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RAILWAYS AND SETTLEMENT

A study of the nature of the relationship  
between railways and settlement in the  
Manawatu and District between 1871 and 1971

A Thesis Presented in Partial Fulfillment  
of the Requirements for the Degree of  
Master of Arts in Geography at Massey  
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BY

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### PREFACE

The source material used in thesis is of two types; primary and secondary. The primary material includes official government publications such as the Appendices to the Journal of the House of Representatives, particularly the Public Works and Railway Statements, the New Zealand Gazette, Statutes of the Colony of New Zealand, Census Publications and the Official Yearbook.

The Annual Reports of the Wellington and Manawatu Railway Company, held at Alexander Turnbull Library provided much valuable information while additional material was obtained from National Archives, the Department of Lands and Survey, New Zealand Railways and Palmerston North Public Library.

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## INTRODUCTION.

The hypothesis of this thesis is that there has been a relationship between railways and the development and settlement of the Manawatu and surrounding districts.<sup>1</sup> Since initial construction of the Foxton Tramway in 1871, this relationship has varied over both time and space. It has, in fact, been a dynamic relationship of continuing change.

Railway development in the Manawatu and surrounding area has exercised both a direct and indirect influence on settlement. The Wellington and Manawatu Railway Company, for instance, actually initiated settlements on its allocated and purchased lands, while the Railways Department by erecting houses in several settlements (especially Taihape, Marton Junction and at Milson in Palmerston North) has also made a direct contribution to settlement. Railways have also indirectly influenced settlement in that they served as a stimulus to economic growth during the initial stages of settlement and development of the area in the late nineteenth and early twentieth centuries. They thus became important agents of development and settlement. It will be shown in later chapters that the Foxton - Wanganui Railway, the Wellington - Manawatu Railway and the Main Trunk Railway all served to stimulate settlement of the area generally and of certain settlements in particular e.g., Taihape, Hunterville, Marton, Feilding, Palmerston North, Shannon and

Levin. The siting of railway lines has also influenced the physical layout of settlement. Both Marton and Otaki, as a result of the original location of the railway have two separate nuclei, and since Palmerston North's railway facilities were relocated in 1959 an industrial zone has developed along the north west boundary.

A further manner of categorising railway influence on settlement is to designate the railway as exercising either a positive influence on settlement (a factor stimulating growth of a town) or a negative influence (a factor impeding growth of a town.) The railway has exercised a positive influence on the growth of settlements such as Levin, Palmerston North, Feilding, Marton and Taihape in that the railway function has been an important factor in the growth of those settlements. The railway, or rather railway decisions, has also had a negative effect on the growth of certain towns, especially Foxton whose decline dates from the decision of the 1880 Railways Commission to abandon work on the Wellington - Foxton Railway. The centralisation of railway activity since 1920 has also meant a decline, if not a loss, of the railway function of some settlements. The centralised traffic control system, in particular, has meant that it is no longer necessary to house signalmen in a number of small railway settlements e.g., Ohingaiti and Mangaweka. Consequently a number of railway houses in these small settlements have either been demolished or not been renewed as they have worn out.

The railway has had a continuing influence on the growth of a number of towns and cities (Taihape, Marton, Feilding, Palmerston North and Levin), but in many cases the railway influence was short-lived during only the initial stages of settlement and development of the area e.g., Utiku, Mangaweka, Ohingaiti, Mangaonoho, Halcombe, Shannon, Ohau and Manakau.

The overall alignment of settlement and communication in the Manawatu is inland towards the Gorge. This inland alignment is probably attributable to several factors including:

- (a) The presence of the gorge providing a link between Manawatu and Hawkes Bay.
- (b) The location of vast strands of timber inland from the sand and swamp country.
- (c) The relatively more fertile farming land inland.
- (d) The early and rapid growth of Palmerston North as the centre of the Manawatu and its later importance as a focus of routes.

As an introduction to a more detailed examination of railway development in the Manawatu, a number of general points will be made about railway development in New Zealand.

The initial development of railways in New Zealand began in the 1860's under the auspices of the Provincial Governments. Approval of the General Government, however, was required before construction could begin. The Lyttleton and Christchurch Railways Act 1860,<sup>2</sup> for instance, validated the proposals of the Canterbury Provincial Council to enter into a contract for the construction of the projected 6½ mile line. The first

section of this line from Christchurch to Ferrymead was opened in December, 1863.<sup>3</sup> Other lines constructed by the Provincial Governments included one from Invercargill to Bluff<sup>4</sup> and the Dun Mountain line in Nelson,<sup>5</sup> until in 1870 46 miles of railway were open in the South Island.<sup>6</sup>

Initially the government stressed the "developmental" role of railways. Vogel's policy, for instance, was to actively promote the settlement of the country by a programme of public works and immigration.<sup>7</sup> The Vogel boom produced a great surge in rail construction and between 1870 and 1879 an additional 1,092 miles of railway were opened for traffic, and a further 542 miles were authorized.<sup>8</sup> It was during the Vogel boom that the first tramway and railway in the Manawatu were constructed. The Foxton Tramway was constructed between 1871 and 1873, although in 1876 the wooden rails were replaced by iron rails and within two years had been extended to Wanganui.<sup>9</sup>

Government policy towards railways was stated by Sir Joseph Ward in 1905:

"...The policy of the government has been throughout to regard the railways as adjuncts to settlement of the country and to look upon the earning of a large profit as of minor importance compared with the incalculable benefits that accrue to the State by giving the settlers a convenient and cheap means of transporting the produce of their farms to the market..."<sup>10</sup>

Generally, railways in the North Island were built to link isolated areas of existing settlement, namely the ports and their hinterlands, but as these lines invariably followed inland

routes they themselves became agents of development and settlement instead of mere links between established settlements. Foxton and Wanganui, for example, were linked by an inland railway through Palmerston North, while the Wellington and Manawatu Railway Company chose a coastal route to Levin with an inland diversion to join the Foxton - Wanganui Railway at Longburn.

An important aspect of the developmental role performed by New Zealand Railways was the differential rating structure adopted by the Railways Department.<sup>11</sup> This had two aspects. Firstly, rates were tapered for distance so that the longer the haul the lower the charge per ton-mile. This eased the transport costs on goods produced at a distance from markets and encouraged the development of remote areas. Secondly, low-value commodities were charged low rates and high-value commodities were charged higher rates. This enabled many farm products to be carried at low rates, and, locally produced goods were carried at rates lower than those charged for similar imported goods.<sup>12</sup>

Since the 1920's, however, there have been indications of a change in government policy towards the early developmental function of the railway. This initial role so important in the past, has been subordinated to the notion of a railway system operating on a normal profit-making basis.

The Minister of Railways noted in 1929, for instance, that even though the railways had been historically important as developmental rather than profit-making institutions, there was a need to regulate competition between road and rail transport in order to alleviate the adverse effects road competition was

having on railways.<sup>13</sup>

A Government Railways Board was set up in 1931 not only to maintain the railways as a public service and developmental agent, but to run the railways on the most economical basis possible.<sup>14</sup> The Government's attempt to regulate road and rail competition was embodied in "The Transport Licensing Act 1931" and subsequent amendments in 1933. The principle of the Act was the control of commercial road transport by a system of licensing.<sup>15</sup>

"Transport licensing is primarily an economic measure to achieve better co-ordination of road and rail transport and to prevent excessive competition and duplication of services within the road transport industry. Public passenger buses, taxicabs, rental vehicles and harbour ferries can only be operated with a license. A transport license is also needed for the cartage of goods in the following circumstances:

(a) When they are carried for hire or reward by means of a motor vehicle.

(b) When they are carried in competition with New Zealand Railways beyond specified distances whether for hire or reward or not, except with vehicles which together with their load weigh  $2\frac{1}{2}$  tons or less ( $6\frac{1}{2}$  tons or less for farmers' vehicles).

In general, goods cannot be carried by road between places where a route is available which involves at least 40 miles of rail. Certain commodities (particularly some foodstuffs),

however, can be carried without this restriction up to 50, 75 or 100 miles, and in some instances, such as livestock, there is no restriction at all. This restriction ceases to apply, however, where use of the railway would increase the journey by more than one-third of the shortest road route available."<sup>16</sup> Although the railways are still adversely affected by road transport the volume of goods traffic carried on the railways has increased, but the relative importance of the railway compared with other forms of transport has declined. The volume of passenger traffic carried has continued to fall.

The consequence of this change in policy has been the closure of many small inefficient branch lines. The closure of the Foxton Branch Line (1959) has many parallels in other parts of New Zealand.<sup>17</sup>

Waterson has suggested that, unlike the United States, where many settlements owed their existence to the railroad, railways in New Zealand stimulated settlement, but did not actually create them. As the exporting ports were already thriving by 1870 the railways and later the roads joined more producers to these markets and entrepots and in the process gradually destroyed the remnants of provincial economics and isolationism. He goes on to comment, however, that:

"...The only exception to this generalisation were the Manawatu and King Country towns along the Auckland - Wellington Main Trunk which owed their genesis to the railways..."<sup>18</sup>

Both the Foxton Tramway and the Foxton - Wanganui Railway stimulated rather than initiated settlement in the area since

most of the settlements on the line were established prior to railway construction e.g., Foxton, Palmerston North, Feilding, Marton and Turakina, while some, Halcombe for instance, actually anticipated the construction of the railway. Similarly the main settlements in the Rangitikei Valley; Hunterville, Mangaweka and Taihape; were established in advance of the railway. The railway provided an important boost to the growth of these settlements, although in some cases prosperity only lasted during the initial period of railway construction and bush-clearing. Settlements such as Mangaonoho and Ohingaiti owed their brief boom periods to the influence of the railway, while Utiku was established by cooperative workmen engaged on construction of the Main Trunk.<sup>19</sup>

The Wellington and Manawatu Railway Company, however, was responsible for establishing or partially establishing a number of settlements on their allocated and purchased land. The activities of this company in constructing a railway from Wellington to Longburn and settling about 243,000 acres of land and playing a leading part in initiating settlement in eight townships undoubtedly constitutes the most significant contribution of any private railway company to settlement in New Zealand. The Company was responsible for subdividing township, suburban and rural land, for arranging for pre-auction inspection and for the sale of the land either by public auction or private sale.

A railway junction can be an important factor in the growth of a settlement. In the study area three settlements, Longburn, Palmerston North and Marton, became railway junctions and another, Mugby Junction, was planned in anticipation of becoming the junction of the east and west coast lines. When construction of the Woodville - Bunnythorpe line was stopped in 1880, the proposed settlement of Mugby Junction did not develop, despite some speculative buying of sections. Longburn is a settlement which developed around a rail junction and a freezing works, but when the Foxton Branch Line was closed in 1959, Longburn ceased to be a junction. Marton Junction grew rapidly as the junction of the Main Trunk and Foxton - Wanganui lines and by 1921 had been incorporated into the borough of Marton. An important factor in the growth of Palmerston North has been its importance as a focus of rail routes.<sup>20</sup>

The growth of the railway network was also closely related to the politics of the period. The stimulating effects of Vogel's Public Works policy, and, the defeat of Grey's Government in 1879 over alleged excessive expenditure (including railway expenditure) had significant effects upon railway development in the area. The latter, for instance, resulted in the appointment of a royal commission to investigate railway proposals which subsequently abandoned work on the Wellington - Foxton and Woodville - Bunnythorpe lines. The findings of this commission and consequent government action motivated local interests to press for the claims of various districts for

railway communication. Following an initiative taken by the Wellington Chamber of Commerce in 1880, the Wellington and Manawatu Railway Company was formed with the intention of constructing a railway from Wellington to Manawatu.

Another company, the Midland Railway Company, was formed in 1886 with the intention of constructing a line to link Canterbury, Westland and Nelson. In return for constructing the 235 miles of railway, the company was to receive land grants from the central government. The company failed to meet its part of the contract and the work was taken over by the government in 1895.<sup>21</sup>

Decisions made either by the government or by railway commissions or by private companies were most important in influencing the growth and direction of the local railway network and settlement associated with the railway.

Settlements were also established in anticipation of either becoming railway junctions or of obtaining a railway connection. As mentioned the settlement of Muggby Junction anticipated the junction of the east and west coast lines at what is now Bunnythorpe. The directors of the Emigrants' and Colonists' Aid Corporation, moreover, proceeded with the settlement of Halcombe before Ashhurst as it was thought the railway would reach there first.

Choice of route for the railways was also important in influencing the spatial organisation and direction of settlement

in the area for it was no coincidence that settlement was attracted to the railway. The railway was generally the most efficient form of transport and generally the fastest link between settlements, particularly before the use of motor vehicles became more widespread in the 1920's. Thus the choice of a route for the railway was of great importance in determining the direction of settlement. The decision of the Wellington and Manawatu Railway Company, for instance, to link with Longburn and not Foxton resulted in a line of inland settlements (Shannon, Tokomaru and Linton) between Levin and Longburn.

It is interesting to speculate on the possible direction of settlement if alternate railway routes had been chosen. What, for instance, would have been the consequences for settlement if the government had proceeded with its plans for the Wellington - Manawatu Railway to connect with the Foxton - Wanganui Railway at Foxton, and Mugby Junction became the junction of the east and west coast lines instead of Palmerston North. Several possibilities present themselves. First, Palmerston North's importance as a focus of rail routes would be much less than today. Second, Foxton would possibly have become an important main line railway station, instead of the terminus of a minor branch line. Third, Mugby Junction could possibly have become a settlement of some size. Finally, settlements along the Levin - Longburn section of the railway such as Shannon, Tokomaru and Linton may not have developed as early as they did.

Another contribution railways have made to settlement has been the construction of railway - department houses in a number of towns and settlements. Railway staff houses were supplied by New Zealand Railways from the early days of railway construction, at least as far back as the 1880's. The houses were built, since in many places no settlements existed prior to railway construction and, in many places where settlements or towns did exist, railway houses were built because there were none available near the station e.g., Mangaweka. In any case it was the department's policy to provide its staff with accommodation at reasonable rents, a policy partly influenced by the fact that members of the staff were frequently transferred from one station to another.

In the study area the most important "railway settlements" have been at Taihape, Marton Junction and Milson, although Otaki, Levin, Feilding and Hunterville have had small railway settlements. Even small villages on the Main Trunk such as Mangaonoho, Ohingaiti and Mangaweka have had a railway house or two, but the extension of the centralised traffic control and automatic signalling system has made redundant the staff formerly employed at many small country stations. The railway houses at many of these places have been sold to the public, frequently for removal. Very few new houses are built today.<sup>22</sup>

The railway, finally, has also modified the physical layout of some towns. The decision to transfer Palmerston North's railway facilities from the centre of town to the western margin

has resulted in the subsequent growth of an industrial zone along Tremaine Avenue, while an extensive belt of open land extending through the centre of the city has become available for redevelopment. In another instance, the railway settlement of Marton Junction, approximately one mile south of Marton was amalgamated into the borough of Marton thus giving the town of Marton two nuclei some distance apart, a situation persisting to the present.<sup>23</sup>

#### Nature of Railway Function and Impact Upon Settlement.

Two broad periods in terms of the nature of railway function and its impact upon settlement can be recognised. The first, a period of railway construction and consolidation lasted from 1871 when construction of the Foxton Tramway began until 1921 when the volume of railway traffic, particularly passenger traffic, reached its first peak. (Fig. 1). In this period the railway played a particularly important part in the development of the country. The second, the period since 1920, has been characterised by the continuing growth of goods traffic and a post war decline in the volume of passenger traffic, but increasing rationalisation and centralisation of railway activity. During this period the railway has declined as a factor influencing settlement.

##### (a) 1873 - 1920

This period saw the initial construction of all tramways and railways in the Manawatu:

- (i) The Foxton Tramway (completed 1873)
- (ii) The Foxton - Wanganui Railway (1878)
- (iii) The Sanson Tramway (1884)
- (iv) The Wellington - Manawatu Railway (1886)
- (v) The Woodville - Palmerston North Railway (1891)
- (vi) The Main Trunk to Taihape (1904)

These railways all served as important agents of development and settlement in that they provided a quicker and more efficient means of access both into and within the bush areas and facilitated the commercial exploitation of timber as well as flax on a larger scale than previously. Settlements whose main function initially was milling timber all received a boost when the railways improved communications.

Prior to the construction of the Foxton - Wanganui Railway access to the bush areas was by light barges or canoe up river and then by bush track. Access to the Rangitikei Valley from the south was barred by the vast strands of timber extending to north of the junction of the Hautapu and Rangitikei Rivers. It was the railway which provided a quicker and more efficient form of access to the inland bush areas and enabled settlement of the area to proceed at a rapid rate.

The importance of the railway in carrying timber is seen by the fact that in 1885-86 timber accounted for about 55% of the total goods tonnage outward from stations between Foxton and Fordell (inclusive) and 30% in 1890-91. The volume of timber carried on the Foxton - Wanganui Railway began to decline in the 1890's, but on the Main Trunk timber represented 53% of total

outward goods tonnage in 1910-11 and as much as 25% in 1920-21.

The railway also linked the inland settlements to the ports of Wanganui, Foxton and Wellington thereby enabling imports and exports to be railed in and out of the area. In addition the railway facilitated the movement of people and the distribution of goods to the many small settlements within the area. In 1884, for example, there were fifteen stations between Palmerston North and Marton, and, not only did the railway serve these small settlements, but it served a wider social function in that it represented the pioneer settler's main link with the outside community. The railway station, in fact, often became the centre of activity for many settlements.

An important aspect of the developmental role of railways has been the part they played in the rise of the pastoral industries in New Zealand. The establishment of pastoral farming in the Manawatu began in the 1880's following the clearing of vast areas of bush. This development was also aided by technological and institutional innovations in the dairy and sheep industries together with government land regulations favouring the small farmer. According to Waterson, between 1900 and 1930:

"...Most of the traffic carried by the New Zealand railways was related to the movement of primary and mining produce from the country to the export ports and the backloading of bulky goods such as fertilisers, cement and timber for the rural community..."<sup>24</sup>

In the Manawatu the movement of stock to the freezing works at Wanganui, Kakariki, Aorangi, Longburn and Ngahauranga increased

in importance as the pastoral industries became more firmly established in the 1890's and early 1900's, and as the railway penetrated the Rangitikei Valley additional areas were opened up for development. Table I shows the increasing relative and absolute importance of the carriage of livestock on local railways up to 1920-21. Dairy produce was also carried on the railways, although by the late 1920's the cream cartage business of the railways had largely disappeared in the face of motor competition.<sup>25</sup>

TABLE I: RAILWAY TRAFFIC IN AND OUT OF MANAWATU STATIONS.

	Cattle and Calves		Sheep and Pigs		Timber		Other Goods	
	(tons)	(%)	(tons)	(%)	(tons)	(%)	(tons)	(%)
1885-86	300	.5	1,028	1.7	24,871	42.0	32,625	55.8
1900-01	2,112	2.0	6,722	10.2	23,667	23.1	70,131	68.4
1920-21	23,178	4.5	51,844	6.5	72,483	14.3	360,532	71.0
1969-70	25,329	3.0	6,746	.8	53,562	6.3	757,476	89.9

Source: A.J.H.R., Railways Statement 1886, 1901, 1921.

Information for 1969-70 obtained from N.Z.R., Wellington

(b) 1920 - 1971

Over the last fifty years the local services performed by the railway have diminished in importance compared with distribution of goods and passengers between metropolitan centres and cities throughout the North Island (since the introduction of the Cook Strait road/rail ferries this has become a national distribution service). Underlying this

changing emphasis have been two factors:

- ( i ) The continuing trend of concentration and rationalisation of railway activity in fewer but larger centres
- (ii) The rise and growing efficiency of road transport.

These two factors, together, have meant a relative decline in the importance of short-haul rail transport compared with road transport, and an absolute, and relative decline in the passenger service performed by the railway. (Figs 1 and 2). The feeder capacity of the rural branch line, in particular, has declined in importance, forcing the closure of many uneconomic lines e.g., the Foxton Branch line in 1959.

The differential rating structure operated by the railway rendered them particularly vulnerable to road competition as at short and medium distances rail freight rates for the higher-value traffic were often at or above the level at which road transport could operate profitably. Thus for short and medium distance traffic, road transporters were often able to offer lower rates for the higher valued commodities. As approximately 40% of the total revenue of the railways was derived from hauls of under fifty miles, the economic well-being of the Railways Department was seriously affected by road transport.<sup>26</sup>

Railway traffic, after reaching a peak in 1920-21, experienced an absolute decline during the late 1920's and early 1930's owing to both the depression and the influence of road competition. Passenger traffic carried on the railways reached a second peak during World War II, but has subsequently declined

in both absolute and relative importance. (Figs 1 and 2). Goods traffic has continued to increase in volume although the proportion of total freight carried by the railways has declined. As far as the composition of goods traffic is concerned both timber and livestock have decreased in relative importance, particularly the transport of sheep which are now generally carried by road. (Table I).

Railway activity, therefore, has become centralised at a smaller number of more important stations (Taihape, Marton, Feilding, Palmerston North and Levin) and many smaller stations have either lost their status as "accounting stations",<sup>27</sup> or have closed completely. As the number of factors influencing the growth of settlement has become more diverse, the relative importance of the railway has probably declined.

#### Methodology.

The thesis has been divided into six chapters plus a conclusion. Three of the chapters discuss the importance of the railway as a factor influencing the development of settlement during specific periods (1871-86, 1886-1920, 1920-71), while the other three chapters deal in detail with specific case studies (The Wellington and Manawatu Railway Company, the influence of the railway on Taihape and Foxton).

In studying the influence of a railway line upon settlement the general approach has been to first outline the development of communication and settlement in the pre-railway period. The next step has been to outline the physical growth of the railway network in the area paying particular attention to the routes

Fig. 1 RELATIVE IMPORTANCE OF PASSENGER AND GOODS TRAFFIC, 1881 - 1970

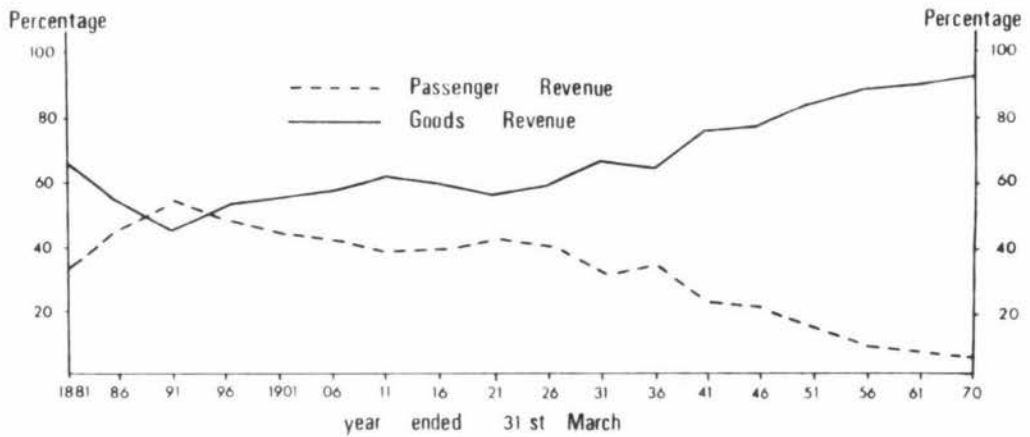
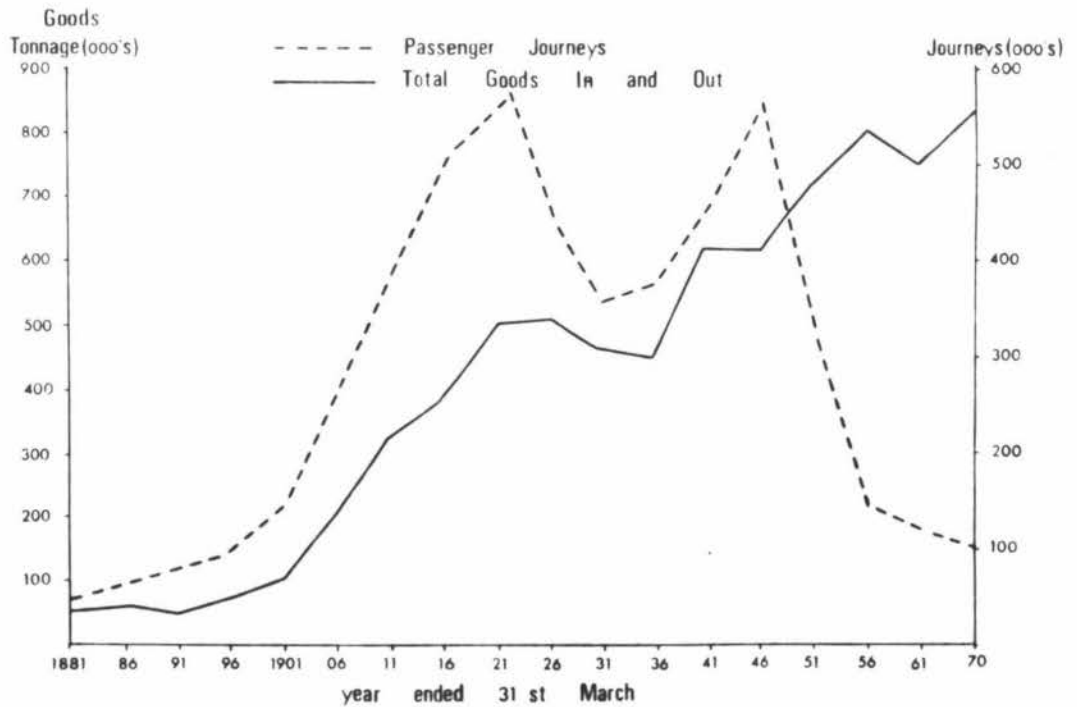


Fig. 2 PASSENGER AND GOODS TRAFFIC, 1881 - 1970



Source: A.J.H.R. 1881 - 1970 D-2

chosen and the decision-making processes involved. The relationship between railways and the development and settlement of the area has been examined by studying the volume and composition of the railway traffic figures in relation to the overall development and growth of the area.

Railway traffic figures (volume in and out, and revenue from outward goods) are given for each station with a sufficiently large volume of traffic to be regarded as "accounting stations". Traffic figures for smaller stations are recorded in those of the nearest accounting station. The passenger journey figures provide one indication of the importance of a particular railway station, although the declining importance of the passenger function since 1920 means that these figures are now of minor importance. The railway revenue figures are only useful for comparing each station in a particular year, although they are also used to show the changing relative importance of passenger and goods traffic. The best figures for showing the importance of a particular station over a number of years and the relative importance of each station in a particular year are the goods tonnages in and out of each station. When broken down, these figures can be used to show the importance of the railway to the timber and pastoral industries. Owing to the difficulty of obtaining figures for a flow diagram showing the volume of traffic moving along various sections of the line, it has been necessary to construct flow diagrams using the number of rail services along each section. These figures provide a satisfactory

substitute, however, in that the number of services is closely related to the volume of traffic.

Three base years have been chosen for studying the railway traffic figures, 1885 - 86, 1920 - 21 and either 1969 - 70 or 1970 - 71. For each of these three years maps, diagrams and tables are used to show the development of the railway network, the number of services over each section of the line and the volume of traffic in and out of each station. Other railway figures used include the number of railway houses and number of railway employees at each settlement. Railway figures used have been obtained from the Railways statement in the Appendices to the Journals of the House of Representatives and from New Zealand Railways.

The study of the Wellington and Manawatu Railway Company emphasizes the policy and activities of the company in promoting settlement of its allocated and purchased lands. The main source material for this study was the Annual Reports of the Wellington and Manawatu Railway Company, 1882 - 1909. As the company's papers were almost wholly destroyed when the government took over the railway these reports remain the only primary source material of any significance.

REFERENCES.

1. The study area is generally defined as that area covered by Rangitikei, Kiwitea, Pohangina, Oroua, Manawatu, Kairanga and Horowhenua Counties.
2. Statutes of New Zealand, 1860.
3. New Zealand Yearbook 1963, Appendix e, 1,175.
4. " " " " " " "
5. " " " " " " "
6. " " " " " " "
7. Vogel's policy is embodied in The Immigration and Public Works Act, 1870 and The Immigration and Public Works Amendment Act, 1871.
8. Transport in New Zealand, 50 and Appendices to the Journals of the House of Representatives (A.J.H.R.), 1879, E-1, Appendix E, 36 and Appendix U, 32-38
9. Chapter One
10. A.J.H.R., 1905, D-2, 18
11. A.J.H.R. 1954, D-2, Appendix, 27-28
12. Transport in New Zealand, 50-51
13. A.J.H.R., 1929, D-2, 11
14. A.J.H.R., 1931, D-3
15. Statutes of New Zealand, 1931 and 1933
16. New Zealand Yearbook 1969, 342-43
17. The 1952 Railway Commission (A.J.H.R., 1952, D-3, 41) noted that branch lines were constructed many years ago when the carriage of farm produce to the rail was

invariably by means of horse-drawn vehicles. This necessitated frequent "flag stations" on the route, but because of motor transport from the farm, many of these could be eliminated now without detriment. The commission, therefore, recommended the closure of the following lines: the Waiuku, Greytown, Foxton, Eyreton, Waimate, Outram, Waikais, Hedgehope and Wyndham branches.

18. Waterson, 120-21
19. See Chapter Three
20. See Chapter Three
21. New Zealand Yearbook 1963, Appendix e, 1,182
22. Most of the information on railway housing was provided by Publicity and Advertising, New Zealand Railways.
23. The original railway station in Marton was located in Pukepapa Road, but in 1898 Marton Junction became the main station and Pukepapa Road a flag station.
24. Waterson, 123-24
25. Waterson 124
26. A.J.H.R., 1930, H-40, 30
27. An "accounting station" is a main station with a volume of traffic large enough to be officially recorded in the railway traffic statistics in the annual railway statement. Traffic through nearby minor stations is recorded at the nearest accounting station.

CHAPTER ONE.

THE FOXTON TRAMWAY  
and FOXTON - WANGANUI RAILWAY, 1871-86.

Coastal Settlement and Communication Pre - 1870.

Early settlement of the Manawatu Lowlands was restricted, in the main, to coastal areas. In 1841 the New Zealand Company purchased from the Maoris approximately 25,000 acres on the south bank of the Manawatu River.<sup>1</sup> During 1842 the block was surveyed and subdivided,<sup>2</sup> with the township of Paiaka, ten miles up the river, as the main settlement.<sup>3</sup> In addition, the township of Te Maire, located on the site of present-day Shannon, was surveyed and subdivided.<sup>4</sup> Although the Company's plans for Paiaka were not proceeded with, a settlement consisting of both Maoris and Europeans developed there and spread along the lower reaches of the Manawatu River.<sup>5</sup>

In 1885 an earthquake resulted in the abandonment of the Paiaka settlement, the settlers and traders moving downstream to Te Awahou (later called Foxton).<sup>6</sup> In addition to a number of Europeans settled at Te Awahou it was estimated that some 3,400 Maoris lived in pas along the river bank.<sup>7</sup>

In this period the only means of communication with Wellington was either by sea or along the beach road.<sup>8</sup> Small vessels worked by the whalers from Kapiti, traded with the

district until 1860 when the first steamer crossed the Manawatu Bar.<sup>9</sup> Stage coaches and bullock wagons, making inland diversions at river mouths, travelled along the beach road to Foxton.<sup>10</sup> As there were no roads into the bush, the river was the main form of transport into the interior.<sup>11</sup>

Following the purchase of the Rangitikei Block in 1849,<sup>12</sup> European settlement of the Lower Rangitikei Valley began in the 1850's. Settlers moved into the area by way of the beach highway and a road alongside the Rangitikei River.<sup>13</sup> From the late 1840's Mr. Tom Scott had operated a Ferry at the mouth of the Rangitikei River and, in addition, piloted a small craft between Port Nicholson and the Rangitikei River. A small settlement developed around the accomodation house and store which Mr. Scott established at the mouth of the river.<sup>14</sup> A rough road extended inland from Scott's Ferry to Parawanui and Pukehou, with two roads extending from there to Turakina by rather circuitous routes.<sup>15</sup>

Following an initial period of scrub clearing and subsistence farming, several large estates practising extensive sheep farming, primarily for wool production, were established. The estates, with the homestead, labourer's cottages and farm buildings all clustered together, often formed small settlements.<sup>16</sup>

The small village of Crofton was formed in the late 1850's when a combined post office-store was built and land divided up into half acre sections.<sup>17</sup> When three landowners each sold a sixty acre block for private settlement, the land was

subdivided and a new town called Tutaenui (changed to Marton in 1869) was established.<sup>18</sup> Bulls had its beginnings in 1859 when Mr. James Bull leased five acres and started a general store and post office. The store was well established by 1876 when the proposed township was subdivided for settlement.<sup>19</sup> In 1868 the area was linked by road with Wellington and Wanganui, Cobbe's coaches travelling twice weekly between these towns making stops at Wellington and Wanganui.<sup>20</sup> Although by 1876 main roads linked the area with Wanganui, Palmerston North and Scott's Ferry, communications remained poor until the construction of the Foxton - Wanganui railway.

