

Mr. JOSEPH PRIME MAXWELL, sworn and examined.

66. *The Chairman.*] You are one of the Railway Commissioners?—Yes.

67. And a civil engineer?—Yes.

68. Have you any knowledge of the country over which it is proposed to construct the North Island Trunk Railway, either on the central or the Ngaire route?—I have a slight knowledge of a portion of the central route—not an intimate one, by any means.

69. At which end?—I have been from Hunterville to Kerioi, and round Ruapehu, and to Te Kuiti.

70. I gather from your statement that you are not acquainted with the central route between Kerioi and the Upper Mokau?—No; I have not been through it.

71. Have you any knowledge of what is called the Ngaire route?—None whatever.

72. Well, from your experience of the working railways, would you consider it a profitable venture for the Government to undertake the construction of this Northern Trunk Railway?—I should think that it would be; but it much depends on how it is carried out, and whether the Government have the land, and whether there are people to put on the land. I might take as an example a work that has been carried through successfully—the Manawatu Railway. There was a good population at each end, with land to sell on the route, and people to settle on it. If the Government has the land to sell, and has population to put on it, I think that the North Island Main Trunk Railway is a parallel case, and that it would pay well to carry it out rapidly from both ends, so as to get at an early date the advantage of the through traffic, as well as the local traffic developed on the route by settlement of the land. I have brought with me, to remind the Committee of the position of the population of the North Island, a map of the electoral districts, showing how the population is grouped, and how this population at the south end of the Island would have access to the central and northern district, and *vice versa*. I was led to do this by considering the parallel case of the traffic between north and south railway districts of the South Island. The through traffic which occurs between the southern district, comprising Dunedin and Invercargill, and the northern district, comprising Oamaru and Christchurch, will amount to twenty-five thousand passengers a year—that is, we may say, entirely through traffic; and I do not think we could anticipate a less traffic than that in the case of the North Island. It is manifest that there are very great attractions in this Island which will take people—mere visitors—through from one part of the country to the other. This opinion, however, is based on the supposition that we can obtain reasonable facilities for travelling—that is to say, that the time is not made too long and the distance too great.

73. As between the two extremities?—Yes. When giving evidence on a line which is not laid out or constructed, it is difficult to point to any final conclusions. Everything in this case depends on the skill with which the line is constructed, and the object in view. If we are going to build a line to make as many miles as cheaply as we can, that is one object.

74. With heavy grades?—Yes, and with very bad curves; but if you are going carefully and skilfully to lay out the line which shall be capable of carrying traffic cheaply, and at a good speed, that is another matter. If a line no better than the line from Marton to Eltham is to be constructed, it would be a very indifferent line for either local traffic or through traffic, and in advocating, as I am doing now, the central line in preference to the Eltham route, I am presupposing that a much better line will be constructed; and not only that, but a much better line is capable of being got without any excessive cost. I have read recently the late Mr. Blair's report on this line, and I was struck in it by observing that he states that as $7\frac{1}{2}$ -chain curves are good enough for the line between Christchurch and Dunedin, they are therefore good enough for the North Island Trunk Railway. Now, I do not think that because a bad feature has been introduced in one case that that is a sufficient reason for introducing it in another. The sharp curves are worst in a general way than sharp gradings, because they curtail the possible engine-power exceedingly; and in laying out this central line too much care cannot be given to questions of this kind—as to what business the line is to serve, and what kinds of features in curves and grades, and their location, should be introduced in the construction. The question, then, of whether we are to get a good through traffic on this central line depends, in my opinion, very much on the way it is constructed, and whether it is constructed with the skill, and care, and attention requisite to enable fast trains to be put on. I should judge, from reading the report, and from seeing a little of the country, that this line ought to be laid out to carry at least 50 per cent. better loads than the coast line—that is to say, an engine which would take 100 tons on the coast line would take 150 on the central line: that is, we should have a line which will carry 50 per cent. more traffic than the coast line.

75. At the same expense?—At the same expense, or less; and, in point of speed, the same results will approximately accrue. I was looking over this question as to what train service could be run from Wellington to Auckland on the alternate routes; and with our weight of rails, and with engines suitable for running through trains—which we have not got at present, but which can be got—we could run from Auckland to Wellington in fourteen hours by the central route; but we could not expect to do it under eighteen hours and a half by the coast route. You have in the central route, if properly constructed, a line which will carry 50 per cent. more traffic than the coast route, and which would save four hours and a half in point of time from Auckland to Wellington. I may say, in addition, that the central line would be of great advantage in giving access to the east part of the Island.

76. Connected with constructed roads?—Yes. In connection with the Taupo district and south of Ruapehu it gives access to the eastern part of the Island, and there is no such advantage to be gained on the Stratford route. I do not think there is anything more that I can add.

77. In attaching value to the central route as making the journey possible in fourteen hours, I presume you have in view tourist traffic as well as the ordinary traffic?—Yes.

78. So far as tourists are concerned, is there any special object in hurrying them through the country?—No, I imagine not.