the shape of more direct connection with Indiana Harbor, Gary, and other steel towns in Indiana.

The Belt company's lines on December 31, 1911 consisted of 104.85 miles of line either owned, operated under contract, or operated under trackage rights, besides over 200 miles of second track and sidings operated in the same way. The rolling stock consisted of 19 locomotives and 282 cars of various kinds.[1]

The earnings statements for a number of years prior to the entrance of the Milwaukee as a partial owner show substantial deficits for every year. The statements for recent years, however, show up much better with substantial surplus balances for the year in most cases.

On November 23, 1917 $2,550,000 more stock was issued to the four companies holding the stock issued previously. The relative portion issued to each company was the same as the relative portion of previously issued stock held by each. So the Milwaukee as a 20% owner received $510,000 stock and now held $1,000,000 of the total $5,000,000 capital stock issued.[2] The Milwaukee received the additional stock for cash advanced to the Belt Company between July 1, 1912 and May 1, 1918 for additions and betterments. In December, 1926 the Indiana Harbor Belt sold $5,000,000 more bonds on its 1907 mortgage. The interest on these were put at 4 1/2% per annum. From the proceeds the $2,500,000 Hammond bonds were retired. So now the Milwaukee was

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1. Ibid.
2. Ibid., 1919, p. 1083.

one of the guarantors on $4,325,000 of the Belt company's 4's and $5,000,000 of the Belt company's 4 1/2's.[1]

At the close of 1913 the Pacific coast extension was substantially completed for the Milwaukee by the Chicago, Milwaukee & Puget Sound Railway Company, organized by the interests of the Milwaukee. At this time the latter company deemed it advisable on account of economy and efficiency in operation to take over the lines of this subsidiary company and make them a part of the system. So the Puget Sound company conveyed all its railway, property, and franchises to the Milwaukee by a deed dated December 24, 1912. On January 1, 1913 the Milwaukee actually took possession of the extension under that deed, merging the accounts and since that date has been operating the line as a part of its own system.[2]

The Chicago, Milwaukee & Puget Sound Railway Company.

In the closing years of the nineteenth century the gold discoveries in Alaska, the expansion of the lumber industry, the increasing commerce with the Orient, and the revival of lan'

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1. Chronicle, vol. 134, p.107.
2. Ibid., vol. 96, p. 1883. Annual Report, 1913. As mentioned previously, the extension up to the time of its merger with the Milwaukee will be treated as previous acquisitions of new lines have been treated previously in this history. The history previous to the merger both as to physical expansion and financing, so far as this financing was done in the name of the Puget Sound Company, will be related presently. This method of treatment will make the account of the Milwaukee financing during this period, which will be related later, more understandable to the reader.

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.[1] 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 hydroelectric power development. As a means of entrance into this growing territory the Milwaukee decided at the beginning of the period now under discussion to construct a line from the Missouri River at Mobridge, South Dakota, to Seattle, Washington.[2]

As early as 1901 the Milwaukee was considering the idea of building to the Pacific coast. At that time E. H. Harriman was dominant in Union Pacific affairs while Mr. Roswell Miller, who had previously been president of the St. Paul,[3] was chairman of the St. Paul's board of directors and Mr. A. J. Earling was its president. In writing to Earling on March 29, 1901, Miller referred to a conversation with Harriman relative to interchange of business between the Union Pacific and the St. Paul. Miller had recently resigned from the Union Pacific board, as he was

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1. See P.
2. Coverdale & Colnitts, p. 13.
3. As previously pointed out, the Milwaukee was called in financial circles the St. Paul. The system shall be referred to as the St. Paul as well as the Milwaukee hereafter in this financial history.

unable to help the St. Paul by remaining on it. He was satisfied with the division of the freight traffic by the Union Pacific as between the North Western and the St. Paul, but the North Western had the better of the passenger business. Miller then went on to say.

"I said to him Harriman that there would be just one result of the Union Pacific policy, that we should be compelled to build a line to the coast. He said we could not build a line to the coast as good as his, to which I replied we could build just as good a road as he could build. He said why don't you start it tomorrow; I said we were not ready, and it might be five years before we got ready; that we could build a line to the coast and supply terminals for $45,000,000 -1/6 of what his line was capitalized at, which would give us an immense advantage over his."[1]

No doubt the arrangements the Milwaukee secured with the Union Pacific in 1908 eliminated the trouble with the Union Pacific as an immediate factor at least in the plans for a coast extension.[2]

Then almost immediately something else turned up. Negotiations for the acquisition of control of the Burlington by the Northern Pacific and Great Northern were going on.[3] Miller

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1. Interstate Commerce Commission, No.17021 "Investigation of the C.M. & St.P.Ry.Co." Submitted January 14, 1927. Decided January 4, 1928. P.616. This report will hereafter be referred to as 131 I.C.C. The Interstate Commerce Commission will be referred to hereafter as simply the Commission.
2. See p.121.
3. See p.139.

who was alarmed wrote Earling on April 9, 1901 that on that day he had seen Mr. Jacob Schiff of Kuhn, Loeb and Company and had told him "that if the Northern Pacific and Great Northern tied up with the Burlington we should be compelled to build to the coast." At that time the St. Paul officials had no clear idea as to what part of the Pacific coast they would build. Various points were mentioned in correspondence being exchanged at the time. Miller still thought $45,000,000 would finance the project and that traffic would be divided with the Northern Pacific and Great Northern from the start. At his request Earling sent an engineer over the Northern Pacific to ascertain the cost of duplicating their line. Before the engineer started on his trip he wrote Miller on April 10, 1901 that he was "sure that it would not cost as much as $45,000,000 to build as good as the Northern Pacific to the coast." On April 25, 1901 Miller wrote to Earling that the board had authorized the expenditure of $10,000 in making a reconnaissance from Evarts, South Dakota, to Butte, Montana, and again stated that "if the Burlington deal goes through we shall be compelled to build to the coast."

In August, 1902 Miller submitted to Mr. William Rockefeller, then very influencial in St. Paul affairs, a report on the proposed extension to the Pacific coast at Eureka, California, to reach the vast timber lands of Humboldt County, California. On March 29, 1905 Miller wrote Earling that it looked as though the St. Paul would have to build to the coast. On

April 27, 1905 a committee of directors was appointed to take action with reference to the acquisition of right of way. On May 25, 1905 Miller reported to Earling that the Harriman and Hill interests had come to an agreement and that "it was supposed both interests would use all the influence they could to prevent the St. Paul from building." However, it seems as though neither Hill nor Harriman feared the threats of the Milwaukee to build to the coast. In May, 1905 Hill wrote the following letter to the president of the Burlington:

"If I were at the head of the North Western or the St. Paul I would never be satisfied with a connection over some other line that was a natural competitor from the common point eastward. The North Western and the St. Paul, with over fourteen thousand miles of railway, would if they built to the Puget Sound, be a great acquisition to the business of the Sound and would go far toward putting it on a foundation viewed from the commerce of the world ahead of San Francisco. This would, in my judgment, help our line much more than any possible injury it could do."[1]

As late as July, 1905, Mr. W. K. Vanderbilt and William Rockefeller had discussed a line to be built jointly by the North Western and the St. Paul. Rockefeller appeared to favor the idea but Miller did not. On November 4, 1905 Miller advised Earling that in view of a cable from Rockefeller, Earling should

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1. Chronicle, vol. 123, p. 2772; 131 I.C.C., p. 618.

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:

"A careful estimate from the information now available indicates that the completed line from the Missouri River to Butte will cost $20,183,000. The estimated cost of the entire line, Missouri River to Seattle, including equipment is $60,000,000."[1]

These two estimates, the former one of $45,000,000 and the latter of $60,000,000, proved to be only a small part of what was ultimately expended on the extension.

No thorough engineering or traffic surveys apparently were made. 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 closely with the North Western.[2] It was not necessary to secure a certificate that the public convenience and necessity required the construction of such a line under provisions of law such as would now be required under part of section 1 of the interstate commerce act. The commission later in its investigation of the receivership pointed out that at this time it had no voice in the momentous decision to build to the coast.[3]

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1. 131 I.C.C., p. 618.
2. Ibid. Statement of H.E.Byram before the I.C.C.Dec.1,1925,p.5.
3. 131 I.C.C., p. 619.

With the action of the board late in November, 1905, the construction at last got under way.

