MANAWATŪ–WHANGANUI GROWTH STUDY

OPPORTUNITIES REPORT
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MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Ministry for Primary Industries
Manatū Ahu Matua

MINISTERS' FOREWORD

As Ministers for Economic Development, Primary Industries and Māori Development, we believe strongly that building successful and more resilient regions is key to building a prosperous nation.

Recognising and capitalising on the investment opportunities and strengths of different regions is vital for each region to provide employment and a good standard of living for its people and to maximise each region's contribution to the economic and social wellbeing of New Zealand.

The Regional Economic Activity Reports (REARs) have allowed us to understand and compare regional performance at a high level. Through the REARs, we know that the current economic and social performance of regions varies significantly.

The Regional Growth Studies programme provides an independent view of specific regions, chosen because their potential is not yet fully realised. Within each of these regions there are excellent success stories but also some pockets of high deprivation. This deprivation can only be fully addressed through wealth creation and higher levels of employment.

The Regional Growth Studies explore opportunities to achieve growth in investment, incomes and employment by sector. The reports pose the questions "what are the investable opportunities in this region and what is preventing investment in them?"

The Regional Growth Studies programme complements the Government's Business Growth Agenda, which works to grow New Zealand businesses, create jobs and improve the standard of living for all New Zealanders.

The Regional Growth Studies programme will also provide a deeper level of information to enable New Zealand Trade and Enterprise and regional economic development agencies to bring investment, and ultimately employment, into the regions.

The *Manawatū-Whanganui Regional Growth Study* follows two studies released earlier this year on the Northland and Bay of Plenty regions and the East Coast Economic Potential Study covering the Gisborne and Hawke's Bay regions, which was released in 2014.

It provides a view that has been developed through evidence and with input from key businesses and economic players in the region. It provides the region and central government with a shared view of the potential of the region and its local communities.

While the Manawatū-Whanganui region is one of the slower growing regions in New Zealand, there is real scope to increase incomes and employment in the region through building on its various strengths, such as its fertile productive land, its location as a natural transport and logistics hub for the lower North Island, its internationally-renowned tourist destinations, and its strong food innovation and agri-business research history. Many of these strengths lie at the sub-regional level, but together they provide strength for the region as a whole. Increasing productivity and added value, particularly in the sheep and beef, dairy, and tourism sectors, will provide opportunities to improve the region's economic performance.

The Government is also committed to raising Māori economic performance. Achieving the goals of He kai kei aku ringa: the Crown-Māori Economic Growth Partnership will be realised if action is taken in those regions where there are larger Māori populations. The Manawatū-Whanganui region also has the benefit of a significant youthful Māori population.

He kai kei aku ringa literally means providing the food you need with your own hands. This concept of economic independence or self-sufficiency is a fundamental principle for Māori, who look to the best interests of, and outcomes for, whānau.

Māori play a considerable role in the Manawatū-Whanganui economy but the potential of Māori capability and assets have not been fully realised. The opportunity to leverage this potential aligns with the review of the Te Ture Whenua Māori 1993, which aims to make it easier for Māori to use and develop their whenua to meet their aspirations.

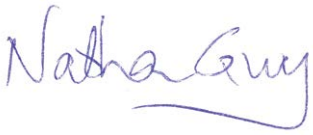
The full potential growth in this region will only be achieved if iwi/Māori can actively work to raise the utilisation and productivity of their assets, and increase the skills, employment and incomes of the region's poorest whānau. Working hand in hand with local and central government, we believe the potential benefits for the country from such a collaborative approach to be enormous,and still largely untapped.

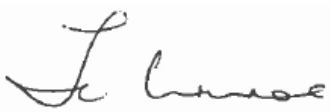
This *Regional Growth Study* identifies a number of actions that support the goals of He kai kei aku ringa.

We are committed to maintaining and building on the strong partnerships established in this region and, through the development of a Regional Economic Action Plan, to further explore and realise opportunities identified in the report. Realising opportunities will only be successful if all stakeholders pull together to do what is right for the region – not just for individual sub-regions or sectors.

To be successful, the *Regional Growth Study* will also need to inform and inspire industry, iwi and Māori, and central and local government to act individually and collectively to turn opportunities into realities.

We welcome this report and its findings.





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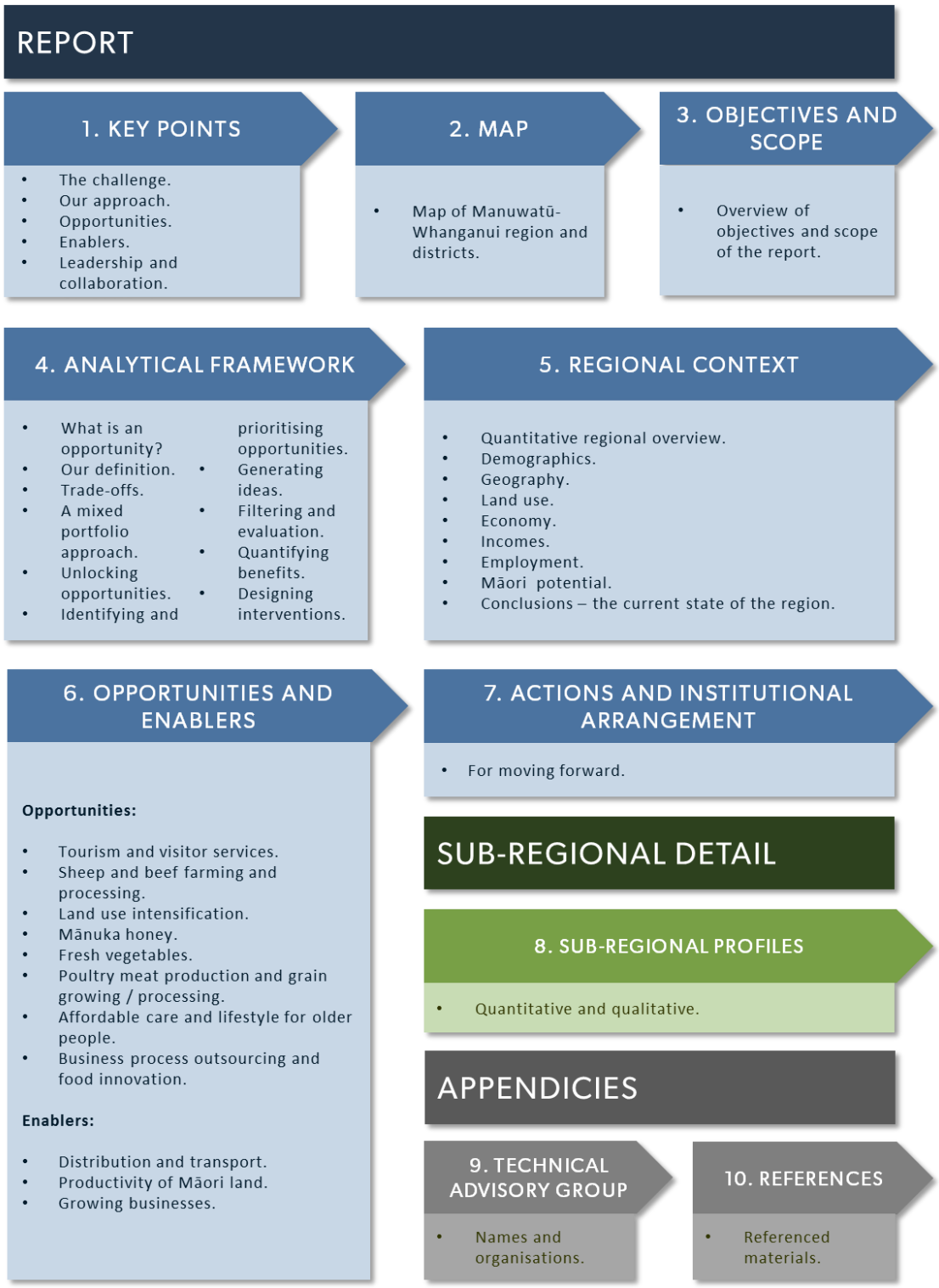
DOCUMENT MAP

The map below details the key content within each section of this report.



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ACRONYMS USED IN THIS REPORT

Acronym	Meaning
B	Billion
BGA	Business Growth Agenda
BPO	Business Process Outsourcing
BSA	Bovine Serum Albumin
CEO	Chief Executive Officer
DCANZ	Dairy Companies Association of New Zealand
DHB	District Health Board
DoC	Department of Conservation
EDA	Economic Development Agency
FAR	Funding Assistance Rates
FOA	Food and Agricultural Organisation
FTE	Full Time Equivalent
GAP	Growth Acceleration Programme
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GFR	Gross Farm Revenue
GP	General Practitioner
GRIP	Growth Realisation Programme
HH	HenleyHutchings
HQ	Head Quarters
HPMV	High Performance Motor Vehicle
HR	Human Resources
ICT	Information and Communications Technology
IMF	International Monetary Fund
IP	Intellectual Property
ITO	Industry Training Organisation
KG	Kilogram
LTP	Long Term Plan
LUC	Land Use Capability
M	Million
M^3	Meters cubed
Mbps	Megabits per second

Acronym	Meaning
MS	Milk Solids
MBIE	Ministry of Business, Innovation and Employment
MFAT	Ministry of Foreign Affairs and Trade
MoE	Ministry of Education
MPI	Ministry for Primary Industries
MSD	Ministry of Social Development
NEET	Not in Education, Employment or Training
NZ	New Zealand
NZIER	New Zealand Institute of Economic Research
NZTA	New Zealand Transport Authority
NZTE	New Zealand Trade and Enterprise
OCD	Open Country Dairy
PA	Per Annum
PGP	Primary Growth Partnership
PKE	Palm Kernel Expeller
PwC	Pricewaterhouse Coopers
QVNZ	Quotable Value New Zealand
R&D	Research and Development
RCA	Regional Competitive Advantage
RLTP	Regional Land Transport Plan
RMA	Resource Management Act
RTO	Regional Tourism Organisation
SFF	Sustainable Farming Fund
SH	State Highway
SLUI	Sustainable Land Use Initiative
SME	Small and Medium sized Enterprises
SU	Stock Unit
TAG	Technical Advisory Group
TPK	Te Puni Kōkiri
UCOL	Universal College of Learning
UFB	Ultra-Fast Broadband
UK	United Kingdom
USA	United States of America

SECTION ONE: **KEY POINTS**

1. KEY POINTS

THE MANAWATU-WHANGANUI REGION IS FULL OF PROMISE…

The casual observer could be forgiven for what is many people's first impression of this region - a land of "milk and honey" - in the biblical and literal senses. Manawatū-Whanganui looks fertile and prosperous with spectacular remote landscapes framing rich farmland.

Its agricultural industries, particularly the hill country beef and lamb sector, are amongst the most productive in New Zealand.

While not a leading dairy region, it is nationally significant and boasts an array of arable farming types. It has notable institutions like Massey University and agriculture research establishments with an international reputation. It has significant provincial cities like Palmerston North and Whanganui and sits astride State Highway 1 and the main trunk railway line.

Yet, measured on almost any economic criterion, it is at the tail end of the regional development stakes in New Zealand. For example, GDP per capita is 23% below the national average, and the region ranks 13th out of 15 statistical regions.

…BUT THE REGIONAL ECONOMY IS STUCK IN A LOW-GROWTH RUT…

The reality is that this region is experiencing slow or static growth, ageing and declining populations and employment. The Manawatū-Whanganui economy grew by an estimated 1.3% a year in the decade to 2014[1] in terms of GDP - slower than the national growth rate of 2.1% a year.

National employment growth has been 11% over the decade to 2014 …but Manawatū-Whanganui shrank by 1%.

The region was the second slowest of all regions. And yet, it has an abundance of underutilised resources - human, natural and physical - and significant pockets of wealth that could be gainfully employed to improve prosperity for the region and for New Zealand as a whole.

[1] In real terms, that is, after adjusting for price movements.

...DUE TO GLOBAL FORCES, STRUCTURAL CHANGE AND SPECIFIC LOCAL CHALLENGES

What is it that holds this region back when it has apparently got so much going for it?

The answer lies primarily in global trends and impacts largely outside local control and the region's failure, thus far, to adapt quickly enough.

Global forces have taken a large toll on jobs. Traditional job creators – agriculture, manufacturing, so significant to the region - have become less labour intensive and some activities have disappeared altogether. It has been gradual, has been happening for a very long time, is somewhat invisible on a day-by-day basis, but the impact has been huge.

The decline of manufacturing has been very severe and long term. Contemporary enterprises are not filling the gap in anything like sufficient numbers to offset the erosion of employment.

The region has been especially vulnerable because of its narrow range of enterprise. With its agricultural powerhouse not producing jobs and manufacturing in the same position, the region has little to fall back on and growth has faltered as a result.

THE CHALLENGE: IDENTIFY OPPORTUNITIES FOR REGENERATIVE FUTURE GROWTH

The situation this region finds itself in is not of its own making, but the task is now one of regeneration. It is not a quick-fix that is required or even possible. Only the activation of significant extensions to existing industries and the nurturing of relatively new but compatible industries will lead to a gradual restoration of the region onto a stronger growth path.

Active regional leadership will be required to build capability and knowledge-based networks, which are the foundation of successful new and extended industries and sectors, and to convert local advantages into growth and especially jobs.

History has proven that regions are vulnerable to the effects of global trends, where metropolitan centres are somewhat more insulated. Change will not take place of its own accord. It will not simply arise solely from market activity.

Provincial towns and regions like Manawatū-Whanganui will need to provide strong leadership and direction to facilitate the building of their own networks, both physical (like transport and communications) and virtual (co-operative networks and partnerships). They have to extend these networks not only nationally but beyond national borders to export markets. The success of regions is not a maverick "man-alone" enterprise, but one of connection and engagement.

REGENERATION TO BOOST LIVING STANDARDS REQUIRES A CATALYST

To do this, regional stakeholders require a catalyst and that's what this Study and subsequent implementation of its recommendations can potentially represent.

We have aimed to identify regional growth opportunities that can boost jobs and living standards, create GDP or export growth and unlock latent productivity gains in the Manawatū-Whanganui region and its sub-regions.

Some sector opportunities we have identified involve trending towards greater scale to better compete on costs. This is especially true of traditional agricultural sectors. Others involve consolidating more fragmented sectors like tourism, yet ensuring they are responsive to change.

The aim is to build on existing strengths (e.g. rural history), but look towards the future (e.g. agri-tech, niche services) to identify areas where firms and sectors can compete on innovation and quality as well as price.

The Study includes a section focused on institutions and machinery for realisation of these opportunities based on enabling teams which are effectively networks of like-minded people. We recommend they are a partnership of private sector, Māori, iwi/hapū and central and local government.

OUR APPROACH:
A MIX OF QUANTITATIVE AND QUALITATIVE ANALYSIS

The approach of the Study involved a mix of qualitative and quantitative activity in roughly equal proportions.

Data can tell a lot about a regional economy as a snapshot in time, and we've assessed that. But it can't tell you about ideas, attitudes, barriers or potential for collaboration. So we've consulted with over 140 people around the region including local government, iwi/hapū, Māori, commercial and community stakeholders and central government representatives to get a more nuanced picture of what's happening on the ground.

Feedback from these interviews has been overwhelmingly positive, reflecting an energy and determination to improve the living standards and prospects of Manawatū-Whanganui and its sub-regions. Many have told us that our consultation has lifted the level of engagement around economic opportunities at the local level. We hope so.

EACH OPPORTUNITY BRINGS SOMETHING DIFFERENT TO THE REGION

Our recommendations are a synthesis of our empirical analysis and our independent interpretation of the key themes from the interviews. We looked for additionality to activity that's happening already, either via:

- Improved productivity from an existing base; or
- New sectoral opportunities arising from changing demographics and market conditions.

We have taken a **mixed portfolio approach** when recommending opportunities, trying to ensure a rural and urban balance and that each District benefits from at least one, or ideally more than one, opportunity. We have sought opportunities that consolidate sectors and others that diversify them.

Some are 'hairy audacious' opportunities while others are more modest. Some are short and others are long term. We have included some vital enablers. Most of the opportunities involve Māori in one way or another. We have considered both public and private investment.

In considering what each opportunity could contribute, job intensity was high on our list even, as with the care of older people opportunity, where there are no export advantages of significance. Some could contribute to GDP through returns to land and capital and boost the region's export revenue, but may not be job-intensive. Others could bring new people, new skills and a greater dimension to the regional economy.

It's a 'hard road' finding the perfect opportunity and trade-offs between impacts are inevitable. But all the opportunities we landed on are expected to deliver a positive outcome to households and firm owners in terms of improved living standards. Those that made the final cut, out of a long list of over 80, are detailed in this report.

OUR 'CALL TO ACTION' ALSO SUGGESTS WHO NEEDS TO DO WHAT NEXT

We have also identified intervention strategies for each opportunity to provide those who come after us with our best advice and guidance on where we believe the starting point should be.

We have been mindful to identify regional levers – those points of intervention or action that can be taken at a regional level and those within the grasp of people in the districts and across the region.

In short, we selected a set of opportunities where each brings something different to the region. Collectively they represent a package of action that could achieve the regeneration objective we believe is necessary to focus on.

The overwhelming point we wish to communicate is that we believe 'the ship will not right itself'. Things will just drift without a commitment to change and development and dedicated leadership of it.

It was beyond the scope of this report to detail business cases and detailed implementation strategies although we have included a section on the structures and institutions we think are necessary to move opportunities forward.

Our key message in that section is the absolute need to build structures of sufficient scope and gravity to do the job – to avoid undershooting the target. Without them we believe the effort will founder.

OPPORTUNITIES

Eight opportunities have been identified and they have been presented in the report in an order of priority based on a mix of criteria including ease and immediacy of realisation, contribution to the region, and leadership support from stakeholders. With each opportunity we have made an estimate of its potential employment (and financial) value to the region where possible, or the marginal benefit from improvement. These are not detailed appraisals of economic impact from these opportunities, which were beyond the scope of this Study. We have not included the qualitative or spill-over benefits in this summary.

In the Sub-Regional Profiles, there is a detailed profile of each district, together with an assessment of opportunities in that district and including feedback from district-based stakeholders.

Finally, we have paired each opportunity with a district or number of districts as a basis from which we would expect initiatives to arise.

The eight opportunities are:

1. TOURISM AND VISITOR SERVICES

To grow the region as a destination for adventure, nature, cultural and outdoor tourism experiences with a focus on international visitors.

***Location**:* Primarily Ruapehu and Whanganui districts but also Rangitikei.

***Description**:* There is significant tourism activity in the region but as it is widely distributed, it is somewhat fragmented, generally small scale in nature (except the long term ski and related attractions of Mount Ruapehu), and performing at a lower level than it could be. The regional attractions are largely domestically focused with little international profile, except the Tongariro Crossing.

***Opportunity**:* There are two interventions which could stimulate a higher profile offering in order to attract an international market. Both are located on the Central Plateau and in the Whanganui and Rangitikei rivers areas. We argue that the sector should initially focus on these two interventions to avoid spreading the effort too thin.

The first is to extend current mountain biking trails by introducing an additional trail on the Turoa side of Mt Ruapehu and enabling the use of Ruapehu Alpine Lifts facilities year-round. This enhanced offering should be marketed in association with other mountain biking initiatives in the central North Island.

The second and related intervention is to package the range of outdoor/nature/cultural tourism offerings, many of them Māori-related, into a consolidated and extensive marketing package.

***Benefits**:* There are benefits that derive directly from the activities themselves such as jobs and GDP. There are also benefits arising from much better utilisation of existing infrastructure including chairlifts, roads, hospitality and accommodation services - making the area a centre for year-round visitor activity and producing significant extra jobs as a result. We believe the profile created by the successful execution of this opportunity will have flow-on effects to other tourism opportunities in and around the region as well.

Potential: If an increased visitor spend of 10% was achieved it would boost regional GDP by $63m a year and add 71 jobs directly and indirectly.

2. SHEEP AND BEEF FARMING AND PROCESSING

Getting more out of the rich and extensive hill country resource across the region.

***Location**:* Across all of the region but particularly in Whanganui, Rangitikei, Manawatū and Tararua.

Description: The region represents a large portion of the sheep and beef sector in New Zealand as a result of the extensive area of hill country in the region. Small achievements on individual farms can add up to a major net effect. In addition, the region is arguably the agri-business centre of New Zealand with a large infrastructure of farm and processing services and facilities.

Opportunity: There are two opportunities: one is improving on-farm productivity and the other is increasing value-added processing.

The Red Meat Strategy is geared to changing farmer practice nationally but it is, as a result of its complexity, a slow process. A tailored extension programme would accelerate change in the region. Currently the Horizons Regional Council's SLUI (Sustainable Land Use Initiative) has advisors on-the-ground helping farmers improve their practice to control erosion. We are recommending that this initiative is extended to encompass other aspects of farming practice besides erosion control.

Benefits: There is already significant investment in the SLUI programme. Extending its brief would be a cost efficient way to achieve the necessary farming performance improvement and augment farming revenues. Such an initiative also has the potential to achieve greater production out of Māori freehold land.

Further active extension of value-add innovative processing would add to the status of the region and also produce jobs across the spectrum of high to lower level skills.

Potential: A conservative estimate of increased farm productivity in the region is $26m pa. This does not include added-value benefits in the processing sector, which would depend on other factors, and are difficult to quantify accurately at this stage.

3.LAND USE INTENSIFICATION

Utilising high quality land to its full potential, within environmental limits, for dairy, arable and other farming - primarily through irrigation.

Location: Rangitikei, Manawatū, Tararua and Horowhenua. The opportunities vary from small operations in the Rangitikei River valley to broader and large opportunities on the Manawatū plains and sand country.

Description: The region has a significant area of class 1 and 2 lands capable of carrying greater intensification through dairying and arable/horticulture uses. While there are a number of possible inputs into farming to drive intensification (within environmental limits), irrigation has the greatest potential. There are some significant barriers to irrigation in the region to be overcome, for example inadequate electricity supply and inadequate information for land owner decision-making.

A package of interventions is recommended including working with MPI to document the potential returns for investors from land use intensification in the region when compared to other regions.

Benefits: As with sheep and beef farming, incremental improvements in farming performance across the region can produce significant improvements in jobs and GDP. With the introduction of the One Plan[2] which controls environmental impacts, the regulatory framework is available within which greater intensification can take place.

Potential: We estimate irrigation could add as much as 20% to productivity improvements in dairying alone (as has been the experience in Canterbury). A 1% increase in production adds $6m and 33 jobs to the regional economy.

4.MĀNUKA HONEY

Produced in its own right and as an adjunct to other land uses.

Location: Rangitikei, Whanganui, Ruapehu and Tararua.

Description*:* The Mānuka honey market is growing, with production and export numbers climbing rapidly to meet international consumer demand. Significant potential exists, particularly in the value-added nutraceutical market. There are significant investors in and around the industry and a PGP programme is well underway.

Opportunity*:* It could be argued that the time has come for this product. While there is an opportunity for table honey, the potentially greater prize is the use of the product in natural medicine as a nutraceutical. The opportunity is for Manawatū-Whanganui to take advantage of this and make better use of its currently underutilised or poorly utilised extensive hill country hinterland which is ideal for Mānuka honey production.

[2] The 'One Plan' is the integrated regional plan prepared by Horizons Regional Council under the Resource Management Act (1991).

This will require, amongst other things: better information and education aimed at hill country land owners and potential farmers; continued research and development; and regional council policies on land clearance for Mānuka plantations.

***Benefits**:* The industry uses low grade land, adds diversification for hill country farmers, opens an opportunity for Māori land and is quite labour-intensive in the collection and processing of the product.

Potential: Being an emerging sector with high uncertainty, future Mānuka honey growth is impossible to estimate with any accuracy. The Mānuka Research Partnership has estimated growth of $75m pa in 2010 towards $1.2b by 2028. If Manawatū-Whanganui was to claim 10-20% of that growth it would make a substantial contribution to the region.

5.FRESH VEGETABLES

Primarily for an export market.

Location: Horowhenua, Rangitikei and Ruapehu.

Description: Horowhenua and Ruapehu are traditional vegetable growing areas. Over the years production has grown to meet domestic demand but the domestic market is now saturated. While some product is exported from the region, export effort is small and fragmented. The growers struggle to exert control on this uncertain market.

The current growing areas in the region are well-suited to the industry. There is good land onto which to expand and vegetable growing is relatively labour-intensive.

Opportunity: The opportunity lies in expansion of fresh vegetable production for export. The international market for fresh vegetables has grown enormously in recent years and New Zealand has a very minor portion of it. Expansion of the export effort requires the balancing of three things – production, market demand and logistics. Any operation would also require scale.

We believe that a concerted joint effort of growers in the area, who would initially focus on a limited number of export markets, could potentially grow the export market to a level of stability and continuity that would produce significant returns.

***Benefits**:* Besides the jobs and GDP advantages, extension of vegetable production will bring greater diversification to the primary sector in the region and assist with economic resilience.

Potential: The sector is currently relatively small, contributing around $85m or 1% towards the regional economy. Every 1% lift in output increases the regional economy by $1m and adds around eight new jobs. A dedicated effort would be intended to produce a lift of output in excess of 20% to achieve required export economies of scale.

6.POULTRY AND GRAIN PROCESSING

Primarily poultry meat, but also eggs and in association with grain-growing.

Location: Horowhenua, Rangitikei and Manawatū.

Description: The consumption of poultry meat is growing rapidly worldwide to the point that it is a dominant source of protein. The domestic market is also growing but there is adequate supply for this market. We have shown ourselves to be good producers of poultry products because of our unique international disease-free status. There is also potential with eggs and egg derivative products.

Opportunity: There is significant room for increased supply to China and other Asian countries whose current poultry meat consumption levels are well below those of other parts of the world.

Some local operators are already exporting to Japan. New Zealand has high standards of production, well developed practice and a well-developed regulatory environment.

Benefits: Manawatū-Whanganui needs greater diversification in its offering to add resilience to the regional economy. Poultry products are ideally suited to do this. Grain growing and poultry meat production would help to insulate the region against shocks in any one product category. There is land, distance from urban areas, yet good access to logistics.

Poultry can drag behind it other enterprise that would add dimension to the regional economy. Grain processing would strongly support the emerging poultry industry and an established dairy industry. Grain processing would provide construction and operational revenues to the region. Grain processing would also provide an outlet for arable crops which would encourage optimum use of class 1, 2 and 3 lands. While this would take time, the benefits are worthwhile.

Potential: As demand for poultry continues to increase, the Manawatū-Whanganui region could plausibly reach a similar scale to Waikato, adding some 1,200 jobs. The potential would be much larger if export markets are established.

7. AFFORDABLE CARE AND LIFESTYLE FOR OLDER PEOPLE

Creating an affordable model of continuing care for older people through retirement to advanced care in a community context to meet the demands of an already emerging sector.

Location: Initially in Horowhenua but Whanganui is also well positioned.

Description: Due to New Zealand's ageing population, demand for aged residential care will outstrip supply in the next two years and this situation will likely continue for at least two decades. Affordability is becoming more important in care, not only for the individual, but more particularly for Government as the population ages.

Opportunity: New models of care and lifestyle for older and elderly people are required. Internationally, there is a move away from segregating older people, whether in retirement villages or rest homes, and instead creating arrangements where they remain in close proximity to the local community.

Horowhenua could become a centre of best practice. Horowhenua is located close to Wellington, and with a mild climate and older people-scale towns like Levin and Foxton it is well-suited to taking a significant piece of this market. The modest property values in the region would also support the development of this sector. This is a complex opportunity to realise, but there is existing local leadership to take this opportunity forward. In the first instance a detailed concept and feasibility study needs to be negotiated with a wide range of interested parties including iwi.

Benefits: This is an opportunity that can contribute positively to national aged care costs by reducing the exposure of Government to care subsidies and also providing local employment for care givers and health professionals.

Potential: The model of care proposed in this opportunity has benefits in saving public money as well as generating regional GDP and jobs. Although the proposed model would be different, by way of comparison, an 80 bed rural residential facility could add $32m and 66 jobs to a rural economy such as Horowhenua.

8. BUSINESS PROCESS OUTSOURCING (BPO) AND FOOD INNOVATION OUTSOURCING

Primarily contact centres and the science, technical and innovation leadership of Food HQ.

Location: Contact centres and related outsourcing based across the region but centred on Palmerston North; science, innovation and technical innovation outsourcing associated with Food HQ in Palmerston North.

Description: Outsourcing of a range of services from large corporates is a growing worldwide trend. In large part, it is driven by costs, but also availability, reliability and quality of the labour force are also important dimensions. There is also a trend of professionals, scientists, innovators and technical people being sought after internationally, no matter what their home location.

Opportunity: The most obvious opportunity is to grow the contact centre industry and in the region's cities and larger towns there is a ready supply of suitable labour for this industry.

The opportunity for Food HQ is for its plans around outsourcing food-related research, innovation and technical services to be more specific and pragmatic to ensure that they are achieved.

Benefits*:* With contact centres the benefits are jobs, especially for second household incomes. In the more technical areas of outsourcing it encourages clustering of skills which has all sorts of other downstream benefits including greater innovation potential.

Potential: The proposal of the parties working on the call centre opportunity at present is to double current jobs in three years to a total of 2,000.

ENABLERS SUPPORT BUSINESS ACTIVITY ACROSS THE BOARD

There are many enablers to economic growth. In many cases enablers emerge organically from commercial activity, and are thus – in our view – outcomes rather than specific opportunities to target.

Vocational education and training is a case in point. There are excellent training institutions locally but the signals from the commercial sector are often too weak for them to know where to place their emphasis. A stronger focus on opportunities which will define workforce requirements more clearly will help remedy that problem.

Ultra-fast broadband is another key enabler and the lack of forward capacity in a number of areas of the region is of significant concern to many of the stakeholders we interviewed. The second tranche of broadband is coming up and the Government's expectation is that councils will need to partner with providers to put in a proposal to MBIE for broadband expansion into their area. It is vital that this next step is actioned. Effective broadband will be fundamental to business growth across all sector opportunities and as such it is identified as a critical component of the Grow Business enabler, which is outlined below.

Some enablers such as irrigation and electricity supply have been dealt with within each of the opportunities, notably Land Use Intensification.

However, in our view there are three strategic areas of enablement that need strong and focused attention and in this Study, we have developed these in more detail:

- ***Transport and Distribution*** – a hubbing concept and optimised roading designed to improve the efficiency of supply chains and logistics to and from the region. This will reduce transaction costs and boost competiveness. This ties closely with agricultural opportunities such as fresh vegetables, poultry and farming development generally, but also builds on existing southern North Island hubbing which is already in place.

  Why is this so important? – because most of the opportunities identified rely heavily on access - supply chain and logistics - and we are concerned that less than optimal planning in this area might seriously frustrate excellent effort.

  What action is required? – we conclude that transport planning and provision is well thought out, but there are additional issues requiring consideration to meet the needs that would arise from the successful execution of the opportunities identified in this study.

- ***Productivity of Māori Land*** – bringing into greater production the large tracts of freehold Māori land much of which is under-productive or even unused.

  Why is this so important? – because this land represents a significantly under-utilised resource and there are issues which continue to hamper its resolution which will not fix themselves.

What action is required? – we believe the opportunities recommended in this Study – sheep and beef, land use intensification, Mānuka honey, tourism – present real opportunities for use of Māori land, but specific interventions are required to resolve the legal and ownership issues that continue to frustrate progress in this area.

- ***Growing Businesses*** – seeking a means of building capacity, scale and innovation into currently small business operations across the agriculture, manufacturing and service sectors and in most sub-regions. Broadband access and the significantly increased uptake of ICT by businesses across all sector opportunities is a critical component of this.

  Why is this so important? – because the individual firm or business is the atom that makes the regional molecule. Without small and medium businesses performing, opportunities will founder. Leadership and vision in every business and enterprise is needed to realise these opportunities.

  What action is required? – we are recommending strategic support for businesses at a governance and management level that builds vision and skills.

LEADERSHIP AND COLLABORATION WILL BE CRUCIAL FOR REALISING OPPORTUNITIES

The "leadership" word was used repeatedly to us and it is fairly liberally sprinkled through the Study. We were told the region lacked leadership but we take the view that leadership emerges when there are compelling demands for it. We have tried to shape the opportunities in such a way that leadership can form around them and we hope that will happen.

Leadership is also required for the whole process of realisation and we have made firm recommendations on structures and institutions in that regard.

What we all know is that the task requires a commitment to collaborative enterprise, working together, making things happen, not being daunted by complexity (because there is plenty of that) or impeded by obstacles of the mind such as outdated views of public and private responsibility.

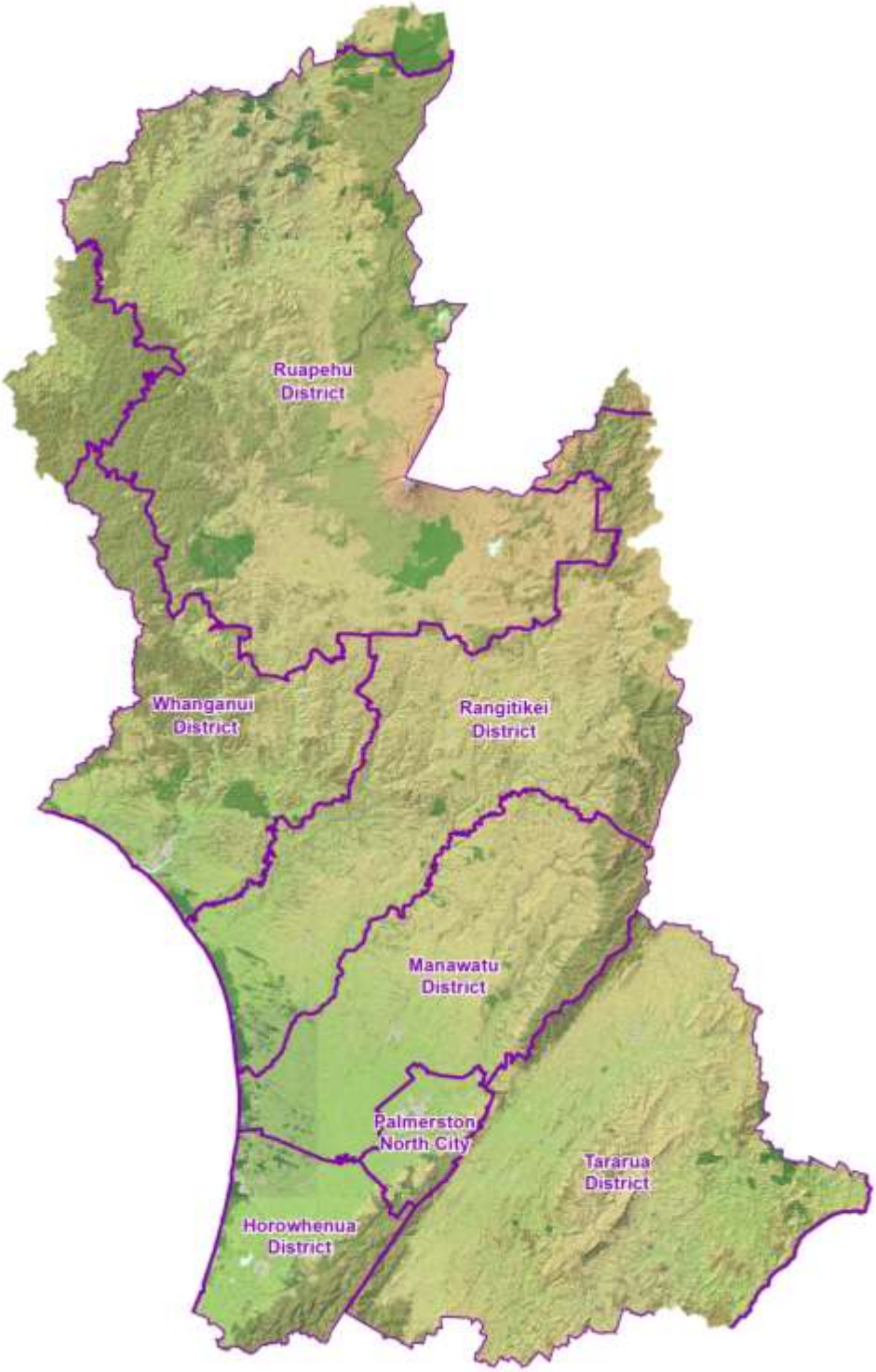
In today's connected world isolation and separation is fatal to the achievement of complex opportunities.

Let's just put the specific opportunities aside for a moment, as important as they are. The City of Palmerston North, together with Whanganui, have a vital role to play as the principal urban centres of the region. The success of the region is very much tied to their success and not just as economic, but also as cultural, educational and social centres. Cafes contribute as much to economic development as do trucks and tractors. The region needs to have a beating heart and in today's world that's our urban centres. Our assessment is that Palmerston North in particular needs to step up to this plate and help pump the social blood through the arteries of the region.

There is always danger in trying to do everything and achieving nothing. We have been selective in what we have recommended regarding opportunities and particularly regarding enablers. In the section on 'Actions and Institutional Arrangements' we emphasise the need for a solid and well planned approach as long term issues require a well-conceived and robust response. We recommend the formation of teams around particular opportunities with a strong foundation in particular districts. We recommend robust, joined up governance involving the main players – central government, regional and local government, business and iwi/hapū.

SECTION TWO:
MAP OF MANAWATŪ-WHANGANUI REGION AND DISTRICTS

2. MAP OF MANAWATŪ-WHANGANUI REGION AND DISTRICTS



SECTION THREE:
OBJECTIVES AND SCOPE

3. OBJECTIVES AND SCOPE

The Ministry of Business, Innovation and Employment (MBIE) and the Ministry for Primary Industries (MPI), working with the Manawatū-Whanganui region engaged a consortium comprised of New Zealand Institute of Economic Research (NZIER) and HenleyHutchings to undertake an Economic Growth Study in the Manawatū-Whanganui region, the region covered by the Horizons Regional Council.

The Study seeks to identify significant opportunities to grow and diversify the economy and to expand investment, employment and incomes in the region. It seeks to identify and suggest solutions to barriers to growth, and make recommendations as to how these opportunities might be progressed. It is not a strategy, but the selection of opportunities and enablers is deliberately strategic.

Commencing in October 2014, the consultants undertook a staged process of investigation of the region as a whole, each of the sub-regions and a wide range of sectors, industries and enterprises including iwi/Māori and local government.

The consultants also engaged with a locally-derived Technical Advisory group (TAG) to assist with their considerations. The TAG was assembled by MBIE in consultation with MPI and local and regional authorities and iwi/Māori.

This document is a big read because we have tried to address two requirements:

- The need to provide an overview of the region and to recommend regional level responses.
- The need to provide an analysis of the challenges and opportunities facing each district, so that those districts can engage with the recommendations.

The effect is that the Report is at times a little repetitive. It is designed for the snap reader who will go directly to their area of interest. The Key Points section at the front provides an overview.

We are very clear that this document is a study not a full-blown strategy. We have synthesised the best opportunities. We have also pointed strongly towards the strategic interventions we believe are necessary so that those following on from us have a clear point to start from.

We wish to acknowledge the huge amount of support given to us by many people. Over 140 people were interviewed including meetings with interested groups in all the districts of the region. The members of the TAG attended four meetings and gave valuable advice to us between meetings. The Steering Group, contributors and government officials have given freely of their time to provide advice, check texts and verify conclusions.

Despite our thorough researching and fact checking, much of the content relies on the accuracy of contributor information. However, the conclusions drawn in this report are ours and we have been grateful for the independence that MBIE and MPI have allowed us.

SECTION FOUR:
ANALYTICAL FRAMEWORK

4. ANALYTICAL FRAMEWORK

This section explains our interpretation of "opportunities" and outlines the processes we used to identify potential opportunities for lifting Manawatū-Whanganui's economic performance. We refer to this as our analytical framework.

WHAT IS AN OPPORTUNITY?

It depends who you ask.

It is clear that the Manawatū-Whanganui economy has underperformed relative to other regions in New Zealand.

We quickly found through our early engagement with officials, the Technical Advisory Group (TAG) and key informants, that "opportunity" means different things to different people. Some took it to mean lifting the performance of existing businesses and sectors by drawing in under-employed resources or lifting the return from existing resources.

Others felt that opportunities were about new business lines or sectors that might emerge in the future.

Still others talked about cross-cutting 'horizontal' issues that would likely enhance firm performance across the board (e.g. infrastructure and educational improvement).

That these opportunities would boost GDP, either via higher domestic sales or export activity, was generally seen as the welcome outcome, rather than the specific goal of the initiatives.

Adding to the raft of definitions was the presence of numerous – and quite different – sub-regions within the Manawatū-Whanganui region. People's views of opportunities in Palmerston North City were very different to those in Tararua or Ruapehu.

OUR DEFINITION OF OPPORTUNITY IS INTENTIONALLY WIDE-RANGING

Ultimately, the goal of realising opportunities – and of most public policy – is boosting household living standards in the Manawatū-Whanganui. The desired future state is thus one where the region's people and businesses are able to take advantage of the opportunities available to them in order to lift their living standards and the overall economic, social, environmental and cultural wellbeing of the Manawatū-Whanganui region.

Taking these factors into account, we defined an opportunity as meeting one or more of the following criteria:

- Likely to unlock productivity in an existing sector.
- Potential to release un-used or under-used resources (labour, capital, land) in an industry or sector.
- Builds on an existing regional comparative advantage.
- Is in a growth period, or may be about to enter one.

- Is attractive for Māori investors or workers.
- Will deliver jobs, especially in areas where employment opportunities are limited, and particularly for those who are relatively unskilled or who are seeking a role as a second income earner in the family.
- Will contribute to increased exports as international markets are ready to accept more of New Zealand's goods or services.
- Will boost regional GDP through its direct growth and its links to other sectors (i.e. upstream and downstream flow-on effects).
- Is unlikely to 'cannibalise' activity from other parts of New Zealand, so is likely to be net additional to New Zealand as a whole.

These are the factors that we took into account when identifying, short-listing and quantitatively assessing potential opportunities.

THERE ARE ALWAYS TRADE-OFFS

Each opportunity brings something different to the region, and its sub-regions. Some are likely to bring job opportunities, but may have low export potential as they sell primarily to the domestic market. Others will create GDP via returns to land and capital and boost the region's export revenue, but may not create many new jobs due to being relatively capital-intensive. Some offer considerable value specifically to Māori stakeholders; others are available for all participants in the regional economy.

Trade-offs between the potential beneficial impacts of opportunities are thus inevitable, but all opportunities are expected to deliver a positive outcome to households (and firm owners) in terms of improved living standards.

A MIXED PORTFOLIO APPROACH

When whittling down our list of potential opportunities, we have also been cognisant of the need to deliver a balanced package. We have thus taken a mixed portfolio approach where there is interdependence between many of the opportunities. The opportunities we present here cover different:

- Timeframes (ready right now to longer term initiatives).
- Sub-regions.
- Rates of return and risk.
- Impacts on jobs and returns to other factors of production (land, capital).
- Impacts on Māori and non-Māori.

This approach reflects our view that there is no single definition of an opportunity to which we have to stick slavishly.

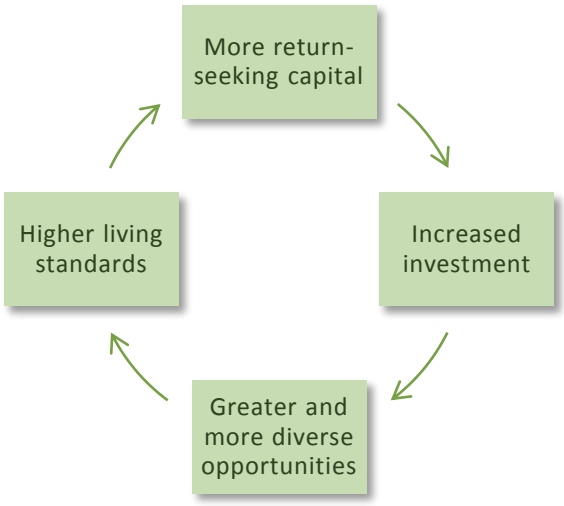
UNLOCKING OPPORTUNITIES REQUIRES INVESTMENT

A unifying theme across the opportunities in this report is that unlocking opportunities requires investment. This investment can be locally, regionally, nationally or globally sourced. It can take the form of business investment, central government intervention and funding or local government coordination.

But investment doesn't just happen – it responds to the promise of more than satisfactory returns for any given level of risk. This means that investors have to understand the region's opportunities. The aim here, then, is to create a virtuous circle where opportunities attract investment, which generates new opportunities that require more investment, and so on.

This study is about identifying viable, market-ready investment opportunities in the Manawatū-Whanganui region. Investment includes capital but also energy, time and reputation.

FIGURE 1: THE VIRTUOUS CYCLE OF INVESTMENT



Source: NZIER

IDENTIFYING AND PRIORITISING OPPORTUNITIES

Our analytical framework combines quantitative and qualitative analysis.

There are various ways of assessing a region's growth potential and the opportunities that may contribute to this growth. There is no single 'best practice' approach in the international literature on this subject, so the chosen methodology depends on the task at hand and the preferences of those carrying out the analysis.

In broad terms, identifying opportunities can occur by using quantitative and/or qualitative methods:

- **Quantitative** methods assimilate official statistical data and analyse their key features across a range of metrics, such as GDP, job growth and regional comparative advantage. Such methods are helpful for identifying *what* is happening now in the economy, and *how* this has changed over time.

- **Qualitative methods** such as literature reviews, structured interviews and stakeholder workshops help to add colour and richness to the official data. They are particularly helpful for finding out more about *why* certain trends are occurring, or why certain initiatives aren't progressing – things the raw data cannot easily tell you. They provide valuable information about ideas, attitudes, barriers to realisation and potential avenues for collaboration at the local level.

We have chosen to use both of these approaches right from the outset of this project in order to generate as much useful information as possible about what is happening on the ground in the Manawatū-Whanganui economy and its sub-regions. We believe this approach is warranted because of the paucity of sub-regional level official data and our broad definition of an opportunity; it simply wouldn't have been feasible to generate meaningful insights using formal data analysis alone.

We acknowledge that our approach differs somewhat from that employed in the Northland and Bay of Plenty Growth Studies, which have tended to focus on the data first and then been followed up with interviews to add a more nuanced story. In our view, there is no right or wrong methodology to these studies, and as explained above, we are confident that our choice of approach delivers a set of investment-ready opportunities that display a wide range of features, all designed to boost living standards in the Manawatū-Whanganui.

GENERATING IDEAS FROM A WIDE RANGE OF SOURCES…

Our general approach was to assimilate as many potential opportunities as possible using quantitative and qualitative techniques and then use numerical filters and professional judgement to narrow this long-list down to a more manageable, balanced set of opportunities to present here in more detail.

We generated our long-list of ideas in four ways:

1. **Quantitative analysis of regional data** – we used a range of data to identify the largest, most specialised and fastest growing sectors. Those that shared more than one feature were added to our long list.
2. **Engagement with the Technical Advisory Group (TAG)** – we canvassed TAG members, who represent some of the key influencers in the economic development space in the Manawatū-Whanganui region, to draw on their expertise in the region. This was done across four half-day meetings and additional offline discussions with individuals and groups from the TAG.
3. **Informant interviews and workshops**[3] – over a three month period, we spoke to over 140 informants, many face-to-face, some by telephone and some in mini-workshops held on-location in each of the districts.

3 Feedback from these interviews with regional stakeholders has been overwhelmingly positive: there is an energy and determination to improve living standards in the Manawatū-Whanganui and its sub-regions. Many have commented that our consultation has lifted the level of engagement around economic opportunities at the local level.

4. **Review of existing literature** – we reviewed over 40 publications from the past decade related to economic development in the Manawatū-Whanganui region and pulled out the key themes for each sub region.

Based on these sources, we assembled a long list of over 80 opportunities.

…THEN FILTER AND EVALUATE

Each of those opportunities was then tested for its potential using a mixture of numerical filters, discussions with the TAG and other key informants.

Not all of the criteria listed above in the section defining 'Opportunity' are able to be readily quantified with any level of robustness. As such, we quantified the potential where we could, and used professional judgement and discussion with experts where we couldn't.

The quantitative filters are summarised overleaf. These numerical filters, and the remainder of the criteria listed above, are discussed throughout the descriptions of the opportunities in this report.

In brief:

- The green/amber/red measures show how each opportunity scores, relative to the economy as a whole.
- The specialisation scores are defined as: high (regional specialisation more than 15% higher than the national average), medium (regional specialisation greater than national average, but less than 15% greater) and low (doesn't have a regional comparative advantage). The choice of the 15% cut-off is arbitrary.

We used the filters, along with discussions with officials and TAG, to refine our long-list to a short-list of 15-20 opportunities. We then analysed these opportunities in more depth by ranking our opportunities by the scores in our filters. We initially used the filters as a gate. If the opportunities were small, had no specialisation locally or in the global export market, or were contracting sharply – they were stopped. In the second stage, we scored the remaining opportunities on their growth, likely spill-over into local jobs and incomes (directly and indirectly) and impact on the economy. The qualitative aspects also tested the validity of the opportunity, potential regional impact, practicality and local fit.

TABLE 1: DESCRIPTION OF FILTERS

Filter name	Explanation/why it matters	Measure	Indicator	Data sources
Current size	Denotes current size of sector in region, based on employment. Larger sectors are likely to have a larger impact; while smaller sectors are likely to have a smaller net impact.	We measured it in filled jobs, because the data is readily available and does not require estimation and application of judgement.	▲ = Relatively large employer (>750 filled jobs, top 5% of industries by size) ▬ = Relatively small employer (500-750 filled jobs) ▼ = Very small employer (<500 filled jobs)	Statistics New Zealand. Business Demography database.
Employment intensity	Shows what proportion of a sector's output is accounted for by wages. To understand the impact of growth in the sector on jobs and local incomes. Some sectors are capital intensive, accruing returns to the asset owner – meaning the immediate spill-overs to the economy are less powerful.	The share of output that is paid out in wages or compensation to employees.	▲ = Greater than economic average (>27%) ▬ = Similar to economic average (17%-27%) ▼ = (<17%)	Wages as a share of output - Statistics New Zealand Input-Output tables.
Economic linkages	Shows extent of upstream and downstream links to other sectors. To understand the impact on other sectors – or the spill-over benefits. Some industries buy from and/or supply into a large number of industries. This means growth in that sector will spill over to increased activity in other sectors.	The impact of an increase in sector output on wages paid in other sectors.	▲ = Higher than economic average (>5%pt) ▬ = Same as economic average (+/-5%pt) ▼ = Lower than economic average (<-5%pt)	Statistics New Zealand Input-Output tables.
Stage of lifecycle	Shows job growth over past decade. If a sector is in growth mode, then it is more likely to be a success.	Growth in sector jobs nationally and where applicable increases in global exports.	▲ = Strong growth in jobs (>10% growth over 10 years) ▬ = Little change in jobs (+/- 10% over 10 years) ▼ = Large decline in jobs (>10% decline over 10 years)	Statistics New Zealand Business Demography database for employment data; UN Comtrade database for global trade data.

