

mate of cost is based, may be approximately stated thus, beginning at Lake Superior, going westward:—

	Miles.	Average height above the Sea.
To Dakota valley,.....	300	1200 feet.
Yellowstone river,.....	300	2200 "
Along Yellowstone,.....	400	2600 "
Flathead valley,.....	300	3500 "
Lewis or Snake river,.....	200	3000 "
Puget Sound,.....	500	400 "

Lake Superior to Puget Sound *via* Portland, ..2000

[Direct line,.....1775]

Compare this with the profiles of the finished line of the Union and Central Pacific Roads. Properly, the comparison should be made from Chicago—the eastern terminus on Lake Michigan, of the Omaha line. There are on that route, approximately, as follows:—

	Miles.	Average height above the Sea.
From Chicago		
To Omaha,.....	500	1000 feet.
Near Cheyenne,.....	516	3300 "
Cooper's,.....	87	7300 "
Promontory Point,.....	482	6200 "
Humboldt,.....	406	4750 "
Reno,.....	139	4000 "
Auburn,.....	45	4300 "
Sacramento,.....	39	300 "
San Francisco,.....	135	50 "

Chicago to San Francisco,.....2410

On the Northern Pacific line there need be but two principal summits, whilst on the other there are four; the lowest of which is about a thousand feet higher than the highest on the northern route.

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In conclusion, I would state as the result of these explorations and investigations, after much reflection, and fully appreciating the responsibility devolved upon me as the Engineer selected by you for the duty, that the Northern Pacific Railroad route, with the land grant secured to the Company by the Government, possesses great intrinsic value, and will be, as a whole, a remarkably favorable line in all important respects; a line which, if judiciously located, honestly constructed, and properly administered, will pay within a few years a fair dividend on its cost. I had apprehensions that personal investigations might disclose material or possibly vital errors in some of the anticipations induced by former Reports. The result, however, has been in the other direction; and I am constrained by the facts to present an estimate of cost essentially lower than those previously submitted by the able Chief Engineer, and I offer it confidently as reasonable and reliable.

CHARTER AND MORTGAGE.

SYNOPSIS OF THE CHARTER.

The leading provisions of the Charter of the Northern Pacific Railroad, as amended to the present date (February, 1871), are as follows:

1. The Northern Pacific Railroad Company is authorized to construct, operate, and own a continuous Railroad and Telegraph line, "beginning at a point on Lake Superior, in the State of Minnesota or Wisconsin; thence westerly by the most eligible railway route, as shall be determined by the Company, within the territory of the United States, on a line north of the forty-fifth degree of latitude, to some point on Puget Sound," *via* the valley of the Columbia River, with a branch "from some convenient point on its main trunk line," across the Cascade Mountains to Puget Sound.