On October 13, 1905 the Pacific Railroad Company was incorporated in Washington with $3,000,000 authorized capital stock in the interests of the Milwaukee.[1] The company took over the tidewater bonds recently acquired in the name of Mr. James T. Woodward, President of the Hanover National Bank of New York. It was reported that this company would build a line from some point on Puget Sound in King County extending in a southeasterly direction to a point on the Columbia River in Walla Walla County, a distance of about 250 miles. At this time Mr. H. P. 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.[2] On January 8, 1906 this new company changed its name to the Chicago, Milwaukee & St. Paul Railway Company of Washington.[3]

On December 18, 1905 the Chicago, Milwaukee & St. Paul Railway Company of Montana was incorporated with $8,000,000 authorized capital stock to build the extension through Montana.[4] Early in 1906 the Chicago, Milwaukee & St. Paul Railway Company of Idaho was incorporated with $3,000,000 authorized capital stock

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1. Chronicle, vol. 81, p. 1242.
2. Ibid., p.1316. Railroad Gazette, November 3, 1905.
3. Chronicle, vol. 82, p. 163.
4. Ibid., vol. 81, p. 1721.

to build the extension through Idaho.[1] Then finally the Chicago, Milwaukee & St. Paul Railway Company of South Dakota was incorporated at Pierre, South Dakota, on August 22, 1906 with $4,000,000 authorized capital stock to build from the Missouri River to the eastern border of Montana.[2] These latter three companies like the Washington company were of course organized in the interests of the St. Paul. 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.[3]

In the fall of 1906 the proposed route of the extension was made public. The route may well be given at this time. The location of the line to Butte, Montana, was first decided upon. It was to run from Glenham to Butte, Montana. Starting from Glenham the line was to run west 12 miles to the Missouri River, crossing it at a point 12 miles above Evarts, thence west along Oak Creek crossing into North Dakota at a point in Morton County near the western boundary line of the Standing Rock Indian Reservation, thence northwest through Hettinger and Bowman Counties in North Dakota entering Montana in Custer County. The route was to be thence northwest along O'Fallon's Creek to the Yellowstone River (385 miles from Glenham) where the line was to cross the Northern Pacific. The route was then to follow the Yellowstone (crossing it three times) via Miles City (522 miles

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1. Ibid., vol. 82, p. 1211.
2. Ibid., vol. 83, p. 686.
3. Annual Report, 1907.

from Gleneham) to the south of Porcupine Creek about five miles west of Forsyth, thence northwest to the Big Bend of the Musselshell River, thence along that river to Harlowton, Montana, where a connection was to be made with the Montana Railroad recently acquired. This latter railroad was to form part of the main line with its grades reduced from Harlowton to Lombard in Montana where the Northern Pacific again would cross the extension.[1] From Lombard the route was to be south along the west bank of the Missouri River to Three Forks and thence through Pipestone Pass to Butte.[2]

A few months later the remainder of the route was announced. From Butte the line was to follow the Deer Lodge, Hell Gate, Missoula, and St. Regis Rivers to a point four miles west of Saltese, Montana, where the ascent of the Bitter Root Mountains begins. The route was to extend over the mountain through the St. Paul Pass, over the Columbia River and Johnson Creek 20 miles beyond, and through the Snoqualmie Pass to Maple Valley, Washington. Here a connection was to be made with the Columbia & Puget Sound Railroad owned by the Washington subsidiary building the line on to Seattle.

Between Whitehall and Butte the line was to cross the Continental Divide, through Pipestone Pass, at a maximum elevation of 6,350 feet. Two tunnels 2,450 and 1,380 feet long and three

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1. See p. 162.
2. Railway Age, Sept. 7, 1906.

steel trestles over deep ravines from 100 to 180 feet deep and from 400 to 600 feet long were to be distinctive features of this portion of the line. In the Bitter Root Mountain the elevation was to be 4,300 feet and a tunnel 8,500 feet long was to be built. The Columbia River was to be crossed by a bridge of 15 spans, having a total length of 2,750 feet exclusive of the steel trestle approaches, 1,000 feet in length at each end. At Johnson Creek Summit, about 20 miles west of the Columbia, there was to be a tunnel 3,400 feet long, and at Snoqualmie Pass there was to be eventually a tunnel about two miles long.

The distance from Chicago to Evarts was 741 miles. The distance, via the St. Paul, from Evarts to Butte was to be 759 miles; and from Butte to Seattle, 805 miles. So from Chicago to Seattle the distance was to be 2,305 miles, about 150 miles shorter than by way of the Northern Pacific and 80 miles shorter than by way of the Great Northern with mountain grades of from 1.68% to 1.5% as against an average of 2.2% on the Northern Pacific.[1]

In November, 1905 before the subsidiary company was organized in South Dakota, a contract was let to McIntosh Brothers of Milwaukee for the construction of about 600 miles of the extension west from Evarts, and orders were placed for the first installment of the 80,000 tons of steel rails estimated to be necessary.[2] By the latter part of August, 1907 the line was

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1. Chronicle, vol.83,p.1469 and vol.84,p.219. New York Evening Post, December 10, 1906.
2. Chronicle, vol.81,p.1664. Annual Report, 1906.

completed for 50 miles west of Glenham and construction work was under way all the way to Butte. Rails were being laid west of Glenham and on a stretch east of Butte. In Washington the work had progressed to such a stage that the hauling of the next year's crops was being planned. Considerable work had been done on the Bitter Root and Snoqualmie tunnels. The entire grading to Butte was completed early in November.[1] During the year ending June 30, 1908 the newly constructed line from Glenham to Mobridge, South Dakota, was made the connecting link between the old system and the extension, and the line from Glenham to Evarts was abandoned.[2] During the summer of 1908 the track was complete from the Missouri River to Butte and the line to this point was in operation on July 16, 1908. About 250 miles of track on the remainder of the extension was completed.[3]

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 from the Chicago, Milwaukee & St. Paul Railway Company of Washington to the Chicago, Milwaukee & Puget Sound Railway Company. The stock of the latter company was increased to $100,000,000 and conveyed to the St. Paul as security for advances previously made for the construction of the extension.

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1. Chronicle, vol.85,p.468.
2. See p. 165.
3. Chronicle, vol.87,p.543. Poor's, 1909, p. 378.

where the St. Paul was getting these funds will be related shortly. This $100,000,000 capital stock would now 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.[1]

On January 13, 1909 the construction was virtually completed. Track laying remained to be done on a stretch of about 80 miles. The amount due on rolling stock ordered and being built was about $5,000,000.[2] On April 1 the last rail was laid at a point two miles east of Missoula, Montana.[3] The ballasting was completed during the early summer. The entire extension was ready for traffic on May 14, 1909. This included the Lewiston branch, 86 miles. The line from Pontis, South Dakota, to Seattle and Tacoma was 1,489 miles in length of which 58 miles from the main line to Tacoma was owned jointly with the Union Pacific. The extension was opened for transportation of freight on July 1, 1909. During August facilities for local passenger service were extended to cover the entire line. About 400 miles of branch lines were being constructed at this time.[4] 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 to serve as branches or feeders.

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1. Chronicle, vol.88,p.90. Poor's, 1909, p. 372.
2. Poor's, 1909, p. 372.
3. Chronicle, vol.88,p.883.
4. Ibid., vol.89,p.580. Poor's, 1909, p. 372 and 1910, p. 745.

During the summer of 1910 branch lines aggregating 585.3 miles were constructed or being constructed. The Moreau line, Moreau Junction, South Dakota, 3.8 miles west of Mobridge, southwesterly and westerly to Isabel, South Dakota, 58.4 miles, was completed and regular service was established on this branch on May 31, 1910. The Cheyenne line, Cheyenne Junction, South Dakota, a point on the Moreau line 25.7 miles from Mobridge, southerly and westerly to Faith, South Dakota, 108.1 miles, was completed in November, 1910. The Cannon Ball line, McLaughlin, South Dakota, northwesterly to New England, North Dakota, 133.7 miles, was completed in October, 1910. The St. Maries line, St. Maries, Idaho, southeasterly through Bovill, Idaho, to Elk River, Idaho, 71.7 miles, was finished in June, 1910. The Coeur d'Alene line being built by a subsidiary corporation, the Idaho & Western Railway Company, extending from Dishmans, in the suburbs of Spokane, Washington, easterly to Coeur d'Alene, Idaho, 25.6 miles, was completed in December, 1910.

