

## A HISTORY OF THE RAILROADS IN WASHINGTON

On September 2, 1876, the people of the Eastern states were given the following directions on how to get to Washington Territory by Elwood Evans, in an address at the Centennial Exposition in Philadelphia:

"The following hints will give the necessary information to tourists or immigrants: Parties from the East can leave the Central Pacific Railroad at Kelton, 700 miles east of San Francisco, and by stage reach Walla Walla; from thence they can readily go to any part of the Territory. Still it is more comfortable, quite as cheap, and about as expeditious, to go through to San Francisco. Arrived there, those bound for Puget Sound will find almost daily opportunity, by sailing vessels and tri-monthly steamers of the Pacific Mail Steamship Company, to reach any port on the Sound. Those bound for Eastern Washington (and if expeditious travel be an object, to any part of the Territory) will be best accommodated by the steamers of the Oregon Steamship Company, which make weekly trips from San Francisco to Portland. Arrived at Portland, steamers leave daily for the upper Columbia, by which all parts of Eastern Washington are reached. There is also daily communication, Sunday excepted, by steamers to Kalama, and thence by the Northern Pacific Railroad to Puget Sound."

Compare these directions with the following statement taken from a railroad folder published in May, 1912:

"Looking at a map of the United States, you will find that there are six transcontinental railroad lines entering the Pacific Northwest."

In these quotations are summed up the entire span of railroad history in Washington, a bracket which includes forty years within its scope.

The course of railroading in Washington drops naturally into three parts: First, the period of discussion about a transcontinental road lasting from 1834 to 1870; second, the period of the construction of the first road, 1870 to 1883, when the last spike was driven; third, the period of development from 1883 to the present time, during which a cobweb of steel has been spun about Washington.

To Dr. Samuel B. Barlow of Granville, Mass., belongs the credit of first proposing a road to the Pacific, although one year before some slight mention had been made of such a plan in a Michigan paper called the "Emigrant." Dr. Barlow, in an article published in the *Intelligencer*, a weekly of Westport, Mass., suggested a government road from New

York to the Pacific Ocean near the mouth of the Columbia River. The cost of such an undertaking was estimated at \$30,000,000, and it was supposed that a train could traverse the 3,000 miles and return, traveling at a speed of ten miles an hour, in thirty days.

"What a glorious undertaking for the United States!" exclaimed Dr. Barlow. "The greatest public work, I mean the greatest in its ends and utilities, that mortal man has ever yet accomplished."

Dr. Parker, with whom Whitman had made his first journey to the West, backed up Barlow's dream with the assertion that there were no greater difficulties in the way of building such a road than there had been in constructing the line from Boston to Albany.

The initial active attempt to carry out the construction of a trans-continental road was made in 1845 by Asa Whitney, a New York merchant, and he was so militant in advocating the plan that he later became known as the "Father of the Pacific Railroad." Whitney conducted a campaign among the members of the United States Congress and by other means for the building of a road connecting Lake Michigan with the mouth of the Columbia by a line that should cross Wisconsin and Minnesota to the Missouri and thence follow the route of Lewis and Clark to the ocean.

As a result of this work of Whitney, Congress, in 1853, appropriated \$150,000 for the exploration of four routes. Isaac I. Stevens, first governor of the Territory of Washington, was placed in charge of the northern route survey, and assisting him were W. T. Gardiner, George B. McClellan, afterwards commander of the Army of the Potomac; Johnson K. Duncan, Cuvier Grover, A. J. Donelson, John Mullan, Jr., army officers and engineers, together with George F. Suckley and J. G. Cooper, surgeons and naturalists; John Evans, geologist; J. M. Stanley, artist; G. W. Stevens and A. Remenyi, astronomers; A. W. Tinkham and F. W. Lander, civil engineers, and John Lambert, draughtsman. The survey was to start from both ends of the route and McClellan was placed in charge of the western part. He arrived with his party in San Francisco in 1853 and proceeded to explore the Cascades for passes leading to Puget Sound. Stevens proceeded from the headwaters of the Mississippi westward to the Sound.

The survey was completed and the route found entirely feasible and practicable and the route finally followed adopted the line of Stevens' exploration. Nothing was done about a northern route for some years, and meanwhile the Territory of Washington was established under Stevens as governor.

