

IS Kawerau – Labour Resources Specification Study

1. Background

As at the 2013 Census, the Bay of Plenty (BOP) region was home to an estimated 271,248 people, accounting for a little over six percent of New Zealand's population. By virtue of its geographical location, the Kawerau District is in the fortunate position of being accessible by the majority of this workforce. Being within reasonable commuting time (~1 hour) of almost the entire Bay of Plenty region opens up employment opportunities for residents in other main centres, with the linkages between these centres offering broad lifestyle and employment location choices.

In addition to Kawerau's local population of 6,363, the following centres are home to residents that would likely consider employment opportunities at Kawerau. Total populations in these areas are:

- Tauranga – 114,789 residents
- Western Bay – 43,695 residents
- Rotorua – 65,280 residents
- Whakatane – 32,688 residents
- Opotiki – 8,433 residents

Source: 2013 Census

Naturally, these populations are not indicative of the available labour pool. Workforce availability can be displayed through the BOP population's age distribution, as shown in Figure 1. In general, those in the 0-14 and 65+ age brackets are not considered available for work, where in reality workforce participation (depending on educational commitments and other factors) may not commence until the age of 18 years or older. It is also common in modern times for people to continue working well beyond the age of 65.

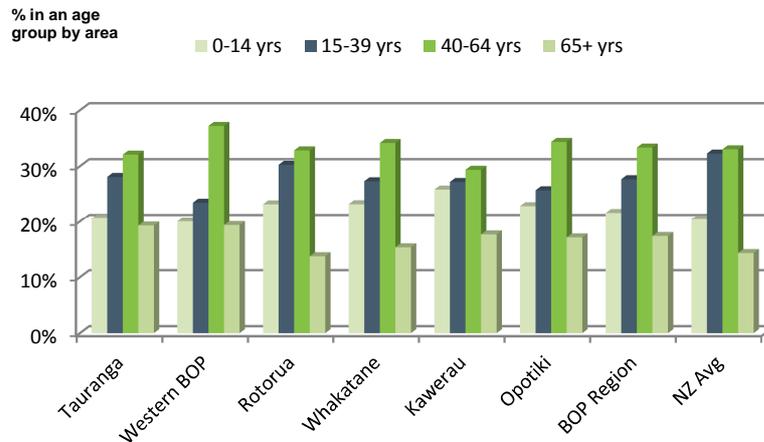


Figure 1: Age distribution of the Bay of Plenty Region

Source: 2013 Census

2. Employment sectors and industries

Employment in the primary sector is relatively high in the BOP compared to the rest of New Zealand. However, as shown in Figure 2, Kawerau's employment is mainly based in the manufacturing, processing and transport industries. As one of New Zealand's major wood processing hubs, Kawerau offers the technical expertise and infrastructure to manufacture value-added products from forestry, as well as the manufacture and maintenance services provided by the specialist engineering sector developed to support Kawerau's industry.