The Warden line, Warden, Washington, northeasterly to Marlin, Washington, 47.5 miles, was completed in September, 1910. The Everett line, Monction, Washington, northwesterly to Everett, Washington, 57.8 miles, was completed in August, 1911. The Enumclaw line, Iolanthe, Washington, southerly to Enumclaw, Washington, 13.1 miles, was completed in September, 1910. The Gray's Harbor line from McKenna, Washington, on the Tacoma Eastern Railroad westerly to Gray's Harbor, Washington, 81.4 miles, was built from McKenna to Portola, Washington, 33.3 miles, by the

Puget Sound Company, and from Portola to Gray's Harbor, 48.1 miles, was built jointly with the Oregon & Washington Railroad Company, the construction work being in charge of the latter company. This branch was completed in September, 1911.[1]

During the year ending June 30, 1912 the line from Lewiston to Hilger, 17 miles, was completed. In February, 1912 about two miles of track between Bagley Junction and Sellack in Washington was purchased from the Seattle Southeastern Railway Company for $80,000 in 4% bonds of the Puget Sound Company. These 4's will be explained later in this chapter. A branch line westerly from Tilflis to Moses Lake in Washington, 15 miles, was constructed during the summer of 1912. The construction of a branch line extending from a point one mile west of Beverly to Hanford in Washington, about 4.5 miles, was completed about the end of the year 1912.[2] A line over this route was planned by some people in Seattle who organized the Priest Rapids Railway Company with $1,000,000 authorized capital stock. This group secured the franchise rights but got no further in their plans. The Puget Sound Company bought them out for $10,000 in cash and built the line.[3]

Some work being performed by the Puget Sound Company was in progress at the time it was merged with the St. Paul, the parent company, at the close of 1912. Construction work on

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1. Annual Report, C.M.& P.S.Ry.Co., 11 months ending June 30, 1910 and year ending June 30, 1911.
2. Ibid., year ending June 30,1912.
3. Interview with Mr. H. H. Field, chief counsel of the St.Paul, at Chicago, during the summer of 1928. Interviews with him hereafter referred to occurred at this time.

a line from Lewiston to Grass Range, 36 miles, and from Lewiston to Great Falls in Montana was in progress at the close of 1912. As mentioned previously, the Idaho & Western Railway Company, a subsidiary of the Puget Sound Company had constructed a line from Dishmans, Washington, to Coeur d'Alene, Idaho. At the close of 1912 this same company was constructing a line from Plummer, Idaho, on the Puget Sound Company's line to Bell, Washington, on the Oregon-Washington Railroad & Navigation Company's line, 22 miles. This latter company was building a line from Spokane to Marengo in Washington, 8.5 miles. This line was to be used jointly with the Puget Sound Company. There were contracts between the two companies allowing each to use the tracks of the other from Bell into the proposed union depot at Spokane. Therefore the completion of the Plummer-Bell line would assure the Puget Sound Company of a line, via Spokane, for through passenger trains.[1]

Now the Coeur d'Alene branch was constructed and the Plummer-Bell line was being constructed by the Idaho & Western Railway Company. This company was incorporated under the laws of Idaho with $3,000,000 capital stock. It was organized as a subsidiary of the Puget Sound Company. The latter owned all the stock.[2] By deed dated December 6, 1912 the Idaho company's property was transferred to the Puget Sound Company, and the accounts were merged with those of the latter on December 31,1913.

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1. Annual Report, C.M.&P.S.Ry.Co., year ending June 30,1913.
2. Poor's, 1911, p. 2584.

The latter paid in all $1,803,300.40 in cash for the Idaho Company with one of its lines completed and the other under construction. Of course this sum really represented Puget Sound Company's funds invested in its own lines.[1]

In addition to the above work in progress at the time of the merger, the Puget Sound Company at this time was improving the terminal in Spokane, which was nearly completed, and working at a rapid pace on the Snoqualmie tunnel in the Cascade Mountains.[2]

There were some acquisitions of other lines through stock control by the Puget Sound Company prior to its merger with the St. Paul.

Sometime during these early years of independent operation, the Puget Sound Company acquired $153,000 of the $300,000 capital stock of the White Sulphur Springs & Yellowstone Park Railway Company. This company was chartered in June, 1910 under the laws of Montana. The line from White Sulphur Springs to Ringling in Montana, 22.95 miles, was opened on January 1, 1911. At Ringling the line connected with that of the Puget Sound Company. The rolling stock on April 1, 1911 consisted of 2 locomotives, 5 units of passenger equipment, and 13 units of freight and miscellaneous equipment.[3] The stock was passed on to the St. Paul with the merging of the Puget Sound Company at

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1. Guaranty Trust Co. of N.Y. et.al., Complainants vs. C.M.& St.P. Ry.Co., Defendants, in equity #4931, and U.S.Trust Co.of N.Y. and Edward W. Sheldon, Trustees, vs. C.M.& St.P.Ry.Co., et.al., Defendants, in equity #5065, Stenographic Minutes of Testimony, p.265, hereafter referred to as in equity numbers 4931 and 5065. Poor's, 1914, p. 996.
2. Annual Report, C.M.&St.P.Ry.Co., year ending June 30,1912.
3. Poor's, 1914, p. 1061.

the close of 1912. No more stock in this line was ever purchased by the St. Paul. Some dividends were paid on this stock prior to 1917; none, from 1917 to 1921; and $45,000 was paid in 1921 from undivided profits.

During the year ending June 30, 1911 the Puget Sound Company acquired the capital stock of the Gallatin Valley Railway Company.[1]

The Gallatin Valley Railway Company.

The Gallatin Valley Railway Company was chartered on March 18, 1908 under the laws of Montana. Its name was then the Gallatin Valley Electric Railway Company. On September 8, 1910 the name was changed to the above title. A line was opened on November 1, 1910. On June 30, 1911 the line extended from Three Forks to Bozeman in Montana, 37.37 miles; and branches extended from Belgrade Junction to Belgrade in Montana, 5.30 miles, and from Bozeman Hot Springs to Salesville in Montana, 4.75 miles. The company also owned a street car line in Bozeman with a trackage of 2.50 miles. The total trackage was 50.92 miles. These lines served very fertile sections, making them valuable feeders. The rolling stock on that date consisted of 4 passenger cars, 1 passenger electric motor, 1 freight motor, and 1 electric motor electric work car.

The financial structure on that date consisted of

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1. Annual Report, C.M.& P.S. Ry.Co., year ending June 30, 1911.

$800,000 common stock issued. However, in addition to $800,000 authorized common, $500,000 preferred were authorized but none issued. There were no bonds. The Puget Sound Company acquired this common stock.

The earnings statement for the eight months ending June 30, 1911 showed gross earnings of $47,348, net earnings of $7,102 and a deficit balance for the period of $1,375.[1] At the time the Puget Sound Company was merged with the St. Paul, a line on this railway was being constructed from Bozeman to Menard in Montana which would, when completed, give the Puget Sound Company access to the business of a rich agricultural district.[2] This road like the Tacoma Eastern, mentioned previously, was operated independently by the Puget Sound Company and later by the St.Paul when the latter absorbed the Puget Sound Company, but like the Tacoma Eastern was finally absorbed on December 31, 1918. The absorption of this line, the Tacoma Eastern and others will be mentioned later in the discussion of the period in which the merging took place.

The capital stock of the Big Black Foot Railway was acquired by the Puget Sound during the year ending June 30, 1911.[3] This company was incorporated under the laws of Montana on June 10, 1910.[4] The road was projected from Benner to Brown's

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1. Poor's, 1912, p. 798.
2. Annual Report, C.M. & P.S. Ry. Co., year ending June 30, 1912.
3. Ibid., year ending June 30, 1911.
4. Poor's, 1912, p. 798.