#### Inland Settlement and Growth of Communications.

After earlier sporadic efforts, settlement of the inland bush<sup>21</sup> areas of the Manawatu Lowlands began in the 1870's. The Ahuaturanga Block, in which Papaioea Clearing<sup>22</sup> was located was first surveyed in 1866,<sup>23</sup> and sections both in the block and in the township of Palmerston North were offered for sale in 1867.<sup>24</sup> Settlement, however, was hampered by lack of adequate communication, especially with Foxton, and, it was not until December, 1870 that the first building was erected in the Square.<sup>25</sup> An estimate made by Mr. D. McEwen in 1868 gives some indication of the population of the inland bush area: Manawatu 21,<sup>26</sup> Ngawhakarau 1, Te Matai 1, Awapuni 1, Fitzherbert 3 and Raukawa<sup>27</sup> 4.<sup>28</sup> In February 1871, a party of 53 Scandinavians, brought to New Zealand under Vogel's Public Works and Immigration Scheme were settled near Awapuni, and, two months later another

party of about sixty settled near Whakarongo.<sup>29</sup>

During 1871 a rough road linking Palmerston North with Foxton was constructed,<sup>30</sup> and, in the following year a road from Palmerston North to the Manawatu Gorge was completed.<sup>31</sup> When the bridge at the eastern end of the gorge was completed in 1875, road communication with Hawke's Bay was established.<sup>32</sup> These road connections helped break down the isolation felt by settlers in the inland bush areas, but, the absence of drays and the impassable nature of the roads during the winter floods meant that road transport was not always satisfactory.<sup>33</sup> It was not until the Foxton Tramway was constructed that Palmerston North obtained a regular link with the coast.

Private settlement companies played an important part in the settlement of the Manawatu. In 1868 the Hutt Small Farm Association applied for some 5,000 acres in the northern part of Manawatu County.<sup>34</sup> Surveys were completed in 1871, and, between 1871 and 1873 rural sections as well as sections in Sanson were balloted out and occupied by settlers.<sup>35</sup> In addition, a considerable part of the adjoining area was surveyed and farm sections were sold in 1873 under a system of deferred payment.<sup>36</sup> Settlement in this area began before there was any roading, the settlers carrying out subsistence farming and cropping and engaging in a limited amount of local trade. It was not until a link for dray traffic was constructed between Palmerston North and Wanganui in 1873 that the Sanson farmers were able to market their produce.<sup>37</sup>

The absence of a direct road connection with Foxton also hindered the growth of Sanson. In 1875, however, construction on a dray road linking Sanson to the Palmerston North - Foxton road, six miles north of Foxton, was completed.<sup>38</sup> These road connections opened up wider trade possibilities for the Sanson area.

The private settlement company which made the most important contribution to settlement in the Manawatu was the Emigrants' and Colonists' Aid Corporation, formed in England in 1867.<sup>39</sup> The corporation's agent, Colonel Feilding, visited New Zealand in 1871 and purchased from the Provincial Government a block of 100,000 acres lying between the Rangitikei River and the Ruahine Ranges, approximately twenty miles in length and eight in width, most of it covered with bush.<sup>40</sup>

The first immigrants arrived in 1874 to establish Feilding as the first settlement on the Manchester Block.<sup>41</sup> Access to the block from Palmerston North was very difficult as a road was formed only as far as Awahuri. From there access was by crossing native land on a track which was not metalled until 1875.<sup>42</sup> By February 1875, 910 "statute"<sup>43</sup> adults had been settled on the block, and, altogether ten miles of road had been formed.<sup>44</sup> Before the vast timber supplies could be utilised on more than a local basis, however, a rail connection with Foxton was necessary.

The directors also decided to establish townships both east and west of Feilding (Ashhurst and Halcombe), depending

on the direction in which the railway formation was initially developed.<sup>45</sup> As it was fairly certain that the Wanganui - Feilding line would be completed before the line from Napier, Halcombe was settled in 1876<sup>46</sup> and Ashhurst in 1879.<sup>47</sup> By 1877, 1,600 colonists had been settled on the block, 52 miles of road had been formed, and a railway line connected Feilding with Foxton.<sup>48</sup> Roads provided the early access both to the Manchester Block and within the block itself, but it was the rail connections with Foxton (1876)<sup>49</sup> and Wanganui (1878)<sup>50</sup> which gave the area its most important boost.

The other significant private settlement was the Douglas Settlement Block comprising some 21,400 acres extending from Himatangi to the Oroua River near Kopane.<sup>51</sup> Purchased in 1874<sup>52</sup> by John Douglas and Robert Campbell, sections were sold in 1878<sup>53</sup> with Campbelltown<sup>54</sup> as the main settlement.

#### The Foxton Tramway and Foxton - Wanganui Railway.

It became evident that for inland settlement to develop and expand a more effective form of communication with the port of Foxton was necessary. This came initially in the form of the Foxton Tramway and later the Foxton - Wanganui Railway, thus providing a stimulus for the development of the inland bush area.

Early in 1871 when a road was begun from Palmerston North to Ngawahakarau (nine miles from Palmerston North), construction was simultaneously undertaken on a wooden tramway following the line of the road.<sup>55</sup> The desirability of a tramway was stated

by the District Engineer, Mr. Blakett, writing to the Minister of Public Works, Mr. Gisborne, in 1871:

"...It is clear that many large and valuable districts will languish, and remain comparatively unknown and unimportant for a length of time, unless some means are adopted to facilitate access to the interior of the country..."<sup>56</sup>

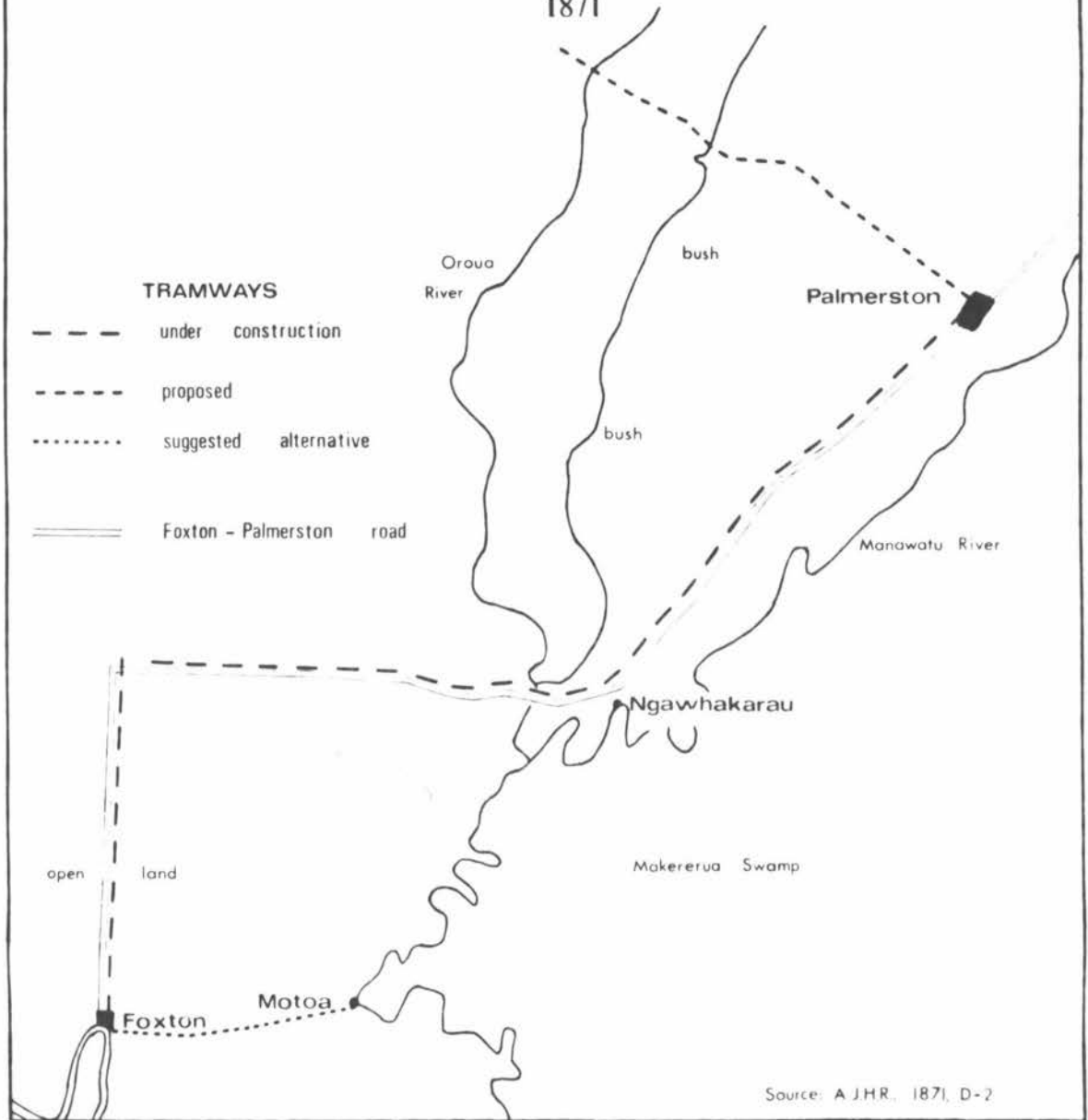
The Provincial Secretary, Mr. Halcombe, in making a case for pressing on with a tramway connection noted that in summer the normal cost of carriage of goods by road from Foxton to Palmerston North had been £2.0.0. per ton, but that by April 1871 this had increased to £6.0.0. per ton and, moreover was likely to further increase to £10.0.0. per ton. Halcombe believed that a tramway would not only substantially reduce costs but, in addition, would facilitate work on the gorge. Furthermore, it was cheaper to go ahead with a tramway than to lay a clay substratum as a basis for a metalled road.<sup>57</sup>

Two alternative tramway routes were suggested for linking Foxton with Ngawhakarau. One was to extend the tramway to what is now Himatangi Corner, and thence inland to Ngawhakarau (a total distance of sixteen miles), while the other was to extend from Foxton to Motoa by tramway (five miles), and thence by river to Ngawhakarau. In both cases transport from Ngawhakarau to Palmerston North was to be by wooden tramway.<sup>58</sup> (Fig 3)

Even though the alternative route through Motoa was less expensive to construct, the former was chosen, mainly because the Motoa route involved a change of vehicle in transit which was not only inconvenient, but more expensive as well.<sup>59</sup>

Fig. 3 MANAWATU DISTRICT TRAMWAYS

1871



The Foxton - Palmerston North Tramway was opened in September, 1873<sup>60</sup> and was later extended to Terrace End.<sup>61</sup> It was also intended to construct the wooden tramway as far as Wanganui, and about seven miles of bush from Palmerston North was cleared for this purpose.<sup>62</sup> Initially the train was horse-drawn along wooden rails, but it became apparent at an early date that a wooden tramway would be unable to cope with the traffic, and in 1875 the wooden rails were torn up and replaced with iron rails, the line being reopened in April, 1876.<sup>63</sup> In the following two years the rail line was extended to Wanganui the final section from Halcombe to Marton being opened in May, 1876.<sup>64</sup> (Fig.4)

Until the Wellington and Manawatu Railway Company's line from Wellington to Longburn was opened in 1886, the Foxton - Wanganui Railway was the principal means of communication with the bush areas of the Manawatu.

#### Early Functions of the Foxton - Wanganui Railway.

In order to evaluate the influence of this railway on settlement it is necessary, by making reference to the volume and composition of the railway traffic on the line, to establish the main functions performed by the railway.

Although in most years coaching traffic was not quite as important as goods traffic, it still provided about 40 - 50% of revenue. (Table II). This contrasts with later years when only a small proportion of railway revenue was obtained from coaching (31% in 1920-21, less than 10% for 1969-70).

Fig. 4 MANAWATU RAILWAYS

1886

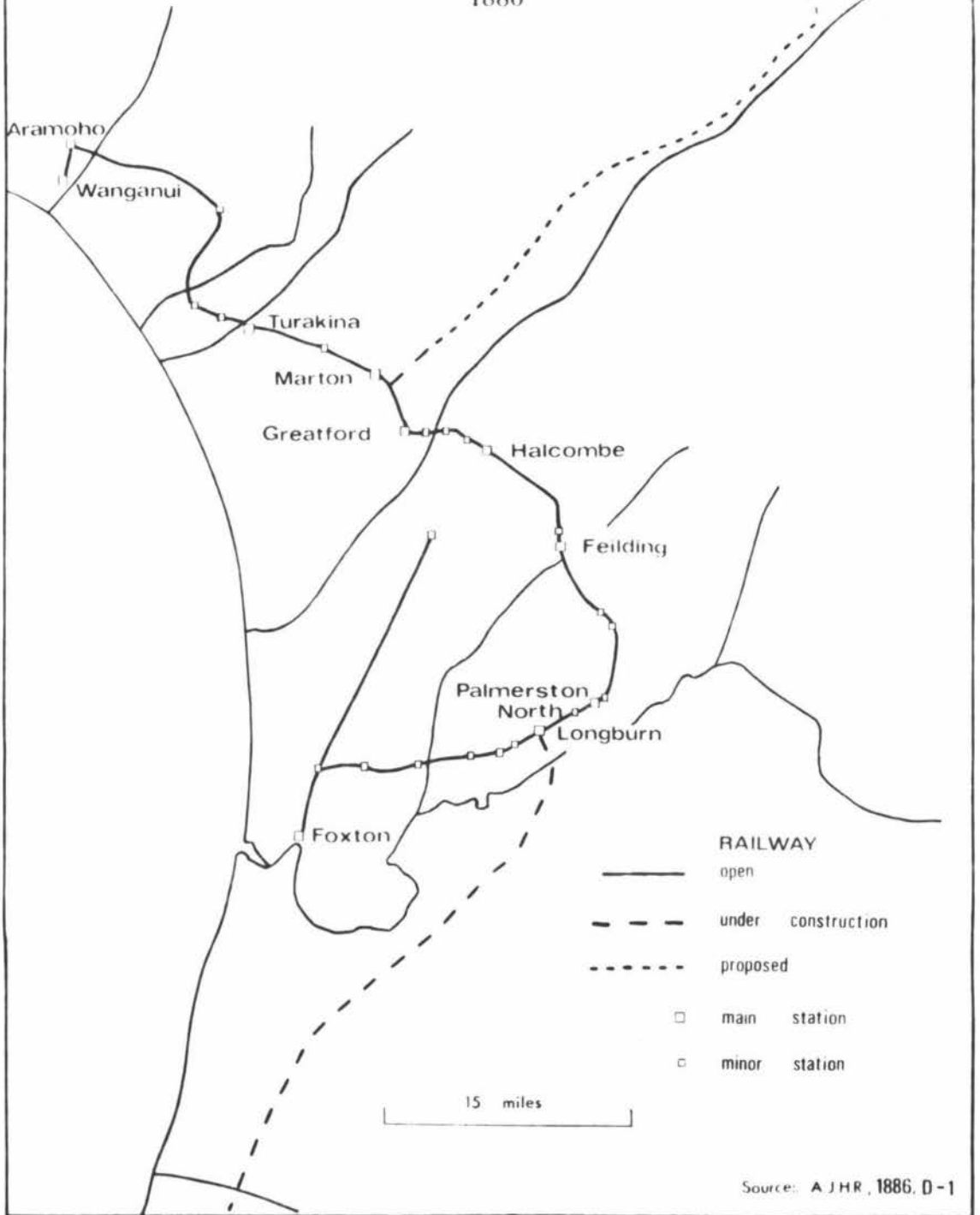


TABLE II:REVENUE FROM FOXTON - WANGANUI RAILWAY:1877-78 to 1885-86.<sup>65</sup>

		Coaching Revenue	Goods Revenue
Year ended 30th June	1878	£ 6,606	£ 7,377
	1879	N.A.	N.A.
Nine months ended 31st March	1880	14,029	13,075
Year ended 31st March	1881	16,086	31,872
	1882	17,537	22,491
	1883	18,432	22,655
	1884	16,862	21,743
	1885	19,439	21,953
	1886	21,066	22,687

Source: A.J.H.R. Reports of Public Works Department, 1878-1886

Thus one of the important functions of the Foxton - Wanganui Railway was carriage of passengers into and out of the area as well as between the many small settlements that grew up along the railway line. The importance of the railway for transporting passengers is also shown by the number of passenger journeys made on the railway. (Table III)

There was an increase in the volume of goods traffic in the late 1870's, but during the 1880's the volume of goods, both outward and inward, remained almost constant. This is, in part, a reflection of the depression conditions of the 1880's, with the

TABLE III:

TRAFFIC ON THE FOXTON - WANGANUI RAILWAY:  
1875-76 to 1885-86.

(a) 1875-76 and 1876-77

	Year ended 30th June	
	1876	1877
Passenger Journeys (a)	4,541	7,580
Livestock	1	12
Bales of Wool	33	578
Timber (tons)	3,741	3,895
Total Goods (tons)	3,756	2,994

(b) 1877-78 and 1879-80

	Year ended 30th June 1878	Nine months ended 31st March 1880
Passenger Journeys	32,785	119,007
Livestock	845	2,297
Wool	£ 362	1,099 ton
Grain	£ 457	2,085 ton
Merchandise	£5, 383	6,641 ton
Firewood	£1, 560	9,030 ton
Total Goods	£15,040	33,057 ton

**TABLE III: TRAFFIC ON THE FOXTON - WANGANUI RAILWAY:**  
1875-76 to 1885-86.

(c) 1880-81 to 1885-86

	Year ended 31st March					
	1881	1882	1883	1884	1885	1886
Passenger Journeys	76,641	122,912	96,707	110,811	106,194	106,829
<u>OUTWARD GOODS</u> (tons)						
Livestock	NA	NA	NA	338	454	430
Timber	NA	NA	NA	NA	15,487	16,408
Other Goods	NA	NA	NA	NA	23,524	23,745
Total Outward Goods	38,169	49,313	42,388	42,990	39,465	40,733
<u>INWARD GOODS</u> (tons)						
Livestock	NA	NA	NA	462	494	979
Timber	NA	NA	NA	NA	13,547	15,105
Other Goods	NA	NA	NA	NA	23,925	23,630
Total Inward Goods	36,311	43,552	39,467	44,951	37,966	30,114

SOURCE: A.J.H.R. - Reports of the Public Works Department, 1878-86

- (a) A passenger journey is defined as a one-way journey.  
 A return journey represents two passenger journeys.

associated slowing down in economic activity.

Timber was the most important single item of goods traffic carried on the railway. The railway provided the impetus to the growth of the sawmilling industry as it enabled the sawn timber to be railed to the ports of Foxton and Wanganui, and shipped out. Palmerston North, Feilding and Halcombe were the most important stations for the despatch of timber. Of the 16,098 tons of timber railed outward from the bush area in 1885-86, 15,980 tons came from these three stations, representing the single most important item from them (56% of outward goods tonnage from Palmerston North, 84% from Feilding, and 52% from Halcombe.<sup>66</sup>) In addition there were a number of small stations and sidings in the bush areas which handled timber, although figures from these would be included in those of the nearest "accounting" station. In 1885-86 Foxton station received 15,497 tons of timber and Wanganui station 5,851 tons for shipment out.<sup>67</sup>

A number of private sidings operated in this early period as "feeders" to the main lines, most of them connected with sawmills. (Plate 1). Approximately one dozen private sidings operated along the Foxton - Wanganui Railway, the most important being P. and J. Bartholomew's at Feilding and Bailey Brothers at Taonui.<sup>68</sup>

The railway also served as a transporter of a variety of goods including wool, lime, chaff, grain, merchandise, minerals and livestock. It was the railway that enabled large quantities



PLATE 1 - Early Manawatu Tramline: this tramline, through dense bush, probably connected a sawmill with the main line.

Photo by courtesy: Alexander Turnbull Library Wellington,  
New Zealand.

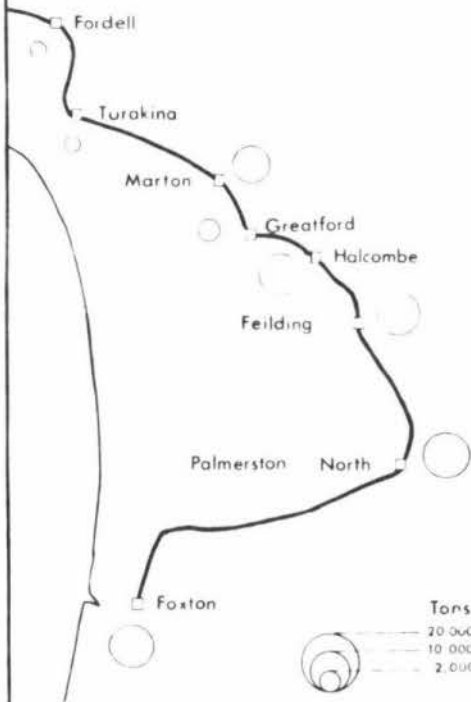
of goods and supplies to be transported into and out of the developing inland area and, in addition, facilitated the interchange of goods between settlements. In the mid 1880's the railway also began to assume importance as a carrier of livestock, a function that became increasingly important as the pastoral industries became more firmly established. (Table III)

The number of passenger journeys and the volume of goods outward from Foxton and Wanganui shows the importance of the railway as the point of entry to the inland area. (Table IV) Until the Wellington - Manawatu Railway came into operation in 1886, the ports of Foxton and Wanganui, and the railway linking them, were easily the most important means of access to the bush areas of the Manawatu and Lower Rangitikei Valley. The considerable volume of goods received at Foxton and Wanganui from the inland area, also shows the importance of these two ports as receiving and distributing centres for goods destined for other parts of New Zealand. (Table IV)

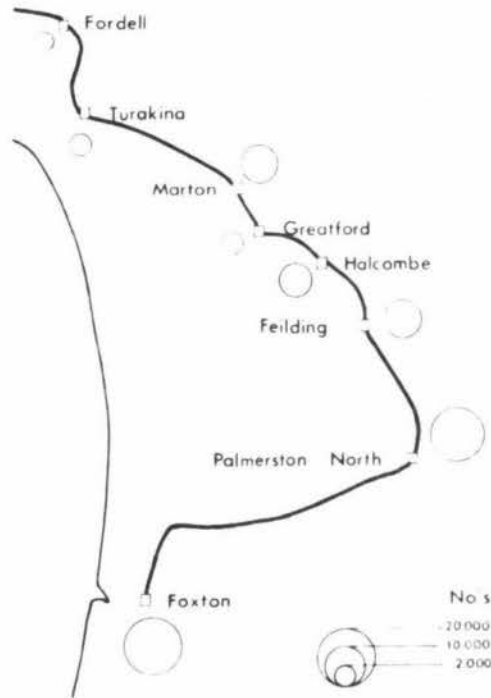
The most important railway stations in the inland area were Palmerston North, Feilding, Halcombe and Marton. (Fig. 5) The large number of passenger journeys and the considerable volume of goods railed into and out of Palmerston North, show the importance of this inland settlement. Feilding, Halcombe and Marton show a lesser, though still considerable amount of passenger activity. The large volume of goods moving out from Feilding and Halcombe is a consequence of sawmilling in the

Fig. 5 TRAFFIC THROUGH EACH STATION. 1885 - 86

(a) GOODS IN AND OUT



(b) PASSENGER JOURNEYS



Source: A JHR. 1886. D-2

vicinity.

The Foxton - Wanganui Railway by providing a regular and efficient means of access to the Manawatu Lowlands, enabled people and goods to move freely into and out of the area. It facilitated movement within the area, it provided the impetus to the sawmilling industry since it enabled the sawn timber to be railed to the ports of Foxton and Wanganui, and, as the pastoral industries developed in the 1880's it assumed importance as a carrier of livestock. It thus became an important agent in the development and settlement of the area.

Influence of Foxton - Wanganui Railway on Settlement of  
Manawatu Lowlands.

During the initial period of settlement of the bush area, sawmilling was the most important economic activity. Pit-sawing was carried out at Longburn in the early 1870's, and the first steam mill at Palmerston North was erected in 1871.<sup>69</sup> By 1872 two sawmills were operating at Terrace End.<sup>70</sup> It was not until the Foxton Tramway was completed in 1873, and more particularly, the Foxton - Wanganui Railway in 1878, that the timber resources of the Manawatu could be utilised on more than a local basis. As the bush line receded it became necessary to construct tramlines to bring the timber to the mills. (Plate 1) Richter, Nannestad and Jenssen, for example, operated a tramline from their mill at Hokowhitu into the Kairanga bush. The same firm also erected a mill at Trondheim and a railway siding extended from the main line into the bush.<sup>71</sup>

TABLE IV:

TOTAL OF PASSENGER AND GOODS TRAFFIC  
FOR INDIVIDUAL STATIONS: 1880-81 to 1885-86

Station	Total Number of Passenger Journeys	Total Volume of Outward Goods (tons)	Total Volume of Inward Goods (tons)
Foxton	107,075	20,053	47,596
Palmerston North	120,909	39,117	29,178
Feilding	53,277	80,348	10,823
Halcombe	46,985	51,648	4,952
Greatford	19,807	6,553	8,889
Marton	42,528	7,348	22,881
Turakine	29,754	4,800	7,150
Fordell	12,196	4,283	4,474
Arsmoho	20,330	6,729	10,136
Wanganui	144,345	29,187	75,626

Source: Reports of the Public Works Department, 1881-86

Most of the settlers on the Manchester Block obtained employment either through public works (road and rail construction) or sawmilling. The concentration of railway stations (main and flag) and sidings in the bush areas of the Manawatu show the importance of the railway in the development of these areas. Of 38 stations along the Foxton - Wanganui Railway in 1884, 21 were located in the bush areas between Oroua Bridge and Greatford,<sup>72</sup> and of thirteen private sidings in 1883, ten were located in the

bush area.<sup>73</sup> Some of the smaller villages such as Oroua Bridge (Rangiotu), Bunnythorpe, Halcombe, Kakariki, Aorangi and Taonui are still in existence today, although they may be performing a completely different function. Other small stations and sidings such as Swainson's Siding, Westoe Siding and Devon Siding do not exist today. According to Franklin, small villages played a critical role in the development of the bush area. They served as housing centres for public works employees and many sawyers and millers, and acted as the social, commercial and transport centres for the surrounding districts.<sup>74</sup> The flow diagram (Fig. 6) shows that the number of services per day was greater in the bush area between Palmerston North and Weilding than in other parts of the area, a further indication of the importance of railway transport in the early days.

Public works provided employment for many settlers, including Manchester Block immigrants who were employed laying sleepers and rails on sections of the Foxton - Wanganui Railway.<sup>75</sup> During this period of sawmilling and road and rail construction in the 1870's, the population of the inland bush area increased considerably. The population of the Manawatu Electoral District in 1871 was 1,002<sup>76</sup>, and, by 1886 the combined population of Oroua and Manawatu Counties was 7,436.<sup>77</sup> Palmerston North had grown rapidly since the arrival of the first settlers in 1870, and by 1886 had a population of 2,606. The development of tram and rail communication as well as the growth of sawmilling (which was stimulated by the railway) are two important reasons for

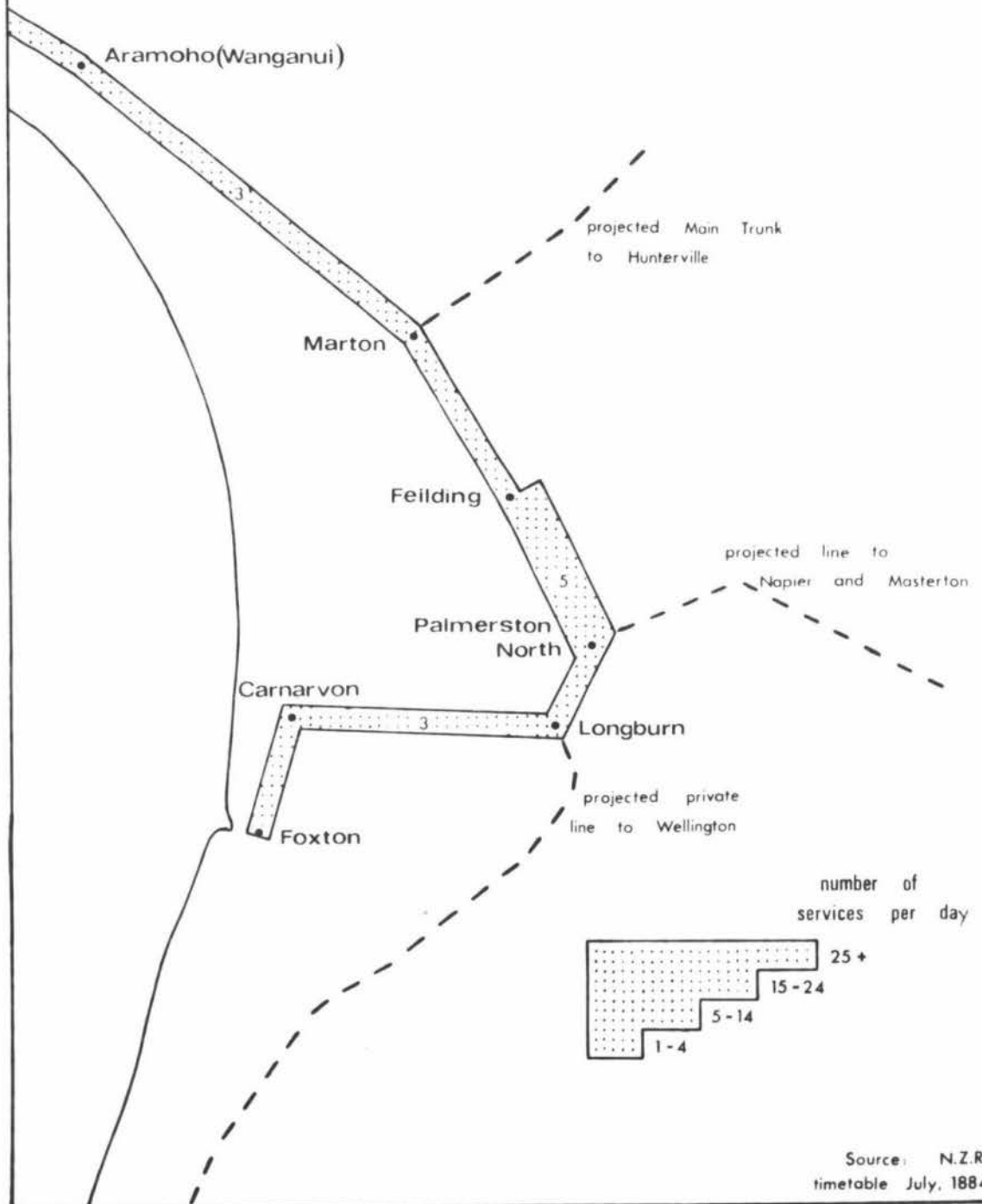
this early growth of Palmerston North. Feilding, following its establishment in 1874, had reached a population of 1,297 in 1886 (Table V). By 1886 both Palmerston North and Feilding had larger populations than Foxton, and Palmerston North had now become the leading town of the Manawatu, acting as the receiving and distributing centre for a wide range of goods.

