

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
THE ALASKA RAILROAD

From Engineering Commission:

Report of the Alaska Engineering Commission for the period from March 12, 1914 to December 31, 1915.

64th Congress, 1st Session, House of Representatives, Document 610, Part 2. Washington, Government Printing Office, 1916.

THE TANANA VALLEY RAILROAD

The Tanana Valley Railroad was a narrow gauge (3 feet) single track steam railroad, 44.7 miles in length. It had a terminus at Chena, at the head of navigation on the Tanana River, and one section of the line, 9 miles in length, extended to Fairbanks, which may be called the main terminal. A line 35 miles in length extended to Chatanika, in the mining district, from a junction point 5 miles from Chena and 4.7 miles from Fairbanks.

Fairbanks, while sometimes referred to as the head navigation for river steamers, is often cut off from river service on account of low water, and the Tanana Valley Railroad was built to handle the freight and passengers from Chena to Fairbanks and to serve the mining district in the vicinity of Gilmore and Chatanika.

The railroad company had four recorded terminal grounds, as follows: Chena, 18.5 acres; Fairbanks junction, 40 acres; Fairbanks, 19.802 acres; Gilmore, 40 acres.

At Chena the terminal was above the town on the north bank of the Chena Slough near its confluence with the Tanana River, but the road ran west from this point for 0.67 miles through the main street of the town to the docks along the river front.

Starting at Chena Dock, the road ran northwest for 5 miles up the Tanana Valley to Fairbanks Junction over some low swampy ground which was subject at times to overflow. The alignment was good, but the track was carried on low embankment without ballast. From the junction to Fairbanks, 4.7 miles, the railroad continued up the valley and crossed Noyes Slough, about 2 miles from the junction, on a pile trestle bridge. The bridge was occasionally carried away by high water and accumulated driftwood. Garden Island Slough was crossed just before reaching Fairbanks. The railroad company had a combined station and office building at their Fairbanks terminal, also a good warehouse and engine house.

The railroad to Chatanika ran due north from Fairbanks Junction up St. Patrick Creek from elevation 526 at mile 5 from Chena to elevation 672 at mile 7.4. Several short pile bridges were crossed. Some of the best farmlands in the Fairbanks district were to be found in this section.

At mile 7.4 the line curved to the east and followed the south side of Goldstream Creek to mile 12.5 where it crossed Goldstream and kept up the north bank to near Gilmore. At Fox, about mile 18, it crossed Fox Creek near where Fox and Pedro Creeks joined to form Goldstream Creek and followed up Pedro Creek for a little over 2 miles, where the lines made a double crossing on high trestles and swung over to the slope of the northern side hill, which was followed back into Fox Creek to gain elevation. Near mile 27, Fox Creek was finally crossed and the summit gained near mile 28 at an elevation of 1,496 feet. The railroad followed down the east side on a descending grade to Chatanika River Valley at mile 35. Between miles 17 and 35 to Chatanika, mile 40, the alignment was good and the roadbed was in fair condition.

No heavy grading work was undertaken in the construction of this railroad. The grade line was laid close to the ground, and heavy grades were used to pass over the ridges. The valleys were crossed on wooden trestles.

The equipment of the railroad, including locomotives, cars, etc., was in poor condition in 1916.

The cost of the Tanana Valley Railroad to the year of 1916 was \$867,000 with a bonded indebtedness of \$666,000. The following table gives a condensed statement of earnings, expenses and traffic during six years from 1909 to 1914 inclusive.

	Gross Earnings	Expenses	Net Earnings	Number of Passengers Carried	Number of Tons of Freight
1909	\$298,250.54	\$182,347.77	\$115,902.77	49,205	15,809
1910	250,537.30	167,440.79	83,096.51	53,248	15,535
1911	160,659.98	116,615.32	44,044.66	34,629	11,867
1912	186,868.00	100,702.01	86,165.99	38,915	16,842
1913	167,758.67	110,608.50	57,150.17	41,682	13,210
1914	116,579.50	94,259.81	22,319.69	27,832	10,231

The Tanana Valley Railroad had been a great boon to the mining industry of the Fairbanks district and had paid good interest on the investment. The earnings of the railroad had lessened gradually, as the mining industry had decreased, although the railroad still paid more than \$22,000 annually over and above the cost of maintenance and operation.

If coal from the Nenana fields could have been delivered to this railroad at either Chena or Fairbanks, an increased traffic would undoubtedly have resulted, as the new fuel would have been used by miners throughout the placer district in preference to the wood which was then consumed. It is also reasonable to assume that quartz mining would have become active if coal had been furnished to the mines in this district at a reasonable figure.

In the fall of 1917, the Tanana Valley Railroad was purchased for \$300,000 at an average of \$6,818.00 per mile. The condition of this railroad at the time of purchase has been described. It was a narrow gauge line, 44.4 miles in length, including 5.13 miles of branch line from Happy Station, 7.3 miles from Fairbanks to the town of Chena, which at certain stages of the river was the head of navigation for the larger steamers. The main line extended northeasterly from Happy Station for a distance of 31.91 miles to Chatanika, thus tapping the several small towns in the gold mining district. The original cost to the owners was \$867,000.00, and their investment had originally been a profitable one; but as against \$115,902.77 in 1919, the net earnings in 1914 were only \$22,319.69 and, three years later, at the time of purchase, the operating revenue was barely sufficient to meet operating expense. This decline in earnings was due to the cessation of gold mining in the district following the high costs of labor and materials, scarcity of fuel, and a relatively low purchasing power of gold during the war periods.

There were three objects in the purchase of this road. First of all, without this purchase, it would have been imperative to provide a right-of-way into Fairbanks for the government line by arranging a joint right-of-way occupancy over a distance of seven miles of the Tanana Valley Railroad. By this purchase, it was only necessary to convert 7.3 miles of the road from its intersection with the government railroad to Fairbanks into standard gauge by laying a third rail. The remainder of the road could be operated as a narrow gauge line. Secondly, since the purchase price included the shops, station buildings, yards, etc., at Fairbanks, adequate terminal facilities were there provided until such time as a significant growth in Fairbanks as a distribution center materialized; finally, it was thought that this road would become a valuable feeder to the main line, for although the bonanzas had been worked out and fruitful source of tonnage thus eliminated, there were great areas of low grade ground remaining that would yield a good profit under conditions of adequate transportation facilities and lower fuel cost due to the possibility of utilization of the products of the Nenana coal field.

The Alaska Engineering Commission
Its History, Activities and Organization
By Joshua Barnhardt
Institute for Government Research
Service Monograph on the U. S. Government No. 4
D. Appleton & Company, New York. 1922.