Lake in Montana, 58 miles. The westerly half of this route ran through heavy timber and the balance through rich agricultural lands. In November, 1910 the construction work was discontinued. At this time the grading and bridging of the first 18 miles from Bonner to Bonner's Landing was practically completed and about 40% of the work on the balance of the line was done. It was planned to lay track in the fall of 1911 to Bonner's Landing where a connection could be made with the logging railroad of the Anaconda Copper Mining Company. The capital structure consisted of $750,000 capital stock, all of which was acquired by the Puget Sound Company.[1] Track laying on the first 18 miles of this railway from Bonner to Blackfoot Junction was completed during the year ending June 30, 1912. A connection was made with the logging railroad of the Anaconda Copper Mining Company. As previously pointed out, the Puget Sound Company planned to have this done as quickly as possible after acquiring this road. Plans were under way to extend this road on to Brown's Lake, Montana, the next year.[2] The Puget Sound Company and later the St. Paul for a time operated this road independently. However, on December 31, 1916 the road, as completed at that time, was merged with the St. Paul. The property account of the latter was debited $1,188,507 for the purchase.[3]

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1. Ibid.
2. Annual Report, C.M. & P.S. Ry.Co., year ending June 30, 1912.
3. Special Report (St. Paul) Six months ending December 31, 1916.

There was one more acquisition by the Puget Sound Company before it was merged with its parent company.

In January, 1912 the Puget Sound Company acquired 71% of the $1,000,000 capital stock of the Bellingham Bay & British Columbia Railroad Company and the entire capital stock of $300,000 of the Bellingham Terminal & Railway Company which was leased to and operated by the Bellingham Bay & British Columbia Railroad Company.[1]

The Bellingham Bay & British Columbia Railroad Company and the Bellingham Terminal & Railway Company

The former company was chartered on May 3, 1883 under the laws of California. The road was opened from Bellingham to Sumas, 23.01 miles, in 1891; extended to Maple Falls, 15.86 miles, in 1901; and to Glacier, 7.28 miles, in 1903. About 1908 a branch was built from Hampton to Lynden, 5.31 miles. On October 1, 1909 the company leased the Bellingham Terminal Railway Company, the line of which extended from Squalicum to Bellingham, 5.81 miles. This was the extent of the line when its control was acquired by the St. Paul. On June 30, 1912 the rolling stock consisted of 8 locomotives, 9 units of passenger equipment, and 209 units of freight and miscellaneous equipment.[2] Its business was chiefly in lumber. Obviously the

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1. Annual Report, C.N. & P.S.Ry.Co., year ending June 30, 1912.
2. Poor's, 1913, p. 482.

new purchase was to be used as a feeder. $600,000 fifty-year first mortgage bonds at 6% per annum and due on September 9, 1941 were issued.[1] These were retired by bonds secured by a mortgage executed in 1901 securing an authorized issue of $1,000,000 first consolidated sinking fund bonds due December 1, 1933, at 5% per annum, and payable June 1 and July 1. Beginning with December 1, 1911 each year an amount equal to 3% of the bonds out was to be invested in these bonds or legal securities for trust funds as a sinking fund. The mortgage covered the line described as then extending from New Whatcom, Washington, to Sumas on the international boundary. A proposed 26 mile extension from Sumas, several spurs, rights of way, franchises, rolling stock, all railroads or railroad lines then owned or thereafter to be acquired, together with all appurtenances thereto as well as all rents, profits, etc. were also covered by the mortgage. $650,000 bonds were issued. The unissued bonds were issuable at not exceeding $15,000 per mile for new line, provided that the earnings of the preceding 12 months shall have been at least double the interest on the amount then outstanding and the new bonds proposed to be issued. At the time the Puget Sound Company acquired the road, $650,000 were out. In addition $1,000,000 capital stock had been authorized and issued. The Bellingham Terminal & Railway Company's financial structure consisted of only the $500,000 capital stock

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1. Ibid., 1898, p. 285.

acquired by the Puget Sound Company.[1] $1,095,000 of the Puget Sound Company's 4's were used with the permission of the St. Paul in acquiring the stock of these two companies.[2] These companies were operated independently for a while by the Puget Sound Company and later by the St. Paul. The above was the status at the time the Puget Sound secured control.

An idea of the earning power of the property can be had from the following figures for the Bellingham Bay & British Columbia Railroad for the following years ending June 30 prior to control by the Puget Sound Company:[3]

	1908	1909	1910	1911	1912
Gross Earnings	$233,086	$234,363	$273,257	$326,216	$322,086
Net Earnings	53,435	81,937	66,901	45,990	116,413
Balance for the Year	29	3,100	5,448	*32,150	22,257

*Deficit

The Bellingham & Northern Railway Company was incorporated in Washington on October 17, 1912 as a consolidation of these two Bellingham Companies. This new company had $1,200,000 authorized capital stock. It assumed the 1901 bonds issued by one of the old companies.[4] It was this company which was finally absorbed by the St. Paul on December 31, 1916 like the Tacoma Eastern. By that time the St. Paul owned all the above capital stock.

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1. Ibid.,1913,p.882. Coverdale & Colpitts, Appendix, p. 1.
2. In equity, Nos. 4931 and 5095.
3. Poor's, 1909, 1910, 1911, 1912 and 1913.
4. Ibid., 1914, p. 2016.

The Milwaukee Terminal Railway Company connected with the Bellingham Bay & British Columbia Railroad at Bellingham. The Terminal Railway Company was incorporated in Washington on April 8, 1908 with a capital stock of $250,000. No bonds were issued. It had car ferry lands, tracks, and industrial spurs at Ballard, Port Blakely, Eagle Harbor, and Bellingham in Washington and also at Front Street in Tacoma between which landings and the Seattle and Tacoma terminals of the Puget Sound Company regular car ferry service was being maintained. The Terminal Railway Company's capital stock was all owned by the Puget Sound Company.[1] In fact, like the Idaho & Western Railroad mentioned previously, the company was organized at the start in the interests of the Puget Sound Company.[2] The Terminal Railway Company was being operated independently, first by the Puget Sound Company and later by the St. Paul. Like the Tacoma Eastern it was merged on December 31, 1919 with the property of the St. Paul. The earning power of the property during the early years under the Puget Sound Company's control was not very strong.

Of course large amounts were spent from year to year by the Puget Sound Company for rolling stock. During the two year period ending June 30, 1912 the company acquired 60 locomotives, 108 units of passenger equipment, 1,111 units of freight

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1. Annual Report, C.M. & P.S. Ry. Co., year ending June 30,1912. Poor's, 1913, p. 680.
2. From an interview with Mr. Field.

equipment, and much equipment of a miscellaneous nature, involving an expenditure of $5,365,111.07. On June 30, 1912 the rolling stock consisted of 427 locomotives, 221 units of passenger equipment, and 13,320 units of freight and miscellaneous equipment.[1]

There were some financial operations during all this time in the name of the Puget Sound Company itself. As pointed out previously, three of the four subsidiary companies constructing the extension were taken over by one of them. The capital stock of the latter, the Washington Company, was increased to $100,000,000. This stock, as was also pointed out, was turned over to the St. Paul as security for advances made by the latter to the Puget Sound Company. Then in May, 1909 the latter company executed a mortgage to the United States Trust Company of New York (corporate trustee) and to Edward H. Sheldon (individual trustee) to secure an authorized issue of first mortgage bonds on the extension, dated January 1, 1909, due January 1, 1949, at 4% per annum, and payable on January 1 and July 1. The mortgage was made to cover the line from Mobridge to Tacoma and Seattle including the facilities owned jointly with the Oregon-Washington Railroad & Navigation Company in the vicinity of Tacoma and the trackage rights covering the use of the Columbia & Puget Sound Railway Company's line for entrance

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1. Annual Report, C.M. & P.S. Ry. Co., year ending June 30, 1912.

into Seattle. The mortgage was made to cover branch lines and terminals as described. The granting clauses were made to cover all property of every nature which should in the future be acquired by the use of any of these bonds together with the appurtenant franchises, rights, privileges, rents, issues, and income thereof; any property from time to time pledged with the trustee; rights of way, lands, tracks, depots, yard facilities, rolling stock, wharves, docks, and in general all appurtenances of the mortgaged premises; rents, trackage rights, leases, income, franchises, etc. of the mortgaged premises. There was no after-acquired property clause except as to property acquired by the use of the bonds; and $100,000,000 of these bonds at this time were turned over to the St. Paul for a like amount of funds advanced for construction.[1] By June 30, 1910 $83,000,000 more were issued to the St. Paul. During the following years up to the time shortly after the Puget Sound Company was merged with the St. Paul, additional amounts were issued to the St. Paul for advances. At the time of the merger on January 1, 1913 the St. Paul held in its treasury $148,350,511.64 of these bonds so issued. Shortly after June 30, 1913, additional bonds were so issued making a total of $184,489,500 of these bonds in the treasury.[2]