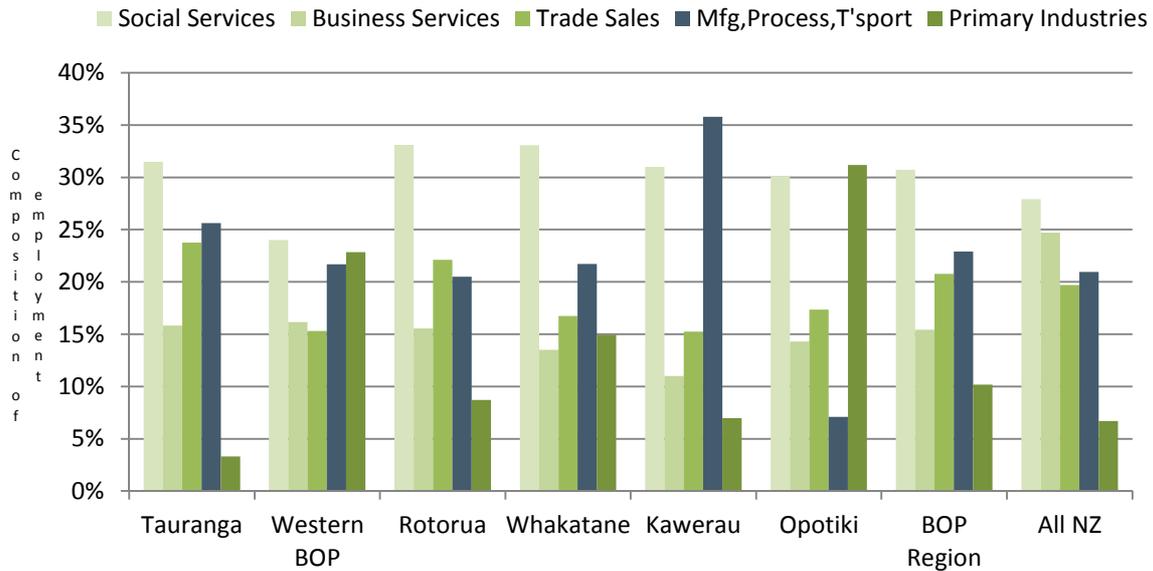


Figure 2: Composition of employment by BOP Territorial Authority 2013

Source: 2013 Census

The forestry sector, downstream processing entities and the engineering industry are all active exporters. Almost one third of BOP employment is in export-related industries, which is substantially greater than the national rate of 24% as at 2010 [1]. This figure will be higher in Kawerau due to the scale and international focus of the manufacturing companies located there.

In the BOP region, wood and paper product manufacturing, along with forestry and logging account for close to 10% of the Region's GDP. The contributions are even higher in the Eastern Districts of the BOP and further still in the Kawerau District [2]. The overwhelming importance of the forestry sector to Kawerau is evident, with the top seven industries in terms of employment all associated with the sector. As a general statistic, workers in Kawerau are 29 times more likely to work in the wood & paper product manufacturing sector than nationally [2].

3. Major local employment industries

Kawerau is home to the Tasman mill complex, a heavy industrial zone developed specifically to service the forestry sector through the provision of wood processing infrastructure and facilities. Wood processing activities include the manufacture of pulp, newsprint, sawmilling, tissue and hygiene products. While this complex is the largest industrial site in the world using direct heat from geothermal energy, there is still considerable potential to provide large scale geothermal services to industries that wish to locate in Kawerau, including aquaculture, forestry, waste processing, resource recovery, and energy generation/export. This expanded industrial activity will be further enabled by an additional 113 hectares of land recently re-zoned industrial.

Kawerau was built on the forestry and wood processing industries; at census date in 2013 there were 2,265 full and part time jobs available in Kawerau although only 47% of these jobs are undertaken by Kawerau residents. The remaining 53% of employees commute from outside the district - namely Whakatane, Rotorua, Opotiki, Western Bay and Tauranga.

The existing forestry and wood processing industries have also supported the development of a cluster of highly skilled and internationally competitive heavy engineering and construction companies. These industries form the heart of the Kawerau economy, with engineering companies now also exporting their products and services to overseas clients and non-related industries. They

possess internationally competitive skills in the manufacture, fabrication and servicing of equipment and components for the wood processing, pulp & paper, energy, marine and construction sectors [3]. The following lays out key information for employment in Kawerau as at 2013: [4]

Main industries:

- Wood Manufacturing – employing 750 people or 33% of the workforce. This includes sawmilling, timber re-sawing & dressing, veneer & plywood manufacturing, pulp & paper manufacturing, corrugated paperboard and sanitary paper.
- Engineering – employing 186 people or 8% of the workforce. This includes fabricated metal manufacturing and machinery & equipment manufacturing.
- Construction – employing 219 people or 10% of the workforce. This includes building construction heavy & civil engineering construction and construction services.

Main occupations:

- White collar and service workers – 1,230 people or 54% of the workforce
- Technicians and trade workers – 369 people or 16% of the workforce
- Production workers – 582 people or 26% of the workforce

Age of employees:

- 15 – 24 years – 168 - 7% of the workforce
- 25 – 34 years – 288 - 13% of the workforce
- 35 – 44 years – 474 - 21% of the workforce
- 45 – 54 years – 645 - 28% of the workforce
- 55 – 64 years – 522 - 23% of the workforce
- 65 years and over – 168 - 7% of the workforce
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In addition to the above figures, the Kawerau workforce is gender skewed, with males making up 64% of employment [4].