At his suggestion, the Washington legislature of 1857 incorporated the Northern Pacific Railroad and named as incorporators Stevens, Senator Ramsey of Minnesota, Gen. James Shields of Minnesota, Judge William A. Strong, Col. William Cock, Elwood Evans, A. A. Denny and W. S. Ladd of Portland. The road was capitalized at \$15,000,000, and the route was to be from Nebraska west across Washington by the Bitter Root Valley, and across the Cœur d'Alene Mountains to the Columbia. One branch was to follow the Columbia and another to cross the Cascades to the Sound, the two branches to be connected by a line from the Sound to the Columbia. In 1860, the legislature amended the act to extend the time of beginning construction to July 4, 1863, and of completion to July 4, 1870. No capital was raised, however, and no railroad was built under the original or amended act.

Congress on February 5, 1855, appropriated \$30,000 for the construction of a military road from the great falls of the Missouri to Fort Walla Walla, and this was looked upon as the forerunner of a Pacific railway, but it was not until nine years later that a Northern railroad became an actual matter of business for Congress.

The State of Washington must look to the Columbia River for the first railroad within its borders. Here, around the cascades of the river, a portage tramway of wood was built by the Cascade Railroad Company, which was incorporated by an act of the legislature, January, 1858. Previous to this there had been a wooden track laid around the rapids for the use of the military department, and over this many immigrants with their goods had been transported by animal power. These wooden rails were, within a short time, covered with iron, and the road was operated by steam. Another road was built to connect The Dalles with Celilo.

The incorporators of this Cascade Railroad Company were B. B. Bishop, William H. Fauntleroy, George W. Murray and their associates. In 1860, the Washington legislature chartered the Oregon Steam Navigation Company, with a capital of \$1,000,000, whose incorporators were J. C. Ainsworth, Daniel Bradford, R. R. Thompson, J. S. Ruckle and their associates, and this company took over the Cascade Company.

The second railroad in Washington was Dr. Baker's famous Rawhide Road. A company, known as the Walla Walla Railroad Company, had been chartered in January, 1862, to operate a railroad from Walla Walla to the Columbia at Wallula to be completed by November, 1865. The time was extended two years in 1864, but the company was never a success and finally failed outright, giving way in 1868 to the Walla Walla & Columbia River Railroad. Dr. Dorsey S. Baker was the builder, using his own resources chiefly. A survey of the thirty miles was completed in

1871, and in 1872 construction started, being completed one year later. The first ten miles were built entirely of fir stringers, 4x6, laid on cross-ties, the wood coming from mills Dr. Baker had built for the purpose. This wood wore out even while transporting construction materials, and the rails at the curves were then protected with strap iron. The straps turned up at the ends under the pressure of the wheels and the trains had to stop while they were pounded down again. The road was the joke of Walla Walla and the people, when they heard of a delay, declared "that the coyotes had eaten out a section of the doctor's track." There was a story current that the rails were covered with rawhide, which gave it the name of the Rawhide Road.

During the third year of construction the rails reached Whitman's mission at Waiilatpu. The doctor at this time purchased rails weighing 26 pounds to the yard, and these were laid down. A little eight-ton engine did the hauling, and the road was completed in October, 1872. For a long time after the road was built freight was carried only on flat cars. The passengers were transported in a low house, with a curved roof and small windows built upon a flat car. This was furnished with a board seat running all the way around except at the doorways, and was known as the "Hearse." The transportation rates were \$5 a ton, feathers or hardware, it didn't make any difference, and passengers were carried for \$5 each. Transportation rates before the railroad were \$13.00 a ton. In 1881, the road was sold to the Oregon Railroad & Navigation Co.

A contest between a northern and southern route for the transcontinental railroad had arisen in Congress, and the larger population in California, due to the gold excitement, determined the construction of the Union Pacific. The Washington legislature, in 1858, had memorialized in favor of the northern route, and in 1860 a railroad convention to boost the northern route had met in Vancouver, attended by delegates from both Oregon and Washington. In 1864, Thad Stevens, a leader in the house, succeeded in passing a bill which was approved by President Lincoln, incorporating the Northern Pacific Railroad Company, and giving it a grant of lands to aid in building a railroad and telegraph line from Lake Superior to Puget Sound. The grant of land proved insufficient to raise the money for construction, which was estimated at \$157,000,000. Jay Cooke & Co. finally undertook to raise the money and issued \$100,000,000 7 and 3/10 per cent bonds in \$50 lots to attract small investors. They were successful, and on February 15, 1870, ground was broken at Thompson Junction, 24 miles west of Duluth. In May of the same year, the western end was started at Kalama. A fight then developed in Washington for the Sound terminus of the line between Olympia, Steilacoom, Seattle, Tacoma and