Public works and sawmilling, however, were only transitory forms of occupation, permanent settlement of the bush areas required a more stable economic base. This was provided in the early 1880's following the advent of refrigerated shipments of meat to England, and subsequent technological and institutional innovations in the pastoral industries, aided by government land regulations favouring the small farmer. The foundation of the dairy and sheep industries upon which the prosperity of the Manawatu has been based, was established in the 1880's. In the following years the railway became increasingly important for transporting stock to and from the stock sales and to the freezing works as well as moving farm products (milk, butter, cheese, meat and grain) to the city markets and export ports. In addition the railway backloaded products such as fertiliser to the rural areas.

Although Foxton did not grow as rapidly as Palmerston North and Feilding it still derived some benefit from the tramway and railway. Large quantities of timber were received at Foxton wharf for shipment out of the area (2,187 tons in 1875-76, 1,619 in 1876-77, 3,634 in 1884-85 and 3,298 in 1885-86<sup>78</sup>).

# Fig. 6 RAIL SERVICES PER DAY

1884



For a decade Foxton was the main point of entry to the inland Manawatu. Until 1886 the volume of traffic passing in and out of Foxton station was almost as large as that for Palmerston North, with a large quantity of goods moving from Foxton inland on the railway (4,221 tons in 1885-86<sup>79</sup>). From 299 in 1874, the population of Foxton had increased to 736 in 1886. It was not until the full effects of the Wellington - Manawatu Railway were felt and the flax industry had reached a depressed state, that the decline of Foxton set in.<sup>80</sup>

By the time railway construction began in the Lower Rangitikei Valley small settlements had already been established at Turakina, Marton, Bulls, Sanson and Parawanui. The main effect of the railway was that it resulted in the growth of Marton compared with other settlements. The population of Marton increased from 339 in 1874 to 908 in 1886, whereas Sanson had increased from 143 to only 200 and Turakina had actually lost population. The sizeable increase of Bulls from 237 to 613 is probably attributable to the fact that it was on the main road connection between Palmerston North and Wanganui. The composition of the goods traffic into and out of this relatively well developed area is much different than that of the bush area stations. The volume of outward goods from Turakina and Marton is low in comparison with Halcombe, Feilding and Palmerston North, although the volume of inward goods is quite high (Table IV). Marton became the receiving and distributing centre of the Rangitikei for a variety of goods, especially timber. Both Marton and Turakina were important stations as far as passenger traffic

was concerned (Table IV).

Speculative Settlement: Mugby Junction.

The proposed settlement of Mugby Junction is a good example of a settlement that was created in anticipation of becoming an important rail junction.

According to Clevely, the first settlers in the vicinity of Bunnythorpe came from Feilding, probably early in 1875<sup>81</sup>. The government township of Bunnythorpe, surveyed by January 1875, was located on the south-western side of the proposed Palmerston North - Feilding Railway, while the Manchester Block extended to the east (Fig. 7). Although Bunnythorpe with its township and suburban sections and reserves set aside for education and recreation was evidently planned as a settlement of some size growth was slow with the town recording populations of only 82 in 1878 and 87 in 1881.

In 1878, the Minister of Public Works, J. Macandrew, outlined government proposals for two main lines of railway communication; one, on the west coast from Wellington to Auckland, the other on the east coast from Wellington to Napier. To complete the system it was proposed to construct a line through the gorge linking Woodville and Bunnythorpe<sup>82</sup>. By mid 1878 four miles of the section from Bunnythorpe to the gorge had been pegged out on an approved line<sup>83</sup>.

The following year the government received a proposal from the Emigrants' and Colonists' Aid Corporation to construct the portion of the line from Bunnythorpe to the gorge in order to

open up valuable timber lands on the Manchester Block through which the line would pass.<sup>84</sup> The government viewed this request favourably. Surveys were discontinued for a time in 1879, but were resumed again later in the year and a trial line was pushed through to the north side of the gorge.<sup>85</sup>

The township of Mugby Junction was laid out on the clear understanding that it would be the junction of the east and west coast railway.<sup>86</sup> The township, located on the Manchester Block on the opposite side of the railway from Bunnythorpe, was surveyed in 1880, and the plan was approved by the government in April, 1881.<sup>87</sup> In anticipation of the expected great future for Mugby Junction, land had been very expensive costing £100.0.0. a quarter acre section.<sup>88</sup> If the railway connection had eventuated the settlement of Bunnythorpe and Mugby Junction might well have become the principal city of the Manawatu, even if a twin city. (Fig. 7 and Appendix I).

The Royal Commission, appointed in 1880 to "investigate the cost and economic value of the several railways proposed by the government, some portions of which were already under construction",<sup>89</sup> made a recommendation for the Woodville - Mugby Junction connection which destroyed hopes for the proposed railway junction:

"...The cost of construction will, however, be heavy, the estimate of the engineers being £139,000.0.0.; and we recommend that it be not proceeded with until communication between Wellington and Woodville has been first established..."<sup>90</sup>

The commission further recommended that work on the line be continued with when further funds became available.

Although this decision ultimately meant the end for Mugby Junction, this was not immediately obvious, and consequently the surveyor continued with his work and the corporation continued to fell bush along the line. By 1884 just over five miles had been felled.<sup>91</sup> The corporation, however, had some difficulty in obtaining labour and consequently progress was slow.<sup>92</sup> In the meantime the Wellington and Manawatu Railway Company was making good progress with their line to the Manawatu. When it was completed in 1886 with Longburn as the junction, the government deciding that Palmerston North was preferable as the junction of the east and west coast lines, abandoned the idea of Mugby Junction.<sup>93</sup> Thus the proposed township of Mugby Junction never eventuated, and sections which had previously sold for £100.0.0., were now re-sold for as little as £5.0.0.<sup>94</sup>

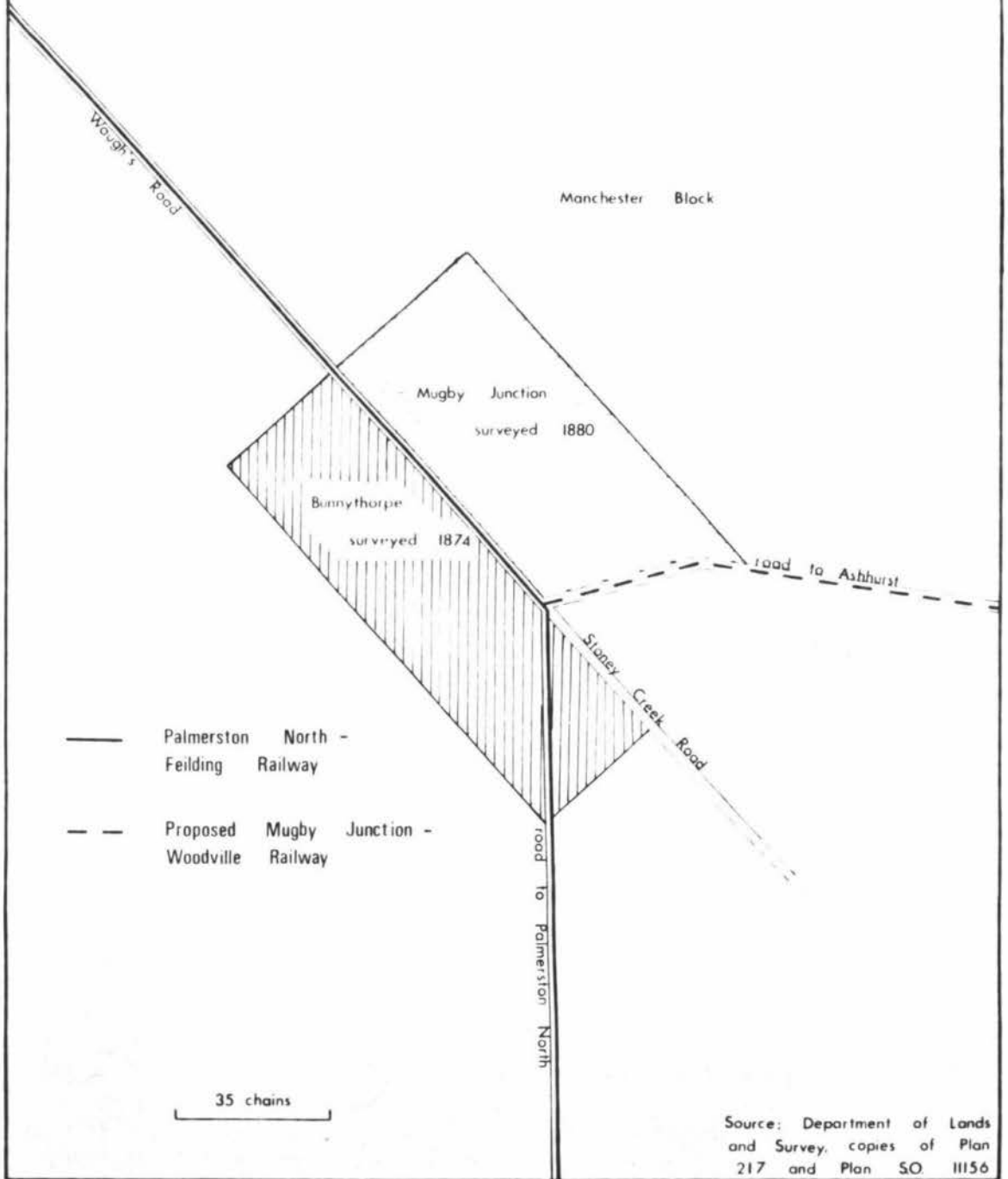
The township of Bunnythorpe today (population of 537 at 1966 census) is now laid out primarily on the old Mugby Junction site on the east of the railway line, having actually adopted parts of the old Mugby Junction plan, although it is not nearly as big as it was hoped the township of Bunnythorpe and Mugby Junction would have been. (See Appendix I for photocopies of survey plans of Bunnythorpe and Mugby Junction.)

#### The Sanson Tramway.

As early as 1878 the Manawatu County Council had approved a

Fig. 7 BUNNYTHORPE AND MUGBY JUNCTION

PROPOSED TOWNSHIP



plan put forward by the Foxton - Sanson Railway Company<sup>95</sup> to construct a line from Carnarvon Junction to Sanson and thence to the Rangitikei River.<sup>96</sup> The work, however, was not carried out and the county itself undertook the work.<sup>97</sup> By August, 1894, the tramway had been constructed as far as Hickford's Siding, and its extension to Sanson was officially opened in November, 1885.<sup>98</sup> In 1902 the line was extended to Pukenui to transport gravel from the pits on the banks of the Rangitikei River.<sup>99</sup> The closing of the port of Foxton and the increasing competition from short-haul road traffic from the 1920's, however, sealed the ultimate fate of this line until it was closed in 1945.<sup>100</sup>

Population Growth and Distribution, 1871-86.

By the end of 1886 the railway network in the area was fairly well developed. Regular passenger and goods services were operating on the Foxton - Wanganui Railway, and had just begun on the Wellington - Manawatu Railway.<sup>101</sup> In addition the tramway service from Sanson linked up with the government railway at Carnarvon Junction. The initial settlement of the inland bush areas in the 1870's had depended on road construction for access into and within the bush area, but with the construction of the Foxton Tramway in 1873 and the Foxton - Wanganui Railway in 1878, settlement of the Manawatu Lowlands progressed much more rapidly. The influence of this line on the settlement of the Manawatu and Lower Rangitikei is clearly shown, while further developments of the railway network (Wellington - Manawatu and Main Trunk Railways and Sanson Tramway) together with the influence they had on local

settlement patterns will be outlined in later chapters.

From 3,271 in 1871 the population of Manawatu, Rangitikei and Horowhenua districts had increased to 14,247 in 1886. In 1871 settlement was restricted to a few coastal areas (Otaki and Foxton) and to areas of fairly open scrub or tussock country (Upper and Lower Rangitikei Valley.) Only a minor penetration into the bush areas was evident. The greatest proportion of the population was located in the Rangitikei District with small settlements at Turakina, Marton, Bulls, Parawanui and Moawhango (Table V) with rural settlement close to these small settlements.

By 1886 the pattern of population distribution had changed significantly. This was a result of the penetration, clearing and settlement of the inland bush area. Settlement Associations played an important part in the settlement of the bush areas, and in most cases settlements were established before adequate lines of communication were open (Manchester Block settlements.) as well as providing the stimulus for the sawmilling industry, the railway also provided the vital stimulus to settlement of the inland area. Settlement tended to follow the line of railway and main road development, although small settlements were scattered throughout the bush area. By 1886 the Manawatu Lowlands had been fairly well settled (Grouse County 5,765, and Manawatu County 5,574) and population in the Lower Rangitikei Valley had increased though at a fairly slow rate. Settlement of the Horowhenua bush country between Otaki and the Manawatu River and of the Middle Rangitikei Valley was only just beginning.

TABLE V:

## POPULATION OF MANAWATU AND DISTRICT, 1871-86.

Areas	1871 <sup>a</sup>	1874 <sup>b</sup>	1878 <sup>b</sup>	1881 <sup>b</sup>	1886 <sup>b</sup>
Rangitikei	2,269	2,329	3,690	3,973	4,753
Oroua					5,765
Manawatu	1,002	1,791	5,730	8,738	5,574
Horowhenua					966
Total	3,271	4,120	9,420	12,711	17,058

a: Electoral Districts

b: Geographic Counties

Main Towns	1871	1874	1878	1881	1886
Otaki				248	234
Foxton		291	563	728	736
Palmerston North		193	880	1,366	2,606
Feilding		195	759	919	1,297
Halcombe			532	574	457
Marton		339	593	662	908
Turakina		493	304	314	259
Bulls		237	N.A.	642	613
Sanson			140	193	200
Rongotea					440

Source: Censuses of Colony of New Zealand, 1871, 74, 78, 81 and 86.

Two final points are, first, the greater rates of increase in population in towns on the railway line compared with non-railway towns and second, the fact that the inland settlements of Palmerston North and Feilding had rapidly surpassed Foxton in size and rate of growth (Table V).

REFERENCES.

1. Buick, 127-28
2. Buick, 132-33
3. Petersen, 14
4. Petersen, 14
5. Buick, 135-43
6. Petersen, 23
7. Hely has referred to this in his thesis
8. Buick, 143
9. Buick, 152
10. Adkin, 12-15
11. Buick, 145
12. Wilson, 37 and Buick, 172
13. Wilson, 60
14. Wilson, 48-50
15. Wilson, 61
16. Hills has referred to this in his thesis
17. Marton Jaycees Publication.
18. Wilson, 104 and Marton Jaycees Publication.
19. Wilson, 3-5
20. Marton Jaycees Publication.
21. "bush" is the term used to denote those areas of native forest.
22. Papaioea was the name given by the Maoris to the clearing of about 600 acres in which the township of Palmerston North was located.
23. Information obtained from Department of Lands and Survey.

24. Petersen, 129
25. Buick, 289
26. Area between Ngawhakarau and Papaioea Clearing
27. Site of present-day Ashhurst
28. Buick, 289
29. A.J.H.R., 1871, D-No 3, 9, 10, 15, 16, 19, 22, 23
30. A.J.H.R., 1872, D-No 6, 8
31. A.J.H.R., 1872, D-No 6, 8
32. A.J.H.R., 1875, E-3, Appendix C, 54
33. Buick, 294
34. Wilson, 199
35. Wilson, 201-03
36. Wilson, 203
37. A.J.H.R., 1874, E-3, map between pages 12 and 13
38. A.J.H.R., 1876, E-1, Appendix C, 47
39. Gibson, 12
40. A.J.H.R., 1874, D-8, No 14, 7
41. A.J.H.R., 1874, D-8, No 14, 7
42. Gibson, 28
43. A "statute emigrant" was one male or female over the age of twelve or two persons between the ages of one and twelve.
44. A.J.H.R., 1875, D-7, Enclosure A, 2-4
45. A.J.H.R., 1874, D-8, No 14, 9
46. " " " " " "
47. Information obtained from Department of Lands and Survey
48. Gibson, 51
49. N.Z.R. Geographical Mileage Table, 7

50. A.J.H.R., 1878, E-1, Appendix B, 21
51. Wilson, 206
52. Wilson, 206
53. Information obtained from Department of Lands and Survey
54. Now known as Rongotea
55. A.J.H.R., 1871, D-2, 5
56. A.J.H.R., 1871, D-2, 4
57. A.J.H.R., 1871, D-2, 4
58. A.J.H.R. 1871, D-2, Map of Manawatu Tramways
59. A.J.H.R., 1871, D-2, 6
60. A.J.H.R., 1874, E-3, Appendix B, 46
61. " " " " " "
62. A.J.H.R., 1874, E-3, Appendix B, 47
63. N.Z.R. Geographical and Mileage Table, 17
64. A.J.H.R., 1878, E-1, Appendix B, 21
65. These figures, and those of Table II, include Aramoho and Wanganui stations. As the railway extended north of Wanganui, some of this traffic originated in, and was destined for, the area north of Wanganui.
66. A.J.H.R., 1886, D-1, Appendix K, Return No 10
67. " " " " " " " "
68. Details of traffic on private sidings can be found in the Public Works Statements of the A.J.H.R. e.g., 1883, D-1, Appendix L, Return No 19
69. Buick, 292
70. Petersen, 46
71. A.J.H.R., 1881, D-1, Appendix K, Return No 28
72. Timetable for Foxton-Wanganui Railway 21st. July, 1884 obtained from N.Z.R., Publicity and Advertising.

73. A.J.H.R., 1883, D-1, Appendix L, Return No 19. The ten private sidings were located at Halcombe (2), Aorangi, Feilding, Trondheim, Hokowhitu, Oroua Bridge, Taonui, Terrace End and Longburn.
74. Franklin, 131
75. Gibson, 53
76. Census of Colony of New Zealand, 1871. The Manawatu Electoral District covered approximately the area now covered by Horowhenua, Manawatu, Oroua, Pohangina and Kiwitea Counties.
77. Census of Colony of New Zealand, 1886, Vol. 1
78. A.J.H.R., 1876, E-1, Appendix F, Enclosure 5  
     "    1877, E-1, Appendix A, Enclosure E  
     "    1885, D-1, Appendix K, Return No 10  
     "    1886, D-1, Appendix K, Return No 10
79. A.J.H.R., 1886, D-1, Appendix K, Return No 10
80. The influence of the railway on the growth of Foxton is the subject of a special study (Chapter Five)
81. Clevely, 16
82. A.J.H.R., 1878, E-1, v
83. A.J.H.R., 1878, E-1, Appendix B, 22
84. A.J.H.R., 1879, E-1, vii
85. A.J.H.R., 1879, E-1, Appendix C, 38
86. Buick, 399
87. Information obtained from Department of Lands and Survey
88. Buick, 399
89. A.J.H.R., 1880, E-3
90. A.J.H.R., 1880, E-3, ix
91. A.J.H.R., 1884, D-1, Appendix H, 39
92. Buick, 390

93. The east and west coast lines were eventually completed by a line from Woodville to Palmerston North in 1891
94. Buick, 399
95. This company was formed in October, 1878
96. Cassells, 5
97. Cassells, 16
98. Cassells, 21
99. Cassells, 34-35
100. Cassells, 70
101. For detailed account of this railway see next chapter

## CHAPTER TWO

### THE WELLINGTON - MANAWATU RAILWAY.

#### Early Government Plans.

When in 1839 the Reverend Hadfield began missionary work at Otaki and Waikanae<sup>1</sup>, the beach was the main highway south from Otaki to Paekakariki with a track from there to Wellington over the Paekakariki Hill, through the Horokiwi Valley to Porirua and thence via Johnsonville and the Ngahauranga Gorge to Wellington<sup>2</sup>. In addition, small trading vessels entered the mouths of the Otaki and Ohau - Waikawa Rivers, tides and weather being suitable<sup>3</sup>. According to Simcox, the last boats to enter the mouth of the former were those which brought the rails for the Wellington - Manawatu line about 1885-86<sup>4</sup>. In 1858 the Wellington - Wanganui coach service along the beach highway, making inland diversions at the Waikanae, Otaki, Ohau - Waikawa, Manawatu and other rivers, was begun<sup>5</sup>. The first inland road was constructed in 1877-78, following a line somewhat to the west of the present highway to Levin, and crossing the sand-hill country to Foxton<sup>6</sup>.

When a railway from Wellington to Palmerston North via Foxton was originally surveyed during the late 1870's the territory between Otaki and the Manawatu River was "a wilderness

of bush and flax-covered swamp"<sup>7</sup>.

The Minister of Public Works having indicated in 1878 that a line from Wellington to Foxton via Waikanae was proposed, contingent upon the acquisition of land from the native owners, there remained the problem of selecting a route<sup>8</sup>. The Superintending Engineer of Railways, C. Knorpp, who was instructed to examine alternative routes for a railway, presented his report in May, 1878<sup>9</sup>. Between Wellington and Waikanae he considered three possible routes presenting firm proposals for only two: the first from Upper Hutt station to Waikanae, the second starting twelve miles from Wellington on the Wellington - Masterton Railway to Pukerua Bay, extending from there to Waikanae<sup>10</sup> (Fig.8). The government rejected both of these suggestions.

Of more interest is Knorpp's report on the Waikanae - Manawatu line<sup>11</sup>. After 23 miles of fairly easy country north from Waikanae, the line would branch off to Foxton to connect with the Foxton - Palmerston North Railway. Knorpp noted that the swamps of the Manawatu would present some difficulties here and that heavy works of embankment and bridging would be necessary to traverse the swampy country and the Manawatu River itself. He also examined a route from the 23 mile point from Waikanae inland to Palmerston North, reporting that there were few engineering difficulties, and that the crossing of the Manawatu River and the flooded country would not be very expensive (Fig.8).

Knorpp's approximate estimates of costs were at least £190,000.0.0. for the Waikanae - Foxton line and at least £220,000.0.0. for the Waikanae - Palmerston North line.

By 1879, however, it had been decided to go ahead with the Kaiwarawara - Johnsonville outlet from Wellington<sup>12</sup>, and, in order to give work to unemployed men, work was begun on the Crofton section in September, 1879<sup>13</sup>. At the northern end of the line, eleven miles of the Foxton - Horowhenua Junction<sup>14</sup> link had been surveyed, and, on the Longburn - Horowhenua Junction link fifteen miles had been surveyed and a further nine miles explored. Because much of the ground was swampy and liable to flood many trial lines had been cut<sup>15</sup>. It is interesting to note, therefore, that even towards the end of 1879, the government was still actively considering the possibility of an inland route to Palmerston North, even though it seemed likely that they would have proceeded with the Horowhenua Junction - Foxton connection first.

When Grey's government was defeated towards the end of 1879 work on the line ceased. The Royal Commission appointed by the new government made the following recommendation on the Wellington - Manawatu Railway.

"...This line would be in direct competition to the line we recommended should be constructed by way of the gorge. Also the proposal is premature on the ground that a large part of the country it would open up is still in the hands of the native owners and inexpedient on the ground that the value of the land which the line would serve has been greatly overrated and that the undertaking would be an unprofitable one, which the colony would not be justified in entering upon. We advise that the

expenditure now going on at the Wellington end of the line be at once stopped, and the labour employed thereon be transferred to the Masterton and Mauriceville section..."<sup>16</sup>

In considering the reasons for the commission's decision two points need to be made. Very little evidence, pertaining to the Wellington - Manawatu line, was actually heard, while, those witnesses who were heard (ten in all) generally favoured, for a variety of reasons, a line via Foxton to the Manawatu.

The two witnesses heard at Foxton<sup>17</sup>, for instance, both favoured a Wellington - Manawatu railway via Foxton as it would bring Foxton and Sanson settlers into closer communication with Wellington, and might induce the Sandon Railway Company<sup>18</sup> to complete their proposed line from Carnarvon Junction to Sanson<sup>19</sup>.

Further witnesses in Otaki and Wellington emphasised the quantity and quality of the land such a railway would open up in the Waikanae - Ohau region, and the valuable timber strands between Ohau and Lake Horowhenua, as well as the easy nature of the country, and the fact that the Native owners would readily agree to sell their lands. Furthermore, a Wellington - Manawatu railway was expected to facilitate the carriage of stock from the already settled lands.<sup>20</sup>

The evidence presented by W.T.L. Travers on behalf of a deputation of Wellington businessmen deserves fuller study as some of the deputation members (Travers, W.H. Levin, J. Wallace) later became prominent members of the Wellington and Manawatu Railway Company<sup>21</sup>. Four points were made by this deputation

in their submissions:<sup>22</sup>

1. The gradients on the west coast line to the Manawatu were easier than on the line through the Wairarapa.

2. They presented information relating to the purchase of Native lands by the government, and statistical information on population and agricultural productivity on the country lying between Wellington and Taranaki.

3. The railway would not prove too great a financial burden for the colony, as, in the opinion of the deputation, it would cost less than £500,000.0.0.

4. A west coast railway to the Manawatu would enable the development of Porirua Harbour which in turn would generate sea traffic between the area and the northern portion of the South Island and other ports on the west coast of the North Island (Foxton, Wanganui and Patea).

One witness who probably did much to influence the commission's decision was the Under-Secretary of Native Lands, R.J. Gill, who failed to convince the commission that the Crown Lands Department had made satisfactory progress in the purchase of Native Lands in the area, or that they were likely to complete purchase arrangements in the near future.<sup>23</sup>

Although the work of the commission was carried out in great haste, and its recommendations were largely ignored, the government adopted this recommendation, and, thus hopes of a west coast railway connection with the Manawatu were aborted.

Formation of the Wellington and Manawatu Railway Company.

Public opinion in Wellington (particularly among the merchants) was very much in favour of a west coast line to the Manawatu. The Wellington Chamber of Commerce took the initiative, and at a public meeting held in September 1880, a resolution was adopted in favour of forming a company to undertake the construction of the railway, and a committee was appointed to make the necessary inquiries and report back<sup>24</sup>.

The committee first approached the government to press for the continuation of construction, but the government pleaded that funds were not available for the line. Sir John Hall suggested, however, that the citizens themselves should undertake the work and promised to assist any company that might be formed. His offer included the handing over of all works already started, together with plant and material on the site, the right to reclaim land at Thorndon, and the necessary legislation to enable the project to be completed. At a meeting held in January 1881, it was resolved that "a joint stock company be formed for the purpose of constructing a railway to connect Wellington with the Manawatu"<sup>25</sup>.

A bill was presented to Parliament in August 1881, and was passed one month later<sup>26</sup>. The Wellington and Manawatu Railway Company was incorporated in August 1881 with an initial capital of £500,000.0.0.<sup>27</sup> afterwards increased to £850,000.0.0.<sup>28</sup> The sequence of events leading up to the formation of the company has been related elsewhere<sup>29</sup>. It is proposed here to examine

aspects of the development of this line especially the contribution of the railway company to settlement.

Railways Construction and Land Act, 1881<sup>30</sup>.

This act enabled joint-stock companies to enter into contract with the government for the construction of railways and to receive grants of crown land to offset the costs of construction. It gave the Wellington and Manawatu Railway Company the 'go-ahead' to proceed with its plans for a Wellington - Manawatu railway on the west coast. Accordingly the company entered into a contract with the government.

Contract between Government and Wellington and Manawatu Railway Company<sup>31</sup>.

The main provisions of the contract were:

1. The company was required, within five years, to construct, maintain and work a line of railway between Wellington and some point on the northern side of the Manawatu River, to connect with the Foxton and New Plymouth Railway.
2. The government agreed to hand over to the company all the works already begun on the line between Wellington and Johnsonville, together with plant and materials on the line.
3. The government undertook, on the completion of the line, and at the company's request, to grant to the company 210,000 acres of land.
4. The maximum tolls, fares, rates and rents to be charged by the company were not to exceed the scale of charges in force on the Wellington - Masterton Railway.

### Choice of Route and Construction of Line (Fig. 8).

The company took over the existing line and construction works near Wellington, but at the northern end were faced with two possible routes. They could connect their line with the existing Foxton - New Plymouth Railway either at Foxton or at Palmerston North.

In locating their line the company were influenced by the objectives of obtaining the greatest possible revenue from traffic returns, particularly through traffic, and of providing access to as much of its own land as possible hence increasing land values.

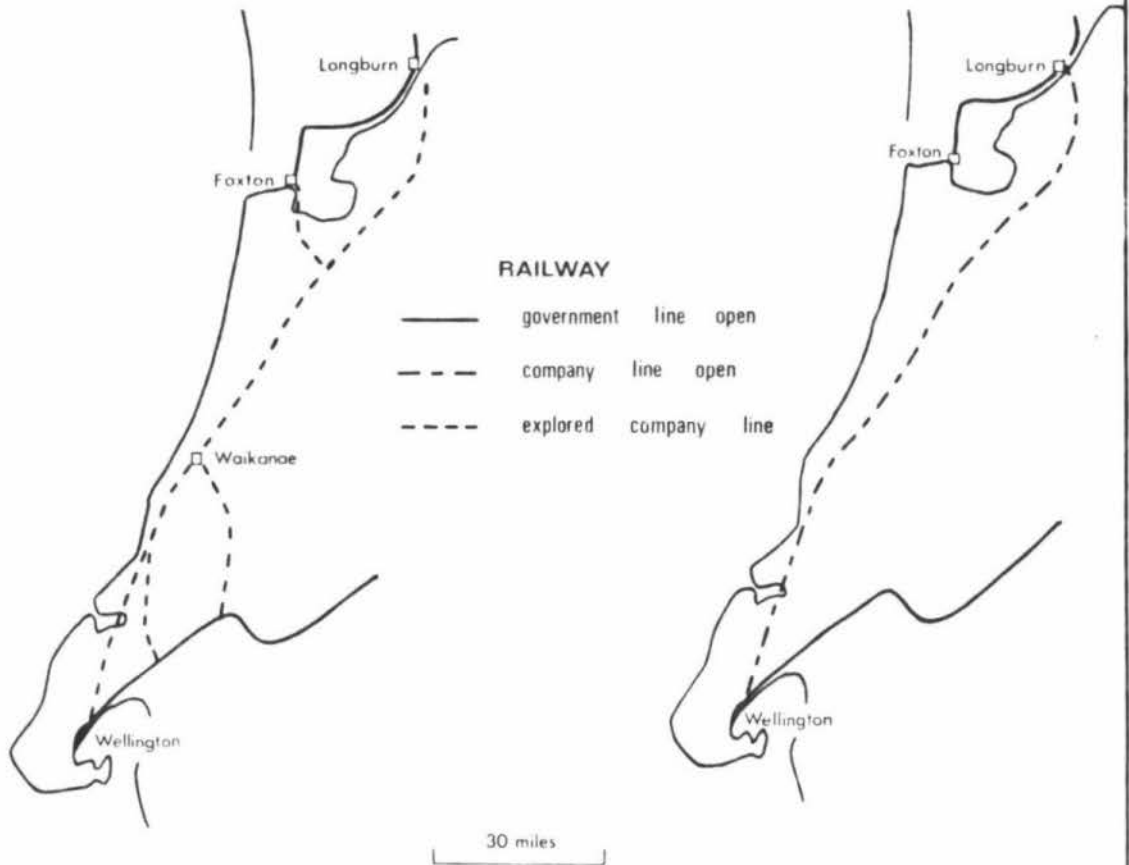
The company felt that these objectives could best be realised by an inland route, although they preferred to link with the government railway at Longburn rather than Palmerston North (Plates 2 & 3). In choosing Longburn as the terminus the company was influenced by the fact that linking with Palmerston North would prove more expensive and that the line, furthermore, would run parallel to the government line for four miles which was neither economically desirable for the company or the government, nor likely to meet with government approval.

While the inland route involved construction for a greater mileage than did the proposed Foxton connection, the distance to Wanganui, Palmerston North and the east coast was actually shortened by by-passing Foxton, and, thus the railway company was in a better position to take advantage of 'through' traffic from the north and east. The decision to choose an inland route

Fig. 8 WELLINGTON - MANAWATU RAILWAY

(a) Government Proposals

(b) Company Proposals



Source 1878 and 1886. D-1



PLATE 2 - Longburn Station: this photograph taken in the late 1820's or early 1880's shows a train at Longburn Station before the Wellington - Longburn line was constructed.  
Photo by courtesy: Palmerston North Public Library.



