunding purposes. Then the Company began to borrow on the new mortgage to "finish off" the extension with branches and feeders and to electrify three divisions of it. In short, besides the stock issues of 1906, these bonds were the sources of the funds by which the St. Paul was building and equipping the extension, through the subsidiary until 1913, while receiving the latter's stock and bonds in return for advances, and in its own name after that.

On top of a simple financial structure consisting of a number of divisional issues, followed by a general blanket mortgage and this in turn by preferred and common stock, the Company placed several issues of what at first were debentures and later mortgage bonds together with additional new general blanket mortgage bonds between the old general mortgage bonds and the stock, and increased the stock. Incidentally, over $67,000,000 of bonds on the old general mortgage on the old lines, due in 1989, were issued to the public from 1909 to 1917 in connection with improvements on the old lines and refunding of underlying liens on these lines. From June 30, 1909, to December 31, 1917, there was a net increase of $266,096,000 in the funded debt in the hands of the public. It is interesting to note that the St. Paul's preferred and common stocks were selling at prices substantially above par from 1909 to 1913, and yet the Company performed its financial operations through the sale of bonds at an average rate of 5 per cent. Needless to point out, such financing greatly increased the capitalization and interest charges on each mile of line. The average interest charge per mile of main line increased from $858 for the year 1905 to $1,668 for the year 1917.

Obviously the extension far exceeded the $45,000,000, later the $60,000,000, estimated by the management. To August 1, 1909, when through traffic was established, $99,506,000 had already been sunk into it, and by December 31, 1917, $215,296,000 had been expended, exclusive of the electrification. Almost contemporaneously with the construction of the extension, large projects were under way on the transcontinental systems in this country and Canada. Work was being pushed on the Panama Canal. Contract prices rose and reached a peak in 1906 and 1907 when the St. Paul contracts were let. Then, according to E. J. Pearson, who was the engineer in charge of construction west of Butte, much heavier work was done than had originally been planned so that the first costs of construction covered much work which other transcontinentals did in the way of improvements long after the original construction. The management decided to construct a line which, when opened for business, would place the St. Paul in a position to compete on equal terms from a physical standpoint with the long established lines. Pearson had extensive experience in railroading in the Pacific Northwest before taking charge of this project. Later the Interstate Commerce Commission concluded that Pearson controlled the work effectively, and as to the construction of the entire extension, there were no losses due to dishonest expenditure.

The earning power of the property did not increase sufficiently, in proportion to the heavier financial burdens, to support the financial structure of 1917 as well as that of 1905. During the early years of this period from 1905 to 1917, over half of which time the extension was built and in operation, the St. Paul was earning roughly four times its interest charges. Then for a number of years beginning with

1908, about three and a half times interest was earned. Then the ratio declined to about two times in 1912 and thereafter for a number of years until in 1917 it was less than one and a half. Generally the increasing operating revenues held their own relative to the increasing operating expenses until 1914, but not relative to the heavy interest charges being incurred in connection with the extension from 1911 on. The management complained about rates, which were being reduced during these years. Then from 1914 through 1917 the rising operating expenses began creeping up to the rising operating revenues, and interest charges continued to mount. In 1914 and 1915 the operating revenues actually declined. In 1905 the St. Paul was paying 7 per cent on both its preferred and common stock and continued to pay 7 per cent on the preferred the succeeding years and including the year 1917. On the common, 7 per cent was paid until 1912 when 5 per cent was paid. The latter dividend was paid on the common to 1917. During that year a semi-annual dividend of 2½ per cent was followed by one of 2 per cent. The second semi-annual dividends of 3½ per cent and 2 per cent paid on the preferred and common, respectively, in the fall of 1917 were the last dividends to be paid by the St. Paul on its old stock. Later, the commission maintained that, had proper maintenance and depreciation charges been charged against income beginning with the year 1906, when the management began to permit the property to deteriorate, it would have been found that all the dividends since 1910 were paid out of surplus. After dividends were paid there was a deficit of nearly $9,000,000 for the year 1917.

A glance over the following figures will give one a birds-eye view of financial developments for the years 1900 to 1909:

	1900	1909
Mileage of St. Paul Railroad	6,482	7,512
Investment in road and equipment	$218,302,680	$274,468,163
Common stock outstanding	46,924,000	83,705,000*
Preferred stock outstanding	35,595,000	49,718,000*
Funded debt	121,154,000	114,732,500
Interest on funded debt	6,633,170	5,855,718
Operating revenues	41,884,692	61,296,041

	1900	1909
Operating expenses	27,162,829	39,950,134
Net income available for interest and dividends	13,608,616	18,967,918
Available for dividends	6,975,449	13,112,200

[a] These do not include the stocks issued on the extension.