Filter name	Explanation/why it matters	Measure	Indicator	Data sources
Share of regional economy	A quick summary measure to complement the size of the industry.	Opportunity sector's share of all jobs in the region.	High: RCA > 1.15 Medium: 1 < RCA < 1.15 Low: RCA < 1	Calculations from Statistics New Zealand Business Demography database.
Share of New Zealand sector	A quick measure of how much of the sector is based in the region.	Opportunity sector's share of local jobs	Level and growth rate	Calculations from Statistics New Zealand Business Demography database.
Comparative advantage or specialisation	Shows sector's share of regional employment compared to the national share. If a region already has a specialisation in a sector, it means it is already good at it and there is potential to grow it.	Revealed Comparative Advantage is where the opportunity sector's share of local employment is higher than the national average.	Level and growth rate	Calculations from Statistics New Zealand Business Demography database.
Export details - World	Shows how global market is growing and provides an understanding of what is happening in the global trade in the opportunity product, who are the biggest exporters and who are the biggest importers.	The size, growth and distribution of exports of opportunity product.	Level and growth rate	UN Comtrade database.
Export details - New Zealand	Shows New Zealand's export growth and provides an understanding of how NZ fits within the global traded market for the opportunity.	NZ's share of global trade, share of growth and specialisation of opportunity product	Level and growth rate	UN Comtrade database and Statistics New Zealand merchandise trade and for tourism, MBIE visitor expenditure survey and Statistics New Zealand Tourism Satellite Accounts.

THOSE THAT WERE CLOSE, BUT NO CIGAR

Those reading the report may well wonder why other opportunities were not highlighted for analysis. Those that may have come to mind are forestry, wood processing, fishing and aquaculture.

Each of these was considered, but they did not stack up as new game breaker opportunities when we looked at their merits and applied the filters described above. For many, it was business as usual.

Many people recommended that the region needed a promotional campaign. We did not consider this to be a new opportunity, under our chosen definition. The reputational challenges have existed for many decades. Opportunities that bring with them new directions and structural changes are what is required.

QUANTIFYING THE BENEFITS OF THE OPPORTUNITIES

The penultimate step of the evaluation analysis was estimating the potential benefits to the Manawatū-Whanganui region of realising the opportunities we have identified in this report. Given the considerable uncertainty about how these might play out, it is difficult to estimate the potential gains with any real confidence. Full economic impact analysis or cost-benefit analysis of each opportunity was outside the scope of this project.

However, we have attempted to provide a "what if?" indication of the potential magnitude of effects, given certain assumptions, and where feasible, we have discussed the distribution of gains (i.e. to Māori, low-skilled, by sub-region) qualitatively.

DESIGNING INTERVENTIONS

The ultimate filter for an opportunity is its viability – can an opportunity move from being an idea to realisation? It became quickly obvious to us that exceptional opportunities were likely to have already been exploited by someone in some form. The silver bullets had been fired.

Those left inevitably involve challenges; whether they are scale or scalability issues, lack of technology or expertise, market penetration or identification challenges. An intervention strategy is required to unlock them. Successful regions have the leadership and vigour to do this.

With every opportunity there are strengths and weaknesses around key inputs such as skilled labour, available capital and technology, but these three factors can be procured with greater or lesser degrees of difficulty. Labour and capital are two particular shortcomings in some parts of the Manawatū-Whanganui region.

But there are three more fundamental factors that enable the realisation of opportunities. Clearly **geography** is one of those and there are some things that won't easily work because of the particular geography of the region, for example – physical isolation from main transport trunks such as is the case for Whanganui. The two others are **culture** and **institutions**. Many informants told us of a culture of complacency or lack of ambition. Others described it as an unwillingness to take risks. We believe we experienced significant hesitancy, even lack of confidence, to identify and take opportunities.

Many informants also told us of a lack of regional cohesion. They described a feeling of isolation and unwillingness between sub-regions to work together for the good of the whole. That said, the point was repeatedly made that this was improving, especially lately at a local government level.

This lack of cohesion was referenced to the business sector as well. We interpreted some of this as being a lack of structures or entities (call them institutions) to move ideas forward and a lack of sophistication in those that existed. We formed the view that in many cases structures were too loose or non-existent.

Accordingly, we have developed a section in the report on interventions and implementation: essentially who needs to do what, to move the opportunities from the hypothetical to the actual?

Most economic policies are applied at a national rather than regional level and for the sake of efficiency alone this is appropriate, but important questions for this Study were not only what further development can take place regionally but what opportunities can be initiated and sustained by essentially regional interventions, and what is the nature of those interventions?

This is terribly important in development terms because the current situation the region finds itself in is largely the product of factors beyond its control. Morale and confidence will build sharply if local people can get their hands on local and regional levers and thereby have more influence over outcomes.

Finally, the "leadership" word was used repeatedly. Informants said the region has lacked leadership and an apparent unwillingness to coalesce around successful ventures. Instead, too often, we were told, successful operators were left to make their own way – some do and some don't. This lack of networks, lack of interconnectedness and lack of common goals and resolve is a key consideration is assessing what is possible in the future of the region.

SECTION FIVE:
REGIONAL CONTEXT

5. REGIONAL CONTEXT

QUANTITATIVE REGIONAL OVERVIEW

This chapter explores the characteristics of the Manawatū-Whanganui region and examines how they affect its economic performance. First up, a quantitative overview is provided of critical performance indicators (Table 2).

TABLE 2: MANAWATŪ-WHANGANUI REGION OVERVIEW

	Manawatū-Whanganui region	New Zealand	Difference compared to New Zealand
People			
GDP ($m)[1]	9,147	229,718	4.0%
GDP per capita ($)[1]	39,442	51,319	76.9%
Population	231,200	4,442,100	5.2%
Population density (per km^2)	10	16	63.9%
Age composition (% of regional total)			
0-14	21%	20%	5.2%
15-24	14%	14%	5.3%
25-64	49%	51%	4.9%
65+	16%	14%	6.1%
Māori share	21%	16%	7.1%
- Of which aged under 25	53%	52%	
Aged dependency ratio[2]	26	22	
Skills, income and work			
Tertiary educated (% of population)	23%	29%	78%
Personal income	25,000	28,500	88%
Household income	50,000	63,800	78%

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Employed	100,521	2,001,009	5%
Employment rate	59%	62%	95%
Unemployment rate[3]	8%	7%	110%
Participation rate[4]	64%	67%	96%
Average firm size (excl. zero sized)	10	11	89%
Housing			
Home ownership rate[5]	65%	65%	101%
House price[6]	$223,588	$488,674	46%
House price to household income ratio	4.5	7.7	58%
Weekly rent[7]	$246	$375	66%
Rental share of household income	26%	31%	84%
Gross rental yield[8]	5.7%	4.0%	144%
Household income after housing costs			
After rent[9]	37,203	44,318	84%
After mortgage payments[10]	35,585	32,296	110%

Notes

1) 2014, Regional GDP estimates
2) The number of people aged 65 and over, for every 100 people between the ages of 15-64
3) Unemployed share of labour force
4) Labour force share of working age population
5) Owned or in trust share of total stated
6) Dec-2014, QVNZ average house price
7) Nov-2014, MBIE average rent
8) Annual rent share of house price. Does not assume vacancy or take any operating costs into account.
9) Household income less annualised weekly rent
10) Household income less mortgage payments assuming 20% deposit, 7% long term interest rate and 30 year term.

Source: All data Statistics NZ and 2013 unless otherwise stated

Table 2 highlights a number of characteristics of the region that help us to understand it: the trend towards ageing is greater than the NZ average creating a higher than average aged dependency ratio; there is a strong demographic bias towards Māori with a high proportion of Māori under 25 years; a lower tertiary education percentage is evident; higher unemployment rate and lower employment participation rates; and costs of living are moderate with lower housing costs especially after deducting mortgage costs.

DEMOGRAPHICS

The Manawatū-Whanganui region is home to around 5% of the New Zealand population – slightly more for the older cohorts (6% of over 65s) and Māori (7% of national Māori). The population has barely grown over the past decade (0.1% p.a. between 2001 and 2013 compared to 1.1%pa nationally).

Demographics are a headwind for the region.

Important differences exist between sub-regions and age-groups. Some of the sub-regions are growing at a modest pace, but four are stagnant or declining (See Figure 3). All sub-regions have a growing older and shrinking younger population, except for Palmerston North and Manawatū. Palmerston North's younger population profile is consistent with the economic opportunities available in the region, which attracts families, as well as a large education precinct.

The ageing profile of the Manawatū-Whanganui region is consistent with a broader pattern of ageing across New Zealand and many other advanced economies. The main drivers are increasing life expectancy, lower fertility and the baby boomers reaching retirement age.

Young people are also leaving the region. The prime working age (defined as those aged 25-54) peaked in the 1996 census and has been shrinking since then.

This demographic 'hollowing' combined with an ageing population (people leaving the workforce) and lower fertility (fewer babies being born, thus fewer entrants into the workforce) means the prime working age population is likely to decline further. Informants from several districts complained about the difficulty of securing labour and some argued for greater emphasis on migration to support economic growth. This is despite a relatively high level of local unemployment – the labour force that is available is not always suited to labour demand. A disengaged youth labour force exacerbates the challenge for local businesses.[4]

The shrinking prime working age population is, of itself, a stark reason for change. If there are fewer people of working age, a key input into economic activity, the economic potential of the region is diminished. Statistics New Zealand projections based on current trends suggest that this will continue for decades to come (See Figure 2).

A declining population, particularly in the prime working age cohort, is a significant demographic headwind facing the region.

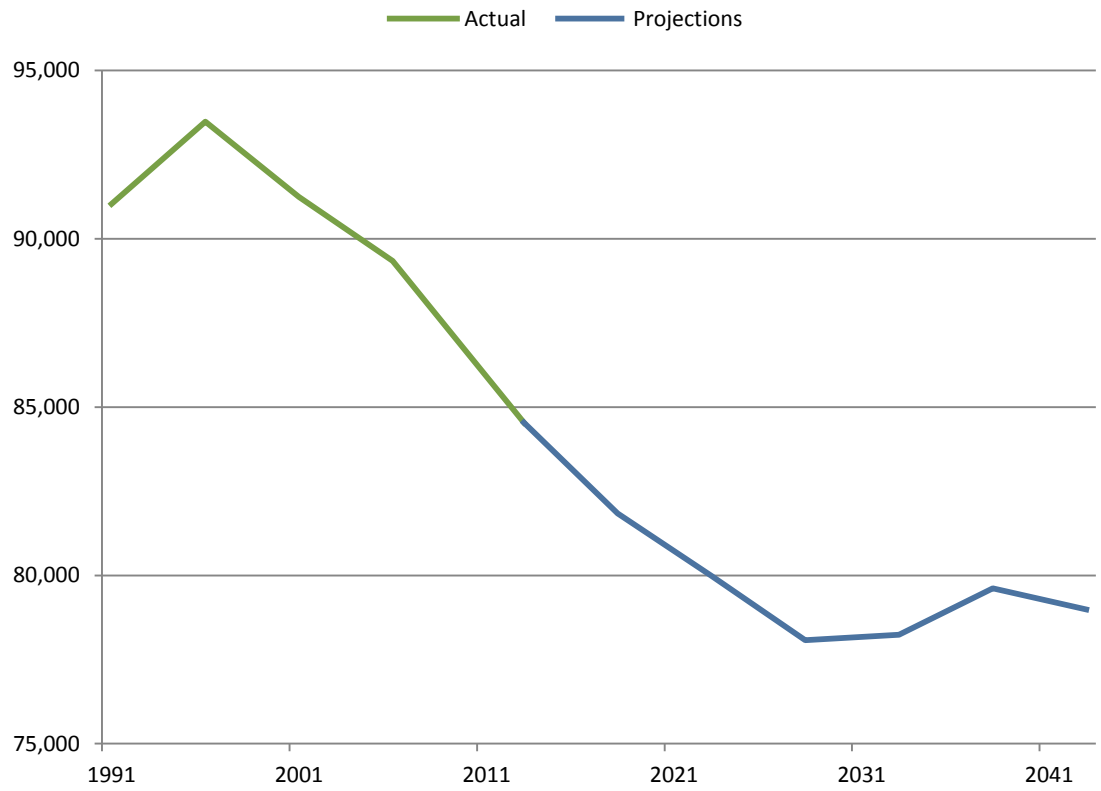
To attract young people, either for local young people to stay, or to come from outside the region, there have to be compelling reasons. Economic reasons, particularly jobs and affordable lifestyles, are at the heart of migration or location choice. The poor education outcomes for some young people also mean that they do not have the skills to get jobs.

[4] The NEET rate (under 25s not in employment, education or training) was 17.5% in Manawatū-Whanganui in 2014, versus 11.4% nationally. The NEET rate is a measure of youth disengagement.

Ageing is a critical demographic pattern to watch. It will have meaningful implications in a number of areas, including:

- **Demand**: changing demand profile as different age groups consume different goods and services. In addition, each generation wants different things. This will create significant changes in work and consumption patterns over coming decades.
- **Supply**: Labour supply will be very different. While many will continue to work much later in their life, there will be a relative shortage of young people, across skill levels. Being able to recruit, train and retain staff will be a critical issue for employers.
- **Politics**: An ageing population will mean an increasing proportion of the population on relatively fixed incomes. This will make raising rates and other charges difficult. This means that the local political economy will tend to favour reduced investment and a resistance to change.
- **Community leadership**: This means that the leadership talent pool is diminishing, resulting in a small number of people able (and willing) to engage in sector, industry, enterprise and community leadership.

FIGURE 2: PRIME WORKING AGE* POPULATION IN MANAWATŪ-WHANGANUI



** Prime working age is defined by convention to be those aged between 25 and 54.*

Source: Statistics New Zealand (Censuses and subnational population projections)

Figure 2 shows the prime working age population (aged 25-54) in Manawatū-Whanganui peaked in the 1996 census and has been trending lower since then. Statistics New Zealand projections show further declines are likely if current trends persist.

FIGURE 3: POPULATION GROWTH BY BROAD AGE GROUP, 2006-2013

	% change per year, 2006-2013									
	Data					Graph				
Region and age	0-14 years	15-39 years	40-64 years	65 years+	*Total*	0-14 years	15-39 years	40-64 years	65 years+	*Total*
New Zealand	0.3%	-0.1%	1.4%	2.9%	***0.9%***					
Manawatū-Whanganui	-0.6%	-0.9%	0.5%	2.3%	***0.1%***					
Ruapehu	-2.7%	-2.9%	-0.8%	0.9%	***-1.7%***					
Whanganui	-0.9%	-1.2%	0.5%	1.5%	***-0.1%***					
Rangitikei	-1.3%	-1.7%	-0.4%	1.8%	***-0.6%***					
Manawatū	0.0%	-0.2%	1.5%	3.2%	***0.9%***					
Palmerston North	0.3%	-0.4%	0.9%	2.5%	***0.5%***					
Tararua	-1.6%	-2.0%	0.1%	2.4%	***-0.5%***					
Horowhenua	-1.1%	-0.7%	0.4%	2.6%	***0.3%***					

Source: Statistics New Zealand (Censuses)

Figure 3 shows the 2006 to 2013 growth of population by broad age group in NZ, the Manawatū-Whanganui regional council area and each of its constituent territorial authorities. The broad pattern is of a declining young population and a growing old population. To slightly dramatize the situation, but nevertheless reflect the reality, the region will have fewer productive people to drive the economy, more people dependent and fewer able to lead the economy out of this situation.

GEOGRAPHY

The Manawatū-Whanganui region is not a region by anything other than administrative and statistical definitions. Historically, there has not been a strong common interest largely because it is a large and diverse geographic area in central North Island where each of the sub-regions has unique characteristics and challenges. The territorial authorities are:

- Horowhenua District Council
- Manawatū District Council
- Palmerston North City Council
- Rangitikei District Council
- Ruapehu District Council
- Tararua District Council
- Whanganui District Council.

It is also geographically diverse. It comprises large expanses of mountain and hill country and significant areas of lowland plains. The major urban centre, Palmerston North, is towards one end of the region and those parts in the north comprising much of Ruapehu tend to face north and probably identify as much with the Waikato as Manawatū-Whanganui. It has a number of significant rivers, notably the Manawatū and Whanganui, which are often described as the life-blood of their respective areas of the region.

The hill country is a mix of volcanic material producing soils of variable fertility and sandstone which is prone to erosion and, related to this, the plains areas are periodically subject to serious flooding. The lower plains are a mixture of sand and alluvial material with generally good fertility and water retention.

Agricultural informants described farming in the area as generally “hard”. Whilst productive, it does not reach the heights of productivity for say dairying or arable that can be found in Southland or Canterbury.

The climate is temperate, with a moderate rainfall all year around, although summer droughts are becoming more common with evapotranspiration aggravated by often strong westerly winds.

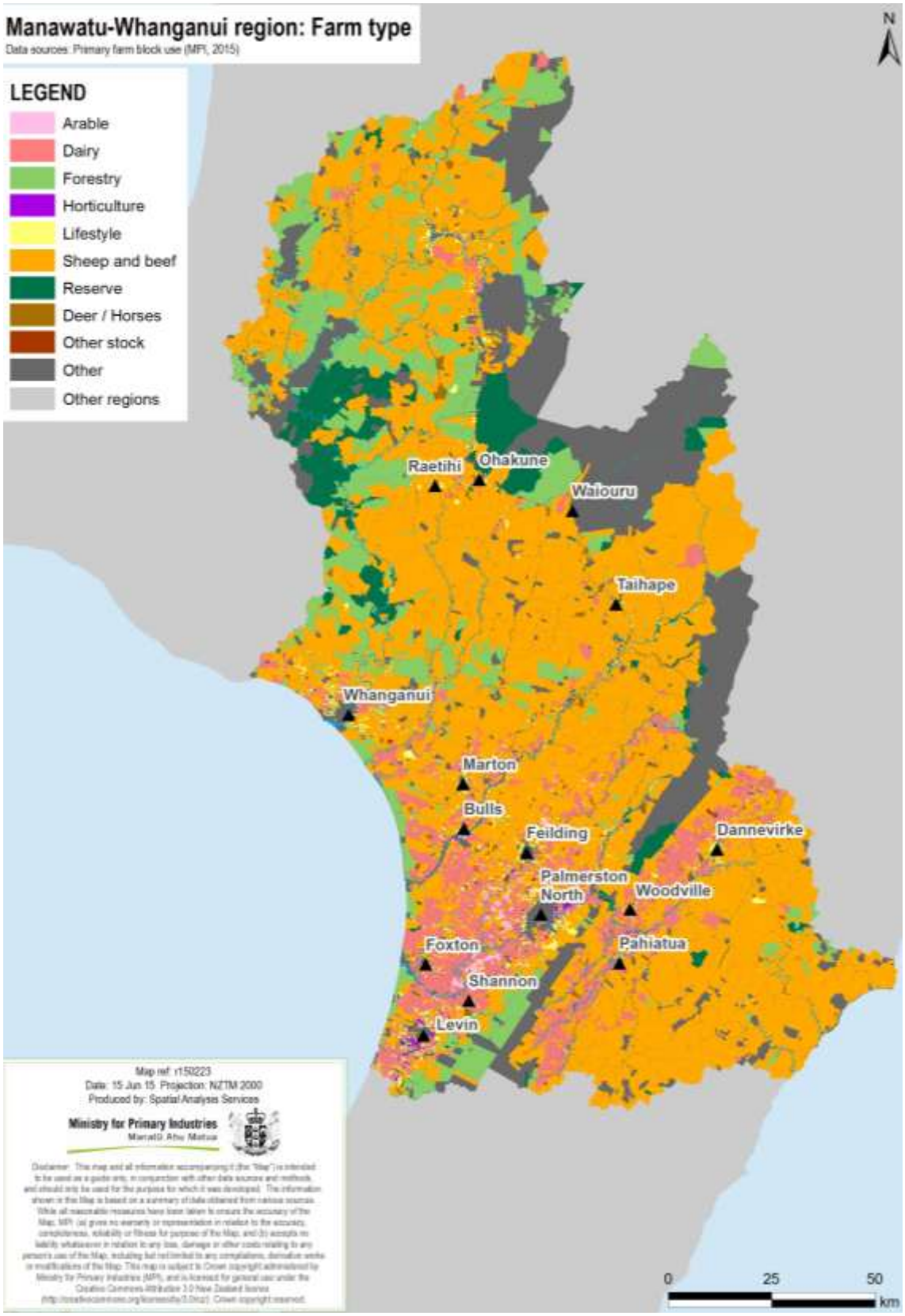
The geography of the region provides benefits but is not a decisive comparative or competitive advantage.

LAND USE

The region is subject to wide variations of land use, although there is also significant specialisation in selected parts which is largely a product of geography. The hill country - mainly sheep and beef - is extensive. The plains - mainly dairy and arable - are also extensive. Mixed land uses are common throughout the region.

The map in Figure 4, right, illustrates patterns of land use and the predominance of sheep and beef farming throughout the region. It should also be noted that there are large areas of native cover offering tourism opportunities.

FIGURE 4: LAND USE PATTERNS



Source: Ministry for Primary Industries

ECONOMY

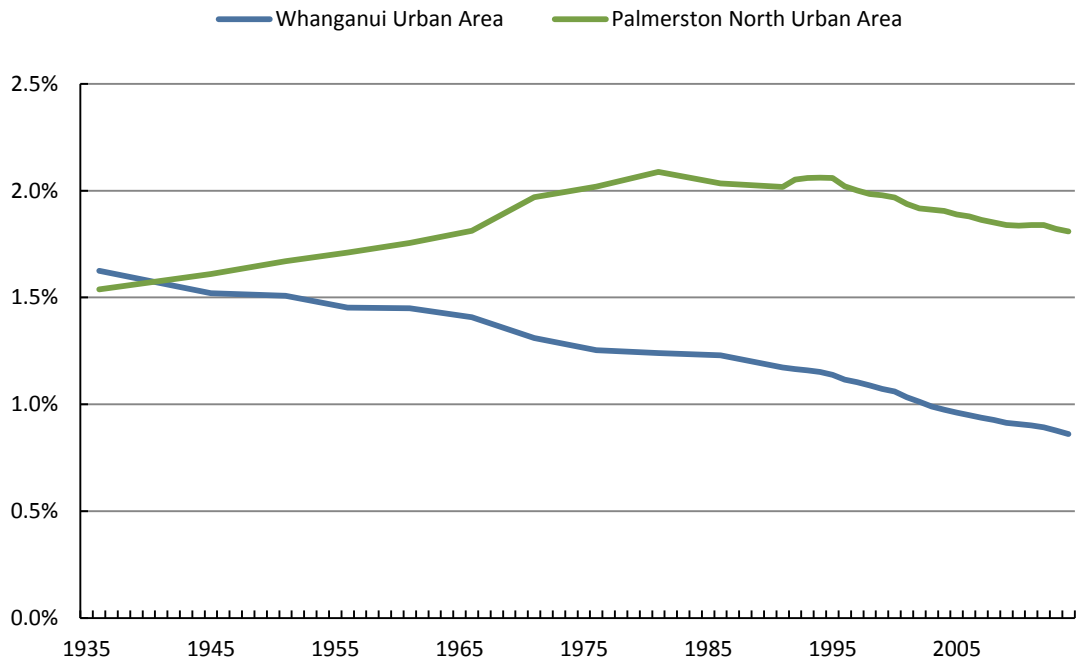
HISTORICAL PERSPECTIVE

The growth challenges faced by the region are not new. A long term view seen through the urban populations of Palmerston North and Whanganui illustrates the point. In the 1930s the two urban centres were about the same size. The population of Palmerston North grew faster than the national total until the 1981 Census. Since then Palmerston North has not grown as fast as the national total, joining the declining national significance of Whanganui which started to occur as early as 1935. The relative decline of the region has been in train for many decades (See Figure 5).

The Manawatū-Whanganui economy was valued at $9.1b in 2014, accounting for 4% of the New Zealand economy. The share of national economic activity is smaller than the size of the regional population (5%), because GDP per capita is around 23% lower than the national average. The difference in GDP per capita is mainly due to the composition of the regional economy, which has a greater concentration of industries that do not employ many people or tend to have many low paying jobs, low employment participation and a higher than average dependency ratio. For example, the region is specialised in agriculture, retail, construction, health and education – sectors that tend to have low wages. Lower economic participation through work and more retirees further lower GDP per capita relative to the rest of New Zealand.

FIGURE 5: POPULATION SHARE IN SELECTED URBAN AREAS (1935-2014)

% share of the NZ population living in the urban areas of Whanganui and Palmerston North



Source: Statistics New Zealand (Yearbooks, censuses and subnational population estimates)

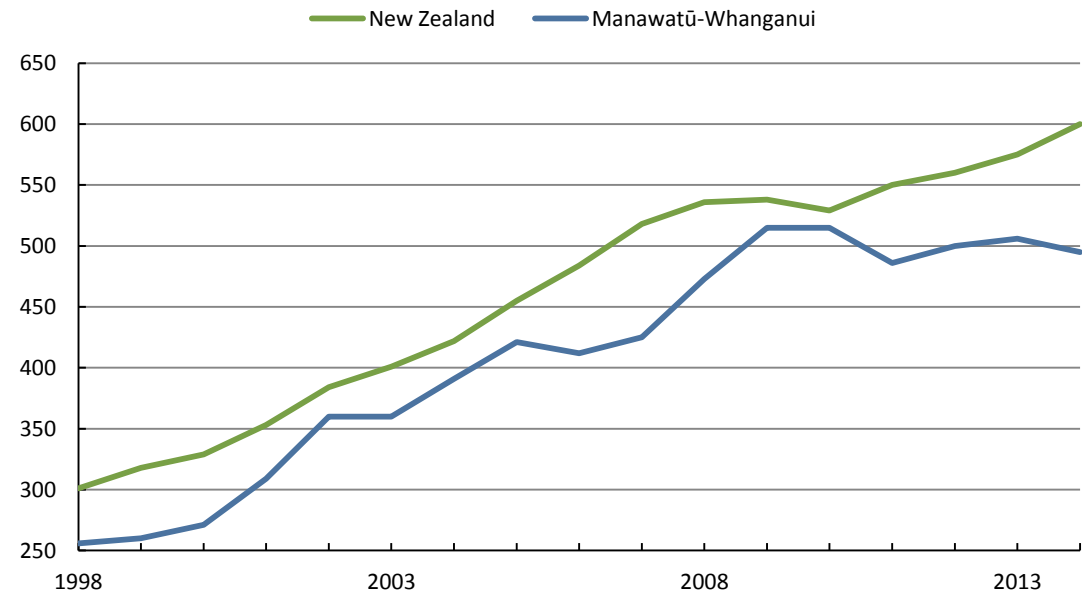
The regional economic patterns are reflected in lower incomes and lower participation in work. Median personal income was on average 11% lower than the national figure in the decade to 2014, and 18% lower in 2014 (See Figure 6).

The gap is getting wider. Participation in work is also lower. In the beginning of official labour statistics in 1986, the regional employment rate, or the share of working age population in work was similar to the national total. Since then, employment in the region (as a share of the working age population) has been persistently lower than the national total. The average gap has been 2.5% of the working age population in the decade to 2014. Recently the employment rate has fallen in Manawatū-Whanganui, while it rose nationally. The gap in the regional employment rate from the national total was 5.7% in 2014, equivalent to 10,000 jobs.

The recent weakness is driven by two components. First, the region specialises in industries with declining employment levels. They are downsizing, measured by employment, across New Zealand and also the region. Second, some of these sectors are doing worse than in other parts of New Zealand. One example is the agriculture, forestry and fishing sector; 12% of the region's employment is in this sector, compared to 7% nationally[5]. Between census years of 2006 and 2013, national employment in this sector fell by 4%, but 10% in Manawatū-Whanganui. So, losses of employment in the region were due to greater exposure to a declining sector and steeper job losses than in other parts of New Zealand.

FIGURE 6: MEDIAN PERSONAL WEEKLY INCOME: MANAWATŪ-WHANGANUI AND NEW ZEALAND

Personal income of all people from all sources, $ per week



Source: Statistics New Zealand (New Zealand Income Survey)

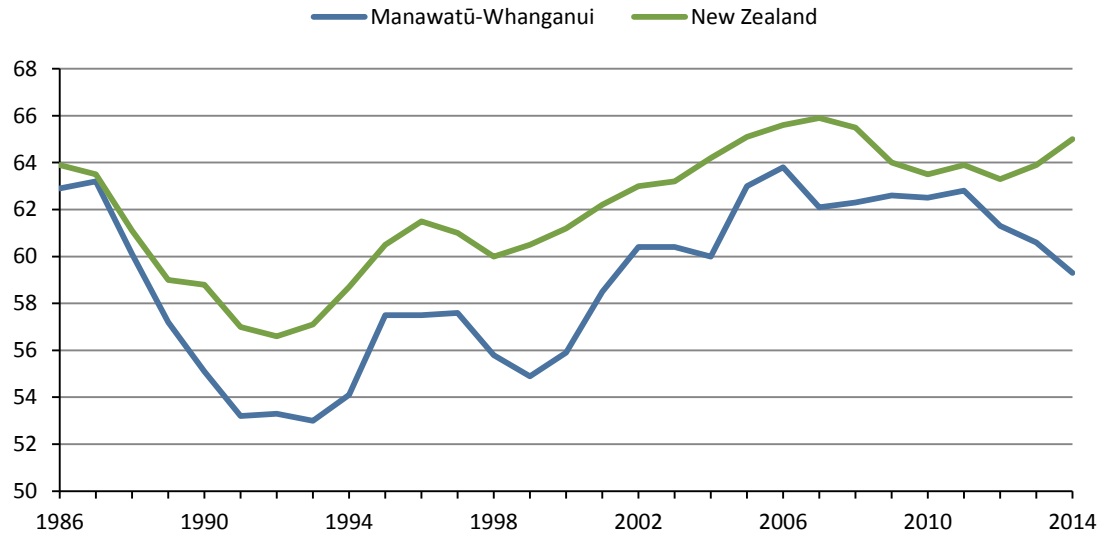
[5] 2013 census data

The region is not holding its own on GDP, which measures the total output of the economy, and neither is it holding ground on employment. It's not a question of capital winning out over labour; both are falling behind national averages.

The result is that there is underutilised labour (See Figure 7) which leads to the problem of young people leaving the region to seek employment in the cities or offshore. Massey University and other training institutions hold young people for the duration of training but a large proportion leave the city at graduation. Also as noted earlier, the ageing of the population is accelerating.

FIGURE 7: EMPLOYMENT RATE: MANAWATŪ-WHANGANUI AND NEW ZEALAND

% of working age population in employment



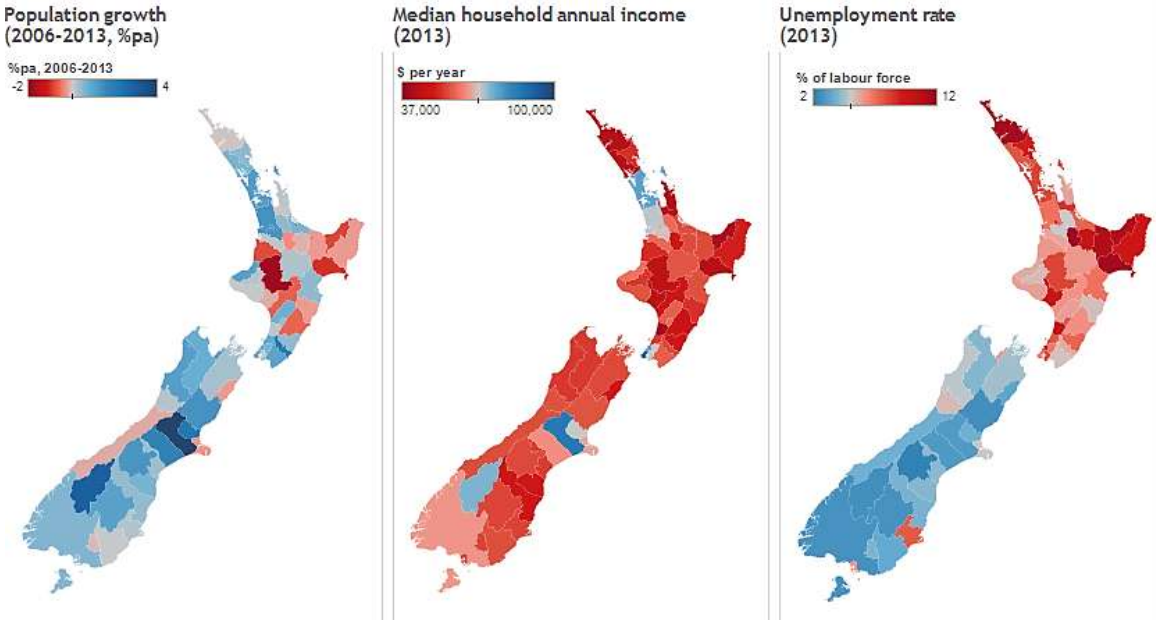
Source: Statistics New Zealand (Household Labour Force Survey)

CURRENT PERSPECTIVE

There are wide sub-regional differences. For example, in the Manawatū-Whanganui region average employment growth rates over the past decade ranged from -1.3% a year for the district with the lowest employment growth rate to +1.1% for the fastest growing district. These divergences can be seen all over New Zealand and are in part reflective of small economies, which lack breadth and depth and are therefore vulnerable and potentially volatile.

Table 3, over the page, demonstrates that the lowest district performance in terms of employment growth is on a par with other deprived districts across the country. The district in Manawatū-Whanganui with the highest employment growth is still amongst the slowest growing in the country.

FIGURE 8: WIDE DIFFERENCES IN ECONOMIC PERFORMANCE



Source: Statistics NZ, NZIER

In Figure 8: Wide differences in economic performance are evident. Each map ranks territorial authorities by their performance in selected measures of prosperity. Red depicts weakness; blue strength. The first map shows population growth between the 2006 and 2013 censuses. During this time many of the Manawatū-Whanganui territorial authorities contracted. The second map shows the median household income. Outside of a handful of locations in the main urban centres, household incomes are low in provincial New Zealand. The third map shows the unemployment rates; they are generally high in the North Island compared to the South Island. This in part reflects an older population in the South Island, but also weak labour market performance in the North Island. The second map depicts the median annual household income for each territorial authority. In 2013, the median annual household income nationally was $63,800. Territorial authorities with median annual household incomes above $63,800 are depicted in blue including Auckland, urban Wellington and parts of Canterbury. While spatially small, a significant percentage of national households are located in these urban centres. The rest of the territorial authorities (in red) experienced median household incomes below $63,800 including all territorial authorities in the Manawatu-Whanganui region.

Of the 10 largest sectors in the Manawatū-Whanganui region, half have shed jobs in the past decade.

Personal and household incomes are lower than the New Zealand average, in part because of lower economic engagement through work and also because of the region's high proportion of low skill jobs.

Some of the income difference from other parts of New Zealand is overstated, because the cost of housing (to buy, but not to rent) is relatively low in the region. This means that income in the region can go further. But it does not take into account future income prospects, which are relatively low due to limited career and income progression opportunities. This fact alone may be a key driver in the lack of ambition we detected in the region.

TABLE 3: GROWTH WITHIN REGIONS IS MORE VARIABLE THAN ACROSS REGIONS

Compound annual rates of growth in employment 2001 to 2013

	Lowest District growth rate	Regional growth rate	Highest District growth rate
Northland	0.6%	0.9%	1.2%
Auckland	1.2%	1.6%	2.5%
Waikato	-0.6%	1.2%	2.0%
Bay of Plenty	-1.8%	1.2%	2.4%
Gisborne-Hawke's Bay	-0.8%	0.5%	1.0%
Taranaki	-0.3%	1.2%	1.8%
Manawatu-Whanganui	-1.3%	0.3%	1.1%
Wellington	-0.7%	1.0%	1.8%
Upper South Island	0.8%	1.1%	2.1%
Canterbury	0.3%	1.5%	4.3%
Otago	-0.1%	1.2%	4.2%
Southland	-0.5%	0.5%	1.0%

Source: Statistics NZ; NZIER

Table 3: Employment growth within regions is more variable than across regions. This depicts the divergence of economic performance within regional council areas. For each regional council area, we show the district or territorial authority with the lowest employment growth rate, the employment growth rate for the total region, and the sub-region with the highest employment growth rate. In the Manawatū-Whanganui region, Ruapehu district is the worst performing and Manawatū the best performing.

SECTOR SIZE AND GROWTH

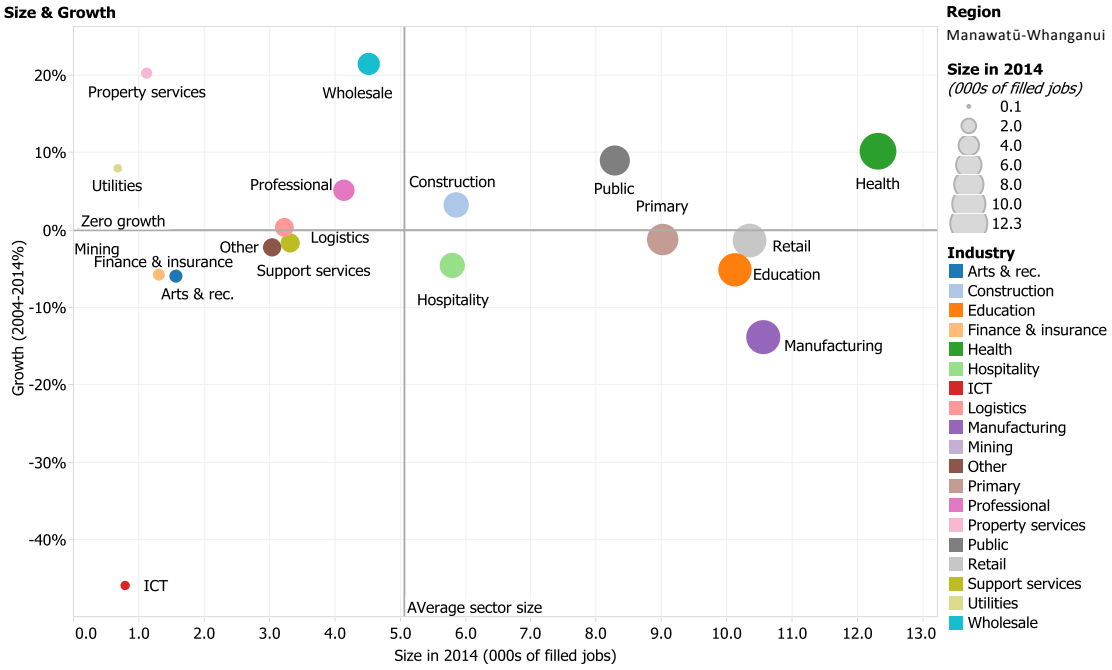
Figure 9 below shows the prominence and growth of sectors in the region, as measured by filled jobs in the business demography dataset. What is immediately apparent is that the larger and more productive sectors such as manufacturing and primary are in negative growth. Where growth is evident in the larger sectors it is driven by public expenditure in health and public service. Palmerston North is second only to Wellington as an economy based on public sector spending.[6] This is not a strong and sustainable basis for a growing economy, due to tight fiscal conditions that are expected to continue.

The wholesale and construction sectors' position in the figure below reflects the hubbing and distribution activity in the region which has grown in recent years and which arises

[6] Stephenson, J. (2013). 'Regional government expenditure Estimates of core crown spending by region'. NZIER report to MBIE and Treasury, April 2013. http://www.med.govt.nz/sectors-industries/regions-cities/pdf-docs-library/research/regional-government-expenditure-report/Regional%20government%20expenditure%20full%20report.PDF

from a regional comparative advantage. Its potential scale is capped by the level of primary economic activity to feed the hub.

FIGURE 9: SIZE AND GROWTH OF SECTORS AT A REGIONAL LEVEL



Source: Statistics New Zealand (Business Demography Statistics)

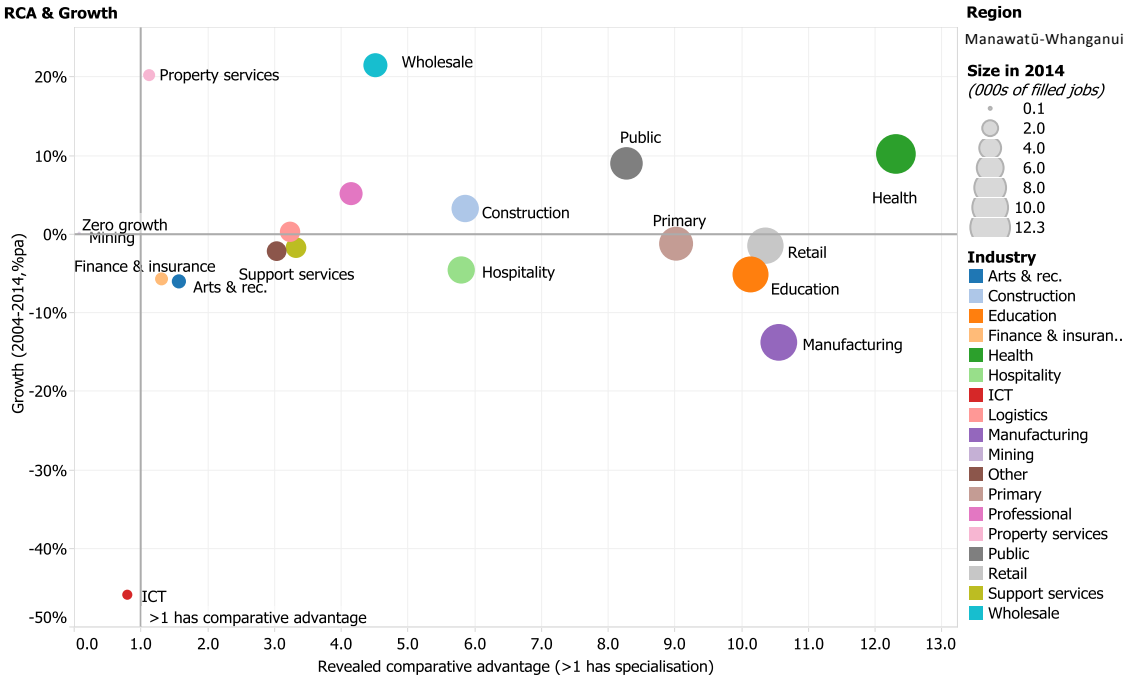
In interpreting Figure 9, note that the sectors on the right hand side in employment terms are large and those on the left are small. The sectors on the top half of the chart have increased employment in the past decade and those in the bottom half have lost jobs. For example, manufacturing is a large employer, but it has been shedding jobs over the past 10 years. ICT is a small sector and shrinking. Property services is a small sector, but growing. The primary sector has created few new jobs in the last decade. The largest segment – sheep and beef – has been shedding jobs. Dairy has added new jobs and so has poultry but from a small base.

COMPARATIVE ADVANTAGE

Figure 10 below shows each sector's specialisation in the Manawatū-Whanganui region and their growth over the past decade. For example, the Manawatū-Whanganui region is specialised in the primary sector (agriculture, forestry and fishing) but the sector has not created many new jobs over the past decade. This is partly due to the nature of these industries in general and also due to their greater mechanisation in recent years. It also reflects the lack of development of processing capability which, while also mechanised, can produce jobs.

Contrasting specialised industries are health (specialised and growing) and manufacturing (specialised and contracting). Manufacturing is suffering from global pressures on traditional enterprises. From a positive viewpoint there is a base of manufacturing activity and capability on which to build. The key to unlocking this area is likely to be technology and innovation.

FIGURE 10: REGIONAL COMPETITIVE ADVANTAGE BY SECTOR



Source: Statistics New Zealand (Business Demography Statistics)

In interpreting Figure 10, note that the sectors on the right side demonstrate greater specialisation; those on the left less so. Those above the line are growing, those below are not.

INCOMES

The region's median household incomes are relatively low (see Figure 11). There are large differences within the region. While incomes are relatively high in Palmerston North (8% below the national median), they are lowest in Horowhenua (39% below the national median).

Incomes should be seen in the context of the cost of living. The largest difference in living costs tends to be in housing. The cost of housing in the provinces is generally much lower than in metropolitan cities. While after-rent incomes are still lower than the national median, most parts of the Manawatū-Whanganui region have higher incomes after mortgage payments.

The main difference between provincial and other urban centres is not just the current level of incomes, but also the potential for future incomes. Our analysis of sectors, occupations and future career progressions suggest that lifetime income prospects are also low in the region. The relatively low cost of housing is consistent with lower lifetime incomes.

These differences in incomes matter. They can make it difficult to retain or attract people to the region, particularly in innovation and leadership roles. But for businesses, the region can be a relatively low cost business location, not just in terms of land and commercial rent, but also in terms of wages and stability for workers (for example,

workers in a region like Manawatū-Whanganui have more of a chance of buying a house than in Auckland, where house prices are much more expensive relative to incomes).

FIGURE 11: INCOME AND COST OF LIVING, 2013

Region	Median Household income ($ per year, 2013)	Difference from NZ		
		Median income	After rent income	After mortgage income
Manawatū-Whanganui	50,000			
Ruapehu	44,400			
Whanganui	43,800			
Rangitikei	48,600			
Manawatū	57,700			
Palmerston North	58,500			
Tararua	47,500			
Horowhenua	39,200			
NZ	63,800			

Source: Statistics New Zealand, MBIE, QVNZ, RBNZ, NZIER calculations

Figure 11 shows the median household income as at the 2013 census. Household incomes in the region are lower than the national median, as shown in the first set of bar charts. But these measures do not take into account a key variation in the cost of living – housing. Once we account for rents the picture stays the same, but home owners with a mortgage are better off in most sub-regions.

EMPLOYMENT

Employment conditions in parts of the region are challenging. The unemployment rate is higher than the New Zealand average across many of the sub-regions (See Figure 12), but Rangitikei, Manawatū and Tararua had lower unemployment rates at the time of the 2013 Census. While national employment has grown modestly over the past decade, the Manawatū-Whanganui region has shrunk slightly (See Figure 13). The past decade contains one of the deepest and longest recessions on record and as such the trends need to be seen in this context.

FIGURE 12: UNEMPLOYMENT RATE, 2013 CENSUS

Region	Unemployment rate, 2013 Census	Difference from NZ
Manawatū-Whanganui	7.8	0.7
Ruapehu	8.1	1.0
Whanganui	9.6	2.5
Rangitikei	6.1	-1.0
Manawatū	5.8	-1.3
Palmerston North	7.5	0.4
Tararua	6.1	-1.0
Horowhenua	10.1	3.0
NZ	7.1	

Source: Statistics New Zealand

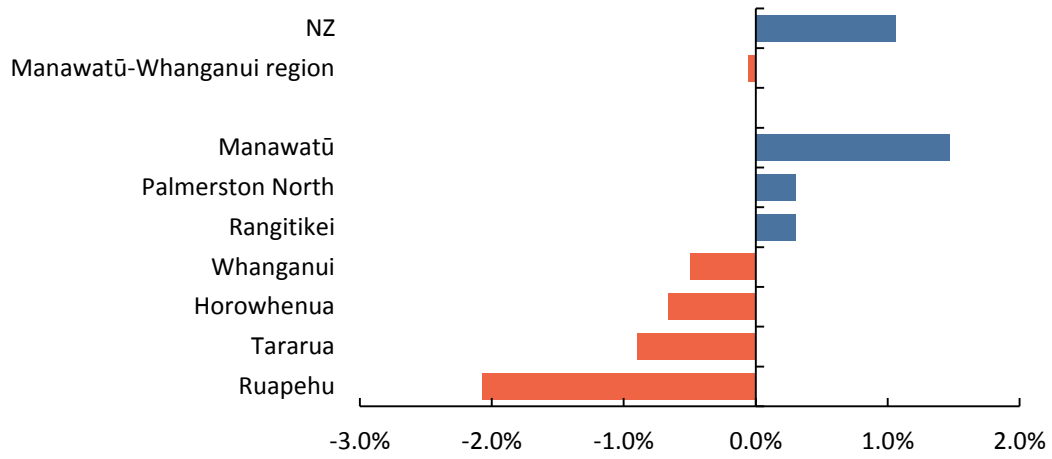
Figure 12 shows the unemployment rate for the Manawatū-Whanganui region and the sub regions. The pattern is uneven – Rangitikei, Manawatū and Tararua had a lower unemployment rate than the national total. But the other regions had higher unemployment rates.

The regional labour market has performed worse than the national total due to two reasons:

- Job losses have been more widespread across sectors.
- The region is specialised in some of the sectors experiencing deep and structural change.

The labour market presents the most compelling platform for change. As already explained, many of the region's large industries are in decline, similar to national and global trends. This is being further compounded by worse regional performance compared to the national average. Manawatū-Whanganui specialises in industries that are in long term decline (at least in terms of jobs); and does worse in those industries than other parts of New Zealand.

FIGURE 13: EMPLOYMENT GROWTH, 2004-2014, COMPOUND ANNUAL GROWTH RATE



Source: Statistics New Zealand

Figure 13 shows the growth in jobs over the decade to 2014, as measured by filled jobs from Business Demography statistics. Three sub-regions have grown: Manawatū, Palmerston North and Rangitikei. But others have shrunk and the region in total has been losing jobs by 0.1% a year, compared to growth of 1.1% a year nationally. However, the broad patterns are consistent with longer term history. Many primary and manufacturing sector jobs are being 'offshored' through globalisation or are being replaced through technological advances. In other instances changing tastes and preferences means some products and industries are obsolete.

The go-forward strategy for the region has to be two-fold.

- To improve performance of its existing businesses. While this may not reverse the declining trend, it would be less steep.
- To expand sectors that have growth prospects and in which the region has a credible chance of building self-sustaining clusters.

The recommendations in our opportunities section address both these points with this approach in mind.

MAORI POTENTIAL WAITING TO BE UNLEASHED

Māori play a considerable role in the regional economy but the potential of Māori capability and assets has not been fully realised.

One in five people in the region is Māori (20.6% of the regional population in 2014). Manawatū-Whanganui has the 6th highest regional Māori population in New Zealand and accounts for 7.3% of the national Māori population. It is home to a number of iwi.

The largest are Te Atihaunui a Pāpārangi with more than 11,600 members and Ngāti Raukawa with more than 15,100.[7]

While the Māori population in the Manawatū-Whanganui region is large, the Māori labour market performance is comparatively poor. In 2014, the Māori unemployment rate was more than double that of European ethnicity, at 14.6% compared to 6.4%. Convergence to the non-Māori unemployment rate would reduce Māori unemployed by 56% or around 2,000 people. Share of the population in employment is also lower for Māori at 57.4% versus 60.2% for European ethnicity. This gap is equivalent to around 1,000 jobs.

Similarly, the median personal annual income for Māori is around 25% lower than for European ethnicity in the region ($24,300 compared to $32,800 in 2013[8]). The gap between Māori and non-Māori incomes narrowed between 2001 and 2006 but grew again between 2006 and 2013, possibly as a result of the GFC[9].