4. Employment growth at Kawerau

In 2013, the Scion Research Institute undertook an analysis of wood processing opportunities in Kawerau using the WoodScape Model. WoodScape was developed to identify wood processing technologies most likely to increase on-shore processing of logs and increase the export earnings of the forestry and wood processing sector from around \$5 billion in 2012 to \$12 billion in 2022. The original studies show that the broader Central North Island (CNI) area generally has advantages for the wood processing industry over the rest of New Zealand in terms of the scale of the available wood resource. It also has well-developed infrastructure and (in some locations) access to geothermal energy suitable for providing heat for wood drying and other process heat demands.

The strategic drivers for Industrial Symbiosis Kawerau - an industry/community-based initiative to develop new investment opportunities for the wood processing industry – are premised on the basis that Kawerau offers particular advantages for establishing new wood processing industries. These advantages are gained by locational, logistics and resource synergies and measured by i) improved financial performance of businesses established there, ii) better regional/national gross domestic product impacts, iii) employment resourcing opportunities, and iv) more effective use of co-located resources, such as geothermal energy.

To assess the benefits of locating in Kawerau an exemplar cluster, designed to fit with the estimated available log supply and consisting of an industrial sawmill, plywood mill and a catalytic pyrolysis biofuels operation, was analysed. Direct employment numbers associated with these plants would be in the order of 344 full time jobs as outlined in Figure 3.

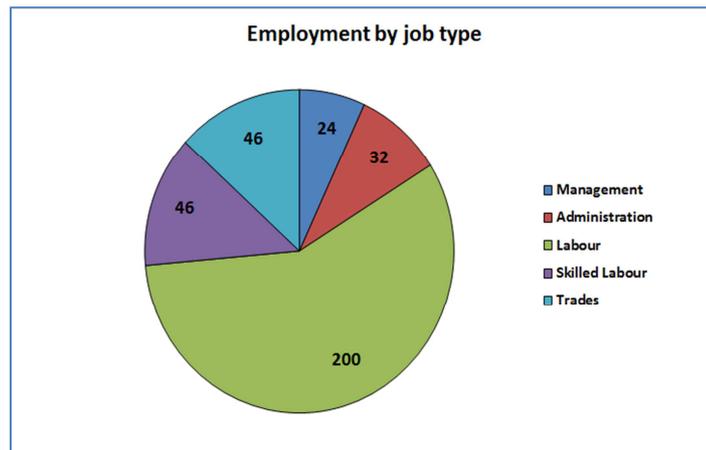


Figure 3: Employment numbers by job type for direct employees based on the plant types assumed in the Scion cluster scenario

Source: Scion

When employment multipliers were applied to direct jobs the indirect jobs were estimated at 670. In other words, approximately 1,000 new jobs would be created by investment in the cluster scenario.

Employment generated from new industries developed to take advantage of the geothermal resource in the district such as milk processing, horticulture, fresh water aquaculture, extraction of minerals from geothermal brine etc. has not been yet been formally analysed but could produce a similar employment profile to that outlined above.

5. Education and training

BOP demographics suggest that it will be increasingly necessary to draw on new, young workers [1]. These workers will need education, vocational training, and workplace mentoring programmes that will ensure skill and knowledge transfer from experienced workers. The education and community infrastructure are likely to be increasingly important for the education and training sectors [1].

- Kawerau and the wider region operate a range of specialist industry training programmes to ensure that its workforce is highly skilled and have current operational knowledge. This is complemented by a long-standing history of expertise in the forestry industry and related businesses.

Rotorua, located 50km west of Kawerau, is the technical and professional centre for the New Zealand forest industry, and is home to world class research, education, training and servicing facilities. Two such facilities are: [3]

- **Waiariki Institute of Technology** - The Waiariki School of Forestry, Wood Processing and Biotechnology is the largest vocational forestry training institute in New Zealand. It was established over 60 years ago by the New Zealand Government to train students in plantation forest management, sawmilling and wood manufacturing. Timber machining and other wood processing courses are taught on site at the Rotorua campus, as well as being available for on-site delivery. Further to this, Waiariki offers a range of business, engineering and other vocational courses.
- **Competenz** - The industry training organisation for the forestry, wood manufacturing, furniture and bio-security industries.