During this decade the Company's revenues increased 46 per cent and there was a satisfactory margin between revenues and cost of doing business, operating expenses being 64.85 per cent of the revenues in 1900 and 65.18 per cent of the revenues in 1909. The Company earned three times the interest on its funded debt, paid 7 per cent dividends on its preferred stock and 7 per cent on its common in all but three years, in which it paid 5 to 6 per cent, and after so doing, carried forward for the ten-year period a surplus of $39,957,000.

Then the St. Paul built its extension and electrified part of its new lines. The figures which follow indicate the resulting changes in the railroad's finances:

	1909	1917
Mileage of St. Paul Railroad	7,512	10,305
Investment in road and equipment	$274,468,163	$602,334,419
Common stock outstanding	83,795,000	117,411,300
Preferred stock outstanding	49,718,000	115,931,900
Funded debt	114,732,500	380,829,255
Interest on funded debt	5,855,718	16,596,006
Operating revenues	61,296,041	113,739,202
Operating expenses	39,950,134	85,195,964
Net income available for interest and dividends	18,967,918	21,965,255
Available for dividends	13,112,200	4,468,631

In 1917 operating expenses were 75.44 per cent of the revenues, as compared with 65.18 per cent in 1909. Its earnings fell from three times its fixed charges in the ten-year period from 1900 to 1909 to only one and one-quarter times the fixed charges in 1917. The financial winds, it is clear to see, were blowing in an adverse direction for the St. Paul.

The property was not holding its own in net income relative to interest charges. Traffic on the extension had failed to come up to expectations. The building boom in the Pacific Northwest culminated in 1909, the year the Puget Sound was opened for traffic. The lumber industry in Washington, which had shown an increase of nearly 200 per cent in output during the decade preceding 1909, remained nearly stationary the following decade. From about 1912 onward, however, there continued a large influx of settlers into Montana, particularly on the new lands opened up by the extension, and for several years prior to 1917 the metal output in Idaho and Montana was stimulated by the increasing price of lead, copper, and zinc. Intense competition was inaugurated between the St. Paul and other established lines following the opening of the extension. Some of these conditions were adverse to other carriers, but disastrous to the St. Paul, saddled with heavy interest charges in connection with a tremendous new investment in an undeveloped property.

IV

When the railroads were taken over by the federal government in 1917, they were to be guaranteed an annual compensation based upon the average railway operating income for the three years ending June 30, 1917. The St. Paul officials succeeded in getting an agreement with the Director General of Railroads providing for an annual compensation of slightly over $27,500,000. This included an extra $2,000,000 for the extension and $440,000 for the electrification project. These allowances were made in the light of the Company's recent extensive projects. Mr. Byram, president of the Company, was appointed as its federal manager during federal operations. When the Railroad was returned to its owners in 1920, the owners were confronted with inadequate revenues, a high scale of wages, and a troubled labor condition. To enable the owners of the railroads to readjust themselves to the conditions resulting from the War, congressional legislation creating a six-months guaranty period was passed providing for the continuance during that time of the guaranteed income. Thus was the road provided for until August 31, 1920.

In 1920, while the Railroad was being operated by the government, an issue of about $16,500,000 equipment trust bonds was sold. This was the first issue of this sort of security on St. Paul property. Heretofore, borrowed funds for rolling stock had been obtained by general mortgage bonds or stock. New rolling stock was badly needed. The Company had been deficient in providing such stock since the extension had been under way. The St. Paul had built a big house and then for financial reasons could not, it seems, adequately furnish it. Of course this situation showed up glaringly during the War and immediately thereafter when railroad rolling stock was being utilized to the utmost. Expenditures for various improvements made by the government while operating the property were funded into a $20,000,000 note to the government, due in 1930. The government operated the road at a tremendous loss. Operating expenses, in a period of rising prices and wages, which accompanied the period of speculation and inflation familiar to all, crept up still more on operating revenues. In 1920 the operating expenses were 97.94 per cent of the revenues. Under the Director General of Railroads there was a net loss before interest charges of over $10,000,000 and a deficit of about $51,000,000 for the period. But the government guaranteed the Railroad's income as specified above, and what seemed to be on the horizon in 1917 was no doubt delayed. Rumors were afloat during these years concerning dividends, but none were paid.

The physical condition of the property continued on the down grade during this period. Depreciation and maintenance charges were inadequate. During the War and afterwards the St. Paul was not alone in this respect.