By increasing employment by around 1,000 people, reducing unemployment by around 2,000 people, and incomes catching up with those of European ethnicity would increase total income for Māori in the region by an estimated $205m (equivalent to 2.2% of regional GDP). The potential is huge but there are challenges. For example, although there has been consistent improvement of most education indicators for Māori in the region[10], Māori are still over-represented in 'no' or 'low' qualifications and under-represented in higher qualifications.

There are two positive developments that can be leveraged to deliver a better Māori economic outcome:

- Demographic: over half (53%) of the Māori population is under 25.
- Treaty settlements: identified and agreed settlements total over $200m, which can be leveraged for social and economic gain.

Māori own considerable assets in the region and these are expected to grow as remaining treaty settlements are completed. The asset base of traditional land is significant. Within the region there is more than 190,000 hectares of Māori Freehold Land consisting of 2,156 land lots of varying size.[11] This supports a number of farming businesses, which, because of the land types and terrain in the Manawatū-Whanganui region and where Māori land is located, are mostly devoted to sheep and cattle farming and forestry.

The largest farming business within the region is Atihau-Whanganui Incorporation (further details are in the Productivity of Māori Land section).

[7] Statistics NZ 2013 Census

[8] NZ 2013

[9] Based on 2001, 2006, 2013 census, customised data sets for Māori and non-Māori median personalised annual income, Statistics New Zealand.

[10] Ministry of Education "Education Counts" website: www.educationcounts.govt.nz

[11] Horizons Regional Council with areas updated by PWC 2014

The predominantly Taranaki-based Paraninihi ki Waitotara Incorporation (PKW), the owner of dairying land and 15 dairy farms totalling 20,000ha, also has some of its land assets in the region. In Palmerston North, the Palmerston North Tenths Trust owns 13 hectares of central Palmerston North worth more than $77m. [12]

Until 1996 the land owned by PKW and the Palmerston North Tenths Trust was held in perpetual leases at legislatively prescribed below market rates of return with lengthy rent review periods. The Māori Reserve Land Amendment Act 1996 improved the terms of the leases in favour of the landowners, moving to market rents and providing owners with the option of purchasing the improvements on their land. This will continue to have an impact on the farm, commercial and residential property markets in these regions as the landowners gain more revenue from commercial rents and buy back leases and the improvements on their land.

There have been relatively few historical Treaty of Waitangi settlements in the region. Iwi that have settled include Ngaa Rauru Kiitahi whose rohe overlaps Taranaki and Whanganui. Their settlement in 2003 totalled $31m and they now have assets of more than $40m. Ngaa Rauru is a member of the Iwi Collective Partnership, a group of 12 iwi that have pooled their fisheries assets to develop greater control over the processing and marketing of their quota acquired as a result of the 1992 settlement of Māori fisheries claims. Ngaa Rauru is the only iwi in the region to be a member of the partnership.

Ngāti Apa received a settlement of $16m in 2008 and has developed an active investment approach including ownership of commercial property in both Whanganui and Palmerston North. It has entered a partnership with the Atihau-Whanganui Incorporation and a local farming company to buy and operate 1100 hectares of sheep, cattle, dairy and forestry property near Bulls.

Ngāti Toa, whose Rangatira are primarily based in the Kapiti region also have interests within the Manawatū-Whanganui Region. Ngati Toa reached agreement with the Crown on their historic Treaty claims in 2012 and received $70m in financial redress.

The historical Treaty claims regarding the Whanganui River are in the final stages of settlement and include legal recognition of the Whanganui River as an entity in its own right as Te Awa Tupua, a $30m fund to assist with restoration of the health of the river as well as a total of $80m in financial redress for iwi. [13] A new governance structure has also been established to replace the Whanganui River Māori Trust Board and represent the interests of iwi in Te Awa Tupua – Ngā Tangata Tiaki o Whanganui.

The majority of iwi have not yet reached comprehensive settlements. This includes Rangitāne o Manawatū, Rangitāne o Tamaki nui a Rua Wairarapa, Ngāti Kahungunu o Tamaki nui a Rua Wairarapa, Muaūpoko, Ngāti Raukawa, Te Atihaunui a Pāpārangi, Ngāti Rangi, Uenuku, Ngåti Maniapoto, Ngāti Tuwharetoa and Mokai Patea. Some iwi also have interests in the separate historical claims relating to Tongariro National Park.

Prepared Foods, the largest processor of paua in New Zealand and a major producer of ready to eat long life meals for other brands, is based in Palmerston North, and opened a new processing plant and factory in 2013. Prepared Foods is one of four divisions of

[12] Tenths Trust website

[13] Office of Treaty Settlements and annual reports of iwi

Aotearoa Fisheries Ltd, a wholly Māori owned entity which, among other things, holds a 50% share of the large seafood processor and exporter Sealord transferred to Māori as part of the 1992 commercial fisheries settlement. [14]

In addition to iwi assets and business, there is also a significant number of Māori in business who employ others or who are self-employed. Together they make up 8.2% of the total Māori in employment in the Taranaki and Manawatū-Whanganui region. [15]

The current relative underperformance is a call for action, as improving the Māori economic performance to the regional average would massively boost economic outcomes.

Māori are starting from a position of disadvantage. If the goal is to reach convergence over time, to invest in young children now for success in adulthood, there has to be success at each stage of life. A Brookings study[16] on social and economic mobility summarised the conditional steps to success in adulthood (measured as reaching middle class by middle life) requires success in early childhood, a good foundation in middle school, good achievements in high school (and avoid the traps of early pregnancy or crime), gain tertiary qualifications and enter into a good job. Māori are stumbling at many of these steps, with continuing differences in qualifications gained from school low transition through tertiary education and consequently engaging in low skill and low paying jobs.

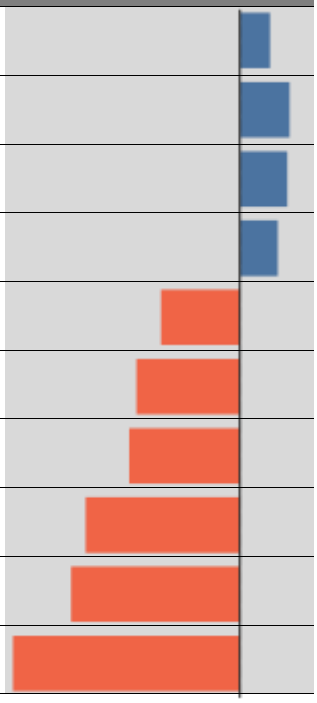
[14] Aotearoa Fisheries Ltd Annual Report 2014

[15] Māori in Business study, MBIE 2014

[16] http://www.brookings.edu/research/papers/2012/09/20-pathways-middle-class-sawhill-winship

FIGURE 14: HIGHEST QUALIFICATION BY SELECTED ETHNICITY IN MANAWATŪ-WHANGANUI, 2013 CENSUS

	All Manawatū-Whanganui	Māori Manawatū-Whanganui	Māori vs Manawatū-Whanganui
No Qualification	27%	37%	
Level 1 Certificate	15%	18%	
Level 2 Certificate	11%	13%	
Level 3 Certificate	9%	11%	
Level 4 Certificate	11%	8%	
Level 5/Level 6 Diploma	8%	5%	
Bachelor Degree/ Level 7	10%	6%	
Post-graduate/Honours Degree	2%	1%	
Masters Degree	2%	1%	
Doctorate Degree	1%	0%	



Source: Statistics New Zealand

Figure 14 shows the share of population in each qualification category. Māori have fewer qualifications, making it harder for them to access good jobs.

OVERALL CONCLUSIONS ON THE CURRENT STATE OF THE MANAWATU-WHANGANUI ECONOMY

On the face of it, the region appears to be in relative economic decline and this has been a feature for a very long time. With the loss of jobs, loss of companies in key industries and an ageing population goes the ability to create ecosystems of development. This is not an ideal setting for building a collection of highly skilled people where innovative sparks can fly, that can generate leadership and energy to create renewal in a regional economy that sorely needs it.

The region needs scale and active ecosystems including a deep pool of suitable labour, soft infrastructure like social networks, places to meet and play as well as its existing physical infrastructure like roads, schools and hospitals. Without these the region lacks the energy required to drive development.

All that said, there are some glimpses of possibility:

- Some sub-regions are doing better than others, suggesting decline is not inevitable and local factors, such as leadership, play a part.
- The region has not sufficiently used its regional scale to support economic development and this represents potential opportunity. It is difficult but not impossible

for a small dispersed population to replicate the agglomeration benefits of larger cities by building good connection internally and externally with metropolitan centres.

- There is a wealth of regional human, natural and physical capital that, if utilised better, can deliver tangible economic and social benefits.

The boat will not right itself. For development to accelerate there needs to be a culture of innovation and leadership. It requires a committed effort of regional leaders to build the culture and the institutions of growth.

SECTION SIX: **OPPORTUNITIES AND ENABLERS**

6. OPPORTUNITIES AND ENABLERS

This section describes the growth opportunities and enablers that we have identified in the Manawatū-Whanganui region. Eight opportunities have been identified and they have been presented in the report in an order of priority based on the filtering process and an additional mix of criteria including ease and immediacy of realisation, contribution of jobs to the region and leadership support from stakeholders. There are three enablers which are presented in no particular order because they are all very different to each other.

Each of the opportunities and enablers are assessed under five headings:

- **What** – what is the opportunity? What is the current situation? What are the prospects?
- **Why** – why is it an opportunity and what sort of opportunity is it?
- **Why not** – what are the factors that may work against it?
- **Filters Summary** – how is it that we arrived at this opportunity as a priority? What filters did we apply and how were they scored?
- **How** – how can this opportunity be unlocked?

At the end of each section there is a summary of interventions which outlines who should carry out what action and where to realise the opportunity and finally there is a visual summary in the form of a quadrant diagram which provides the answers to these questions, at a glance, for each opportunity/enabler.

Active regional leadership is required to convert local advantages into growth and especially jobs

The opportunities have been carefully selected. Some are large sectors such as sheep and beef where small changes can have large impacts. Others are extensions of existing activity such as fresh vegetables, based on the belief that expansion can be leveraged off the existing platform. Still others are relatively new to the area – Mānuka honey and poultry meat for export. In making the selection we were mindful of a number of criteria such as short and long term achievability, chances of success, local commitment and leadership in the sector and, of course, the viability and productivity of the sector for jobs and GDP.

Within each opportunity we have identified a strategic intervention or a point of entry, so while we would like to see an overall expansion of tourism, and particularly international tourism, in the region, we have limited ourselves to a focus on adventure/nature/cultural tourism in the Central Plateau and major rivers. We believe that if this was realised the flow-on effect would gradually stimulate other tourism opportunities. It's a case of initially addressing what is manageable then building on success.

We have selected only three enablers out of a possible much larger number. Those selected focus on critical areas such as transport and distribution. This is critical to the achievement of all the opportunities and effective supply chains are vital. Others focus on areas of under-utilised resources such as Māori land and where the way ahead remains uncertain. An enabler such as this requires dedicated and purposeful effort. The last enabler – 'growing businesses' – is about investing in the performance of the basic building block of business in the region – the small and medium enterprises – and intervening to address the business culture by enhancing their governance and management. Other enablers are referenced in the opportunities such as vocational education and training, broadband and regional leadership and are not treated separately.

OPPORTUNITY: TOURISM AND VISITOR SERVICES

WHAT? - THE OPPORTUNITY

The region already has significant tourism assets and exposure. The emphasis is on outdoor and nature-based adventure and is well-suited to a new generation of domestic and international tourists.

Comparative advantage lies not only in the geography of the region and its location at the centre of high volume traffic flows from State Highways 1, 3 and 4. There is also a uniquely spiritual character to the mountains of the Central Plateau and the Whanganui River with its numerous marae settlements.

Ski field developments are well-established and recent enhancements in the Ruapehu area include cycle trails, but apart from the skiing facilities the other attractions are not well known. At present it is predominantly a domestic destination and few of the attractions have reached a scale of market recognition to attract significant international traffic.

Current tourism activity is widely distributed, somewhat fragmented and generally small scale in nature and performing at a lower level than it could be (except for the long term ski and related attractions in the Tongariro National Park).

The opportunity is to use existing resources better, on a larger scale, with better coordination of diverse offerings and packaged through a single point of entry geared to both international and domestic markets.

Mountain biking on Tūroa is the ideal point of intervention to leverage this opportunity. The rapidly growing popularity of the sport and its pulling power to bring people (with opportunity for repeat visits) to the region, especially in the low shoulder seasons, would drive growth across all aligned adventure and outdoor tourism offerings.

The benefit to the region would be immense in that public and private infrastructure currently used for only part of the year (hospitality, accommodation and services) would become 365 day operations.

There is a compelling *prima facie* case that tourism of this nature would add jobs and increase incomes in the short and medium term.

Current patterns and projections

The current tourism contribution in the region, apart from the existing ski-related offering and the Tongariro Crossing, has latent growth potential. The region is not telling the story of the potential outdoor recreational opportunity because the offerings are fragmented with no cohesive narrative around them.

As a measure of the potential value of the opportunity, if the level of international visitors was raised to that of domestic visitors, $460m pa would be added to the regional economy, together with 520 jobs. This would boost regional employment by 0.5% and sub-regional employment, if concentrated in a place like Ruapehu District, by 11%.

This is very much a long term upside scenario. A more probable scenario is increasing visitor spending by around 10%, which would boost regional GDP by $63m a year and add 71 new jobs directly and indirectly.

We regard an increased visitor spend of 10% as very achievable simply through better packaging. We believe the mountain bike opportunity, which will take longer to develop, has the potential to enable growth to be better than this figure.

The tourism sector is already important for the Manawatū-Whanganui region, (see Table 4) accounting for 4.2% of GDP directly and another 3.3% indirectly (through related industries and induced demand). It generated economic activity of $633m in 2014 ($355m directly and $277m indirectly) and 7,105 jobs (4,008 directly and 3,097 indirectly). Tourism accounts for 7.4% of the regional economy, a little higher than the national total of 7.0%.

Tourism spending over recent years has been up and down, reflecting uncertain economic conditions. Nevertheless, growth in tourism expenditure has been robust in the five years to 2014 (Figure 15) suggesting Manawatū-Whanganui is a maturing destination. Visitor spending grew by 16% in this period, driven by domestic tourism (Figure 16). This is significantly better than the national growth of 7% over the same period.

While the Manawatū-Whanganui region has a similar total exposure to tourism as the New Zealand total, the region is more reliant on domestic tourism than international tourism - 87% of total tourism expenditure is domestic versus 59% for New Zealand - (Figure 17).

Source, season, value and change in the nature of tourists

The largest sources of offshore visitors to both the region and nation are from advanced economies like USA, Australia and UK. But the fastest growth is coming from markets like China (which is now New Zealand's second largest source of visitors) and emerging markets like India and Indonesia; economic growth in both these countries is leading to a rapidly increasingly mobile middle class with disposable income. India is also a good market for shoulder season travel which could help extend the tourism season in the region.

The type of visitor changes as incomes within visitor countries increase. Visitors tend to move from organised tours to independent travel. The latter tends to be more aligned to individual interests, for example mountain biking, trekking and experiences such as those available on the Forgotten Highway (State Highway 43), including the opportunity to self-drive a converted golf cart along the tracks of the Forgotten World railway. This positively reflects just some of the many tourism opportunities in the Manawatū-Whanganui region.

This shift in the type of visitor is also reflected in the growth of the camper van traveller – both domestic and international – as this form of travel makes the area more accessible. Ruapehu, Whanganui and Rangitikei are areas that lend themselves as destinations for this type of traveller, particularly as they sit at the centre of the intersection between state highways 1, 3 and 4.

A report completed in 2007[17], although a little dated, documents the high volume of domestic and international tourism flows on these highways. Much of this was the Foreign

[17] See http://www.med.govt.nz/sectors-industries/tourism/pdf-docs-library/tourism-research-and-data/other-research-and-reports/tourism-flows-model/tourism-flows-model-summary.pdf

Independent Traveller (FIT) heading south down State Highway 1. The opportunity lies in better understanding these travellers with the challenge being to draw them off the road because of their desire to connect with the experiences and activities available in the area.

MBIE forecasts that international visitor numbers and expenditure will continue to grow over coming years. Manawatū-Whanganui has the opportunity to take a bigger slice of visitors coming to New Zealand.

Tourism tends to be seasonal, with high visitor numbers during summer, and lower but still significant visitor numbers during winter/spring for skiing (Figure 18). While Tūroa has become a national and international destination for skiers the remainder of the attractions in the area have very limited profile, even with those visiting the area to ski.

TABLE 4: KEY TOURISM STATISTICS (MARCH 2014 YEAR)

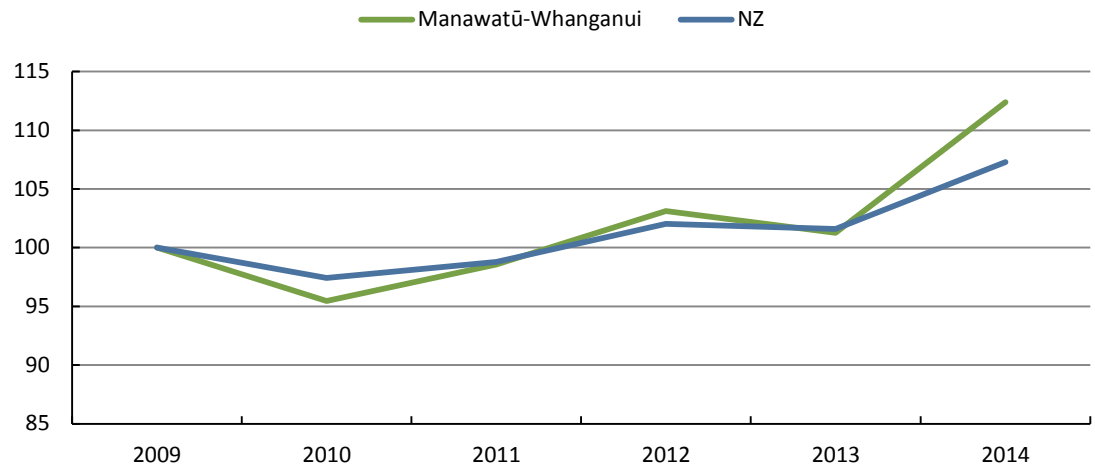
		Manawatū-Whanganui	NZ	Share of NZ
Tourism GDP	**$m**	**633**	**14,850**	**4.3%**
Direct	$m	355	8,339	4.3%
Indirect	$m	277	6,512	4.3%
Tourism employment	**000s**	**7**	**167**	**4.2%**
Direct	000s	4	94	4.3%
Indirect	000s	3	73	4.1%
Tourism expenditure	**$m**	**875**	**17,293**	**4.3%**
Domestic	$m	763	10,134	4.3%
International	$m	112	7,159	4.3%

Source: Statistics New Zealand, MBIE, NZIER estimates

Tourism expenditure in Manawatū-Whanganui tracks very closely that of New Zealand as a whole as illustrated in Figure 15. It is also a strong contributor when compared with other regions.

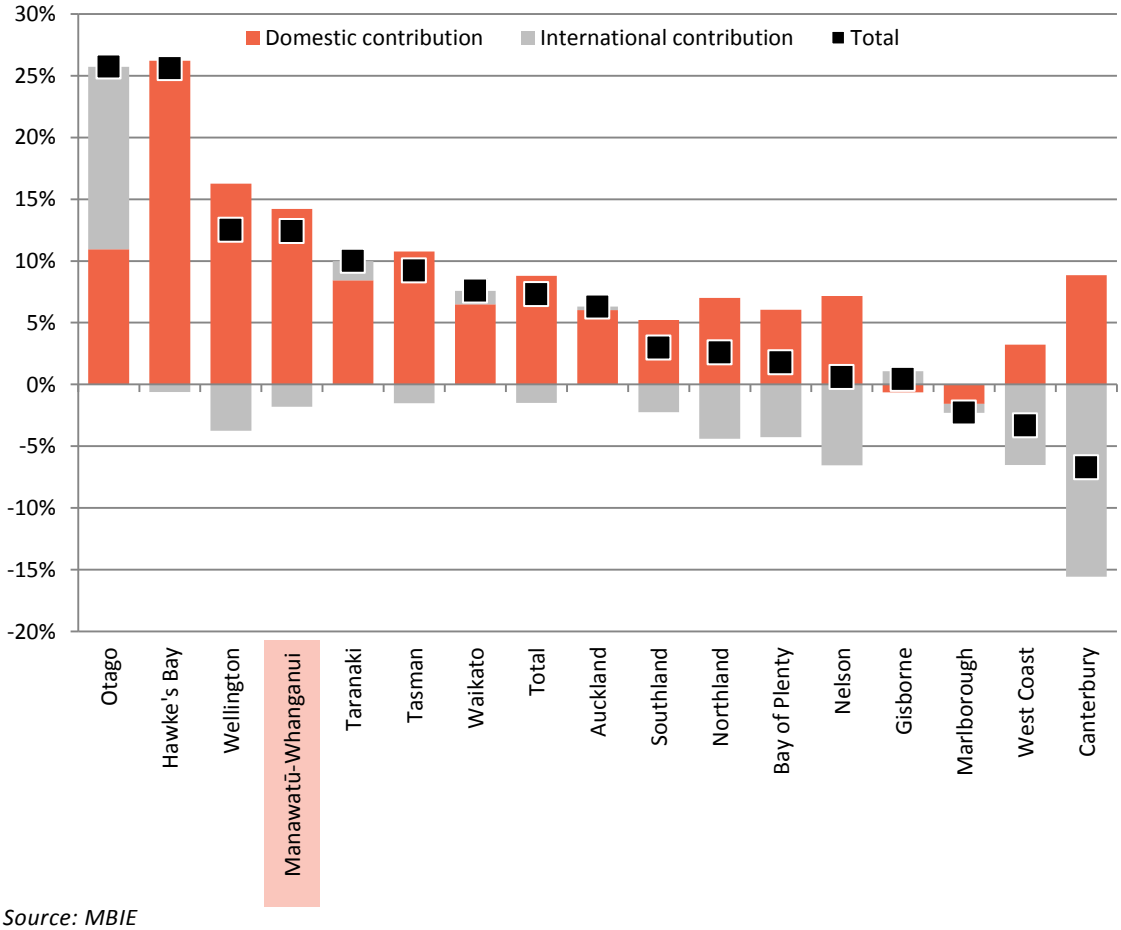
FIGURE 15: VISITOR EXPENDITURE (ALL EXPENDITURE)

(Nominal expenditure, indexed to 100 in 2009)



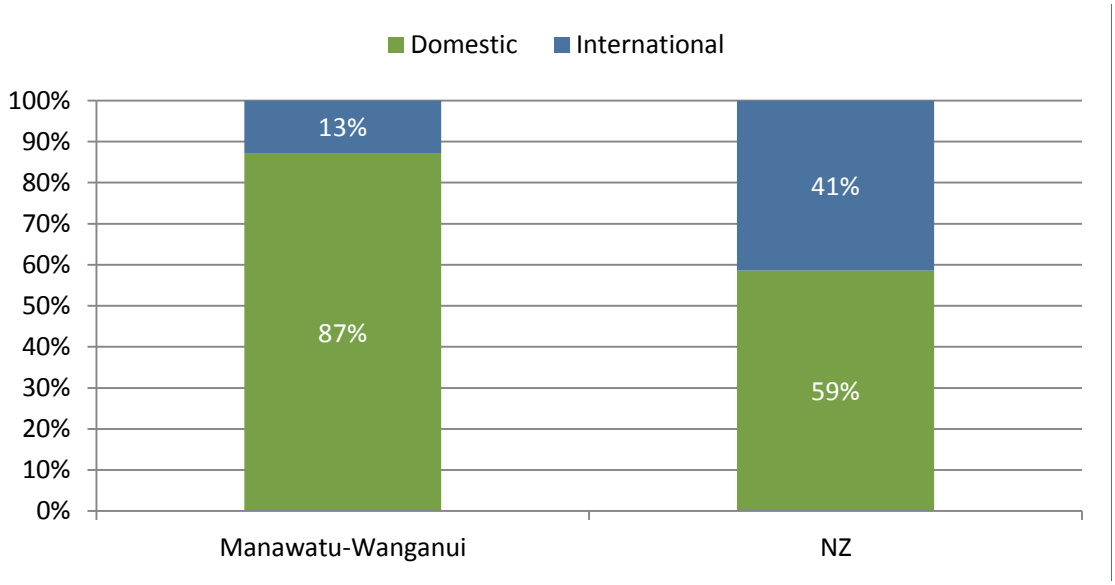
Source: MBIE, NZIER calculations

FIGURE 16: VISITOR SPENDING GROWTH, 2009-2014, % CHANGE



Source: MBIE

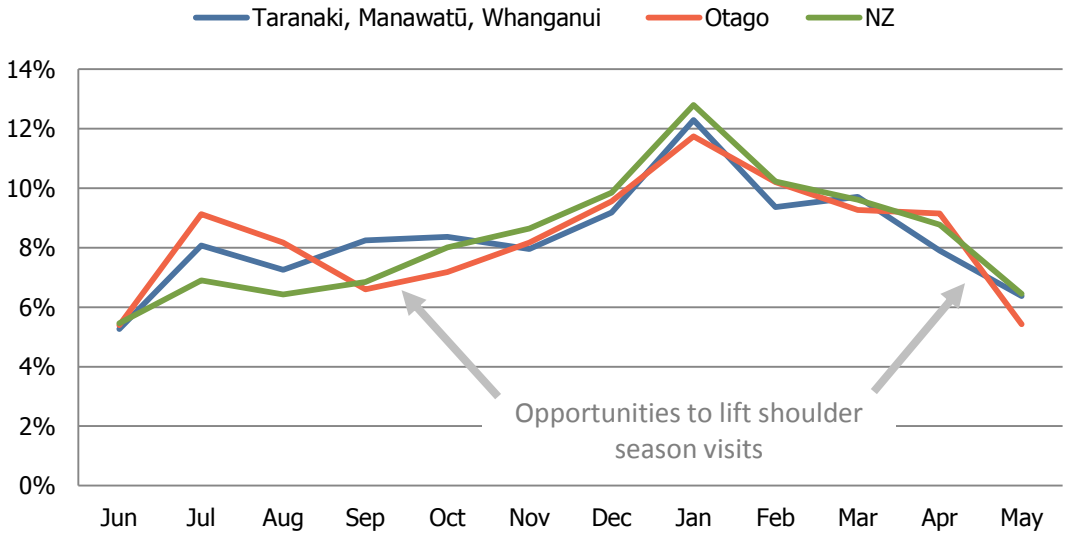
FIGURE 17: COMPOSITION OF VISITOR SPENDING % OF TOTAL, 2014



Source: MBIE, NZIER calculations

FIGURE 18: SEASONALITY OF ACCOMMODATION

Percentage of annual visitors in month (2014)

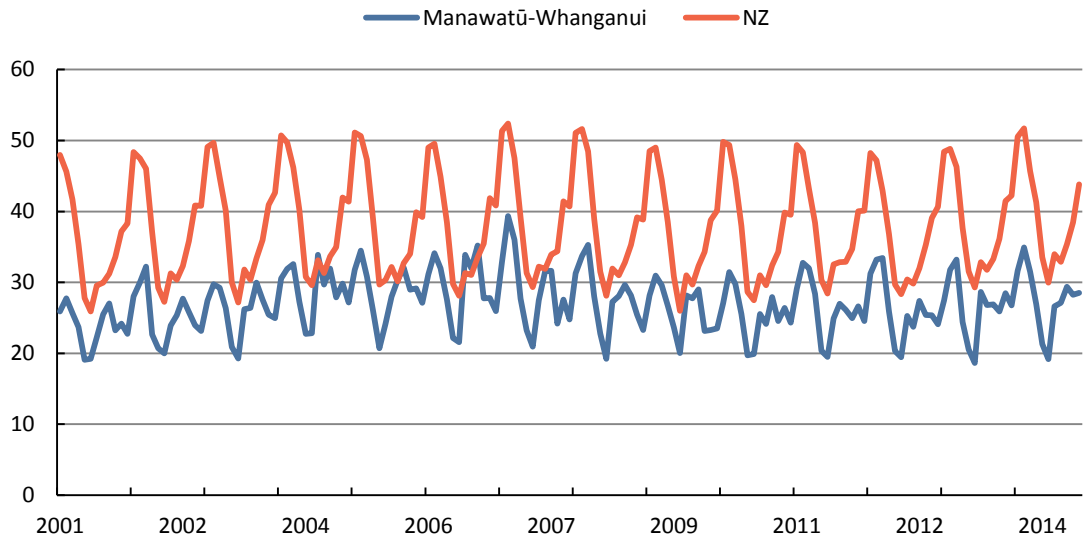


Source: Statistics New Zealand, NZIER calculations

As illustrated in Figure 18, the sharp dip in the autumn and the sluggish growth through spring – the shoulder seasons – are obvious opportunities to capitalise upon, with the right sort of offering and marketing. It is likely that mountain bike opportunities will not only extend the summer peak, but will also extend the shoulder seasons, particularly in the autumn when the weather is more reliable.

FIGURE 19: OCCUPANCY RATE OF SHORT TERM COMMERCIAL ACCOMMODATION

Percentage of capacity guest nights



Source: MBIE, Statistics New Zealand

Interestingly Figure 19 illustrates that Manawatū-Whanganui has a less volatile seasonable pattern than New Zealand generally and the extensions to the offering could help to flatten this volatility even more.

Growth of Cycling

Cycling is a world-wide phenomenon. New Zealanders of all ages now ride, with over 75,000 taking part in events in 2014.[18] Tourism New Zealand research information shows a positive 47% trend in growth from international cycling tourism from 2008 to 2012[19]. The largest part of that growth is in mountain biking. Comparative growth rates are evident in Australia and North America, which are significant sources of tourists to New Zealand.

Major marketing initiatives are attracting an increasing number of mountain bikers to the Whakarewarewa Forest near Rotorua and similar efforts are unfolding in partnership with the Taupo Regional Tourism Organisation (RTO).[20] There is no reason why the Ruapehu area should not leverage these initiatives. Its offerings are compatible and sit well with the mountain biking traveller wanting to stitch one trail ride into a sequence with others in neighbouring regions.

[18] From Cycling New Zealand

[19] Refer to Tourism New Zealand 2013 Study into International Cycling Tourism

[20] See for example the central North Island mountain bike marketing network. An overview is provided at http://www.bayofconnections.com/sector-strategy/sport-and-recreation/

There is also scope to link into the parallel interest in road cycling. There are two premium 'Great Ride' New Zealand Cycle trails in the region[21] - the 'Mountains to Sea' ride and the 'Timber Trail'. The 'Mountains to the Sea' (M2C) ride, although only just recently sealed, is gaining an increasing reputation for its character and beauty. The opportunity is to maintain and improve the quality of these trails (and supporting services) as part of the national cycle trail brand - in much the same manner as has been achieved for Great Walks like the Tongariro Crossing and the Tongariro Northern Circuit.

A 2012/13 report evaluating the benefit of the Great Rides provides a case study of the benefits to the local economy of the Mountains to Sea cycle trail. It identified numerous benefits to the region and the estimated spend arising from trail use. It also records[22] the results of discussions with Ohakune businesses who, among other things, noted the support for creating year round opportunities for businesses and thereby allowing full time staff to be employed on skiing activities over winter and mountain biking over summer. This has flow on benefits for school roles and the general dynamic of communities.

Strong support from four Regional Tourism Organisations (RTOs) and the Department of Conservation

The region is well served by three Regional Tourism Organisations[23] (RTOs) all of whom also work closely with Destination Lake Taupo and the Department of Conservation (DOC). The Whanganui Māori Regional Tourism Organisation Trust Board is also active. A 'can do' and 'willingness to collaborate' attitude is more than evident.

Visit Ruapehu, one of the RTOs in the region, is a small but impactful player. They have enjoyed some success in working to build customer friendly packages tailored for the convenience of visitors and aligned to the area's attractions and providers e.g. packages involving ski hire, lift pass, transport, bike hire and accommodation. This is part of a concept known as 'Grab One' deals. There is scope to do similar packaging for international travel wholesalers and individual consumers. Visit Ruapehu has also been marketing mountain biking since fledging trails first opened in the area and has been working with other RTOs in Taupo and Rotorua to collectively promote the wider region as a cycling destination. This includes involvement in a collective marketing network called 'Explore Central North Island'[24].

Rail tourism also has an important role to play in the growth of regional tourism in the Central North. Kiwi Rail's 'Northern Explorer' carried 32,144[25] passengers during the financial year 2013-2014. It had a successful summer season with 21% growth in February 2015 compared to one year earlier, with stops at National Park and Ohakune.

[21] The Timber Trail is more suited to mountain bikers and it too is gaining a reputation as being ideal for riders of all ages and skills.

[22] See page 70 onwards of www.nzcycletrail.com/sites/default/files/uploads/NZCT%20Final%20Report%20-%20Angus%20and%20Angus.pdf and also

www.nzcycletrail.com/sites/default/files/uploads/case-study-NZCT-TCB-Ohakune.pdf

[23] These are Visit Whanganui, Destination Ruapehu and Destination Manawatu

[24] See http://www.explorecentralnorthislandnz.com.

[25] Ruapehu District Council: Scenic rail in the central North Island. REV1: 30th April 2015.

An important additional development could be an integrated shuttle/coach/rail connection between Rotorua, Taupo and National Park each day to meet the train.

DOC, as the manager of many of the region's outdoor assets, is an important partner in continuing to build and market the area as a premium destination.

The Tongariro Crossing

The Tongariro Alpine Crossing in Tongariro National Park is among the most popular day hikes in the country[26] and is rated as one of the world's best one day walks. The Tongariro National Park is also a World Heritage site known for both its natural and cultural significance. It will continue to be a focal point for domestic and international travellers.

Diversity of visitor offerings beyond the Ruapehu area

The focus of the opportunity discussed in this part of the report is on the Ruapehu and Whanganui Districts but the objective of increasing tourism was something that was discussed at meetings with informants from all parts of the region. They identified opportunities covering an area separate from and much wider than Ruapehu. These opportunities could all benefit from better packaging and marketing on a bigger scale. They include the following attractions:

- **Tararua:** An opportunity exists to promote and grow visitors to the mountain biking and walking tracks at the Eastern End of the Manawatū Gorge. Visitor interest in the Tararua wind generation farms was also noted. In general it was felt that uncrowded hunting, fishing and trekking opportunities in the northern Ruahine and Tararua ranges were an under-recognised asset of the District. Informants supported the 'leveraging' opportunities referenced above. They wanted to give further attention to establishing links to promotional efforts and programmes established for attractions in neighbouring districts and regions such as Hawke's Bay and further afield. Norsewood would be a particular beneficiary of such attention.
- **Rangitikei:** The beauty of the Rangitikei River gorge, particularly in the headwater regions, and the associated farm stay, rafting, hunting and trekking opportunities in this area are viewed by informants as a forgotten treasure. These attractions have sometimes been overshadowed by the attention directed toward the Whanganui and Tongariro National Parks and would benefit from 'joined up' promotion.
- **Whanganui:** There is growth occurring in the Whanganui Journey Great Walk and M2C cycle trails - both recognised nationally for their recreational values. There has also been observed growth in the Whanganui Journey over several years and there are opportunities to extend tourism packages further down the Whanganui River to the township. Connections with Taranaki involving the Forgotten Highway and the Matemategonga Track are reference elsewhere.

[26] NZ Herald, August 19th, 2014, Mike Smith, Ruapehu Trust General Manager says '100,000 walked the crossing last summer'. The Tongariro Crossing is rated best 1 day walk in New Zealand and in the 'Top 10' one day walks in the world by National Geographic.

Not all tourist opportunities involve adventure recreation. Whanganui is known as a provider of facilities suited to high performance sports. New opportunities include:

- Marketing Whanganui Collegiate as a summer school for Indian cricketers (catering for the growing Indian middle class).
- Convening an international event, perhaps to be known as the 'Iron Wakarama Māori' Race' over a distance of 100 km race from Pipiriki to Whanganui.
- Growing cultural tourism experiences which connect marae of the Whanganui River to the growing interest in the tourism, educational and recreational experiences to be had in the Whanganui National Park.

TABLE 5: EMPLOYMENT IN TOURISM RELATED INDUSTRIES

	Employment (**)			
Element:*	Number, 2014	% of total	% growth, 2004-2014	Specialisation
Broad areas				
NZ	160850	8	10	..
Manawatū-Whanganui Region	6510	7	-6	Low
Territories				
Ruapehu	623	13	-5	High
Whanganui	1079	7	-10	Low
Rangitikei	465	8	-3	Medium
Manawatū	439	5	5	Low
Palmerston North	3000	6	-7	Low
Tararua	350	6	-0	Low
Horowhenua	565	7	3	Low

Source: Statistics NZ, NZIER

Notes

.. Not available or applicable

* Specialisation is calculated as revealed comparative advantage. We summarise the results as High, Medium and Low where high is RCA score of more than 1.15, medium is below 1.15 but greater than zero, and low is less than zero.

** Filled jobs. The sector is defined for this purpose as:
G40 Fuel Retailing
H44 Accommodation
H45 Food and Beverage Services
I49 Air and Space Transport
I50 Other Transport

The tourism sector cannot be neatly defined, because it is made up of the collection of sectors that service it. Table 5 illustrates that tourism related sectors account for around 7% of regional jobs, slightly below the national share. Ruapehu stands out as specialising in tourism. While employment in tourism related sectors is growing nationally, it is shrinking in the region, except in the smaller tourism centres of Manawatū and Horowhenua.

Unlocking Māori cultural and spiritual dimensions

A part of the tourism opportunity would involve either the expanded use of Māori land or expanded participation of Māori enterprise, particularly where cultural and spiritual dimensions are sought. The marae based experiences on the Whanganui River mentioned earlier and the addition of a cultural dimension to a trip across the Tongariro crossing are just two of the many examples which could contribute revenue to Māori enterprise.

Māori have operated very successful outdoor experiences on the Whanganui River and around the Ruapehu district for a number of years but some ventures did not thrive as the GFC hit the tourism sector. Collaboration between the Māori RTO, other RTOs and Economic Development Agencies in the area could see a rejuvenation of the outdoor Māori experiences.

AN OPPORTUNITY FOR RUAPEHU DISTRICT

- Currently the Ruapehu District is a major winter sports destination. The district's tourism sector contributed 6.2% to district GDP. This is double the contribution which tourism makes to the national economy.
- Around 13% of local employment is in the tourism sector. The sector accounts for 546 FTEs, 161 business units and $29 million in GDP.
- There were 376,000 guest nights spent in the district in the year ending March 2013. The district has a daily accommodation capacity of 2,450 beds. The spending of tourists flows to cafes and restaurants, the hospitality sector, supermarkets and grocery stores and sports and recreation providers.
- Figures just released by MBIE show that December 2014 was the most popular month for tourists ever experienced in the Ruapehu District. Visitor nights for that month hit 40,000 for the first time, exceeding the previous highest month of 36,000, recorded in January 2013. And 2014 in general was a great year for the district's tourism, with visitor nights overall topping 427,000 - well above the previous high, set in 2009, of 412,000.
- The research and conversations undertaken as part of this Study have indicated that growth and employment opportunities in the Ruapehu area will be achieved by expanding and making better use of existing attractions including:
  - Adding depth and variety to the Tongariro Crossing experience by expanding the number of concessions provided by those providing guided walks – particularly those from Tu Wharetoa, covering the many cultural, landscape, volcanic and other educational elements of the area.
  - Further developing and marketing additional partner walks to sit alongside the Tongariro Crossing and Northern circuit – as a means of taking some of the pressure off this area and also to encourage visitors to increase the number of nights they spend in the district (for example: expanded marketing of the Tama Saddle Track; more promotion of the Whakapapa village as the base for the Tongariro Crossing walk; further investment in the Round the Mountain track; and on-going investment in tracks around the Park's Southern Gateway between Ohukune and Waiouru.
  - Packaging and marketing visitor attractions around Mt Ruapehu and the Whanganui River in a way that provides a comprehensive multi day experience, for example, by combining Hobbiton with the Forgotten Highway with Whanganui River and 'Bridge to Nowhere' experiences, with Waiouru WW1 experiences and with mountain biking, trekking and other outdoor adventure activities etc.
  - Completing and fully integrating the growing range of mountain biking tracks and

road riding opportunities in the district and making this a key reason to visit the district.
    - Enabling the 365 day use of the uphill lift capacity offered by Ruapehu Alpine Lifts – particularly on the Tūroa side of the mountain where iwi have informed us they are cautiously supportive.
    - Combining the above two opportunities with that arising from a fully developed multi-level mountain biking track located adjacent to the Tūroa road, noting the additional benefit of increasing the safety for cyclists who currently use this Road.
- Related research has identified the following examples of the benefits of mountain biking investments for local economies:
    - The Whistler Ski Field in Vancouver, Canada now receives more visitor nights and higher daily use in the summer mountain biking season than it does in winter.
    - At levels of annual visit growth of 10% and 20% pa, a potential net increase in economic impact of between $31.2 million and $74.5 million respectively is expected in the Rotorua area from mountain biking expenditure in the period 2013 to 2025.[27]
    - Gondola uplift of mountain bikers at Queenstown has made a significant, but as yet un-quantified, contribution to the 'year round' Queenstown economy. It has also contributed significantly to the viability of the Queenstown gondola.
    - There is an investment of $3 million into the Christchurch Port Hills project to make that facility an attraction for mountain bikers.
    - The Cardrona Alpine Resort near Wanaka operated one of their chairlifts for mountain biking enthusiasts over the summer holidays of 2014/15. The new offering combines accommodation and food/beverage options and special events for guests and has made a positive contribution to the economies of Wanaka and Queenstown.
- The above examples support the existence of flow on benefits of an increased number of mountain bikers to other non-mountain biking activities and facilities. They also indicate a number of other matters:
    - The need for a marketing approach which is integrated with that developed for and by other locations e.g. Rotorua, Taupo or Queenstown
    - The need to see Mt Ruapehu and the Whanganui and Rangitikei Rivers as the critical point of difference for the region i.e. the focus and connector of related attractions.

WHY?

Summary of the rationale

- The good returns for capital and labour that can be derived from this sector.
- The physical, environmental and spiritual assets of the mountains of Tongariro National Park and the Whanganui and Rangitikei Rivers.
- The close proximity of the region to other attractions such as those located in Rotorua and Taupo, for example, mountain bike trails, thermal pools and geothermal attractions.

[27] See Rotorua Ten-Year Cycle Tourism Growth Strategy, APR Consultants, 26 February 2014

- The diversity of the offerings, though many aspects are still under-developed.
- The cultural dimension of the area's outdoor experience with its strong Māori overlay.
- The rapidly growing market interest in adventure and nature based tourism, particularly mountain biking and the potential of this market to drive repeat visits to the area.
- The existing infrastructure that is in place in the form of existing services – ski lifts, kayaks, recreation equipment, tracks, accommodation, restaurants that can be leveraged for year round use.
- The potential to develop inaccessible Māori land and produce jobs for the large local Māori community.

In summary, Manawatū-Whanganui's potentially strong performance in domestic and international tourism reflects its location and amenities and will improve with greater connectivity.

WHY NOT?

Current and proposed regional tourism offerings are potentially a good quality package. It will be important to use and protect the quality of the experiences available although because of the size of the region and the diversity of the opportunity it is unlikely to feel over-used or crowded.

Fragmentation

Capturing the opportunities described above is not straightforward. Some operators are very isolated and small scale. Some may not want to be part of something larger. An integrated marketing package would be essential which requires all parties to visualise the scale of the opportunity and agree on the fundamentals. "Patch protection" may be a problem.

Permissioning

The whole question of whether mountain biking can be operated on the mountain is likely to be a sensitive one with both iwi and the Taupo-Tongariro Conservation Board.

Who captures the benefit?

Where mountain bike tracks are developed around the country they have used a high level of volunteer labour contributions. Volunteerism as a mechanism for developing recreational assets has its limits. A mountain bike park similar to that proposed for Turoa is being developed in the Port Hills of Christchurch on a largely commercial model.

In addition, in projects like this, there can be a separation of capital for investment in the mountain bike trail asset development from those who reap the rewards of this investment such as motel owners, hospitality owners and food suppliers. A strong community ethos is required otherwise some parties can be seen as free-loaders by others.

The essence of the opportunity for the hospitality industry is that it will extend usage of other infrastructure and services without requiring significant extra provision. The Manawatū-Whanganui region has an excess supply of accommodation, relative to current

demand. The occupancy rate of the region's accommodation stock (excluding holiday parks) is typically below 35% which is well below the national norm (Figure 19). This means that there is capacity to potentially double visitor numbers within existing infrastructure.

The question of the standard of accommodation would need to be addressed and would require close examination to ensure it matched the expectations of new tourists. Public infrastructure might also not fare so well with a capacity review required of waste water treatment systems to ensure they can meet needs.

The matter of broadband connections needs attention. Some of the outdoor experiences that would be valuable in the proposed package are in remote areas. Adequate connection is essential for the efficient conduct of this business. Expansion of the Government's existing broadband initiatives and the new Mobile Black Spot Fund may deliver new opportunities, particularly in the tourism sector.

The regional tourism offering has already demonstrated its potential with domestic exposure, but the connection to the international market is weak. At the core of this problem is the packaging rather than the quality of the offering. A stronger international exposure will help to diversify not only the region's offering but the national offering.

FILTERS SUMMARY

Our summary of how the filters identified in the earlier 'analytical framework' part of this report are reflected in the scale of the 'tourism growth' opportunity provided in table 6 below. In brief:

Impact: the tourism sector is already a significant portion of the regional economy, but it is under-represented in overseas visitors. Increased visitor spending by 10% would boost regional GDP by $63m a year and add 70 new jobs directly and indirectly.

Trend: the global tourism market is growing and New Zealand is benefitting. Overseas visitor spending has been growing at 2% a year and holidaymakers spent some $4.6b across New Zealand in 2014. While this tourism growth rate is not spectacular, it is maturing and growth projections are steady. Future demand looks assured with increasing travel in markets like India and China, as the middle class in these countries grows.

Competitive advantage: the tourism product is sufficiently strong to support major growth. The fact that it is relatively undeveloped is an opportunity but also a challenge. The tourism sector also has large indirect spill-overs, generating high levels of economic activity and new jobs.

Employment intensity: the tourism sector is moderately labour intensive with a 26% share of output being wages. There are already around 6,510 tourism-related jobs in the region, accounting for around 7% of regional employment. While the bulk of jobs tend to be low skill and low pay, the alternative for unskilled labour may be no jobs at all. The types of experiences available lend themselves to other labour-intensive activity such as guiding and interpretation.

Like most service sectors, visitor service operators are intricately enmeshed with other businesses. A lift in tourism spending is 2.5 times more powerful than a generalised uplift in economic activity of the same magnitude.

Exporting: the tourism opportunity in the Manawatū-Whanganui region has significant potential for a mixed age demographic and has the potential for strong growth in the international market.

TABLE 6: OVERALL METRICS FOR TOURISM

Metrics	Current size (filled jobs)	6,510
	Employment intensity	Medium
	Linkages to other sectors	High
	Stage of lifecycle	Growth/Maturing
Impact	GDP adding	▲
	Job adding	▲
Trend	Domestic	▲
	Export	▲
Competitive advantage	Domestic	▼
	Export	▲
Summary	Current size	▼
	Employment intensity	–
	Linkages	▲
	Stage of lifecycle	–

Source: NZIER

HOW?

Objective - to grow the region as a destination for adventure, natural, cultural and outdoor tourism experiences.

Strategic interventions - these are twofold:

- First: to extend the mountain biking trails already being developed by introducing an additional trail on the Turoa side of Mt Ruapehu and marketing this in association with other mountain biking marketing initiatives in the greater area.
- Second: to use interest in mountain biking to accelerate interest in general regional adventure, outdoor, cultural and nature-based tourism opportunities.

The key to success with this twofold strategy is to adopt a comprehensive multi-activity and multi-dimensional regional package (accommodation, transit, rental etc.) approach with integrated marketing. In other words, to better coordinate the marketing of diverse[28] offerings and to incrementally add other additional attractions to the package as the concept grows.

[28] See example: http://www.explorecentralnorthislandnz.com/

The response to each of the two lines of strategic intervention is somewhat different. Taking the first one first, we believe it requires an action team comprised of the key players, that is Ruapehu District Council, Ruapehu Alpine Lifts, iwi, DOC, Visit Ruapehu (and other RTOs) and MBIE and possibly Tourism New Zealand, together with local operators – to get the momentum going. Detailed feasibility studies on the risk/reward of investment would be required.

More particularly:

- **Give priority to revisions to the Tongariro National Park Management Plan:** These changes should be designed to enable expanded use of Ruapehu Alpine Lifts (RAL) Ltd facilities for year-round tourist uplift, mountain bike trails on the Tūroa Ski-field area and a mountain biking trail running parallel to the current Tūroa Road[29]. This requires collaborative activity between RAL, DOC, iwi and related stakeholders with the council as an enabler. These parties should also plan for the development of a second Great Walk within the National Park.
- **Complete bike trails in the area:** Further infrastructure work is required such as establishing easy connections between the various trails in the area, completion of the trail from Ohakune to National Park ($1 million required) and the further packaging/marketing of multiple biking trails into a single cohesive package: Timber Trail; Taupo Trails; the 42 Traverse and Whanganui River experiences[30] together with related opportunities in the Taupo and Rotorua areas. This will require financial and volunteer contribution and will need to be progressed as a series of projects led by Ruapehu District Council.
- **Complete and further promote the Mountain to Sea Great Ride**: The cycle trail from Ohakune to Whanganui via the Whanganui River has received significant investment, including the completing of road sealing. Further work is required to achieve the 'rider-friendly' road design guidelines on the section from where the ride joins state highway 4 through to Whanganui (from River Road through to the North Mole at the Whanganui river mouth).

The second intervention (leveraging off the extension of mountain biking) relates to the packaging of all local tourism opportunities in the Ruapehu, Whanganui and Rangitikei area. This is a developmental task requiring care and skill. It will be enabled with:

- **Good Iwi/hapū engagement and governance:** Co-governance will be the key to on-going iwi/hapū engagement – particularly with projects to fulfil the tourism/recreation potential of the Whanganui River. All the parties will need to examine the best form of governance for the whole project and for each of the elements of it. This should be an early priority because it will build the cohesion the project will require.
- **Inclusion of the Waiouru WW1 and related attractions:** Additional tourism experiences are expected to be major attractions. They include: opening up the

[29] The proposal for a separated cycle and walkway located adjacent to the Ohakune Mountain Road has been supported by the Tongariro Taupo Conservation Board. The Board has recommended to DOC's planning team that a partial plan change to the Tongariro National Park Management Plan be pursued. Whanganui Chronicle. 10 March 2015

[30] Some work has already commenced e.g. the production of an attractive integrated trail map information pamphlet. This initial work needs to be significantly leveraged.