PLATE 3 - Longburn Junction: showing junction of Foxton - Wanganui and Wellington - Manawatu Railways.  
Photo by courtesy: Palmerston North Public Library.

was later vindicated when revenue from 'through' traffic became more important than revenue from 'local' traffic (Table IX).

The route finally chosen by the company provided access to a larger area of its land than would have been by the Foxton connection thereby boosting land sales in the large area of allocated and purchased land between the Horowhenua Block<sup>32</sup> and the Manawatu Gorge<sup>33</sup>. The chairman in 1884 noted that:

"...The surveys of the allocated and purchased lands within the boundary of the Gorge and Horowhenua are now carried out. By the opening of the line through that part of the country there will be a large quantity of land ready for sale..."<sup>34</sup>

The first land sales actually made by the company were urban and suburban sections in Linton, Tokomaru and Shannon and adjacent rural blocks.

From the engineering point of view, the company favoured the inland route as it presented few engineering difficulties, whereas the proposed route to Foxton involved the difficult task of crossing the swamps adjacent to the Manawatu River. The actual route chosen by the railway company was superior in grade and alignment to that of the proposed government line, and, in addition, the final cost was less than that estimated for the shorter government line to Foxton<sup>35</sup>.

Construction of the line began in September 1882, and it was opened for traffic in December, 1886 (Plate 4). The line, therefore, was constructed well within the five year period required under the terms of the contract.



PLATE 4 - Driving in the last Spike: opening ceremony of Wellington - Manawatu Railway, 1886.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.

Land Settlement Activities of the Wellington and Manawatu  
Railway Company.

The government, as part of its contract, granted to the company 240,000 acres which it could use for settlement purposes (Fig. 9). It was thought that proceeds from such land sales together with traffic revenue, would offset construction costs. The company, purchased a further 33,000 acres from the Maoris, including over 20,000 acres of the Makerua Swamp<sup>36</sup>.

The contract listed certain conditions which had to be fulfilled in the sale of land<sup>37</sup>.

(a) All agricultural and pastoral land, and not less than one-quarter of the area set apart for town, village and suburban lands, were to be offered for sale not later than twelve months after the railway had been opened for traffic to the locality of such lands.

(b) Sales of land could be either by auction or by applications receivable on a given day.

(c) Agricultural lands were to be surveyed in sections not exceeding 320 acres, with a practicable line of road marked-off to each section. Bush was to be felled on road-lines one chain wide, and cleared sixteen feet in the centre, before the land was offered for sale.

(d) The Makerua Swamp was to be drained by one or more main outfall drains before being offered for sale.

(e) Sites for towns and villages were to be selected by the company along that part of the line between Longburn

and Waikanae at intervals not exceeding ten miles, water and other circumstances favourable.

Initial Attempts at Land Sales: 1884-85.

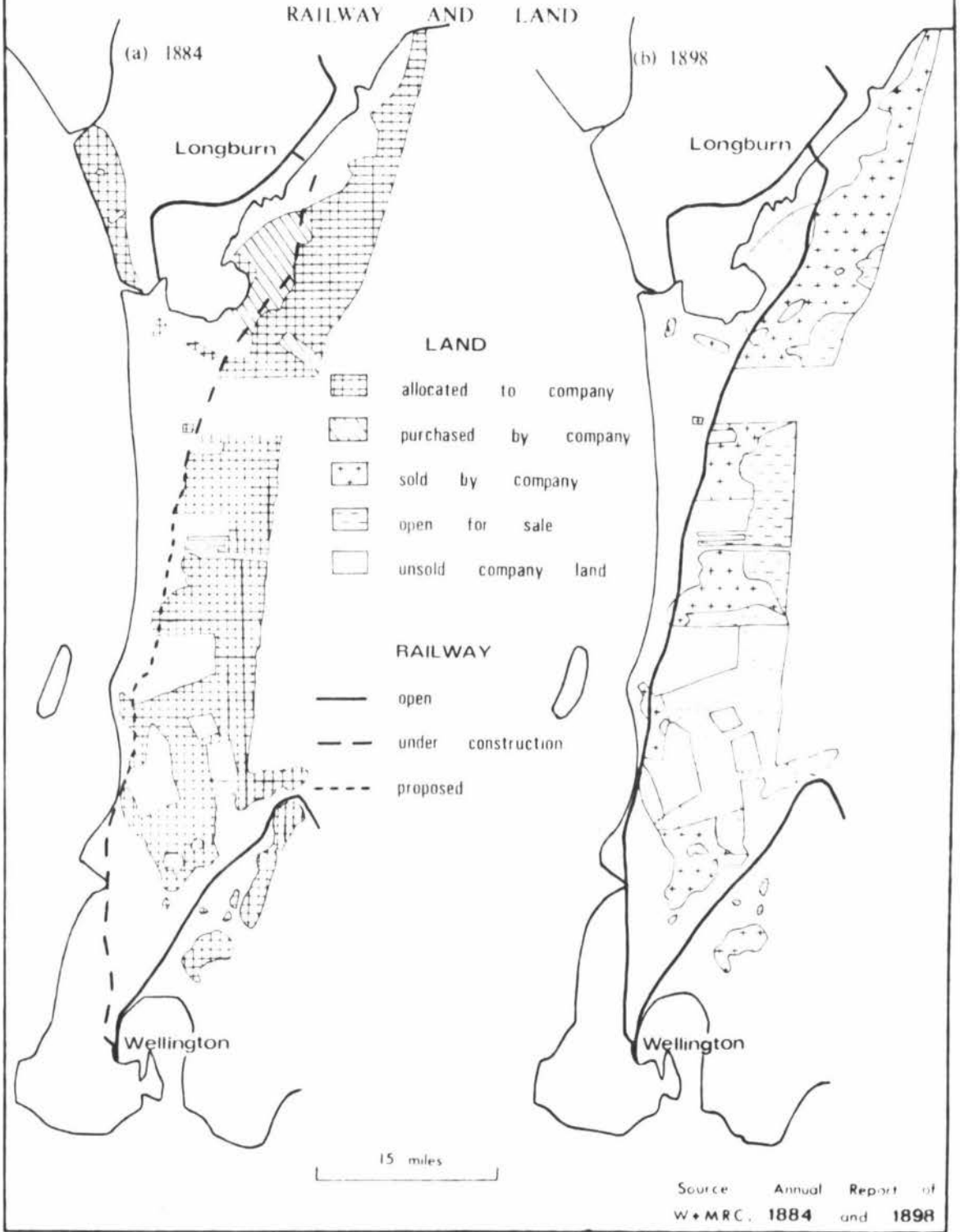
Even before the line between Wellington and Longburn had been completed, the company had made preparations for sale of land, and, by March 1884, contracts had been let for the survey of land between the Manawatu Gorge and the Horowhenua Block<sup>38</sup>. Within a year 20,000 acres of allocated land, including the township of Linton and its suburban lands had been subdivided and were ready for sale. In addition, the survey of a further 15,000 acres as well as the township of Shannon, was in hand<sup>39</sup>.

The first land sales were made in February 1885, when the public auction of Linton Township and adjacent rural lands was held<sup>40</sup>. The sale, however, realised only a total of £20,000.0.0. even though prices were substantially reduced from those advertised<sup>41</sup>. This failure of land sales resulted in financial difficulties and the company entered into negotiations with the government with a view towards obtaining assistance. The government offer to buy the line was declined, the company preferring to raise additional capital by a new share issue<sup>42</sup>.

The company attributed the slowness of these initial land sales to the problem of access to the district for at the time of the sales the railway between Wellington and Longburn had not been completed. Furthermore, access roads onto the properties were inadequate.

Following this initial failure of land sales the company adopted a more successful land sales policy.

Fig. 9 WELLINGTON AND MANAWATU RAILWAY COMPANY



Company Land Policy: 1886-1908.

(a) The company sold the land on fairly easy terms. The terms of sale for Shannon and suburban lands (June 1887), for instance, were 10% in cash, 10% in one month, 30% in one year, and the balance on mortgage for seven years at 5% interest per annum<sup>43</sup>. These fairly easy terms contrast with those for the sale of Linton and suburban lands (February 1885) which were 12½% in cash, 12½% in cash in one month, and the balance falling due by acceptances in three, six and nine months from the date of sale with interest at 8% payable quarterly<sup>44</sup>.

(b) Land was gradually placed on the market so as to not affect adversely prevailing prices. In 1888 the Chairman reported that there were still 210,000 acres of land for sale.

"...The policy of the Directors is to bring this area gradually into market, being careful not to overtax the demand"...<sup>45</sup>.

Sales were arranged to be held regularly, and were well advertised thus helping to attract possible buyers<sup>46</sup>.

(c) Land sales were delayed until adequate means of access were available, and, whenever possible, special trains carried intending purchasers to the land to be sold<sup>47</sup>. The company also saw that there were adequate bridle tracks constructed so that the lands could be closely inspected before purchase<sup>48</sup>.

(d) In order to help those about to settle, the company made it part of its policy to use as much local timber as possible in the construction of the line and later, to burn as much wood as possible instead of coal<sup>49</sup>.

Land Sales by the Company.

Summing up the settlement activities of the company, the Chairman in 1909 noted that altogether 242,804 acres of rural land and 1,702 acres of township land had been sold, including eight townships which had been laid out and sold by the company.

TABLE VI:TOWNSHIPS SOLD BY COMPANY.<sup>50</sup>

Township	Date of First Land Sales
Linton	1885
Tokomaru	1887
Shannon	1887
Levin (a)	1889
Ohau	1889
Manakau	1888
Paraparaumu	1889
Plinmerton (b)	1891

Source: Annual Reports of Wellington and Manawatu Railway Company.

(a) Levin was not entirely a company settlement. The government originally purchased 4,000 acres in the Levin area from Major Kemp. The Wellington and Manawatu Railway Company ceded 76 acres adjoining the railway line. This was the area first broken up into sections and offered for sale. Other sections, offered for sale by the government, were put on the market shortly after e.g. a block of land surveyed in 1888 (including 257

township sections, 71 suburban sections and 28 rural sections) was offered for sale in 1889.

(b) Plimmerton was also a part government, part company settlement. Company sections were located on the beach front adjacent to the railway station.

Land Sales: 1886-91.

Following the unsuccessful land sales in 1885 the company met with considerable success with sales in the following five years. By March, 1891, sections had been offered for sale in all the townships. In the 1887-88 financial year, sections were offered for sale in Tokomaru, Shannon and Manakau (Plates 5&6).<sup>51</sup> That year was highly successful for the company as they sold 1,853 acres in the three townships, and 28,807 out of 60,500 acres offered in five rural blocks, obtaining £52,629.0.0. from these sales<sup>52</sup>. In addition to land sales the company also let surveying contracts for 99,000 acres of rural land as well as the townships of Manakau and Paraparaumu<sup>53</sup>. Sections were offered for sale in Manakau in 1888<sup>54</sup> and in Paraparaumu in 1889<sup>55</sup>.

During the same year the company also received permission from the government to sell surplus lands alongside Plimmerton Station. By March 1888, the ground had been levelled and filled in and survey plans of 40 - 50 building sites for 'marine villas' along the beach front had been completed<sup>56</sup>. (Plate 7). The company also proposed to construct bridle tracks to the more remote rural lands (e.g. in the hill country inland from Otaki)



**PLATE 5** - Shannon Railway Station: this photograph probably taken in the late 1880's or early 1890's. Note the dense strands of timber in close proximity to the town.

Photo by courtesy: Palmerston North Public Library.



**PLATE 6** - Plimmer Terrace Shannon: this photograph was probably taken in the early twentieth century.

Photo by courtesy of: Alexander Turnbull Library  
Wellington, New Zealand.

in order to assist land sales<sup>57</sup>. Some idea of the progress of land settlement was given by the Chairman in 1888:

"...About 10,000 acres has been felled and burnt off by the purchasers. When the grass which is now being sown has grown there will be upwards of 210 settlers with their families in occupation on land bought from the company..."<sup>58</sup>

In 1888-89 only the Paraparaumu Block was offered for sale owing to a difficulty with the government regarding land titles<sup>59</sup>. This difficulty was resolved early in 1889 enabling 14,135 acres of rural land and sections in the township of Levin to be sold in the following year<sup>60</sup>. Surveying work continued and by March 1890 only 48,000 of the 188,000 acres had yet to be surveyed<sup>61</sup>. By this time much of the land in close proximity to the railway line had been sold<sup>62</sup> and consequently as early as 1891 land prices had begun to fall<sup>63</sup>. It was reported in 1890 that:

"...The settlers along the railway line have made very large clearings on their bush land during the past season. Between Paekakariki and Fitzherbert upwards of 15,000 acres have been felled and burnt off. It is estimated that there will be about 20,000 acres of new grass as a result of this year's burning off..."<sup>64</sup>

By the 1891 census considerable progress had been made with land sales. The population of Horowhenua Geographic County<sup>65</sup> had increased from 966 in 1886 to 2,789 in 1891 and Shannon, Levin, Ohau and Manakau had all grown quite rapidly.

#### Land Sales: 1891 - 1901.

Land sales continued in all of the company's townships during this decade. All of the surveyed sections in Paraparaumu were sold by 1897<sup>66</sup> and in Ohau by 1898<sup>67</sup>. Levin grew rapidly, the population increasing from 963 to 1,147 between 1891 and

**TABLE VII:** LAND SALES OF  
WELLINGTON AND MANAWATU RAILWAY COMPANY,  
1887 - 1908.

Year ended February	Land Sales		
	Rural	Township	Total
1887	N.A.	N.A.	16,721
1888	26,954 acres	1,853 acres	28,807
1889	7,243 "	327	7,570
1890	13,967 "	168	14,135
1891	13,665 "	158	13,824
1892	N.A.	N.A.	4,641
1893	12,665 "	30	12,695
1894	N.A.	N.A.	1,896
1895	N.A.	N.A.	N.A.
1896	1,081 "	65	1,146
1897	15,435 "	157	15,593
1898	8,102 "	181	8,283
1899	N.A.	N.A.	1,480
1900	1,163	£5,225	N.A.
1901	11,798	8 acres	11,806
1902	2,951	1 acre	2,951
1903	21,106	£6,143	£42,886
1904	2,923	£2,171	£ 6,451
1905	6,623	£ 200	£ 4,319
1906	16,726	£ 260	£13,548
1907	£13,545	£ 220	29,909
1908	£17,849	£ 870	34,559

**Source:** Annual Reports of the Wellington and Manawatu Railway Company.

Owing to inadequacies of the data, it is not possible to give an exact account of the progress of land sales. In some years the land sales figures are given in acres, in other years by value of land, and in some years not at all.

1901 and quickly established itself as the leading town in the Horowhenua. Linton had progressed little since the initial land sales in 1885 and Tokomaru had grown as slowly. Shannon's growth was overshadowed by that of Levin, although as the Mākerua Swamp had only recently been drained and sold some land in the vicinity of Shannon was largely unproductive. Of the four remaining company townships only Ohau had shown any significant increase.

By March, 1901 approximately 145,000 acres of the company's lands had been sold, leaving about 100,000 acres unsold, (Table VII), most of it poorer hilly country. Throughout the decade of the 'nineties' the company had to struggle to make profitable sales of this poor country as well as some town sections. In 1892 it was reaffirmed that settlement on unoccupied lands was of the highest importance to the company. The Chairman recorded that the value of the railway in opening up country for settlement was shown by the following figures:

"...of the 72,600 acres sold by the company 44,500 have been laid in grass. Of 137,900 acres of Maori land 36,200 have been cleared and grassed. Population on land served by railways has more than doubled..."<sup>68</sup>

During the 1890's the company continued its policy of constructing access roads into the back country before offering it for sale, the general manager noting in 1892 that further road-making was needed to ensure the disposal of land in the Otaki - Waikanae and Akatarawa Districts<sup>69</sup>.

The demand for land along the railway line continued, but by 1896 the only land of this nature still for sale was in the Makerua Swamp, which had yet to be sold<sup>70</sup>.

Thus between 1891 and 1901, land sales slowed down largely because of difficulties experienced in selling some of the more remote sections. The Chairman in 1898 reported that most of the purchased land (including part of the Makerua Swamp) had been sold for a large profit. One section of a few hundred acres, for example, which had been purchased for £1.0.0. per acre was sold for as much as £11.0.0. per acre. Much of the allocated land, however, was sold for only a little more than the original price and subsequent expenditure<sup>71</sup>.

#### Land Sales: 1901 - 1908.

Between 1901 and 1908, when the railway was taken over by the government, the company sold the remainder of its allocated and purchased lands. With the exception of the remaining township sections and the Makerua Swamp, the land sold was mainly in the more remote areas. From August 1901 to March 1902, all land sales stopped while the company negotiated with the government over purchase of the railway<sup>72</sup>. Land sales, however, recommenced in 1902-03 and together with 21,106 acres of rural land, the last of the sections in Tokomaru were sold<sup>73</sup>. Over the next few years sales were slow, but from 1906 to 1908 some 81,192 acres of rural land was sold, although much of it was poor hill country<sup>74</sup>. When the railway was finally taken over by the government in December 1908 the only unsold lands remaining were some sections

on Thorndon Quay<sup>75</sup>.

Although the 1911 census was held more than two years after the government had purchased the railway, the population returns provide some indication of the growth of the company's settlements (Table VIII). Levin had consolidated its position as the most important of the company's settlements and was developing into a market centre of some importance. Tokonaru and Shannon (Plates 5 & 6) had both grown in the early years of the twentieth century, while Hau and Manakau although experiencing relatively minor booms, probably associated with timber-milling, by 1911 had declined in importance. Pliamerton had grown steadily while Paraparaumu had grown faster.

#### The Makerua Swamp.

As part of its contract with the government, the company was required to drain the Makerua Swamp before offering it for sale, and a plan of the drainage works had to be submitted for approval within one year of the swamp being granted to the company<sup>76</sup>.

When the route for the railway was finally selected, the swamp was valued chiefly because of the possibility of profitable returns from the sale of the drained lands. Within a few years however, flax, hitherto only occurring in small clumps grew more profusely, and as the swamp was drained it spread rapidly until practically the whole area was covered with it<sup>77</sup>. (Plate 8).

As about 8,000 acres of the upper portion of the swamp was not covered with water during the 1887 floods, the company's engineer at Longburn was ordered to report on the possibility of



PLATE 7 - Plimmerton, early 1900's: The Wellington and Manawatu Railway Company was responsible to the survey, construction and sale of about fifty marine villas in Plimmerton.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.



PLATE 8 - Train derailed in Makerua Swamp: this photograph taken in either late 1880's or 1890's. Note the undrained swamp land.

Photo by courtesy: Palmerston North Public Library.

TABLE VIII:

POPULATION OF WELLINGTON AND MANAWATU  
RAILWAY COMPANY'S SETTLEMENTS, 1886 - 1911.

	1886	1891	1896	1901	1906	1911
Linton	-	40	51	61	61	N.A.
Tokomaru	7	84	88	116	383	330
Shannon	28	165	262	272	506	752
Levin	-	184	581	1147	1265	1608
Ohau	-	140	256	309 <sup>a</sup>	377	188
Manakau	-	171	149	184	118	146
Paraparaumu	-	-	192	198	215	339
Plimmerton	-	21	49	92	69	148

Source: Census of New Zealand, 1886 - 1911

a: includes population in vicinity

providing outlets by means of the Tokomaru River and to devise a scheme with an estimate of the cost<sup>78</sup>. By March 1889 the engineer had presented his report and experimental drainage work begun<sup>79</sup>. The success of the experimental work resulted in the authorization in 1890 of the drainage of 5,000 acres in the upper part of the swamp between Linton and Tokomaru<sup>80</sup>.

Owing to an unfavourable season in 1892 no further progress was made with drainage works until 1893 when logs obstructing the flow of the Tokomaru River were cleared and the channel deepened<sup>81</sup>.

Until this work had been done it was only possible to cut surface drains on the Makerua Swamp<sup>82</sup>. By March 1894, four miles of main drains had been laid and over three miles of the Tokomaru River had been cleared of snags and a considerable part of the drained area was available for sowing with grass seed<sup>83</sup>. Wet weather retarded the drainage work in the following year, although by March 1895, nearly twelve miles of surface drains had been cut and over four miles of the Tokomaru River cleared of logs and snags so as to permit the working of a dredge<sup>84</sup>.

By March 1897, the drainage contracts at the northern end of the swamp had been successfully completed with the result that 3,400 acres had been drained, surveyed and laid out in sections for sales. At an auction held in 1897 some 1,525 acres were sold for a total revenue of £10,400.0.0.<sup>85</sup>. Further sales were made in the next few years until by 1902 all of the former swamp land had been sold.

At the 1902 annual meeting a conflict arose over the valuation of the Makerua Swamp. The Company regarding the swamp primarily as potential pastoral land, was criticised for valuing it at only 5.0d. to 10.0d. per acre<sup>86</sup>. Some shareholders believed that owing to the boom in the flax trade the swamp had a much higher value. The instigator of the criticism, J. Plimmer formed a syndicate and purchased about 14,000 acres of the swamp for £31,000.0.0. This syndicate formed a company called the 'Makerua Swamp Company' who drained the swamp and developed the area for flax milling<sup>87</sup>.

General Influence of Wellington and Manawatu Railway Company  
on Settlement.

As well as promoting settlement on its own lands, the company exercised a more general influence on settlement in the area.

Firstly, by providing easier access to the 'bush' area and by facilitating the commercial exploitation of timber from the Horowhenua District, as well as by providing an efficient transport service, the railway stimulated the continuing development and settlement of the area.

Secondly, the actual route chosen by the company influenced the direction of settlement immediately south of the Manawatu River.

Thirdly, the railway gave a boost to settlement north of the Manawatu River, particularly to Palmerston North.

The Wellington - Manawatu Railway represented a significant improvement over the existing forms of communication with the area (coastal shipping, beach highway and inland road).

Following the opening of the railway several timber mills were opened in the area and the bush cleared for settlement. By March 1888, there were sawmills at Waikanae, Hadfield, Manakau, Levin and Linton<sup>88</sup> and in the next few years additional mills were opened in the bush areas between Waikanae and the Manawatu River<sup>89</sup>. The timber trade was at its peak in the 1890's and early 1900's, although by 1920 it had declined as most of the accessible timber had been cut (Table IX).

A variety of other goods were carried by the railway, with flax especially important during boom periods 1889-93 and 1898-1918. The railway was also important for transporting livestock, much of which was railed to the freezing works at Longburn, Feilding and Ngahauranga<sup>90</sup>. Passenger traffic was heavy contributing a high proportion of railway revenue<sup>91</sup>. Even after 1920 passenger traffic in the area remained little affected by the increasing popularity of motor transport<sup>92</sup>. Between 1888 and 1908 there was a steady increase in the volume of local traffic carried on the Wellington - Manawatu Railway, attributable primarily to the growing population and the trade in flax and timber. Between 1900 and 1930 the railway between Wellington and Longburn was second only to the Auckland - Hamilton line in density of traffic<sup>93</sup>.

The railway also exercised an indirect influence on other settlements in the area. The original settlement of Otaki, for instance, was located one mile from the railway around the Maori Pa and Church. Following the construction of the railway a cluster of settlement developed around the station reaching a population of 290 by 1921. Similarly, with the settlement of Waikanae, the original Maori settlement was near the mouth of the Waikanae River, but with the construction of the railway the Pa was moved over to be near the line<sup>94</sup>.

The construction of the railway inland to Longburn resulted in the emergence of a line of settlements along the railway (Levin, Shannon, Tokomaru) which has persisted until today.

**TABLE IX:**

WELLINGTON AND MANAWATU RAILWAY,  
VOLUME OF TRAFFIC, 1890-91 to 1905-06.

**(a) Local Traffic**

	1890-91	1895-96	1900-01	1905-06
Passengers (numbers)	129,461	143,397	178,851	277,993
Livestock (tons)	3,549	4,654	3,311	5,329
Timber (tons)	5,576	7,984	13,934	12,069
Other Goods (tons)	9,863	13,081	28,411	30,315
Total Goods (tons)	18,991	35,719	47,656	47,713
Total Revenue	£31,942	£38,959	£49,155	£56,652

**(b) Through Traffic**

	1890-91	1895-96	1900-01	1905-06
Passengers (numbers)	30,631	51,742	73,584	178,239
Livestock (tons)	9,494	10,796	13,939	12,575
Timber (tons)	1,169	859	1,294	1,247
Other Goods (tons)	8,158	14,722	13,512	27,505
Total Goods (tons)	18,821	26,377	28,745	41,325
Total Revenue	£39,858	£53,026	£47,114	£75,837

**Source:** Annual Reports of Wellington and Manawatu Railway Company - 1891, 1896, 1901, 1906.

These settlements, as well as benefiting from their location on the North Island Main Trunk Railway were in a potentially more productive agriculture area than Foxton; Levin, in particular, developed into an important market centre for the Horowhenua.

The opening of the line in 1886 increased Palmerston North's importance as a rail centre, and it developed as an important railway junction when the east coast railway was linked with Palmerston North in 1891<sup>95</sup>. The decision to link the east coast railway with the main line at Palmerston North rather than Mugby Junction, was partly a consequence of the Wellington and Manawatu Railway Company's decision to make Longburn the terminus of their line<sup>96</sup>.

It is interesting to speculate on the possible direction and patterns of settlement if alternate railway routes had been chosen. If either the government or the railway company had chosen to link with the existing government railway at Foxton instead of Longburn, for instance, would Foxton's growth have been boosted by becoming a main line railway centre, instead of declining as the terminus of a minor branch line? What would have been the consequences for Palmerston North, furthermore, if a route through Foxton had been chosen or the east coast link made at Mugby Junction? A rail connection with Foxton would have made the Levin - Foxton - Sanson and Marton or Greatford Deviation, examined by the 1916 Railway Commission<sup>97</sup>, a more attractive proposition. If this had happened a line of coastal

settlement (Foxton, Sanson, Bulls and Marton) may have developed at the expense of the inland settlements (Levin, Shannon and Tokomaru). This, however, is only speculation. The fact remains that it was a decision taken by the Wellington and Manawatu Railway Company which created a settlement pattern which has persisted.

Buick has summed up the importance of the railway to the Manawatu:

"...There can be no contravening the fact that it is to its existence that the Manawatu largely owes the prosperous and influential position which it holds today. It is not contended that without the railway the Manawatu would still have remained in a state of nature, for there will always be an element of progress wherever a section of the British race has established itself, but it is no exaggeration of the facts to say that but for the building of this line there would neither have been the same degree of rapidity in the development of the district, nor would that development have been accomplished with the same degree of profit to the settler..."<sup>98</sup>

REFERENCES.

1. Simcox, 24-25
2. Carman, 31
3. Simcox, 32
4. Simcox, 32
5. Adkin, 12-13
6. Adkin, 15-16
7. N.Z.R. Staff Bulletin, Vol. 5, No. 5, 1956, 1
8. A.J.H.R., 1878, E-1, iv and v
9. A.J.H.R., 1878, E-1, Appendix B, Enclosure 2
10. The first route is now known as Haywards, the second as Akatarawa.
11. A.J.H.R., 1878, E-1, Appendix B, Enclosure 2, 26
12. A.J.H.R., 1879, E-1, vii
13. A.J.H.R., 1880, E-1, Appendix C, 38
14. Horowhenua Junction refers to the point, at the 23 mile mark from Waikanae, where the two alternative routes diverged.
15. A.J.H.R., 1880, E-1, Appendix C, 32-38
16. A.J.H.R., 1880, E-3, ix
17. E.S. Thynne (storekeeper) and G.W. Russell (journalist)
18. This company was formed in the late 1870's with the object of linking Sandon and Carnarvon Junction with a light tramway. The company later folded up and the work was taken over by the Manawatu County Council.
19. A.J.H.R., 1880, E-3, 9-11
20. A.J.H.R., 1880, E-3, 11-17
21. The deputation consisted of W.H. Levin, W. Hutchison, A. de B. Brandon, W.W. Johnston, W.T.L. Travers and J. Wallace.

22. A.J.H.R., 1880, E-3, 13-15
23. A.J.H.R., 1880, E-3, 18-20
24. N.Z.R. Staff Bulletin, Vol. 5, No. 5, 2
25. " " " " " " " "
26. Statutes of New Zealand 1881, 233-63
27. Annual Reports of the Wellington and Manawatu Railway Company (A.R.), 1882, 1
28. A.R., 1885, 13-15
29. Mills, 1928, O'er Swamp and Range, unpublished M.A. thesis V.U.W.
30. Statutes of New Zealand, 1881
31. A.J.H.R., 1882, D-7
32. A government block
33. Approximately 93,000 acres
34. A.R., 1884, 9
35. " " "
36. N.Z.R. Staff Bulletin, Vol. 5, No. 5, 3-4
37. A.J.H.R., 1882, D-7
38. A.R., 1884, 5
39. A.R., 1885, 5
40. Information obtained from copies of original survey plans
41. A.R., 1885, 9
42. A.R., 1885, 13-15
43. From copy of original survey map of Shannon and Suburban Lands (held in Palmerston North Public Library)
44. From copy of original survey map of Linton and Suburban Lands (held in Palmerston North Public Library)
45. A.R., 1888, 6
46. A.R., 1888, 9

47. A.R., 1888, 9
48. " " "
49. A.R., 1886, 6
50. Photocopies of some of the survey plans of the company's townships are included in Appendix II
51. A.R., 1888, 9
52. A.R., 1888, 3
53. " " "
54. A.R., 1888, 9
55. A.R., 1888, 10
57. " " "
58. A.R., 1888, 9
59. A.R., 1891, 11
60. A.R., 1890, 6
61. A.R., 1890, 6
62. A.R., 1890, 6
63. A.R., 1891, 7
64. A.R., 1890, 13
65. Geographic county includes all boroughs and independent town districts as well as the rest of the county
66. A.R., 1897, 11
67. A.R., 1898, 13
68. A.R., 1892, 6
69. A.R., 1892, 12
70. A.R., 1896, 8
71. A.R., 1888, 7
72. A.R., 1902, 7
73. A.R., 1903, 17

74. A.R., 1906, 15; 1907, 9; 1908, 10
75. A.R., 1908, 7
76. A.J.H.R., 1882, D-7, 8
77. Cockayne (The Vegetation of New Zealand, 1928) has observed that in a primitive swamp, such as the Mākerua Swamp before it was drained, *Phormium tenax* occurs in stunted growths in the shallowest water or fringing the margins of the swamp. It is not until the swamps are drained and the water content greatly lessened that the *Phormium tenax* attains its full growth and will dominate the existing typha (raupo, toi toi). This appears to be what happened in the Mākerua Swamp.
78. A.R., 1888, 10
79. A.R., 1889, 12
80. A.R., 1890, 13
81. A.R., 1894, 7 and 11
82. " " " " "
83. " " " " "
84. A.R., 1895, 9
85. A.R., 1897, 7
86. A.R., 1902, 8-9
87. This information obtained from I.R. Matheson, Archivist Palmerston North Public Library. It was this company, rather than the Wellington and Manawatu Railway Company which was primarily responsible for the development of flax-milling. In the mid 1920's approximately 25 flax mills were operating in the swamp area. Prominent flax milling enterprises in the swamp included the "Poplar Flax Dressing Company", the "Tokomaru Flax Mill Company" and "A. and L. Seiferts' Flax Dressing Company Limited".
88. A.R., 1888, 5
89. Simcox, 100-105
90. Waterson, 133
91. For 1910-11 passenger revenue was 34% of the total revenue of traffic outward from Shannon, 58% from Levin and 56% from Otaki.

92. Waterson, 133
93. " "
94. Information from I.R. Matheson
95. A.J.H.R., 1891, D-1, 9
96. See Chapter One for more detail on the proposed Woodville - Mugby Junction line.
97. Considered by the 1916 Railways Commission:  
A.J.H.R., 1916, D-4:

This Commission investigated, among others, the following propositions:

1. Either, the purchase of the Sanson Tramway by the government and its extension to join the Main Trunk Railway at either Marton or Greatford  
Or, the desirability of the County Council connecting the tramway with the Main Trunk Railway at either Marton or Greatford.
2. The construction of a government line from Levin or some other suitable point on the Main Trunk to Foxton.
3. The construction of a government line from Marton to Levin.