Subsequent to the period of government operations the St. Paul made two important additions to its lines. In 1921 it leased the use of the property of the Chicago, Terre Haute, & Southeastern Railway Company for a period of 999 years. The Company owned about 360 miles of main track and gave the St. Paul a connection with the rich coal fields of southern Illinois. Byram was impressed with the fuel difficulties which the railroads experienced during the

War, and was determined by this move to make the St. Paul independent of distant mines on other railroad lines. By the terms of the lease, the St. Paul obligated itself to pay interest and principal, when due, on an existing indebtedness of about $19,500,000 on the lines and to purchase the 43,000 outstanding shares of capital stock at $10.00 a share. In 1922 the St. Paul took over the property of the Chicago, Milwaukee, & Gary Railway Company. This Company owned about 95 miles of main track extending around Chicago in northern Illinois, and gave the St. Paul a connection with the lines of the newly acquired Terre Haute. In connection with this acquisition the St. Paul agreed to pay interest and principal, when due, on the debt of $3,000,000 on the Gary's lines. Byram was of the opinion that, aside from the access which these new lines would give the St. Paul to the rich coal mines of southern Illinois for supplying its own fuel, they would enable the St. Paul to derive substantial revenues from traffic in coal for consumers along its lines and from the interchange of business with eastern roads without passing through the Chicago terminals. Up to and also including the year 1924, the St. Paul operated the Terre Haute at an aggregate deficit in net income of over $4,000,000; and the Gary at an aggregate deficit in net income of over $930,000. The roads were both distress properties at the time they were taken over by the St. Paul. The Commission was of the opinion that the terms on which the St. Paul acquired the lines were improvident. It is clear that the St. Paul paid dearly for the acquisitions. Granting all that Byram claimed in the way of advantages ultimately to be derived by the St. Paul, the road during these years could ill afford to suffer these deficits. The two acquisitions aggravated the St. Paul's financial plight at this time.

During the years from 1921 to 1925 the situation went from bad to worse. Late in 1920 the St. Paul obtained funds to meet certain maturing underlying liens through a note to the government of $25,000,000, due in 1927. In 1921 a similar note was executed for $10,000,000, due in 1923. The latter note was renewed on maturing. Several issues of equipment trust bonds, which aggregated over $23,000,000, were sold to obtain additional rolling stock. No doubt the road's financial plight since the building of the extension was aggravated by the lack of adequate rolling stock. Byram, with his operating experience, on coming to the road in 1917 recognized this situation easily and was continually trying under financial difficulties to remedy the situation. Early in 1924, $14,000,000 of security gold 6's, due in 1934, were sold. These were floated on a property whose credit was about gone, by using as security $20,000,000 in bonds, secured by the old general mortgage on the old lines, held by the Company in its treasury. The Company owed the banks $5,000,000 at the close of 1923. The funds from this issue enabled the banks to obtain payment. It is significant to note that these gold 6's were sold to yield the investor 6½ per cent and were secured by about one and a half times their par in the best security that the Company could offer, that is, general 5's which were a first mortgage on the profitable old lines east of Mobridge. Such a bond ordinarily would sell above par at that time. The scooping up of some of the best of the Company's treasury assets to float this issue was the last gasp, financially speaking, of the St. Paul. It is significant to note that the banks which loaned the funds and arranged with the road for the issue succeeded in having their loans paid up before the coming of the crash which the bankers expected soon to arrive.

The St. Paul had by this time erected for itself a fancy financial structure. Going back to 1905, the year the extension was formally authorized by the board of directors, one will find that on June 30 of that year the St. Paul's capital stock outstanding was $107,511,300, or 46 per cent of the amount still outstanding on December 31, 1924, $233,343,200. Most of the additional stock was issued in 1907 and 1909. Meantime the long-term debt liability increased almost three times as fast. On June 30, 1905, it was slightly in excess of $115,000,000, whereas on December 31, 1924, it was over $440,000,000. In other words, during these years the Company incurred about $2.75 of long-term debt for every dollar of capital stock issued. It will be noted that on June 30, 1905, the capitalization of the Company was quite evenly divided between capital stock and funded debt. On December 31, 1924, the capital stock was about 35 per cent of the capitalization and the funded debt was about 65 per cent.