Some of the bonds secured by this mortgage got into the hands of the public. Early in March, 1911 $25,000,000 were

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1. Chronicle, vol.88,p.1252. Chronicle,Railway and Industrial Section, vol.92,p.38. Cravedale & Colpitts, Appendix, p.1.
2. Annual Reports of the C.M. & P.S.Ry.Co. for these years.

offered to the public by Kuhn, Loeb & Company and the National City Bank, New York, and Kidder, Peabody & Company, Boston, at 95 1/2 and interest to yield 4 1/4%. Of this block $1,000,000 were purchased by the insurance department of the St. Paul. As pointed out previously, in January, 1912 $1,095,000 of these bonds were used to purchase the capital stock of the Bellingham Bay & British Columbia Railroad Company and the Bellingham Terminal & Railway Company, and in February, 1912 an additional $80,000 was given for a two mile line between Burley Junction and Belleck in Washington. The $25,000,000 sold by the banks and the $1,095,000 issued for the stock of the Bellingham roads were guaranteed as to principal and interest by endorsement by the St. Paul. These $27,175,000 bonds and the $154,489,500 issued to the St. Paul made a total of $181,664,500 bonds issued on this mortgage.[1]

An idea of the growth in the Puget Sound Company's lines and the earning power of the property during the period of its independent operation can be gained from the following figures:[2]

(Figures in Thousands)

Item	11 months to June 30 1910	Years ending June 30 1911	1912	Six months to December 31 1912
Miles Operated	1,453	2,069	2,081	2,081
Railway Operating Revenues	$11,167	$15,584	$16,729	$11,754
Railway Operating Expenses	5,838	8,928	9,996	6,153
Railway Operating Income	5,289	5,711	5,880	5,131
Available for Int.	5,923	7,737	8,185	5,348

1. Chronicle, vol.93,p.669. Poor's, 1925, p. 1307.
2. Coverdale & Colpitts, p. 13.

A 3 7/10% dividend was paid from the earnings of the 11-month period ending June 30, 1910; and 3 3/10% from the earnings of the year ending June 30, 1911.[1]

While the above figures show in a general way the earning power developed during the opening years of trans-continental operation, the figures have no important bearing on subsequent events of much more importance. In the first place they represent only three years and five months of a new operation during which period maintenance charges were very low. Furthermore the operating expenses are incomplete. No provision was made for depreciation of equipment. Some question as to earnings is also raised by a decision of the commission on February 9, 1914.[2] The commission maintained that in the 1910 report of the Puget Sound Company the revenues were overstated by including charges for construction materials at rates substantially above the published rates of the Northern Pacific Railway; that large amounts were included in the cost of construction which should have been charged as expense of operations; and that interest which under the commission's rules should have been charged to income was charged to the cost of construction. The commission maintained that these irregularities were continued after June 30, 1910.[3] After the main line was opened in 1909 construction work upon branches, as was related previously, was

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1. Annual Report, C.M. & P.S. Ry. Co., year ending June 30, 1911.
2. "St. Paul & Puget Sound Accounts," 39 I.C.C. 508, hereafter referred to as 39 I.C.C.
3. Coverdale & Colpitts, p. 13.

continued for some time. Expenditures for construction and operation were thus being made simultaneously. It was possible, therefore, to include large amounts in the cost of construction which should have been charged to operations as had been the case with numerous railroad projects elsewhere. One financial writer pointed out that, if the established accounting practices had been adhered to, the reported income available for dividends of over $2,000,000 for the 11 months ending June 30, 1910 would have disappeared, making the dividend paid to the parent company really come from capital.[1] No doubt the Puget Sound extension during these years was both a constructing and accounting affair which made the accounting very difficult. No doubt also much of the accounting work in the new enterprise was done by new men not acquainted with the commission's classifications. The commission had some more to say concerning accounting practices being followed at this time. However, this had to do with the parent company itself and will be brought out subsequently.

A few summary statements may be advisable at this point. The extension was constructed at first by four subsidiary companies. At the close of 1908 three of these were absorbed by the fourth which increased its capital stock from $3,000,000 to $100,000,000. This stock was given to the parent company for advances toward constructing the extension. A mortgage was executed. Nearly $175,000,000 bonds were issued on this mortgage.

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1. William Z. Ripley, "Railroads, Finance and Organization," 1915 (New York), p. 23, hereafter referred to as Ripley.

Over $25,000,000 of these found their way into the hands of the public and the rest were issued to the parent company for advances. The main line was opened in 1909. Numerous branches were constructed subsequently. The Montana Railroad was purchased by the St. Paul and deeded to and merged with the Puget Sound Company. The St. Paul also acquired control through the purchase of stock of the Tacoma Eastern which was also acquired in connection with the extension. The Puget Sound organized the Idaho & Western which constructed two lines. This company was merged just prior to the absorption of its parent company by the St. Paul. The Milwaukee Terminal Railway was likewise organized. The Puget Sound Company acquired control through the purchase of stock of the Gallatin Valley, the Big Blackfoot, the Bellingham Bay & British Columbia, the Bellingham Terminal & Railway Company, and the White Sulphur Springs & Yellowstone Park. All the above companies except the Montana Railroad and the Idaho & Western were being operated independently at the time the extension was merged with the parent company. At the time of the merger construction projects were under way on several branches of the Puget Sound Company and also on the lines of the Gallatin Valley and Big Blackfoot lines. Advances were being made to these companies by the Puget Sound Company which was securing the funds from the St. Paul and to a certain extent from the sale of some of its bonds to the public.

Then, as pointed out previously, on December 24, 1912 the Puget Sound Company conveyed by deed all its property to the

St. Paul. On January 1, 1913 the latter took possession. The accounts were merged with those of the St. Paul. Since then the extension has been operated as a part of the St. Paul system. The property account of the St. Paul was debited $176,560,139.49 for the purchase. The $173,526,511.64 Puget Sound 4's which were issued up to that time were assumed and added to the funded debt of the St. Paul. $146,350,511.64 of these had been issued to the St. Paul up to January 1, 1913 and were in the St. Paul's treasury and $27,175,000 were outstanding. The $100,000,000 Puget Sound Company's stock heretofore carried at that amount on the books of the Puget Sound Company was now written down and carried at a nominal sum as a muniment of title on the books of the St. Paul.[1]

The St. Paul continued to extend its old lines and complete the extension projects on the extension which were in progress at the time of the merger. On its old lines at the close of this period on June 30, 1913 a line from Crystal Falls to Iron River in Michigan, 22 miles, was in progress. By June 30, 1913 the branch line from Bozeman to Menard in Montana,

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1. Annual Report, 1913. Chronicle, vol.95,p.49 and vol.98,p.832. The subsequent history of the new lines will hereafter be treated as a part of that of the whole system. The subsidiary companies controlled but not merged will be treated likewise. For the ultimate cost of the extension and the returns on the investment, see p. 448.

25 miles, on the Gallatin Valley Railway was completed and in operation. This company and others, the control of which was transferred from the Puget Sound Company to the St. Paul with the merger of the extension, continued to receive advances from the St. Paul for the construction of their lines, as they had previously received from the Puget Sound Company, their former parent company. On June 30, 1913 the St. Paul had out $29,581,067 to affiliated and controlled companies.[1] The extension from Lewiston to Great Falls in Montana, 137 miles; a branch line from Hilger to Roy in Montana, 30 miles in an easterly direction, 4 miles north to Hilger, and 25 miles on to Winnifred, Montana; an extension from Lewiston to Grass Range in Montana, 38 miles in an easterly direction; a line from Plummer, Idaho, north Bell, Washington; a short line out of Spokane, Washington; the Silver Bow Canyon line from Colorado Junction near Butte to Cliff Junction in Montana; and the Chateau line extending 62 miles northwest from Great Falls to Agawam in Montana were all being constructed on June 30, 1913. The Silve Bow Canyon line above when complete would obviate the necessity of using the line of the Butte, Anaconda & Pacific Railway which the company was doing temporarily. The St. Paul expected to finish all these lines except the Chateau line before the close of the calendar year.[2] The costs of these extensions like the purchase of new lines were debited to the property account as usual.

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1. Because of the financial relationship, the subsequent history of these subsidiary companies will be treated as a part of the history of the St. Paul.
2. Annual Report, 1913.