The Commission, in refusing to recommend the purchase of the tramway, noted that the Railways Department had no control of tramways in the Dominion, and, as the tramway was essentially a county work, was not of value to the Dominion as a whole.

The Commission, also, did not recommend the connection of the tramway with the Main Trunk at either Greatford or Marton, partly owing to the fact that the light rails used on the tramway were not suitable for main line trains. A direct connection with the Main Trunk, moreover, could prove detrimental to the government's monopoly position. No opposition was stated, however, to the tramway being so close to either Greatford or Marton stations or running parallel to a siding close to the main line station thus facilitating the interchange of goods between the railway and the tramway.

Regarding the latter two questions, the Commission believed that as the government was already heavily committed to railway construction, they would 'constitute a waste of the Dominion's resources'. Of all the propositions studied by the Commission, the question of a railway linking Levin via Foxton with Marton, is the most interesting. If such a proposition had been implemented it would have resulted in the diversion of a large volume

97. of traffic from the existing line to the proposed deviation. Foxton would once again have been a main line railway station and Marton would have had a more direct rail connection to the south.
98. Buick, 328

CHAPTER THREE.1886 - 1920.The North Island Main Trunk Railway.

When the exploration of routes for the central portion of the Main Trunk Railway began in 1883, settlement was already established in the upper and lower portions of Rangitikei Valley, but large areas in the middle portion were given over to dense bush<sup>1</sup>.

The surveyor, J. Rochfort, in his report<sup>2</sup> noted that construction of the Marton - Porewa section would present no difficulties, but that at the point where the Makohine River joined the Rangitikei River it would be necessary to construct a viaduct, and, that as the bluffs near the confluence of the Hautapu River and the Rangitikei River were rather high, some tunnels would have to be constructed. Finally, he noted the existence of good milling timber in the middle Rangitikei Valley, particularly near the Hautapu River.

The first contracts for construction were let in February 1885<sup>3</sup>, and by June 1888, the line was opened for traffic as far as Rangitira<sup>4:5</sup>. As the junction of the line with the Foxton - Wanganui Railway was about one mile south of the existing Marton Station, a new station, Marton Junction, was erected in 1886<sup>6</sup>. Main stations on the line were Hunterville and Rangitira, with flag stations at Cliff Road, Overton, Porewa, Rata and Silverhope.<sup>7</sup>

In 1889 cattle and sheep loading pens were erected at Hunterville and sheep loading pens at Porewa<sup>8</sup>.

The contract for the Rangitira - Mangaonoho section, was let in December 1890<sup>9</sup>, and the section was opened for traffic by May 1893<sup>10</sup>. In order to provide work for the unemployed, the two mile section from Mangaonoho to the Makohine River was begun in 1891<sup>11</sup>, and by the latter half of 1894 rails had been laid as far as the site of the proposed viaduct<sup>12</sup>. As many as 137 men were employed on construction works along this section<sup>13</sup>. (Plate 9).

Tenders for the construction of the Makohine Viaduct were called early in 1896, but as the lowest tender was considerably in excess of the government estimate, the Public Works Department undertook the task, starting preliminary work in May of that year<sup>14</sup>. Owing to the Great Engineers' Strike in Britain, delivery of the machinery was delayed until June 1898, but shortly, afterwards manufacture of the ironwork and steel plates and girders commenced in workshops erected near the site<sup>15:16</sup>. Erection of the piers began in April 1900, and about two years later the viaduct was opened for traffic<sup>17</sup>. (Plate 10).

Mangaonoho remained the railhead for ten years while the viaduct was under construction. Bush clearing, formation works and laying of rails over sections of the line as far north as Mataroa was pushed ahead during this period, enabling additional sections to be opened shortly after the viaduct was completed<sup>18</sup>. In December 1897, it was estimated that there were 215 men employed on various sections along the line<sup>19</sup>. Sections of the railway



PLATE 9 - Cutting on Main Trunk, 1880's: many towns on the main trunk had boom periods during the period of railway construction and many construction workers later applied for land in the area.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.

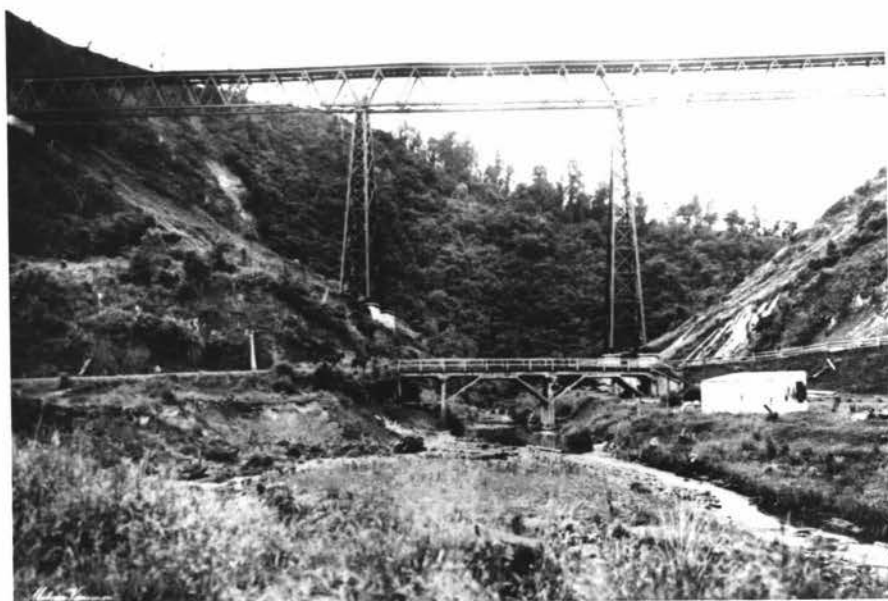


PLATE 10 - Makehine Viaduct, 1903: the northern advance of the railway was delayed for ten years while the viaduct was constructed. A workshop was located near the site.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.

opened following the completion of the Makohine Viaduct were:

Mangaonoho - Mangaweka	in November 1902 <sup>20</sup>
Mangaweka Viaduct	in November 1903 <sup>21</sup> (Plate 11)
Mangaweka - Taihape	in November 1904 <sup>22</sup>
Taihape - Mataroa	in June 1906 <sup>23</sup>
Mataroa - Waiouru	in June 1908 <sup>24</sup>

The railway route is shown in Figure 10.

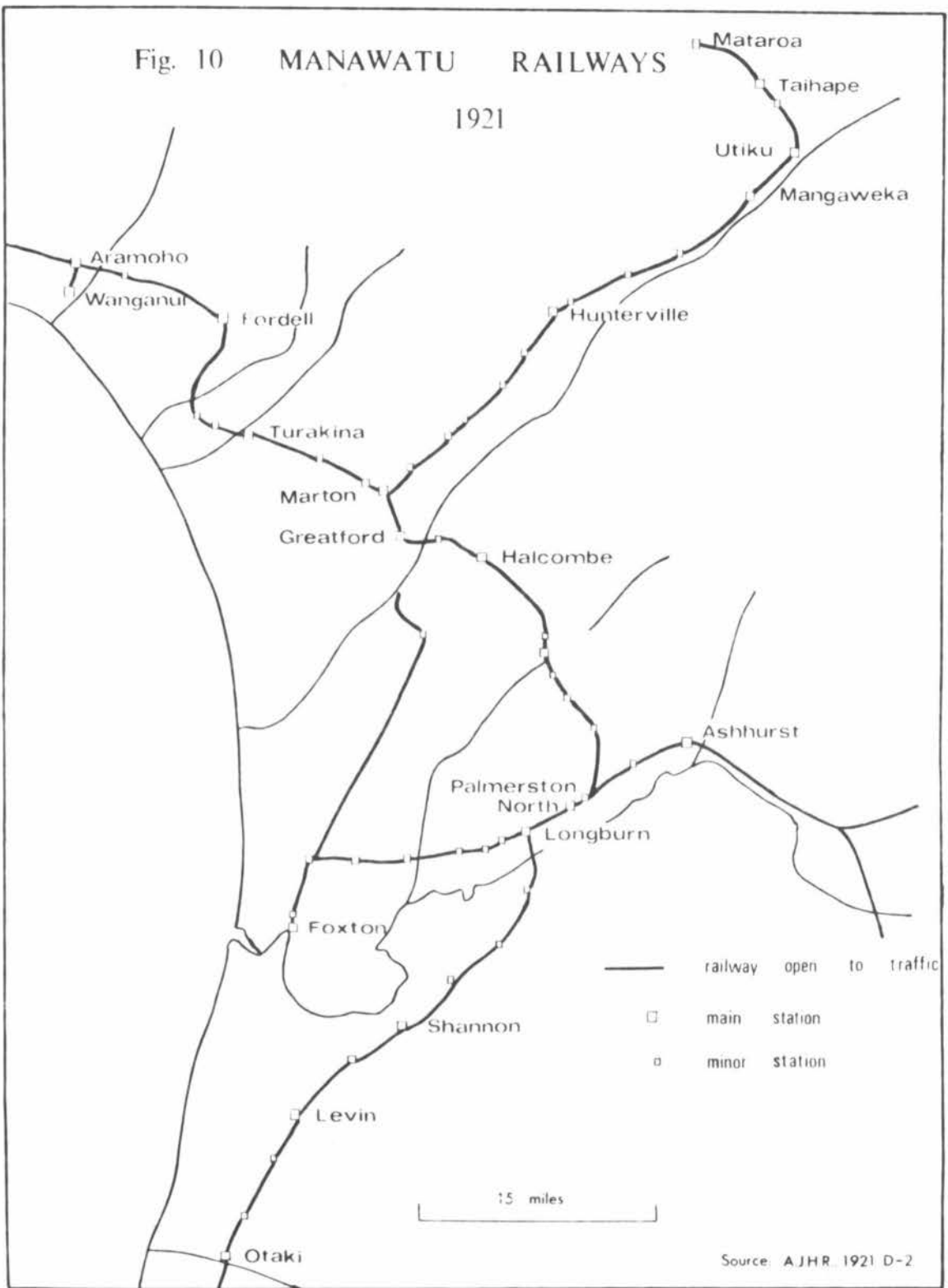
### Influence of Railway on Settlement of Rangitikei.

Settlement throughout the middle portion of Rangitikei Valley, invariably promoted by the government, preceded railway construction. Sections in the Hunterville Village Settlement, (Plate 12) for instance, were first gazetted for sale in September 1885<sup>25</sup>. Taihape was first settled in 1894 by the Christchurch settlers taking advantage of the Improved Farm Settlement Scheme<sup>26</sup> and sections in the Mangaweka Village Homestead Settlement (Plates 13&14) were first gazetted in January 1895<sup>27</sup>. Despite these early attempts at settlement, it was not until the Main Trunk Railway provided easier access to the middle and northern parts of the Rangitikei Valley that settlement proceeded at a greater pace. (Table XI).

As railway construction advanced up the Rangitikei Valley, several small settlements underwent temporary booms as they became public works construction camps. When the railway reached Hunterville in 1888 the population of the town was temporarily increased by public works employees and sawmillers, who were able to take advantage of the railway to transport the sawn timber<sup>28</sup>. Mangaonoho owed its temporary prosperity in the

Fig. 10 MANAWATU RAILWAYS

1921



Source: A JHR. 1921 D-2



PLATE 11 - Mangaweka Viaduct: North Island Main Trunk Express crossing viaduct in early twentieth century.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.



PLATE 12 - Hunterville: this photograph probably taken in the late 1880's. Note timber lying on the ground and the dense bush in the background.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.

late 1890's and early 1900's primarily to the fact that it was the railhead. As soon as the railway moved on Mangaonoho declined in importance. (Table XI) (Plate 15).

Between 1891 and 1902 a large volume of railway traffic passed through Hunterville and Mangaonoho with passenger traffic, accounting for about 40% of total revenue<sup>30</sup>, especially important. The importance of the railway to the timber trade is obvious from the volume of timber moving outward from these two stations. As well as transporting timber, the railway was responsible for transporting a wide variety of goods into and out of the Rangitikei Valley (Table X). Hunterville and Mangaonoho gained their early importance from the fact that they were centres of railway construction and from the large volume of railway traffic generated during the initial period of exploitation of the timber resources and settlement of the land.

As rail construction north of the Makohine Viaduct continued, many small villages gained some temporary benefit. Ohingaiti became a railway and sawmill centre<sup>31</sup>, reaching its peak populations in 1896 and 1901 (Table XI). Mangaweka, in 1897 was reported as being the scene of operation of a large construction gang, with sawmilling and pastoral pursuits as the other main occupations<sup>32</sup>. It reached a peak population of 956 in 1901, only to decline thereafter to a stable population of about 300 (Table XI). It was reported, also, that Utiku first became a settlement in 1893 when a body of labourers employed on railway construction were located there<sup>33</sup>.

**TABLE X:**

**TOTAL VOLUME OF RAILWAY TRAFFIC THROUGH  
MANGAONHO AND HUNTERVILLE, 1891 - 1902 (inclusive).**

**(a) Outward.**

	Number of Passenger Journeys	Outward Goods (tons)			
		Livestock	Timber	Other Goods	Total
Hunterville <sup>a</sup>	73,432	2,528	11,471	31,702	45,701
Mangaonoho <sup>b</sup>	81,043	1,427	30,347	37,086	68,860

**(b) Inward.**

	Inward Goods (tons)			
	Livestock	Timber	Other Goods	Total
Hunterville <sup>a</sup>	1,031	6,571	26,910	34,512
Mangaonoho <sup>b</sup>	1,215	812	38,005	40,032

**Source:** A.J.H.R., Annual Railways Statements, 1892 to 1902

a: from 1891-92

b: from 1894-95

The change in character of the middle and northern portions of Rangitikei Valley from an area of pioneer settlement, characterised by public works camps and timber milling in the late 1890's and early 1900's, to an area of established settlement based upon pastoralism in 1920 is evident from the rail traffic figures (Table XII). As the railway progressed past Mangaonoho the timber industry continued to thrive, Mangaweka, in particular, becoming an important station for timber (112,162 tons railed

TABLE XI:

POPULATION OF RANGITIKEI VALLEY RAILWAY TOWNS, 1886 - 1921.

	1886	1891	1896	1901	1906	1911	1916	1921
Marton	908	976	1,151	1,101	1,268	1,438	1,650	2,602
Marton Junction			37			363	544	
Porewa	82	66	73		106	90	140	167
Rata		188	195	201	220	170	100	263
Silverhope		71	174	186	55			
Hunterville	86	404	755	576 <sup>a</sup>	645	658	555	628
Rangitira		16	26 <sup>b</sup>			81	39	
Mangaonoho			166	342 <sup>a</sup>	19 <sup>c</sup>	165	153	125
Ohingaiti			410	464	319	312	309	368
Mangaweka			349	956 <sup>a</sup>	609	494	390	361
Utiku			66	297 <sup>a</sup>		359	586	300
Taihape			86	461 <sup>a</sup>	1,273	1,577	1,927	2,099
Mataroa							385	250

Source: Census of Population and Dwellings, 1886 - 1921, Vol. 1

- a: and vicinity  
b: Rangitira Road  
c: Mangaonoho Railway Station

outward from Mangaweka between 1902-03 and 1910-11). Utiku and Taihape also temporarily became centres of the timber industry with 65,515 tons railed out from Utiku between 1907-08 and 1910-11, and 68,250 tons from Taihape between 1904-05 and 1910-11. Utiku and Mataroa continued to rail

out large quantities of timber for a few years after output from Taihape and Mangaweka had fallen off, but by 1920-21 the timber industry had declined in importance. In that year only 26,450 tons of timber were railed out from all stations between Marton and Mataroa, comprising 29.6% of total outward tonnage (Table XII) compared with 72,323 tons in the peak year of 1907-08 when timber comprised 77% of total outward tonnage. Figure 11 shows the location of sawmills in the Rangitikei in 1907 when the timber milling industry in the area was at a peak. Most of the mills were located a short distance from the railway. Some mills had their own siding connecting with the Main Trunk Railway<sup>34</sup>.

As the land was cleared and settled and the pastoral industries developed the railway became an important transporter of stock until in 1920-21 livestock comprised 18.36% of total outward tonnage, and 11.92% of total inward tonnage. Towns such as Taihape and Hunterville, and, to a lesser extent Mangaweka became important assembly and despatching centres for livestock destined either for the freezing works or perhaps store stock destined for lowland pastures. In addition a wide variety of 'other goods' were carried on the railway, many related to the pastoral industries including grain, minerals, wool and general merchandise (Table XII).

The prosperity which a number of settlements enjoyed during the period of railway construction carried over for a few years while the timber industry in the Rangitikei Valley was at its height. By 1921, however, Mangaonoho and Ohingaiti had ceased

Fig. II NORTHERN RANGITIKEI 1907

SAWMILLS

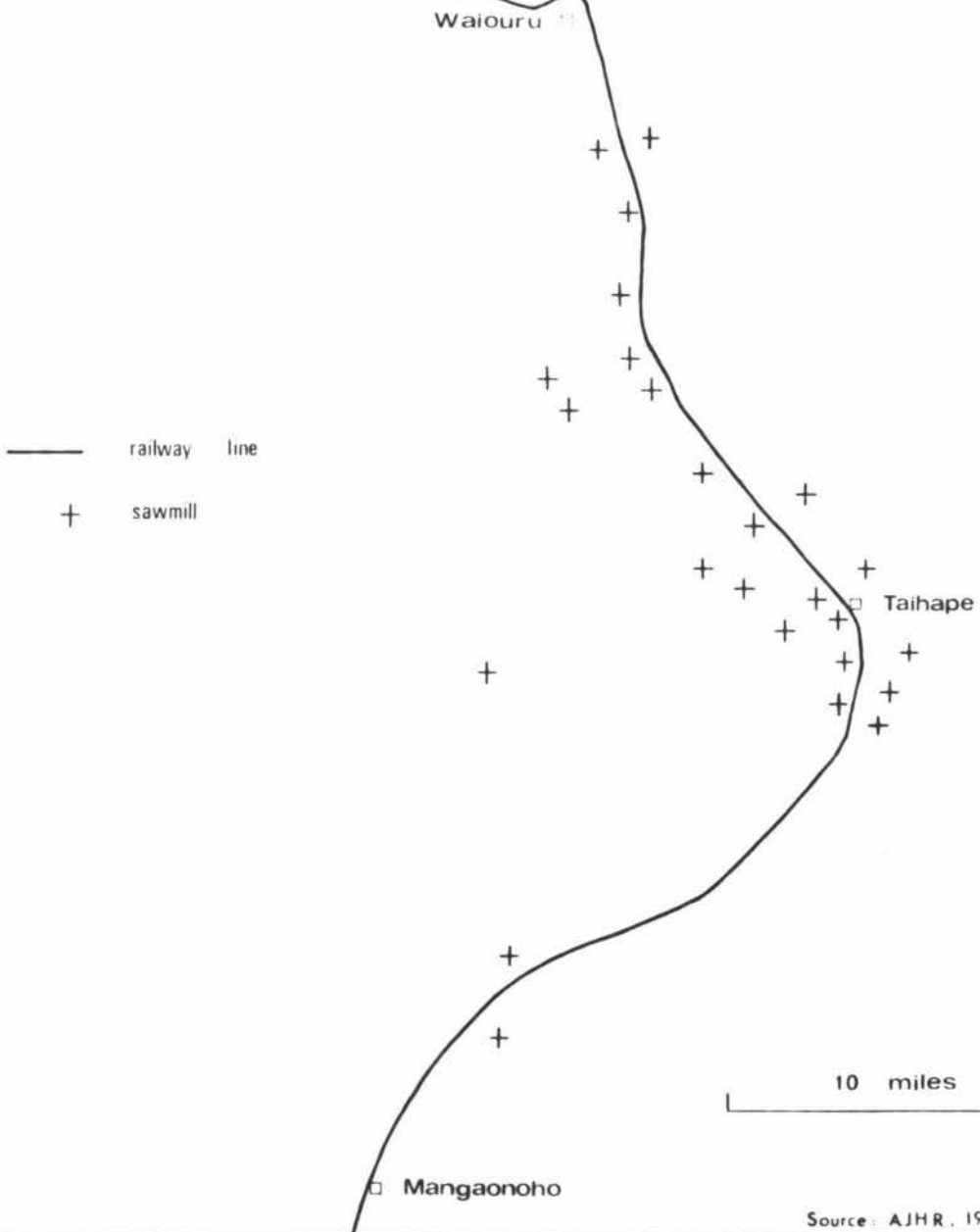


TABLE XII:

GOODS TRAFFIC IN AND OUT, 1910-11 and 1920-21.(a) Outward Goods (tons)

Station	Year	Livestock	Timber	Other Goods	Total
Mataroa	1910-11	515	12,589	927	14,031
	1920-21	1,577	12,695	2,986	17,258
Taihape	1910-11	1,761	6,375	1,814	9,950
	1920-21	2,565	3,734	4,370	10,669
Utiku	1910-11	443	9,154	606	10,203
	1920-21	1,801	7,202	8,021	17,024
Mangaweka	1910-11	1,260	210	6,657	8,127
	1920-21	3,060	1,496	14,100	18,656
Ohingaiti	1910-11	1,100	4,534	422	6,056
	1920-21	N.A.	N.A.	N.A.	N.A.
Hunterville	1910-11	3,992	46	1,963	6,001
	1920-21	5,376	545	14,100	20,021
Marton	1910-11	3,177	182	4,286	7,645
	1920-21	4,245	778	12,765	17,788
Total	1910-11	12,248	33,090	16,675	62,013
	1920-21	18,624	26,450	56,342	101,416

**TABLE XII:****GOODS TRAFFIC IN AND OUT, 1910-11 and 1920-21.****(b) Inward Goods (tons)**

Station	Year	Livestock	Timber	Other Goods	Total
Mataroa	1910-11	187	117	4,106	4,410
	1920-21	235	114	1,287	1,636
Taihape	1910-11	898	970	8,307	10,175
	1920-21	1,173	1,231	10,009	12,413
Utiku	1910-11	228	140	890	1,258
	1920-21	1,000	2,579	1,972	5,551
Mangaweka	1910-11	404	224	1,582	2,210
	1920-21	427	45	1,707	2,179
Ohingaiti	1910-11	40	31	731	802
	1920-21	N.A.	N.A.	N.A.	N.A.
Huntermville	1910-11	441	800	3,874	5,115
	1920-21	980	602	4,423	6,005
Marton	1910-11	516	3,314	7,964	11,794
	1920-21	1,532	2,764	12,747	17,043
Total	1910-11	2,714	5,596	27,454	35,764
	1920-21	5,347	7,335	32,145	44,827

**Source:** A.J.H.R., Railways Statement, 1911 and 1921

to be regarded as 'accounting' stations and the volume of railway traffic through Mangaweka had fallen by over 50% since 1905-06. Although by 1920-21 a considerable volume of timber was still being railed outward from Mataroa, Taihape and Utiku, only Taihape and further south, Hunterville had established permanent railway functions (Table XII and Fig. 14 show the relative importance of the stations along the Main Trunk). Hunterville was the scene of periodic stock sales<sup>35</sup> with a large volume of stock railed outward from there (5,376 tons in 1920-21). Taihape had established itself as the centre of the Northern Rangitikei serving the needs of the local rural community and was the main railway town of the Rangitikei section of the Main Trunk. Not only did Taihape serve as an important stop on the Main Trunk, but it was the terminus for a number of services (Fig. 15) and, moreover, the Railways Department operated a workshop at Taihape<sup>36</sup>.

#### Marton - Marton Junction.

As mentioned previously Marton was first linked by rail in May 1878, when the final section of the Foxton - Wanganui Railway was completed<sup>37</sup>. The original station was located on Pukepapa Road in Marton itself. Marton Junction, about one and a half miles south of Marton station became the junction of the Main Trunk and Foxton - Wanganui Railways in 1886<sup>38</sup>. Although it was the junction of two lines, Marton Junction remained a flag station until 1898 when it became the main Marton station and the original station at Pukepapa became a flag station<sup>39</sup>. With



PLATE 13 - Mangaweka 1898: this photograph was taken before the railway had been opened as far as Mangaweka during the early period of bush felling and development of settlement.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.

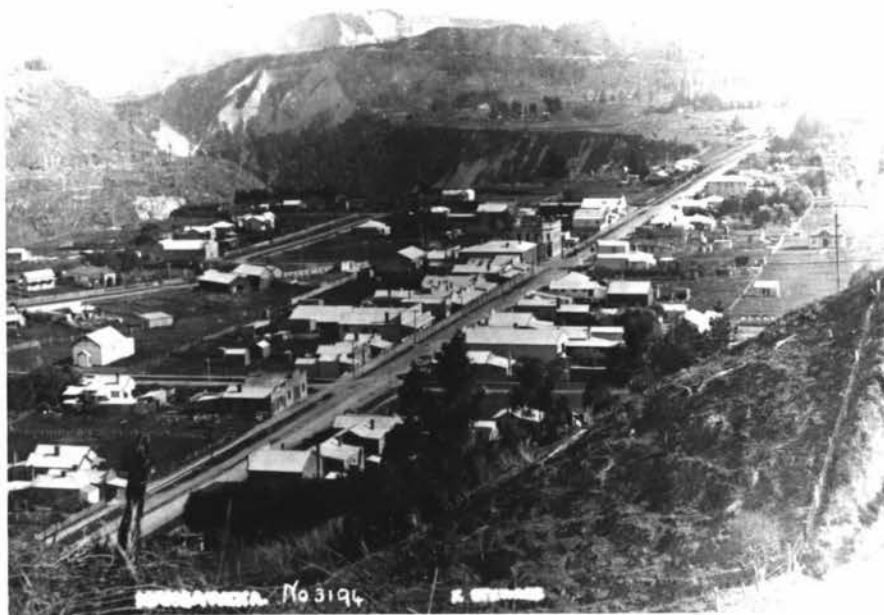


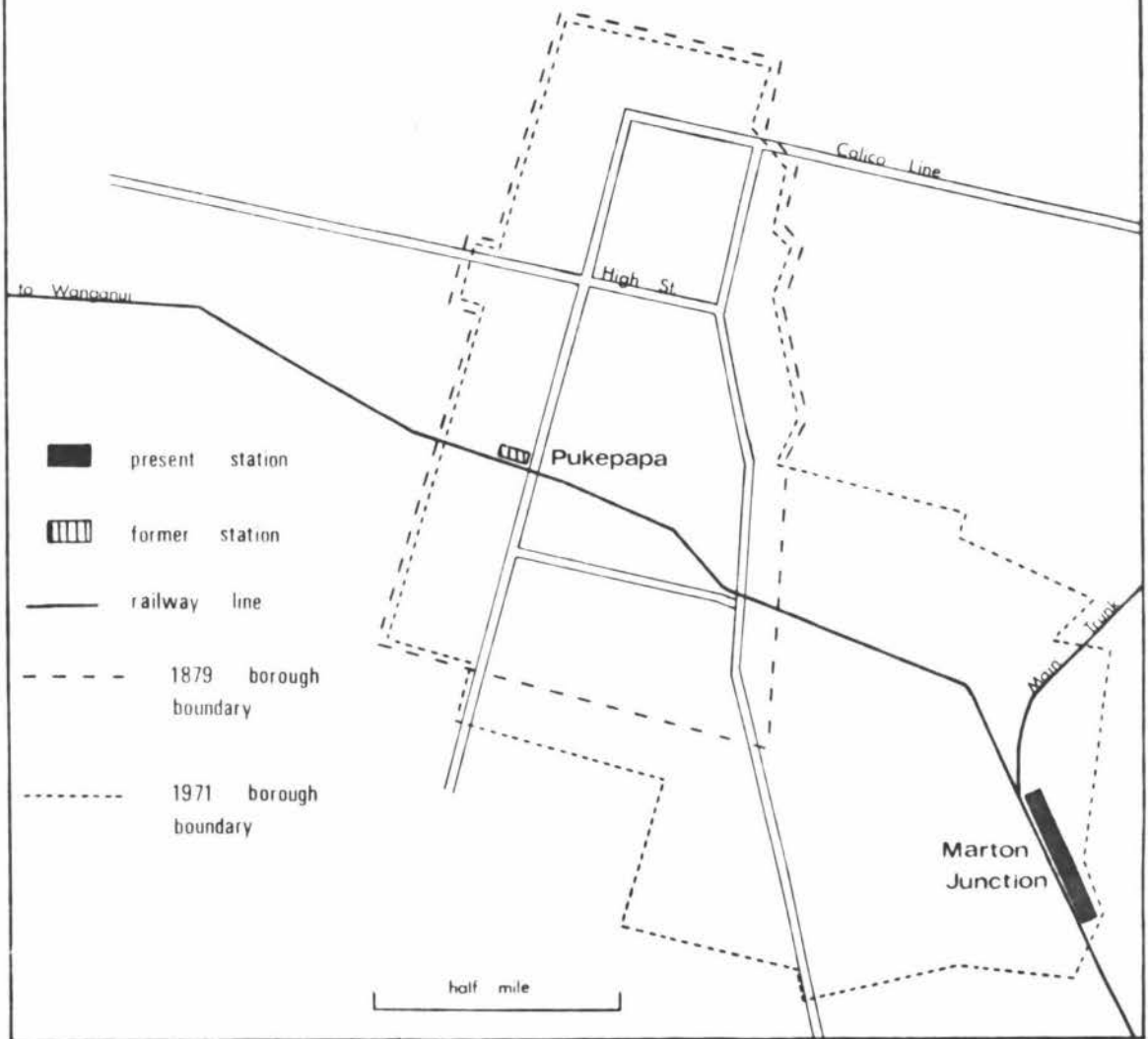
PLATE 14 - Mangaweka: this photograph taken in the 1930's.  
Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.



PLATE 15 - Mangaonoho Flag Station, 1971: Mangaonoho was once the scene of a prosperous settlement while it was the terminus of the main trunk railway in the 1890's.

Photo: K.G.T.

Fig. 12 MARTON 1971



the completion of the Main Trunk in 1908, Marton Junction increased in importance and the small settlement around the railway yards began to expand. By 1916 Marton Junction had a population of 544 and by 1921 had been incorporated into the borough of Marton<sup>40</sup>.

Marton Junction, therefore, was a settlement which developed primarily because of the rail junction<sup>41</sup>. The increase in rail traffic through Marton Junction shows the importance of this station (Table XIII) particularly after the completion of the Main Trunk in 1908.

The Railways Department located a considerable number of permanent staff at Marton Junction<sup>42</sup>, and by 1913 this number had increased to 31<sup>43</sup>, an indication of the growing importance of the railway function. Prior to 1920 the Department erected nine houses at Marton Junction, but in the following five years erected an additional 34. Today there are 49 railway houses in Marton and 86 permanent railway employees<sup>44</sup>.

An interesting consequence of the fact that the junction of the two lines was located one and a half miles south of the existing station at Pukepapa has been the development of two separate nuclei within the borough of Marton, one centred on the older established business centre in High Street, the other based on the railway yards at Marton Junction (Fig. 12).

#### Palmerston North as a Rail Focus.

By 1921 Palmerston North had a population of 15,649 and was by far the largest town in the area. One reason for Palmerston North's prominence was the function it performed as a rail junction.

TABLE XIII:

RAILWAY TRAFFIC THROUGH MARTON AND MARTON JUNCTION,  
1890-91 to 1920-21.

	1890-91 <sup>a</sup>	1900-01 <sup>b</sup>	1910-11 <sup>b</sup>	1920-21 <sup>b</sup>
Total Revenue (£)	5,105	5,010	17,457	41,683
No. of Passenger Journeys	11,514	12,681	32,728	55,488
Outward Goods (tons)	6,378	4,747	7,640	17,688
Inward Goods (tons)	4,459	3,550	11,794	17,152

Source: A.J.H.R., Railways Statement, 1891, 1901, 1911 and 1921

a: figures for Marton Station

b: figures for Marton Junction

Palmerston North's initial growth was based around sawmilling and flax dressing both of which were aided by the early tramway connection with Foxton. In 1876 the wooden rails were replaced with iron rails and the railway extended to Wanganui. The first station in Palmerston North was erected in Main Street, east of the Square (Plate 16). This was later moved to the centre of the Square, where it remained until 1899 (Plate 17) when it was shifted to the Main Street site which it occupied until 1963. (Plate 18) In 1963 the new station on Tremaine Avenue was opened (Plate 19).