How the debt of St. Paul compared with that of other Northwest railroads at the time may be seen from the following figures:

	Ratio of Funded Debt to Capitalization	Funded Debt per Mile of Main Line
St. Paul	65 per cent	$43,301
Great Northern	56 " "	38,308
Northern Pacific	56 " "	37,131
Burlington	55 " "	22,568

For the year ending June 30, 1905, interest deducted for funded debt was less than $6,000,000. For the year ending December 31, 1924, the same item amounted to over $20,000,000. While the aggregate of capital stock and funded debt increased about 203 per cent after 1905, the increase in investment was about 185 per cent.

From 1921 through 1924 the operating expenses were brought into a more favorable ratio to operating revenues than during the period of government operation, but the operating income was inadequate. The rising interest charges appeared to make the situation hopeless. The Railroad was obtaining funds in excess of 6 per cent and using part of them to meet maturing underlying liens at lower interest rates. From 1921 through 1924 the total income available for interest was $54,300,000; interest requirements totaled $74,925,000, leaving a deficit of $20,625,000. Later the engineers, who were called in early in 1925 to investigate the road's affairs,[3] were to find that depreciation charges during this time as well as in earlier

[3] The engineers and their report will be referred to hereafter as the engineers.

years were inadequate. Had proper depreciation rates been charged, the deficit would have been larger.

In 1921 and 1922 substantial rate reductions, especially on agricultural products, from levels to which they were raised during the period of federal operation went into effect. Shippers clamored for reductions. A strike in the bituminous coal fields and the railroad shops in 1922 caused losses in revenues and increases in operating costs. Wage reductions were difficult to bring about. In Montana the metal industries curtailed operations with the decline in prices of zinc and copper following the Armistice. Bank failures were numerous in the territory traversed by the St. Paul. Throughout these four years, as is well known, recovery from the depression in 1921 was particularly slow in the northwestern section of the country. At the close of the World War the Panama Canal became a very effective factor in transcontinental freight business. Water shipping rates relative to railroad rates were substantially lowered after the War, and much tonnage was diverted from the roads to the Canal. At this time also there was a rapid increase in the use of automobiles, busses, and trucks for short-haul freight and passenger travel. The competition of motor vehicles was most marked in its effect upon the St. Paul's passenger traffic, the revenues from which declined from over $31,000,000 in 1920 to less than $22,000,000 in 1924. But all carriers were experiencing these difficulties.

One may wonder how the road continued to operate with a deficit in income of over $20,000,000 during the four years up to and including 1924. The engineers found that the deficit, as well as over $26,000,000 in improvements on the road and for equipment, was financed by liquidating materials and supplies, reducing other current assets, securing bank credits, and increasing the funded debt. Besides letting its property run down, as mentioned previously, the St. Paul was really borrowing money and drawing on its last dollar of quick assets to pay unearned interest. Going back a number of years, we find that a comparison of the Company's balance sheets, prior to the operation of the extension, show a continuing decline in its net current assets and profit and loss balance. Since the beginning of operations on the extension there were pronounced and quite constant decreases in both accounts, evidently supporting the Interstate Commerce Commission's claim that all dividends subsequent to 1910 had been paid out of surplus. On June 30, 1913, the first report covering the combined St. Paul and Puget Sound properties was filed with the Commission. The profit and loss account on that date was $43,417,000 while the current assets were $20,653,000. By the close of 1924 these had shrunk to amounts slightly over $13,000,000 and $1,250,000, respectively. The corporate surplus of the Company on June 30, 1910, was $57,738,933. Notwithstanding that no dividends had been paid since 1917, that amount as of December 31, 1924, had shrunk to 16,994,000. Apparently the Company was resorting to tactics used generally years before by business enterprises similarly situated. Surely rather than continue this process and finally entirely exhaust its treasury and liquid assets, it would be much better for the Company to go into receivership.

While many of the unfavorable business factors mentioned so far were adversely affecting the St. Paul's competitors, receivership was being quietly forecasted for the St. Paul by well informed persons during the year 1924. The other northwestern carriers evidently were not in such danger.

The Interstate Commerce Commission was of the opinion that, had the St. Paul continued to realize the full increased revenues which would have resulted from various authorized increases in rates to 1920, after which decreases in rates began, the Company might have financed itself much better than it did in the period up to 1924, and probably would then have been in a better position to finance the heavy maturities coming in 1925. The Commission expressed this opinion, assuming that traffic would have held up under such rates. It doubted whether traffic would have held up. Furthermore, after the rate reductions, a weak spot in the rate structure which had existed for many years showed up glaringly. This was in the Western Trunk Line Territory so-called, which was traversed by all the lines of the St. Paul except those in Indiana, Montana, Idaho, and Washington. The rate structure in fact, relatively speaking, for years had been low in the Northwestern Region including this area, but this particular territory had been the worst of the bad. A much larger portion of the St. Paul's lines traversed this territory than of its competitors. For this reason the rate situation was an ailment peculiar, to a certain extent, to the St. Paul by the close of 1924.