Mukilteo. A committee from the company decided on Tacoma, and General Morton Mathew McCarver, founder of the city, drove the last spike on December 16, 1873. The other Sound cities now started a fight for existence. Seattle attempted to organize a line of its own through Snoqualmie Pass to Walla Walla. A survey of the road was completed by General Tilton and T. B. Morris in 1874. The estimated cost, by making the lower Yakima route, was \$4,179,910, or \$3,677,962, if built by way of Priest Rapids. The people of Seattle found it impossible to finance the road, although it was shown that the annual revenue would be \$1,600,000 per year, so on May 14, 1874, they started out to build it themselves. Cannon and anvils were fired, steam whistles blown, and the whole town, men, women and children, started building the road. Everybody worked, and at noon there was much oratory and a dinner prepared by the women. The plan of action was for each man in the town to give at least one day a week to working on the road. The construction and enthusiasm lagged, so that by October only thirteen miles had been graded, and this was beginning to be washed away by the rains.

At this point J. M. Colman saved the day by advancing money and finishing the construction of the road to Seattle. On April 7 the people of Olympia had done practically the same thing. The Northern Pacific passed eighteen miles from Olympia at Tenino and the citizens determined to build a branch to their town.

"The building of this railroad was made a labor of love," says Bancroft. "The governor and territorial officers, and all the most prominent citizens worked at clearing and grading on regular days, called 'field days,' when their wives accompanied them to the place indicated by the superintendent of construction and carried with them ample provisions, which, being prepared and served by them with much mirth and amiability, converted the day of labor into a general holiday."

But their ardor also died and the road was not completed until July, 1878, when all the citizens were given a free ride on the first train to Tenino.

The legislature in 1875 passed an act to aid in the construction of the Seattle and Walla Walla Railroad, the name of which was changed to the Seattle and Colfax. The counties along the route, under this act, were permitted to contribute \$400,000. But the road itself never developed.

The failure of Cooke and Company in 1873 delayed the Northern Pacific construction, and it was not until 1879 that work was resumed. The western end reached Spokane in 1881, and the road was continued eastward from Spokane towards the Pend d'Oreille and at the same time

westward from the Missouri River. The eastern and western ends of the Northern Pacific were brought together on the north bank of the Deer Lodge River in Montana on September 8, 1883. The Cascade division was started through Stampede Pass in 1884 and the first train reached Tacoma on July 3, 1887. The Puget Sound Shore line from Black River Junction to Stuck, to connect with the seven-mile spur of the Northern Pacific and give Seattle direct connection with the main line, was finished and trains were operated for but one month, when the line stopped and was known as the Orphan Road.

From the completion of the Northern Pacific Road until the present time, there has been a great era of railroad building until practically every portion of the state has one or more lines.

One of the first acts of Cooke and Company in taking over the Northern Pacific was to acquire control of the old Cascades road about the falls of the Columbia.

An early road in Seattle was that of the Seattle Coal Company, which connected the portage between Lake Washington and Lake Union and ran from the southern extremity of Lake Union to a wharf at the foot of Pike Street, a distance of approximately two miles.

In 1884, according to the report of Governor Watson C. Squire, the Oregon Railroad and Navigation Company maintained 204 miles of track in the state. The Northern Pacific owned 324 miles, distributed as follows: From Wallula junction eastward, 179 miles; from Kalama to Tacoma, 105 miles; from Tacoma to South Prairie, 25 miles; from South Prairie to Carbonado, 8 miles; from Puyallup Junction to Stuck Junction, 6 miles. The Oregon Improvement Company, belonging to the Oregon Railway and Navigation Company, operated 21 miles narrow gauge from Seattle to Newcastle and 7 miles of an extension up Cedar River Valley between Renton and the McAllister coal mine. By December 1, the rails, said Governor Squire, would be laid to the Black Diamond mine, 31 miles from Seattle, and by January 1, 1885, to the north bank of the Green River, making a total of about 46 miles under control of the Oregon Improvement Company. The Olympia and Chehalis Valley Railroad connected Olympia with Tenino and another railroad connected the Northern Pacific at Stuck directly with Seattle, but not being operated. Counting the newly constructed roads, there were in 1884, 660 miles of railroads in the territory, of which about 600 was operated.