The St. Paul acquired one more new acquisition during this period or rather completed arrangements for the acquisition. Late in June, 1913 Clark, Dodge & Company and Potter, Choate & Prentice, New York, who had purchased a block of $2,988,500 trust certificates of the Puget Sound & Willapa Harbor Railway Company and disposed of part of them privately, offered the remainder to the public at 98 1/4 and interest yielding 5.40% to the investor. These certificates were dated January 1, 1913, were due on January 1, 1918, and bore interest at 5% per annum payable in January and December. They were redeemable as a whole or in part at 103 1/2 and interest on 30 days notice. They were issued by the United States Trust Company, New York, as trustee against the deposit of the entire $3,000,000 stock (less 5 shares to qualify the trustee) of the unbonded Puget Sound & Willapa Harbor Railway. These certificates were guaranteed as to the principal and interest of the St. Paul. In the trust agreement under which the stock was deposited, the St. Paul agreed to purchase for cash the stock of this company at $100 per share on June 1, 1918 on which date the trust certificates were to be payable unless sooner redeemed.[1]

The Puget Sound & Willapa Harbor Railway Company was incorporated in Washington on April 13, 1913 as the successor to the Pacific & Eastern Railway Company which operated a line of road from its terminus on the Willapa River near Raymond, Washington.[2] Plans were under way at this time to extend the

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1. Chronicle, vol.96,p.1770 and 1930. Poor's, 1914, p. 995.
2. Poor's, 1914, p. 995 and 1915, p.1296.

road to a junction with the main line of the St. Paul in Thurston County in Washington and to extensive terminals in the town of Raymond on Willapa Harbor. This proposed extension was to be through one of the most heavily timbered sections of that section of the country and on completion would bring the St. Paul road into Willapa Harbor upon which were located two large milling towns of Raymond and South Bend with a large east bound tonnage of shingles and other lumber products. The line no doubt was to be a valuable feeder to the St. Paul. The harbor was considered one of the best on the Pacific coast.

Subsequently the extension was built and put into operation on November 8, 1915. Later the St. Paul purchased the stock, paid the certificates, and, like with the Tacoma Eastern and other companies, operated this company in an independent unit until December 31, 1918 when the property was merged with that of the St. Paul.

The St. Paul on June 30, 1913 owned solely 8,321.60 miles of main line and owned jointly 103.22 miles or a total of 8,424.81 miles of main line. This main line was located in the following states: in Wisconsin, 1,783.05 miles; in Illinois, 415.04 miles; in Iowa, 1,870.32 miles; in Minnesota, 1,244.90 miles; in North Dakota, 339.95 miles; in South Dakota, 1,795.54 miles; in Missouri, 140.97 miles; in Michigan, 167.04 miles; in Montana, 818.04 miles; in Idaho, 197.31 miles; and in Washington, 613.45 miles. On June 30, 1905 the main line of the company extended 6,811.62 miles. The company was operating a total of 13,687.73

miles of track on June 30, 1913 as against 8,868.01 miles on June 30, 1905.[1] The above mileage did not include the several subsidiary companies being operated at this time as independent units. The St. Paul system now was one of the largest railroad systems in the United States.

During this period, like the preceding one, large amounts were expended on the property in other ways than the construction or acquisition of new main lines.[2]

Second track projects were numerous. During the year ending June 30, 1907 second main track from Watertown Junction to Portage in Wisconsin, about 45 miles, was completed. During the year ending June 30, 1908 second main track which was under construction on the River Division on June 30, 1907 from River Junction to Richmond in Minnesota and from Lake City to Wabasha in Minnesota, 22.5 miles, was completed. This latter stretch was completed to Hastings, Minnesota, 37.29 miles from Lake City, during the year ending June 30, 1909. During the year ending June 30, 1911 second main track was completed on the LaCrosse Division from Camp Douglas to West Salem, about 39 miles, except a gap of about 3 miles west of Tunnel City; on the River Division from Wabasha to Minneiska, about 17 miles, and from Richmond to Whitman, about 26 miles; and on the Prairie du Chien Divison from Elm Grove to Blue Mound Junction, about 7 miles. By 1913 the traffic had reached such a point on the St. Paul that

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1. Annual Report, 1913.
2. Unless otherwise stated, the sources of material for the remainder of this section of the chapter are the annual reports of the company from 1906 to 1913 inclusive.

considerable additional main track was needed for the economical movement of the company's freight. To meet these needs in April, 1912 construction work was commenced on 323.9 miles of second main track. The stretches on the Chicago & Council Bluffs Division in Iowa were from Marion to Elbaron in Iowa, 38.1 miles, and from Capron to Manila in Iowa, 120.5 miles. The stretches on the Hastings & Dakota Division were from Hopkins to Glencoe in Minnesota, 40.9 miles, from Granite Falls to Milan in Minnesota, 27.5 miles, and from Milbank to Aberdeen in South Dakota, 97 miles. Of this 323.9 miles of track, 71.05 miles were completed and put into operation by June 30, 1913 as follows: on the Chicago & Council Bluffs Division in Iowa from Marion to Louisa in Iowa, 4.14 miles, and from Hurley to Madrid in Iowa, 10.03 miles; and on the Hastings & Dakota Division from Minneapolis (Hennepin Avenue) to Hopkins in Minnesota, 5.17 miles, from Milbank to Twin Brooks in South Dakota, 6.91 miles, and from Bristol to Aberdeen in South Dakota, 43.80 miles. Work was in progress on the remainder at the close of this period. The costs of this second main track was debited as usual to the property account.

In the fall of 1907 the elevation of the tracks used jointly with the Pittsburg, Cincinnati, Chicago & St. Louis Railway Company from Western Avenue to Elizabeth Street and tracks of the St. Paul between Western Avenue and Grand Avenue, all in Chicago, were completed. The cost of this project was met from

the renewal and improvement fund. During the fiscal year ending June 30, 1912 work was commenced on depressing the tracks on the Hastings & Dakota Division in Minneapolis on an average of about 20 feet for three miles from Hiawatha Avenue to Hennepin Avenue, eliminating 37 grade crossings. On June 30, 1913 the work was 15% completed. During the year ending June 30, 1913 the elevation of the tracks in Chicago along Bloomingdale Road for 2.4 miles from North Laundale Avenue to North Ashland Avenue eliminating 35 crossings and in Milwaukee for 1.4 miles from Kinnickinnick Avenue to Fowler Street and from Clinton Street to First Avenue eliminating 14 crossings was commenced. The projects were not to be completed for several years.

On June 30, 1912 automatic block signals were being installed on the Chicago & Milwaukee Division between Pontout, Illinois, and Lake, Wisconsin, and on the Chicago & Council Bluffs Division between Elgin and Savannah in Illinois. Work of this kind was in progress at the close of this period on June 30, 1913.

During this period from 1905 to 1913, 311 steel bridges aggregating 38,541 feet and 118 masonry bridges aggregating 8,488 feet were built replacing 38,388 feet of wooden bridges, 12,357 feet of iron bridges, and 3,274 feet of embankment. The company began constructing masonry bridges during the year ending June 30, 1911 when 85 were built. During the same time, 14.81 miles of pile were filled with earth. During this period up to June 30, 1912, 2,850 wooden culverts were replaced with iron. During the last year, 1,028 feet of wooden culverts were replaced

with iron.

On June 30, 1913 the work on the Snoqualmie Tunnel in the Cascade Mountains was still progressing. This was the largest tunnel project involved on the extension. It would when completed be about two miles in length, would shorten the line 3.8 miles, eliminate some heavy grades on the company's lines, and practically eliminate trouble caused by snow slides on the Coast Division.

At the close of th e period there was some discussion in the financial press concerning the plans of the St. Paul for electrifying sections of the new extension. As the project was not started until April, 1914, discussion of this matter will be omitted from the discussion of this period.