The St. Paul's electrification project by the end of 1924 seemed to have been a good investment which, by the way, finally amounted to about $23,000,000 in fixed property and locomotives. The management put out some figures showing the merits of the investment. What the figures show is the difference between the cost of moving the traffic of 1923 over the electrified lines and the cost of the traffic using the steam equipment in operation in 1915—the last full year of steam operation over the electric lines. A saving of over $1,000,000 is shown. The Commission, using the same figures with some adjustments, arrived at a similar saving. However, the Commission then adjusted the steam figures so that they represented the cost of moving the business of 1923 over the electrified lines with the use of the most modern and suitable type of steam locomotives in use in 1923. The costs of moving the 1923 business by steam, thereupon, appeared to be about the same as by electricity. Of course no road's locomotives at any one time are all of the most modern type. The electrification of the St. Paul had probably resulted in some savings. Certainly it had not resulted in losses.

Some significant facts relevant to the extension, however, tell a different story. The Commission's accountants, taking the income as shown by the carrier's books modified by adjusting charges for depreciation as recommended by the engineers and actually put into force in May, 1925, estimated that the net income on the lines west of Mobridge for 1923 and 1924 was about 1½ per cent per annum on the investment in the extension as of December 31, 1924. The engineers arrived at the same per cent for the same years, calculated on the assumption of the operation of the extension as an independent unit. The engineers also calculated the return realized on money invested in the St. Paul and in other northwestern railroads between 1908 and 1924. In the case of the St. Paul the rate of return on this investment amounted to 3/5 per cent per year. For the St. Paul, the Burlington, the Northwestern, the Northern Pacific, and the Great Northern combined, the rate of return on increased investment was found to be 1/2 per cent a year or about the same as the St. Paul alone. The amount of money so expended since 1908 by the St. Paul was, of course, very much in excess of that expended by either of the other lines, and consequently its failure to earn an adequate return was that much more of a strain. The other roads were better capitalized, particularly as to the relationship between stock and funded debt, so that they could carry the load during the lean years. It is interesting to note that in 1923 the fixed charges of the St. Paul were 12.01 per cent of its railway operating income, while those of the Northwestern and Omaha lines combined, financially the weakest of these other lines, were only 7.44 per cent. They also calculated the freight and passenger density of the St. Paul, the Northern Pacific, and the Great Northern on the main lines between the Twin Cities and Seattle for the year 1923. The freight density of the St. Paul was much lower than that of the other two lines. The passenger density of the St. Paul was much below that of the Northern Pacific and about equal to that of the Great Northern.

The question had been raised in the minds of many, before and after 1924, as to whether the St. Paul would have been in the financial condition in which it found itself at the end of 1924, had it not incurred the financial burden attendant on the construction of the extension. Of course any answer can be only a matter of conjecture. It is interesting to note that, after deducting the engineers' estimated income earned for interest on the new lines in 1924 and deducting this amount from the actual amount earned for interest on the entire property of the St. Paul for the same year, as calculated by the engineers, and after providing for adequate depreciation charges which were not charged to income by the Company in 1924, and then deducting from this amount in turn the difference between the interest charges in 1924 and the interest on bonds floated to build the extension (ignoring the stock floated for the same purpose), we find a surplus of a little over $2,300,000 for 1924 as against an actual deficit of $4,222,000 found by the engineers when the Company's accounts are adjusted for inadequate depreciation charges. However speculative this calculation may be, it leads one to believe that, had no extension been built, the St. Paul would not have been experiencing financial troubles at the close of 1924.

V

Some time prior to 1922 Charles E. Mitchell, president of the National City Bank and the National City Company, became skeptical of the future of the St. Paul. He even recommended that the junior bonds (floated in connection with the extension and held by the Bank) be sold. Due to William Rockefeller's stand, however, they were not sold until after the latter's death in 1922. Early in 1923 Mitchell took these bonds off the daily lists given to the salesmen. In 1923 several large insurance companies which had been watching the situation closely sold as many junior bonds as the market could absorb at prices satisfactory to these companies. As pointed out previously, the road's floating indebtedness to the banks was liquidated in 1924 by the sale of a block of bonds. In June, 1924, Byram requested four of the directors to co-operate with him as a special committee to formulate, if possible, some practical plan to meet nearly $50,000,000 bonds maturing in 1925. Many meetings were held that summer. The committee formulated plans and met with the bankers in August and again in December. These bankers were Mitchell of the National City and Jerome J. Hanauer of Kuhn, Loeb & Company, whose banks had been the financial advisors of the road for years and had marketed all the securities issued since the construction of the extension had been started. The possibility of a voluntary exchange of approximately $50,000,000 in maturing securities for new ones, or, in other words, an extension was considered. The committee and the bankers decided that no definite assurance could be given to the holders of the proposed bonds that the higher interest which would be demanded and the principal would finally be paid. Furthermore, dissenting holders of the bonds of 1925 would have to be paid in cash which would have to be borrowed. Besides, large amounts in bonds would mature in various years up to 1934. Therefore, it seemed that the plan would afford only temporary relief.