In 1885, the Oregon Railway and Navigation Company operated 259 miles, branches extending into the eastern wheat regions; one branch from Colfax to Moscow being completed and a branch from Starbuck to Pomeroy started. The Northern Pacific maintained 455 miles and had

completed during the year 62 miles from a point 25 miles west of Pasco to North Yakima. The grading and bridging of 37 additional miles between North Yakima and Ellensburg were finished, and 25 miles of road construction from South Prairie to Eagle Gorge, on Green River. By the beginning of 1886, but 75 miles of the Cascade division was unfinished. The Columbia and Puget Sound Railway Company, the old Oregon Improvement Company, had completed the line from Seattle to Franklin. A summary of the mileage gave 866 miles within the Territory, 804 of which were operated. This was a gain of 200 miles, or one-third of the total mileage, over 1885.

Governor Squire thus surveys the situation in his report to the Secretary of the Interior in 1885-6: "We now have the Oregon Short Line, connecting westward by way of the Union Pacific to Portland; the Canadian Pacific Railroad, terminating at Port Moody on Burrard's Inlet, from which immigrants can arrive by a short ride on the steamer to Puget Sound; and perhaps most important of all, the Northern Pacific Railroad line, which now traverses the eastern portion of the Territory and makes its connections with the western portions by way of the Oregon Railway and Navigation line from Wallula to Portland."

The report showed that the Northern Pacific had completed the Cascade division as far as Ellensburg and had leased the Spokane and Palouse Railway, which had been built during the year, from Marshall Junction to Belmont. This road left the main line of the Northern Pacific at Marshall, nine miles west of Spokane Falls, and ran southward by way of the towns of Spangle and Rosalia to Belmont. The line, it was said, would be continued in 1887 to Snake River. Other proposed Northern Pacific branches mentioned were to the Cœur d'Alene region and to Colfax. The Bellingham Bay and British Columbia Railroad, which was organized in 1883 to build from Bellingham Bay to the Canadian Pacific at Mission, was mentioned in the report as projected. The road was not built, however, until 1889, and in 1891 the line was completed to Sumas and in 1900 extended to Glacier, with a branch in 1903 to Lynden. The Seattle, Lake Shore and Eastern Railroad was mentioned in this report as starting construction. This road was incorporated in 1885 and constructed afterwards a line to Snoqualmie, with a branch to Sumas. A line was also constructed from Spokane westward as far as Davenport, with the intention of ultimately connecting it with the Seattle end. The road was bought by the Northern Pacific.

In 1892 there were 2,618 miles of railroad in the State, distributed as follows: Northern Pacific, 1,244, including the following branches: Spokane and Palouse Railway, Farmington branch, Central Washington

Railway; Northern Pacific and Cascade Railway; Burnett Branch, Crocker branch; Tacoma, Orting and Southeastern Railway; Northern Pacific and Puget Sound Shore Railroad; Roslyn branch; Green River and Northern Railroad; Tacoma, Olympia & Grays Harbor Railroad (Centralia to Ocosta); Lake View Branch (Olympia to Ocosta); Seattle, Lake Shore & Eastern; Yakima & Pacific Coast Railroad. Great Northern Railroad, controlling 487 miles, including the Seattle and Montana and the Bellingham Bay and British Columbia. Union Pacific System, controlling 270 miles, including a Walla Walla branch and a Mason branch. Oregon Improvement Company's lines, 164 miles, including Columbia River and Puget Sound, Port Townsend and Southern; Olympia branch and the Seattle and Northern Railroad. Hunt's system, 111 miles, including Washington and Columbia River Railway, formerly the Oregon & Washington Territory R. R. Co. (Eastern division, Dayton to Hunt's Junction); Western Division, Pendleton to Hunt's Junction in Washington; Eureka Flat Branch, Pleasant View to Eureka Junction. Other lines, 338 miles—Spokane Falls and Northern Railroad Co. (Spokane to Northport); Ilwaco & Shoalwater Bay Railroad; Puget Sound and Gray's Harbor; Mason County Central; Clifton to Port Orchard; Vancouver, Klickitat & Yakima; Monte Cristo; Blue Canyon Coal Road; Shelton Southwestern Railroad; Mosquito & Coal Creek Road in Cowlitz Co.; Ostrander, Cowlitz Co.; Fidalgo City and Anacortes; Wm. Knight & Co., Skagit Co.; Cascades Portage; Fairhaven and Southern; and the Washington Southern, Shelton to Satsop route. Washington in this year led all the other states in railroad building with a total of 420 miles, the nearest approach being Pennsylvania, with 256 miles.