Waiouru area for a wide range of experiential/outdoor recreation opportunities as an adjunct to the current focus on army training and the development of a Waiouru WW1 experience. These are projects in their own right and while they should eventually become part of the overall approach, they should be managed separately and considered in a priority order of achievability, cost and alignment with the total package. The biggest gain will come from packaging these new experiences with other similar experiences such as the Forgotten World/Whangamomona rail experience. There is also opportunity to link these attractions to the current 'Hobbiton' international draw card located in Waikato which continues to attract high levels of international tourists as part of the Tourism New Zealand '100% Middle earth, 100% Pure New Zealand' marketing campaign.

- **Ultra-fast broad band:** This is a key enabler for both elements of the twofold approach. Tourists interested in mountain biking (and adventure tourism generally) tend to be younger and more independent and therefore more comfortable with using the internet for booking and arrangements. In particular, expansion of the speed and the area (into rural areas) of high speed service would help generate the facility to work from home and help contain costs; otherwise businesses would be dependent on expensive office accommodation. It may also provide more opportunity to generate dual family incomes as employment for spouses in remote areas is an increasing concern. Most importantly, high speed broadband development must keep up with the tourism development programme in the region otherwise it will act as a drag on progress.

- **Targeting of international tourists:** While there is scope to grow the domestic market, the big gains are in the international market. Obvious markets are English-speaking countries such Australia and the US, but there is significant potential in markets such as China and India. The cultural connection is a potential factor to weave into this marketing. Targeted marketing may be required for example, aligning fishing and hunting with particular international tourist markets. The task is for the RTOs, in collaboration with tourism operators and significant accommodation providers like 'The Chateau', to align, leverage and influence Tourism New Zealand's international campaigns, all of whom together could assist with campaigns which match particularly markets to the particular attractions of the area.

- **Targeting campervan travellers:** The numbers of individual experiences available in the area particularly lend themselves to campervan travellers. The same organisations as those mentioned above should target campervan providers with a well packaged selection of central North Island experiences for them to enjoy. This also raises the question of the adequacy of campervan facilities in the region. This is a consideration for all district councils in the region.

- **Picking the best of what has gone before:** Te Kahui Tupua was a $3 million project completed in 2010 and funded by the Ministry of Tourism and NZTE as part of its Major Regional Initiative [MRI] programme. The project involved was a tourism sector capability building and branding aimed at raising the performance of the tourism sector in the Ruapehu, Rangitikei and Whanganui area. The project was the result of a five year collaboration of 11 iwi, three local authorities and over 100 tourism operators. Key informants suggested the project was overly ambitious and follow up action did not receive enough resource to enable it to deliver on its ambitions. Notwithstanding, consideration could now be given to dusting off the initiatives championed in the original programme to rejuvenate a joined up approach to area marketing.

As will be seen with many of the opportunities referenced in subsequent sections of this report, significant public and private sector investment will be required to make progress on the above two pronged strategy.

Relevant current central government initiatives:

- National cycle trails – Mountains to Sea Trail and The Timber Trail.
- Tourism New Zealand promotion and marketing.
- Rural broadband initiative, the Mobile Black Spot Fund and further roll out of ultra-fast broadband in Manawatū-Whanganui - creating a platform for adoption of technology for tourism industry.
- Wellington Northern Corridor Roads of National Significance.
- Upgrades and maintenance of state highways and regional roads.

INTERVENTIONS SUMMARY

Ruapehu District Council

- Provide energetic and committed leadership across all of the interventions discussed above as means to achieve the two pronged strategic approach and search out additional partners to sustain momentum.
- Build on work undertaken in Rotorua to confirm the economic potential of mountain biking tourism.
- Review the capacity of water and waste water systems in the district to accommodate the additional load arising from a growth in the number of visitors, (including that from campervans) and develop a plan for overcoming any shortfall.

Whanganui District Council

- Complete the Mountains to Sea Great Ride to the standard required as part of Nga Haerenga, the New Zealand Cycle Trail project.
- Undertake cross RTO / council marketing of the trail as part of a broader tourism package.

All councils, RTOs and tourism operators

- Work collectively with other regional RTOs – especially in Bay of Plenty, Hawke's Bay and Waikato to strengthen and raise the profile of existing initiatives such as the 'Explore Central North Island' to package and brand regional tourism offerings and work with Tourism New Zealand to market these packages.
- Review and refresh Te Kahui Tupua and grow those elements which still have merit.
- Seek out and secure investment from all possible sources to increase the size and therefore impact of marketing efforts.
- Work with New Zealand Cycle Trail Inc. and Tourism New Zealand to further promote regional trails as part of Nga Haerenga.

- Submit a proposal for consideration by Government as part of the second tranche of rural and ultra-fast broadband roll out.

Central Government

- Assess whether the Tongariro National Park Management Plan should be amended to accommodate mountain biking and other visitor attractions (DOC).
- Support international marketing of Ruapehu, Whanganui and Rangitikei attractions (Tourism New Zealand).
- Work with Whanganui District Council to complete the Mountains to Sea Cycle Trail (NZTA and MBIE).
- Examine the outdoor experiences which could be accommodated on Defence land near Waiouru (Ministry of Defence).
- Work with local councils to commission a survey to develop a better understanding of the motivation and intentions of international travellers heading south from the Ruapehu area on state highway 1.

Iwi

- Work in partnership with the parties leading this initiative to grow, package and brand Māori cultural awareness tourism offerings including those related to marae experiences on the Whanganui River, the proposed Wakarama event from Pipiriki to Whanganui and other experiences within the Tongariro National Park etc.
- Seek options for support which could be provided to grow the effectiveness of the Whanganui Māori Regional Tourism Organisation Trust Board.
- Actively engage with DOC, Ruapehu Alpine Lifts, the Tongariro Taupo Conservation Board and others to explore and bring to fruition opportunities to provide additional visitor experiences within Tongariro National Park.

TOURISM AND VISITOR SERVICES

THE OPPORTUNITY AT A GLANCE

What? – the opportunity	**Create an international scale destination:** • Adventure tourism. • Cultural/spiritual experience. • Major regional tourism asset. • Add substantial new dimension to economy.	**Overcome:** • Fragmentation. • Small scale thinking. • Limitations of the Tongariro National Park Management Plan. • The need for capital to realise the opportunity.	**Why not?** - obstacles
Why? – will it succeed	**Leverage off:** • Huge natural assets • Existing capacity – 365 days. • Strong growth of mountain biking. • Iwi and the spiritual ambience of the region. • Energy of Ruapehu District Council. • High speed internet access.	**Act to:** • Empower Ruapehu District. • Engage key players to modify Park Plan. • Undertake feasibility study for expanded mountain bike uplift at Turoa skifield. • Identify investors. • Package experiences. • Build a brand.	**How ?** – interventions, actions and arrangements

OPPORTUNITY: **SHEEP AND BEEF FARMING AND PROCESSING**

WHAT? – THE OPPORTUNITY

There are two opportunities – in farming it is improvement in on-farm productivity performance; in processing it is value-added processing geared to international market niches.

The red meat (sheep, beef and venison meat) production is a large component of the farming sector in the region. It represents a large portion of agriculture revenue because of the extensive area of hill country. It is a very significant employer (8,343) and source of GDP and could be more significant in terms of GDP.

Many of the productivity and practice issues that hold back the industry across the country and have been identified in the Red Meat Strategy are evident in this region. Progress is being made by the Red Meat Strategy but it is slow. The question is what are the unique regional levers that can be used to fast-track the national effort in the region?

An opportunity lies in the Horizons Regional Council's Sustainable Land Use Initiative (SLUI) programme. Through this programme, hill country farmers have begun to make significant progress in reducing erosion on erosion-prone hard hill country. In so doing farmers are required to consider, in depth, the nature of their practice. A modest extension of this programme could achieve significant rewards.

For Horizons, SLUI is an intervention to minimise erosion but could also be seen as something of a Trojan Horse for farm practice improvement. Work done so far has enabled quantification of the latent additional productive potential of this land (up to $26m of additional gross farm revenue per annum and the opportunity for land owners to increase their productivity). This is a worthy prize.

While improved productivity is important, the region's long term prosperity requires added-value processing and this is the second but challenging opportunity. The red meat sector is gradually spawning value-added products and processes, many for niche international markets. The opportunity is to identify and accelerate such initiatives.

Farming commentators strongly advocate an enhanced relationship between education, research and science establishments in the region to improve business practice, encourage technology development and uptake, and supply highly trained people.

The size of the potential prize in farming productivity is in the vicinity of $26m. The size of the prize in processing is the securing of valuable off-shore markets to provide longevity to the industry in the region.

CURRENT POSITION - BEEF AND SHEEP FARMING

We define the sheep and beef sector broadly to include sheep and beef farming, processing and selling (meat, leather and wool). A total of 1.2m hectares (55% of the region's total land) is used for sheep, beef and deer farming. About 50% of class 1 and 50% of class 2 farm and forest land in the region is used for sheep and beef farming, however most (77%) of sheep and beef farming is on class 6, 7 and 8 land.

The region has the largest sheep flock and beef herds of any region in the country[31]. In 2012 the region accounted for 18% of the nation's sheep flock and 15.5% of the beef cattle herd. Some 40% of New Zealand lamb production and 50% of New Zealand lamb exports come from within two hours driving time from Feilding[32].

Employment

The sheep and beef sector in the Manawatū-Whanganui region has performed better than other parts of New Zealand in terms of employment. While national sheep and beef employment fell by 9% over the past decade, it only fell 1% in Manawatū-Whanganui. This is partly attributed to the labour-intensive requirement of hill country and because the sector has not declined in size as much as in other regions.

The region employs 11% of the nation's sheep, beef and related workforce. This is 8,343 workers (Table 7). A significant share of jobs are in services to agriculture and food manufacturing (6,064 persons are employed in the food products manufacturing sector[33]). At the broader primary sector level, the region currently contributes nearly $1.9 billion per year to the nation's primary sector export earnings (12% of total primary sector earnings[34]).

[31] The data in this section of the report was derived from Statistics NZ and was interpreted with the assistance of MPI

[32] Pers.comm. Andrew Watters (a member of the Study's Technical Advisory Group)

[33] Data drawn from the 2013 census by Statistics NZ

[34] NZIER regional database.

TABLE 7: EMPLOYMENT PATTERNS IN THE SHEEP, BEEF AND RELATED SECTOR

Element:*	Employment (**) Number, 2014	% of total	% growth, 2004-2014	Specialisation
Broad areas				
NZ	76,733	4	-1	..
Manawatū-Whanganui Region	8,343	9	-3	High
Territories				
Ruapehu	862	17	-25	High
Whanganui	1,548	9	1	High
Rangitikei	2,056	37	40	High
Manawatū	1,495	18	23	High
Palmerston North	186	0	-10	Low
Tararua	1,579	25	-28	High
Horowhenua	493	6	-27	High

Source: Statistics NZ, NZIER

Notes:
.. Not available or applicable
* Specialisation is calculated as revealed comparative advantage. We summarise the results as High, Medium and Low, where high is RCA score of more than 1.15, medium is below 1.15 but greater than zero, and low is less than zero.
** Filled jobs. The sector is defined for this purpose as:
A014100 Sheep Farming (Specialised)
A014200 Beef Cattle Farming (Specialised)
A014300 Beef Cattle Feedlots (Specialised)
A014400 Sheep-Beef Cattle Farming
A014500 Grain-Sheep or Grain-Beef Cattle Farming
A052200 Shearing Services
A052900 Other Agriculture and Fishing Support Services
C111100 Meat Processing
C111300 Cured Meat and Smallgoods Manufacturing
C131100 Wool Scouring
C132000 Leather Tanning, Fur Dressing and Leather Product Manufacturing
C133100 Textile Floor Covering Manufacturing
F331100 Wool Wholesaling
F331900 Other Agricultural Product Wholesaling

The sheep, beef and related sectors account for 14% of jobs in the region – a large employer and much larger than nationally (4%). Even though it is a large employer, only 11% of the sector's revenue goes towards local wages – although the sector has spill-over benefits to other industries in the region. The sector is losing jobs, although there is growth in some sub-regions, particularly in Rangitikei and Manawatū. The region is highly specialised in sheep and beef related sectors.

Farmer performance

If a comparable region like Hawke's Bay was chosen as a yardstick by which to measure the performance in Manawatū-Whanganui, then sheep and beef farmers in Manawatū-Whanganui would have a lot of catching up to do. This represents a regional opportunity - to increase the size and scale of sheep and beef production, as well as increasing processing and mixed use grain farming (see Figure 20, below).

Performance improvement in farming industries is not an easy task, but the gap between this region and Hawke's Bay is sufficient to make the effort worthwhile and would appear

to be attainable. The Areas of Opportunity column in Figure 20 illustrates the areas where Manawatū-Whanganui is not as specialised as Hawke's Bay and thus are sectors that are likely to have the most potential growth in them.

FIGURE 20: KEY INDUSTRY COMPARATIVE STATISTICS

Revealed comparative advantage in employment (>1 has comparative advantage)

	Manawatū-Whanganui	Hawke's Bay	Areas of opportunity
A014400 Sheep-Beef Cattle Farming	3.8	4.8	
C111300 Cured Meat and Smallgoods Manufacturing	1.2	0.9	
A014100 Sheep Farming (Specialised)	3.0	1.4	
C111100 Meat Processing	2.4	3.3	
F360200 Meat, Poultry and Smallgoods Wholesaling	0.4	0.7	
A014200 Beef Cattle Farming (Specialised)	2.1	1.9	
A014500 Grain-Sheep or Grain-Beef Cattle Farming	1.9	3.3	
Meat related	2.6	3.0	

Source: NZIER calculations from Statistics New Zealand data

Despite the scale of the industry there are real concerns about farming performance within the sector. The Red Meat Strategy presents survey results from a sample heavily weighted towards North Island Hill Country farms (representing much of the Manawatū-Whanganui region), and concludes:

- 27% of beef and lamb suppliers did not understand their costs.
- Opportunities to operate a land use 'portfolio approach' that optimises land use to take full advantage of the capability of each part of a farm are not fully utilised.
- Top on-farm performers are, not surprisingly, making more money than farmers on similar land but with lesser on-farm performance.
- The number of farmers losing money is increasing (from 17% in 2003 to 23% in 2011).
- The costs incurred by the top 20% of performers are 32.5% less per hectare than the bottom 20% of farms.
- Information about how to improve animal health, pasture management, environmental management, soil composition and protein production is available now but not fully used.

It is recognised in sector organisations that the sector's top performers are not defined by their land class, their age, their stock units per hectare or the size of their farm – rather it is their behaviour and willingness to invest in their business that defines them, alongside their focus on optimising kg per hectare of market-ready product.

The net result of the above features is that there is a large gap between potential capacity to produce meat and actual capacity. When similar farms are compared, this is reflected - despite the region's comparative benign climate until recently - in a wide range of production volumes per hectare i.e. the bell curve of performance is broad. The point was made to us that farmer attitude may currently be a little defensive as the region suffered

the worst drought in 70 years in 2012/13 and has had two drier than normal summers since.

One informant to the Study has confirmed there is no question that with more and better fertiliser application, productivity will be unlocked. Fertiliser is typically applied in the autumn and the amount is determined by how much money the farmer has at the time. With some challenging seasons, lack of good budgeting, and too much financial resource being used up on fixed costs or regulatory costs, the fertiliser spend tends to get rationalised. It is easy for a farmer to say 'they will put more on next year', or 'reducing the amount applied won't reduce production too much'. When a farm that has been 'mined' changes ownership, it takes time and a lot of money to build up fertility again.

In terms of infrastructure, fences and tools the opportunity cost of doing a task incrementally is sometimes not taken into account. For example, with better and more subdivision, a longer rotation and better stock grazing may emerge. This can increase carrying capacity, improve animal nutrition, and improve pasture quality. Downstream animal production benefits will result. (Note – subdivision is often limited by stock water. Comment is made on this challenge in a later section of the report).

A lot of progress is being made to improve forages or crops but this may be viewed as a costly and risky enterprise by many farmers despite the potential being large. Currently farmers learn from mouth to mouth conversations, or by following a few key farmers in the region. Opportunities for information exchange are limited.

In summary, the potential gains from improved performance are significant but the rate of uptake is slow and the national vehicle, the Red Meat Strategy, is achieving results, but slowly.

Industry and regional initiatives

Over $350 million of Government and primary sector funding is currently committed to a Primary Growth Partnership (PGP) programme aimed at achieving improvements to the productivity and profitability of the red meat sector. One of the objectives of a partner programme to the Red Meat Strategy - the Red Meat Profit Partnership [35] is to explore different outreach education options and apply the best option through which the above objectives can be delivered.

Similar issues and opportunities to those identified in the Red Meat Sector Strategy have been identified by Horizons Regional Council as part of their Sustainable Land Use Initiative (SLUI) programme. Typically these SLUI hill country farms include sheep, beef and deer production of 6-13 stock units/hectare.

The SLUI programme:

- Maps the resources of the farm.
- Identifies areas of strength and vulnerability.
- Develops erosion control programmes.

[35] Red Meat Profit Partnership: A $64 million programme funded by a consortium of agribusinesses and the government to drive sustainable, long-terms profits for New Zealand's red meat sector. The programme focuses on supporting farmers in the adoption of best practice behind the farm gate and between the farm and processor.

- Offers the opportunity to farmers to initiate "works programmes" designed to prevent erosion/sediment entering watercourses.
- Involves the preparation of Whole Farm Plans (WFPs).

Gains from the SLUI Programme

As at July 2014, Horizons have completed farm plans and farm scale mapping on 540 hill country properties covering 412,912 hectares (41%) of the hill country of the region. The SLUI programme has been successful in implementing over 20,000 hectares of erosion control works. These works, when mature, will result in 12% less sediment entering the region's streams and rivers. This, in turn, will result in improved water quality, improved longevity of flood protection schemes and the protection of on-farm, local and national infrastructure (roads, rail, bridges, power supply etc.).

Analysis of 540 hill country farms to date shows that there is an unrealised potential dry matter production per property of 752kg. This could represent enough feed for an additional 203,357 stock units. At $68-$89 GFR/su[36] this is an extra $13.8m-$18.1m gross farm revenue for the SLUI farms completed to date pa.

Over the 1,000,000 hectares of hill country in the region this figure becomes an overall potential increase of $20.1m-$26.3m of revenue per annum, according to estimates supplied by Horizons Regional Council. In addition to the above, further production opportunities may arise from better use of the 82,000 hectares of class 1-3 land located in the hill country. All other things being equal, this land has potential to be cropped. Only around 500ha of this land is currently cropped.

A further option is the helicopter sowing of plantain as an additional stock feed source. The more strategic use of fertiliser, as referenced earlier, is also important and there is a current Government -funded Primary Growth Partnership programme[37] addressing this issue.

We believe that the SLUI programme is demonstrating that engagement with farmers is a key way to effect practice change and in lieu of anyone else doing it, engagement on broader practice issues as an extension of the SLUI programme appears to be a genuine option.

CURRENT POSITION - BEEF AND SHEEP MEAT PROCESSING

The region is well represented by the meat processing industry located in the various districts of the region are listed below:

Whanganui District

- AFFCO Imlay (Owned by Talley's Group) – Whanganui City – Sheep and beef processing.
- Land Meats (owned by AFFCO) – local trade including processing of lambs for 'Coastal Spring Lambs' Ltd.

[36] Beef and Lamb NZ. GFR is 'gross farm revenue' and 'su' is stock unit.

[37] Pioneering precision application of fertiliser in hill country PGP

Rangitikei District

- ANZCO Foods Manawatū – near Bulls (previously Riverlands) – Cattle.
- ANZCO Foods Rangitikei – near Marton (formally Canterbury Meat Packers [CMP]) – Sheep meat.

Manawatū District

- AFFCO Manawatū, situated in the outskirts of Feilding (Beef).
- Venison Packers Feilding.
- Ovation Feilding (Sheep and cattle) Owned by Hawke's Bay Meat Company Limited– (Ovation product is also processed and packaged at Progressive Meats Limited and by an affiliate Company Te Kuiti Meat Processors Limited).

Tararua District

- Alliance Dannevirke (Sheep and Cattle).

Horowhenua

- Alliance Levin (Sheep and Cattle).

CASE STUDY: VALUE-ADD PROCESSING

Over the last few years, a number of agribusiness facilities have been established in the region to generate value-added products for export markets. For example:

ProLiant near Feilding transforms cattle blood into plasma products for medical tests and pharmaceutical manufacturing.

Prepack Ltd located in Palmerton North prepares standardised ration packs for the Australian military as well as emergency preparedness kits.

Coastal Spring Lamb[38] processes premium brand lamb. The model applied to the development of this product has proven successful and may prove valuable if replicated elsewhere. The essential features are: the quality control of product (triple grading approach with taste and tenderness the key); traceability; provenance – part of a coherent story; co-branding with Food Stuffs and mutual endorsement. The target posted by the Company is to crack the international market by the end of 2015. The Company currently sells 30,000 lambs domestically.

ANZCO Foods Manawatū – near Bulls (previously Riverlands) with a focus on cattle and ANZCO Foods Rangitikei – near Marton (formally Canterbury Meat Packers [CMP]) with a focus on sheep-meat, procure the best beef and lamb they can get their hands on and market it in chef and kitchen-ready cuts. They have state-of-the-art, accredited facilities and pride themselves on creating sophisticated food and healthcare solutions

Nestle Purina Petcare Ltd near Marton and Mars Pet Foods in Whanganui are two further examples of value add producers located in the region.

Each of these examples are testament to the fact that improvements are possible in both farming and processing. What is required is breadth and scale of improvement.

[38] Coastal Spring Lamb is a company established to capitalise on the price advantage of producing lamb products from lambs grown on coastally located farms and processed with particular attention to quality.

The agribusiness sector in the Manawatū-Whanganui Region is growing. The region is a home to a diverse range of agricultural producers looking to stand out from the crowd by creating a unique point of difference. Key informants from the Manawatū District viewed their area as the hub for the region of intensive agriculture, agri-business technology, agricultural servicing, innovation, precision agriculture and primary sector processing.

Salient examples of this were quoted as being:

- **The Building Clever Companies (BCC**) group who are developing plans for setting up an agri-tech accelerator which would have national reach into the regions.
- **Figured Agri-Business** who provide a complete cloud-based livestock tracking, farm budgeting and forecasting tool that works hand-in-hand with Xero to help farmers improve farm performance and profits is a leader in the trend toward ICT based precision agriculture and information rich farm decision making.
- **Interpine Forest Consulting and Data Management Company** specialising in information technology and optimal decision making across the forest industry.

It is clear that agricultural production and processing in the region is developed, business savvy and sophisticated. Many of the products coming out of the region have value-add components, strong marketing plans, and clearly reflect elements of agribusiness research and development.

The question is - can gains in processing, particularly those which add value to the product, 'kick on' to produce more enterprise, revenue and ultimately jobs? There is no question that there is a base of capability already evident in the region from which to build.

WHY?

SUMMARY OF THE RATIONALE

- There is a significant productivity dividend to be captured for land and capital owners (i.e. farmers) and to an extent for employed labour.
- There is existing investment by the industry in the region and the body of knowledge and experience is already established.
- The region has extensive hill country that supports this land use.
- The sheer scale of hill country farming in the region means that small changes multiply out to major benefits.
- Significant advances have already been made and the positive can-do attitude shown by stakeholders provides a good basis for expansion.
- The resource of knowledge and experience that exists in Horizons Regional Council can be capitalised on.
- The close proximity of expertise in Massey University and other research and enabling institutions provides the region with 'first mover' opportunities.

- Value-added products and processing have long term potential to contribute to GDP and jobs.
- The potential of the industry to expand and intensify the use of freehold Māori land is clearly apparent.

WHY NOT?

Productivity improvements in the meat industry have a long history of under-achievement. The two fundamental and related problems of the processing industry – excessive procurement costs and over-capacity – remain. Similarly, on-farm productivity has been a difficult nut to crack and yet some have succeeded and improvements in the last decade in the lamb industry are testament to this.

Publicly or industry funded farm advisory services were dismantled years ago as the industry struggled for profitability[39], as they were seen as a cost rather than a benefit.

The Red Meat Strategy is well-conceived and is making progress but an added intervention is required regionally if it is to really bite and this is the case in Manawatū-Whanganui as much as anywhere else.

Factors such as passivity, lack of vision, lack of role models hold the industry back.

We met a new generation of young farmers willing to address these issues and they, like us, believe it requires a human intervention with farmers to give them the incentive to change. A cadre of private sector farm advisors is ready to step in. It requires the initial breakthrough with farmers who can then activate this group of talented advisors to assist farmers.

It also needs to be acknowledged that the sector is losing jobs and that will continue. The speed of loss will be reduced if practice improvements are achieved and the contribution to GDP will be significant, but the returns are generally greater for capital and land than labour.

FILTERS SUMMARY

Impact: the scale of the industry is such that small improvements can have significant impacts. The farm productivity opportunity is relatively immediate compared to those in the processing sector that are either out of the hands of the region or long term. If set in motion the rewards are potentially significant.

Trend: the global market for meat is growing strongly, led by increasing demand from emerging markets. Over the past decade meat exports have increased by an average of $135m per year, the third fastest growing commodity in New Zealand, behind dairy and forestry.

[39] Wool was in the order of 60% of a hill country farmer's gross income in the 1980s. This has fallen to as low as 10-15% in recent years

Competitive/comparative advantage: the region already has a large sheep and beef sector. The quality of the land, access to transport networks and processing are all hallmarks of specialisation in the sector. It employs over 8,000 people when processing and wholesaling is included.

Employment intensity: the sector is losing jobs, albeit only modestly (only 3% in the last decade). The sector is also not very labour intensive, being much more reliant on capital and the spill-overs to the regional economy are slow to come through.

Māori landlocked land: this is an area of particular opportunity and which could improve job prospects. Much of the poor productivity of Māori land is attributed to poor farming practice. This initiative provides an opportunity to intervene and assist.

TABLE 8: OVERALL METRICS FOR SHEEP AND BEEF

Metrics	Current size (filled jobs)	8,343
	Employment intensity	Low
	Linkages to other sectors	Low
	Stage of lifecycle	Growth
Impact	GDP adding	▲
	Job adding	▬
Trend	Domestic	▲
	Export	▲
Competitive advantage	Domestic	▲
	Export	▲
Summary	Current size	▲
	Employment intensity	▼
	Linkages	▼
	Stage of lifecycle	▲

While opportunities in this sector are not particularly job-rich, consideration also has to be given to protecting existing jobs. We have recommended this opportunity with the future in mind. It is designed to protect jobs and incomes, to maintain community resilience and get the best out of the resource the region has in abundance. It is the most efficient use of those resources the region has at this point in time.

Greater consciousness of farming practice could lead farmers to diversify into Mānuka honey. Improved practice could boost the use of undeveloped Māori land and this is considered in the section of the report titled Productivity of Māori Land.

HOW?

Objective – improved on-farm productivity; identification of value-added opportunities.

Key strategic intervention - we are recommending an association with the SLUI programme. There are, however, a range of other lesser interventions that can also be contemplated and they are outlined below. With regard to processing opportunities we are recommending a focus of attention in this area to identify and qualify opportunities in a systematic way.

SHEEP AND BEEF FARMING

The purpose of the Red Meat Profit Partnership and Red Meat Strategy is to lift farmer performance. What's required is an extension programme. There is also a need to better connect famers with scientists. Both measures would require growth in the number of farm consultants in the sheep and beef sector in the region. This gap is currently filled by industry representatives, vet services, and the sharing of ideas that happens at beef and lamb field-days.

The priority of such programmes should be on sharing information about:

- Improving finishing capability on hill pastures.
- Improving sheep genetic stock.
- Developing pathways for new talent to enter the sector.
- Providing clearer succession pathways.
- Renewing pastures, tailoring and targeting fertiliser use and improving stocking mix.
- Improving business practices and the use of technology to measure and manage pasture production.
- Developing new forages for hill country farms.
- Adopting an integrated farming approach in association with other primary sectors including taking advantage of finishing opportunities on better class land located on river flats or closer to the coast.
- Developing and applying an equity/sharing model, for example separating land ownership from land management and sharing the returns from the application of good decisions.
- Improving access to science, technology and expanding access to information – preferably cloud based, to enable benchmarking and active comparison of 'like for like' farmer performance.

The above list provides great tools to have in the tool belt to make positive change, but farmers also need:

- The confidence, skill, and knowledge to make changes.
- The desire to do things differently.
- Time to put things into place toward change.

With the SLUI initiative, Horizons Regional Council is the natural leader in the realisation of this opportunity. Horizons could play a more active role as a channel in providing information and advice about the sustainable production which is achievable by individual farmers. While not a core activity of Horizons, it is a natural addition. SLUI advisors could act as a motivator and connector with other advisors to assist farmers. We appreciate that involves a shift in their role, but at present the 'in your face' approach which is so badly needed is not available.

Irrigation and rural water reticulation schemes will also increase productivity. Water projects either small or large scale, can unlock a lot of potential. In the past decade there has been a focus on large scale irrigation projects on high quality land. The benefits of small scale water projects focusing more on stock water can unlock just as much, if not more potential. At present these initiatives are progressing to a degree through the MPI Irrigation Acceleration Fund. Irrigation is dealt with in more detail in the section on Land Use Intensification.

The importance of high speed internet access should not be underestimated. There are growing opportunities to encourage farmer behaviour change through internet-based programmes and support channels. This is a strong argument in support of the need to achieve the current targets for the availability of rural internet and not letting them slip back.

SHEEP AND BEEF PROCESSING

The focus of industry processing improvement is a double-edged sword for Manawatū-Whanganui. The 'Pathways to Long Term Sustainability' report released in March 2015 by Meat Industry Excellence (MIE) Chairman John McCarthy says $1 billion could be saved in five years if New Zealand's biggest four processors merged into one. The report estimates returns would increase $5.75 per lamb and $39.24 for each head of cattle processed. Given that the Manawatū-Whanganui region has in the order of 18% of the nation's sheep flock and 15.5% of the beef cattle herd, these savings (if achievable) will significantly improve returns and reduce costs for farmers.

The report also suggests that 53% of existing lamb processing capacity and 41% of the existing beef processing capacity are under-utilised and that 13 of the current 34 sheep plants and 6 of the current 21 beef plants should be closed affecting plants at Levin (sheep and cattle, Alliance), Feilding (sheep, Ovation) and Whanganui (beef, AFFCO). This would

have a significant negative impact on the region and particularly the specific districts in terms of jobs[40].

These dynamics will play out at a national level over the coming years and the outcome is uncertain.

The regional focus needs to be different. Science and innovation are the keys to developing new products suitable for the international markets. Informants assured us that New Zealand's trade negotiators have the ability to open markets if we have the ability to produce for them. The product range of the industry has increased enormously in recent years with well over 300 separate products coming off these animals. Every part of the animal is now used.

The Manawatū district is recognised as THE agri-business capital of New Zealand. The potential is there to apply science and technology to further enhancing this wide range of products including their presentation and packaging. Informants also told us that this capability is not benefitting the region to the extent it could. Federated Farmers, for example, believes there needs to be much better connection between education, industry institutions and businesses to improve practice and encourage technology development and uptake.

Our view is that this area of potential development requires a vehicle through which dedicated examination of the opportunities can take place. It remains a challenge often discussed but yet to be properly addressed. We believe a task force approach is required to surface regional opportunities. We belief it should be led by the farming community together with Massey University. Federated Farmers seems an obvious candidate for leadership in this area.

Relevant current central government initiatives:

- Primary Growth Partnership (PGP) and Sustainable Farming Fund (SFF):
  - The Pioneering to Precision programme – Application of Fertiliser to Hill Country - improvement of hill country sheep and beef farm productivity through the precision application of fertiliser.
  - The Red Meat Profit Partnership - adoption of best practice behind the farm gate and between the farm and processor.
  - Farm IQ – increase of the proportion of livestock produced to premium market specifications.
  - FoodPlus – generating more value from the red meat carcase.
  - Marble grass-fed beef – developing an integrated value chain for high-value, marbled beef that is internationally recognised for its superior eating qualities.
  - Pasture development programmes focused on improved pasture renewal, pasture improvement through utilising forages and improved weed control (Californian thistle, field horsetail and tutsan). (SFF)
  - Sheep Internal Parasite Anthelmintic Trial. (SFF)
  - *Sustainable Innovation for Lower North Island Sheep and Beef Farmers* – upscaling new extension models. (SFF)
  - *Farming with the environment for customers* – develop new market opportunities

[40] See page 21 of the 'Pathways to Long Term Sustainability' report released in March 2015 by Meat Industry Excellence (MIE)

seeking to provide year-round supply of consistent quality chilled and branded beef and lamb. (SFF)
- Hill Country Erosion Fund (HCEF): the Horizons SLUI programme is partially funded by HCEF.
- Enhancing New Zealand's market access: implementing the Government's Free Trade Agreement agenda; addressing behind the border barriers in key markets; implementing NZ Inc. Strategies; increasing NZ's representation in emerging markets.
- The Food Innovation Network.
- National Policy Statement for Freshwater Management – supports sustainable growth of primary sector production within environmental limits.
- Te Pūnaha Hiringa: Māori Innovation Fund.
- Treaty Settlements in the region which are currently in progress.
- Rural broadband initiative and further roll out of ultra-fast broadband in Manawatū-Whanganui - creating a platform for adoption of technology for the red meat sector.

INTERVENTIONS SUMMARY

Red meat sector - Beef and Lamb NZ, Meat Industry Association, MPI:

- Continue to pursue the Red Meat Strategy and Profit Partnership.

Horizons Regional Council:

- Continue and expand the SLUI programme as outlined in the report.
- Work with land owners on increased irrigation options (see the Land Use Intensification section for more detail).
- Consider internet-accessed programmes for driving farmer behaviour change.

Business leaders, Federated Farmers and Massey University:

- Lead engagement between parties on the question of value-added processing.

Iwi:

- Mount a programme of focused attention on the issues that obstruct development of Māori land in the context of opportunities for improved practice in sheep and beef farming

SHEEP AND BEEF FARMING AND PROCESSING

THE OPPORTUNITY AT A GLANCE

What? – the opportunity

Why? – will it succeed

Improve performance:

- Incremental productivity improvements on-farm.
- Focus on value-added product capacity.
- Utilisation of Māori land.
- Land use diversified.

Leverage off:

- Red Meat strategy.
- Established industry
- Interventions such as SLUI.
- Regional science and technology capability.
- Desire in the sector for improvement.
- High speed internet access.

Overcome:

- Complacency.
- Fragmentation.
- Conservatism.
- Passivity.
- Lack of vision.

Act to:

- Augment the SLUI effort with industry support.
- Support Horizons to change practice.
- Form a vehicle – task force – to expedite science and business connection in processing.

Why not? - obstacles

How ? – interventions, actions and arrangements

OPPORTUNITY: LAND USE INTENSIFICATION

WHAT? – THE OPPORTUNITY

There is an opportunity to intensify land use within the water quality limits established by the One Plan[41].

There are three ways this can be achieved:

- Increase production from existing dairy farms - particularly by increasing productivity per cow.
- Use a greater portion of classes 1, 2 and 3 land for dairying, as well as for other more intensive land uses such as vegetables and grain growing.
- Apply irrigation to a larger area of land.

The capability lies within the industry (Dairy NZ, Fonterra and other processors) to achieve the first of these intensification opportunities. The Manawatū-Whanganui region should be a key focus for them. Opportunities also lie in horticulture and arable farming to benefit from irrigation. Shifts in commodity prices may well favour those land uses over the next few years.

The second and third methods of intensification are particularly amenable to regional interventions.

The use of irrigation and the reticulation of stock water has been developing in the region for several decades. The region has significant unallocated and under-used water in the following categories: run of river extraction; extraction for storage during higher river flows; allocated but underutilised water; and groundwater extraction.

The greatest potential is in the use of small-scale water storage and irrigation arrangements – perhaps serving 100 farms, to improve the productive capacity of land and to moderate the risks of more variable weather patterns.

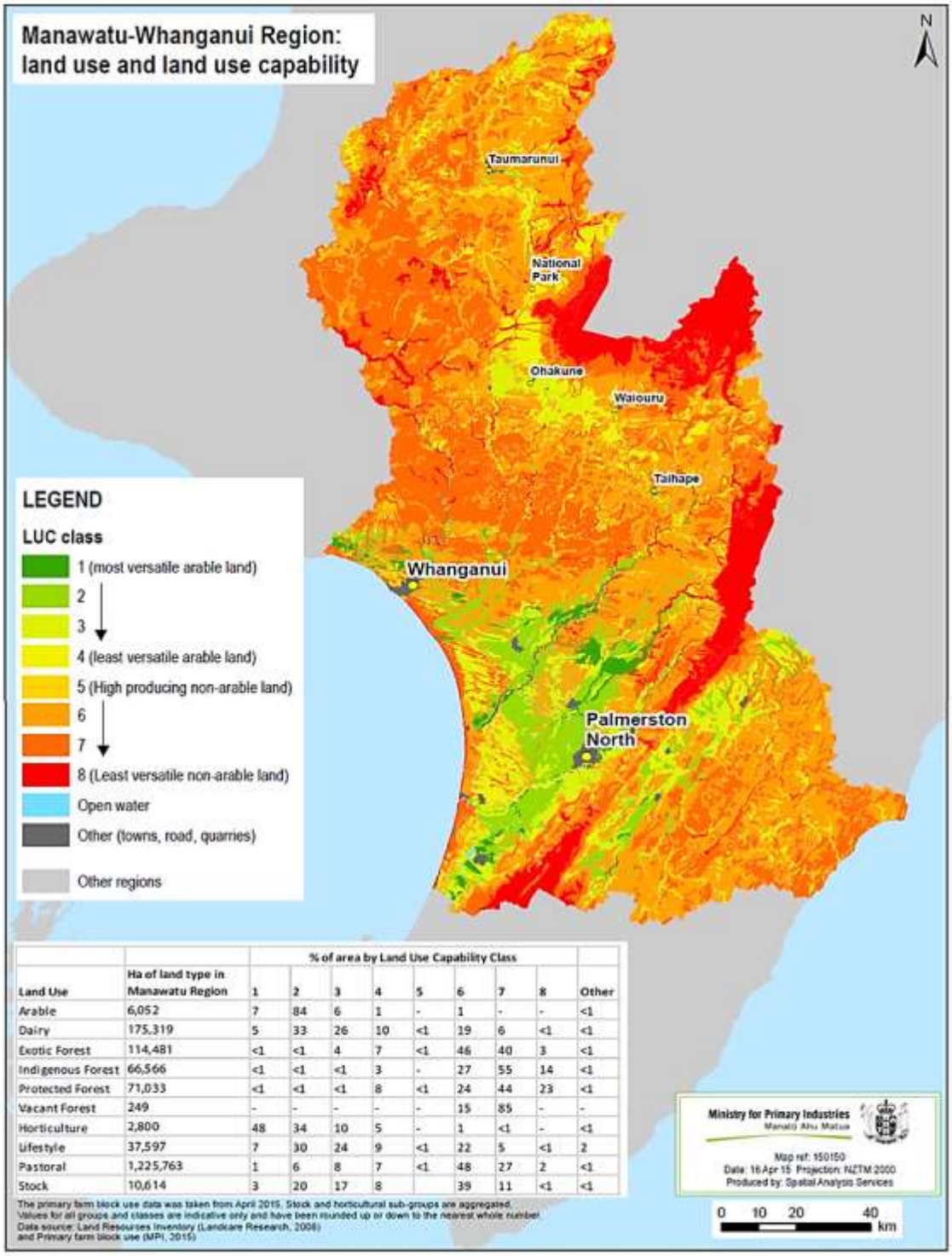
There is clear evidence that substantial production improvements, in the order of 20%, can be achieved from dairying with the use of irrigation. This would represent a substantial increase in revenue to the region and jobs to meet servicing requirements.

In areas not suited to irrigation, the prize lies in more land owners with class 1, 2 and 3 land capitalising on the returns from dairy farming (putting aside the current year) and all by dairy farmers increasing the returns from their investment by producing at the levels of leading producers. A 1% increase in production would add $6 million to the regional economy and generate 33 jobs.

As the experience in Canterbury towns like Ashburton has shown, increases in dairy production expand the rural population and contribute to community resilience because servicing its needs is more labour intensive than some other forms of farming.

[41] The One Plan is the integrated natural resource regulatory instrument promulgated by Horizons Regional Council under the RMA

FIGURE 21: LAND USE AND LAND USE CAPABILITY[42]



		% of area by Land Use Capability Class								
Land Use	Ha of land type in Manawatu Region	1	2	3	4	5	6	7	8	Other
Arable	6,052	7	84	6	1	-	1	-	-	<1
Dairy	175,319	5	33	26	10	<1	19	6	<1	<1
Exotic Forest	114,481	<1	<1	4	7	<1	46	40	3	<1
Indigenous Forest	66,566	<1	<1	<1	3	-	27	55	14	<1
Protected Forest	71,033	<1	<1	<1	8	<1	24	44	23	<1
Vacant Forest	249	-	-	-	-	-	15	85	-	-
Horticulture	2,800	48	34	10	5	-	1	<1	-	<1
Lifestyle	37,597	7	30	24	9	<1	22	5	<1	2
Pastoral	1,225,763	1	6	8	7	<1	48	27	2	<1
Stock	10,614	3	20	17	8		39	11	<1	<1

The primary farm block use data was taken from April 2015. Stock and horticultural sub-groups are aggregated.
Values for all groups and classes are indicative only and have been rounded up or down to the nearest whole number.
Data source: Land Resources Inventory (Landcare Research, 2008)
and Primary farm block use (MPI, 2015)

Disclaimer: This map and all information accompanying it (the "Map") is intended to be used as a guide only, in conjunction with other data sources and methods, and should only be used for the purpose for which it was developed. The information shown in this Map is based on a summary of data obtained from various sources. While all reasonable measures have been taken to ensure the accuracy of the Map, MPI: (a) gives no warranty or representation in relation to the accuracy, completeness, reliability or fitness for purpose of the Map; and (b) accepts no liability whatsoever in relation to any loss, damage or other costs relating to any person's use of the Map, including but not limited to any compilations, derivative works or modifications of the Map. This map is subject to Crown copyright administered by Ministry for Primary Industries (MPI), and is licensed for general use under the Creative Commons Attribution 3.0 New Zealand licence (http://creativecommons.org/licenses/by/3.0/nz/).
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[42] Note that the total area identified within the table embedded in Figure 1 does not match the total area in the Manawatū-Whanganui region because the total land area held in Conservation Estate is not included.

DAIRY FARMING – GROWTH POTENTIAL

Demand for dairy products has surged over the past decade driven by burgeoning interest in newly industrialising countries like China, India and others. All indications are this will continue. The fastest economic shift has come in China, but India, Indonesia, Vietnam and Thailand are just some of the countries that will follow similar patterns of development and product demand[43].

Until recently, the global dairy market was balanced in favour of producers. Dairy prices were exceptionally strong and demand robust. In 2014, demand growth slowed and supply increased. This has reduced prices sharply but the long term trend is positive.

Dairying is already a major contributor to the regional economy. It's a mature land use in the region with advanced supply chain arrangements for processing.

In regulatory terms it is also a mature region. The One Plan has been in place for several years and is becoming well understood by farmers.

Growth

Dairy farming has grown strongly in recent years throughout New Zealand. The Manawatū-Whanganui region has participated in this growth, but not to the extent possible given the availability of good quality land, the availability of water and the logistic connections available in the region.

While it has a tendency towards dry summers, Manawatū-Whanganui's reasonably mild climate suits dairy operations and there are distinct irrigation opportunities.

Current dairy herds are on par with or exceed North Island productivity metrics (milk solids per cow for example, Figure 23).

The dairy sector employs around 3,300 people in the region (see table 9) or around 3% of regional jobs and is growing at a healthy pace. The dairy sector in the region generated around $685m of revenue and $338m of GDP in the March 2014 year. Employment has increased by 11% in the past decade (see table 9, over page). The share of wages in output is 11% which is modest and comparable with sheep and beef.

[43] Developing a plan for New Zealand's continued prosperity (2014), CAANZ, accessed 30 March 2015 at http://www.charteredaccountants.com.au/futureinc/Business-Plan#newzealand

TABLE 9: KEY DAIRY SECTOR STATISTICS

Element:*	Employment (**) Number, 2014	% of total	% growth, 2004-2014	Specialisation
Broad areas				
NZ	44,700	2	28	..
Manawatū-Whanganui Region	3,300	3	11	High
Territories				
Ruapehu	135	3	26	High
Whanganui	185	1	76	Low
Rangitikei	305	5	-45	High
Manawatū	655	8	36	High
Palmerston North	675	1	16	Low
Tararua	840	13	14	High
Horowhenua	505	6	28	High

Source: Statistics NZ, NZIER

Notes:
.. Not available or applicable
* Specialisation is calculated as revealed comparative advantage. We summarise the results as High, Medium and Low.

** Filled jobs. The sector is defined for this purpose as:
A016 Dairy Cattle Farming
C113 Dairy Product Manufacturing
F331 Agricultural Product Wholesaling

The dairy sector accounts for 3% of jobs in the Manawatū-Whanganui region, slightly more than the national average. Employment growth in the region, while strong, has not kept pace with growth in other parts of the country. Most of the sub-regions are specialised in dairy and employment is growing.

Productivity

The Manawatū-Whanganui region has a modest comparative advantage in dairy, but not like dairy powerhouse Waikato (Figure 22). Compared to Waikato, the region has the opportunity to increase scale by increasing dairy cattle farming.

There are also opportunities for gain in dairy processing and wholesaling as Figure 22 below indicates but these opportunities are less accessible to the region as a large portion of Manawatū-Whanganui's dairy milk is processed outside the region. However, looking forward, most milk from Eastern Manawatū/Tararua is likely to be processed in Fonterra's expanded Pahiatua processing facilities rather than it being transported by rail to Hawera.

FIGURE 22: KEY COMPARATIVE STATISTICS

Revealed comparative advantage (>1 has advantage)

	Manawatū-Whanganui	Waikato	Areas of opportunity
F360300 Dairy Produce Wholesaling	0.4	2.4	
A016000 Dairy Cattle Farming	1.6	3.1	
C113300 Cheese and Other Dairy Product Manufacturing	0.6	3.6	
C113200 Ice Cream Manufacturing	0.0	0.0	
C113100 Milk and Cream Processing	6.9	1.9	
Dairy related	1.4	3.1	

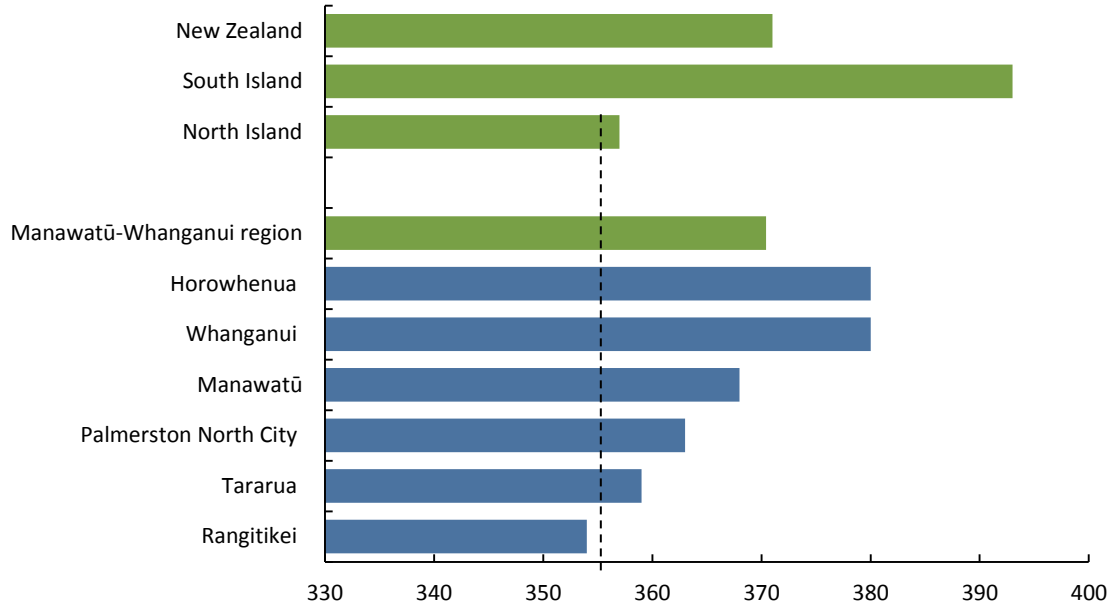
Source: Statistics New Zealand, NZIER

Figure 22 shows that the Manawatū-Whanganui region has expertise in various aspects of the broader dairy sector, but not to the same extent as Waikato. The column labelled Areas of Opportunity identifies the extent of improvements possible in Manawatū-Whanganui if the Waikato yardstick was used.

There are significant variations in dairy productivity within the region. These variations cannot solely be explained by geography and soil, indicating the potential for significant productivity improvement (see Figure 23, over page).

FIGURE 23: DAIRY PRODUCTIVITY IN SELECTED REGIONS

Milk solids per cow (average kg)



Source: Dairy NZ (2013/14)

Figure 23 shows that there are significant variations in dairy productivity (measured as output per cow in this instance) within the Manawatū-Whanganui region. Catching up to the top producing areas, within natural limits, can unlock significant production, revenue and job growth.

Dairy production grew by 11% in the region in the period 1997 to 2007 but it still occupies only 33% of class one soils[44]. DairyNZ describe[45] the growth potential of the dairy sector in the region from 2014 to 2025 as likely to be characterised by a smaller number of herds with a larger number of cows each occupying a larger area per farm with increased production per cow.