The Interstate Commerce Commission promised to release the bonds on the old general mortgage of 1889 which was held as partial security for the government notes. The management was considering the possibility of issuing these to refund the 1925 maturities. But this move also would only temporarily relieve matters, it seemed. Byram inquired of the Secretary of the Treasury concerning the possibility of a loan from the government, but the latter advised that there was no authority under the law whereby any financial aid could be given. Byram appeared before the Senate Interstate Commerce Committee in January, 1925, on behalf of the Gooding Bill, which would reduce the rate on government loans to the railroads arising out of federal operations from 6 to 4½ per cent. The St. Paul owed the government $55,000,000. Congress adjourned without passing the bill.

At the December meeting of the special committee of the directors and bankers, the latter suggested that Coverdale and Colpitts, engineers, be appointed to make an independent study of the property. The directors approved and the bankers prepared a questionnaire of problems for them to answer in their investigation. The engineers concluded their report with the statement that "a readjustment of the financial structure of the company is necessary." Without a voluntary exchange of securities, this of course was a virtual recommendation of receivership. In January, 1925, Mitchell definitely concluded that receivership was inevitable.

The Commission maintained that the directors and board itself had virtually ceased to function in January, 1925, when the control of the property shifted to the bankers. Byram denied any loss of control by the owners, holding that the directors maintained the initiative until the last and merely sought the bankers' advice. He was satisfied in his own mind that the management had done all it could to prevent receivership. Certain facts would seem to give credence to the Commission's opinion. For many years there had been four large stockholding interests in the St. Paul, which controlled the road. William Rockefeller held at one time 150,000 shares. After his death his interests were disposed of in the years 1922 and 1924. Ogden Armour held 125,000 shares. This holding had been liquidated three or four years prior to the receivership. The George Smith interests in England held approximately $20,000,000 in bonds and stocks. These had been liquidated several years before, principally during the War. The fourth interest was that of E. S. Harkness who held over 100,000 shares, which was the only large holding not liquidated before the receivership. The rest of the stock was scattered about, to be held for the most part during the receivership by brokerage houses on behalf of speculators. Harkness, Samuel Fisher, his attorney, and Buckner of the New York Trust Company, in which Harkness was substantially interested, were the only directors on the board representing a substantial stock interest, and it seems, with the exception of Byram, were the most concerned with the various plans being considered to avoid a receivership. The rest of the directors were either representatives of large holdings which had been liquidated or were appointed as directors from time to time because of their positions in the business world or because of information and experience they possessed which would be of value to the road. In other words, there was no one, like a Hill or a Harriman, with a vital interest in the road and with an effective, consistent, and unified policy.

With the receivers now operating the property, the bankers and the three security holders' committees set to work to formulate a plan by which the financial structure could be reorganized so that fixed charges would be safely within earnings, adequate working capital be provided, and the relative position of the holders of various layers of securities be consistent with the quality of their holdings and contributions or sacrifices they would be called upon to make. Early in June, 1925, the reorganization managers, the National City Company and Kuhn, Loeb & Company, announced to the security holders the proposed plan. A stockholders' group and a bondholders' group were organized at once in opposition to the plan. To meet the objections from these groups and others, some modifications were made and on November 19 the modified plan, which finally was to go into effect, was announced.