In 1906, there were 3,292 miles of railroad in operation, just 400 per cent more than in 1886. The cost of construction was estimated at \$160,000,000 and the mileage was owned and controlled as follows: Northern Pacific, 1,782; Great Northern, 747; Oregon Railway & Navigation Company, 550; Tacoma Eastern Railroad, 62; Bellingham Bay and British Columbia, 58; Columbia and Puget Sound Railroad, 58, and the Canadian Pacific Railroad, controlling the Kettle River Valley Railway (Great Northern property afterwards), 35 miles.

In 1910, the railroads owned 3,795 miles in Washington and paid a total of \$2,059,017 into the state treasury.

The following table, taken from the annual reports of the State Tax Commission, shows the growth of the roads in recent years:

ROAD	MILEAGE					TAXES				
	1906	1907	1908	1909	1910	1906	1907	1908	1909	1910
Bell. B. & B. C. R. R. Co.....	58.10	57.81	59.00	59.00	61.00	\$ 15,108.59	\$ 10,985.71	\$ 8,252.00	\$ 11,162.00	\$ 12,544.00
Col. & P. S. R. R. Co.....	57.90	60.26	58.00	57.00	57.00	14,708.63	20,084.54	16,815.00	22,765.00	38,694.00
Col. & Red Mt. R. R. Co.....	7.51	7.51	7.51			1,621.88	1,621.88	2,014.00		
Great Northern .....	542.04	547.00	547.00	806.00	817.00	140,747.81	172,057.00	344,548.00	457,577.00	699,032.00
Ilwaco Rail. & Nav. Co., O. R. & N.	*	15.26	15.00	28.00	28.00	*	2,639.00	3,406.00	3,772.00	2,862.00
Northern Pacific .....	1,535.14	1,591.00	1,629.00	1,737.00	1,665.00	452,760.00	742,091.00	839,571.00	1,241,000.00	1,070,903.00
Oregon Railroad & N. Co. ....	*	500.00	500.00	*	503.00	*	130,135.00	128,870.00	*	118,187.00
Port Townsend Southern R. R., N.P.	41.20	41.20	41.00	41.00	41.00	4,893.28	5,067.00	4,438.00	3,048.00	8,219.00
Spokane Falls & Nor. Ry., (G. N.)	139.28	139.28	139.00			27,601.92	29,042.00	36,185.00		
Tacoma Eastern R. R. Co. (N. P.)..	61.20	69.80	83.00	101.00	103.00	8,078.50	10,160.00	11,328.00	17,218.00	24,001.00
Wn. & Col. R. Ry. Co. (N. P.).....	117.78	123.00	123.00			18,459.81	25,226.00	22,101.00		
Wn. & G. N. Ry. Co.....	69.38	83.90	111.00			9,356.88	10,654.00	15,328.00		
Col. R. & Northern Ry. Co. ....	*	*				*	*			
Spokane & B. C. Ry. Co. ....	*	*				*	*			
Spokane International R. ....			18.50	18.50	18.50			1,241.00	6,146.00	2,753.00
Seat. S. E. Ry. (Pd. by N. C. T. Co.)			5.00	5.00	4.00				529.00	648.00
Ore. & Wn. R. R. Co. ....				6.10	6.10					151.00
Ore., Wn. & Idaho R. R. Co.....				70.00	70.00					9,296.00
Snake Riv. Vy. R. R. Co. (O. R. & N.)										
Spokane U. Depot Co. (Harriman)..										99,353.00
Spok., Port., Seat. Ry. ....					400.00					1,344.00
Wn., Oregon & Mont. Ry. ....					3.00					1,012.00
North Yakima & Vy. Ry. ....					14.00					
Totals .....	2,629.00	3,238.00	3,336.00	2,856.00	3,795.00	\$ 693,337.00	\$1,159,966.00	\$1,433,981.00	\$1,763,171.00	\$2,059,017.00