The right conditions for such growth are said by DairyNZ to include:

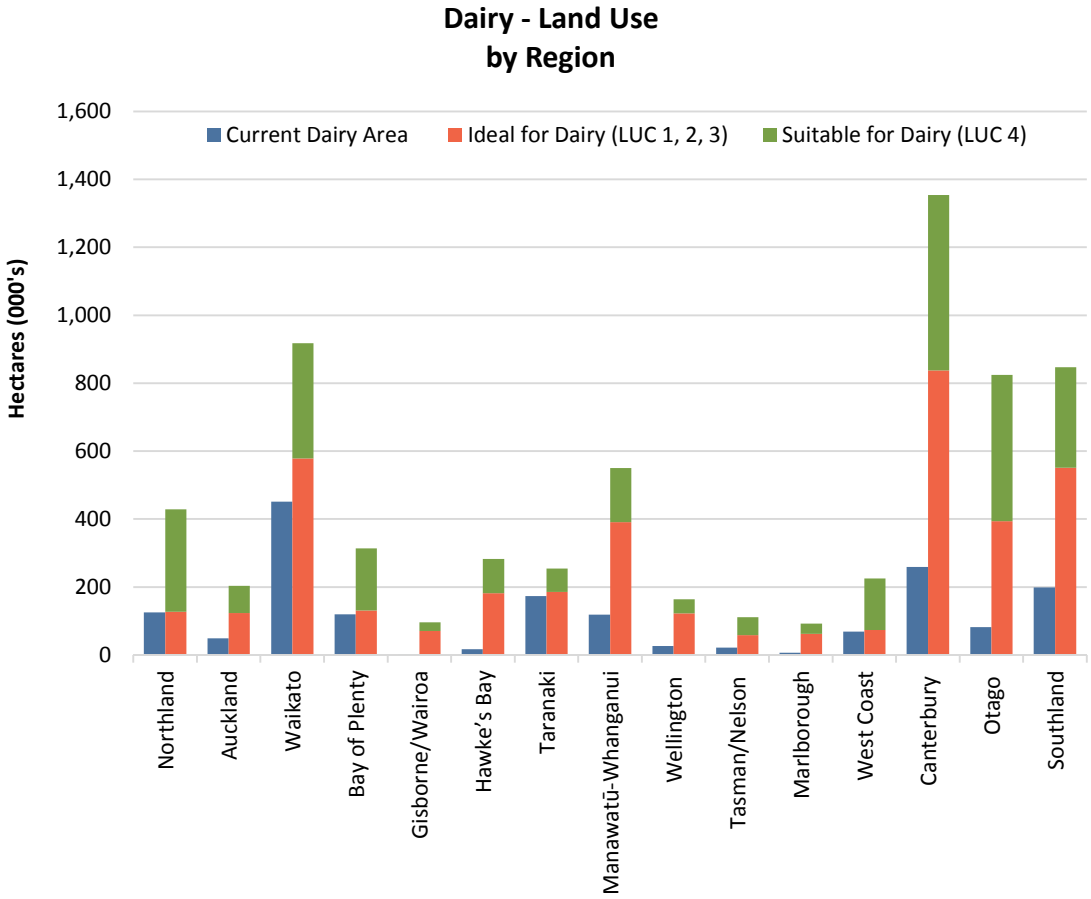
- Certainty about environmental limits and a commitment by dairy farmers to work within them by, for example, increasing production in association with the use of feed pads, wetland water treatment options and other measures to mitigate nutrient losses.
- A general shift in the bell curve of production towards leading edge performance by all farmers.

[44] We note that one of the consequences of a change in land use to dairy is that the area available for sheep and beef finishing would be reduced. This may affect the profitability and integrated nature of sheep and beef farming generally.

[45] Pers. comm. Matthew Newman, Economist, Dairy NZ, November 2014.

DairyNZ do not expect the area used for dairying to increase greatly over the next ten years. We are of the view that DairyNZ's prediction of a relatively constant area in dairying may be conservative, perhaps reflecting the dampening influence of the One Plan and current dairy prices. We comment on how additional dairying areas and production may be unlocked later in this section of the report. Irrigation will be decisive in this respect.

FIGURE 24: REGIONAL LAND USE AND POTENTIAL LAND USE FOR DAIRY PRODUCTION



Source: Current Dairy Area - "New Zealand Dairy Statistics 2013-14 (LIC/DairyNZ)

LUC = Land Use Capability (Landcare Research 2008). Descriptions of the classes can be found at http://www.landcareresearch.co.nz/publications/books/luc

Figure 24 shows that in the Manawatū-Whanganui region there is just over 550,000 hectares of class 1, 2, 3 and 4 land and less than a quarter of this is currently used for dairying.

The region is also a hub for academic, scientific and technical institutions with strong focus on, or relevance to, the agricultural sector including Massey University, Fonterra Research Centre, UCOL and Food HQ, as well as a number of top schools including Feilding (Agricultural) High School and Palmerston North Boys High School.

This hub of institutions represents a comparative advantage for the region, which is not currently taken full account of. There is an opportunity to attract, secure and integrate the

talent who may attend these institutions for short periods into the regional economy and to weave them more fully into dairying and other intensive land use enterprises.

As with dairy farming, dairy processing is also mature with large export plants either in the region or nearby. For processing there are also opportunities in the region's emerging agri-food-tech skills area. This is a similar opportunity to that identified in the Sheep and Beef section of this report.

IRRIGATION

Potential

Irrigation has the potential to significantly increase the productivity of the region's land resource and improve its utilisation.

The area of greatest potential is the Rangitikei catchment. Although not the only area with potential, Rangitikei has been the subject of detailed research[46].

Demand for surface water abstraction in the Rangitikei reflects that experienced elsewhere in the region. It doubled between 2000 and 2004 and has increased by a further 33% in the last ten years.

Nearly 200,000 m^3 / day is available in coastal Rangitikei zone and just over 50,000 m^3 / day is available for allocation in the lower Rangitikei zone on a non-stored, run-of-river basis.

Current groundwater use is viewed by Horizons Regional Council as sustainable. Demand throughout much of the region is very low relative to the rate of ground water re-charge.

A 20% increase in production may be achievable with significant subsequent net additional contributions to the district

Improved consent conditions may free up both the ground and surface water resource for greater utilisation or alternatively, a programme to facilitate the easy transfer of unallocated water may be called for.

Farmer attitudes

The Rangitikei study noted that the particular drivers for landowners contemplating and installing irrigation in the Rangitikei were:

- The financial, stock welfare and psychological impact of the recent series of dry summers.
- The significant productivity gains that are possible - in the sand country in particular, via irrigation (in conjunction with land contouring and increased inputs).

[46] See the Rangitikei District Strategic Water Assessment carried out by the Catalyst Consulting Group for Rangitikei District Council with funding assistance from the MPI Irrigation Acceleration Fund

- The opportunity to better manage their farms in terms of inputs, production levels and profitability.

There is a documented lift in production and profitability with irrigation and the region, particularly the Rangitikei is comparatively water rich.

The study suggested that sheep/beef farmers, particularly those in the middle and northern parts of the region, would also be interested in investigating stock-water supply schemes at a property or community scale. Stock-water security and the area of coverage is still a major limitation on sheep/beef farmers in the district during droughts. This is because the foraging range of livestock is significantly constrained if stock water is not widely dispersed. With the increased use of foraging crops and the expanded use of the key parts of the area as lamb- finishing country, reliable access to stock water will become an increasing limiting factor.

Interest is already being expressed in the potential of the Rangitikei area. For example:

- Shanghai Pengxin and Landcorp have acquired a property near Ferry/Scott's Landing near Bulls with irrigation being one of the options they may use for intensification.
- A Dalrymple/Ngati Apa/ Atihau Whanganui partnership investment has occurred and there is potential on their recently acquired Flock House Station to establish irrigation.
- The Santoft forests are in the process of being developed for agricultural purposes. There is a high probability that landowners will consider dairying as an alternative land use on this sand country. Irrigation will assist to accelerate the process of building soil organic matter and will be a valuable mechanism for achieving the level of production currently being experienced by neighbouring dairy farms.

The key conclusion is that there is a documented lift in production and profitability with irrigation and the region, particularly the Rangitikei district, is comparatively water rich.

Capitalising on this opportunity is dependent not only on harvesting water but also upon what is grown and the need to have the right farming systems in place to optimise the potential for increased production. For instance:

- Irrigation in dairying and coastal sand country generally provides good returns.
- Large-scale cropping and horticulture in the sand country has good and less good years depending on the weather – these variances would be overcome with irrigation.
- Land use capability limits are such that irrigation in the middle/upper parts of the Rangitikei district are likely to be focused around lamb finishing using high value fodder crops rather than dairying.

Non-dairy potential

Non-dairy irrigated land uses may be more challenging to get to viability, as the study prepared for the Rangitikei catchments shows, but these should not be put aside as they may have as much net benefit to the Rangitikei community overall.

Farms in the sand country require around 5mm/day to 7mm/day for irrigation. If it is assumed that the lower and coastal Rangitikei has 110,000m^3/day available at peak, there

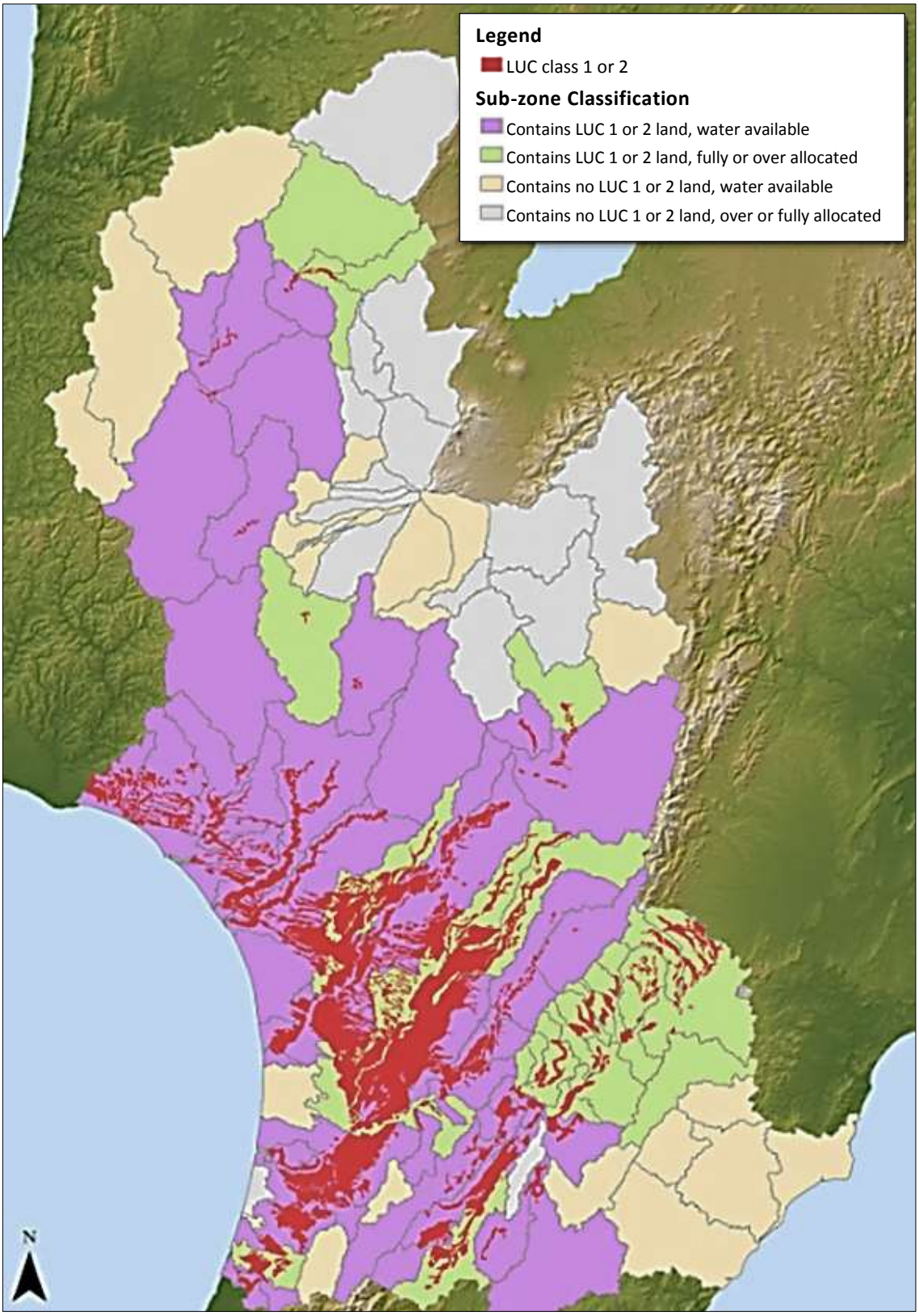
is currently enough water to irrigate about 1,570 to 2,200 hectares from run-of-river surface water alone without storage.

This is not a particularly large area but additional water is available from ground water. Considerable additional irrigation potential exists if storage is included in system design.

Overall potential

If all irrigated land is used for dairying and all other contingency measures and challenges are overcome, then conservatively, a 20% increase in production may be achievable with significant subsequent net additional contributions to the district and regional economies. This 20% increase prediction is on the basis of comparison with the one third increases achieved in Canterbury which is much drier than the Manawatū-Whanganui region.

FIGURE 25: WATER AVAILABILITY COMPARED TO LAND USE CAPABILITY



Source: Horizons Regional Council, 2015

Assuming surface and ground water is equally available and nutrient losses can be managed, similar conclusions to those drawn from the Rangitikei work could be drawn about the potential for irrigation-induced land use intensification over a large area to the south, and perhaps to a degree to the north of the Rangitikei, as well as the Rangitikei district itself – thereby encompassing an area extending from Levin to north of Whanganui.

The Regional Council has combined land use capability data with an assessment of water availability to identify all parts of the region which may have irrigation potential. This suggests that the potential (see the area marked as red and purple on Figure 25, above) is quite significant.

WHY?

Summary of the rationale

- Development of under-utilised land capacity will provide a higher contribution to GDP and employment opportunities.
- Growth in demand for protein products like dairy milk will continue for the foreseeable future.
- Investment in intensification of existing dairy areas and the expansion of dairy into new areas will capitalise on the forward prospects of the dairy sector.
- Growth in dairy will align with other opportunities such as those in grain growing and processing.

WHY NOT?

One Plan

The National Policy Statement for Fresh Water Management has been amended to require all regional councils to set limits for water quality. One of the core dimensions to be managed is nutrient losses from agricultural land in order to avoid eutrophication of rivers, lakes and ground water.

The Horizons Regional Council, to a degree, pre-empted this requirement by promulgating the One Plan. Among other things this set limits on the volume of nutrients which are permitted to be discharged from those regional catchments deemed to be under pressure.

The One Plan, which was initially seen by many farmers as a major obstacle to intensification and production, has now been in place for several years and is becoming well understood by farmers. A pragmatic approach has been adopted by the Horizons Regional Council and the region's dairy farmers towards implementation of this Plan. This should provide some certainty to land users contemplating intensification and is now more an enabler than an obstacle.

Social license

The implementation of the Manawatū River Accord will continue to contribute to community-wide understanding of the objectives and responsibilities of all parties to improve water quality.

The Rangitikei coastal zones encompass the coastal sand dune complexes which support a number of significant lakes, wetlands and lagoons and a network of valued small streams and drainage channels. Care will need to be exercised to ensure the quality of these surface waters is not compromised as a consequence of the more intensified land use possible with irrigation in this area.

The use of reticulated water for stock water purposes is also an important part of establishing a social licence.

Dairy intensification

Our informants indicated that dairying is generally, but not always, the first choice of land use for decision-makers contemplating intensification. The structural demand conditions for dairy are sound however there are cyclical risks from variations in economic conditions. The current price downturn may generate a conservative attitude by land owners toward investment in dairying intensification but, as noted earlier in this report, long term demand trends are positive.

From a supply perspective, dairy farming is capital intensive. It therefore takes time to increase production, as it requires investment in land, often conversion from another use, and the construction of milk collection and processing infrastructure.

The capital requirements of land use intensification accelerate if irrigation is added to the mix but the first question to address is water availability. Restrictions are required to be adhered to, or water storage accessed, when a river or ground water resource gets below minimum levels.

Irrigation and dairying

Under the existing regime, current Rangitikei irrigators have been required to restrict their use between three and eight days per year. On a ten year basis this means users may need to use off-line storage or alternative water sources to continue irrigation over around 24 – 59 days per year (depending on the location of the abstraction point).

In more general terms, farmers may not have an interest in irrigation if they are: receiving sufficient natural water already or operating a farming system which does not require or is unsuitable for irrigation.

Other barriers (as identified by Irrigation New Zealand[47]) to interest in irrigation opportunities may include: lack of information on establishment and running costs and or; the profit margins may be too small / the pay-back period may be too long.

On top of these challenges, in the southern part of the Rangitikei District the electricity supply grid is able to support more users, whereas further north, much of the power is supplied via single dead-end lines. As such, even small irrigation proposals could overload the system, resulting in 'brown outs' for other users of the line.

Returning to the question of capital requirements, significant development costs and related challenges will need to be overcome in order to take advantage of irrigation opportunities.

[47] NB this is a generic list which could be applied to anywhere in New Zealand.

These include:

- **Bore development** – costs are approximately $1000/metre. Recent bores in the coastal sand country have been extending to a depth of 350m, with some exploration bores extending to a depth of 600m.
- **Pumping costs** – in the middle/northern part of the Rangitikei district, the rivers and streams are deeply incised, requiring large volume pumps to lift water at least 50m vertically. The cost of such pumps and their associated infrastructure may be considered high if only relatively small areas of land are being considered for irrigation (i.e. 20-40ha). It is not unusual for large irrigators to have a $300,000 -$400,000 annual power bill. Given most of the electricity consumption is associated with moving water (i.e. out of the bore/river and distribution on the farm), rather than operation of the irrigator, placement of the intake/bore relative to the irrigator can have a major and highly variable impact on power use.
- **Back up storage costs** – when minimum river flows or ground water levels are reached then irrigators are required to cease abstraction. This implies a need for storage to cover water needs during the period when irrigation is likely to be most important. Water storage liners are expensive and will be particularly necessary for storage of water in the sand country.
- **Advice** – easily accessible experts with practical irrigation, resource consent and related development advice may help to accelerate interest in irrigation in the Rangitikei area.

Even if there is a strong economic case for intensification in a particular area, farming operations may not seize that opportunity, or at least not immediately. Farmers, particularly family owned farms are often capital constrained and while the economics may stack up they may still take a cautious approach toward large capital expenditure for irrigation and other land use intensification options. Good information on the costs and benefits for farmers and good knowledge about the regulatory regime will help overcome this, but it will still take time.

In summary, any new irrigation will need to be considered in terms of water availability, reliability, summer storage cost and land owner attitudes as well as the nutrient implications arising from intensified land use.

Additionally most intensification will be at the expense of other land use, generally beef and lamb. The gains therefore have to be assessed in net rather than absolute terms. As outlined in the section on red meat, internet access will become a powerful tool for assisting to achieve practice and behaviour change. Intensification is a strong knowledge and science-based process and dispersal of vital information through the internet will become ever-more important.

FILTERS SUMMARY

Impact: The combination of irrigation and intensification has the capability of producing a significant one-off lift in productivity. The process of intensification is, however, gradual.

From a regional perspective the gains of intensification are certainly worth having, but contributions to the broader growth objectives sought by this Study are not as strong from this sector as from other sectors.

The dairy and related processing sector accounted for around 7% of national dairy jobs, which equates to around $600m regional GDP in dairy related sectors in 2012[48] (assuming constant labour productivity across regions). A 20% increase in production would add $120m to the regional economy and add 660 jobs.

Trend: the global market for dairy products is growing despite the setback of the last year. Over the past decade dairy exports have increased by an average of $970m per year, the fastest growing commodity in New Zealand. Dairy prices have fallen in 2014, due to increasing supply in other parts of the World, and the use of previously accumulated stocks in China. However, the longer term structural demand for dairy remains very strong and there is not yet sufficient capacity to meet that demand. There are growing international markets for arable products.

Competitive/comparative advantage: the region already has some specialisation in dairying, with significant employment in the sector (over 3,300 jobs). The sector accounts for 3% of regional jobs, compared to 2% nationally. This illustrates the comparative advantage in the region. Similarly, there are other indicators of specialisation, like productivity per cow, which are higher than the North Island average for a number of the sub-regions. The region has a significant dairy capacity though not of the scale of Waikato, Canterbury and Southland. It also has significant arable production which is arguably below potential.

Employment intensity: the sector is growing and employing more people. Hiring increased by 5% in Manawatū-Whanganui, but it was slower than the national growth rate of 20%. The benefits of a growing dairy sector tend to go to the capital owners, as wages account for a relatively small part of total sector spending (11%). The spill-overs through linkages with other businesses also tend to be moderate, as the spending by farms tends to be intermittent and focussed toward large capital items.

While land intensification is generally capital-intensive the experience of Canterbury is that the combination of dairying, arable and irrigation land uses produces jobs and enhances communities through support and advisory services.

[48] This is the latest available detailed industry data and regional comparators.

TABLE 10: OVERALL METRICS FOR DAIRY

Metrics	Current size (filled jobs)	3,300
	Employment intensity	Moderate
	Linkages to other sectors	Moderate
	Stage of lifecycle	Growth
Impact	GDP adding	▲
	Job adding	▲
Trend	Domestic	▲
	Export	▲
Competitive advantage	Domestic	▼
	Export	▲
Summary	Current size	▲
	Employment intensity	▼
	Linkages	▬
	Stage of lifecycle	▲

Source: Statistics NZ, NZIER

HOW?

Objective: - greater productivity from good land.

Key strategic intervention - irrigation. This intervention has multiple effects, but to operate with irrigation, farmers have to be in tight control of their operation. This produces a halo effect where productivity gains are achieved not only from irrigation but from improved farm practice generally because they are focused on it. There are other interventions of lesser impact and these are outlined below.

DAIRY FARMING

DairyNZ and other dairy focused players have committed 10 full time equivalent consultants and officers to the region to assist dairy farmers to adopt best practice. The focus of these programmes is on 'farming to limits' which includes, among other things, advice to dairy farmers about how to manage nutrient losses.

If dairy growth opportunities are to be fully capitalised upon, consideration should be given to methods through which advice about leading edge production can be extended and accelerated.

Horizons Regional Council can also help. The task is to provide regulatory certainty and thereby make the challenge for those farmers with an interest in intensifying one step less complex than that experienced elsewhere. One way of doing this is to build on work already undertaken by DairyNZ to commission further research to more accurately define the link between dairy farm intensity, nutrient loss mitigation practice, the cost and benefit of different mitigation interventions, the relationship between phosphates and nitrates in terms of water quality outcomes and the impact of various sources of nutrients,

for example urban or farming, at various times of the year – particularly under summer low flow conditions.

In addition, Horizons Regional Council may wish to consider the following initiatives:

- **Headroom statement:** land use change and intensification decisions would be assisted if Horizons were to prepare a clear statement about the catchments which may have additional nutrient loss headroom.
- **Greater nutrient freedom in the sand country:** an argument could be mounted to suggest that farms located in the sand country between Levin and Whanganui drain to the sea and therefore these could be separated out from the land use capability based limit regime listed in the One Plan and thereby given more freedom to intensify because their nutrient losses would not have a significant impact on surface water.

More generally, there are a number of other strategic interventions which those with an interest in land use intensification may wish to consider:

- **Marketing initiatives:** one of the advantages of the region is its relatively benign climate – at least compared to the dry of Canterbury and the cold of Southland. This means that most farmers are less dependent on palm kernel (PKE) and other non-farm sources of feed than farmers located elsewhere. With a growing market interest in food produced from grass fed free-range animals, opportunity exists to establish groups of like-minded farmers and producers who are prepared to brand and sell their milk products accordingly.
- **Land-use analysis:** a critical analysis of existing land use capability[49], water availability, property size [50]and property price could be undertaken to identify those areas which are likely to provide the greatest return on investment if converted from sheep, beef or arable uses to dairying. This assessment would also need to consider how the region sits when compared to other regions. The hypothesis to be tested is that, for the capital cost required, the Manawatū-Whanganui region is capable of better returns from intensification than investors realise.
- **Youth pathways:** Federated Farmers met with representatives from UCOL, Feilding High School and Food HQ (March 2015) to discuss an initiative aimed at lifting expectations of students about the opportunities in the agricultural sector. The objective was to establish pathways to enable young people with an interest in agriculture to develop the skills needed to operate within, what is and will increasingly become, a large complex business using new technologies and systems. This 'Youth Pathways' initiative has the potential to help plug sector skills gaps in the region. Funding and full multi-party support is required to bring it into fruition.
- **Labour market enhancement:** Federated Farmers nationally is working on a Workplace Accord, with the aim of ensuring the industry is providing an attractive environment to attract and retain quality people. This initiative is to be applauded.

[49] Perhaps modelled on the Topoclimate Survey of Southland and South Otago.

[50] Noting that to be future proofed, most dairy farms now carry around 600 cows.

IRRIGATION

The use of small-scale water storage and irrigation to improve the productive capacity of land and to moderate the risks of drier weather patterns was seen as necessary by key informants. We would like to see a pilot project undertaken to confirm the cost benefit of various options, the locations likely with most land owner interest, the areas likely to provide the best returns and the likely regulatory requirements to be met for businesses to invest in water storage and irrigation schemes.

Research

The Horizons Regional Council is considering a significant programme to better understand the availability and limits of groundwater abstraction. The Council's intentions would be reinforced if demand was confirmed and cost-share partners could be secured. The proposed Council programme, among other things, would confirm the availability of ground water from deeper zones and also assess the risk of salt water intrusion.

There is good reason for the Horizons Regional Council to be encouraged to review the policy and rules it has established for minimum flows and allocation limits for surface water. This would increase the availability and surety of the supply of water for land use intensification and stock water reticulation. Groundwater limits could also be revisited as they appear to be currently set conservatively compared to some other regions.

The allocation framework in the One Plan enables transfer of water between users. This, alongside a refined reviewed approach to allocation/use consents may free up additional water for productive use.

In addition, water is still available in fully allocated catchments provided it is harvested at higher flows and then stored. The issue to be addressed is whether the costs of storage can be recovered through additional production gains. Further research is required to confirm this potential benefit.

Demand

Demand for an irrigation scheme in the Rangitikei is latent, not explicit. There are early gains to be made by individuals taking up irrigation by using unallocated ground and surface water and some of them may find it easier to get together in small groups to share infrastructure and storage costs rather than embarking upon grand schemes.

Advice and information is a pressing need. Experience in other parts of the country is that the advent of irrigation often reinvigorates farming practice as farmers look at all aspects of their operation in the light of a new cost structure.

There is also a pressing need to further explore the potential for redeveloped, redesigned and or expanded rural water supply schemes, including that located at Hunterville possibly incorporating opportunities for irrigation potential.

Obstacles

The key challenge to overcome is the limit posed at some locations by inferior electricity supply systems. As noted previously, in the north of Rangitikei much of the power is supplied via single dead-end lines which will not cope with irrigation pump power demands. The only options available to large irrigators to overcome these electricity supply issues are to: upgrade transmission lines and install transformers; or install diesel

generators, to supplement their electricity needs. Overcoming this issue could potentially be a key enabler to industry development and productivity increases.

The potential for irrigation may well need to be assessed on a catchment-by-catchment basis, or farm-by-farm. The decision for developing water storage/irrigation will be made by farmers on the basis of a whole host of factors, let alone annual rainfall - which can vary considerably within 5km of another farm. An initial broad spectrum approach is required to determine pockets of interest which could then become the focus of deeper work.

Relevant central government initiatives:

- Irrigation Acceleration Fund - includes the Rangitikei District Strategic Water Assessment.
    - Primary Growth Partnerships and Sustainable Farming Fund projects with the dairy industry including: Clearview Innovation - will develop a range of new products, which will improve nitrogen and phosphorus use efficiency and reduce losses to the environment.
    - Transforming the Dairy Value Chain – development of new premium products with health benefits; initiatives to improve on-farm productivity and reduce environmental impacts, and improve agricultural education.
    - Whai Hua – developing immune enhancing dairy milk products for Asian and New Zealand markets.
    - Pasture development programmes focussed on improved pasture renewal, management practices for intensive winter dairy grazing, plantain and tutsan weed control.
- Enhancing New Zealand's market access: implementing the Government's Free Trade Agreement agenda; addressing behind the border barriers in key markets; implementing NZ Inc Strategies; increasing NZ's representation in emerging markets.
- Food Innovation Network.
- Rural broadband initiative and further roll-out of ultra-fast broadband roll out – creating a platform for adoption of technology in the dairy industry.
- National Policy Statement for Freshwater Management – supports sustainable growth of primary sector production.
- Māori Agribusiness: Pathway to Increased Productivity programme.
- Te Pūnaha Hiringa: Māori Innovation Fund.
- Treaty Settlements currently being progressed.

INTERVENTIONS SUMMARY

Dairy sector:

- Extend and accelerate advice about methods to increase on-farm productivity within water quality limits.

Horizons Regional Council:

- Work with Government and DairyNZ to do more research to better understand land use and water quality relationships.
- Carry out more research to define catchments with nutrient loss headroom.

- Amend One Plan to allow more nutrient loss in coastal areas where there will be less effect on surface water quality.
- Work with primary sector to build image, brand and provenance of sustainably produced products from Manawatū-Whanganui.
- Work with MPI to document the potential returns for investors from land use intensification in the region when compared to other regions.
- Work with MPI (Irrigation Acceleration Fund) to document land owner interest in small scale water storage schemes, form farmer clubs and then pilot such schemes.
- Confirm the availability and risks associated with extraction from deep aquifers.
- Review the policy and rules for allocation limits for surface and ground water.
- Assess, determine and implement the best means of making allocated, but under used water available to other users.
- Work with Rangitikei District Council to explore rural stock water reticulation options including what may be done to add more security to the Hunterville Rural Water Supply Scheme and related electricity supply situation.
- Work with Massey University and other training institutions to keep talent in the region by channelling more of it into local job opportunities.
- Ensure rural internet access targets are met.

All parties:

- Continue to add detail to and support the 'youth pathways' programme
- Support and do further work to market the value of the Federated Farmers Workplace Accord.

MPI:

- Work with MPI (Irrigation Acceleration Fund) to document land owner interest in small water storage schemes, form farmer clubs and then pilot such schemes.

Iwi

- Engage iwi in these developments as they apply to the Māori land in the Class one and two categories.
- Engage iwi on the steps taken to manage and mitigate environmental impacts of intensification.

LAND USE INTENSIFICATION

THE OPPORTUNITY AT A GLANCE

What? – the opportunity

Why? – will it succeed

Farm to capacity:

- Increased productivity from Class 1, 2 & 3 land.
- Increase productivity per cow in the dairy industry.
- Encourage diversity and resilience in farming enterprise.
- Increase productivity by 20% from irrigation.

Overcome:

- Perceptions of nutrient. loss/contamination
- Passivity around land use change.
- Electricity supply issues.
- Labour shortages.

Leverage off:

- Classes 1, 2 & 3 land.
- DairyNZ productivity initiatives.
- Available water.
- Available nutrient headroom.
- Certainty created by the One Plan.
- Improved rural internet access.

Act to:

- Support and expand irrigation initiatives.
- Support national productivity initiatives.
- Encourage sector leaders - Federated Farmers, Dairy NZ, DCANZ – to act locally on intensification.

Why not? - obstacles

How ? – interventions, actions and arrangements

OPPORTUNITY: MĀNUKA HONEY

WHAT? – THE OPPORTUNITY

Manawatū-Whanganui has an extensive hill country hinterland ideal for Mānuka honey production, especially on Class 6 and 7[51] lands that are used for little else. The infrastructure of knowledge and practice is developing rapidly.

The regional advantage lies in the volume of land with Mānuka trees already in place and/or capable of being planted with high grade cultivars. Other advantages are the co-benefits associated with the industry such as erosion control and riparian planting which suggests the potential for a public/private development partnership. Add-on income for hill country farmers and use of landlocked Māori land are other attractions.

Whilst not a totally proven market, development is taking place very quickly with significant Government and industry investment.

Information provided with a PGP bid submitted by the Mānuka Research Partnership Ltd consortium suggests that the value of New Zealand's honey industry could grow from an estimated $75m in 2010 towards $1.2b pa by 2028. Even if a fraction of this growth is realised, the scope for growth is significant. The region would be building the sector almost from scratch on land that has limited productive use currently, meaning any growth will be additional to the economy and jobs.

The *prima facie* case is very strong for Mānuka honey as a development opportunity for the region.

Current position and prospects

New Zealand honey exports are at present doing well internationally and New Zealand Mānuka honey is a premium honey product that demands particularly high prices compared to honey from other countries. At present it is unique to New Zealand and temperate parts of Australia. The Mānuka plant is hardy and able to grow in terrain that is not very productive for intensive agriculture. A current Primary Growth Partnership is investigating environmental and site factors and genetics that influence Mānuka establishment and growth, and related effects on honey yield and quality.

The Mānuka honey industry in New Zealand is currently in its infancy but is growing rapidly. The main area for growth would now seem to lie with plantation Mānuka as natural stands are rapidly approaching full use status. The number of persons employed in the industry in the Manawatū-Whanganui region has increased by 180% between 2004 and 2014 (see Table 11). The value of honey (not just Mānuka) exported from New Zealand grew by 793% over the last ten years. While the base was low, this clearly

[51] For Land class categories refer Figure 21

confirms there is a definite market and that New Zealand Mānuka honey has a growing world profile in both medicinal and 'honey for food' markets[52].

The global market for honey is growing strongly. New Zealand has a relatively high share of the global export market and has been increasing its global market share (see Figure 25). The largest demand is typically from the rich world, but New Zealand has patchy exposure to these markets (see Figure 26).

While significant infrastructure is required it is not on the scale of many other industries, reducing the risk of entry for farmers and investors.

Information provided with a PGP bid submitted by Mānuka Research Partnership (NZ) Ltd and Comvita Ltd suggests the value of New Zealand's Mānuka honey industry could grow from an estimated $75 million in 2010 towards $1.2 billion pa by 2028[53]. Research to date has shown that some of the Mānuka trial cultivars developed as part of the PGP programme are producing nectar with two-times the level of dihydroxyacetone (DHA) compared with general Mānuka growing in the same district.

No one country is large in this market and New Zealand is a significant player (See Figure 26). In addition, the markets for this product are quite diverse and involve many western countries. This will have the effect of adding diversity to New Zealand's agricultural profile and reducing the risk of over-reliance on certain products (e.g. dairy) in certain markets (e.g. China). See Figure 26.

Health and beauty properties

Mānuka honey is a desirable food product and has proven healing properties when applied to wounds[54]. The honey is an ingredient in beauty products and is used in an increasing range of medical supplies. As a medicinal product, the active ingredients in Mānuka honey have a strengthening scientific basis as work is done on this. It's efficacy as a topical treatment for wounds has been established.

[52] For further information see 'Investment opportunities in the New Zealand honey industry' prepared as part of the Food & Beverage Information Project, May 2012 v1.01c, www.foodandbeverage.govt.nz

[53] This is the aim/vision of the PGP and is reliant on the PGP being fully successful in delivering on the productivity gains being investigated and on successful uptake and market growth.

[54] The health properties of Mānuka honey, when digested, have not been proven.

Employment

TABLE 11: EMPLOYMENT IN THE HONEY INDUSTRY

Element:*	Employment (**) Number, 2014	% of total	% growth, 2004-2014	Specialisation
Broad areas				
NZ	1180	0.1	119	..
Manawatū-Whanganui Region	70	0.1	180	Medium
Territories				
Ruapehu	0	0.0	..	..
Whanganui	25	0.2	..	Medium
Rangitikei	35	0.6	..	Medium
Manawatū	3	0.0	..	..
Palmerston North	0	0.0	..	..
Tararua	0	0.0	..	..
Horowhenua	6	0.1	..	..

Source: Statistics NZ, NZIER

Notes:

.. Not available or applicable

* Specialisation is calculated as revealed comparative advantage. We summarise the results as High, Medium and Low.

** Filled jobs. The sector is defined for this purpose as:

A019300 Beekeeping

There are no detailed regional data for honey-related sectors, so we use beekeeping as a proxy. The sector is tiny, but is growing rapidly both in the Manawatū-Whanganui region and nationally. The region has some specialisation in honey related sectors, but the small size of the sector means that inferences should be drawn with caution[55].

[55] Notably most of the large beekeeping operations in the North Island have hives in many areas, so beekeeper numbers by location can be very misleading as a proxy for actual beekeeping activity in an area. The American Foul Brood Pest Management Scheme register of apiary sites may provide additional data, noting that the data is not collected for this purpose and it has proven difficult for us to access.

FIGURE 26: EXPORTERS/PRODUCERS

Rank	Country	US$b	Share	Growth, 1y
3	**NZ**	0.1	7%	793%
Top 5 exporters				
1	**China**	0.2	12%	139%
2	**Argentina**	0.2	10%	33%
3	**New Zealand**	0.1	7%	793%
4	**Germany**	0.1	7%	69%
5	**Mexico**	0.1	6%	65%
	RoW	1.2	58%	128%
	World	**2.0**	**..**	**115%**

Source: UN Comtrade

FIGURE 27: IMPORTERS/CONSUMERS

	2013 imports		Growth, 2003-2013	
	US$b	NZ share	Growth	NZ share
USA	0.5	1.9%	127%	59%
Germany	0.3	1.5%	33%	3%
United Kingdom	0.1	23.4%	73%	4%
Japan	0.1	8.4%	87%	15%
France	0.1	0.4%	134%	3%
Italy	0.1	0.0%	78%	0%
Belgium	0.1	5.7%	226%	0%
Saudi Arabia	0.1	0.3%	100%	1%
Netherlands	0.1	0.0%	115%	0%
Spain	0.1	0.0%	88%	0%
World	2	7.6%	101%	59%

Source: UN Comtrade

Location and scope of industry activity and potential

Currently wild-harvest Mānuka honey is sold as a premium product based on the collection of Mānuka nectar in a number of hill country areas across the region particularly in the Whanganui, Rangitikei and Ruapehu Districts. The current exact location and volume produced in the region is not known and is likely to be seasonally variable.

There are some large blocks of Māori land within the Manawatū-Whanganui area which could potentially benefit from increasing Mānuka yield because of the nature of the

terrain and the affinity of honey production with the long term land management objectives of owners of this Māori freehold land.

Class 6 and 7 land is ideally suited to the growing of Mānuka. The arrangement suggested by experienced bee keepers is to allow the Mānuka to flower sequentially area by area to thereby optimise the length of the period over which honey is produced[56].

In the 2014/15 season 1,600 hectares of Mānuka species from various sources were established throughout New Zealand with 800 hectares of this managed by Comvita[57]. The expectation of the PGP research consortium is that 30,000 hectares of specialist species will be planted over the next several years.

The key advantages of entry into Mānuka honey production are the:

- Low cost of entry and exit.
- Comparative low cost of the hill country land suited to Mānuka honey production.
- Availability of large tracts of land with regenerating Mānuka which is suited to honey production but unsuitable for most other farming purposes.
- Diversity that the industry may provide to current hill country farming ventures and therefore the contribution it may make to improve the resilience of these farming enterprises.
- Productive use of land which may not have any other productive value.
- Mānuka stands, while predominately on marginal land, could also be used in other contexts such as riparian situations or around lakes needing protection or even as shelter belts. All areas of unproductive land on a farm can be potentially used.
- Opportunity to use the native Mānuka which may be present on many hill country properties and then, if the land owner is willing and subject to local plan requirements, transition to planting with genetically improved cultivars which are capable of generating honey at the high end of the range of levels of dihydroxyacetone (DHA) and therefore capable of increased returns.
- Compatibility with Māori enterprise noting the:
    - Long term land ownership approach inherit in Māori land ownership.
    - Skill development opportunities and team-work required, particularly during the planting of specialist Mānuka cultivar plants.
    - General ease of integration into Māori farming enterprise.
    - Opportunity for bee keeping employment.

[56] This is being researched as part of the PGP. It is important because, without sequential Mānuka flowering the bees will search out other flowering plants with the risk of dilution of the sought after value-add properties. On the other hand they are a useful feed source when the bees are not on sequential Mānuka flowers so careful management is required.

[57] Pers. comm, Neil Walker, Chair, Mānuka Research Partnership Ltd.

Informants provided examples of land owners receiving an average of 10-20% of the revenue produced by beekeepers from the sale of the Mānuka honey produced by the hive owners/managers operating on their properties. MPI have indicated that this can be as high as 30%.

The region is well served by the Tweeddale family of beekeepers who operate from a base near Taihape and support the production of honey across a large part of the adjacent hill country. The region is also well served by the sector leadership provided by the Chair of the Mānuka Research Partnership consortium, Neil Walker from Hawera.

Options are available to land owners and hive owners to determine how intensive they want their involvement in the honey industry to be. The scale and nature of the involvement usually depends on available investment, skills and interest. The options include:

- Rental from a land owner by a hive owner of an area of land owned with naturally occurring Mānuka owner.
- Hive owner profit share with that land owner.
- Purchase of land with Mānuka plants and establishment/management of hives and associated honey product.
- Employment by a land owner of a bee expert, with hives and honey production skills, as part of a farming enterprise.
- All of the above with associated arrangements for the planting of high value cultivars.
- Cooperative arrangements with neighbouring farms to share in the costs of employing a bee keeper and honey extractor.
- Storage of Mānuka honey by owners in barrels to allow it to mature and to take better advantage of market fluctuations.
- Supply of honey to a variety of suppliers for creaming/refining.
- Establishment of centres of excellence or of common interest to enable branding/provenance and scale opportunities to be capitalised on.
- Sale of honey to the highest bidder or production/sale of honey under contract to a major purchase such as Comvita.
- Export and sale of honey, at scale, to markets.

Newly established Mānuka stands may be eligible for credits within the carbon market. Over 100,000 hectares of land in the Manawatū-Whanganui region may be suited to Mānuka honey production but they have to be capable of growing to above five metres in height. Mānuka planting has benefits as an erosion control measure on steep land and has the added benefit of being a crop which may never need to be harvested.

Costs and prices

Areas covered in Mānuka plants may be capable of supporting two beehives per hectare. Hives cost approximately $300 each. Each hectare may be capable of producing 30-40 kg per hectare per annum of honey depending upon the density and variety of Mānuka flower production and the length of the flowering season[58].

The current price for Mānuka honey at the extractor's gate may range from $30 per kg to $80 per kg depending on the market in any one year and the volume of supply offered by competitors. Price and value is also linked to DHA and monofloral quality because it is these which determine price premium. Returns from good quality Mānuka plants may be as high as $4,000 per hectare gross although $2,000 is probably a more realistic average figure.

Input costs will vary depending on the particulars of the arrangement adopted in any one area. If the hives and beekeeping are operated within the farm enterprise and the cost of land is not included, input cost may be in the order of $1000 per hectare pa[59].

Input costs will also vary considerably depending on whether the venture includes clearing, tracking, fencing and a planting regime for high value Mānuka plant cultivars and also depending on whether honey management is provided by independent bee keepers and or other parties who are external to the farm, or alternatively, provided as part of the farm venture.

WHY?

Summary of the rationale

- On the surface of it, current returns are very good though volumes are small.
- The product is rapidly gaining international interest.
- It has significant potential in the value-added nutraceutical market.
- There is extensive available land.
- It has enormous potential for Māori Freehold and landlocked land if farming skills can be developed and capital located.
- There is an information asymmetry problem at this time where information to support growers is running behind demand. This is a reasonably simple point of intervention.

WHY NOT?

The speed at which the industry is moving means that there is an information asymmetry problem – information supply is not keeping up with industry demand. This information is production and market-related. This problem has been lessened to some degree by the introduction of a PGP programme, but it only deals with some aspects of the production of Mānuka honey.

[58] For further information about costs and prices see the MPI 2014 apiculture monitoring programme report at https://www.mpi.govt.nz/document-vault/5302

[59] Ibid. Neil Walker

Market uncertainty

Additionally, the size of the Mānuka honey market is uncertain. Exports from Australia and other countries are also growing.

There are producers of other non-Mānuka honeys from New Zealand, Chile, Iceland and UK who claim that their honey has similar active ingredients to Mānuka honey. Some Australian producers have varieties of Mānuka honey which they claim have more active ingredients than Mānuka honey produced in New Zealand. It is becoming more difficult for consumers to compare the differences across the range of honey products and to judge the quality of the product relative to price. For example, some New Zealand Mānuka honey is being used as an ingredient in UK store-brand honeys. These products are blends which are advertised as Mānuka honey but sold at a much lower price point. There is a risk that this may diminish the value of the total brand.

There is a growing domestic and international consumer demand for Mānuka honey-based products for medical, culinary and other uses which is not being satisfied because of constraints in New Zealand Mānuka industry supply.

Growing season uncertainty

Variation in growing seasons impacts on the reliability of the supply of Mānuka honey, and on beekeeper profitability. Under current conditions in many Taranaki locations, good Mānuka honey years only occur in 1 in 4 years. Other years can either be too dry or too wet. While new research trials are seeking to greatly extend the flowering period, this is certainly not as yet a proven process.

There is a lack of a robust business case for retiring marginal land from pastoral grazing to enable Mānuka plantations. More work is required. This is being progressed as part of the PGP research programme.

Cultivars

The major current technical barrier is the difficulty in selecting the right cultivar for a particular part of a particular site so that it will establish, thrive, flower and offer abundant high-DHA nectar at exactly the same time as bees are flying.

Other risks

Other risks associated with the use and growth of Mānuka honey plants for honey includes:

- Incursion of the plant pest Myrtle Rust (though New Zealand's biosecurity control and border control systems are robust).
- The inability to control where bees travel enables hives to be placed on the boundary of land with Mānuka plants owned by someone else – hence reducing the benefit the neighbouring landowner can gain from the Mānuka plants on their property (the planting of high shelter belts is one of the means used to limit this practice).
- No scientific evidence about the efficacy of ingested Mānuka honey for health purposes, compared to the well documented benefits from its use topically (surface wounds) and in lozenges etc.
- General lack of knowledge about many other matters which will have a bearing on the success of various aspects of the industry.
- The quantities of honey that are able to meet Mānuka honey labelling requirements, once determined, may be less than that currently claiming to be Mānuka honey.

- Bees may preferentially forage on plants other than Mānuka and may travel some distance to do so despite being surrounded by be Mānuka[60].

Parties seeking to enter the market need to undertake thorough due diligence. There is also relatively limited R&D funding into medical uses at this stage. Despite these factors the opportunity has all the indications of a strong one.

FILTERS SUMMARY

Impact: the potential scale of the industry is difficult to assess but it is likely to create production where production did not formerly exist such as on Māori land and marginal land. The potential for Mānuka honey development to use either unutilised or poorly utilised land resource is very strong. In effect, it is bringing a formerly little used resource into play.

Trend: the global demand for honey is increasingly strongly. New Zealand exports grew from $28m in 2004 to $202m in 2014 – a whopping 612% increase. The export potential is also through nutraceuticals – particularly for Mānuka honey. The global honey market is small and New Zealand is a relatively large player, accounting for 7% of global honey exports.

Competitive/comparative advantage: the region does not currently have a significant specialisation but with current levels of activity this is beginning to emerge with land already in Mānuka plantings or able to be converted to this use. Beekeeping, a close proxy for the sector, is very small in the Manawatū-Whanganui region (70 jobs) and is concentrated in Rangitikei and Whanganui.

Employment intensity: the beekeeping sector is relatively small, but it is growing fast. The number of beekeepers increased by 180% nationally in the past decade[61]. If the industry continues to grow at current rates, so will jobs, particularly in related processing and distribution sectors. The industry, in part because of the type of land used and its location, does not easily lend itself to mechanisation, so jobs are likely to continue to grow.

[60] The relatively higher sugar content of nectars from some other common floral species is thought to be responsible for this behaviour. Management of competing floral sources may therefore need to be factored into viability studies.

[61] Pers.comm. Neil Walker, ibid, noting that some of this increase is due to growth in the hobbyist. An assessment of the MPI Apiculture reports produced over the last ten years suggests that long term large operators are growing even larger.

FIGURE 28: OVERALL METRICS FOR THE MĀNUKA HONEY INDUSTRY

Metrics	Current size (filled jobs)	70
	Employment intensity	n/a
	Linkages to other sectors	n/a
	Stage of lifecycle	Growth
Impact	GDP adding	▲
	Job adding	▲
Trend	Domestic	▲
	Export	▲
Competitive advantage	Domestic	▬
	Export	▲
Summary	Current size	▼
	Employment intensity	n/a
	Linkages	n/a
	Stage of lifecycle	▲

Source: Statistics NZ, NZIER

HOW?

Objective – expansion of Mānuka honey production on Class 6 and 7 land, including Māori landlocked land.

Strategic intervention – correct the information asymmetry with a strong information and education programme to hill country land owners and potential farmers. The industry is providing sufficient support for someone committed to the development of the practice for serious contenders to undertake due diligence.

The key challenge is one of information asymmetry. Many of the farmers are learning as they go. A large number of farmers who could benefit from developing the practice know nothing about it and harbour the usual apprehensions associated with new ideas.

The crucial task is to get conservative land owners from a position "that's not me" to "this looks interesting". The building of connection into current national and international networks is important.

The PGP programme with the objective of achieving a more productive and valuable Mānuka honey industry in New Zealand has an end purpose of supplying reliable and expanded volumes of monofloral Mānuka honey suitable for medical, culinary and other uses.

We have assessed from discussion with informants that the programme is comprehensive and well managed. The critical issue is whether the PGP programme will result in large scale availability commercially of suitable cultivars to plant with general availability and at reasonable cost. Given the opportunities identified earlier in this report, the PGP work deserves on-going support and all effort should be made to speed up the process of

generating information to better document both the benefits arising from Mānuka honey production and manage the risks associated with this honey production.

In addition, for Mānuka honey production wherever it occurs, continued research and development is required to:

- Confirm the size of the likely market and ensure expansion of the depth and breadth of the market for New Zealand Mānuka honey.
- Allow expansion and achievement of the economies of scale needed to tackle the export challenges faced by small primary producers.
- Achieve coordination, collaboration or consolidation among small producers to take advantage of scale and thereby assist these small producers to tap into new markets and fund their share of on-going research and development.

Knowledge about the costs and benefits of Mānuka honey production should be widely disseminated by both Government and leaders in the sector. This could be assisted by programmes to support the establishment of cooperatives and networks of interested individuals.

An interim labelling standard guideline was introduced by MPI to assist industry compliance with the joint Food Standards Code FSANZ (Food Standards Australia and New Zealand) after widespread mislabelling was reported from offshore markets. This need was identified by the industry. A final definition for both monofloral and multifloral Mānuka honey could be incorporated into the standards. Labelling and information is required but is currently hampered by the lack of available science. MPI is currently investing considerable operational research funding to rectify this. This is essential to protect the brand.

Consideration should be given to whether Government assistance could be justified to help with the cost of establishment (planting or sowing) in the manner of that applied to assist with the cost of planting of forestry under the Afforestation Grant Scheme.

Similarly, consideration could be given to establishing assistance programmes regionally to take advantage of the erosion control and riparian management benefits of Mānuka planting.

Policy needs to be developed by regional councils to provide clarity to land owners about the rules which may be applied to the clearing or spraying of class 6 and 7 lands to enable it to be replanted with high value Mānuka cultivar species.

There is an opportunity for a group of interested parties to grasp this whole opportunity in the Manawatū-Whanganui area. The potential for development is enormous and the argument for acceleration on all fronts including farmer education, science, market and production is very strong. Who should provide this leadership? We believe it needs to be a consortium of producers, marketers and local government. We are strongly of the view that a regional grouping is necessary to act in the regional interest in an industry that during its development phase is a little helter skelter.

Characterised by physically mobile small businesses and the need for active communication with elements of the supply chain, this industry will benefit enormously from the rural internet capability being currently developed.

Relevant current central government initiatives:

- The High Performance Mānuka Plantations - a seven year Primary Growth Partnership programme aimed at increasing the yield and reliability of supply of medical-grade Mānuka honey and increasing Mānuka honey exports to $1.2 billion annually by 2028.
- Scientific research underway for the definition of monofloral and mulitfloral Mānuka honey to update MPI's Labeling Guide for Mānuka Honey.
- NZTE support for Mīere coalition - a national coalition of Māori landowners, Māori honey producers and Māori investors.
- Sustainable Farming Fund programmes: Developing environmentally sustainable alternative to chemical treatments for Varroa; Honeybee genetics for sustainability and pollination security; Producing abundant bee pollinators for sustainable farming.