Underlying bonds amounting to $181,370,400, consisting of various divisional issues, equipment trusts, and the general mortgage bonds issued on the old lines exclusive of the extension, were to be undisturbed. A timber loan of $2,200,000 was to be liquidated in cash. Two of the government notes, aggregating $35,000,000, were to be similarly treated, while a third note to the government of $20,000,000 was to be paid off with $17,000,000 in cash and $3,000,000 in preferred stock. The various issues of bonds which were secured by the general and refunding mortgage of 1913 and the $26,175,000 bonds issued on a first mortgage on the extension, aggregating in all $230,950,796, were to be exchanged for 50-year 5 per cent mortgage bonds, due in 1975, to the extent of 20 per cent of the holdings and for the 75-year 5 per cent adjustment mortgage income bonds, due in 2000, to the extent of 80 per cent of the holdings. These bonds had all been issued since 1909 in connection with the construction of the extension and the electrification of three divisions of it and were in default either in respect to interest or principal or both. These were the so-called junior bonds. The 50-year bonds were to precede the 75-year bonds but were to follow the new financing and refunding mortgage. The interest on the income bonds was to be cumulative beginning with the year 1930. It is significant to note that the three government notes were to be treated in a different manner from the junior bonds, even though they were secured by the defaulted general and refunding bonds as well as old generals. The reorganization managers and security holders' committees gave this matter careful consideration. If the government were to foreclose upon the collateral and exchange it for new securities under the plan, the funded debt would be increased at least $35,000,000, diluting the security of the bondholders and increasing the burden ahead of the stockholders' equity. Besides $18,000,000 of this collateral were general 5's on the old lines, which were not in default, and the release of these bonds, the best the Company possessed, was desirable as a possible source of necessary new funds during the first few years of existence under the new financial structure. If the notes were extended, the necessary refunding of them would only be delayed and possibly be a drag on the Company's credit. Therefore, they decided to pay with cash the two notes secured in part by the generals and pay with cash and preferred stock the third note, taking into consideration the fact that, at prices then prevailing, the collateral of general and refunding bonds did not fully cover the third note.

It is also significant to observe that they decided to treat alike the various issues under the general and refunding mortgage of 1913 and the $26,175,000 Puget Sound bonds in the hands of the public. The latter were secured by a first mortgage on the extension. An additional $155,000,000 was issued to the St. Paul by the Puget Sound Company when it was building the extension. These were received in return for funds advanced to the subsidiary company and were in the treasury of the parent Company. They were pledged as part of the security under the general and refunding mortgage, which was also a lien on the entire property subject to the undisturbed liens on the old lines. The earning power of the extension was much less than that of the old lines. Therefore, the reorganization managers and security holders' committees decided, after considering these facts, that the first mortgage on the extension should be treated the same as the junior lien on the more profitable old lines.

The preferred and common stockholders were to pay in cash an assessment of $28 and $32, respectively, for which they were to receive all but $4 of their assessments in 50-year 5 per cent mortgage bonds, the same security which was to go to the junior bondholders. The uncapitalized $4 of the assessment was to be applied to purposes which the managers and the committees did not wish to appear finally in the financial structure. This assessment was to supply about $70,000,000 in cash with which certain obligations noted above would be paid up, leaving over $16,000,000 for additions and betterments, equipment, working capital, and expenses of receivership and reorganization. These provisions called for the issuance of $106,888,980 new mortgage bonds and $184,760,640 new income bonds. The stockholders were to receive a share of the new stock for a share of old stock. In the case of the preferred, this was to be a share of non-cumulative preferred stock having a par value of $100 each and entitled to a dividend of 5 per cent and participating equally with the common in any dividends above that amount paid on the common. In the case of the common stock this was to be a common share without par value. The issuance of $115,931,900 in preferred stock and 1,174,113 shares of common stock to the stockholders was called for by the plan. For the first five years the stock was to be voted by a board of five trustees, three of which were to be appointed in the interests of the junior bondholders.

It is interesting to note that, taking the new no-par common stock at $100 per share, the total capitalization was to amount to $706,363,220 in comparison with the old capitalization of $702,864,396. This increase in capitalization was not nearly so much as that which had accompanied many railroad reorganizations in the past. The fixed interest charges were to be $13,776,353 as against $21,836,793 on the old capitalization. Of course there was to be an additional interest charge of $9,143,685 which was to become cumulative in 1930, making the interest charges on the new capitalization $21,920,038. But this charge was contingent, and the framers of the plan were of the opinion that the road after that time would be able to meet it.

By the end of 1925 over 76 per cent of the junior bonds and 60 per cent of the stock had been deposited by the holders in designated financial institutions which favored the plan. The two dissenting groups threw their support to the modified plan, but early in November, 1925, a dissenting bondholders' group was organized by Edwin C. Jameson, president of the Globe and Rutgers Fire Insurance Company of New York. The $18,000,000 junior bonds it represented were practically all holdings of Jameson or his insurance company and were purchased shortly before or soon after the appointment of receivers. This group furnished most of the opposition to the majority's plan on its way through the courts and before the Commission, and probably delayed the whole procedure a year. This group bitterly fought the progress of the majority security holders and the reorganization managers at every step. During the conflict between these rival groups from 1925 to early in 1928 the battle at times became personal.