Material changes took place during this period in other respects than that having to do directly with the company's line. During the year ending June 30, 1908, an additional ore dock 1,440 feet long was constructed at Escanaba, Michigan. The cost was handled through the renewal and improvement fund. The extensive program of improvements to the company's shops at West Milwaukee, Dubuque, Minneapolis, and Savannah being carried on during the closing years of the previous period was continued during this period. The car erection shop and the addition to the passenger car paint shop, mentioned in the previous chapter as under construction on June 30, 1905, at West Milwaukee, were completed during the year ending June 30, 1908. Shortly after at West Milwaukee an extension to the Wheel foundry 130 by 328 feet, a new pattern storage building 80 by 180 feet, an extension

to the power house 61 by 100 feet, a locomotive blacksmith shop 101 by 150 feet, and a machine shop 47 by 357 feet were constructed. On June 30, 1907 the shop facilities at West Milwaukee were sufficient to care for the construction of 10 locomotives per month and 38 freight cars per day. From June 30, 1908 to June 30, 1909 a total expenditure of $1,439,503.88 was made on shop improvements at these four places. $1,338,989.62 of this was debited to the property account as a capital expenditure; $100,078.25 was handled through the renewal and improvement fund; and $3,436.01 was charged to operating expenses. Of course the shop improvements were continued after 1909. On June 30, 1913 the work on the terminal facilities in Spokane, commenced by the Puget Sound Company and continued by the St.Paul after absorbing the extension, was practically completed. Improvements being made to the terminal facilities at Savannah, Illinois, Perry, Iowa, Council Bluffs, Iowa, and Montevideo, Minnesota, were practically completed on June 30, 1913.

To sum up then on June 30, 1913 the St. Paul was constructing an extension on its old lines, completing several extensions commenced by the Puget Sound Company on the new lines, constructing many miles of second main track, installing automatic block signals on parts of its lines, depressing and elevating its tracks at several places, carrying on work on its terminal facilities at numerous places, and constructing a large tunnel on its new lines.

The management of the company continued to handle some of these improvements entirely and in other cases partially through the renewal and improvement fund as justified by earnings during the early years of this period. The practices followed as a result of this policy were brought out in the preceding chapter and need not be repeated here.[1] The status of the fund at the beginning of this period appears in Table V in the Appendix. During the year ending June 30, 1906, $1,511,758.93 was credited to the fund. This was the last credit made to the fund from earnings. The credits to the fund from 1896 to this time totalled $11,428,758.23. In addition to these credits up to June 30, 1905, $883,718.12 in interest accumulated on the unexpended balance in the bank. On June 30, 1906 the unexpended balance amounted to $3,508,408.31. During the early years of this period expenditures continued to be made from the fund for improvements, as related just previously. Then in the year ending June 30, 1908 the items having to do with "reducing grades and improving lines" containing the amounts expended from the fund at different places on the company's lines from the time the fund was set up in the late nineties to date were closed out and added to the property. On June 30, 1908 these items were as follows:

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1. See p. 79.

LaCrosse Division	$ 1,207,260.06
Chicago & Council Bluffs Division	2,537,547.66
River Division	538,325.30
Iowa & Minnesota Division	266,031.28
Chicago & Milwaukee Division	38,349.02
Dubuque Division	1,000.00
Hastings & Dakota Division	63,173.22
Total	$ 4,650,995.39

At the same time the following items were debited to the property account, amounting on June 30, 1908 to the following amounts:

Third and Fourth Main Tracks:	
Chicago & Milwaukee Division	$ 145,284.45
Change of Line:	
Redfield, South Dakota	84,728.48
Oakwood, Wisconsin	148,484.76
Portage, Wisconsin	17,835.01

So from the year ending June 30, 1909 on the expenditures on such items were debited to the property account as capital expenditures instead of being met from a fund which was built up from the earnings of the company and not appearing in the property account at all as previously was the case. The unexpended balance in the fund was of course increased by the above changes. On June 30, 1909 it amounted to $5,807,189.17.

Then in the year ending June 30, 1911 the rest of the items were transferred to the property account. At this time the renewal and improvement fund was made an affair of the past with the items closed out and transferred to the proper accounts of additions and betterments, profit and loss, and operating expenses. The status of this fund showing the amounts credited to the fund

and expenditures from the fund up to June 30, 1910 and the unexpended balance on that date is shown in Table IX in the Appendix. The company in the report to the stockholders on June 30, 1911 called attention to the fact that the fund was closed out as of July 1, 1907.

As pointed out in the previous chapters at times as justified by the earnings of the company the management charged substantial sums representing such things as additional weight of new rails over old ones and the excess cost of buildings, bridges, etc. over the original renewal costs to operating expenses. The management continued that policy during the years ending June 30, 1906 and June 30, 1907 of this period when a total of $1,659,198.92 was so charged. However, as pointed out in the company's annual report as of June 30, 1908, under the new system of accounts as prescribed by the commission for railroads to be effective on and after July 1, 1907, these items were not to be charged to operating expenses but to the property as a capital expenditure. Since that date such expenditures have been so treated by the company.

During this period 515 locomotives, 439 units of passenger equipment, 19,183 units of freight and miscellaneous equipment, and some miscellaneous work equipment were acquired. In 1912, 60 locomotives and 2751 cars which were dropped from the inventory prior to July 1, 1907 were reinstated on January 1, 1912. The estimated original cost of this reinstated equipment was $2,032,557. In addition some money was expended on improve-

ments to the rolling stock. In all during this period $38,478,142.30 was expended for rolling stock. This amount represents the amounts spent from the equipment replacement fund, which was in turn built up from the earnings of the company and treated as operating expenses, and the amount charged to the property account as a capital expenditure. The amount spent for rolling stock which was chargeable to the property account less the amount representing rolling stock destroyed or taken down and retired from the inventory or in other words the net increase in the property account representing expenditures for rolling stock treated as capital expenditures during this period was $28,219,287.37.

In the year ending June 30, 1910 the equipment replacement funds (for locomotives and cars) were discontinued.[1] They were closed out as of July 1, 1907. The account reserve for accrued depreciation was opened. The balance in this liability account in the statement as of June 30, 1910 when it first appeared was $2,211,803.47. This amount represented the estimated depreciation of the company's rolling stock since June 30, 1907. On June 30, 1913 the balance in the account was $5,649,820.17. So instead of handling some of the expenditures for rolling stock through a replacement fund and some as a capital expenditure the company was now treating all such

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1. See p. 84.

expenditures as capital expenditures deducting therefrom amounts representing the cost of equipment withdrawn from the inventory. Replacements were provided for by credits or additions to the depreciation reserve account for depreciation on the equipment in use; and debits to or deductions from this account, for depreciation previously credited on equipment sold, destroyed, or taken down and withdrawn from the inventory. This change was also in compliance with the commission's regulations regarding accounting practices to be followed by railroads on and after July 1, 1907. The commission at that time also prescribed a system of revenue, income, and expense accounts in some cases quite different than those formerly in use.

The rolling stock at the beginning and at the end of this period was as follows:[1]

	June 30, 1905		June 30, 1913
	Standard Gauge	Narrow Gauge	
Locomotives	1,014	3	1,952
Units of Passenger Equipment	865	8	1,589
Units of Freight and Miscellaneous Equipment	41,934	88	87,490

The company's mileage increased during this period over one third. The car equipment exceeded this growth; the locomotives did not. No doubt by June 30, 1913 the St. Paul barely had time to equip sufficiently its new extension.

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1. Poor's, 1906, p. 354. Annual Report, 1913.

The changes in the property during this period were briefly as follows:

Cost of Road and Equipment on June 30, 1905		$342,431,438.52
Bonds and Stocks in Other Companies on June 30, 1905		5,478,994.86
Capital accounts on June 30, 1905		$347,910,431.38
Additions:		
Improvements and Additions	$96,038,248.23	
Purchase of Securities	1,308,641.37	
Acquisition of the C.M.&P.S.Ry.	178,560,139.48	
Premiums on Stock Sold, 1901 and 1902	1,538,335.68	
Total Additions:	$278,437,358.77	
Deductions:		
Stocks and Bonds of other Companies acquired prior to July 1, 1908	$5,477,447.69	
Advances to other Companies	987,506.32	
Sundry Credits	1,049,851.38	
Total Deductions:		7,514,805.39
Net Additions		270,918,553.38
		$618,828,984.77
Unexplained		14,591.54
Cost of Road and Equipment on June 30, 1913.		$618,808,393.23

A more detailed account of the changes to the property during this period appears in Table X in the Appendix. On account of the closing of the renewal and improvement fund items into the property account much of the increase shown in the property investment represents in part expenditures made during years previous to those in this period. These items appear for the most part under miscellaneous improvements and the item reducing grade and improving the line contained in the item of miscellaneous improvements.

The reader will note that the property account more than doubled during this period. The extension of course explains a great deal of this increase.

CHAPTER V

THE NEW TRANSCONTINENTAL SYSTEM--
1905 to 1913 (continued).