INTERVENTIONS SUMMARY

MPI and leaders in the Mānuka honey industry:

- Continue to support the PGP programme.
- Expand the PGP programme in association with NZTE to add breadth and depth to markets.
- Assist the Research Partnership with workshops, website and other similar steps including those to assist Māori land owners.
- Research and confirm policies related to expanding Mānuka honey planting as part of erosion control and carbon sequestration.
- Encourage research on technical issues, particularly those relating to benefits of ingestion of the product.
- Resolve practice issues such as the location of hives near to each other and the effect on honey volumes.
- Continue to work on standards to ensure the international integrity of the product.

Horizons Regional Council:

- Develop policies for inclusion in the One Plan about the clearance of land for planting Mānuka.

Iwi/Māori/hapū

- Actively encourage Māori land owners to participate in the development of the industry where it suits their circumstances.

MANUKA HONEY

THE OPPORTUNITY AT A GLANCE

What? – the opportunity

Why? – will it succeed

Why not? - obstacles

How ? – interventions, actions and arrangements

Industry extension:

- Building knowledge and practice.
- Extend mixed land use in hill country.
- Build markets, especially nutraceutical.
- Build on cultivars and PGP advances.

Overcome:

- Information asymmetry.
- Short term market uncertainty.
- Scaling issues.
- Farmer uncertainty.
- Some diseases.
- Market damage through poor marketing.

Leverage off:

- Hill country availability.
- Landlocked Māori land.
- Existing operators.
- Emerging supply chains.
- Local enthusiasm.
- Rural internet development.

Act to:

- Solve technical issues.
- Create regional project structure.
- Confirm site specific / local feasibility.
- Source investment.
- Harness leadership.
- Establish robust quality and labeling programme.

OPPORTUNITY: FRESH VEGETABLES

WHAT? – THE OPPORTUNITY

The region is good at growing vegetables, has a long history of successful cultivation and has significant areas of high quality, class 1 and class 2 soils (over 25,000 hectares and 150,000 hectares respectively). With a saturated domestic market the only real further opportunity for vegetable growers in the region is export.

International markets are large and growing and there are opportunities to provide fresh products to them, but there are significant barriers, particularly for the individual or groups of small operators.

Perishable products require timely logistics. Volumes from individual suppliers have to be sufficient to feed supply chains. Markets need to be built and actively managed with the leverage of scale, quality and price. Scale is required to reduce production costs. All this is not easy.

A tightly organised production-to-market structure focused on a limited number of markets (to generate volume) appears to be the best opportunity. This would require dedicated regional leadership working closely with other New Zealand suppliers and wholesalers through to key distributors in defined markets.

The region already has some expertise in vegetable growing and processing. The sector is relatively small, contributing around $85m or 1% towards the regional economy. Every 1% lift in output increases the regional economy by $1m and adds around eight new jobs. Change of land use can deliver significant expansion of vegetable production and adds to economic activity and jobs.

There is a strong *prima facie* case for investigating the expansion of the fresh vegetable export trade and an assessment of its impact on jobs and local GDP.

Advice from informants is that this opportunity would have to be tackled at scale. However, given the logistics required this has to be regarded as a speculative opportunity. A committed effort of regional collaboration would be required.

Current patterns and projections

Horticulture New Zealand have informed us that the sector involves 1,770 growers throughout New Zealand of whom 120 are located in the Manawatū-Whanganui region[62]. Of the 120, around 10 produce 90% of the volume.

Three areas of the Manawatū-Whanganui region have soils and climate which are particularly suited to vegetable growing. These are located adjacent to Ohakune, adjacent to Levin and in the lower part of the Rangitikei District. The area located in Rangitikei has a

[62] Horticulture New Zealand website and pers. com Chris Keenan

focus on mixed broad acre vegetable and arable cropping including yams, potatoes and squash for export.

In the Horowhenua area, the largest businesses are Kapiti Green and Woodhaven Gardens who together operate over 600 hectares, employ 120 people and generate turnover of $16-$18 million. A third large venture, Tender Tips, operate one of the nation's largest asparagus growing ventures. The focus in the Horowhenua area is on domestic market greens and brassicas as well as potatoes for processing and export.

Data compiled by BERL for 2013 for the Ohakune area suggests vegetable growing in that area:

- Employs 135 FTEs (a decline of 2.1% between 2003 and 2013).
- Contributes $14 million or 1.5% of the District's GDP.
- Involves 11 business units.

Supply to markets from different parts of New Zealand is often sequential to reflect differing temperature regimes with, in general terms, supply in the warmer parts of New Zealand being provided to market earlier than supply from southern parts of New Zealand, including from the Ruapehu area.

In general terms, timing and climate are the key factors in creating market opportunity. The big opportunities for some key vegetable crops are from spring through to early autumn. For asparagus there is a much more defined season as it is a perennial crop. There are some notable exceptions and currently leeks are one vegetable which is grown year round with a steady export market into Japan.

Ohakune has some significant advantages in carrot, potatoes, parsnip and brussel sprout production as a result of elevation and the associated cold winters.

Employment

The sector has some specialisation with 875 jobs. The wages share of output is modest at 18% but is significantly higher than red meat and dairy which both sit at 11%. The sector has large spill-overs to other sectors like transport and logistics. At present the sector is actually losing jobs both nationally and regionally and this will continue unless a major initiative is undertaken.

TABLE 12: EMPLOYMENT IN VEGETABLE GROWING

Element:*	Employment (**) Number, 2014	% of total	% growth, 2004-2014	Specialisation
Broad areas				
NZ	16,300	0.8	-7	..
Manawatū-Whanganui Region	875	0.9	-21	Medium
Territories				
Ruapehu	123	2.5	-23	High
Whanganui	21	0.1	-42	Low
Rangitikei	89	1.6	-36	High
Manawatū	43	0.5	-87	Low
Palmerston North	210	0.5	0	Low
Tararua	6	0.1	100	Low
Horowhenua	368	4.5	52	High

Source: Statistics NZ, NZIER

Notes:
.. Not available or applicable
* Specialisation is calculated as revealed comparative advantage. We summarise the results as High, Medium and Low, where high is RCA score of more than 1.15, medium is below 1.15 but greater than zero, and low is less than zero.

** Filled jobs. The sector is defined for this purpose as:
A012200 Vegetable Growing (Under Cover)
A012300 Vegetable Growing (Outdoors)
C114000 Fruit and Vegetable Processing
F360500 Fruit and Vegetable wholesaling
G412200 Fruit and Vegetable Retailing

Vegetable growing, processing and selling is a relatively small sector, accounting for around 1% of regional jobs. However, the sector is proportionately large in some sub-regions like Horowhenua. Sector employment growth in the region is patchy, with declines in most sub-regions.

The importance of market management

All fresh vegetable export opportunities are reliant on air freight, with some exceptions, including the Pacific Island tourist market for mainly potatoes. The spot market is the current biggest opportunity. To take advantage of this opportunity, timely local market intelligence is required but with sufficient certainty to build a business case.

On-farm infrastructure exists both in Ohakune and the Horowhenua to enable production to be scaled up if demand can be secured. The market offering must of necessity be at the 'premium product' level (quality, sustainability, quarantine control). This will not necessarily attract a higher price but it will sway a purchaser who may be looking at two similarly priced items.

The Rangitikei area has significant potential for expansion of vegetable growing including seed growing, provided markets can be secured. There is also significant potential to use the transport logistics strengths of the Palmerston/Marton area to expand fresh vegetable exports. This includes producing more local produce for delivery to New Zealand-wide

supermarkets by Speirs Ltd from Marton and the long term potential for direct export for fresh vegetables from Ohakea (see separate section of this report on 'transport').

Comparative Advantage

Compared to the Hawke's Bay region, the Manawatū-Whanganui area is currently under-developed particularly in the processing and wholesaling areas. At present the focus is largely on growing alone, making the whole industry vulnerable (see Table 13).

Regional Comparative Advantage analysis of Manawatū-Whanganui and Hawke's Bay indicates that Manawatū-Whanganui compares well, however, Hawke's Bay is strongly represented in processing.

TABLE 13: POSSIBLE OPPORTUNITIES IN THE VEGETABLE SECTOR

Revealed comparative advantage (>1 has advantage)

	Manawatū-Whanganui	Hawkes Bay	Areas of opportunity
A012200 Vegetable Growing (Under Cover)	0.3	0.2	
A012300 Vegetable Growing (Outdoors)	3.1	2.4	
C114000 Fruit and Vegetable Processing	0.4	10.2	
F360500 Fruit and Vegetable Wholesaling	0.9	1.6	
G412200 Fruit and Vegetable Retailing	0.6	1.1	
Vegetable related	1.1	4.2	

Source: NZIER analysis of Statistics New Zealand Business demography statistics

Table 13 shows that the Manawatū-Whanganui region has expertise in some aspects of vegetable growing already, but not to the same extent as Hawke's Bay. The column labelled Areas of Opportunity identifies the extent of improvement possible in Manawatū-Whanganui if the Hawke's Bay yardstick were used.

New Zealand currently occupies only 1% of global trade in vegetable production (See Table 14). The small contribution New Zealand makes to the global vegetable trade is also illustrated in Table 15 where New Zealand's contribution barely rates a mention. However, this same table illustrates the huge international growth in the importation of vegetables by the large European, North American and Asian countries.

TABLE 14: GLOBAL VEGETABLE AND FRUIT TRADE (EXPORTS), 2013 EXPORTS AND MARKET CONCENTRATION

Rank	Country	US $b	Share	Growth, 10y
25	NZ	0.3	1%	37%
Top 5 exporters				
1	Netherlands	7.9	13%	87%
2	China	7.9	13%	261%
3	Spain	6.4	10%	66%
4	Mexico	5.5	9%	111%
5	USA	4.4	7%	114%
	RoW	30.9	49%	149%
	World	**62.9**	**..**	**131%**

Source: NZIER analysis of UN Comtrade database

TABLE 15: TOP VEGETABLE IMPORTERS

Imports and NZ's relevance

	2013 imports		Growth, 2003-2013	
	US$m	NZ share	Growth	NZ share
USA	9	0.1%	120.0%	2.0%
Germany	7	0.4%	86.0%	0.0%
United Kingdom	5	0.3%	64.0%	0.0%
France	3	0.2%	70.0%	0.0%
Russian Federation	3	0.0%	583.0%	0.0%
Netherlands	3	0.8%	108.0%	0.0%
Canada	3	0.0%	109.0%	0.0%
China	3	0.3%	954.0%	0.0%
Japan	3	3.8%	43.0%	0.0%
India	2	0.0%	289.0%	-2.0%
World	64	0.6%	123.0%	0.0%

Source: NZIER analysis of UN Comtrade database

Despite its relatively small share of the international market, New Zealand is a well-established vegetable exporter and to a very diverse range of countries. For the year to March 2015 New Zealand exported $550m of vegetables. Clearly, New Zealand growers are able to meet international price points despite production and transport costs.

Of our top 10 markets, five are in Asia, being our closer neighbours (than Europe or North America). Australia still dominates at 40% while Japan and Fiji are at 20% and 5% respectively.

It is evident that Asian traders are buying produce off the market floor in Auckland and exporting it themselves to Asia and trading successfully.

All these indicators suggest that there is a market opportunity, the real question is whether a significant increase in scale can be achieved into these markets and over what time period.

The viability of fresh vegetables as a major export growth area needs in depth market analysis. Our assessment is that the market connections are already in place and price points are competitive. This is a strong platform for increasing volume. Market engagement is required to secure such market volumes and then the challenge of scaling up production faces the industry in the region.

Data compiled by Rabobank, on the basis of an assessment of vegetable growing economics in the Horowhenua area suggests:

- Income per hectare for intensive vegetable production can be up to 25 times greater than other farming such as livestock farming.
- Intensive vegetable production can support up to 10 times more FTEs than other primary sector agricultural opportunities. 95% of wages are estimated to be spent locally.
- Expenses can be up to five times that of other farming ventures and these also flow through the local economy

The low temperature growing environment in Ohakune means that lesser quantities of pesticides and herbicides are required to grow vegetables in this area compared to other parts of New Zealand. This, alongside the 'Mt Ruapehu' brand, may be a competitive advantage which has not been fully taken advantage of.

CASE STUDY

By way of illustration of the challenges, the UK imports significant quantities of fruit, vegetables and flowers from Africa. High value products (like beans and cut flowers) are air freighted and low-value and non-perishable bulk items are seaborne. The value supply chain connects up good growing conditions and low labour costs with a ready consumer market in the UK.

Production has increased massively in places like Kenya to meet this increase in demand driven initially in large part by one British supermarket, Tescos. It has increased economic opportunities. But there have also been some costs, particularly environmental degradation through excessive use of pesticides and social issues through the use of child labour.

The Kenyan experience shows the importance of market channels provided by UK supermarkets, which in turn created a strong value chain to large scale operators, who could co-ordinate to produce, store and transport vegetables. The supermarkets and the interface with the destination markets, were critical in the Kenyan example to define what is produced and how it is produced. It also illustrates the long term commitment that is required from markets and suppliers. Suppliers from the Manawatū-Whanganui do not yet have the scale to exert this level of control on the market, nor are they trying as most

operate in isolation. The example also demonstrates the value of seeking out Foreign Direct Investment partners with an interest in playing a stronger role in connecting the 'source to market' logistics for fresh vegetables.

Credence goods

There is a growing market for credence goods, in which New Zealand has strong capabilities. A credence good is a complex, new product with quality and/or safety aspects that cannot be known to consumers through sensory inspection or observation in consumption. The quality and safety characteristics that constitute credence attributes include the following:

- Food safety.
- Healthier, more nutritional foods (low-fat, low-salt, etc.).
- Abundance of suitable soils.
- Authenticity.
- Production processes that promote a safe environment and sustainable agriculture.
- "Fair trade" attributes.

The credence is established through certification and the use of increased labelling in transit. This, as described in the case study above, has led to a transformation of the Kenyan vegetable industry over time, from fragmented collection of smallholders to a few vertically integrated and large players. In emerging markets, vegetable consumption is increasing with population, but limited arable land means extensive use of fertiliser and pesticides. Ineffective food standards mean that many purchasers worry about food quality and safety. There is a niche but growing market for safe fresh vegetables – or credence agricultural goods as they have been described above.

New Zealand has a number of characteristics that meet the definition of a credence good, particularly through a good food safety record, authenticity of local products (through traceability, localisation, etc.), rules and regulations to ensure environmental safety and sustainable practices. New Zealand's transparent rules, regulations and standards for traceability, food safety, environmental standards and social standards are necessary elements and place it well in forging value supply chain links.

The Manawatū-Whanganui region has a number of advantages to be able to connect into this sector. It has good quality soil and an abundance of land to increase vegetable production. There is ample local capacity to expand on existing vegetable processing capability. It is in a logistics hub and is able to quickly connect to sea or air-freight.

WHY?

Summary of the rationale

- An established industry in Horowhenua, Rangitikei and Ruapehu with wider potential.
- An industry constrained by a domestic market but eager to expand, is consolidated and appears to have leadership capacity.
- Growing international demand in Asia.
- Seasonality benefits for the Northern Hemisphere.
- Job-intensive nature of the industry.
- Plays positively on the international reputation of New Zealand as "fresh".

WHY NOT?

Marketing of vegetables is challenging. Informants told us they have found their product on shelves in some Asian markets with supply sourced by offshore traders operating from the market floor in Auckland. Horticulture New Zealand believes that this type of market is alive and well in Australia, Hong Kong, Singapore and the Pacific Islands. Small growers are particularly vulnerable to this behaviour.

Fragmentation

Growth in the sector will only occur if integrated supply chain and 'scale' opportunities are secured in international markets. Considerable further work is required if this objective is to be achieved. The domestic market is saturated. Scale is the key to flattening out market fluctuations.

The types of challenges involved are well illustrated by the situation of asparagus. Heinz Watties has stopped taking New Zealand-grown asparagus for canning in favour of cheaper Peruvian product. The February 2015 decision affects up to 15 growers in Hawke's Bay and several in the Rangitikei area. Growers elsewhere sell all their asparagus fresh on the domestic market or to Japan but even this market is not secure. About 3,000 tonnes of asparagus is produced in New Zealand a year, of which 2,500 tonnes is sold domestically. Just 300 tonnes go to Japan and the remainder is canned.

To achieve significant asparagus penetration into export markets:

- Coordination across product categories and increased scale and season length will be required to ease the supply chain economics.
- Focus should be on developing markets and not just Japan. To do this, the industry needs market development infrastructure. This will almost certainly be as true for other vegetables as it is for asparagus.

In short, this involves getting to where Kenya has got to, but very quickly. Fast scalability would be required and this market development would be a major challenge although it may be possible in a contained area such as Horowhenua, Rangitikei and Ruapehu and would require premium product with premium branding and most importantly an integrated marketing effort. In addition it is possible that some of the fragmentation issues of the past may incrementally be addressed by the producer amalgamation which is taking place at present and is projected to continue.

Workforce

Maintaining a sufficient labour force to service the industry is an on-going challenge even at current levels of production. This is both an obstacle and an opportunity. An increase in industry scale will only be possible with a training and workforce management strategy.

Scale of Growth

It has to be borne in mind that the scale of this industry is small at present. Even if strong growth was achieved it would initially only create a modest number of new jobs. This would not change until the sector was able to build scale.

Quality

Sanitary and phyto-sanitary issues are a significant hurdle for some fresh vegetable exporters. This may act to constrain potential growth. The high cost of production when compared to some international growers implies that optimum leverage will need to be obtained from the quality and general sustainability characteristics associated with New Zealand produce.

FILTERS SUMMARY

Impact: the vegetable growing industry in New Zealand has plateaued and has not been able to move much past the domestic market. The fresh market is the one which offers opportunities because of the scale of its growth.

Trend: the global market in vegetable trade is growing strongly, more than doubling in the past decade. New Zealand is a small player, but it is also growing (by 37% in the past decade versus 131% in total global trade). The demand for vegetables is largest in advanced markets, where incomes are high and they import exotic and cheaply produced products from other places. Emerging markets are also increasingly demanding fresh vegetables, increasing incomes make imports more affordable and issues with local products (quality, pollution, etc.) are further bolstering demand. Demand for high quality vegetables will increase with global growth and growing middle classes in Asia. New Zealand accounts for around 0.6% of global trade in vegetables and has a relatively large presence in Japan and has gained market share in USA.

Competitive/comparative advantage: the region has significant specialisation in vegetable growing already with nearly 900 jobs currently in the sector. There are particular sub-regions that are specialised in vegetable growing or processing in Manawatū, Ruapehu, Rangitikei and Horowhenua. In Horowhenua the sector is a major employer, accounting for 5% of all jobs. The specialisation is linked to the quality of the soil, climate and access to transport links.

Employment intensity: the vegetable growing sector's labour intensity is moderate. Jobs in the sector tend to be low paid. The sector is losing jobs (21% in the past decade in Manawatū-Whanganui compared to 7% nationally – although growing strongly in Horowhenua). The positive spillovers to other businesses in the region are quite high, particularly in transport and logistics.

TABLE 16: OVERALL METRICS FOR THE VEGETABLE INDUSTRY

Metrics	Current size (filled jobs)	875
	Employment intensity	Low
	Linkages to other sectors	High
	Stage of lifecycle	Mixed
Impact	GDP adding	▲
	Job adding	▲
Trend	Domestic	▲
	Export	▲
Competitive advantage	Domestic	▲
	Export	–
Summary	Current size	–
	Employment intensity	▼
	Linkages	▲
	Stage of lifecycle	▲

Source: NZIER

HOW?

Objective – substantial growth of the export market for fresh vegetables from the region

Strategic intervention - Feasibility study of establishing an export marketing vehicle based in the region with sufficient scale to establish secure markets and supply chains.

Cooperation and coordination

The challenge is one of cooperation and coordination, not unlike industries such as wine and seafood have experienced. The Manawatū-Whanganui region potentially has the scale and the cohesiveness to achieve something the industry nationally has not achieved. The challenge is to meet the high fixed costs involved in establishing markets and supply chains.

Two key interventions have been identified by informants as being critical to growth of vegetable production for export. The first is to establish a common information portal for growers. This would enable growers to better understand constraints and opportunities including matters related to environmental regulation etc.

The second intervention relates to the need for much higher levels of collaboration between growers to achieve the scale needed to optimise access to international markets. More particularly Ohakune, Rangitikei and Horowhenua growers need to get together to leverage international market opportunities and logistics. In the view of a Horticulture New Zealand spokesman, only then can the opportunities associated with the Korea free trade agreement and the like be capitalised upon.

In other words, a structure is needed that puts the smart people together and someone needs to be employed to make this happen. Attempts have been made to do this in the

past but they have not so far been successful. Our impression is that they have not been sufficiently ambitious.

An associated need is to grow a combined brand and build transport hubs and associated logistics.

What support is required?

In general terms, vegetable growers as a sector could profit from receiving help with co-ordinated industry action, possibly from wholesalers like Turners and Growers or Horticulture New Zealand, to get beyond the saturated domestic market and achieve the scale and integrated supply chain logistics required to take advantage of export opportunities. Once established, NZTE could likely assist with developing markets. Korea looks like a particularly ripe market to target[63] given the progress being made in this area with the Free Trade Agreement.

First up, it will be necessary to form strong customer facing relationships in target markets (e.g. through wholesalers and retailers) and then to connect into the growing demand for credence vegetables.

Workforce interventions will be necessary with organisations such as UCOL perhaps able to assist.

It also needs to be borne in mind that speed to market is everything for fresh produce. Communications generally and high speed internet in particular, will be a vital factor in the success of such an initiative.

Relevant current central government initiatives:

- Enhancing New Zealand's market access: implementing the Government's Free Trade Agreement agenda; addressing behind the border barriers in key markets; implementing NZ Inc. Strategies; increasing NZ's representation in emerging markets.
- NZTE programmes that build the capability of companies to export (e.g. 'Better by Capital').
- Rural broadband initiative and further roll-out of ultra-fast broadband roll out – creating a platform for adoption of technology in the horticulture industry.
- Sustainable Farming Fund: programme quantifying the relative effectiveness of the key practices advocated for reducing sediment and phosphorus loss on cultivated land; Investigating strategies to increase potato yields.

[63] Pers. Comm Chris Keenan, Horticulture New Zealand

INTERVENTIONS SUMMARY

Horticulture New Zealand / industry interests:

- An early assessment needs to be done of what countries and in what product areas export growth is most viable.
- Once this assessment is satisfactorily completed the next step is to appoint an experienced sector leader to establish a small implementation team and charge them with the task of:
  - Establishing a tightly focused production (multi-grower) to market structure.
  - Securing a limited number of markets.
  - Establishing associated logistics.
  - Establishing clear branding to reflect the region's provenance and credence of locally sourced product.
  - Developing strong grower collaboration.
  - Developing a common information portal about regulations, quality expectations, etc.
  - Work with ITO and MSD to secure required employees.

NZTE:

- Continue to assist with market development activities.

UCOL/Primary ITO

- Assistance with workforce development activity, particularly adapted to the seasonal work regime of the industry.

FRESH VEGETABLES

THE OPPORTUNITY AT A GLANCE

What? – the opportunity

Why? – will it succeed

Why not? - obstacles

How ? – interventions, actions and arrangements

Build an export market:

- Analyse export market opportunities.
- Attack the problem as a whole region, not piecemeal.
- Build links direct to retailers.
- Build volumes.

Overcome:

- Individualistic behaviour.
- Limited export market connections.
- Middleman interference.
- Market manipulation by some traders.
- Lack of critical mass in all respects.

Leverage off:

- Vegetables' health advantages.
- Disease-free Ruapehu.
- Korea Free Trade Agreement (and others).
- Transport hub.
- Industry ambition.
- Rural internet access.

Act to:

- Establish regional marketing/export initiative.
- Assess market opportunities in Australia and Asia.
- Develop logistics pathway.
- Bring whole industry along through collaborative action.
- Minimise workforce issues.

OPPORTUNITY: POULTRY MEAT PRODUCTION AND GRAIN GROWING / PROCESSING

WHAT? – THE OPPORTUNITY

Poultry meat consumption is rising around the world, including in New Zealand. There is plenty of room for increased supply to China and Asian countries which are well below the levels of current poultry meat consumption compared to other parts of the world.

In essence the opportunity centres on establishing a large scale consortium of poultry meat growing farms and facilities at suitable locations within the Rangitikei, Tararua, Manawatū and Horowhenua districts.

The proposal is that these would align with a large scale modern poultry meat processing, packing, transport logistics and marketing facility, possibly taking advantage of established infrastructure or alternatively involving construction of new facilities adjacent to centres of production.

The focus of this enterprise would be entirely export to meet international, particularly Chinese, demand for protein.

New Zealand has a unique poultry disease-free and sustainability status which provides a premium positioning for our product.

Exporting of eggs and meat is currently at a token level and a major effort would be required to grow markets and supply chains (besides production). Poultry meat production is essentially a farming activity and therefore is moderately labour intensive.

Considerable investigation has been done by potential investors on the potential of grain-growing and processing and it has passed the early viability assessments.

Grain growing and processing will not of themselves provide significant jobs but upstream and downstream activities - particularly in conjunction with, or as an enabler for, the production of poultry meat, will make both sets of initiatives important employment generators.

Estimates of the size of the export revenue prize arising from significantly increasing the volume of poultry meat would only be guesswork at this early stage. In essence the opportunity looks extremely good. China is consuming about one quarter of the volume of poultry meat of other countries such as Australia and new Zealand. The growth of the Chinese middle class and their willingness to pay a premium for product with the right provenance, positions New Zealand particularly well to fill this market gap.

While the region is specialised in poultry for eggs, it is not in meat. Neighbouring Waikato has nearly 2.5 times the number of jobs in the poultry and related sectors. As demand for poultry continues to increase, the Manawatū-Whanganui region could plausibly reach a

similar scale to Waikato, adding some 1,200 jobs. The potential would be much larger if export markets are established.

When poultry production is combined with the grain-based chicken food production sourced from the class 1, 2, 3 arable land located on the river plains from Levin to Whanganui and beyond, and the comparative water rich status of this area is taken into account, the potential prize seems even more secure.

There is a clear *prima facie* case for taking the establishment of grain growing/processing and poultry meat production facilities to a business case and feasibility level with intensive investigation of their viability. The case for poultry meat is contingent on being able to secure markets and being able to scale up production and supply.

POULTRY MEAT PRODUCTION

Current patterns and projections

The poultry market includes eggs, meat, processing and sales. The best export opportunity is meat. By international standards the sector is small, but is growing strongly.

The Manawatū-Whanganui region has a strong position in egg production, but not in meat farming or processing. Figure 29 uses Waikato, a significant poultry area, as a comparator.

FIGURE 29: POSSIBLE OPPORTUNITIES IN THE POULTRY RELATED SECTOR: REGIONAL COMPARATIVE ANALYSIS OF MANAWATŪ-WHANGANUI AND WAIKATO

Revealed comparative advantage based on employment (>1 has advantage)

	Manawatū-Whanganui	Waikato	Areas of opportunity
A017100 Poultry Farming (Meat)	0.5	5.3	
A017200 Poultry Farming (Eggs)	6.1	1.6	
C111200 Poultry Processing	0	3.4	
F360200 Meat, Poultry and Smallgoods Wholesaling	0.4	0.7	
G412100 Fresh Meat, Fish and Poultry Retailing	0.7	1	
Poultry related sector	1	2.1	

Source: NZIER analysis of Statistics New Zealand's Business demography statistics

Figure 29 illustrates that the Manawatū-Whanganui region has an existing specialisation in poultry farming for eggs. Neighbouring Waikato has wider expertise in poultry, particularly in poultry meat and processing. The column Areas of Opportunity illustrates the potential for poultry production compared to the yardstick of the Waikato which is a significant poultry area.

Employment

The poultry sector is relatively small, employing around 9,530 people nationally and 473 people in the region (see Table 17).

Employment has grown at a gradual pace over the past decade, cumulating to 10% growth in national jobs over the last decade (and similarly at 11% in the region) – albeit off a low base. National production rose 24% in the same time, meaning poultry farming is becoming more productive and less labour intensive over time. Current volume rests almost entirely on the domestic market which has grown strongly over recent decades (see Figure 30).

TABLE 17: KEY STATISTICS FOR POULTRY RELATED SECTOR

Element:*	Employment (**) Number, 2014	% of total	% growth, 2004-2014	Specialisation
Broad areas				
NZ	9,530	0.5	10	..
Manawatū-Whanganui Region	473	0.5	11	Medium
Territories				
Ruapehu	6	0.1	0	Low
Whanganui	78	0.5	56	Low
Rangitikei	0	0.0	-100	Low
Manawatū	43	0.5	-41	Medium
Palmerston North	55	0.1	-35	Low
Tararua	9	0.1	0	Low
Horowhenua	279	3.4	47	High

Source: Statistics NZ, NZIER

Notes:
.. Not available or applicable
* Specialisation is calculated as revealed comparative advantage. We summarise the results as High, Medium and Low, where high is RCA score of more than 1.15, medium is below 1.15 but greater than zero, and low is less than zero.

** Filled jobs. The sector is defined for this purpose as:
A017100 Poultry Farming (Meat)A017200 Poultry Farming (Eggs)
C111200 Poultry Processing
F360200 Meat, Poultry and Smallgoods Wholesaling
G412100 Fresh Meat, Fish and Poultry Retailing

Table 17 illustrates that the poultry-related sector is small, but growing. Horowhenua is the largest of the sub-regions in the Manawatū-Whanganui in terms of employment, but there is a small presence of poultry related employment in Whanganui, Palmerston North and Manawatū as well. The region overall has moderate specialisation in poultry-related sectors.

Competitive advantage

New Zealand has a high standard of production and with our disease-free status our product is desirable. This nation-wide competitive advantage, for both eggs and poultry meat, because of the rigour of our biosecurity arrangements, partially explains the recent growth in export demand albeit from a low base. This means that New Zealanders are low users of remedies such as antibiotics to control disease. Well-fed birds mean that in comparison to many other countries, growth hormones are not employed in New Zealand.

This disease-free status also has attitudinal impacts. There are strong movements against the use of chemical remedies in all types of animal production. In addition, in the egg industry, production is moving towards colonies which have a higher animal welfare status than conventional cages featured in much of the rest of the world.

Export revenue from poultry meat has a value of $74 million (2014). This indicates that New Zealand is not yet a significant player in this export market (see table 18). The main markets are Japan and China.

Comparative consumption rates

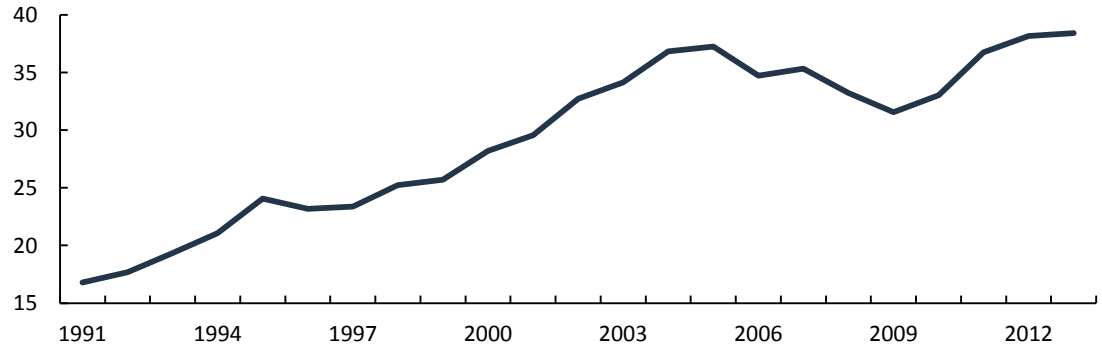
Our research indicates that the consumption of poultry in US, Australasia and Malaysia is currently 40 kg per capita pa whereas in China it currently sits at 10 kg. This is said to be because of environmental and disease issues.

Other sources suggest chicken is the fastest growing source of protein in China but it still represents only 17% of the country's total meat consumption, compared to 40% in Taiwan and Hong Kong.

The pattern of growth in the consumption of poultry meat is similar globally – chicken is becoming a more frequently consumed protein. A rising and more discerning middle class in Asia, who may not trust the quality of local product, will add to the global demand for poultry (see Table 19).

FIGURE 30: NEW ZEALAND POULTRY CONSUMPTION PER CAPITA

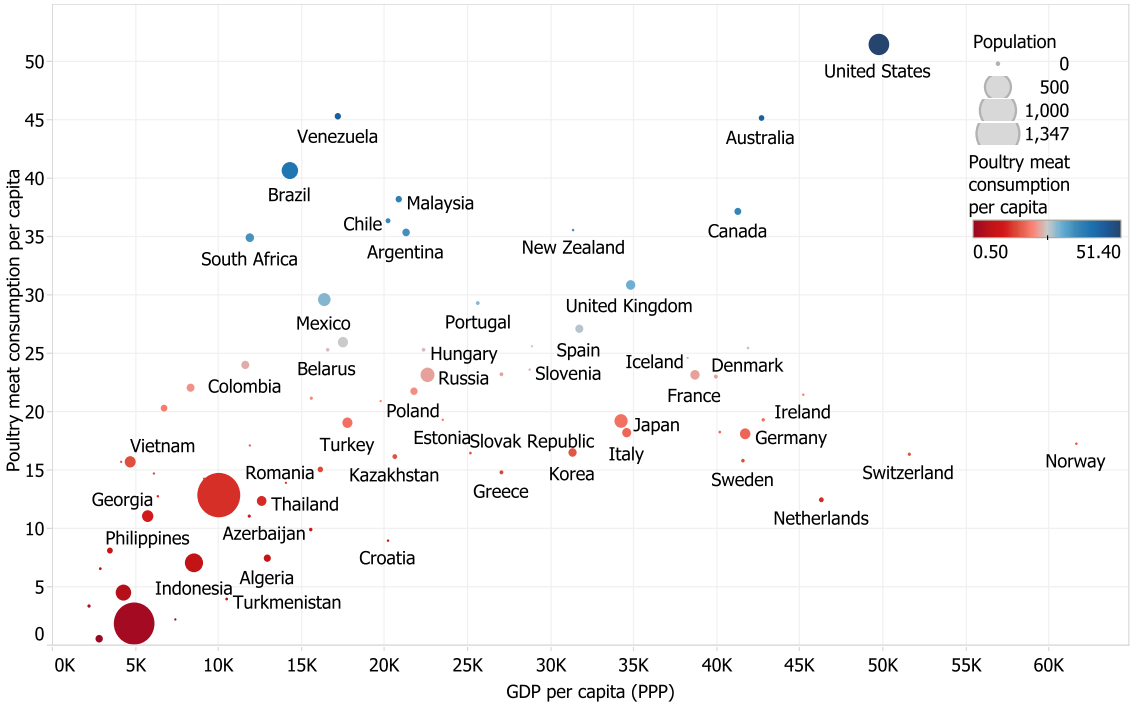
Kilos of poultry meat per capita



Source: Statistics New Zealand

Figure 29 illustrates that poultry consumption has trended higher over time, although New Zealand's tightened financial position gave rise to a decline in the period around 2009.

FIGURE 31: POULTRY MEAT CONSUMPTION AND INCOMES



Source: NZIER analysis of FOA and IMF data

Figure 31 illustrates that poultry consumption like other protein, tends to increase with incomes. The figure above shows that in high income countries like the US, poultry consumption per capita is very high compared to Indonesia. As the incomes of emerging markets, with large populations, grow, the potential future market for poultry will be orders of magnitude larger than at present.

TABLE 18: TOP POULTRY IMPORTERS, IMPORTS AND NZ'S RELEVANCE

	2013 imports		Growth, 2003-2013	
	US$m	NZ share	Growth	NZ share
Germany	3	0%	104%	0%
Netherlands	2	0%	202%	0%
Saudi Arabia	2	0%	346%	0%
United Kingdom	2	0%	39%	0%
Mexico	1	0%	286%	0%
France	1	0%	198%	0%
Japan	1	0%	47%	0%
Russian Federation	1	0%	58%	0%
Belgium	1	0%	121%	0%
China	1	0%	122%	0%
World	**27**	**0%**	**130%**	**0%**

Source: NZIER analysis of UN Comtrade database

Table 18 shows the largest consumers of imported poultry. NZ is not a player in a strongly growing global market. All the zeros in the right hand column illustrate graphically that poultry tends to be a domestic product, but the globally traded market is also large (and New Zealand has practically none of it).

TABLE 19: GLOBAL POULTRY TRADE (EXPORTS) -2013 EXPORTS AND MARKET CONCENTRATION

Rank	Country	US$b	Share	Growth, 10y
35	**NZ**	0.1	0%	946%
Top 5 exporters				
1	**Brazil**	7.3	21%	290%
2	**USA**	5.7	16%	188%
3	**Netherlands**	4.4	13%	209%
4	**Germany**	2.3	7%	215%
5	**France**	1.9	6%	32%
	RoW	12.8	37%	150%
	World	**34.4**	**..**	**174%**

Source: NZIER analysis of UN Comtrade database

Table 19 shows that New Zealand is a small player in global poultry trade, which is growing rapidly. The largest exporters tend to trade with neighbouring countries.

Current export of poultry products is small, however ventures into the poultry export market are very new for New Zealand as poultry has been largely seen as a domestic industry. Our exports have been largely focused on Australia and the Pacific Islands with 70% of exports to those countries.

The Japan market has opened with exports from the region. They are small but with significant growth potential according to informants. Those informants also told us that the Chinese market, which currently has low consumption of poultry (but is likely to increase) is more challenging, but not impossible to break into. Export growth has been 16% to the year ended March 2014 and 6% to the year ended March 2015. Our assessment is that this market is just beginning to take off.

It would appear that there is sufficient export activity to conclude that poultry exporters can achieve international price points. The question then becomes what scale of export can be leveraged from which markets. The comparative advantage of New Zealand's disease-free status and, as a result, its ability to achieve high production levels are critical to success in international markets. Tight integration with good quality grain mixes for poultry feed is also a potential comparative advantage.

The challenge in poultry expansion is market development, mainly in Asia. Informants were optimistic about the opportunities but cautioned that much work (and patience) will be required to build these markets. Market intelligence in Asian countries requires direct engagement and this has so far been limited. Without such engagement it is difficult to assess the actual potential of the Asian market.

GRAIN GROWING AND PROCESSING

Current patterns and projections

Grain processing in the region currently employs 113 persons. The number of persons employed in the sector has declined 33% in the period 2004-2014 (see table 20), contrasting 17% growth nationally. This is not a labour-intensive industry (particularly the growing of grain) with wages representing only 7% of output. There are quite strong spill-overs to the rest of the economy, however.

TABLE 20: GRAIN PROCESSING KEY INDICATORS

Element:*	Employment (**) Number, 2014	% of total	% growth, 2004-2014	Specialisation
Broad areas				
NZ	2269	0.1	17	..
Manawatū-Whanganui Region	113	0.1	-33	Medium
Territories				
Ruapehu	3	0.1	-67	Low
Whanganui	18	0.1	100	Low
Rangitikei	47	0.8	-30	High
Manawatū	39	0.5	-25	High
Palmerston North	3	0.0	-75	Low
Tararua	0	0.0	-100	Low
Horowhenua	3	0.0	-80	Low

Source: Statistics NZ, NZIER

Notes:

.. Not available or applicable

* Specialisation is calculated as revealed comparative advantage. We summarise the results as High, Medium and Low, where high is RCA score of more than 1.15, medium is below 1.15 but greater than zero, and low is less than zero.

** Filled jobs. The sector is defined for this purpose as:
A014500 Grain-Sheep or Grain-Beef Cattle Farming
A014900 Other Grain Growing
C116100 Grain Mill Product Manufacturing
F331200 Cereal Grain Wholesaling
I530100 Grain Storage Services

Table 20 demonstrates there are few grain-related jobs, whether in Manawatū-Whanganui or nationally, accounting for 0.1% of all jobs. While the sector is growing nationally, it is shrinking in the region. Existing regional facilities for storage and distribution are currently established near Feilding (Mt Stewart) and near Foxton.

Sector performance

The performance of the sector has been poor and any development is off a small base. The grain sector opportunity for the region (see Figure 32) lies in establishing a new national scale facility which tend to be in the 10,000 to 20,000 tonne grain complex size. To be competitive this would need to:

- Be a state of the art and technology-driven facility encompassing grain drying, processing and storage.
- Include processing elements such as crushing, pellets and bagging.
- Integrate transport logistics encompassing rail and road.
- Involve and manage multiple products (maize, barley, wheat, palm kernel/PKE).

Canterbury sets the standard in grain-growing in the country. Below is a comparative analysis, using the revealed comparative advantage measure, with Canterbury to demonstrate the potential for Manawatū-Whanganui.

FIGURE 32: POSSIBLE OPPORTUNITIES IN THE GRAIN RELATED SECTOR

Revealed comparative advantage measured by employment (>1 has advantage)

	Manawatū-Whanganui	Canterbury	Areas of opportunity
A014900 Other Grain Growing	0.6	4.7	
I530100 Grain Storage Services	0.0	4.9	
C116100 Grain Mill Product Manufacturing	1.7	1.4	
F331200 Cereal Grain Wholesaling	0.4	5.4	
A014500 Grain-Sheep or Grain-Beef Cattle Farming	1.9	4.3	
Grain related	1.1	4.3	

Source: NZIER analysis of Statistics New Zealand Business demography statistics

Figure 32 shows that the Manawatū-Whanganui region has a moderate grain processing capacity compared to Canterbury and less than half the grain production capacity of that region. In addition there is capacity to expand storage and wholesaling sectors. The column Areas of Opportunity highlights the comparative potential for the region. This assumes there is an outlet for the grain which is envisaged as the poultry and dairy industries.

The development of a grain processing facility would encourage more local farmers to grow maize, barley and wheat and thereby optimise the land use capability in the Rangitikei area. The facility would provide employment opportunities in the central facility and within on-farm production and transport operations.

Geographic suitability

One informant involved in the industry has suggested that the Rangitikei District may not be the best in New Zealand for growing maize, barley and wheat but it is in the top echelon for each of these and for the adoption of multi-crop mixed production systems.

The lower Rangitikei area is particularly suitable for the construction of a grain processing facility because it:

- Is close to secure gas and electricity supplies which are essential inputs to a grain processing facility.
- Has water availability (irrigation is usually required for grain growing).
- Has a central location and associated transport logistic advantages which will enable ease of inward and outward product movement and in particular:
  - Provide opportunity to minimise the current cost of product transport from considerable distances including from Canterbury.
  - Still enable product from other regions to be sourced e.g. PKE via Port Taranaki and thereby would increase the volume, diversity and resilience of the grain processing enterprise.
- Would overcome current regional location capacity limits in drying and storing and thereby would enable better use of harvesting windows suited to the local area rather than those determined by a processor operating in a region with a different growing pattern.
- Would reduce the volatility of product price which is endured currently by those users who are reliant on Australian product and in addition would grow the opportunity to secure forward purchase contracts with agreed prices.

The establishment of such a facility also has potential flow-on benefits such as it:

- Would provide a secure feed source to support expansion and intensification of not only the poultry meat sector but also the pig, pet food (noting that pet food businesses are already established in the region – with growth potential, in Whanganui and Marton) dairy industry and malting industry.
- Could become a potential additional site alongside South Canterbury for seed growing noting that some farmers are growing pea seed now and that this would require additional infrastructure. At scale this is a longer term opportunity as there are well-established companies such as Midland Seeds and South Pacific Seeds who are currently expanding their range of crops. Our preference is that the grain growing and processing opportunity should not be unduly complicated by flow-on opportunities at this early stage.

WHY?

Summary of the rationale

- Poultry meat is the fastest growing demand category of animal protein product virtually world-wide.
- Current exports of poultry meat from New Zealand are very small but emerging - the Asian market poses the greatest opportunity.
- Grain processing would strongly support the emerging poultry industry and an established dairy industry.
- Grain processing would provide construction and operational revenues to the region.

- Grain processing would provide an outlet for arable crops which would encourage optimum use of class 1, 2 and 3 lands.
- Grain growing and poultry meat production would encourage diversification in the agricultural sector and would help to insulate the region against shocks in any one product category.
- Both grain processing/growing and poultry meat production are moderately labour intensive.

There may be additional comparative advantages associated with relative geographic isolation (fewer issues with neighbours) and proximity to feed, assuming grain production proceeds in parallel.

WHY NOT?

POULTRY MEAT PRODUCTION

New Zealand currently does not have a meaningful presence in the global poultry market. The development of this industry would mean a standing start in export terms. It has a very robust domestic market. Most importantly, a customer 'market back' focus means that priority must first be given to securing large, preferably Chinese or Asian-based, customers.

Animal welfare issues could stymy this industry with activists pressing the industry to go wholly free-range. That will make New Zealand production uncompetitive with most other countries in the world meaning exporting would be virtually impossible.

GRAIN GROWING AND PROCESSING

The matters which would need to be addressed to establish an optimally scaled grain processing, storage and distribution facility include a rail siding at Marton and the selection and consenting of an adjacent processing site and facility. Initial KiwiRail estimates to establish a rail siding at Marton are not attractive and this makes the project less viable.

The facility would require sufficient certainty about market opportunity to enable it to be of optimal size. It would also require land use change in the area of sufficient scale to guarantee product supply to meet market demand 365 days/year.

FILTERS SUMMARY

POULTRY MEAT PRODUCTION

Impact: the poultry meat opportunity does not currently score highly on a range of important quantitative measures (see summary data in Table 20). The key negatives arise from its current small scale (although the impact on a sub-region could be large) and its comparative low labour intensity (both directly and indirectly through spill-overs to other sectors). There is also uncertainty on the capacity and capability of the industry to export, given New Zealand is still largely untested in the global poultry export market.

Trend: Poultry (meat and eggs) is a fast growing sector. Consumption of protein is increasing and chicken's share is increasing within that. The global market for chicken meat and eggs has been growing strongly, but New Zealand is a small player in the global market. Protein consumption increases with incomes. The broader story of increasing protein consumption is bolstered by increased poultry share of meat consumption as incomes rise.

Globally traded poultry meat increased by over 170% in the past decade.

Increasing demand from the emerging market presents significant potential, if the existing dominance of large producers like the USA can be overcome. Over the next decade, Chinese incomes (as approximated by GDP per capita) are likely to increase by around 7% a year. Other countries with this level of GDP have poultry consumption of around 20kg per person. This translates into a potential increase in poultry meat demand of around 10 million tonnes over the next decade in China (around 600 times New Zealand's current consumption). India could add another 6 million tonnes.

The global increase in demand will be widespread across all industrialising countries throughout Asia. Given the scale of demand, New Zealand cannot hope to meet much of the new demand; rather the opportunity may be more in producing specialised products, creating channels to market and marketing our 'premium' product status to targeted segments to achieve prices which more than cover freight costs.

Competitive/comparative advantage: the poultry sector is relatively small in the Manawatū-Whanganui region, employing around 500 people. The largest presence is in the Horowhenua district. Much of the poultry is geared to egg production, rather than meat. There is not strong specialisation, but sufficient to form a foundation for growth.

Employment intensity: the poultry sector is growing strongly, both in terms of jobs (up 10% over the past decade, similar to the national average) and also consumption. Consumption in New Zealand has grown steadily over time, although there was a reduction during the recession. Neighbouring Waikato has nearly 2.5 times the number of jobs in the poultry and related sectors. As demand for poultry continues to increase, the Manawatū-Whanganui region could reach a similar scale to Waikato, adding under an optimistic 'export focused scenario, some 1,200 jobs. That potential would need to see a significant increase in sales, which is likely to be from export markets.

TABLE 21: OVERALL METRICS FOR POULTRY[64]

Metrics	Current size (filled jobs)	875
	Employment intensity	Low
	Linkages to other sectors	High
	Stage of lifecycle	Mixed
Impact	GDP adding	▲
	Job adding	▲
Trend	Domestic	▲
	Export	▲
Competitive advantage	Domestic	▲
	Export	▬
Summary	Current size	▬
	Employment intensity	▼
	Linkages	▲
	Stage of lifecycle	▲

Source: Statistics NZ, NZIER

HOW?

Objective – to leverage significant expansion of poultry growing in the region together with increased land use intensification.

Strategic Intervention – an in-depth study of the viability of poultry growing in the region. If viable it is assumed that grain growing and processing would easily follow because one is dependent on the other.

POULTRY MEAT PRODUCTION

The challenges of this opportunity are significant as it involves a major diversification of primary sector activity for the region. Strong sector leadership through some sort of local industry development structure would be required to:

- Identify international markets. Engage and develop relationships into the market(s).
- Establish supply chains.
- Build on current investor interest.
- Possibly enlist the assistance of a leading business development facilitator.
- Establish a business case.
- Contemplate an expanded PGP bid to facilitate the above actions.

[64] Note that Statistics NZ does not provide data with sufficient granularity to enable a similar table to be produced to apply filtering to grain processing.

This level of action is required because essentially this opportunity involves action from a standing start. To be competitive, poultry growing and grain growing will need to be developed in parallel. Every step in the domestic supply chain will need to be confirmed as being more competitively priced than that established by global competitors. This focus will need to be at the heart of the development of the business case.

Capital requirements are likely to be significant. Consents will be required for appropriate sites, including for waste disposal.

Subject to the development of a compelling case NZTE could be invited to use their existing networks to help secure strategic international investment.

Established infrastructure and services associated with a Marton or Palmerston North-based hubbing facility may assist with distribution logistics.

There is also an opportunity to capitalise on existing New Zealand-based technology, genetics and disease control knowledge to learn from, construct and operate hatcheries and parent stock farms. This includes knowledge to operate 'free range' or ranch style farms as part of the mix of poultry growing options to counter growing market concern about caged birds.

New Zealand's reputation as a high quality food producer and provenance should be woven into marketing initiatives. New Zealand's disease-free status bypasses concerns about the diseases which feature in the Chinese poultry market.

GRAIN GROWING AND PROCESSING

There are interests in the region who are active on this particular opportunity which makes it, in part, a proprietary opportunity. That said, they will face challenges and may or may not be able to deal with them alone.

Resource consents for the facility will be required – these can be challenging to secure. The site will need licenses etc. to import PKE and there is significant process involved in this.

There is a complementary advantage in increasing grain production, which is a key input for the poultry sector. For both to be successful, both would need to proceed in parallel.

A business development process is required to move this opportunity from an area of interest to one of commitment to action and investment. This should be undertaken by a group made up of current local interested investors and NZTE with local government assistance.