Between 1870 and 1900 the bush was steadily cleared and the pastoral industries established. The meat freezing industry and most of the dairy factories in the district were established in



ENGINE AND TRAM SHEDS, PALMERSTON NORTH 1877.  
*Formerly Situated opposite the present Court House.*

PLATE 16 - Palmerston North Railway Station 1877: this was the site of the first station in Palmerston North in Main Street East.

Photo by courtesy: Palmerston North Public Library.



PLATE 17 - Palmerston North Railway Station in Square: the station remained here until 1899 when it was shifted to the Main Street West side.

Photo by courtesy: Palmerston North Public Library.



PLATE 18 - Palmerston North Railway Station 1910: the station remained on this site until 1963 when facilities were moved to Tremaine Avenue. Note the stock wagons. The railway at this stage was an important transporter of livestock.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.



PLATE 19 - Palmerston North Railway Station, 1971: Tremaine Avenue location.

Photo: K.G.T.

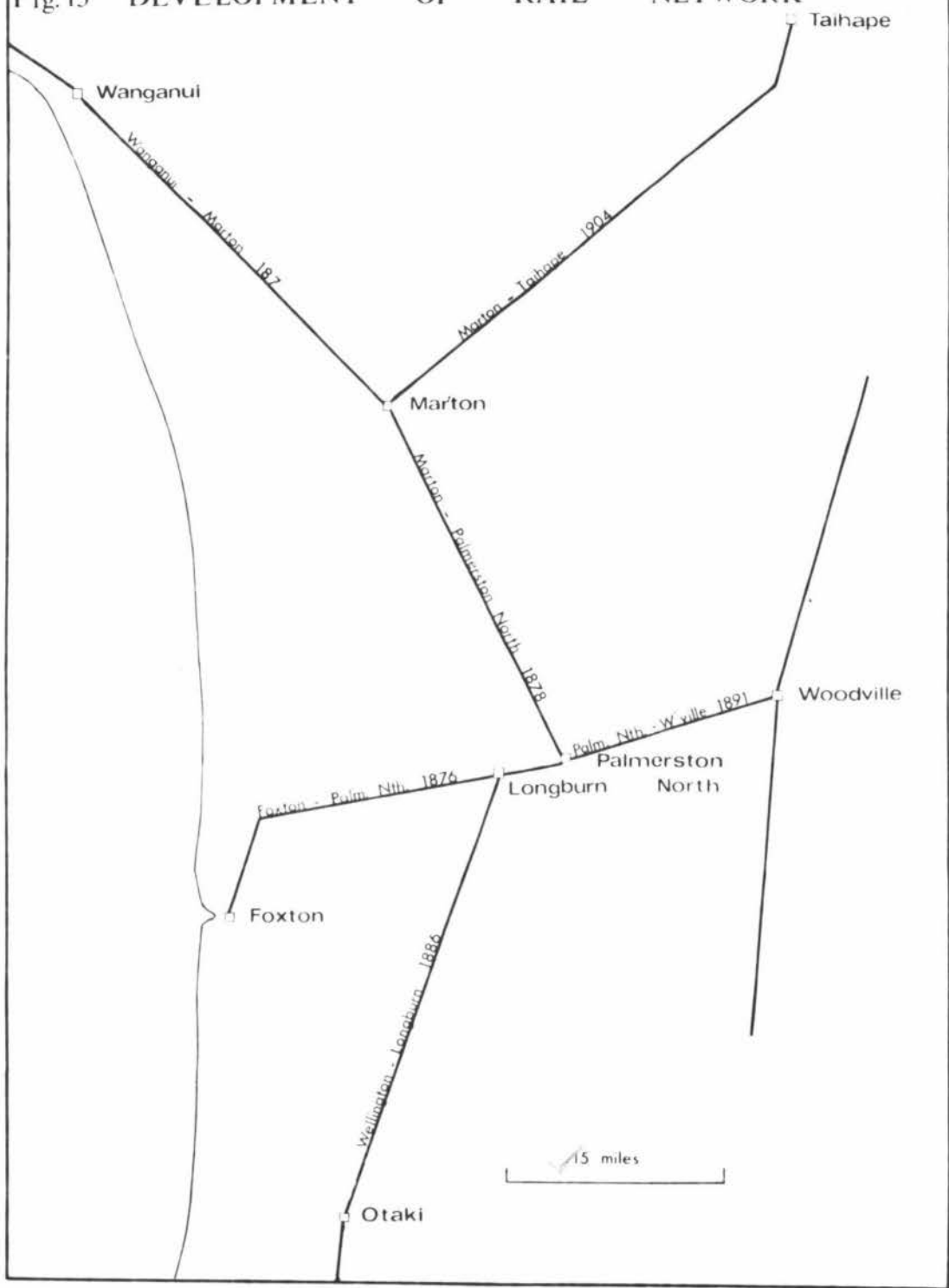
the 1880's and 1890's. The development of pastoralism was aided by further developments in the rail network with the completion of the Wellington - Manawatu line in 1886 and the Woodville - Palmerston North line in 1891.<sup>45</sup> Palmerston North became a focus of rail routes and a collecting and despatching centre for livestock, livestock products and materials related to the pastoral industries (Table XIV). It was not until the final section of the Wellington - Woodville Railway was completed in 1897,<sup>46</sup> however, that Palmerston North obtained a rail connection with the Wairarapa.

The completion of the Main Trunk line in 1908 consolidated Palmerston North's importance as a junction with the volume of traffic in and out of Palmerston North increasing in successive years. By this time Palmerston North had become an established marketing centre, with a wide range of small scale industrial enterprises adding to its importance. Chief among these were engineering, coach building, rope and twine manufacturing, brick and tile making, brewing and cordial making, baking and furniture manufacturing.

Since 1900 Palmerston North has continued to outstrip other towns in the area and according to Anderson:

"...transport and communications seem to have been the key, and the focal position of the town in the railway system, making it so accessible within its tributary area and from other parts of the North Island assured its development as the collecting and distributing

Fig.13 DEVELOPMENT OF RAIL NETWORK



centre for the district. The steady expansion and intensification of farming in the region has reinforced the commercial and servicing roles..."

TABLE XIV

RAILWAY TRAFFIC IN AND OUT OF PALMERSTON NORTH, 1880-81 to  
1920-21

(a) Outward Goods

	1880-81	1890-91	1900-01	1910-11	1920-21
Passenger Journeys (No's)	7,127	25,876	56,865	156,019	223,532
Livestock (tons)		64	845	4,497	3,955
Timber (tons)		619	243	984	870
Other Goods (tons)		3,196	11,753	17,677	36,615
Total (tons)	5,581	3,879	12,841	23,158	41,440

(b) Inward Goods

	1880-81	1890-91	1900-91	1910-11	1920-21
Livestock (tons)		85	2,211	3,227	3,241
Timber (tons)		253	11,136	10,433	15,450
Other Goods (tons)		5,109	7,395	32,428	66,568
Total (tons)	2,296	5,447	20,742	46,088	85,259

Other factors which have contributed to the growth of Palmerston North include the development of motor transport which has permitted the centralisation of activity in the area and improved connections with Wellington and the steady growth of a wide range of tertiary activities. Expansion of manufacturing industries moreover, has broadened the work opportunity and economic base of the community. A more recent factor contributing

towards the growth of Palmerston North has been its growing importance as an educational and research centre.

### Summary

Between 1886 and 1921 the railway, though of varying importance, continued to influence settlement in the area.

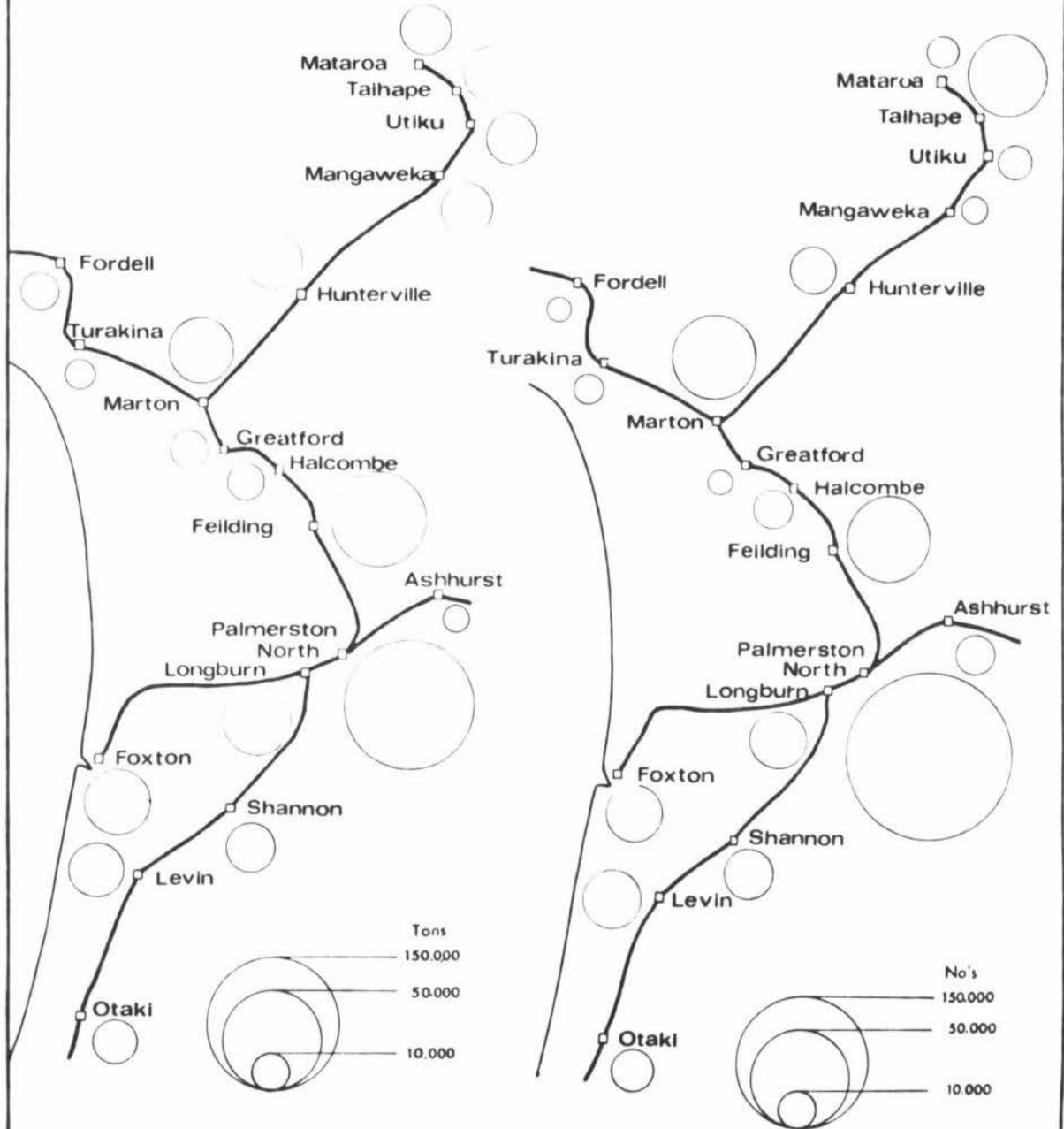
Large parts of Horowhenua were opened up for settlement by the Wellington and Manawatu Railway Company, both through the stimulus to settlement given by the railway, and the settlement activities of the railway company itself. The large number of services passing over the Otaki - Palmerston North section is an indication of the importance of the railway to this district (Fig. 15). In the Rangitikei Valley, the construction of the Main Trunk Railway resulted in the opening up of a large area for settlement and the growth of a number of settlements whose original functions were based around the railway.

Along the Foxton - Wanganui line some settlements assumed greater importance as railway centres than other. An increasing proportion of rail traffic passed through Palmerston North and Feilding, with Foxton, Marton and Longburn of lesser, though still considerable importance as rail centres (Fig. 14). Both Palmerston North and Marton became important rail junctions. Although the volume of traffic passing through Halcombe, Greatford, Turakina and Fordell increased between 1890-91 and 1920-21, their proportionate share of total rail traffic declined. In Horowhenua railway traffic was concentrated at Shannon, Levin and Otaki (Fig. 14).

Fig. 14 TRAFFIC THROUGH EACH STATION, 1920 - 21

(a) GOODS IN AND OUT

(b) PASSENGER JOURNEYS



Source: A.J.H.R., 1921, D-2

By 1920 the timber industry had fallen to only a fraction of its former size, but, the railway played an important part in the development of the pastoral industries, especially by railing stock to and from sales to the freezing works and by moving store stock to lowland pastures. In addition milk, cheese, butter, frozen meat, grain and other agricultural products were moved on the railways. In return large quantities of fertiliser and farm implements and machinery were railed back into the farming districts.

Although it is difficult to accurately assess the importance of the railway in the growth of settlement, by 1921 the influence of the railway on settlement was probably not as great as it had been during the initial settlement in the late nineteenth century. By 1921 a more stable economic base for settlement had been established and a number of other factors, mainly economic, had emerged to influence the growth of many settlements (Taihape, Marton, Feilding, Palmerston North and Levin), although in these settlements the railway was neither the only factor nor necessarily the most important one. Some settlements which had brief periods of prosperity during the period of railway construction and initial settlement subsequently declined (Mangaweka, Ohingaiti and Mangaonoho), while others had seen their hopes of becoming important main line railway stations abandoned through government decisions (Mugby Junction, Foxton and Sanson).

TABLE XV

POPULATION OF MANAWATU AND SURROUNDING AREA, 1886 - 1921(a) Geographic County Population

Geographic County	1886	1921
Rangitikei	4,753	14,339
Kiwitea		2,438
Pohangina		1,341
Oroua	5,765	8,112
Manawatu	5,516	6,123
Kairanga		20,342
Horowhenua	996	9,464
TOTAL	17,058	62,159

(b) Population of Main Towns

	1886	1921		1886	1921
Otaki	234	1,075	Marton	908	2,602
Levin		1,976	Turakina	259	264
Shannon		1,013	Bulls	613	505
Foxton	736	1,686	Sanson	200	171
Longburn		586	Rongotea	440	NA
Palmerston North	2,606	15,649	Hunterville		628
Feilding	1,297	4,510	Mangaweka		361
Halcombe	457	639	Taihape		2,099

REFERENCES

1. Chapter One mentions early settlement of the lower Rangitikei and Chapter Five mentions early settlement of Northern Rangitikei.
2. A.J.H.R., 1884, Session I, D-5, 1-5.
3. A.J.H.R., 1885, D-4, 4.
4. A.J.H.R., 1888, D-1, 14.
5. Rangitira is now known as Kaikaranga.
6. A.J.H.R., 1886, D-1, 4.
7. N.Z.R. Timetable August, 1884.
8. A.J.H.R., 1889, D-1, Appendix H, 32.
9. A.J.H.R., 1891, D-1, 9.
10. A.J.H.R., 1893, D-1, Appendix F, 31.
11. A.J.H.R., 1891, D-1, 9.
12. A.J.H.R., 1894, D-1, IX
13. A.J.H.R., 1893, D-5b.
14. A.J.H.R., 1896, D-1, iii
15. A.J.H.R., 1902, D-1, VI
16. The workshops at Makohine also constructed the steelworks for the Mangaweka Viaduct and for bridges between Taihape and Waiouru.
17. A.J.H.R., 1902, D-1, VI
18. A.J.H.R., 1902, D-1, VI
19. A.J.H.R., 1897, D-1, Appendix F, 56
20. A.J.H.R., 1903, D-1, V
21. A.J.H.R., 1904, D-1, Appendix, F, 54
22. A.J.H.R., 1904, D-1, V

23. A.J.H.R., 1906, D-1, V
24. A.J.H.R., 1908, D-1, V
25. New Zealand Gazette 10th September, 1885.
26. Cyclopaedia of New Zealand 1897, 129.
27. New Zealand Gazette, 10th January, 1895.
28. Between 1886 and 1891 the population of Hunterville increased by 318, from 86 to 404.
29. Between 1901 and 1911, the population of Mangaonoho declined by 177 from 342 to 165.
30. Figures obtained from Annual Railway Statement in A.J.H.R., 1891,- 1902.
31. Cyclopaedia of New Zealand 1897, 1292.
32. Cyclopaedia of New Zealand, 1897, 1296.
33. Cyclopaedia of New Zealand, 1897, 1300.
34. See Chapter Four, footnote 10.
35. Cyclopaedia of New Zealand 1908, 629.
36. See Chapter Four for a more detailed study of the influence of the railway on Taihape.
37. See Chapter One.
38. See Chapter One.
39. This information obtained from N.Z.R.
40. This information obtained from Marton Town Clerk.
41. See Appendix III for survey plans of Marton Junction subdivisions.
42. A.J.H.R., 1906, D-2, Return No. 12.
43. A.J.H.R., 1913, D-2, Return No. 12.
44. Information obtained from N.Z.R., District Engineers Office, Wanganui.

45. A.J.H.R., 1891, D-1, Appendix G,27.

The proposal to connect the east and west coast railways by a line from Woodville to Bunnythorpe was made in 1878, and work commenced shortly after. Work on the line was stopped in 1880, but surveys of the Gorge section recommenced in December, 1884, although it had now been decided to make the connection with Palmerston North and not Bunnythorpe. The contract for the Gorge section was taken up in October, 1886 and within six months about 300 men were employed on the works.

By August, 1889 work on the complete length of line was in hand, and only the Gorge section presented any great difficulty. As the rock was friable and liable to slips difficulty was experienced in obtaining a solid foundation, and, in addition it was necessary to construct 45 chains of tunneling, 22 bridges and 25 retaining walls. Consequently work on the line took longer than expected and it was not until March, 1891 that it was opened for traffic. On the Palmerston North - Gorge section a shelter-shed was erected at Whakarongo and a shelter-shed, goods shed and sheep and cattle yards were erected at Ashhurst. In anticipation of the extra traffic at Palmerston North, the station was rearranged and extended.

46. A.J.H.R., 1897, D-1, VI.
47. Reynolds Plan Report, 18.
48. Anderson, 118.

CHAPTER FOUR.

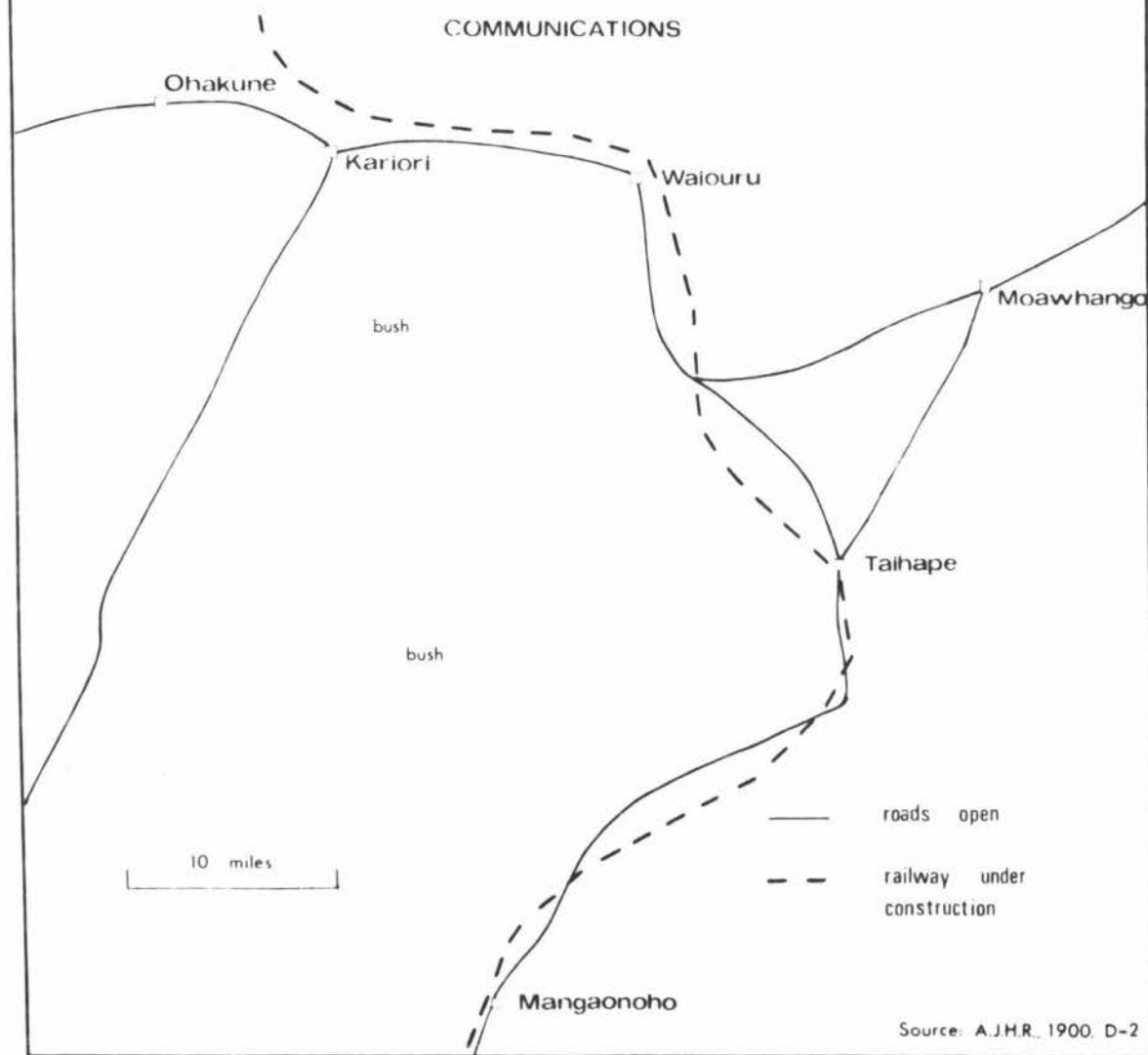
TAIHAPE: RAILWAY SETTLEMENT

The first settlers in the Northern Rangitikei were the pastoralists who took up the tussock and bush areas around Moawhango in the late 1860's.<sup>1</sup> Initially access to the area was by bush track and later, a road from Hawke's Bay<sup>2</sup> as well as the Wanganui - Hurimotu Road.<sup>3</sup> When the survey of the Main Trunk Railway began in 1883 a road was constructed from Hunterville to the Hautapu Valley.<sup>4</sup> By the end of the century roads from all directions converged on the Northern Rangitikei and Taihape, located on both the main north - south road and on the proposed railway line, was in a more advantageous position than the established township of Moawhango, and was a more likely place for any sizeable settlement (Fig. 16).

In 1894 settlers from Christchurch taking advantage of the Improved Farm Settlement Scheme,<sup>5</sup> established the settlement of Taihape.<sup>6</sup> The first auction of township and suburban sections was held in March, 1895,<sup>7</sup> and, within a year Taihape had a population of 86. In 1897 Taihape was reported as:

"...A small government township situated at the junction of four roads each being a highway to a large district, Taihape is a stopping place of the line of coaches to and from the Hot Lakes District, Mangaweka, and the Hunterville Branch

Fig. 16 NORTHERN RANGITIKEI 1900



Railway, the traffic having largely diverged in this direction. It is the centre of the famous Awarua Block, which contains some very superior land. In 1894 the site of the settlement was all standing bush, a great deal of which has now been cleared..." 8

Employment provided by the timber industry has been regarded as an important factor in the rise of Taihape.<sup>9</sup> By the early twentieth century pit - sawing had been replaced by saw - milling, tramlines had been constructed into the bush areas<sup>10</sup> while the railway was used to transport timber to the markets. Timber - milling, however, grew rapidly and chaotically with saw - millers marketing their produce individually in Wellington.<sup>11</sup> To encourage conformity in product, provide greater stability in the trade, and to reduce the cost and risk factors associated with the sale and marketing of timber, the Rangitikei Sawmillers Co-operative Association Limited was formed in 1903 with one central office in Taihape, to control the output in the area between the Waimarino District and Marton. Total production rose from 8,000,000 feet in 1903 to 33,000,000 feet in 1908, and Taihape was the centre of a thriving industry.<sup>12</sup>

By the late 1890's the development of the area in and around Taihape had been influenced by various waves of settlers i.e., pastoralists, road - builders (Plate 20), farm small - holders from Christchurch and the sawmillers. The next and most important wave as far as the growth of Taihape was concerned was that associated with the construction and operation of the Main Trunk Railway.

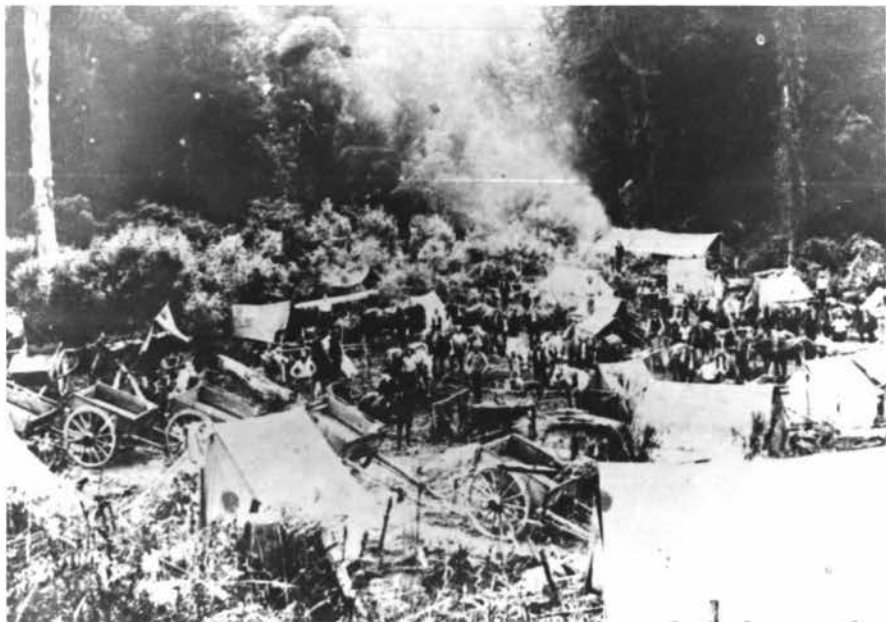


PLATE 20 - Roadmakers Camp, Taihape: this photograph taken in the late 1890's. Together with pastoralists, sawmillers and the Christchurch settlers, the roadmakers were an early wave of settlers who influenced the growth of Taihape in the pre-railway period.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.



PLATE 21 - Taihape 1910: photograph showing station and yards.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.

The felling of the bush on the line between Mangaweka and Taihape began in 1897<sup>13</sup> and within two years had been cleared to five miles beyond Taihape.<sup>14</sup> By October, 1901 earthworks had reached Turangarere, although progress had been slow because of the poor conditions of the roads which restricted access to the construction site.<sup>15</sup> Rail - laying on the Mangaweka - Taihape section finally began in 1903<sup>16</sup> and the section was opened for traffic in October, 1904.<sup>17</sup> The difficult nature of the construction works<sup>18</sup> meant that the completion of this section took longer than most other sections and, consequently, construction workers camps at Taihape assumed more of a permanent character than did other camps.<sup>19</sup>

Although it is difficult to obtain an estimate of the number of workers located in camps at Taihape, it is possible to state how many workers were employed on construction of the south end of the Main Trunk (Table XVI). Works at this time extended for 33 miles from the Makohine Viaduct to the end of the Turangarere section.

TABLE XVI:

AVERAGE NUMBER OF WORKERS EMPLOYED ON THE  
SOUTH END OF THE MAIN TRUNK

Dec 1901	Jan 1902	Feb 1902	March 1902	April 1902	May 1902	June 1902
428	426	252	220	234	297	319

SOURCE: A.J.H.R., 1902 D - 11

Some of the construction workers actually settled permanently in the Northern Rangitikei.<sup>20</sup> As early as 1898 groups of workers had petitioned the Minister of Lands requesting the right to purchase properties on numerous blocks of land in the district (Appendix IV). The Minister referred these petitions and other individual requests to the Land Board which at that time was considering special types of settlement. The Land Board, however, insisted that land be balloted out among all eligible applicants without any preferential basis for the railway workers. Nevertheless, land on the northern outskirts of Taihape and in the Mangaweka - Taihape District was occupied by railway workers in this way.<sup>21</sup>

Taihape rapidly grew in importance as a railway centre, particularly after the Main Trunk was opened in 1908, when it became the most important station on the line between Marton and Taumarunui (Plate 21). The volume of railway traffic in and out of Taihape is much greater than for other stations in the area (Table XVII). The continued importance of Taihape as a railway centre is an indication of the centralisation and rationalisation of railway activity over the last fifty or so years.

The number of railway employees located permanently in Taihape increased rapidly as the town grew in importance as a railway centre reaching a total of 149 employees in 1971.<sup>22</sup> This concentration at Taihape is another indication of the centralisation of railway activity in the area. The advent of the Centralised Train Control system has meant that it is no

longer necessary to staff small stations with signalmen and other employees. 23

TABLE XVII.

IMPORTANCE OF TAIHAPE AS A RAILWAY CENTRE

1905-66 to 1969-70

Passenger Journeys Outward (No's)			Total Goods In and Out (tons)	
Year	Taihape	Other Rangitikei Stations (a)	Taihape	Other Rangitikei Stations
1905-06	34,402	13,636	35,396	47,664
1910-11	29,073	26,842	20,125	47,093
1920-21	53,563	21,123	23,082	62,310
1930-31	26,195	22,351	19,925	31,191
1940-41	29,212	8,841	35,697	44,736
1950-51	22,662	9,624	48,991	31,772
1960-61	9,005	1,013	38,275	23,008
1969-70	4,655	NA	31,089	NA

SOURCE: A.J.H.R., Annual Railways Statement and 1969-70 figures obtained from N.Z.R. Wellington.

(a) Includes: Ohingaiti, Mangaweka, Utiku and Mataroa.

A number of railway employees at Taihape actually live in Railway Department houses. The first railway houses in Taihape were erected between 1904 and 1909 when more than twenty were built, some of which are still in use in Huia and Robin Streets. Others were recently demolished to make way for the enlargement of the railway station. In 1919 a further 24 houses were built



PLATE 22 - Railway Houses in Mataroa Road Taihape, 1971: these houses were erected by the railways department in 1919.  
Photo: K.G.T.



PLATE 23 - Railway Farm Settlement, Taihape, 1971: these houses were erected in 1920 when the railways department acquired some land northeast of Taihape.  
Photo: K.G.T.



PLATE 24 - Single Men's Huts, Railway Compound Taihape, 1971.  
Photo: K.G.T.



PLATE 25 - Single Men's Huts, Railway Compound Taihape, 1971.  
Photo: K.G.T.

along Mataroa Road (Plate 22), and, in the following year the Railways Department acquired land immediately northwest of Taihape and built eighteen houses. This group of houses became known, apparently semi-officially, as the Railway Farm Settlement (Plate 23). The latest railway houses erected were thirteen in Takaheha Place (a state housing area) in 1956 and three in Kakapo Place.<sup>25</sup> In addition a number of single men's huts are located in the railway compound at Taihape (Plates 24 and 25). The importance of railway housing to Taihape is shown by the fact that of the 654 private dwellings in Taihape in 1966, approximately 13% were owned by the Railways Department. Railway employees and their families make a significant contribution to the population of Taihape.<sup>26</sup>

REFERENCES.

1. Chapter Three
2. A.J.H.R., 1881, D-1, Map of North Island between pages 26 and 27
3. " " " " " " " " " "
4. A.J.H.R., 1887, D-1, Appendix I, 34
5. A system of settlement whereby those with limited means were enabled to obtain loans and assistance from the State in clearing their lands
6. Encyclopaedia of New Zealand 1961, 343
7. New Zealand Gazette January 10, 1895
8. Encyclopaedia of New Zealand 1897, 1299
9. Encyclopaedia of New Zealand 1908, 635
10. In 1907 there were private sidings at Ohingaiti, Utiku (3) and Taihape, A.J.H.R., 1907, D-2, Return No. 24
11. Encyclopaedia of New Zealand 1908, 637
12. " " " " " "
13. A.J.H.R., 1897, D-1, v
14. A.J.H.R., 1899, D-1, v
15. A.J.H.R., 1901, D-1, Appendix E, 123
16. A.J.H.R., 1903, D-1, VI
17. A.J.H.R., 1904, D-1, V
18. These works included seven tunnels, large banks and culverts, the Mangaweka Viaduct the Toitoti Bridge and the station formation at Taihape; A.J.H.R., 1905, D-1, Appendix E, 51.
19. The main camps were where the present railway houses now stand, near the southern tunnel, and the area now known as Railway Farm. The tents remained until 1901.