ROAD	ASSETS				
	1906	1907	1908	1909	1910
Bell. B. & B. C. R. R. Co. ....	\$ 2,106,239.00	\$ 2,096,211.00	\$ 2,078,947.00	\$ 2,112,870.00	\$ 2,144,114.00
Col. & P. S. R. R. C. ....	2,319,189.00	2,257,613.00	2,572,194.00	2,515,083.00	4,205,975.00
Col. & Red Mt. R. R. Co. ....	582,415.00	605,119.00			
Great Northern .....	289,250,280.00	320,036,465.00	363,608,616.00	523,994,447.00	533,800,870.00
Ilwaco Rail. & Nav. Co. (O. R. & N.)	289,330.00	288,974.00	598,885.00	952,123.00	1,190,082.00
Northern Pacific .....	478,357,645.00	489,782,115.00	533,502,636.00	593,672,421.00	638,048,555.00
Ore. Railroad & N. Co. ....	79,632,205.00	84,568,502.00		67,635,193.00	68,979,697.00
Port Townsend Southern R. R. (N. P.)	3,950,355.00	4,064,104.00	5,340,100.00	4,794,650.00	4,842,676.00
Spokane Falls & Northern Ry. (G. N.)	6,447,199.00	6,623,826.00			
Tacoma Eastern R. R. Co. (N. P.)	2,791,260.00	2,996,590.00	3,403,067.00	3,615,862.00	3,682,855.00
Wn. & Col. R. Ry. Co. (N. P.)	8,169,640.00	8,290,666.00			
Wn. & G. N. Ry. Co. ....	3,145,083.00	4,826,420.00			
Col. R. & Northern Ry. Co. ....					
Spok. & B. C. Ry. Co. ....					
Spokane International R. ....			9,018,651.00	9,268,855.00	
Seattle Southeastern Ry. (Paid by No. Coast Timber Co.)			113,550.32	113,048.00	126,174.56
Ore. & Wn. R. R. Co. ....			16,668,943.00	19,740,279.00	23,865,940.00
Ore., Wn. & Idaho R. R. Co. ....			3,031,968.00	3,928,776.00	4,012,164.00
Snake River Vy. R. R. Co. (O. R. & N.)			2,506,573.00	2,601,805.00	
Spokane Union Depot Co. (Harriman)			454,952.00	496,553.00	521,556.00
Spokane, Portland, Seattle Ry. ....					53,892,003.00
Wn., Ore. & Mont. Ry. ....				2,295,474.00	2,385,417.00
North Yakima & Vy. Ry. ....				1,243,990.00	1,395,323.00
Total .....					

\*No report.

Since its completion in 1883, the Northern Pacific Railroad's policy has been to acquire control of lines throughout the state. At different times it has bought the following roads: The Puget Sound Shore Railroad, bought in 1890; the Seattle, Lake Shore & Eastern Railroad; the Spokane and Palouse Railroad, operated from Spokane south into Idaho, the construction of which was begun in 1886, and later extended from Pullman to Moscow; the Washington Central, from Spokane to Coulee City, begun in 1888 and completed in 1891, extended to connect with the Great Northern in 1903; the Bellingham Bay & Eastern Railroad, from Bellingham to Wickersham, incorporated in 1891, constructed in 1901 and sold to the Northern Pacific in 1902; the Seattle and San Francisco Railroad; the Everett & Monte Cristo, from Everett to Snohomish and from Hartford to Monte Cristo; the Washington & Columbia River Railroad, organized as the Oregon & Washington Territory Railroad in 1887, known as the Hunt Road, built from Wallula to Walla Walla, nearly paralleling the Snake, but branching off at Eureka Junction and going down the other side of the triangle to Walla Walla and thence to Pendleton and Athena in Oregon. The road was organized in 1887 by Pendleton business men, who could not carry out their plans, and the road was acquired by G. W. Hunt, an experienced railroad builder of Corvallis. The Port Townsend and Southern, acquired in 1901, was organized in 1887 and construction begun in 1890, the line extending from Port Townsend to Quilcene and from Olympia to Tenino, a projected road going from Tenino to Tacoma.