In April, 1926, the district court in Chicago entered a decree ordering the sale of the Railroad. The successful bidder was to present a plan of reorganization and this was to be approved with the sale by the court. The court later set the sale of the property for November. An upset price for the entire property was set at $122,500,000, subject to the undisturbed liens aggregating about $231,000,000, a little higher than that suggested by the reorganization managers and much lower than that suggested by the Jameson group. It is interesting to note that this price would give the dissenting bondholder forty-nine cents on the dollar for his holdings. On November 22 the property was sold at the front entrance of the railway passenger station at Butte, Montana, on the premises covered by the bonds in default. The sum of $140,000,000 was bid for the property by the representatives of the reorganization managers and majority security holders. There were no opposing bidders. As expected, the Jameson group protested the sale, but in January, 1927, the court approved the managers' and majority's reorganization plan and the sale. The Jameson group then carried their case through the Circuit Court to the federal Supreme Court, but without success. In approving the sale, the Court, in response to the Jameson group, decreed that the property should not be released until the Commission approved of the plan.

So in April, 1927, the new company, the Chicago, Milwaukee, St. Paul, & Pacific Railroad Company, which had been incorporated by the majority to take over the property, applied to the Commission for permission to receive the deeds and to issue the new securities as called for in the plan of reorganization. The Commission since 1925 had been investigating the road's past affairs, and in January, 1928, handed down both the report on this investigation and the report on the new Company's application to receive the property and issue the new securities. The application was granted over the vigorous protests of the Jameson group by a seven to four vote. The Commission maintained that the defects of the plan, when regarded in the abstract and in the light of a possible ideal of sound financial theory, were manifest. Even though the fixed charges were brought within reasonably safe limits, the issue of income bonds which were to become cumulative in 1930 might prevent the Company for a considerable time from obtaining new capital by the sale of other than fixed-charge securities, especially if, after 1930, the unpaid interest on these bonds accumulated. The stock would then become purely speculative. However, the Commission only considered the application from the point of view of the public interest and ignored any questions arising between rival security holding groups, and concluded that the plan of reorganization was already approved by a vast majority of security holders who had deposited their securities under it. The Commission could not see that the plan was injurious to the public interest and could see further time-consuming, costly, and probably endless delay if the plan was not approved. So the plan, while not sufficiently drastic, in its opinion, was approved. Commissioner Eastman in a dissenting opinion criticized the income bonds called for in the plan. He maintained that preferred stock, several kinds if necessary, with claims of different rank, different dividend rates, and some cumulative and some non-cumulative, should have been used in exchange for the defaulted bonds. No doubt the use of stock would have been ideal, but a plan which is usually, as in this case, the product of compromise between groups of various security holders, cannot be judged too harshly on the basis of the ideal, as the majority of the Commission pointed out in its report.

While the legal battle was raging, the receivers, under the direction of the court, brought about important improvements in the property. Mr. Potter, one of the receivers, claimed that the fixed property had in places become so bad

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by the end of 1924 that it was amazing to him to see the vast number of situations where an expenditure of \$2,500, \$7,500, and \$10,000 would bring economies which would mean a saving of 25, 50, and 75 per cent a year on the expenditure. The shops, yards, and roundhouses of the Company were allowed to get into an abominable condition in comparison with those of other roads. With no obligation to pay interest on the defaulted bonds, the receivers spent heavily on the fixed plant to bring it into proper shape. The increased rates of depreciation on rolling stock went into effect in May, 1925. The rolling stock was in much better shape than the fixed property. Since coming to the road in 1917, Byram was always keenly interested in maintaining, if possible, adequate rolling stock. The receivers brought about a greater intensity in the use of the rolling stock than the previous management. They inaugurated the operation of roller-bearing trains, a distinctive feature of the St. Paul's best passenger trains today. The income from operations since 1925 had been sufficient to meet all interest on undisturbed securities and for maintenance and improvements. It was not found necessary to resort to receiver's notes.

What did the future hold in store for the reorganized Company early in 1928? The engineers in their investigation in 1925 concluded, on the basis of past experience in old territories and in the relatively new territory traversed by the extension, that within the next decade the operating revenues at existing rates would increase twenty-five per cent, allowing for a continuance of the decline in passenger traffic. Certainly the realizations during the three years of receivership have not verified the engineers' prediction concerning these three years at least.