The sales of securities to the public during this active period of expansion were of course numerous. These sales were the ultimate source of funds with which the St. Paul was improving its old lines and, through advances to subsidiary companies, extending its line to the coast.

During the year ending June 30, 1908 $2,400,000 General Mortgage 3 1/2's were sold from the company's treasury. These were the last of the Series B bonds to be sold on the General Mortgage of 1889. The total amount of General 3 1/2's now aggregated $8,950,000. The next block of Generals that were to be offered to the public, as will be pointed out later, were to be the 4's of Series A again. On June 30, 1908 after the sale of these $2,400,000 General 3 1/2's there were 18 mortgages on the property prior to the General Mortgage and aggregated $78,822,500.[1]

Stock to the amount of $25,000,000 common was offered at par to shareholders of record August 29, 1908. The purposes for which the stock was issued were additional equipment, $11,419,312; second track ($2,310,358) ballasting ($691,508) and real estate ($251,553) $3,823,519; improvements at Milwaukee and other shops, $1,374,640; coal lands and shafts

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1. Annual Report, 1908. Poor's, 1907, p. 530 and 532.

(2,500 acres in Iowa and 27,000 acres in Illinois) $1,418,737; sundry other improvements, $1,333,744; about 300 miles of new road in Wisconsin, South Dakota, Minnesota, and Illinois, $4,859,348; and new side tracks ($864,879) and bridges and other structures ($506,607) $1,371,486.[1] This stock sold at this time was that authorized by the stockholders on October 4, 1903, when, as pointed out before, the public began to hear rumors of an extension to the coast.[2] The shareholder was allowed to receive 23% of his holding. 12/23 of the amount subscribed had to be paid on or before September 25, 1906; and the remainder 11/23, on or before November 13, 1906.[3]

At the annual meeting on September 30, 1906 the stockholders authorized an increase of $75,000,000 each in the preferred and in the common.[4]

The directors on December 17, 1906 decided to permit the common and preferred holders of record December 19 to subscribe at par (on or before December 31, 1906 in the case of home stockholders and until and including January 10, 1907 in the case of non-resident foreign holders) for $66,328,500 preferred and $33,164,300 common. The stockholders were to be allowed to subscribe to the new pfeferred shares to the extent of 50% of their total stock holdings and to the new common shares to the extent of 25% of their total stock holdings. This

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1. Chronicle, vol.83, p. 890. Poor's, 1908, p. 392.
2. Annual Report, 1907.
3. Chronicle, vol. 83, p. 379.
4. Ibid., p. 890.

stock could be paid for in full or in installments of 10% on December 31, 1908 (January 10, 1907 in the case of a non-resident foreign holder), 15% on June 1, 1907, 20% on December 1, 1907, 20% on June 1, 1908, 20% on December 1, 1908, and 15% on March 1, 1909.[1] In applying to the New York Stock Exchange to list this stock in January, 1909 the company gave the following purposes for which this stock was issued: for the cost to date of a line from Mobridge, South Dakota, to Seattle and Tacoma, in Washington, constructed by four subsidiary companies and, including the Lewiston branch of the Montana Railroad, extending 1,489 miles with track laid on all the main line except 60 miles, $82,000,000; amount due on rolling stock or being built for the extension, $5,000,000; additional equipment that was to be ordered for the extension, $5,000,000; and the construction of 419 miles of branches, $10,465,000.[2]

Then the company in 1909 began financing its extension project with bonds. The issues they put out in this connection were to affect profoundly the financial structure.

In June, 1909 Kuhn, Loeb, & Company and the National City Bank in New York sold $25,000,000 of an authorized issue of $50,000,000 debenture bonds of the St. Paul at 95 and interest. These bonds were dated July 1, 1909, due on July 1, 1934, and bore interest at 4% per annum payable January 1 and July 1. The indenture was executed to the Farmers' Loan & Trust

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1. Ibid., p. 1523. Annual Report, 1908 and 1909.
2. Chronicle, vol.88, p. 283. Poor's, 1909, p. 372.

Company, New York, as trustee. At this time no part of the company's property was mortgaged or pledged but the company agreed to include these bonds under any future mortgage on the property. The proceeds were to be used chiefly for the construction of branches and feeders to the coast extension. In the fall $3,000,000 more were sold to the public. Out of this $25,000,000, $33,000 were sold to the company's insurance department. In 1911, $50,000 more were issued and sold to the insurance department. $98,000,000 of these bonds were sold by the company to the banks at 93 1/3 and interest; and $2,000,000 at 93 1/2 and accrued interest.[1]

Then in December, 1908, $25,000,000 General 4's were sold by Kuhn, Loeb & Company and the National City Bank in New York at 102 1/2 and interest. These were of Series A. As pointed out previously, the company at first sold 4's of this series on the General Mortgage of 1889. Then it sold several blocks of 3 1/2's, Series B. Now the company was continuing the sale of 4's on the General Mortgage. The company at this time cancelled the General 3 1/2's which it held in the treasury and replaced them with General 4's. This block of $25,000,000 was sold from the company's treasury. These bonds had been issued previously to the company's treasury to retire dollar for

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1. Chronicle, vol.88, p.1599. Annual Report, 1911. Poor's, 1915, p.1307. Coverdale & Colpitts, Appendix, p. 1. Guaranty Trust Co.vs.C.M.& St.P.Ry.Co. and others, in Equity Consolidated Case #4931, in the District Court of the U.S. for the Northern District of Illinois, p. 712, hereafter referred to as in equity No. 4931.

dollar various underlying bonds, 12,357,000; for the construction of sundry lines aggregating 488.31 miles, $7,614,754; for second main tracks, $1,880,500; and for additional equipment, $3,302,748.[1] In short, funds from the company's treasury had been or were soon to be spent for the above purposes and these bonds were issued to the company's treasury by the trustee by way of compensation therefor in compliance with the terms of the General Mortgage of 1889. At this time the company was selling some of these bonds so issued to the public. On June 30, 1910 there were 16 mortgages on the company's lines prior to the General Mortgage aggregating $55,880,500.[2]

In March, 1910 the company arranged through White, Weld & Company, New York and Chicago, to extend at 4 1/2% the outstanding $2,155,000 Milwaukee and Northern first mortgage 5% bonds due on June 1, 1910 to June 1, 1913 so that they would mature at the same time as Milwaukee & Northern consolidated mortgage bonds. Of course the extension was at the option of the holders who could present the bonds for payment on June 1, 1910.[3] The same amount of these bonds remained outstanding after as before this arrangement was made. The Milwaukee & Northern Railroad was acquired by the St. Paul in the early nineties, as pointed out in the second chapter. Its bonds were assumed at that time by the St. Paul.

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1. Chronicle, vol. 89, p. 1541, 1598, and 1607. Annual Report, 1910. Poor's, 1925, p. 1307.
2. Poor's, 1911, p. 748 and 750.
3. Chronicle, vol. 90, p. 108 and 771 and vol. 90, p. 1238. Poor's, 1925, p. 1307.

In April, 1910 there were reports that the St. Paul would undoubtedly issue more bonds. The Puget Sound Company needed money. $7,500,000 new equipment in addition to 25 Millet type engines costing $750,000 were ordered, and $2,000,000 worth of property had been purchased at Spokane for a terminal. A line had to be built to reach this. Besides a number of branches were being planned on the extension as well as some second tracks on the St. Paul's old lines.[1]

In January, 1910 an issue of 250,000,000 francs or £9,887,500 consisting of 500,000 St. Paul bonds of 500 francs or £19 15s.6d. were sold by Kuhn, Loeb & Company to a French syndicate. By June, 1910 these had been resold by the French banks to small investors and minor institutions throughout France. The average allotment to each of the 250,000 individual investors averaged about 1000 francs or $200. The bonds were dated June 1, 1910, due June 1, 1925, and bore 4% interest per annum payable June 1 and December 1. The trustees to the new loan were the United States Mortgage & Trust Company and William Nelson Cromwell of New York. The bonds were due in francs or pounds at a fixed rate of exchange, £19 15s.6d. for 500 francs. The St. Paul pledged no specific property but, like the 25 year debenture gold 4's sold previously, promised to include these French bonds in any future mortgage on the property. The St. Paul further agreed not to part with the ownership of the 1,000,000 shares of

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1. Chronicle, vol.90, p. 1170.