Other tertiary and/or vocational training organisations in the region include:

- **Te Wānanga o Aotearoa** - One of New Zealand's largest tertiary education providers, offering a comprehensive range of certificate to degree level qualifications. Guided by Maori principles and values, Te Wānanga o Aotearoa provides courses in small business, computing, social work, teaching, Maori performing arts and Maori language.
- **Bay of Plenty Polytechnic** - Offer a hands-on learning environment with four schools of study in Applied Science, Applied Technology, Business Studies and Design & Humanities. The polytechnic is based in Tauranga.
- **The University of Waikato** – Based in Hamilton but with a campus in Tauranga, the University of Waikato offers a wide range of qualifications from undergraduate certificates, diplomas and degrees through to postgraduate research. Courses are offered in the fields of Arts and Social Sciences, Computing and Mathematical Sciences, Education, Law, Maori and Pacific Development, Science and Engineering, and Business Management through the Waikato Management School.
- **Te Whare Wānanga o Awanuiārangi** – Innovation, advanced technology and cultural design elements are features of a new campus built by Te Whare Wānanga o Awanuiārangi in Whakatāne to help transform educational outcomes for Māori.

6. Government assistance

The New Zealand Government offers a range of incentives and packages to assist potential employers in their search for workers that possess their required skills, and also to employees through training and up-skilling in their desired vocations. Examples of assistance include: [6] Student loans and allowances to help students fund the cost of tertiary education. Interest free student allowances are available to students that meet certain criteria and are fully funded by the New Zealand Government.

- **Industry Partnerships - Work and Income** (a division of the Ministry of Social Development) can provide training for specific industries where there are employment outcomes for employment seekers.
- **Skills Investment with Training** - Can provide wage subsidies to employers who take on qualifying employment seeking clients and provide them with training as part of their employment. This needs to lead to full time, permanent employment.
- **Task Force Green** - a funding stream for community based projects that meet a proportion of the employment costs for Work and Income clients engaged in a defined project. This would normally involve some on-the-job training.
- **Job Ops with Training** - Is a six month subsidised job placement for young people with low skills and limited work experience to help them build confidence at work and demonstrate their ability to work. This requires employers to provide training to participants with the primary aim being to encourage employers to take on young people aged 16 – 24, who have low skills and limited work experience.
- **Training Incentive Allowance** - Provides non-taxable assistance to clients receiving certain types of welfare benefits to undertake employment related training, and who do not have the necessary work skills, qualifications or recent work experience to obtain employment in the labour market.
- **Unemployment Benefit Training** - Is an option for people registered on an unemployment benefit to undertake approved training courses. Clients receive the same rate of payment while in study as clients on unemployment benefits and still have obligations to seek work, and accept opportunities if they are offered to them.

7. Attracting people

The four most common reasons migrants choose New Zealand as a destination to live are: [1]

- The relaxed pace of life
- The environment
- Family
- Employment opportunities

The attractiveness of New Zealand, especially in terms of the rate of economic growth achieved, has been associated with increased rates of net inward migration. It therefore seems logical to assume that a change that facilitates quality residential and business development in a region will also tend to attract migrants to settle in that region [1].

Lifestyle is typically an important driver of people's choice to live in the BOP. The increased flow of immigrants combined with the retention of highly skilled people in the BOP represents a gain to its economy [1]

References

- [1] Slack, Williamson and Sanderson 2011. The State of Readiness of the BoP's Local Government Infrastructure for Growth. Business and Economics Research Limited, Wellington.
- [2] Leung-Wei, Dixon, Sanderson and Nana, August 2011. Update of the Bay of Connections Regional Economic Development Strategy: Economy, Industry Profile and Projections. Business and Economic Research Limited, Wellington.
- [3] Putauaki Softwood Opportunity, 2010.
- [4] Statistics New Zealand. Employment in Kawerau as at 2013 – Fact Sheet.
- [5] New Zealand Department of Labour. See www.dol.govt.nz/lmr/lmr-hlfs.asp
- [6] Information provided by the Ministry of Social Development, New Zealand Government.

© Prepared by Stefan Teat for Industrial Symbiosis Kawerau
June 2012

Updated by ISKawerau
March 2014

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