The Oregon Railway and Navigation Company got its foothold in Washington by the purchase of Dr. Baker's Rawhide road. In 1881, the company completed a road from Portland to Wallula, which gave it direct connections with Walla Walla. Extensions from Walla Walla to Riparia and from Bolles to Dayton were made in 1881. In 1883, under the name of the Columbia & Palouse Railway, a road was built from Connell to Colfax, and in 1885 this was extended to Pullman and Moscow. The company extended its line from Starbuck to Pomeroy in 1885 and in 1886, as the Columbia and Palouse, from Colfax to Farmington; in 1888, as the Washington and Idaho, from Farmington to Rockford, and in its own name from Riparia to La Crosse; in 1889, as the Washington and Idaho, from Rockford to Spokane, and from Tekoa to Mullan, Idaho; and as the Oregon Extension Company, from Winona to Seltice; as the Snake River Valley Railway, from Wallula to Grange City; and in its own name from Dayton to Turner and Fairfield to Waverly; in 1889, under the name of the Ilwaco Railway and Navigation Company, from Ilwaco to Nahcotta.

The work of construction of the Great Northern from its Idaho line to Lowell was started April, 1892, and completed January 6, 1893.

The Seattle and Northern was acquired. This road was incorporated in November, 1888, with Elijah Smith, president, and H. W. McNeil, vice-president, to build a road from Seattle northerly via Whatcom to a point on the northern boundary of Washington near Blaine; also from where it crosses the Skagit up to the mouth of the Sauk, and thence in an easterly course to Spokane Falls; also from the Skagit crossing westerly via Fidalgo Island and Deception Pass to Admiralty Head on Whidby Island. The road from Hamilton to Sauk or Rockport, begun August 7, 1900, was completed February 6, 1901, Anacortes to Hamilton, constructed in 1890 and 1891.

The Washington & Great Northern Railway, Curlew to Midway, was started August 19, 1905, and completed November 28, 1905; Marcus to Republic, started October 3, 1901, and completed July 29, 1902.

The Fairhaven and Southern Railway Company, incorporated in 1888 with Nelson Bennett, president, and a capital stock of \$1,000,000, was built from Bellingham Bay to Vancouver, B. C. This gave Bellingham Bay its first connection with the outside world. It was bought by the Great Northern in 1891, after surveys had been completed to extend it to Seattle, becoming a part of the Seattle & Montana system.

The Columbia and Puget Sound Railroad, existing as an independent road, bought the Seattle & Walla Walla Road in 1880, and has since extended it in the Newcastle coal region. It is ranked as a part of the Oregon Railway & Navigation system.

The Bellingham Bay & British Columbia Railroad, extending from Bellingham to Glacier, an independent road, was organized in 1883. In 1889, construction started and in 1903 was completed to Glacier, with a branch, built in 1903, to Lynden.

The Tacoma Eastern Railroad Company, a part of the Chicago, Milwaukee & Puget Sound system, although long ranked as independent, was organized in 1890 and constructed to Ashford. In 1900 it was continued to Kosmos.

The latest addition to the transcontinental roads is the Chicago, Milwaukee and Puget Sound Railway, which has completed its road, entering the state at Plummer, and proceeding directly west to Tacoma and Seattle. Branches are in operation to Spokane, Everett, Marcellus, and the Tacoma Eastern road to Mount Rainier, and the Grays Harbor and Puget Sound Railway to Grays Harbor.

The North Coast Road, traveling through Spokane, Davenport, Walla Walla, North Yakima, Portland, Tacoma and Seattle, is not yet completed. It is a part of the Harriman system.

The Spokane, Portland and Seattle Railroad, the North Bank Road, traversing the North Bank of the Columbia and Snake, completed in 1910, is used jointly by the Northern Pacific and Great Northern.

In addition to these roads mentioned, there are scores of logging railroads, privately owned, to transfer lumber to the main roads.

The aim of the railroads in the past has been to tap the shipping, lumber, coal and wheat regions of the state, so that practically every section of the state has an outlet for its products. Development within the next few years will be to open up the great Olympic peninsula and to further build throughout the Okanogan region. SOL H. LEWIS.