ADDITIONAL CONSIDERATIONS AROUND POINTS OF INTERVENTION

- **Poultry meat**: Provide NZTE input to assist the current group of interested invoestors to further develop and confirm the feasibility of their business case and to secure their commitment to direct their capital toward the incremental growth of poultry meat growing facilities; use NZTE / MFAT networks to assist to develop markets.
- **Grain production**: Request Horizons Regional Council and Rangitikei District Council to work with local land owners to investigate the potential of PGP funds, or other sources

of funds, to confirm the feasibility of grain growing and supply chain logistics including comparative returns, water needs and availability, land use capability opportunities and transport matters – including the business case for a rail siding at Marton.

- **Grain processing**: Provide NZTE input to assist the current group of interested local investors to further develop and confirm the feasibility of their business case and to secure their commitment to capital investment toward the construction and operation of an optimal scale processing facility.

Relevant current central government initiatives:

- NZTE programmes that build the capability of companies to export (e.g. Better by Capital).
- Enhancing New Zealand's market access: implementing the Government's Free Trade Agreement agenda; addressing behind the border barriers in key markets; implementing NZ Inc. Strategies; increasing New Zealand's representation in emerging markets.
- Rural broadband initiative and further roll-out of ultra-fast broadband roll out – creating a platform for adoption of technology in the industry.

INTERVENTIONS SUMMARY

Local industry leaders/MPI:

- Appoint a business development facilitator to work with the leaders in the poultry and grain processing sector:
  - Confirm the business case for both poultry meat and grain processing.
  - Consider a PGP bid and, if appropriate, develop one to add depth to the business case and or investigate the potential for assistance under other current government programmes.
  - Secure specific market interest with a focus on China.
  - Establish infrastructure and related services including a rail siding at Marton.
  - Establish a template for poultry farming resource consent purposes.
  - Promote landowner interest in grain growing.

NZTE:

- Assist with market identification and development.

POULTRY MEAT PRODUCTION

THE OPPORTUNITY AT A GLANCE

What? – the opportunity

Why? – will it succeed

Why not? - obstacles

How ? – interventions, actions and arrangements

Industry extension: • Build a substantive poultry export industry in the region. • Provide the market for a local grain industry – poultry and dairy. • Align poultry and grain development.	**Overcome:** • Cost perceptions resulting from distance to market. • Perceptions in markets about importing poultry. • Fear of scale. • Transport logistics. • Social license issues on animal welfare.
Leverage off: • International market growth. • NZ's disease-free status. • Existing operators and industry strength. • Transport hub • Grain growing/processing potential.	**Act to:** • Undertake business case on both poultry and grain. • Build industry cohesion. • Leverage transport hub. • Assess export market. • Identify capital sources. • Secure certainty of poultry welfare legislation.

OPPORTUNITY: AFFORDABLE CARE AND LIFESTYLE FOR OLDER PEOPLE

WHAT? - THE OPPORTUNITY

The whole shape of ageing is expected to change rapidly in the next decade. The proportion of older people (65+) in the community will rise sharply and the majority will have at least moderate wealth. Retirement will become a life phase rather than a hard date and older people will be looking to carefully plan the segue from work to retirement pursuits.

Internationally, notably in the Netherlands, there is a move away from segregating older people, whether in retirement villages or rest homes, and instead creating arrangements where they are in closer proximity to young people and families.

Demographically-driven demand for rest home care will soon outstrip supply. There is a boom in the retirement village market with ancillary care services but affordability is likely to be a factor for many coming into the age-group.

The Horowhenua district is ideally suited to be a centre for affordable care and lifestyle for older people. Levin, in particular, is an established town already servicing a sizeable ageing population. This potentially provides a foundation for the development of care models that will meet the needs of economy budgets and an increasingly cash-strapped Government when it comes to servicing the older population.

Advantages of the location include climate, highway upgrades underway, travel time and safe travel to Wellington and its international airport significantly improved and land costs at a fraction of city prices.

Thinking more of Havelock North than Mount Maunganui, the opportunity is for Horowhenua to leapfrog into new models of care as a key centre for modern, affordable care and retirement living, in other words a lifestyle not just a rural servicing district.

Estimates of returns from this approach would be only guesswork at this early stage, but a relatively small amount of investment would have a major impact on prosperity and employment in a town like Levin.

There is a *prima facie* case that affordable care and lifestyle for older people is a significant opportunity able to be capitalised upon in the medium term.

Current patterns and prospects

There is significant growth in services in this age group across the region as the demographic of older people thickens up. There are 11,230 jobs in this sector across the region. Horowhenua, for its size, is over-represented and this is in part because it is developing as a living destination (of modest proportions) for older people. Horowhenua currently has 11 rest homes with 500 residents – one in Otaki, two in Foxton and eight in Levin.

The dynamics of this sector over the next 30 years will involve a lot more people entering the age group and demand for rest home accommodation facilities outstripping supply. The economics of ageing will also be complex with Government having to bear more and more cost through rest home subsidies. The cost to Government is a serious concern. As people living in these expensive facilities use up their savings and reach the subsidy threshold Government is likely to incur very significant subsidy costs. Trends towards longer life expectancy are also going to exacerbate this problem.

There are attempts to offset this trend with community care approaches based around the 'ageing in place' concept. International experience indicates that consumer preferences for care are also changing, driven by both economic and social preferences. The segregation of older people into large establishments, whether rest homes or retirement villages, will likely become less popular with more intermediate care growing such as home care, supported living and similar arrangements.

Land availability and cost for large facilities such as rest homes and retirement villages in main centres like Wellington will also work against the current trend of building in these locations. In fact, industry informants told us that the current building activity in Wellington would probably be the last for some time for these exact reasons.

Future models of care

With its small size but significant aged care experience, Horowhenua has the opportunity to lead with modern models of care and lifestyle for older people that emphasise quality on a budget. The foundation of this is the relatively low land and property values. Such modern care models could involve:

- **Housing trust** – that rents, leases or sells on a buy-back arrangement local properties for older people to live in through the retirement phase of their ageing process. This has potential application to Government's current desire to get community providers involved in social housing projects.
- **Home care and support** – such services need to be linked to each of the other services on this list.
- **Serviced units** – small clusters of units that are rented or sold on buy-back arrangements and which include communal facilities handily located to community services.
- **Marae-style clusters** – small clusters of units, some with rest home levels of service that are co-located with other community services or where they are associated with an actual marae, and with Kohanga Reo and youth facilities (encouraging inter-generational interaction).
- **Specialist hubs** – which provide high level care such as dementia and hospital level services.

While there are examples of all of these types of arrangements in different parts of the country, we are not aware of any location where they are deliberately co-located in a planned fashion. This is the opportunity that could be grasped by Horowhenua if it had a will to do so. Such models provide scope for both public and private provision. Isolated examples of these types of arrangements are already being developed in other parts of the country by large retirement village enterprises.

Such a configuration of lifestyle and care-related accommodation is only possible with a strong set of support services around it. These services include GP and medical services, pharmacy, specialist and wellness services, some of which are funded publicly and some by the user.

This opportunity is developmental rather than immediate

The emerging silver and white haired markets (in marketing parlance), besides their immediate needs of accommodation and health, increasingly seek retail, hospitality, wellness and leisure services. These demands often overlap with general demand patterns and are difficult to isolate to an ageing population. They also seek a range of lifestyle opportunities such as recreation, sports and social facilities and services which will have dual application for older people and the community in general.

The heart of this approach is to integrate older people, as long as they can, into the life of the community and vice versa. This adds to quality of life for all concerned, but with the emphasis on de-institutionalisation of aged care, it also makes living for older people potentially more affordable.

A pattern has emerged in New Zealand of aged dormitory areas within driving distance of larger cities - Mosgiel near Dunedin, Oxford near Christchurch, Waikanae near Wellington, Mount Maunganui near Auckland and Hamilton and Havelock North near Hastings/Napier. Horowhenua is near Wellington and will be closer with the roading improvements, but because its relatively limited development of aged care to date and its need to attract people for reasons other than immediate proximity, it needs to offer a different and compelling approach. We believe that this model, if pursued, will actually have broader application in the region beyond Horowhenua. In other words, this is not about competing with other regions; it's about being well positioned to capitalise on the growth in demand for aged care services occurring everywhere and thereby increasing the number of jobs in the district – with subsequent flow-on benefits.

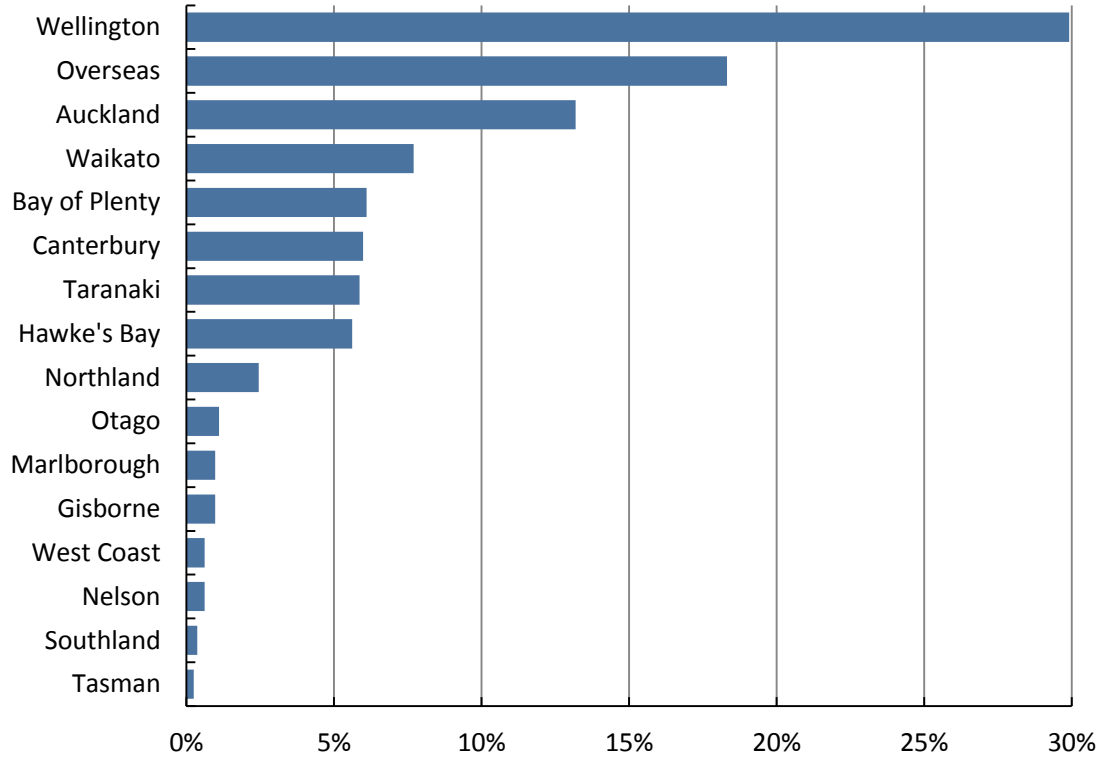
Levin and Foxton

The concept would involve towns like Levin and possibly Foxton emerging as lifestyle towns as well as their rural servicing function. It does not all have to take place in those towns either. It can include developing innovative ways to support older people while they continue to live in their 'down-sized home' in coastal villages like Waitarere or Foxton Beach and at the same time providing choices about the level of support they may require as their capacity to be self-contained weakens. Such an approach is now common place in the Netherlands and is emerging in Germany and Sweden with glimpses in New Zealand. Places like the Horowhenua could become a centre of best practice which incorporates concepts such as universal design particularly for new housing.

The opportunity being promoted here is an affordable aged person's living destination. This is a new market that is emerging as the numbers in the 65+ age group expand. These are people of modest means reliant on National Superannuation and an additional moderate supply of revenue from a capital base of life-long savings.

As an opportunity it is about additionality. The nature of the opportunity extends well beyond the local demand for elderly care and retirement living services, though these are relevant. The opportunity is based on inter-regional (and even international) flows of elderly people as well as those already in the region.

FIGURE 33: % OF TOTAL – ORIGIN LOCATION OF OVER 65 AGED GROUP INWARD MIGRANTS TO THE REGION



Source: Statistics New Zealand

Figure 33 shows the sources of inward migrants to the Manawatū-Whanganui region over the 5 years to 2013, for people aged 65 and over. The biggest sources are Wellington, overseas and Auckland. The total immigration to the region was around 30,000 during the five years to 2013 giving a sense of the scale of current demand.

Local patterns of ageing

The easy assumption is that the sole source of over 65 migration to the area is from Wellington. In point of fact the catchment is much wider and begs the question of what are the attraction factors that produce figures of this nature and which draw people even from off-shore.

Looking at existing patterns in the Manawatū-Whanganui region, it has a relatively old population (16% above 65 years compared to 14% nationally). In most districts within Manawatū-Whanganui the under 65 population is shrinking, with the exception of Palmerston North City and Manawatū District (which account for about half of the regional population).

The regional population grew by 2% or 3,700 people between the 2001 and 2013 censuses. This was all driven by the over 65's, which grew by 7,900 people while the under 65's shrank by 4,200 people. The region will age further in future years according to Statistics New Zealand projections, suggesting that an increasing percentage of the regional economy will revolve around older people. This suggests a significant portion of potential local demand. This is not the rationale from recommending this opportunity

except in as much as the region is already gearing to meet the requirements of an aging population.

The broad aged and health care sector accounts for 12% of filled jobs in the region, compared to 10% nationally. While the sector is larger, growth has been slower than the national total (over the last 10 years the number of filled jobs has grown by 4%, compared to 23% nationally). The health care-related segments and aged care sectors account for around $540m or 6% of regional GDP which was $9.1b in total in 2014.

Comparative advantages

There are existing specialisations in some services, but the region is not yet reflecting a full service offering such as that provided in an established retirement destination like Tauranga/Mount Maunganui in the Bay of Plenty (see Figure 34). There are gaps in GP services in particular and in services like pathology and diagnostic imaging services, physiotherapy and chiropractors (see Figure 34). This may be seen as a weakness, or alternatively, as an opportunity to close these gaps.

The sector is not bogged down with too many outdated facilities such as rest homes and land prices are very affordable.

Trends in healthcare for the aged are based on strengthened primary health access, much of which would operate in the local community. The blending of primary and hospital care would be part of the new model of care envisaged in this opportunity.

The Horowhenua District Council is strongly committed to the development of this sector in their district and is prepared to provide leadership for it.

Employment

There is a significant base of jobs in aged care in the region. Horowhenua's job base is significantly smaller than either of Palmerston North or Whanganui partly because they are larger centres and because there are hospitals in both cities. Growth in these two areas is generally in line with national trends. We have particularly identified Horowhenua as an opportunity area because it has many of the indicators of potential for operating to an evolved care model: a base of activity and leadership, under-investment in existing models, and the other items we identified in the section on comparative advantage.

TABLE 22: EMPLOYMENT IN THE AGED CARE-RELATED SECTOR

Element:*	Employment (**) Number, 2014	% of total	% growth, 2004-2014	Specialisation
Broad areas				
NZ	196,400	10	23	..
Manawatū-Whanganui Region	11,230	12	4	High
Territories				
Ruapehu	376	8	3	Low
Whanganui	2,602	16	15	High
Rangitikei	247	4	-30	Low
Manawatū	497	6	19	Low
Palmerston North	6,287	14	8	High
Tararua	358	6	5	Low
Horowhenua	877	11	-28	Medium

Source: Statistics NZ, NZIER

Notes:
.. Not available or applicable
* Specialisation is calculated as revealed comparative advantage. We summarise the results as High, Medium and Low, where high is RCA score of more than 1.15, medium is below 1.15 but greater than zero, and low is less than zero.
** Filled jobs. The sector is defined for this purpose as:
Q840100 Hospitals (Except Psychiatric Hospitals)
Q840200 Psychiatric Hospitals
Q851100 General Practice Medical Services
Q851200 Specialist Medical Services
Q852000 Pathology and Diagnostic Imaging Services
Q853100 Dental Services
Q853200 Optometry and Optical Dispensing
Q853300 Physiotherapy Services
Q853400 Chiropractic and Osteopathic Services
Q853900 Other Allied Health Services
Q859100 Ambulance Services
Q859900 Other Health Care Services n.e.c.
Q860100 Aged Care Residential Services
Q860900 Other Residential Care Services
R913900 Amusement and Other Recreation Activities n.e.c.
S951100 Hairdressing and Beauty Services
S952000 Funeral, Crematorium and Cemetery Services

The table above shows that the region has some specialisation in the broader healthcare, aged care sectors and some related sectors. A large share of the labour pool is already in this sector and employment is growing, albeit not as fast as nationally. Whanganui, Palmerston North and Horowhenua already have some comparative advantages in this broad sector.

Figure 34 below compares services in Bay of Plenty and compares them with Manawatū-Whanganui. The column “Areas of Opportunity” indicates services that would benefits from development in Manawatū-Whanganui if its service levels were to be comparable with Bay of Plenty.

FIGURE 34: POSSIBLE OPPORTUNITIES IN THE AGED CARE SECTOR: REGIONAL COMPARATIVE ADVANTAGE ANALYSIS OF MANAWATŪ-WHANGANUI AND BOP

Revealed comparative advantage in employment (>1 has comparative advantage).

	Manawatū-Whanganui	Bay of Plenty	Areas of opportunity
Q840100 Hospitals (Except Psychiatric Hospitals)	1.0	1.1	
Q851100 General Practice Medical Services	1.0	1.4	
Q851200 Specialist Medical Services	0.6	1.0	
Q852000 Pathology and Diagnostic Imaging Services	1.1	1.7	
Q853100 Dental Services	0.9	1.2	
Q853200 Optometry and Optical Dispensing	1.1	1.1	
Q853300 Physiotherapy Services	0.8	1.0	
Q853400 Chiropractic and Osteopathic Services	1.1	1.7	
Q853900 Other Allied Health Services	1.5	1.5	
Q859100 Ambulance Services	1.5	0.9	
Q859900 Other Health Care Services n.e.c.	0.9	1.3	
Q860100 Aged Care Residential Services	1.6	1.4	
Q860900 Other Residential Care Services	1.3	1.0	
Age care related services	1.2	1.2	

Source: NZIER analysis of Statistics New Zealand Business demography statistics

The areas of opportunity are simply the difference between the position in Manawatū-Whanganui and Bay of Plenty. The specialisation is not as deep and broad as the grey capital of New Zealand, Bay of Plenty. The column Areas of Opportunity illustrates the potential for aged care and related services compared to the yardstick of Bay of Plenty, which is a significant retirement destination.

THE HOROWHENUA DISTRICT COUNCIL PERSPECTIVE

- The Horowhenua District Council is of the view that the upcoming redevelopment of Levin and Foxton townscapes will contribute to the attractiveness of these locations as a place to accommodate the needs of the ageing population.
- The factors which they view as being an advantage for the Horowhenua area in terms of care of older people include:
  - Horowhenua property and living costs are considerably lower than those in Wellington. A move to Horowhenua may therefore be seen as an easy 'equity release' mechanism. A retiring couple could sell their $800K house in Karori, build their dream home at Waitarere Beach and still put $300k in their back pockets for a cruise, or a trip to Australia to visit family
  - Horowhenua is well connected to airports, and has rail passenger access, etc. People can move to the District and stay connected

  - A local Private Training Establishment has developed a tailored training centre to support the demand for care providers.
- The Council has noted that many existing providers are reviewing plans for growth and expansion to meet increasing demands for elderly care in their area.
- In addition a number of new residential unit developments are underway in the Levin and Foxton area including:
  - The Trackside Villas development which is commencing the second stage of a three stage development
  - A large (up to 500 units) development ('Speldhurst Country Estate') is currently being launched at the site of the old Kimberley Hospital. This is currently at resource consent stage for an initial 90 unit-title dwellings
  - A Hawke's Bay developer is currently considering options to facilitate the development of a large site next to both an existing Summerset facility and the Horowhenua Integrated Family Health Centre.
  - Te Waiora, a new community health clinic, has recently been opened in a strategic location in Foxton. This will provide accessible quality health care to the local Foxton community.

What about Whanganui (and other parts of the region)?

The City of Whanganui is also well positioned to service the grey and silver haired markets. It is already a significant player in this sector in the region. There is a centre of excellence project in aged care and service development underway together with linkages between the DHB and health technology companies. There is no reason why Whanganui cannot develop this capability also. We have selected Horowhenua as the initial point of intervention because of its proximity to the Wellington market and the opportunity to pioneer an evolved model of care and lifestyle for those ageing. This does not stop other districts emulating all or parts of the model.

WHY?

Summary of the rationale

- Close to Wellington.
- Close to secondary and tertiary hospitals (Capital Coast, Mid Central and Whanganui).
- Close to an international and a regional airport (Wellington and Palmerston North).
- Relatively low cost of land compared with metropolitan centres.
- Comparative attractive climate.
- Elderly-friendly community scale.
- Established base of care provision, though sufficiently flexible for consideration of new models of care.

WHY NOT?

This opportunity is developmental rather than immediate. There are indications of commercial champions willing to take the idea forward but considerable pre-work is required to clarify the concept and assess its viability.

Realising this opportunity will require co-ordination and cooperation and most of all, local leadership. Partnerships across research, education, health, Government and the private sector will be required. This is a major undertaking.

Workforce issues

While there is a local workforce to service this opportunity it is doubtful whether it is large enough. Many in this sector are relatively low skill and training interventions could prove helpful. Recruitment of international expertise such as from the Philippines may also be necessary. These two types of interventions would need to be managed together.

Perception issues

Success will depend on a changed perception of Levin - less as a rural service centre and more as a lifestyle community. This is a big step for the town. Horowhenua is not Queenstown or Mount Maunganui. It does not currently have the cache of these locations. Any development would need to project a strong sense of its intrinsic value and points of difference such as affordability, community scale and proximity to urban centres and other services.

Health service issues

There are significant deficits in health services which would have to be addressed, particularly for GPs and medical services. There is also the question of accessibility of secondary and tertiary hospitals. Three hospitals are about an hour away from Horowhenua which is just about the outer limit, particularly as people get impaired at older ages.

Transport issues

Public transport within the region and to main centres remains an uncertain proposition. The Capital Connection train is a marginal proposition at this point. Loss of links such as this would work against the interests of this proposition.

FILTERS SUMMARY

Impact: the aged care sector adds to regional economic performance. An 80 bed rural facility is estimated[65] to add $32m to the regional economy over a decade and boost employment by around 66 additional jobs.

For a sub-region like Horowhenua, it represents a 0.8% lift on current employment, which lost 6% of its jobs (of all jobs not just aged care) in the past decade.

[65] http://nzaca.org.nz/publication/documents/Covec-EconomicImpactreportforAgedCare.pdf

There are also likely to be wider spill-over benefits. There are already prospective plans for a 500 unit development, which could boost employment by 5% for a territory like Horowhenua when completed.

Trends: the sector is also growing. Employment in the aged residential care sector has grown by around 15% in the past decade and 11% for the broader health and related sectors. The growth rate has not been as fast as the national rate (24%), but the sector is clearly in a growth phase and there is potential for faster growth in the Manawatū-Whanganui region than seen historically. The Grant Thornton[66] report on residential aged care commissioned by the New Zealand Aged Care Association indicates that demand will exceed supply of rest home care in the next few years and this situation will prevail for a long period. The current trend of provision is to associate rest homes with retirement villages. This necessitates new builds and this pattern is being seen around the country. Horowhenua, in particular, has a good supply of affordable land for such enterprises and the ageing in place options outlined in this section.

Competitive/comparative advantage: the region has an existing specialisation in aged care and a number of related services in health and residential care services. For example, the aged care residential services account for 2.6% of regional employment, compared to 1.6% nationally – the region is specialising in aged care. The broader sector including health, which supplies services to aged care is much larger at around 11,230 jobs, accounting for 12% of regional jobs.

Employment intensity: the aged care and related health and services sectors are relatively labour intensive. Just over half of all the output in the sector is paid in wages (compared to 22% in the general economy), which benefits the local economy through gainful employment. These jobs are a combination of low paid and some highly specialised and highly paid positions. There are also spill-over benefits. The aged care and related sectors are linked to numerous other sectors, by purchasing products and services from them. Money spent in the age care related sector is 1.8 times more powerful than a similar increase in the overall economy.

[66] http://nzaca.org.nz

TABLE 23: OVERALL METRICS FOR OLDER PEOPLE CARE AND LIFESTYLE

Metrics	Current size (filled jobs)	11,230
	Employment intensity	Very high
	Linkages to other sectors	Very high
	Stage of lifecycle	Growth
Impact	GDP adding	▲
	Job adding	▲
Trend	Domestic	▲
	Export	▼
Competitive advantage	Domestic	▲
	Export	n/a
Summary	Current size	▲
	Employment intensity	▲
	Linkages	▲
	Stage of lifecycle	▲

Source: NZIER

HOW?

Objective: to create affordable person-centred models of continuing care for older people through retirement to advanced care in a community context.

Strategic Intervention: this is a complex opportunity to realise. In the first instance a detailed concept and feasibility is required negotiated in a consultative fashion with a wide range of interested parties including iwi.

While we believe there is a *prima facie* case for this opportunity, it requires considerably more validation than is possible in this report. Some of this work is known to have been done already by developers interested in the region but we have not been provided access to it. More information is required to better understand demand and the comparative cost advantage for older people locating to Horowhenua and their likely origin.

Relevant current central government initiatives:

- District Health Board (DHB) assessment of individual's needs and eligibility of services, provision of funding of service providers and provision of services directly such as hospital interventions. Legislation and compliance of service providers to sector standards and DHB contracts.
- National Science Challenge – 'Ageing Well.'

INTERVENTION SUMMARY

Horowhenua District Council, DHBs, iwi:

- Develop the concept as it applies to the district and sub-district areas immediately adjacent such as Otaki (iwi interests).
- Undertake validation of the concept with all necessary parties (Government and community).
- Establish a pathway to implementation.

Training Providers:

- Work with private sector health providers, iwi and the DHB to develop a health care training and attraction programme compatible with the opportunity.

DHB, Community-based health care and "lifestyle" providers:

- Assess how they can assist in the development of the concept.
- Assess what it means in terms of extending support services e.g. physiotherapy and rehabilitation services, as well as other indirect services such as those related to mobility transportation, supermarket delivery services, entertainment, in-home monitoring, e-services, medical equipment, travel booking services and food and beverage also need to be in the mix.
- Assess feasibility of recruiting trained people and developing facilities (which will give investors necessary confidence).

DHB, Specialist providers:

- Undertake a demand assessment exercise to assess requirements for the provision of specialist care e.g. dementia services. Numbers needing this service are expected to double over the next 10 years (increasing 4% p.a.) which will require a response from aged care providers and Government.
- Assess the requirement for GP services and emergency services and how they will be developed to support the opportunity.

AFFORDABLE CARE AND LIFESTYLE FOR OLDER PEOPLE

THE OPPORTUNITY AT A GLANCE

What? – the opportunity

A new concept of care for older people:

- Affordable care
- Community-integrated care
- Integration of rest home, retirement and independent living
- Modern presentation
- Human scale community

Overcome:

- Perception that it's not Mount Maunganui or Queenstown
- Passivity
- Related services deficit
- Transport issues

Why not? - obstacles

Why? – will it succeed

Leverage off:

- Existing capability and capacity
- Proximity to Wellington / airport
- Affordable property values
- Trainable local workforce
- Benign climate

Act to:

- Create a concept/vision
  - Form a feasibility vehicle
  - Complete a feasibility study
- Engage parties including health, providers and professionals.

How ? – interventions, actions and arrangements

OPPORTUNITY: BUSINESS PROCESS OUTSOURCING AND FOOD INNOVATION OUTSOURCING

WHAT? – THE OPPORTUNITY

International companies are in search of talent and skill wherever they can find it and this is, in part, driving a trend towards international outsourcing. There is growth in New Zealand and worldwide in the tertiary services sector and business process outsourcing (BPO) in particular. The opportunity is for Manawatū-Whanganui to capture some of this growth through the use of existing capacity and capability geared partly to a domestic market, but mainly to an international market.

Within business process outsourcing the contact centre industry is rapidly maturing worldwide and while at one time it was relatively cost driven, now qualitative as well as cost factors are important. This opportunity has become more real in recent years because of the apparent interest of companies in quality and not just cost solutions. A region like Manawatū-Whanganui is able to deliver quality solutions.

New Zealand generally, and Manawatū-Whanganui in particular, have specialised science and technical capability in the agri-tech, food-tech and bio-tech industries focused around Massey University and the various research centres mostly located in Palmerston North. The opportunity is for international companies to outsource their requirements to the region where the region is able to offer unique benefits that make it competitive internationally.

The outsourcing opportunities outlined here have short and long term dimensions. Contact centres are in the immediate foreground whereas other professional services and particularly science and technical services (Food HQ) are a longer term proposition.

The contact centre opportunity is appealing because it is urban or town-based , it is flexible and offers employment to a wide range of people. Contact centres offer jobs to lower skill people and are particularly relevant for second household incomes and tertiary students. This is an important balance for building jobs, incomes and community resilience. It is also rapidly developing into higher skilled areas (e.g. technical analysis and advice, high trust functions needing strong interpersonal skills) and as such will provide higher paid roles than traditional centres would have provided.

Work in the region on the contact centre opportunity is now well advanced and while Manawatū-Whanganui does not have a decisive regional advantage, apart from its strong existing cluster of contact centres, the mere fact that so much work has been done places it in a strong position to take advantage of this opportunity should it be proven to be real. The proposal of the parties working on the call centre opportunity at present is to double current jobs in three years to a total of 2,000 (FTE equivalents).

Food HQ's objective is to outsource to international companies using established local capability and capacity. This is still very much an emerging area as Food HQ finds its place in the world. Its vision is to double its scientists, researchers and students to 4,000 while attracting $150m pa in international food R&D.

CONTACT CENTRES

This is a priority focus of Spearhead, a regional development agency, which has defined and quantified the sector and has undertaken solicitation activity in Australia to try and woo Australian firms to establish contact centres in Manawatū-Whanganui. This work is being supported by NZTE.

There is an international trend to outsourcing generally which has been well documented. In the contact centre industry, this had previously been to third world countries. The trend has reversed as companies have realised the importance of considerations such as local information, language and culture. This is now rated as more important than cost[67] especially in the top-end functions which require stronger customer relationships.

The attractions of outsourcing, apart from cost are:

- Greater flexibility to scale operations.
- Standardisation of processes.
- Meeting compliance regulations.
- Gaining access to talent and a good quality labour market from which to draw staff.
- Gaining access to technology.
- Achieving change often not possible with in-house operations.
- Benefitting from business outsourcing expertise not able to be achieved internally.

As a generalisation, large enterprises focus on cost, while mid-market operators focus on provider solutions. The latter are the target for Manawatū-Whanganui as they are in scale with the local communities.

The principal focus is inbound customer service (as distinct from sales and technical support).

Spearhead estimate there are 322 companies operating contact centres in New Zealand with 30,970 "seats" (individual operators). The average cost per seat is around 15% lower in New Zealand than Australia and Manawatū-Whanganui is 35-40% lower than Australia. This is achieved because of lower wage and overhead costs.

Staff turnover rates are estimated by Spearhead to be 6-10% in Manawatū-Whanganui versus 40-50% in Auckland and similar rates in large Australian cities. Reasonably close access to an international airport is important for clients wanting to visit operations.

[67] Pers. comm: Craig Nash, Spearhead.

Wellington is sufficiently close to potential suppliers in the Manawatū-Whanganui region and the high daily frequency to international connections is promoted as being an advantage of the region. This is often an early hurdle for Australian businesses.

The hunt to attract contact centres and other outsourcing business has been underway for three years. The key opportunity is to bring contact centre operations across the Tasman to Manawatū-Whanganui to take advantage of cost and workforce quality advantages.

FOOD HQ

The vision of Food HQ is to be New Zealand's international centre for collaborative food research, so its ambitions are wider than simply an outsourcing model. However, outsourcing food research from national and multi-national food companies is part of the concept.

Its vision is to generate value for the global food industry through innovation across the value chain[68]. The partners' mid-term goal for Food HQ is to have it ranked among the top five food innovation centres in the world, in terms of economic and social impact.

Food Innovation NZ, as the fledging genesis of Food HQ, was launched in August 2009 as a collaborative partnership between Massey University, AgResearch, Plant & Food Research, Fonterra, Riddet Institute (the National Centre of Research Excellence in Food and Nutrition), and the Bio Commerce Centre.

The plan, as stated in the Food HQ Vision 2025 document, is ambitious and includes:

- Development of a fully integrated super campus in Palmerston North with approximately 4,000 public and private researchers, PhD students and educators involved in the food value chain,[69] all together achieving critical mass to make a difference on a global scale.
- Capital investment of $250m leading to $230m in added economic activity each year.
- Desire to help boost the annual value of New Zealand's food exports to $60 billion by 2025.
- A mechanism to help meet the 70% increase in global food demand expected by 2050.
- A mechanism to fill the gap created by the apparent downsizing of food company research and development in-house expertise.

Food HQ is viewed by leading proponents as a gateway for other R&D organisations, companies and support industries to enable them to engage and co-locate with each other as a cluster. They see themselves as a portal to facilitate research and development at the value-added end of the food value chain. They want to be at the heart of supporting the Manawatū-Whanganui economy and demonstrating the vibrant science environment of the region.

[68] As quoted in the Vision 2025 document prepared by Food HQ which is available on the Food HQ website

[69] An estimated 2000 persons are currently part of the Food HQ network

As one informant[70] described it, Food HQ is a platform for:

- Collaboration and interconnectivity between all parts of the food chain.
- A mechanism to help fast track innovative food ideas.
- The 'virtual' entrepreneurial 'food expert' and middle man to give clients a simple point of entry and an account manager function to the wide array of New Zealand food innovation capability, particularly that located in Manawatū-Whanganui.
- A train track with stations – with a "facilitating conductor" connecting these stations i.e. a mechanism for providing inside knowledge about where people should go to access experts who will help food producers get where they want to go, whether these experts be related to science research, technology, commercialisation, brand development, packaging, biosecurity issue management, regulatory matters, market assessment or logistics.

Many of the members of Food HQ are distributed networks in their own rights (including Massey, Plant Food Research, Ag Research and the Riddet Institute). Food HQ is designed to be a powerful local cluster with the objective of tying all these networks together locally.

If it were to succeed it would provide enormous benefit to the region. Because the principal target is international companies it would effectively generate export dollars. It would also leverage development of the capability and reputation of New Zealand's skills in science and innovation in the food industry. It would help to build a cluster of capability that would advance the whole region, and for that matter, New Zealand as well.

WHY?

Summary of the rationale

- The rationale for contact centres includes:
  - Ready supply of labour.
  - Competitive rental levels.
  - Trend towards Business Process Outsourcing.
- The region has in excess of 1,000 contact centre jobs now, providing a foundation for expansion.
- The rationale for food-related technical and scientific outsourcing through Food HQ includes:
  - Extension of current capacity and capability.
  - International trends towards outsourcing in this market.

[70] Pers. Comm. Professor Richard Archer

WHY NOT?

Contact centres

Despite the general attractions of Business Process Outsourcing, the industry is still at an early stage in New Zealand and even internationally. Potential outsourcing-seeking sectors for focused marketing attention include banking, insurance, manufacturing, energy and utilities, media and entertainment, hi-tech and public sector.

There is no strong comparative advantage for the region and the current 1,000 jobs is a small, but not insignificant, base to build from. The decisive factor is the commitment of the region to the development of this capability which primarily involves clear lines of connection to customers.

Clients are particularly looking for stability, cost savings, knowledge and delivery competence. These competencies need to be proven as available from the region.

Critical mass is another question. Indications are that there is barely sufficient potential critical mass and for this reason the whole of lower North Island is being seen as a market rather than just Palmerston North.

Food HQ

Food HQ is young in its development cycle. There are some eye-wateringly innovative ideas but few, to date, have materialised into business structures which can be used as success case studies to leverage further success.

The strength of Food HQ is the idea and its potential, but it is made up of individual enterprises co-located but arguably, insufficiently cohesive to make real progress as a whole entity. To us it appears to have not resolved the conflicting demands of individual organisation goals and the vision of the whole cluster. Until this is resolved Food HQ is likely to progress very slowly. A more enabling structure is required if the idea is to translate into reality.

If Food HQ is left to receive its impetus largely or solely from the private sector (especially entrepreneurs and angel investors), development will be slow as there is costly business infrastructure required and returns on capital will be long term.

Food HQ as an opportunity is tantalising but very challenging. We believe it requires a much sharper focus if it is to reach anything like its promise.

FILTERS SUMMARY

Because of the formative stage of business outsourcing in the region it is difficult to filter using the same measures as applied to other opportunities; however we have drawn the following conclusions:

Impact: the potential impact on the region of service and science outsourcing is significant. It represents an urban rather than rural service. It focuses on the second household income market and jobs are very divisible allowing part-time work. Companies tend to outsource a whole operation so that each start-up could be quite significant in size and have a material effect on the region.

Trend: global activity around outsourcing is increasing, not only in contact centre provision but in other areas of expertise such as technical, scientific and legal. Whether the global market is interested in New Zealand has yet to be established. If it is, and business is attracted, then it will make a welcome addition to New Zealand's export earnings and create further opportunity.

Job intensity: the contribution of outsourcing to creating jobs is its major attraction. As a sector it is highly job-intensive and this is true of both contact centres and hi-tech science based outsourcing like Food HQ. It also offers opportunities for training and skill improvement which will potentially have spin-offs into other areas.

HOW?

Objective: to create a base of service offerings, principally service and science outsourcing activity, in the region that becomes a platform for building a regional reputation as a quality and reliable provider.

Strategic Intervention: the first point of intervention should be contact centres. As outsourcing goes, they are the least complex. Food HQ is a more gradual and long term proposition although the potential rewards are much greater.

CONTACT CENTRE

A great deal of effort has already gone into the hunt for contact centre markets. It is regarded as a gradual process of persuasion and building of critical mass. Persistence is essential because these are long term projects for major companies. Current interventions appear sufficient at this point, but if they are unsuccessful they will require review. We note the following points:

- Spearhead has projected a target of doubling jobs in the Manawatū-Whanganui region over the next three years – from 1,000 to 2,000 jobs (FTEs).
- Spearhead, with support from NZTE, is involved in developing a concept to collaborate with Wellington and Hawke's Bay in attracting business process outsourcing industries, with the larger target being to secure 3,000 jobs across the lower North Island over the next three years.
- Spearhead has an established programme of recruitment of clients. So far it has had limited success, but our assessment is that persistence is likely to pay off. A current pilot scheme in conjunction with NZTE and Vision Manawatū is showing promising signs which validates our view.
- Minister English recently met with the Australian business Council. From these discussions he believes a strong opportunity will arise over the next two years as they struggling Australian economy will prompt business to look at new cost-effective options.

Once established and a local "brand" is recognised in terms of quality, then the industry has long term potential. The effort is currently funded by ratepayer and taxpayer money and it is unlikely to succeed without such public support.

This industry, at its current level of revenue and growth prospects, is unlikely to be attractive to independent investors although large outsourcing companies who contract to clients are also being targeted.

FOOD HQ

On March 31, 2014 Massey University unveiled a $22m upgrade of the Manawatū campus Riddet Complex, its base for food technology and engineering. The major revamp was viewed as a significant step in the planned $250m investment into Food HQ. This is a real indicator of a willingness to back the potential of the idea.

Within the Food HQ ambit is the FoodPilot which is a member of the NZ Food Innovation Network (NZFIN). The Network has four open access facilities for development and manufacturing of new food products. One such facility is the Hamilton-based 500 kg per hour spray drier largely devoted to infant formula and dairy applications. The FoodPilot is the most comprehensive facility in the NZFIN having the widest range of equipment suited to the largest range of food industry sectors. But the FoodPilot equipment is small scale suited to research and development where product is made to generate information (e.g. stability, flavour, texture, shelf-life) while the other facilities are suited to small scale manufacture of product for sale.

A further example of the work of Food HQ is the convening of the Ewe Milk Products and Sheep Dairying Conference covering such issues as: ewe milk product consumers and markets; processing and manufacturing; sheep dairy farm operations; sheep genetics and; industry structure and organisation. Sheep milk was an opportunity we examined as a possible opportunity for the region, but at this stage rejected it because of its micro scale and lack of infrastructure. As a result of input like this it may again emerge as a possibility.

These are all important developments and are fundamental to the economic success of the region as they are counter to the effects of global pressures this report has discussed extensively. To meet its promise, a public/private development structure (possibly involving iwi) that integrates diverse operations that is adequately financed is required. Food HQ is a big idea and requires robust and integrated governance.

One way to achieve this would be for Government to continue and potentially increase its weighting of research grants in favour of collaborative models i.e. incentivise parties to work together. A second intervention is to establish a five year co-funding model with Food HQ partners. The purpose of this would be to drive collaboration specifically on Food HQ and to enable the search for and receipt of global revenues to be fast tracked.

Our conclusion is that the plans of Food HQ around outsourcing need to be more specific and pragmatic to ensure they are achieved and until that is the case it is difficult to recommend further action despite the enormous opportunity it represents.

Relevant current central government initiatives relating to business process and food science outsourcing:

- NZTE involvement in attracting BPO investment to the region through co-funding a lead generational consultant in Australia, research and facilitation activity.
- Further roll-out of ultra-fast broadband roll out – creating a platform for adoption of technology for the industry.
- Establishment of Food Safety Science and Research Centre – national virtual centre hosted by Massey University.
- National Science Challenges– The High-value Nutrition Challenge, Our Land and Water - Toitū te Whenua, Toiora te Wai, Ageing Well - Kia eke kairangi ki te taikaumātuatanga
- Contestable science funding
- Crown Research Institute core funding which supports many of the partners within FoodHQ
- MBIE contestable science funding.
- Funding for the New Zealand Food Innovation Network including the FoodPILOT within Massey University.
- Callaghan Innovation support for Bio Commerce Centre
- Tertiary Education Commission funding for Centres of Research Excellence
- The Dairy PGP project referenced earlier in the report includes off-farm components based at the Fonterra Research Centre.

INTERVENTIONS SUMMARY

Local Authorities, Spearhead and NZTE

- Increase resources to support and grow current initiatives to recruit contact centres to the region.

Food HQ

- Note the support for Regional Research Institutes contained in the 2015 Budget

Food HQ partners

- Revisit governance arrangements to devise a structure that provides strong collaborative incentives to achieve a more integrated and robust business model.
- Consider what more can be done to add servicing the needs of regional business and sectors to the business model.

MBIE

- Weigh research grants in favour of collaborative models such as those aligned with Food HQ
- Establish a five year government co-funding model with current Food HQ partners.

BUSINESS PROCESS OUTSOURCING AND FOOD INNOVATION OUTSOURCING

THE OPPORTUNITY AT A GLANCE

What? – the opportunity

Why not? - obstacles

Why? – will it succeed

How ? – interventions, actions and arrangements

Cluster building:

- Introduce urban-based export-focused services industries.
- Focus on contact centres as a first step.
- Attract unutilised labour.
- Utilise IP and capability in NZ research centres.

Overcome:

- Lack of comparative advantage and detractors of contact centres – low wage industry.
- Slow pace of decision-making by clients.
- Potential flaws in the Food HQ business model.

Leverage off:

- Existing local capability.
- Either low operating costs or international capability in the region.
- NZ as a stable modern country.
- Existing labour and knowledge pool.

Act to:

- Market contact centre options to prove (disprove) there is a market.
- Focus and direct the offering of Food HQ to both national and multi-nationals.
- Renegotiate contract arrangements with government.

ENABLER: DISTRIBUTION AND TRANSPORT

WHAT? – THE ENABLER

The opportunity here is to provide a regional transport vision which aligns transport interests with development opportunities and current priorities. To a degree this is achieved within the current Regional Land Transport Plan (RLTP) but there are matters of detail that require further attention. The rest will largely be carried out by commercial interests.

The region has a clear advantage for distribution hubbing throughout the lower North Island. It is of concern that already two distinct hubs are developing – one in the north east and the other in the south west (Longburn) of Palmerston North. Volumes are such that it is unlikely two hubs can be sustained and pursuing these two options could result in the under-performance of both.

Recent refinements to the Government and New Zealand Transport Agency's transport investment framework give appropriate priority to the role of transport as an enabler of economic growth. The region's leaders may find value in continuing to search out ways to apply the elements of this framework more rigorously.

Additional rail sidings and increased use of the rail network may assist with growth in the region. Business and regional leaders, with the support of Government, should develop a united case for consideration by Kiwi Rail.

With the Manawatū's unique location as the junction for several major rail and road networks, there is opportunity for the region to lead the way to improve national supply chain efficiency and gain greater returns from adoption of a strategic approach based on a single 'freight network' rather than road and rail as separate entities.

Securing an Ohakea based 'fresh and urgent' air freight service to international markets will require a clear vision and on-going focused attention on defining and achieving achievable and incremental steps toward that vision.

The transport network

The Manawatū-Whanganui region is located at the centre point of five road and rail networks which connect Hawke's Bay, Wellington, Taranaki and other parts of region located to the North. Palmerston North is near the centre of the region's transport network. It is located close to State Highways 1, 2 and 3.

State Highway 1 to the North provides a link from the Region to the Port of Tauranga. Tauranga is New Zealand's largest port in terms of export cargo volume. State Highway 1 also provides road linkage to the 'Golden Triangle' regions of Auckland, Bay of Plenty and Waikato. These regions account for around two-thirds of New Zealand's freight movements and have over half of New Zealand's population.

Marton connects rail lines linking Wellington and Taranaki. Businesses producing freight in Palmerston North and surrounds are also able to take advantage of the rail link to the Hawke's Bay.

Palmerston North has a significant domestic airport. This includes direct, but limited freight links to Auckland International Airport. It is one of only three airports in New Zealand which operate on a 24 hour basis. Ohakea Defence Airbase is capable of servicing wide bodied jets. Its current focus is as an air-force training facility.

The region has an extensive network of local roads primarily to service the needs of the agricultural and forestry sector. A market of up to 700,000 people[71] will be created within little more than one hour's drive from Levin and surrounds. This will be assisted by the completion of Transmission Gully and Kapiti Expressway routes to Wellington which are being upgraded as part of the 'Roads of National Significance' programme. Their completion will provide significant market opportunities for Levin businesses, particularly those related to fresh food and elderly care/retirement living.

The strategic location of Palmerston North and the central location of the region as a whole is such that it has become a key staging point and distribution centre for high value imported and domestic freight between Auckland and Wellington and to a degree, also between Auckland and the South Island.

Distribution and Hubbing

The region's location and potential to quickly package and redistribute produce places it in a strong position to capitalise on further transport hubbing (collection, amassing product for volume and redistribution) and the associated growth opportunities which depend for their success on the:

- Reduced distance of travel, traffic volumes and the interconnectivity of the flow of traffic
- Need to be more competitive than any other player when it comes to 'input' costs.

An example of recent investment to capitalise on the region's hubbing capacity is the announcement in 2014 of an inland port and intermodal freight hub at Longburn, just south of Palmerston North. This is a joint venture agreement with the Ports of Auckland, Napier and Icepak. This facility is reusing the old Longburn freezing works site which sits on the North Island Main Trunk Line and is adjacent to State Highway 56. Cool stores and container handling facilities have been established.

Toyota, EziBuy, Food Stuffs and other agencies have located their hubbing ventures in an area located to the north east of Palmerston North, close to the airport at Milson but without direct rail siding services. To a degree there is competition between this site and the Longburn site.

In addition, we have been informed that a third land-based logistics partnership is also looking at improving ways to move freight regionally and nationally.

Whanganui is also growing as a transport hubbing centre and Marton is the site used by one distributor with potential for expansion as a site for food and grain/stock-food distribution. Whanganui's hubbing capacity is based on the Heads Road Industrial Estate. Freight volumes are, in part, facilitated by a daily return freight train service to Wellington's CentrePort.

[71] Pers.comm., Brendan Duffy, Mayor, Horowhenua District Council, November 2014

This raises the concern about multiple hubs alluded to earlier. Regional transport planners need to be mindful of this issue with an evidence-based approach.

PRIMARY SECTOR PRODUCT DISTRIBUTION

The regional economy is largely based on production from the primary sector. The region has the largest number of stock movements in the country.[72] The establishment of a resilient road and rail network is therefore critical.

A high percentage of beef and lamb production from throughout the region is first transported to meat processing facilities located throughout the region.[73] Most of this processed product then makes its way out of the region for export overseas. Distribution also occurs to domestic markets located in other parts of New Zealand.

About 44% of processed meat in New Zealand[74] is conveyed by rail around New Zealand mostly for export through the Ports of Tauranga or Napier. Most meat processing plants have railway sidings. Movement of milk and dairy products occurs from dairy farms to processing plants located at Pahiatua, Palmerston North and Whareroa near Hawera in Taranaki. Processed milk products are mostly transported by rail for export from the Port of Tauranga.[75]

Rail is used to convey milk from collection facilities at Oringi and Longburn to the Fonterra Whareroa plant in Hawera. There is also a large counter flow of export product from Hawera to the Ports of Napier and Tauranga. In 2015, the upgrade of Fonterra's Pahiatua milk processing facility will be completed. This will include construction of a new milk powder dryer. All the milk produced in the eastern North Island from Hawke's Bay to Wellington will then be converted to milk powder at this upgraded Pahiatua facility. This will negate the need for it to be transported to Hawera by rail.

The reopening of the Castlecliff branch rail line in May 2011 provided direct access to Open Country Dairy's (OCD) Whanganui factory. Construction by OCD of a second dryer will be completed at the Whanganui site in 2015. Completion of this facility is expected to result in increased milk tanker movements on State Highway 3 and on local roads near Whanganui to reflect the greater volume of milk being processed at this site. Some of this extra volume will displace milk collected by Fonterra for processing at the Whareroa plant. Increased volumes of OCD milk product will also be transported from Whanganui to Port Taranaki at New Plymouth for export.

Forestry is likely to contribute to increased demands on the transport network in the period between 2018-2030. Rangitikei, Ruapehu and Whanganui Districts account for more than 75% of the total land area planted with radiata pine in the region and 7% of the

[72] See draft Manawatū-Whanganui Regional Land Transport Plan

[73] Information about the meat processors in the region is provided in the section of this report addressing the opportunities associated with the beef and lamb sector

[74] National Freight Demand Study, Deloitte et al. Prepared for the Ministry of Transport, 2014

[75] Fonterra has an arrangement with meat processors known as 'Kotahi' which is designed to capitalize on the benefits arising from economies of scale by using joint in-land port facilities and common shipping and port facilities

area in exotic tree plantation for harvest nation-wide (128,000 hectares[76]). Most of the region's logs will be transported via road (over 90% nationally), particularly using local roads, but in some instances they will be transported by rail. Most of the region's logs are exported via the Ports of Napier and Wellington (CentrePort).

PEOPLE MOVEMENT

Palmerston North City and Manawatū District are experiencing modest population growth. This will need to be accommodated by providing road improvements suited to the needs of persons commuting between their place of residence and their place of work. This includes growth in rural residential living throughout the Manawatū District and the growth of residential living in the Aokautere area to the East of the Manawatū River.

Conversely, population decline in the other parts of the region will bring about its own set of transport problems, including the capacity of a declining ratepayer base to fund necessary road improvements.