20. Information on the petitions suggests this
21. This information obtained from the Lands and Survey File, National Archives
22. Information obtained from N.Z.R., Wellington
23. See Chapter Six for more detailed information
24. Now the main highway north from Taihape
25. This information obtained from the Taihape Town Clerk. He suggested that it probably became known as the Railway Farm because the land had been part of a farm and possibly because it was so far away from the town
26. Information on Taihape railway houses was obtained from the Taihape Town Clerk, N.Z.R., Publicity and Advertising Department and from the District Engineer, Wanganui

CHAPTER FIVE.THE DECLINE OF FOXTON

The decline and subsequent loss of railway function had important consequences for the growth of the settlement of Foxton. The main stages in the decline of Foxton as a railway centre will be briefly restated here and, in addition, other factors affecting the growth of Foxton will be discussed.

Until 1886 Foxton and the inland railway were the most important means of access to the inland bush areas<sup>1</sup> with the volume of traffic carried on the railway stimulating activity at the port (Plate 26). Such was the volume of traffic (Tables AVIII and XIX) that alterations and extensions were made to the wharf in 1879 and 1881 to increase its frontage to five hundred feet.<sup>2</sup> Between 1874 and 1886 the population of Foxton increased by 445 from 291 to 736 (Table XX). This increase is largely attributable to Foxton's function as the "point of - entry" for the Manawatu. Although both Feilding and Palmerston North increased at faster rates in the same period,<sup>3</sup> Foxton's growth was still significant as there was a large native population in the vicinity, and, furthermore, the European population was much greater than shown by the census return since settlement actually



PLATE 26 - Foxton Wharves, 1910: coastal vessels unloading directly to railway wagons on the wharf.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.

extended along the river banks beyond the city boundaries.<sup>4</sup>

TABLE XVIII.

GOODS RECEIVED AT FORTON WHARF, 1875-76 and 1876-77

Year Ended 31st June	Goods (tons)	Bales of wool	Timber (tons)	Total Value(\$)
1876	5,950	NA	2,186	1,278
1877	3,599	703	1,619	758

SOURCE. A.J.H.R., 1876 and 1877, Reports of the Public Works Department

TABLE XIX.

RAILWAY TRAFFIC INWARDS AND OUTWARDS AT FORTON,  
1880-81 to 1885-86

Year Ended 31st March	Passenger Journeys No's	Outward Goods Tons	Inward goods Tons
1881	16,517	2,224	9,015
1882	9,499	1,830	12,844
1883	14,932	3,289	5,978
1884	21,912	4,647	7,567
1885	22,913	3,800	6,350
1886	21,302	4,263	5,842

SOURCE. A.J.H.R., 1881, 1882, 1883, 1884, 1885 and 1886.  
Reports of the Public Works Department

TABLE XX.POPULATION OF FOXTON (1874 - 1966 CENSUS DATES)

1874 - 291	1901 - 1,211	1936 - 1,605
1878 - 563	1906 - 1,330	1945 - 1,651
1881 - 728	1911 - 1,637	1951 - 2,226
1886 - 736	1916 - 1,772	1956 - 2,525
1891 - 1,223	1921 - 1,686	1961 - 2,628
1896 - 1,102	1926 - 1,697	1966 - 2,819

SOURCE. N.Z. Census of Population and Dwellings, Vol. 1

The stage was set for the ultimate decline of Foxton with the abandonment of the government plan for a west coast railway via Foxton in 1880 and the formation of the Wellington and Manawatu Railway Company a year later and its decision to connect its line with the existing government line at Longburn and not Foxton.<sup>5</sup>

Although this decision was of the utmost importance for the decline of Foxton, the town continued to grow and in the next thirty years more than doubled its population (Table X.). The reasons for the continued growth in this period include the growth of the flax trade, and the volume of traffic on the Sanson Tramway (most of which passed through Foxton) and the continued importance of the port itself.

The first flaxmill in Foxton was opened in 1869,<sup>6</sup> although much of the fibre processed was poor quality. Between 1888 and 1890 when prices of flax increased from £30 per ton in 1887 to

£41-10-0 per ton in 1889 six mills were established in Foxton, although three went out of business after the boom.<sup>7</sup> In a later boom period, beginning in 1898, a more permanent market was found for the New Zealand fibre and by 1906 eight mills were operating in Foxton. The peak of production was reached, in World War I when the price of the fibre rose to more than £50 per ton.<sup>8</sup>

TABLE XXI.

RAILWAY TRAFFIC INWARD AND OUTWARD AT FOXTON, 1890-91 to 1959-60

Year	Passenger Journeys (No's)	Outward Goods (tons)	Inward Goods (tons)
1890-91	11,292	4,864	4,395
1895-96	8,837	6,405	5,187
1900-01	13,244	7,418	10,230
1905-06	21,928	14,822	6,330
1910-11	25,714	18,335	14,727
1915-16	32,849	21,129	22,874
1920-21	26,648	11,130	22,599
1925-26	12,559	7,697	23,477
1930-31	7,403	10,019	16,188
1935-36	NA	10,599	9,544
1940-41	552	5,207	18,628
1945-46	633	3,383	18,137
1950-51	561	2,602	12,701
1955-56	653	4,972	10,987
1959-60 (a)	86	1,470	4,540

SOURCE. A.J.H.R. Annual Railways Statements, D-2  
(a) Branch line closed July, 1959

In addition to the mills operating in Foxton Township,<sup>9</sup> there were a number operating in the nearby - drained lands of the Makerua Swamp. A large amount of the fibre was transported to Foxton for shipping out of the region.<sup>10</sup> After 1918 however, the flax trade at Foxton virtually came to a standstill, and it was not until the formation of New Zealand Woolpack and Textiles in the 1930's that the trade was revived.

For some time the volume of traffic carried to and from Foxton on the Sanson Tramway compensated for the loss of rail traffic suffered by Foxton as a result of being by-passed on the Wellington-Manawatu Railway. The tramway was the most important outlet for the Sanson area with a large volume of traffic carried on the Tramway as far as Himatangi to link with the government line. By the mid 1920's, however, the Tramway, in the face of growing competition from motor transport had begun to decline in importance.<sup>11</sup>

From the 1840's Foxton had been a port of some importance, particularly during the early decades of the twentieth century (Table XXII). From about 1910, however, the tempo of activity at the port began to slow-down, mainly because of silting up of the bar and lower reaches of the Manawatu River.

The failure of the 1916 Railways Commission to recommend construction of the Levin-Foxton-Marton or Greatford Deviation provided yet another setback for Foxton and by the 1920's Foxton

had entered a period of decline which was to last until after World War II when New Zealand Woolpack and Textiles became more firmly established. From 1916 to 1945 the population of Foxton showed an absolute decline of 121 (Table XX).

TABLE XXII.

SHIPPING TONNAGE ENTERED PORT OF FOXTON, 1880-81  
to 1938-39

Year	Shipping - Tonnage Entered Port of Foxton
1880-81	10,205
1890-91	11,700
1900-01	18,213
1910-11	23,984
1912-13	25,250
1914-15	22,731
1916-17	12,593
1918-19	9,557
1920-21	3,423
1930-31	3,432
1938-39	2,589

SOURCE: N.Z. Yearbook 1881, 91, 1901, 11, 13, 15, 17, 19, 21, 31, 39

From the end of World War I the volume of traffic carried on the "branch line" had declined so that in 1932 it was closed to passenger traffic.<sup>12</sup> By 1952 only a single goods train provided a service three days a week, and, as it was operating at a loss and the area was well served by motor transport, the 1952 Railways Commission recommended the closure of the line.<sup>13</sup>

It was not until July, 1959, however, that the Foxton Branch line was finally closed to traffic.<sup>14</sup>

REFERENCES.

1. Chapter One
2. A.J.H.R., 1916, D-4, 12
3. Foxton increased by 153%, Feilding by 565% and Palmerston North by 1250%
4. Chapter One
5. Chapter Two
6. Matheson, 5
7. Matheson, 15
8. " "
9. Matheson, map on page 16 indicates that between 1869 and 1969 fifteen mills operated in the township of Foxton.
10. In 1915-16, for instance, 48,000 bales of hemp were received by Levin and Co. at Foxton Wharf. A.J.H.R., 1916, D-4
11. Chapter Six
12. New Zealand Geographical and Mileage Table 1957, 8
13. A.J.H.R. 1952, D-3, 45
14. A.J.H.R., 1960, D-2, 18

## CHAPTER SIX

### RAILWAYS AND SETTLEMENT 1920-71

The past fifty years have seen an increasing rationalisation and centralisation of railway activity. This has been associated with the concentration of activity at fewer points and the increasing efficiency of motor transport. The former trend has resulted in the railways increasingly assuming a nationwide distribution function (i.e. movement of goods and passengers between more widely spaced cities and metropolitan centres), while the latter has meant a decline in short-haul rail traffic.<sup>1</sup> The rural branch line, in particular, has declined in importance if not totally disappeared.

Between the 1920's and 1970's railway activity became centralised at fewer, but more important rail centres such as Taihape, Marton, Greatford, Feilding, Palmerston North, Longburn and Levin while towns such as Hunterville, Shannon and Otaki have retained a minor rail function (Table XXIII and Fig. 17). Utiku, Fordell, Turakina and Halcombe have lost their status as accounting stations, while during the same period the Foxton Branch Line and the Sanson Tramway ceased to operate. The flow diagram (Fig. 18) showing the number of railway services per day indicates the importance of each section of the line. The

busiest portion is from Marton south although there is a significant number of services between Palmerston North and Woodville and Marton and Taihape, while the number of services to Wanganui is comparatively low.

From a peak in 1920-21, passenger traffic carried on the railways declined in the 1920's and 1930's as the effects of motor competition and the depression were felt. Following an increase in the war years, attributable to petrol rationing and movement of service personnel, passenger traffic has continued to decline both in actual numbers carried and in comparison with other forms of transport.<sup>2</sup>

Apart from decreases in the volume of goods during the late 1920's and early 1930's and occasional and brief recessions since, reflecting fluctuations in economic activity, the volume of goods traffic carried on local railways has continued to increase. In order to regulate competition between road and rail transport and to ensure the economic survival of the railways, a system of transport licensing was introduced in 1931.<sup>3</sup> Measures introduced in 1961, however, have made for greater flexibility between road and rail transport. All restrictions on the carriage of livestock by road in competition with rail services were removed and the thirty mile limit for the conveyance of general goods in competition with the rail was lifted to forty miles. Moreover, rail charges for the conveyance

of livestock for distances between 52 and 175 miles were reduced.<sup>4</sup> Although these changes have resulted in a diversion from rail to road transport, particularly livestock carriage,<sup>5</sup> they provided an incentive for the Railways Department to go out after business and provide a higher standard of service. The department has given particular attention to the transport requirements of industry.<sup>6</sup>

The differential rating structure employment by the Railways Department has continued to operate. This has two aspects: first low - value commodities are charged low - rates and high - value commodities high - rates and, second, rates are tapered for distance.<sup>7</sup> This rating structure has played a leading role in the development function performed by the railways, and, despite criticism,<sup>8</sup> it continues to operate.

For most of the last fifty years the railway continued as an important transporter of livestock, although competition from motor transport has meant a decline in the number of sheep carried since about 1930, and the relaxation of the restriction on motor transport of livestock in 1961 meant an absolute fall in the tonnage of all livestock carried. The railway, nevertheless, continues to play a part in the continuing development of pastoralism, not only by transporting livestock but by moving agricultural produce to markets and backloading products such as fertilisers to the rural community.

**TABLE XXIII.****RAILWAY TRAFFIC, 1920-21 and 1969-70**

	Passenger Journeys (No's)		Inward and Outward Goods (Tons)	
	1920-21	1969-70	1920-21	1969-70
Mataroa	7,320	NA (a)	18,900	NA (a)
Taihape	53,563	4,655	23,082	30,916
Utiku	6,994	NA (a)	22,575	NA (a)
Mangaweka	16,809	NA (a)	20,835	28,321
Huntermville	17,393	NA (a)	26,026	NA (a)
Marton	55,488	7,516	34,831	65,754
Fordell	5,539	NA (a)	11,875	NA (a)
Turakina	7,493	NA (a)	6,742	NA (a)
Greatford	5,968	NA (a)	11,451	36,218
Halcombe	12,039	NA (a)	11,048	NA (a)
Feilding	58,307	8,305	71,627	148,251
Palmerston North	223,532	66,545	126,699	386,791
Longburn	25,289	NA (a)	36,122	65,150
Foxton	26,648	Nil	33,729	Nil
Shannon	20,619	20,888 (b)	18,848	14,096
Levin	29,976		22,321	66,498
Otaki	20,157	5,251	15,388	16,278

**SOURCE.** A.J.H.R., 1921 and 1941 Annual Railways Statement. Information for 1969-70 obtained from N.Z.R., Publicity and Advertising.

(a) Separate figures are not kept for these stations, instead they are included in those of the nearest accounting station.

(b) This includes both Shannon and Levin.

TABLE XXIV.

VOLUME OF LIVESTOCK CARRIED ON LOCAL RAILWAYS,  
1920-21 to 1969-70

Year	Outward		Inward		Total	
	Cattle & Calves	Sheep & Pigs	Cattle & Calves	Sheep & Pigs	Cattle & Calves	Sheep & Pigs
1920-21	15,753	35,224	7,425	16,618	23,178	51,842
1940-41	34,719	56,393	15,581	27,156	50,300	83,594
1960-61	37,353	39,324	30,744	21,577	68,097	60,901
1969-70	12,276	3,009	13,060	3,737	25,336	6,746

SOURCE. A.J.H.R., Railways Statement, 1921, 1941, 1961 and the 1969-70 information obtained from N.Z.R.

For some stations the movement of livestock has represented a significant proportion of total goods in and out. The high proportion of Longburn's inward goods traffic as livestock is a reflection of the proximity of the freezing works and the importance (at least until 1961) of the railway in transporting stock to the works (Table XXV). The relative importance of livestock in the movement of goods out from several other stations is an indication of the importance of these towns as centres of stock sales and centres for transshipment of stock to other areas of New Zealand. It should be noted though, that since 1961 the volume of livestock carried on the railway has declined both in absolute importance (Table XXIV) and relative importance (Table XXV).

TABLE XXV.

LIVESTOCK TONNAGES AND LIVESTOCK AS PERCENTAGE OF  
TOTAL GOODS TONNAGE

(a) OUTWARD:

	1920-21		1940-41	
	Livestock (tons)	% of total goods	Livestock (tons)	% of total goods
Levin	3,533	25.4	7,091	60.5
Longburn	5,332	22.0	5,604	26.0
Feilding	9,884	39.0	17,092	46.5
Marton	4,245	23.3	7,993	41.3
Huntermville	5,376	27.0	8,032	48.5
Taihape	2,565	23.8	8,520	46.1
	1960-61		1969-70	
Levin	9,018	51.0	2,440	18.3
Longburn	6,532	19.5	536	1.4
Feilding	13,040	23.3	2,223 (a)	3.4
Marton	9,051	40.6	1,247 (b)	4.6
Huntermville	6,384	45.5	2,157 (c)	10.9
Taihape	8,947	65.5	3,438 (d)	39.3

(b) INWARD:

	1920-21		1940-41	
	Livestock (tons)	% of total goods	Livestock (tons)	% of total goods
Levin	1,196	9.5	4,099	18.1
Longburn	3,468	28.0	5,528	46.2
Feilding	5,693	12.0	9,851	15.0
Marton	1,532	8.9	2,103	9.5
Huntermville	980	16.0	1,476	11.8
Taihape	1,173	9.1	596	3.8

(b) Cont'd.....

	1950-51		1969-70	
	Livestock (tons)	% of total goods	Livestock (tons)	% of total goods
Levin	5,755	18.4	197	.4
Longburn	14,111	52.6	5,314	19.8
Feilding	18,148	24.8	8,435 (a)	9.4
Marton	1,819	6.8	234 (b)	.6
Hunterville	2,756	18.8	913 (c)	10.8
Taihape	2,173	9.1	291 (d)	3.6

SOURCE: A.J.H.R., Railway Statement, 1921, 1941, 1961 and the information for 1969-70 was obtained from N.Z.R.

- (a) Includes Halcombe
- (b) " Turakina
- (c) " Mangaweka
- (d) " Mataroa

#### Rangitikei Valley - Main Trunk Railway

As already mentioned a number of towns had boomed during the earlier period of railway construction and timber milling in the Rangitikei Valley, but by 1920 this phase had passed and only Taihape remained showing any significant measure of growth in population.

Despite a recent decline, Taihape has remained the centre of railway activity in the Rangitikei Valley (Table XXIII and Fig. 17). Reasons for Taihape's continued importance as a rail centre include:

- (a) The centralisation of railway activity which has meant that an increasing number of railway employees have been located there.

- (b) The establishment of railway workshops in Taihape.
- (c) Taihape was a major stop before the long haul to Taumarunui and a main refreshment stop on the Auckland - Wellington express.
- (d) From the earliest times the Railways Department seem to have regarded Taihape as a centre of railway activity (by 1920 over twenty railway houses had been erected in Taihape and a number of railway employees permanently located in the town).

The volume of goods traffic through Marton, the junction of the Main Trunk and Wellington - Wanganui lines, has continued to increase. The rail traffic figures also indicate the declining importance of Mangaweka, and to a lesser extent, Hunterville as centres of railway activity. The decline of these towns can be attributed to many socio - economic factors including: the decrease in the volume of livestock carried on the railways, the centralisation of economic activity and the lack of opportunity in the rural areas for young people. The major concentration of railway houses and railway employees at Taihape and Marton and a lesser concentration at Hunterville illustrates the importance of the railway in these towns (Table XXVI).

With the exception of Taihape, which increased approximately 41% between the 1921 and 1966 census, and Marton which increased approximately 45%, all of the railway towns in the Rangitikei

TABLE XXVI.

RANGITIKEI VALLEY TOWNS - RAILWAY HOUSES AND RAILWAY EMPLOYEES

	No. of Railway Houses			No. of Railway Employees	
	Pre 1920	1925	1971	1913	1971
Mataroa	NA	NA	NA	4	Nil
Taihape	29	67	87	33	149
Utiku	1	2	4	4	2
Mangaweka	6	7	2	5	2
Ohingaiti	2	3	2	3	1
Mangaonoho	Nil	1	Nil	NA	Nil
Kaikaranga	Nil	1	2	NA	Nil
Hunterville	1	5	11	6	16
Rata	Nil	Nil	2	NA	1
Marton	9	43	49	31	86

SOURCE: N.Z.R., District Engineer, Wanganui and Publicity and Advertising Department Wellington, and A.J.H.R., 1913, D-2.

valley suffered absolute losses of population, even Hunterville which has retained a reasonably important railway function. Taihape, by virtue of its function as a railway centre and rural market and service town, has maintained its slow but steady rate of growth. The economic life of Utiku and Rata became centred upon the dairy factory, although the recent closure of the Rata factory could lead to a further decline of that settlement. Ohingaiti and Mangaweka have both lost population in recent years while the once booming Mangaonoho now comprises only a small station (Plate 15) and a scattered collection of farm houses. It would appear then, that apart from

Taihape and Marton and to a lesser extent Hunterville, the railway is exercising little positive influence on settlement of the Rangitikei Valley. Indeed the growing centralisation of railway activity and the decline in short - haul rail traffic, together with the overall national trend of a population drift towards the larger urban centres in search of economic opportunity are important factors in the decline of these settlements.

#### Other Manawatu Railways

Between 1920 and 1971 activity on the line between Otaki and Pordell became concentrated at fewer points: Marton, Greatford, Feilding, Palmerston North, Longburn and Levin with Otaki and Shannon of lesser importance (Table XXVII and Fig. 17). Although the number of factors influencing the growth of larger settlements has become more diverse, no doubt the railway function has been one factor contributing to the growth of Levin, Palmerston North, Feilding and Marton. Comparatively small settlements such as Longburn and Greatford illustrate the fact that a railway function alone will not sustain growth of a town. The continuing importance of Longburn as a railway centre can probably be attributed to the proximity of the freezing works (although volume of livestock through Longburn has declined in the last decade) and to the fact that Longburn was once the terminus of the Wellington and Manawatu Railway Company's line and between 1886 and 1959 was the junction of two lines, Greatford's importance as a railway

centre can probably be attributed to the proximity of Ohakea Air Force Base.

TABLE XXVII.

MANAWATU RAILWAYS - RAILWAY HOUSES AND RAILWAY EMPLOYEES

	No. of Railway Houses			No. of Railway Employees	
	Pre 1920	1925	1971	1913	1971
Fordell			NA	4	Nil
Wangaehu			NA	NA	1
Turakina			NA	4	5
Marton	9	43	49	31	86
Greatford			Nil	6	Nil
Halcombe	2	3	5	4	3
Feilding	1	5	12	14	25
Palmerston North			106	105	530
Longburn			7	7	7
Foxton			Nil	7	Nil
Tokomaru			Nil	Nil	3
Shannon			5	4	6
Levin			11	6	31
Otaki			14	5	35

SOURCE: N.Z.R., Publicity and Advertising A.J.H.R., 1913 D-2.

A concentration of railway employees and railway houses is evident in Marton, Feilding, Palmerston North and Otaki (Table XXVII). The importance of railway housing to Marton has already been mentioned while Palmerston North's railway houses are concentrated in the Milson area. Before the more recent housing concentration in the area, Milson was almost entirely a railway settlement. Although the volume of rail traffic in

and out of Otaki is much less than for either Feilding or Levin, Otaki has a greater number of railway houses. The fact that Otaki has two commercial sectors is a consequence of the location of the railway line one mile inland from the original settlement of Otaki. Feilding continues to be an important rural market and service town which is experiencing a slow rate of population increase.

#### General Review of Rail Influence

As stated in the introduction settlements along railway lines can be placed into several categories according to the type of rail influence.

By acting as an important agent of development and settlement of the Rangitikei Valley and the bush areas of the Manawatu, the railway had an indirect affect upon settlement. By the erection of railway housing, the Railways Department has made a direct contribution to settlement, particularly Taihape, Marton and the Milson area of Palmerston North. The settlement of Marton Junction, moreover, was established as a direct consequence of the decision to make the junction of the Main Trunk Line with the Foxton - Wanganui line one mile south of the existing settlement of Marton. By playing a leading role in the establishment of eight townships, the Wellington and Manawatu Railway Company made an important direct contribution to the settlement of the Manawatu. The route chosen for the railway has also influenced the spatial growth of some towns. Otaki has two separate commercial nuclei while the

relocation of Palmerston North's railway facilities has had a big influence on the growth of an industrial zone along the northwest boundary of the city.

The railway, has also had a positive influence on settlement in that it has been a factor contributing to the growth of many towns. For some towns (Taihape, Marton, Feilding, Palmerston North and Levin) this influence has been a permanent one, although as these settlements have grown larger the number of factors influencing them has become more diverse and it has become increasingly difficult to isolate the railway factor. The railway, then, is just one factor among many influencing the growth of a town. During the initial stages of railway construction and timber milling the railway was an important factor in the temporary booms of many settlements (Ohingaiti, Mangaweka, Mangaonoho).

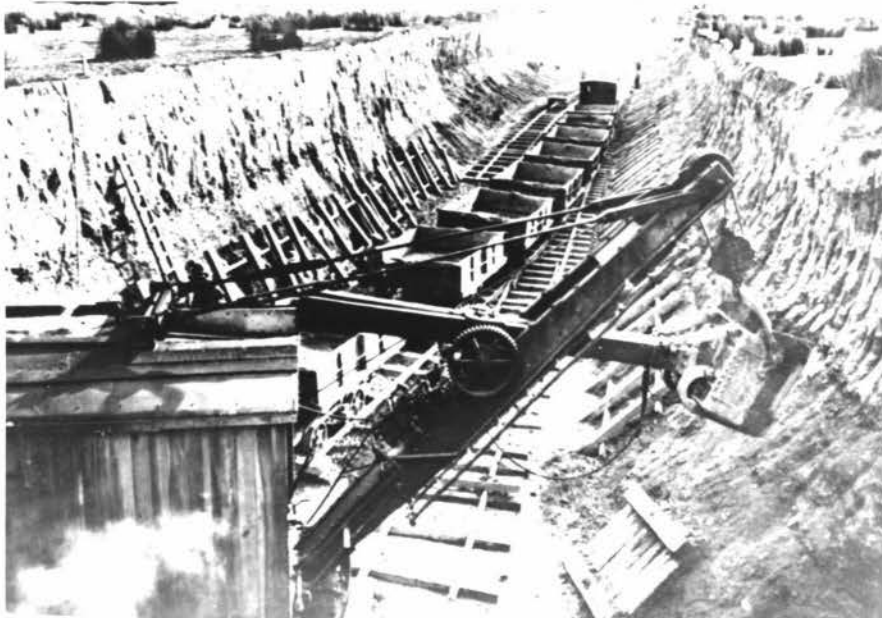
Railway decisions and the loss of a railway function have had negative effects on the growth of some towns, although the decline of many small rural settlements has been associated with other socio - economic factors. The railway influence on the decline of many small settlements is seen in the Centralised Train Control system which has meant that it is no longer necessary to maintain signalmen at all stations along the line. Consequently, many railway houses in smaller settlements have either been sold or not renewed as they have grown older. The

decision of the Wellington and Manawatu Railway Company to join its line at Longburn instead of Foxton and the decline and subsequent loss of a railway function is a major reason for the relative unimportance of Foxton today (Chapter Five).

#### The Milson Deviation

. Because of the inadequate railway yarding facilities at Palmerston North, it was proposed in 1914 to enlarge and remodel the existing yards.<sup>10</sup> The advent of the war resulted in the shelving of the programme, and it was not until the 1921 Palmerston North Railway Facilities Commission presented its report that definite proposals were made for improvements to Palmerston North's railway facilities. They recommended the relocation of the railway station on the northern side of Boundary Road (now called Tremaine Avenue). This involved a relocation of the existing line, a deviation from near Longburn Station rejoining the existing line between Terrace End and Bunnythorpe Stations<sup>11</sup> (Fig. 19). Following the recommendation of the 1925 Commission<sup>12</sup> work on the deviation commenced in 1926<sup>13</sup> (Plates 27 and 28).

Initial progress was slow, but by 1929 the number of men employed had risen from thirty to 204 and earth - moving machinery was in use.<sup>14</sup> In April, 1929 when approximately half of the excavation work had been carried out, work was stopped as the government felt that it could not be economically justified. Instead £33,000 was spent on improvements and enlargements at



**PLATE 27** - Milson Railway Deviation, Palmerston North, 1927: steam shovel operating during the early stages of construction.

Photo by courtesy: Alexander Turnbull Library  
Wellington, New Zealand.



**PLATE 28** - Milson Railway Deviation, 1971.

Photo by courtesy K.G.T.

the existing station.

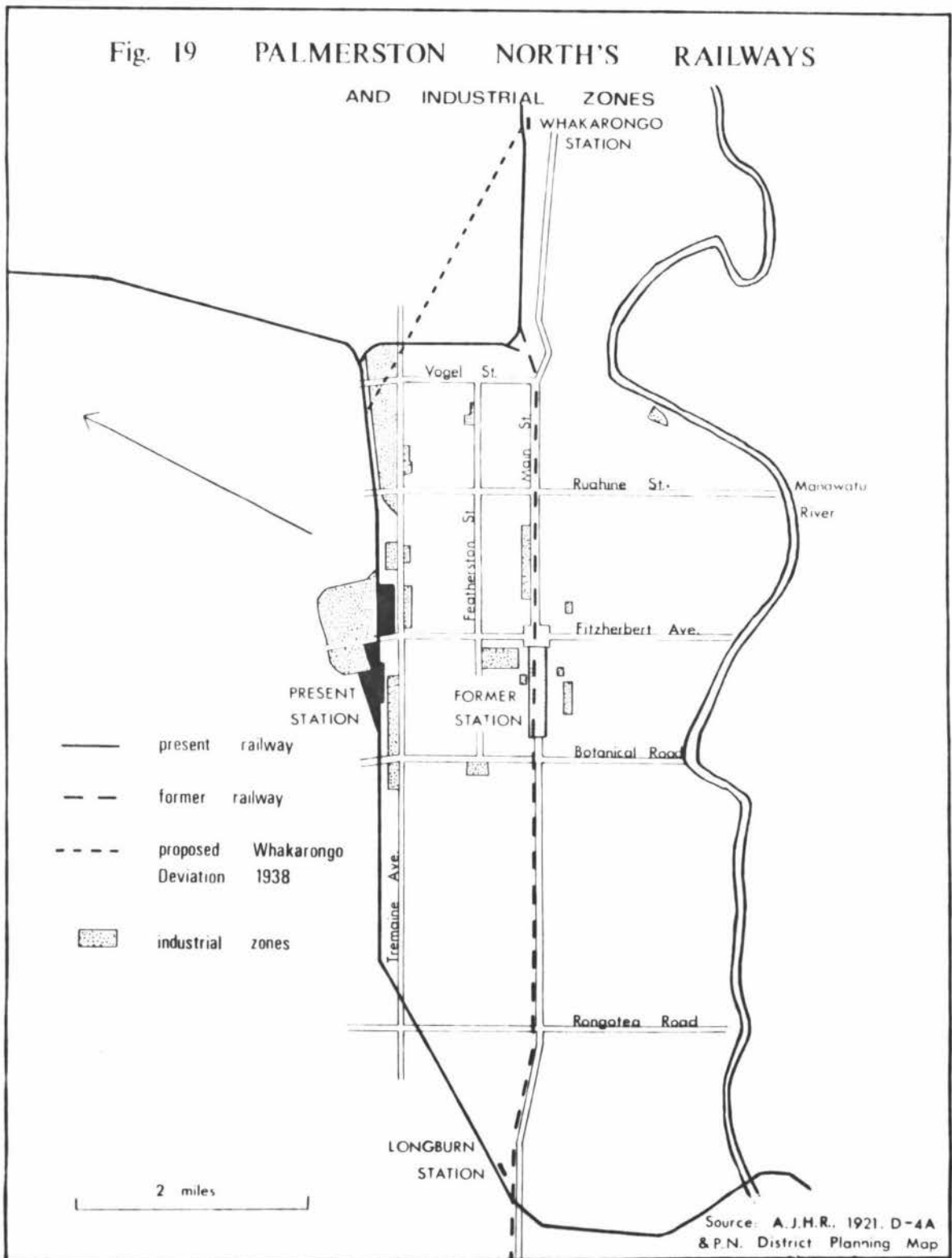
Work on the deviation did not resume until June, 1938 when the original proposals were enlarged to include the Whakarongo Deviation.<sup>16</sup> (Fig. 19). Work continued until March, 1941 when, due to a shortage of manpower, all work was again suspended.<sup>17</sup> The next phase of development began in 1954 when a goods siding, approximately two miles in length was constructed at Milson to connect with the Main Trunk at Roslyn.<sup>18</sup> Construction of the Longburn - Milson Deviation recommenced in 1956,<sup>19</sup> the Whakarongo Deviation having been abandoned, and it was opened for goods traffic in July, 1959,<sup>20</sup> and for passengers in 1963.<sup>21</sup>

#### Effect of Relocation of Railway Facilities to Palmerston North

When Palmerston North's railway facilities were finally moved to Tremaine Avenue in 1963, a 27 acre block of public - owned land in the centre of Palmerston North and a median strip the length of Main Street became available for redevelopment. It was decided to reconstruct Main Street to its former width of two chains and to re-establish cross links at Pitt and Cook Streets. In addition a partial motorway south has been constructed. Nothing has been done to develop the median strip on Main Street East. The Reynolds Plan<sup>22</sup> has provided a framework for the development of the former railway land, although as yet little has been done to implement the recommendations.

The report recommended that the railway land between Pitt

Fig. 19 PALMERSTON NORTH'S RAILWAYS



Street and the Square should be given over to civic amenities (theatre, conference rooms and hall) and offices and shops, with the area closed off to motor traffic. It was recommended that the remainder of the former railway land be developed for low rise flats and town houses<sup>23</sup>.

One result of the location of railway facilities to the southwest of the Square was that the C.B.D. tended to extend towards the northeast and northwest away from the railway yards i.e. up Broadway and Rangitikei Street. The Reynolds Report strongly recommended that by redevelopment of the railway land this extension of the C.B.D. could be halted.<sup>24</sup>

The relocation of railway facilities has meant that an industrial zone has developed adjacent to the railway along the northwest boundary of the city (Fig. 19). Two main factors have encouraged the location of industry in the vicinity of railways. Firstly, the railway provides the transportation facility essential to the operation of some industry, and secondly, the presence of a railway tends to lower the desirability of adjoining land for other uses. Only those industries with a sufficiently large through put of raw materials and finished goods, however, can justify the construction of a rail siding. Hence rail sidings are only of limited significance for industry in Palmerston North. Only firms the size of Steel Benders, Golden Bay Cement, M.S.D. Speirs and Boniface Brothers can justify a rail siding.

### The Turakina - Okoia Deviation

Work on the Turakina - Okoia Deviation, designed to improve grades and curves on the existing line between Turakina and Okoia, began in 1936. The length of the deviation was just over ten miles, shortening the existing line by about  $3\frac{1}{2}$  miles.<sup>25</sup> Major works on the line included tunnels near Fordell and Turakina, bridges over the Wangaehu and Turakina Rivers, and the formation of station yards at Fordell and Wangaehu.<sup>26</sup> Labour for the construction work was provided as much as possible by the unemployed of Wangaehu with accommodation provided at Fordell, Turakina and Denlair.<sup>27</sup>

By mid 1931 the main camp at Fordell, consisting of 44 married men's quarters, fourteen staff cottages, and various service facilities, had been built and occupied. Two camps at the Fordell Tunnel and one at the Turakina Tunnel, provided additional accommodation for 130 men. At this time 300 men were employed on the works.<sup>28</sup> One year later fourteen married quarters had been built at Denlair, and, at the Reynolds Camp 26 married quarters and three houses had been erected, bringing total accommodation on the project up to ninety married quarters and fifty single quarters.<sup>29</sup>

Early in 1943, with the project practically completed, all work on the deviation was stopped.<sup>30</sup> By March, 1943 a number of buildings, including camps at each end of the Fordell Tunnel, had already been dismantled and several suitable structures

transferred to other works or military camps, and the number of men employed had fallen to 153.<sup>31</sup> In the following year other accommodation facilities were transferred and re-erected for temporary accommodation on farms.<sup>32</sup> Construction work recommenced in 1943 with accommodation restored at Turakina and Fordell<sup>33</sup> and the deviation was eventually opened for traffic in December, 1947.<sup>34</sup>

This deviation has exerted an influence on settlement of the area in two ways. First, the actual construction work resulted in the creation of temporary settlements at the site of the works, settlements which were abandoned once the work was completed. Secondly, the loss of a railway function to both Fordell and Wangaehu has been one factor influencing the post-war growth of these settlements, although in the case of the latter, the more recent deviation of the main road to by-pass the town has probably been a more significant factor.

#### Decline of the Foxton Branch Line

A feature of the last fifty years has been the closure of the uneconomic Foxton Branch Line.

When the Foxton - Longburn Railway became a branch line in 1886 the volume of railway traffic through Foxton initially declined over the next few years, but began to increase again in the early twentieth century (Chapter Five). Traffic remained at fairly high levels until the mid 1920's when the line began to suffer from competition from road transport. In 1932 the

line was closed to passenger traffic.<sup>35</sup> Apart from an increase in the early war years, the volume of goods through Foxton continued to decline until in 1952 the eight stations (Foxton, Motuiti, Himatangi, Bainesse, Rangiotu, Rangitane, Tiakitahuna and Kerere) on the line were served by a goods train on only three days a week.<sup>36</sup>

The Railways Commission noted that the branch line was operating at a loss giving the following figures for 1951.<sup>37</sup>

Coaching Revenue	Goods Revenue	Total Revenue	Branch Expenditure	Operating loss	Loss per mile
£101	£4324	£4425	£9363	£4938	£247

As the area was well served by road transport, both, New Zealand Railways passenger and goods services and private operators, the Commission recommended that the line be closed as soon as possible.<sup>38</sup> It was not until July, 1959, however, that the line was finally closed.<sup>39</sup>

Although the seven stations on the line between Foxton and Longburn were never important railway centres, it is interesting to note the size and present - day functions performed by these settlements. Tiakitahuna (157 in 1966), Karere (67), Rangitane (no population figures available) and Motuiti (129) do not exist as recognizable nucleated settlements, while Himatangi Corner, the former junction of the Foxton Branch Line and the Sanson Tramway has no more than a service station and restaurant and a few houses. Bainesse (135) has a collection of houses and a school, while the most important of these settlements, Rangiotu

(190), has a service station, a post office, hall, school and a small collection of houses.

### The Sanson Tramway

For nearly seventy years the Sanson Tramway provided a useful service for Manawatu and part of Rangitikei County. Initially it carried a variety of goods between Sanson and Himatangi (Table XXVIII), but later its function was restricted to the transport of bulk goods, especially road metal. Metal hauled by the tramway from the Rangitikei River was used for metalling roads in the Sanson and Foxton area.<sup>40</sup>

By 1924 the tramway was operating at a loss most months as the best paying freights and much of the passenger traffic had been diverted to road transport.<sup>41</sup> Even though it was competition from short - haul road transport which resulted in the ultimate decline of the tramway, from an early date it had often operated at a loss (Table XXIX). During the depression three trips from Sanson to Himatangi were made each week and metal was moved from Pukenui as required.<sup>42</sup> It still paid consignors to send bulk goods such as metal, coal, manures, grain, livestock and timber by train, but other goods more easily handled and more profitable had been transported by road for many years.<sup>43</sup> During the war years the tramway served to transport materials for the construction of Ohakea Aerodrome.<sup>44</sup> The Manawatu County Council finally closed the tramway in November, 1945.<sup>45</sup>

TABLE XXVII.TRAFFIC ON SANSON TRAMWAY, 1899 - 1915

	1899	1904	1909	1914	1915
Grass Seed (tons)	Nil	Nil	291	311	101
Grain (tons)	911	834	620	608	589
Chaff (trucks)	50	51	94	27	240
Minerals (tons)	585	542	575	861	1183
Manure (tons)	135	186	292	579	557
General Merchandise (tons)	697	903	1415	1930	2127
Wool (bales)	2105	1595	2481	2647	1992
Posts & Firewood (trucks)	109	100	84	79	68
Timber (su. feet)	187,000	141,000	691,000	256,000	352,000
Sheep (trucks)	Nil	Nil	Nil	13	364

SOURCE: A.J.H.R., 1916 Exhibit 8, 198

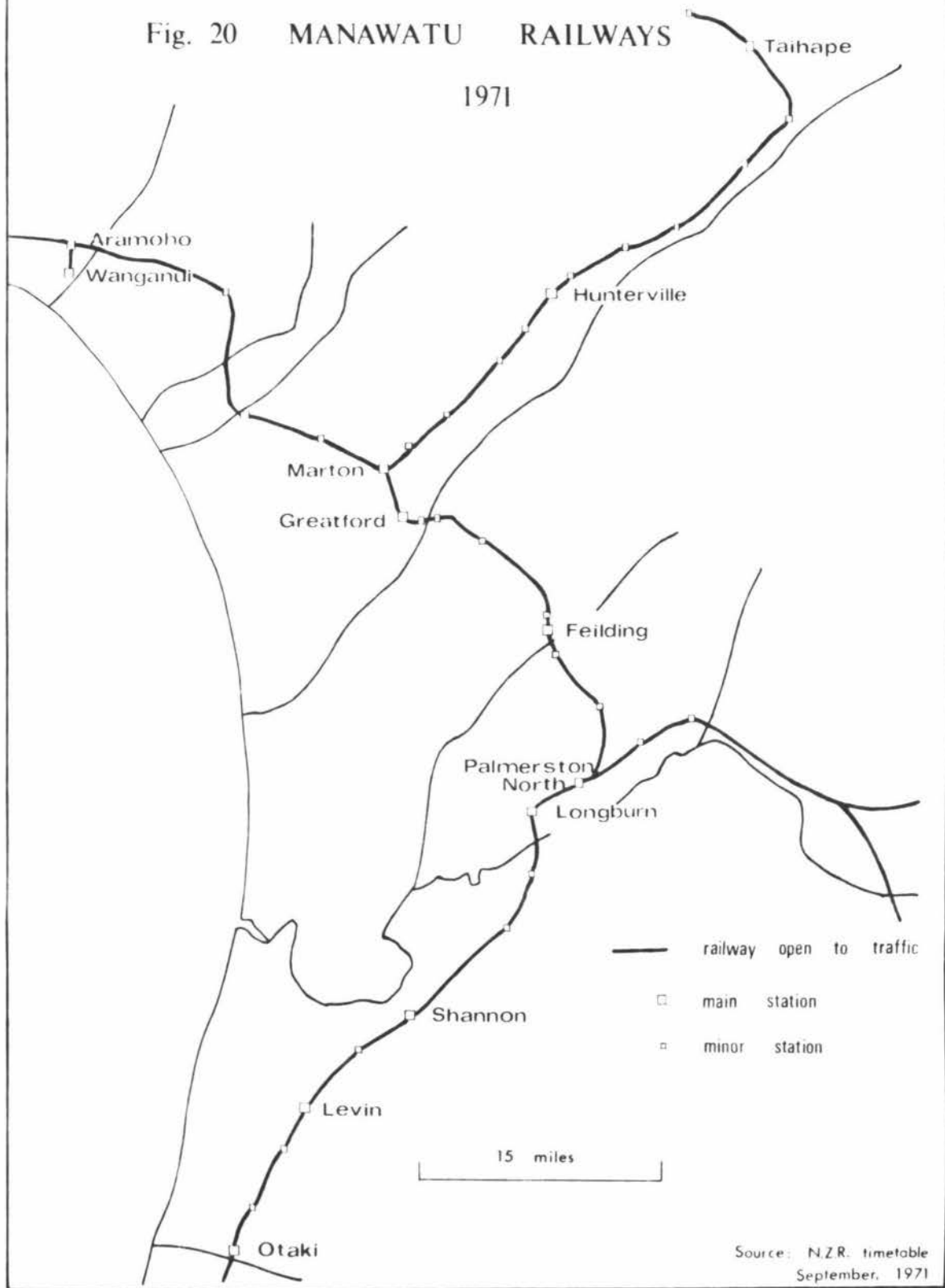
TABLE XXIX.RETURN OF RECEIPTS AND PAYMENTS OF SANSON TRAMWAY, 1895 - 1916

	Receipts £	Payments £		Receipts £	Payments £
1895	849	1057	1906	2459	2342
96	1180	1422	07	2339	2688
97	1440	1258	08	2948	2868
98	1776	2029	09	3020	3603
99	1750	1809	10	3334	3257
1900	1940	2051	11	4210	4652
01	1986	2034	12	4157	5953
02	2397	2151	13	4822	4475
03	2873	3196	14	4308	4715
04	3227	3690	15	4192	4307
05	3119	2537	16	5622	5400

SOURCE: A.J.H.R., 1916 D-4, Exhibit 2, 19

Fig. 20 MANAWATU RAILWAYS

1971



Summary.

Between the 1920's and 1970's the railway continued to be a factor influencing the growth of settlement in the area, although it was not as influential as it was in the initial stages of settlement and development of the area. The railway, moreover, was just one factor among many influencing the growth of settlement, rather than the dominant factor it often was in the early days of settlement. A feature of railway activity was its centralisation at a smaller number of more important stations, where the railway is one factor influencing the growth of that particular town. The decline or lack of growth of many small settlements can be partially attributed to the decline of the rail function of that town.

A feature of the period has been the post-war decline of passenger traffic on the railway, and a post-war growth of goods traffic. Pre-war fluctuations in the volume of railway traffic were associated with the initial impact of road competition and the depressed economic conditions of the 1930's. Despite the post-war growth of goods traffic the Railways Department in finding it increasingly difficult to operate at a profit. Competition from road transport became so severe that in 1931 the Transport Licensing Act was passed with the object of regulating competition between road and rail transport. The system of licensing still operates today, although measures taken in 1961 made for greater flexibility in the choice of transport. The financial losses experienced by the railway forced them to change their developmental policy to a policy emphasizing the need to run the railways at a

profit while at the same time assisting development of the country. A consequence of this policy has been the closure of many uneconomic branch lines e.g. the Foxton Branch Line was closed in 1959, and the Manawatu County Council was forced to close the Sanson Tramway in 1946.

This period has also seen other changes made to the rail network (Fig. 20). The Turakina - Okoia Deviation shortened the existing line by  $3\frac{1}{2}$  miles and by-passed both Wangaehu and Fordell. Of more significance is the Milson Deviation which has meant a relocation of railway facilities in Palmerston North and resulted in the growth of an industrial zone to the northwest of the city, and has left a large area in the centre of town available for redevelopment.

REFERENCES

1. The average length of haul for goods traffic is now about 134 miles, whereas in 1929 it was 64 miles, and of much importance to the railways was the fact that just over 40% of total railway revenue was derived from hauls of under fifty miles (A.J.H.R., 1930, H.40, 37).
2. See Figs. 1 and 2 in the Introduction.
3. See Introduction for more detail.
4. A.J.H.R., 1962, D-2, 3,
5. The number of cattle and calves carried in 1961-62 increased only 0.46% from the previous year and the number of sheep and pigs fell 12.36%.
6. A.J.H.R., 1962, D-2, 13.
7. See Introduction.
8. A.J.H.R., 1960, D-2, 3.
9. The recent population losses experienced by Marton suggest that the town does not offer sufficient socio-economic opportunities to retain its young people.
10. A.J.H.R., 1914, D-2B, 12.
11. A.J.H.R., 1921, Session II, D-4A.
12. A.J.H.R., 1925, D-2A, 25.
13. A.J.H.R., 1926, D-1, Appendix B, 25.
14. A.J.H.R., 1929, D-1, Appendix B, 48.
15. A.J.H.R., 1929, D-1, IX.
16. A.J.H.R., 1939, D-1, XVII.
17. A.J.H.R., 1941, D-1, Appendix B, 24.
18. A.J.H.R., 1954, D-2, 24.
19. A.J.H.R., 1957, D-2, 24.
20. A.J.H.R., 1960, D-2, 17/

21. A.J.H.R., 1963, D-2, 16.
22. Kingston, Reynolds, Thom and Allardice, 1969 "City of Palmerston North Central Area Proposals Development Report"
23. Reynolds Report, 46-48.
24. Reynolds Report, 50.
25. A.J.H.R., 1937-38, D-1, Appendix B,34.
26. A.J.H.R., 1938, D-1, Appendix B,32.
27. A.J.H.R., 1937-38, D-1, Appendix B,34.
28. A.J.H.R., 1937-38, D-1, Appendix B,34.
29. A.J.H.R., 1938, D-1, Appendix B,38.
30. A.J.H.R., 1943, D-1, Appendix B,2.
31. A.J.H.R., 1940, D-1, Appendix B,25.
32. A.J.H.R., 1941, D-1, Appendix B,24.
33. A.J.H.R., 1944, D-1, Appendix B,2.
34. A.J.H.R., 1948, D-1, 11.
35. Railways Geographical and Mileage Table, 8.
36. A.J.H.R., 1952, D-3, 44.
37. A.J.H.R., 1952, D-3, 44.
38. A.J.H.R., 1952, D-3, 45.
39. A.J.H.R., 1960, D-2, 18.
40. Cassells, V.
41. Cassells, 55.
42. Cassells, 61.
43. Cassells, 61.
44. Cassells, 63.
45. Cassells, 72-73.

## CHAPTER SEVEN

### CONCLUSION

The dynamic relationship between railways and settlement has been characterised by continuing change. The continuing influence of the railway on settlement of the Manawatu and District has varied both in time and space, being more marked during the initial stages of settlement of the bush areas than later and having a greater influence upon some settlements than others.

This relationship between railways and settlement has been influenced by many factors, three of the more important being:

- (a) government policy on railway development.
- (b) the overall political environment of the time.
- (c) the specific decision-making processes involved in the choice of routes.

Government policy initially stressed the developmental role of railways tending to regard them as "adjuncts to settlement". An integral part of this development policy was differential rating which enabled low-value bulk goods to be transported long distances relatively cheaply and facilitated the development of more remote areas. In serving as important agents of development and settlement Manawatu railways helped break down the isolation felt by the early settlers and facilitated the development of the inland bush areas for closer settlement. Not only did the railways provide a relatively quick and efficient transport service,

but they also enabled the commercial exploitation of timber to proceed and later made a notable contribution to the development of pastoralism.

The political environment of the time also influenced the growth and direction of the railway network. The early development of railways in the 1870's, for instance, was closely associated with Vogel's Public Works and Immigration Policy. Moreover, the abandonment of the proposed government line from Wellington to Foxton as well as the connection between Woodville and Bunnythorpe were consequences of the defeat of Grey's Government in 1879 over alleged excessive expenditure. Following the report of the 1880 Railways Commission a number of railway leagues and railway companies emerged to lobby for continued railway development in their particular area. One group of Wellington businessmen formed the Wellington and Manawatu Railway Company which negotiated a contract with the government enabling it to construct a railway from Wellington to the Manawatu in return for grants of land.

As settlement invariably follows main lines of communication, the decision making processes and the consequent choice of railway route have been of critical importance to subsequent settlement. An interesting example is that route chosen by the Wellington and Manawatu Railway Company. This company, seemingly motivated by possible profits from traffic returns and land sales, chose to make an inland connection with the Foxton - Wanganui Railway at Longburn

thereby, passing through its allocated and purchased lands, whereas the government in its original plans had seemed to favour the shorter and cheaper coastal route to Foxton. The early decision to by-pass Foxton proved a vital factor in the subsequent decline of Foxton and the growth of inland towns. If the company had chosen to link with Foxton, and, furthermore, if the 1916 Commission had approved the Levin-Foxton-Sanson Deviation, the ultimate pattern of settlement on the lowland areas of the Manawatu might have been very different.

The operations of the Wellington and Manawatu Railway Company exerted a considerable influence on the development and settlement on the lands between Palmerston North and Wellington. As well as running a profitable railway enterprise the company was responsible for surveying, pre-sale inspection and the final sale of approximately 240,000 acres of rural land and played a leading role in the establishment of eight townships. This early role of the railway is today evidenced in several towns having names of company directors e.g. Levin, Shannon and Linton. As well as directly promoting settlement the company was also responsible for the drainage and sale of parts of the Makerua Swamp.

Another direct contribution railways made to settlement was the erection of groups of department houses for railway employees in a number of towns especially Taihape, Marton Junction and Milson in Palmerston North. Workmen engaged on

construction of the Main Trunk Railway, furthermore, actually ultimately settled on land in the vicinity of Mangaweka and Taihape in the late 1890's.

By providing an efficient form of transport and by facilitating movement of people and goods both into and within the inland bush areas the railway served as an important agent of development and settlement of a large area. The railway, for instance, facilitated the movement of timber and flax and so made early saw-milling and flax milling economically viable. Even where settlement had been established prior to railway construction, a railway connection stimulated the further expansion of settlement in that area, with towns such as Marton, Feilding and Palmerston North gaining a particular benefit from railway activity.

The physical layout of some towns has also been modified by the results of railway construction. The railway settlement of Marton Junction, for instance, rapidly expanded to be incorporated within the borough of Marton. Similarly the settlement of Otaki Railway, approximately one mile from the original Otaki settlement is now part of the main settlement, while the more recent removal of railway facilities from the centre of Palmerston North meant changes to the layout of the city.

A significant railway function was a major factor in the early growth of several towns, many of which have maintained

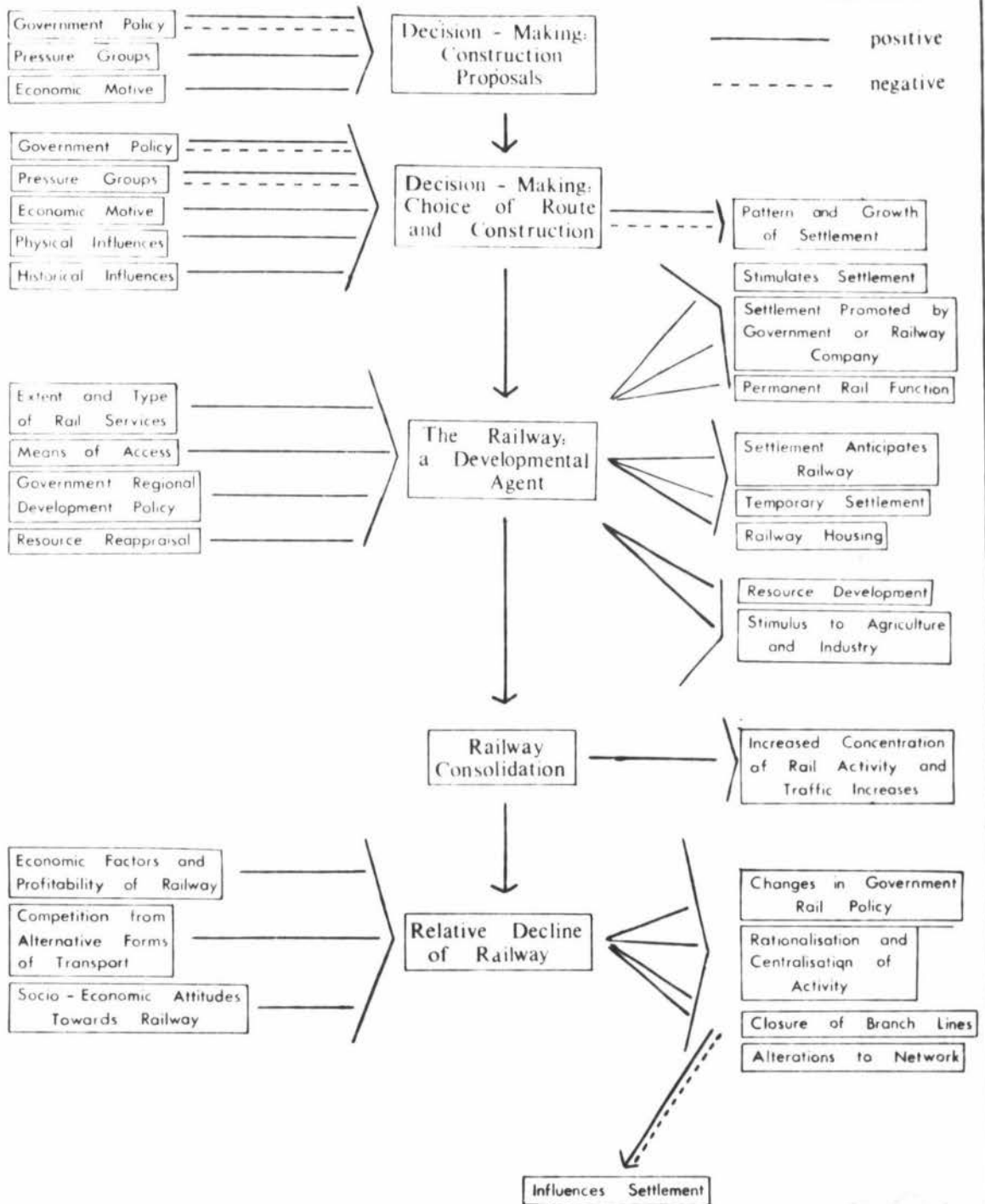
that function. A good example is Taihape whose early growth was based on the stimulus given it by railway construction workers and a subsequent railway function. Today Taihape continues as the centre of railway activity in the Rangitikei area, and by providing employment for 149 people, the railway is easily the most important single economic activity in Taihape. Marton, Feilding, Levin and Palmerston North have also maintained important railway functions, although the railway factor has been of varying importance in influencing the growth of these settlements. In some cases the railway only exercised a transitional or temporary influence during the initial period of railway construction and timber milling. Several Rangitikei towns such as Mangaonoho, Ohingaiti and Mangaweka had brief booms during this period only to decline thereafter.

Although the railway often exerted a positive influence on the growth of a town this has not always been the case. The decline of Foxton as a result of a railway route decision has already been mentioned while the speculative settlement of Mugby Junction was planned in anticipation of becoming the junction of the east and west coast lines. If the Woodville - Mugby Junction connection had been made the "city" of Bunnythorpe and Mugby Junction might possibly have played a decisive role in the Manawatu. The increasing rationalisation and consequent centralisation of railway activity today has meant the decline in importance of the railway function in a number of small settlements, thus contributing to their decline.

Since construction of the Poxton Tramway began a century ago the relationship between railways and settlement has varied considerably. During the initial period of railway construction and settlement the railway acted as a significant agent of development and settlement. By about 1910 this period had passed, and, following a period of consolidation of railway activity, peak volumes of railway traffic were attained in the early 1920's. Until then the railway was easily the most important form of land transport. Since the 1920's however, the railway has experienced increasing competition from motor transport and its relative importance has declined. This has resulted in two measures which have affected the relationship between railways and settlement. The increasing rationalisation has resulted in centralisation of railway activity at fewer stations and the consequent closure of many rural branch lines and stations. Figure 21 presents in diagrammatic form the various stages which the railway settlement relationship has passed through in the Manawatu and District. Factors contributing to each stage and the influence of the railway on settlement in each stage are summarised. This flow - diagram could probably have application for railway development in other parts of New Zealand.

Although the Railways Department is making a concerted effort to improve the quality and usefulness of its services, it seems likely that the railway as a transport form will continue to decline in overall relative importance, and, in particular

Fig. 21 DIAGRAM TO SHOW THE CHANGING NATURE OF THE RELATIONSHIP BETWEEN RAILWAYS AND SETTLEMENT



short-haul goods and passenger traffic will continue to decline in importance. The influence the railway exerts on settlement will probably become more localised and generally of less importance in the future.

SOURCES CONSULTEDPrimary

Appendices to the Journals of the House of Representatives:  
Public Works and Railways Statements

Annual Reports of the Wellington and Manawatu Railway Company  
Ltd 1882-1909

New Zealand Official Yearbooks

New Zealand Gazette

Statutes of New Zealand

Additional information was also obtained from National Archives,  
the Department of Lands and Survey and New Zealand Railways

New Zealand Department of Statistics Population Census 1874-1966

Thesis

- |           |        |      |   |
|-----------|--------|------|---|
| Boniface, | A.G.   | 1947 | <u>Foxton: Its Site and Changing Function (C.U.)</u>  |
| Carr,     | M.A.   | 1966 | <u>Market Town in Transition: a study of Industrial Growth in Levin (V.U.W.)</u>  |
| Ching,    | D.M.   | 1963 | <u>Levin: A Town in Transition Between a Rural Service Centre and a Manufacturing Centre (V.U.W.)</u>   |
| Gerrard,  | J.B.   | 1949 | <u>The Significance of Railways in the Auckland Province: Their Influence on Development and Settlement and Their Role as a Means of Passenger Transport (A.U.)</u> |
| Hely,     | A.S.M. | 1947 | <u>Some Effects on Changes in Transportation Upon the Economic Development of the Manawatu, 1816-1946 (V.U.W.)</u>  |
| Hills,    | T.     | 1949 | <u>Aspects of the Development and Settlement of the Rangitikei Valley (C.U.)</u>  |
| Hunt,     | A.N.   | 1968 | <u>Foxton: A Small Town in the Manawatu (M.U.)</u>  |
| McQueen,  | A.E.   | 1966 | <u>Report on the Rural Branch Line (V.U.W.)</u>   |

- |                  |          |      |   |
|------------------|----------|------|---|
| Mills,           | G.A.     | 1928 | <u>O'er Swamp and Range: A History of the Wellington and Manawatu Railway Company Limited, 1882-1909 (V.U.W.)</u>               |
| Moar,            | N.T.     | 1955 | <u>The Origins of Taihape: A Study in Secondary Pioneering (V.U.W.)</u>   |
| Oliver,          | R.G.     | 1963 | <u>The Impact of Communications in Manawatu - Kairanga, 1874-1916 (V.U.W.)</u>  |
| Page,            | A.J.     | 1928 | <u>Manawatu: From the Earliest Times to 1900 (C.U.)</u>   |
| Tannock,         | J.L. M'C | 1968 | <u>The Growth of Shannon: The Impact of Economic Change on a Country Town (M.U.)</u>  |
| Topp,            | E.Z.     | 1947 | <u>The Contribution of Railways to the Settlement and Development of the South Island of New Zealand (U.N.Z.)</u>               |
| Warren,          | U.R.C.   | 1969 | <u>Geography and Planning in Palmerston North (M.U.)</u>  |
| <u>Secondary</u> |          |      |   |
| Adkin,           | G.L.     | 1948 | <u>Horowhenua: its Maori Place - Names and Their Topographic and Historical Background</u>                                      |
| Anderson,        | H. Grant | 1959 | <u>The Element of Change in Palmerston North N.Z.G. Vol XVI, 2, 115-130</u>   |
| Buick,           | T.L.     | 1903 | <u>Old Manawatu</u>   |
| Cassells,        | K.R.     | 1962 | <u>The Sanson Tramway</u>   |
| Clevely,         | R.       | 1953 | <u>Bunnythorpe and District, 1872-1952</u>  |
| Cockayne,        | L.       | 1928 | <u>The Vegetation of New Zealand</u>  |
| Croucher,        | W.J.     | 1954 | <u>Idle Hours - Tales of Country and Village Life Around Sandon, 1871 - 1939</u>  |
| Franklin,        | S.H.     | 1960 | <u>The Village and the Bush Pacific Viewpoint, Vol 1, No. 2</u>   |
| Gibson,          | T.       | 1936 | <u>The Purchase and Settlement of the Manchester Block: An Account of the Development of the Feilding District, New Zealand</u> |

Kingston, Reynolds, Thorn and Allardice		1969	<u>City of Palmerston North Central Area Proposals Development Report</u>
Matheson,	I.R.	1969	<u>The Fortunes of Flaxmilling (1869-1969) in Hunt A.N. (ed) Flax Through the Century</u>
McGavin,	T.A.	1958	<u>The Manawatu Line</u>
Peterson,	G.C.	1952	<u>The Pioneering Days of Palmerston North</u>
Peterson,	G.C.	1965	<u>Pioneering the North Island Bush in Walters, R.F. (ed) Land and Society in New Zealand 66-79</u>
Simcox,	F.S.	1952	<u>Otaki: The Town and District</u>
Wallace,	W.A.	1957	<u>New Zealand Railway Traffic Patterns N.Z.G. Vol XIII, 131-150</u>
Warr,	E.C.R.	1964	<u>The Rise of the Pastoral Industries and The Growth of Communications in Saunders B.G.R. (ed) Introducing Manawatu, 148- 180 and 129-145</u>
Waterson,	D.	1965	<u>Transport in New Zealand 1900-30, in Walters, R.F. (ed) Land and Society in New Zealand 120-138</u>

### Other

Cyclopaedia of New Zealand, 1897

Cyclopaedia of New Zealand, 1908

Encyclopaedia of New Zealand, 1963

National Resource Surveys 1962 Bay of Plenty  
1964 Northland

Railways Geographical and Mileage Table, 1957

New Zealand Railways Staff Bulletin, Vol 5, No. 5, 1956

Wanganui Group - New Zealand Railway and Locomotive Society, 1958  
The Foxton Branch and Sanson Tramway

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Plan of Town Sections - Bunnythorpe - Manawatu (January, 1875)

Plan of the Township of Mugby Junction and Suburban Sections  
(April, 1881)

Appendix II

Plan of Township of Tokomaru (June, 1887)

Appendix III

Plan of Marton Junction Township (July, 1902)

Plan of part of Town and Suburbs of Marton Junction (1904)

Appendix IV

Petitions from Co-operative Workmen on Main Trunk Railway