A percentage of both freight and people movement in the Manawatū-Whanganui region is between adjacent regions. This has placed an increased demand on roads which by-pass Palmerston North. It has also drawn the attention of the region's transport planners to the capacity of roads in adjacent regions. The related need is to avoid 'pinch points' at any location used as part of the journey between the origin and destination of freight and people.

Due to its central location and ease of access, Palmerston North is regularly selected as a domestic conference and sporting venue. Domestic and international visitors are as important, or perhaps more important to the economies of Ruapehu and Whanganui Districts as they are to other locations in the region. These other districts have major recreational attractions associated with the volcanic plateau and Whanganui National Park.

The Ruapehu and Whanganui Districts also have two of the 'Great Rides' that make up part of the National Cycle ways Network 'Nga Haeranga'. These are the 'Timber Trail' near Taumaranui and the 'Mountains to Sea' cycle trail which traverses the Whanganui River. Increased domestic tourism using mountain biking trails in the Ruapehu District is contributing to the 365 day use of roads and accommodation in that area. Previously winter skiing was the dominant attraction.

State Highway 43 ('The Forgotten Highway') is now functioning as an emerging tourist route between Stratford and Ruapehu Districts.

[76] National Freight Demand Study, Deloitte et al. Prepared for the Ministry of Transport, 2014

WHY

Summary of the rationale

The rationale for enablers is a little different from that of opportunities. We consider transport and distribution to be key enablers because they go to the heart of the present and long term future of Manawatū-Whanganui as an exporting area. Logistics and supply chains are absolutely vital to economic growth because they:

- Unlock new sites for development such as logging opportunities.
- Provide access to new, better or cheaper resources and thereby lower the cost of goods manufactured in New Zealand and increase the nation's competiveness.
- Allow access to a wider labour market and, as a consequence, potentially lower labour costs.
- Open up new and larger markets.
- Allow economies of scale.
- Generally make New Zealand more attractive as a place to live, work, play or visit.

Hubbing requires particular attention in the region because:

- The region is well placed geographically to be a hubbing centre.
- Effective hubbing could be an accelerator for the economy.
- Ineffective, duplicated or inefficient hubbing could be a handbrake for the economy.
- The region itself is widespread and requires a rational transport and hubbing network to operate more strongly as a unit.

WHY NOT?

A number of road transport issues and challenges have been identified in the draft Manawatū-Whanganui Regional Land Transport Plan (Manawatū-Whanganui RLTP) as matters requiring on-going attention. Priority will need to be given to the resolution of these matters if the full growth potential of the region is be capitalized upon. They include the need for better:

- Integration of land use and transport planning to produce a more resilient network.
- Provision of a more structured road hierarchy to accommodate anticipated future freight growth – with designated roads being designed to be fit for the purpose for which they are used.
- Use of the region's advantages as a freight distribution centre.
- Linkages to and within other adjacent regions.

- Investment in secondary strategic links that play a role as east-west links.[77]
- Provision for an appropriate network of tourism routes.
- Provision for anticipated population and economic growth[78] in the Palmerston North and Manawatū area.
- Provision for road safety in the region and better provision for the needs of pedestrians and cyclists.
- Maintenance and on-going improvements to the region's rural road network, particularly with increased forest harvesting, agricultural intensification and potential increases in tourism traffic.
- Mitigation of the adverse environmental effects arising from construction and use of the regional transport system.

Progress on the above matters implies a need for focused collaboration between all of the region's local authorities and the New Zealand Transport Agency. It also implies a need for priority to be given to interventions which will enable the growth potential of the region to be fully unlocked.

It is also apparent – as mentioned previously – that the hubbing/redistribution industry has established itself within the region without the benefit of a clear overall 'optimising' strategy. Individual investments have been made in property with the expectation that road and rail links will come to them rather than the other way around.

FILTERS SUMMARY

Transport is a key enabler in many aspects of the region's economy and it will be critical to unlocking the opportunities identified in this study. Enablers are not designed to produce economic growth themselves but to facilitate growth for sectors and industries. There is, however, no doubt that the growth of hubbing services will provide jobs. The key rationale for it is economic efficiency, that is, the quick and cost-effective movement of products and produce (and tourists) in and out of the region.

This requires a clear vision, sound research and courage to support the options that are in the long term best interest of the region. The decisions required have been clearly laid out in this section.

[77] These routes also perform as alternative routes in the event of road closure and as roads for tourism/economic development purposes. The lengthy period of closure of the Manawatū Gorge road has made the region's leaders very conscious of the need to put in place contingency measures to overcome the effect of significant natural events on transport networks.

[78] The challenges listed in the Manawatū-Whanganui RLTP also include the need to better cater for the transport demands of smaller households, urbanisation, an ageing population and the need to ensure that land use planning fully reflects the associated demand for an efficient transport network.

HOW?

Objective: to create certainty and maximise productivity around transport and distribution, especially hubbing, so that the commercial sector can develop opportunities in a firm and sure context.

Strategic Intervention: that local government releases a clear statement on their position and actions on the matters listed as key interventions at the end of this section with a focus on integrating current actions with the opportunities identified in this Study.

TRANSPORT OBJECTIVES AND INTERVENTIONS IDENTIFIED IN DRAFT REGIONAL LAND TRANSPORT PLAN (RLTP)

The draft Manawatū-Whanganui RLTP is well constructed and in our view clearly anticipates the future transport needs of the region, particularly those which will support growth in the region's economy. The RLTP outlines a number of strategic priorities and provides detailed programmes of work and interventions to deliver on them. The growth related priorities include:[79]

- Enhancing freight efficiency across the region.
- Enhancing the strategic advantage of the freight hubbing role played by the region.
- Improving the connectivity of key strategic routes.[80]
- Establishing a resilient and multi modal transport system.
- Providing for efficient road maintenance and delivery.

A set of prioritised activities have been identified within the region's RLTP to deliver on the above priorities. Of particularly importance is the upgrade of the Whirikino Trestle bridge (the long bridge over the Manawatū River near Foxton) to avoid the need for heavy vehicles to bypass this route.

The RLTP also gives emphasis to the importance of maintaining the existing road network of the region at its current level of service. New Zealand Transport Authority's (NZTA) November 2014 decisions about Funding Assistance Rates (FAR) for each of the region's districts, and the region as a whole, will make a valued contribution to the achievement of this objective[81]. Several key informants have informed us that these assistance rates appropriately recognise the varying ability of ratepayers to meet their share of these costs and that the new rates have been well received.

[79] This list is a paraphrased summary of the information provided in the Manawatū-Whanganui Regional Long Term Plan with an emphasis toward those aspects which may contribute to regional growth

[80] This priority reflects the fact that the Region serves as the crossroads for much of the north-south and east-west traffic in the lower North Island

[81] Most districts in the region will receive minor to moderate increases in their financial assistance rate.

VIEWS OF KEY INFORMANTS

Most of the growth related transport issues of interest and concern to the key informants interviewed as part of the Study have been captured within the RLTP. Other matters of detail raised by key informants are included in the sub-regional profiles included in Section Eight: Sub-regional Profiles.

OHAKEA

Another opportunity which has received considerable attention over the last few years by Manawatū-Whanganui leaders has been the viability of using the Ohakea Airbase for the wide bodied jet transport of fresh produce directly to international markets. This is viewed by regional leaders as remaining a live opportunity deserving of on-going focus. Securing such a service – even in the longer term – will require a clear vision and on-going focused attention on achievement of a number of clearly defined and incremental steps. The challenges are:

- The need to amass sufficient volume of appropriate product to fill a cargo jet on a regular basis, including back fill.
- Establishing export volumes in key areas such as fresh vegetables that are sufficient to sustain such a service either seasonally or on a year-round basis.
- Establishing a service which is distinctly more competitive than the comparative speed, efficiency and competitiveness of transporting product by road or domestic air from the Palmerston North airport and or by road to Auckland airport for export to the multitude of destinations serviced by this airport.
- The need to establish logistics and storage infrastructure – including cool stores, at Ohakea.
- Accommodating the priority currently accorded to use of Ohakea for defence purposes.
- The need to adopt a 'market back' approach[82].

Many of the opportunities identified in this Growth Study focus on conveying products, often perishable, to international markets, or accessing remote areas for tourism.
These recommendations hinge on logistics and the transport network being efficient and contemporary.

[82] A 'Market back' approach gives priority to securing markets and then working back down the supply chain to ensure that every link is secured before generating more product locally. Stated more precisely, the message is 'don't generate additional export product without a clear market opportunity and / or a globally competitive price'.

FURTHER CAPITALISING ON HUBBING AND DISTRIBUTION CAPACITY

As already observed, there is a need to seriously consider the costs and benefits of consolidating and better integrating the region's existing freight hubbing capacity. In particular, the question to be addressed is whether better value could be achieved by focusing Palmerston North hubbing capacity at just one site rather than two and by viewing sites at Whanganui and Marton as part of a 'feeder' network [83]as well as sites in their own right.

A single hubbing site may generate additional benefits as a result of the:

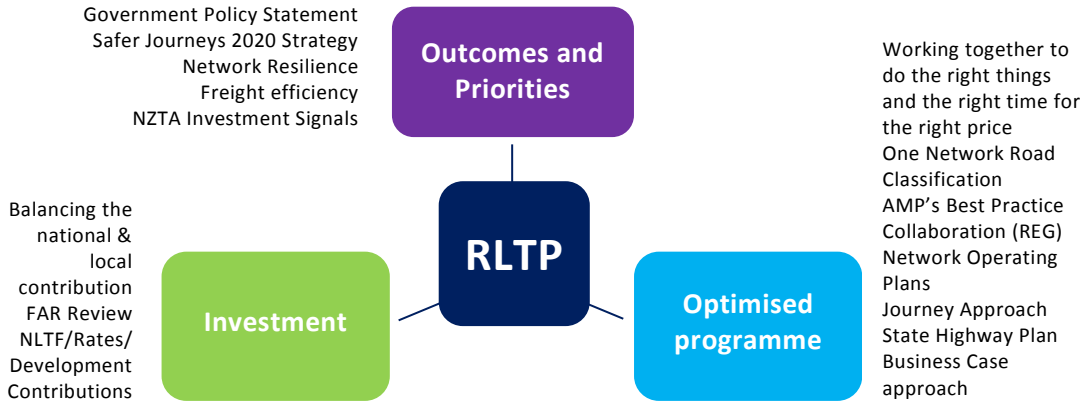
- Increased freight volumes and therefore improved freight logistics capacity and efficiency (faster flow of product).
- Dedicated and better planned road and rail services[84] and better related District Plan provisions.
- Increasing investment in the region from the National Land Transport Fund.

Any changes of policy obviously need to be evidence-based.

Optimising access to available funding

NZTA have suggested to us that the key to gaining access to additional transport funding is to understand and optimise the transport investment opportunities inherent in the current Government and NZTA transport investment paradigm (see Figure 35, below). Particular attention has been drawn to the following matters:

FIGURE 35: TRANSPORT INVESTMENT FUNDING PARADIGM[85]



[83] Noting that the competitive advantage of preferred hubbing sites arises from reducing the number of 'touches' on any item of freight as it moves from source to destination.

[84] If the Milson site was to be the preferred site, then there may also be merit in considering the cost benefit of constructing a dedicated rail siding to this site and also the designation of defined roads as being 'freight use dominant'.

[85] This diagram has been used by NZTA as part of its engagement programme with local authorities throughout New Zealand.

Other initiatives

Transport investment framework: recent refinements to the transport investment framework applied by Government and the NZTA give appropriate priority to the role of transport as an enabler of economic growth. The region's leaders may find value in applying some of the elements of this framework in more detail,[86] than has been the case in the past, to support a case for increased levels of expenditure in the future.

Rail sidings: additional rail sidings and increased use of the rail network may assist with growth in the region. Business and regional leaders, with the support of Government, should develop a united case for consideration by Kiwi Rail.

Road and rail integration: there is further opportunity to maximize production returns by adopting a national transport management system which better integrates road and rail. With the Manawatū's unique location as the junction for several major rail and road networks, there is opportunity for the region to lead the way to improve national supply chain efficiency and returns from adoption of a strategic approach based on a single 'freight network' rather than road and rail as separate entities. The region's leaders should offer their region as a case study to prove the efficiency gains which could be achieved from higher levels of integration - in association with the region's locational hubbing advantages.

Hubbing capacity: further work is required to explore what more could be gained by growing and rationalising the region's hubbing capacity. As a way of resolving this challenge, a dedicated study led by the Regional Council may be required with a focus on the comparative merit of having one, two, three or more hubbing sites in the region and how they may relate to each other. In addition, further guidance is required about whether the growth of hubbing capacity should be market led or alternatively, whether the establishment of additional capacity would be 'the catalyst' for that growth. Moreover, given the current sunk investment, the study should identify how future growth may be moulded to optimise the value of current investment. The overall objective would be to seek out ways to maximize the speed and efficiency of the movement of freight to, from and within the region.

Air freight: securing an Ohakea based 'fresh and urgent' air freight service to international markets will require a clear vision and on-going focused attention on defining and achieving clearly defined, achievable and incremental steps toward that vision. This would be best achieved by a consortium of local authority leaders working with fresh food producers and the Ministry of Defence to prepare a development and growth plan for fresh food/vegetable distribution with the use of wide body jets to Asia on a daily basis from Ohakea defined as the big goal.

[86] This equally applies to the results of the Joint Transportation Study carried out with NZTA.

Relevant current central government initiatives:

- Funding support through the National Land Transport Programme including:
  - Improving resilience of Manawatū-Gorge (resilience for the SH3, East – West, corridor).
  - Replacement of Whakaruatapu Bridge.
  - Otaki to Levin section of the Wellington Northern Corridor.
  - High Performance Motor Vehicles (HPMV) programmes SH1, SH3, SH56 and SH57.
  - SH2 Otamaroho Curves passing lane extension and realignment.
  - SH57 Shannon North Seal Widening.
- Regional Roading Programme - Whirokino Trestle and Manawatū River Bridges upgrades.
- Consideration is being given to extending the 30-year transport view for the Greater Palmerston North area to include the whole Manawatu-Whanganui region.
- Government Policy Statement on Land Transport Funding (2015).
- Funding Assistance Rate (FAR) review.

INTERVENTION SUMMARY

Manawatū-Whanganui Regional Land Transport Committee:

- Secure additional funds for investment in regional transport projects by further developing understanding and then more rigorously applying the NZTA/Government transport investment paradigm.
- Work with business leaders to develop and apply a case to Kiwi Rail for additional rail sidings in Marton, Whanganui and at the north east Palmerston North hubbing centre.
- Commission research to optimise and rationalise hubbing capacity.
- Develop a business case to optimise integration between road and rail transport modes.
- Work with food producers to develop a transport strategy for the export of fresh food.
- Work with NZTA, Spearhead and the private sector to continue to refine and achieve an integrated overview of the whole transport system, particularly the road and rail freight routes, and road and tourist routes (including cycle ways).

TRANSPORT AND DISTRIBUTION

THE ENABLER AT A GLANCE

What? – the opportunity

Rationality and certainty:

- Absolute clarity on transport and hubbing policy.
- Communication of that to private sector operators.
- Efficiency of distribution.

Overcome:

- Fragmentation.
- Small scale mindset.
- Lack of regional vision.

Why not? - obstacles

Why? – will it succeed

Leverage off:

- Existing hub arrangements.
- National networks.
- NZTA policies and investments.

Act to:

- Set priorities.
- Build a regional view.
- Gain acceptance of that view.
- Provide certainty.

How ? – interventions, actions and arrangements

ENABLER: PRODUCTIVITY OF MĀORI LAND

WHAT? – THE OPPORTUNITY

The Manawatū-Whanganui region has a comparatively large area of Māori land at 190,000 hectares. The major strategic challenge faced by a Māori land owner and the region is to optimise productive use of the land. It is treated as an enabler in this Study because many of the development opportunities canvassed in this Study such as sheep and beef, land use intensification, Mānuka honey and tourism would all benefit Māori land. The challenge is applying them to these land holdings. This challenge could be met with the assistance of:

- Better use of technology and information.
- Larger scale investment in integrated value chains.
- Access to capital to manage debt and expand land holdings.
- Capitalising on the advantages of adopting an integrated or 'group' approach across several holdings and owners.
- Implementation of the findings of the Report of Te Ture Whenua Māori Act 1993 Review Panel 2014.

Extent of Māori land

The Manawatū-Whanganui region is New Zealand's second largest regional area by land mass. Within this area there are prime opportunities for improving land productivity throughout the entire region no matter whom that land is owned by. Many of these opportunities have been highlighted earlier in this report with reference to sheep and beef, land use intensification, Mānuka honey, tourism and even aged care.

There are approximately 190,000 hectares of Māori owned freehold land in the Manawatū-Whanganui region

The opportunity for Māori through the development and sustainable utilisation of Māori land is very significant. The significance of these opportunities is documented in studies undertaken by Te Puni Kōkiri (TPK[87]) and more recently, by Pricewaterhouse Coopers (PwC[88]).

[87] Owner Aspirations Regarding the Utilisation of Māori Land', a report prepared for Te Puni Kōkori, April 2011.

[88] These PwC reports document the scale and cost benefit of interventions to unlock the potential of Māori freehold land. They may be found at https://www.mpi.govt.nz/document-vault/4963

There are approximately 190,000 hectares of Māori owned freehold land in the Manawatū-Whanganui region (see figure 36). Of the 190,000 hectares 127,000 hectares has land use capability falling into classes six (67,000h) and seven (60,000h).

Utilisation of Māori land for productive purposes is limited by various factors which include (but are not limited to) the viability and quality of the land and the lack of knowledge around how best to use that land. We have considered this fact in our recommended opportunities such as Mānuka honey, sheep and beef farming and tourism.

Nick Roskruge (2014) estimates that 20% of Māori land nationally is well managed, 40% is under-performing and 40% is underused. He says that current Māori farmland is returning $750m pa, the short term potential return from Māori land is $6 billion and about 15,000 Māori are employed in the farming sector. From these figures it can be assumed that there is considerable underutilised potential in the Manawatū-Whanganui region.

He also suggested that:[89]

- Many owners of Māori land are not aware of the opportunities provided by that land.
- Land holdings lack governance arrangements to enable quality decisions.
- Absence of good information.
- Need for skill development of land users.

Treaty Settlements

All iwi within the Manawatū – Whanganui region are currently either engaged in Treaty Settlement negotiations with the Crown, have agreed to settlement in principle (AIP) or have received full and final settlement. Two iwi within the region have received full and final settlement, those being Ngati Apa and Ngati Ruanui Kitahi. These settlements provide a substantial capital base for investment which could contribute to industries that support the development of Māori land.

The recent Whanganui River Settlement – Te Awa Tupua, may generate investment decisions with a value of $120 million into the Whanganui River catchment and beyond, to the benefit of the people of that area, including iwi groupings and the wider Whanganui River community. The Whanganui River area is a prime site for the development of tourism with strong cultural overtones.

The lack of urban development and the rural nature of the Manawatū-Whanganui region mean that a portion of likely Treaty settlement investment will be toward the better use of land and water. This is quite different to the situation facing iwi in other regions such as those in Wellington and Auckland where economic growth opportunities primarily lie in ownership of commercial lands and in urban/city based developments[90]. The finalisation of treaty settlements in the region will provide a significant resource base for Māori iwi and hapū to realise land use development opportunities. Bringing all suitable Māori

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http://www.mpi.govt.nz/document-vault/4960, http://www.mpi.govt.nz/document-vault/4957, http://www.mpi.govt.nz/document-vault/4969,

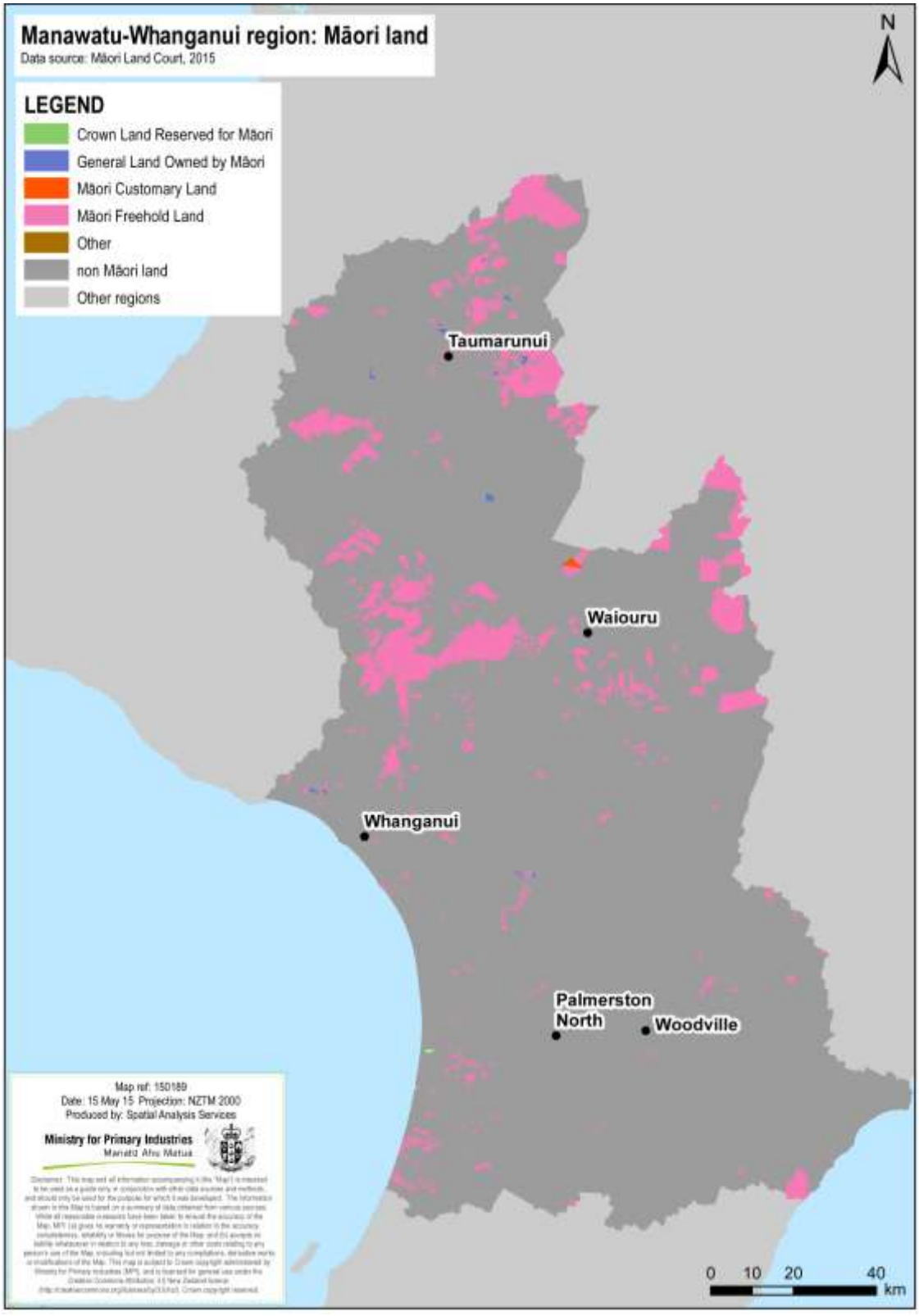
http://www.mpi.govt.nz/document-vault/4966

[89] Quoted in the Dominion Post 30 October 2014 and in an interview with Dr Nick Roskruge, Institute of Natural Resources, Massey University.

[90] City based economic growth opportunities will also be a focus of iwi treaty settlement investment assessment.

freehold land into production, improving the productivity levels of other land and changing the land use on defined areas to other more productive uses, will significantly increase the contribution of Māori freehold land to the Manawatū-Whanganui economy.

FIGURE 36 LOCATION OF MĀORI OWNED FREEHOLD LAND



Māori Values

Māori tradition highlights that land or whenua has a direct association with them because of their relationship to papatuanuku (earth mother). This relationship provides a base for Māori cultural values and principles and includes emphasis toward 'ownership in perpetuity' and an associated willingness to invest with long term sustainability in mind.

The regional increase in GDP of the agriculture changes on Māori land could be $181 million and the forestry changes could generate GDP of a further $14.2 million.

As an example of the above philosophy, the people of the Whanganui River have a prominent whakatauki or proverb which states 'ko ahau ko te awa, ko te awa ko ahau' meaning, 'I am the river, the river is me'. This expression emphasises a Māori world view which brings together the genealogical relationships between Māori as people and the environment around them.

More particularly, this relationship is informed by the behavioural actions of iwi and hapū, which are built upon values, traditions and skills that relate directly to their locality. These relationships link directly to core Māori values and principles such as kaitiakitanga (stewardship), manaakitanga (care and consideration of) and utu (reciprocity).

The individuals talked to as part of the process of compiling information for this Study have emphasised that consideration of these key cultural values, among other things, is critical as they will more than likely play a considerable role in making decisions about how tools and methods for prosperity are used to increase the productivity of Māori land.

In the Manawatū-Whanganui region, PwC suggest 63,000 hectares of Māori freehold land used for sheep and beef and 10,000 hectares of dairy land could also increase its productivity. In addition, 11,915 hectares of forest and unproductive land could be converted to sheep and beef farming and 4,226 hectares could be converted from other uses to dairy.

The value-add of changing the land use applied to Māori freehold land in the Manawatū-Whanganui region would in this way be $42 million (stabilised year). A total of 272 new jobs could be created. A net increase of 5,440 forest land could generate $16 million extra per annum (stabilised year) and 12 additional jobs.

WHY?

Rationale

- There is a large amount of Māori freehold land in the region.
- Development of Māori freehold land will not only bring economic value to the owners, but there would be likely flow-ons into the wider Māori community such as increased employment.
- Work is being undertaken nationally which could be capitalised upon regionally to resolve some of the legal and ownership impediments to overcome the difficulties of development.
- There is interest and commitment of iwi to its development.

WHY NOT?

Key informants and our own research suggest that the constraints affecting use of Māori land relate to[91]:

- Low levels of use of technology and information.
- Lack of scale of investment in integrated value chains.
- Constrained access to capital to manage debt and expand land holdings.
- Difficulty of accessing new capital and equity partners.
- Difficulty of accessing skilled external advice.
- Failure to make the best use of land use capability at all locations.
- Absence of planning for succession and failure to lock in preferred arrangements early enough in the life of current managers / owners to prevent a loss of momentum.
- Inadequate fertiliser application.
- Poor genetic quality of the stock.
- Failure to measure performance against clear benchmarks established by farmers on similar country and failure to adopt the performance of the best.
- Poor access to transport networks.
- Poor access to high speed broadband as a means of staying abreast of good advice and information.
- Lack of a skilled and motivated workforce.
- Need for more training and access to more workers with a stronger knowledge of the particular stock, feed and land issues faced in any one area.
- Lack of awareness of all owners with an interest in the development of Māori land of the opportunities provided by that Māori land.
- Enabling governance structures which do not assist quality decision making.
- Absence of good information sharing.
- Challenge of getting the right relationship between owners and the land including the difficulty of finding the right balance between sustainability concerns and the production aspirations of other owners.
- Finding and or developing the right skills amongst iwi at all levels of input – "the good people are spread too thinly on the ground".

While this list of limitations may appear daunting our assessment is that most items amount to straightforward developmental challenges that face anyone wanting to develop land, though more challenging for much Māori land because of the lack of historical development. Core amongst all of the above challenges is the need to build Māori

[91] When compared against the challenges faced by other land owners – although many of these challenges also apply to other hill country farmers.

capability at operational, management and governance levels, again, similar to any agricultural land.

FILTERS SUMMARY

Filtering of enablers is a different matter to filtering opportunities. We have assessed the best approach to development of Māori land is to create real land use options in the hope that will drive the need for solutions to other issues such as ownership and legal problems. We applied our filters in the following way:

Impact: The extent of Māori land and Treaty Settlements in the region has the potential to make a significant contribution to regional development.

Trend: Māori land is a latent natural resource. It has the potential to add growth to sector opportunities. Productivity from Māori land has the potential to contribute to the export effort particularly where the products are either agriculture or tourism-related.

Job intensity: development of the use of Māori land cannot be separated from the development of Māori skills and capabilities. There is sufficient potential in Māori land to create a substantial number of jobs depending on the land use chosen. This will only succeed if it is backed with training opportunities.

HOW?

Objective: to accelerate the conversion of under-utilised Māori land to productive use.

Strategic Intervention: for iwi to form an action or enabling team, perhaps based around governance arrangements that may arise out of this Study. This team would establish machinery for helping Māori land owners resolve land use obstacles using the opportunities identified in this Study as motivation.

How to advance the interests of Māori and Māori land has been studied in-depth and some of the ideas put forward – together with current models of action, are evaluated below.

Pricewaterhouse Coopers

PwC recommended that MPI build on current successful initiatives to roll out an intervention process to facilitate increased productivity on Māori land. More particularly, PwC and other key informants suggest adoption of the following interventions:

- Promote awareness of the case study benefits of the approach to farming Māori land adopted by Ati Hau Whanganui Incorporation (see below).
- Target Māori land managers with programmes designed to increase production on all hill country.
- Review and ramp up programmes to grow the base of labour skills amongst young iwi Māori.
- Define and circulate a case study model for successful Mānuka honey production on Māori land.

- Explore the cost and benefit of developing access to land locked land in Rangitikei.
- Implement the findings of the Te Ture Whenua Māori Act Review Panel.

We would endorse these recommendations. We believe there are significant opportunities in sheep and beef, land use intensification, tourism and other sectors. Interventions in these sectors following on from this Study need to have clear actions related to the development of Māori freehold land. The question is - what are the best types of structures to enable this development and connection to take place?

Ati Hau Whanganui Incorporation – a successful venture

The Ati Hau Whanganui Incorporation occupies 101,000 hectares of Māori freehold land in the Manawatū-Whanganui region. The Corporation manages seven sheep and beef properties and one dairy property plus forestry interests. These are managed as part of a single integrated unit.

The Corporation was established in 2007. Its farming interests cover an area running from Ohakune to Whanganui River in a westerly direction. They include seven sheep and one dairy farm as integrated unit.

The major strategic challenge faced by a Māori land owner[92] is to optimise productive use of the land and to take full advantage of 'uplift production opportunities' including honey and tourism. This challenge could be met with the assistance of:

- Better use of technology and information, and access to high speed rural internet.
- Larger scale of investment in integrated value chains.
- Access to capital to manage debt and expand land holding.
- Getting accountability in place for each unit of the farmed area while still capitalising on the advantages of adopting an integrated or 'group' approach across several holdings.

The challenges faced by hill country farmers generally are shared by Māori free hold land owners everywhere – with the same potential mechanisms for unlocking them[93.]

The Corporation's model could be replicated elsewhere.

The Incorporation has recently purchased Flock House station from AgResearch in partnership with fellow local farmers Hew and Roger Dalrymple. "This brings a unique combination of skills and capital to the farm and will assist to optimise opportunities."

The Corporation already has a fully integrated supply chain and are looking to expand it by establishing connections with iwi from the east coast to optimise store stock and finishing stock opportunities and to further improve the general genetic quality of their stock.

The short term focus of additional production effort will be toward additional fencing and the strategic use of fertiliser. The Incorporation is currently valuing Mānuka honey production at $300k. They want to participate in adding value to this product and supply chain by, for example, allowing the product to mature in barrels.

[92] The views which follow have been shared with us by the Ati Hau CEO Andrew Beijman, Pers. comm.

[93] See the detail provided in the earlier sheep and beef section of this report.

One key to development is to not be averse to incurring debt. A further critical element of success is to secure good governors. In the Ati Hau case the Board is and should be a force to be reckoned with. They need (and have) a wide network of valuable contacts.

Te Ranga Tupua[94] *– some thoughts on Māori land development*

Representatives of Te Ranga Tupua when spoken to said:

"Education is an economic conversation. Investment in education will provide the backbone of the country's future for iwi. Providing more education is fundamental to unlocking all development opportunities. Skilled labour is in short supply. Iwi need to partner with those with the skills to make good decisions and need to develop skills for youth to enable them to be employed on farms."

Better GIS mapping would provide information about the location of Māori freehold land. This will help to get those with an interest aligned to take advantage of development opportunities. All land based decisions must be made with sustainability in mind. These decisions must balance land and water use and environment considerations[95].

The allocation of a percent of available water to Iwi may be one way of providing additional land based opportunity.

The Whanganui Treaty settlement will provide a significant capital injection to the district. Being risk adverse means being at risk of doing nothing. Iwi need to have the courage to make the necessary investment decisions.

Research will help. Te Ranga Tupua has a fledging research unit in Whanganui. This could be used to grow understanding of Māori development opportunities.

An inland rail port or siding at Marton will provide development opportunity. Ati Hau is considering investment opportunities in this area.

Education is an economic conversation. Investment in education will provide the backbone of the country's future for iwi.

Te Puni Kōkiri – further reflections

Views reflected in Te Puni Kōkiri (TPK) 2011 report on 'Owner aspirations regarding the utilisation of Māori land' said that land use should be within the context of:

- Values associated with land as a taonga tuku such as kaitiakitanga and manaakitanga.
- Cultural connection.
- Hunting and fishing opportunities.
- Direct use rather than through lease.
- Maximal financial returns, employment and building a financial base for future generations.

[94] Te Ranga Tupua is a forum made up of representatives of iwi located in the northern part of the region.

[95] These views were strongly reinforced by iwi from the south of the Manawatū-Whanganui region as well.

- Diversification into honey and tourism etc.

The TPK report also said that the barriers to achievement of full utilisation of Māori land include:

- Absence of commonality amongst ownership groups and management entities.
- Low level of information about the land, ownership and management.
- Incompatibility of regulation including that associated with Te Ture Whenua Māori Act 1993 such as: diverse expectations of owner consensus; difficulties of working in a Trust structure; the extent to which the trust structure relies on the (in)ability to locate and engage with owners.

It noted that changes should be made to regulatory settings to:

- Better enable fulfilment of owner aspirations.
- Better match the size and potential of land blocks to governance and management structures.
- Remove barriers to the actions of those management structures and groups who are already achieving owner aspirations.
- Reduce the risks and costs e.g. rates for those owners who are unable to use their land.
- Prepare a clear menu of options for land management to match ownership and land potential.

Review Panel of Te Ture Whenua Māori Act

Views put forward in the Report of Te Ture Whenua Māori Act 1993 Review Panel 2014 also throw light on the interventions required to unlock the potential of Māori Freehold land. Their report explores four areas:

- Enabling Māori land owners to affiliate and engage with their land.
- Ensuring there are effective structures to support effective decision making.
- Making sure resources are available to make and implement decisions.
- Enabling better use of Māori land.

The Panel put forward five propositions as means to make progress on resolving the above challenges:

- Enable the utilisation of Māori land to be determined by a majority of engaged owners, rather than by all land owners by such means as: a centralised database; enabling those who choose to be actively involved to make the necessary decisions; enabling sale or lease decisions to be made on the basis of a 75% vote from all registered owners with other (land management) decisions being on the basis of 50% of engaged owners
- Enable all Māori land to be capable of utilisation through effective administration including providing clear mechanisms for external managers to be appointed to administer underutilised Māori land blocks where there is no engagement by the owners
- Enable Māori land to have effective, fit for purpose governance including making reforms to laws to prescribe the duties and obligations of Māori land governance

entities (and the alignment of these to the general law applying to similar entities) and clarify the jurisdiction of the Māori Land Court for related breaches

- Enable creation of an institutional framework to support owners of Māori land to make decisions and resolve disputes including ensuring the Māori Land Court remains an accessible judicial forum for resolving disputes that cannot be resolved by mediation
- Avoid excessive fragmentation of Māori land by creating a transparent registration process, developing legislative provisions which facilitate succession with minimal compliance requirements and reducing barriers caused by excessive fragmentation

Our view about the next steps

Our view is that decisions and actions will begin to flow when there are immediate and realistic opportunities for use of Māori land that the owners are able to consider. These would include the uses already mentioned as part of this Study – increases in beef and sheep productivity, land use intensification, Mānuka honey, tourism, and others.

We have noted in each of these sections of this Study that consideration should be given to utilisation of Māori land. It is our hope that the parties involved will take these recommendations and act on them.

We believe that if there are real development opportunities being presented to Māori owners that this will provide motivation for them to solve some of the issues raised in this section of the report and which impede progress. Conversations over opportunities are the best conversations to be having because there is the potential of an outcome.

This means that as part of the work-up of each of those opportunities specific consideration needs to be given to the potential use of Māori land or investment in the opportunities from Settlement money giving Māori a stake in the development of their region.

There is a strong case for an iwi-led initiative as part of the programme flowing out of this Study to provide support and advice to landowners who are contemplating opportunities but who do not know how to deal with the ownership and legal issues facing them. Such a service could draw on national remedies outlined in the Act and central governmental support. Then, perhaps, the combined action of their support and generation of opportunities will achieve the breakthrough that we are all seeking.

Such an iwi-led group should have a direct involvement in the institutions and arrangements set up to carry the recommendations of the Study forward. This would serve to keep the needs of Māori land in front of everyone involved and provide opportunities for formal linkage. That way, case studies could be advanced and this may create momentum across the whole area of Māori land in the region.

Relevant current central government initiatives:

- Māori Agribusiness: Pathway to Increased Productivity programme.
- Sustainable Farming Fund programmes including: developing farm systems across multiple properties that deliver sheep and cattle to proprietary specifications for export; developing a monitoring and benchmarking framework for the Māori pastoral sector; integrated suite of farm management and benchmarking tools to improve productivity and profitability for Māori agribusiness.
- He Kai Kei Aku Ringa: Crown-Māori Economic Growth Partnership.
- Te Pūnaha Hiringa: Māori Innovation Fund; Te Kakenga Ngātahi i te Ara Poutama - piloting Hono Framework, new generation farm systems and social return on investment models with Māori landowners in the Ohakea Plains. Pilot to collectively determine best sustainable use of landholdings that balance Rangitikei River with long-term economic, social and cultural goals.
- Te Pūnaha Hihiko Vision Mātauranga Capability Fund.
- Treaty Settlements currently being progressed.
- Māori ICT Development Fund - support enhanced use of ICT as an input into Māori business.
- Rural broadband initiative and further roll-out of ultra-fast broadband– creating a platform for adoption of technology in the primary industries.

INTERVENTIONS SUMMARY

TPK/MBIE/MPI and iwi leaders from the region:

- Support an iwi led initiative to provide advice to Māori landowners which helps resolve decisions about development options and ownership and legal challenges.
- Provide for the direct involvement of iwi in the arrangements to be established to implement the findings of this Study.
- Give particular consideration to what more can be done to build the farm based skills of Māori.
- Ensure consideration surrounding the use of Māori land is part of the thinking of every team working on relevant Opportunities following the completion of this Study.
- Take account of funds earmarked in the 2015 Budget relevant to the development of Māori land.

PRODUCTIVITY OF MAORI LAND

THE ENABLER AT A GLANCE

What? – the opportunity

Why? – will it succeed

Why not? - obstacles

How ? – interventions, actions and arrangements

Combined action:

- To increase productivity and wealth to iwi.
- To present land development opportunities to land owners and iwi.
- To provide a compelling reason for action.

Overcome:

- Sense of difficulty involved in any change.
- Lack of motivation to seek change on such a complicated issue.
- Governance weaknesses.
- Fear of debt.
- Lack of ambition.

Leverage off:

- Large amount of land available.
- Partner industries, e.g. tourism and honey.
- The momentum created by this Study.
- Changes to the Act and Government support.
- Improved rural internet access.

Act to:

- Provide information and support to owners wanting to move farming enterprise forward.
- Form some sort of iwi agency to do this.
- Liaise closely with other "opportunity' teams.

ENABLER: GROWING BUSINESSES

WHAT? – THE OPPORTUNITY

Building the human resource whether it be in schools, in workplaces or in the governance of companies or iwi/incorporations, is vital to the success of the opportunities identified in this Study. However, it is business that will carry opportunities forward as they have the motivation and the structures to do so. The business is a core unit of economic activity and in Manawatū-Whanganui their numbers are thinning.

Strengthening the small business infrastructure in potentially productive industries requires the development of business capability. There are strong expressions of need and willingness to act, especially in particular sub-regions such as Whanganui, Horowhenua, Ruapehu and Tararua.

Any number of interventions is possible. We believe the focus should be on business leadership – governance and management to enhance performance. This is the crucial intervention required.

Loss of small business infrastructure

The Manawatū-Whanganui region, typical of New Zealand as a whole, is populated by a large number of small businesses across all sectors, and particularly in the manufacturing and primary product processing industries – the industries that are losing jobs in the region. These businesses are, by and large, family businesses, often inter-generational (with limited or no independent governance), or are low level partnerships.

The potential benefits to the region are that these enterprises usually or currently have the potential to add value to commodities which, when considering the larger picture of the New Zealand and regional economy, is an important element of the infrastructure for creating a more strongly value-added economy.

Using the Statistics NZ dataset, the position of small businesses in the region can be assessed. The focus here is on manufacturing and processing (agricultural and non-agricultural). In 2004 – ten years ago – these types of businesses in the region represented 5.3% of these businesses nationally. At the same time they represented 5.4% of employment. However, in 2014 a quite different picture has emerged. The percentage of New Zealand business has fallen to 4.8% and employment had also fallen to a similar number.

This might not seem a lot, but measured against the whole of New Zealand it is very significant. In that period the country had grown significantly in most respects but small business activity in the region appears to have fallen.

This pattern of reduction of activity suggests that the small business backbone of the region comprising productive industries is gradually contracting. This aligns with the information we received directly from a great many industry informants (see sub-regional qualitative data in the Sub-Regional Profiles section in this Study).

These informants talked of two phenomena: the lack of replacements as businesses have moved offshore (particularly manufacturing businesses), and the lack of growth in existing businesses. Some portrayed this as portions of inability, unwillingness and lack of courage of many business people to take their business ahead, expand and chase new opportunities, especially in the export market. It certainly reflects the inability or unwillingness to modernise their offering any more than they had to in the light of global pressures.

By way of comparison, a region like Southland, which has at times struggled against the tyranny of distance and climate, has achieved growth and has been able to grow and streamline many of its local businesses. This is a state of mind rather than a state of the economy.

As further evidence that it is a mind-set issue, we were told by informants from Horowhenua where there are textile enterprises of various types which have carved out an on-going living after the massive shift of such manufacturing off-shore to Asia. Some of these companies have addressed the problem and found a niche which involves production of short runs requiring quick retooling and an adaptable and multi-skilled workforce. Asian producers are not interested in short runs because of the costs involved in constant retooling. There is evidence of companies in the agriculture sector achieving similar advancement through clever thinking and committed effort.

Lack of business management skills

This situation is not unlike what is prevalent in the rural sector, and dealt with separately in this Study, where some farmers are performing at levels below what they may be capable of and certainly below the capability of the land they farm, even given the nutrient limits regime they are obliged to operate within. To use the phrase coined for this – there is potential to move the bell curve to a level of better performance.

Informants noted that most small business operators were immersed in their businesses, often very good businesses, on a daily basis without a wider view. Collaborative alignments are often not sought. An example was given of a galvaniser and a trailer manufacturer operating as neighbours but not taking advantage of their common interests and networks to build scale and reach.

Examples were also given of a few businesses that successfully sought outside advice and others who recruited a board of directors to provide advice and an objective view of the business. Networking and using expert advice on business development is not a luxury, it is essential if growth is to be achieved. But instead, a 'do-it-yourself' mentality appears common together with resistance to external perspectives.

Those same informants made the point that there is no shortage of innovative or adaptive thinking in terms of the 'doing' of the business, but there is a lack of vision and courage when it comes to expanding the business and grasping opportunities.

This gave us great concern because there is little value in trying to leverage opportunities as we are recommending if there is not the business environment willing to take them up and run with them.

Insularity

Distance is a tyranny with high air travel cost and time away from small business to larger cities for superior learning and networking opportunities acting as significant regional

hurdles. Numerous company owners do not have the luxury or opportunity of working on the strategic direction of the business and by default are constrained to working in it.

Many of these businesses are innovative, or have been at various stages in their lives, but many could also be characterised as insular and slow to embrace change.

The uptake of business tools and processes such as ICT, HR management skills, methods to protect unique IP and collaboration with partner industries are all areas of under-performance. The philosophy and practice of lean businesses driving value for money was not in evidence when we asked informants. Many businesses, they told us, are not well "wired". For example, they do not have websites which are today's shop window, not just for product but for talent recruitment. Such "wiring" also needs to include high speed broadband access (and its active use).

Their insular stance means that they are not connected into networks, either in their district or more broadly out into their markets. The effect is that their growth is capped. Many are underperforming in terms of what they could achieve due to a lack of business management skills, inability to attract and manage capital and fear of loss of control as the enterprise becomes larger.

What is the opportunity? More than an opportunity, there is a huge need for strategic intervention with local businesses to build their management and governance capability without which they cannot take a full role in realising growth opportunities.

Broadband access and ICT utilisation by businesses

We have not treated broadband and ICT utilisation as a separate enabler in this report. It is relevant to just about every opportunity, and sits as one critical element of the "Growing Businesses'' enabler.

Businesses increasing need to stay digitally connected to their value chain and wider business environment to stay competitive, innovate and grow market access. This requires access to high speed broadband but it often requires supporting businesses to better leverage ICT in their operations. This appears particularly important in the region where, as noted above, many businesses are very insular and lack even basic ICT tools such as websites. Broadband and digital capability is also an important enabler for many rural regional businesses in overcoming the impact of geographic isolation.

The Government has two major initiatives to deliver more reliable and faster internet to New Zealand homes, schools and businesses; the Ultra-Fast Broadband (UFB) Initiative and the Rural Broadband Initiative (RBI). Both are important in the region. The UFB Initiative aims to connect 75% of New Zealanders with fibre to their premises by the end of 2019, with peak speeds of at least 100Mbps. As of June 2014, 50% of the UFB build had been completed in Manawatū-Whanganui region. UFB connections are available in parts of Levin, Palmerston North, Fielding and Whanganui. The UFB build will be completed in Fielding and Levin in 2018; Palmerston North in 2019 and Whanganui in 2015. Infrastructure installation is moving at pace and this comes at a good time for the region.

6.0% of Manawatū-Whanganui users with access to fibre have taken up a UFB service which suggests more needs to be done to encourage broadband uptake and digital capability and to support businesses to utilise ICT across the region. For example the completion of fibre deployment in the urban areas of Whanganui has been supported by a number of initiatives by the District Council which are designed to extract maximum benefit from the deployment. These have ranged from programmes to assist businesses to

develop an on-line presence, enhancing on-line local government services and establishing a Digital Leaders Forum to search for opportunities to gain advantage from the broadband infrastructure. These programmes could be expanded to other parts of the region.

Our concern about growing businesses is not solely focused on urban enterprises. Connecting rural homes and businesses is equally important. Through the RBI it is expected that 86% of rural homes and businesses will be connected with rural broadband at peak speeds of at least 5Mbps by 2016. As of June 2014, almost 14,500 households and premises have access to new wireless broadband services and over 5,000 have access to new or improved fixed line broadband services. Again support programmes to help rural businesses utilise ICT will be important.

Expansion of the Government's existing broadband initiatives and the new Mobile Black Spot Fund will continue to provide for the enabling infrastructure to support business growth.

WHY?

Summary of the rationale

- Small and medium sized businesses are the heart of the regional (and national) economy.
- The number of such businesses is falling in the region.
- It is from these businesses that growth will come and that is not evident.
- The key to intervention is the owner or the manager and the governors or shareholders.

WHY NOT?

The reasons why not are the very reasons that have impeded progress. These include no time, too many pressures, lack of staff, too old, too tired… there is any number of presenting reasons. In our view these are excuses. Too many business managers and owners lack a vision of what they could achieve. There is also a lack of belief.

Historically training interventions into these types of situations have a low record of success because those who attend courses or seminars are generally the ones who are doing better anyway. It requires a programme of getting beside people. Online support encouraging innovation, dispersal and market engagement needs to be considered.

Intervention into business is also a complex activity. Many of the problems they identify are real and require a solution. Any effective form of intervention is difficult to undertake and even more difficult to measure for effectiveness.

FILTERS SUMMARY

This is strictly an enabler activity. It is about developing skill sets and creating enabling structures for business that allows them to be more ambitious than is currently the case. This enabler does not lend itself to our filtering mechanism.

The principal filter is that such an enabler should be tightly targeted. This should not be directed to all staff, just owners and managers. It relies on those owners and managers, if successful, carrying their learning and attitude changes through their business.

HOW?

Objective: to stem the loss of business and have them more growth-ready and growth-focused

Strategic Intervention: this is a question of starting somewhere. In Southland Venture Southland mounted a Lean Management programme. A systematic intervention targeting owners and managers has the best chance of success.

Some local authorities have been trying to identify actions as they too have experienced a strong desire to investigate and remedy the problem identified by commentators and many business owners.

The section of this report on fresh vegetables noted the hesitation of suppliers in Horowhenua and Ruapehu to push their activity into export. If a viable fresh vegetable market is to be established it will require commitment and courage, together with businesses' savvy and international networks. It will require collaboration using the power of all enterprises involved in the industry.

Others have done it. Coastal Spring Lamb in Whanganui is an example where successful domestic market initiatives are underway utilising premium positioning, and management has a strong clear vision. The same issues and opportunities are available to small scale manufacturers.

We have looked in other regions for examples. We were very impressed with the Lean Management programme[96] operated by Venture Southland. This has recruited companies into the programme over a two year period and some have achieved staggering productivity gains of up to 100%. The lowest productivity gain was 20%. This demonstrates that progress is possible.

The following approaches have been considered:

- Bringing a team of executive graduates (perhaps from Massey University) into the area to run seminars with businesses about modern business practice and opportunities.
- Encouraging local networking through new or existing institutions such as the Chambers of Commerce. Employment by councils, the chamber or the Institute of Directors of the right type of highly motivated facilitator to encourage this type of activity.
- Linkages to larger organisations operating nationally such as Turners and Growers.
- Building a voluntary cadre of advisors or engagement of board governors who could assist businesses for periods when they are developing and initiating strategy are ideas

[96] This programme helps businesses reduce costs and streamline processes to achieve better profitability.

that have all been considered. This approach has been used successfully on several occasions.[97]

- Development of online resources specific to the region.
- Exploring options whereby NZTE and local and central organisations could provide concentrated effort in the region to support export business growth. The recent Agribusiness Investment Showcase held recently at the Central North Island Fieldays is one example how business support might be accelerated in the region through short concentrated efforts.
- Supporting more companies in the region to develop products and services that have real export potential: possibly by taking advantage of NZTE's coalitions work programme.
- Developing case studies and leveraging off them for the strong set of businesses established in Whanganui, Levin and elsewhere as an example to others.
- Packaging information about competitive real estate values, schools, warehouses, skills availability, high speed optic fibre cable etc. and actively marketing the advantages of say Levin or Whanganui or Marton to targeted South Auckland and other businesses whose leases may be about to expire makes sense and will be best advanced via a very well-funded and collaborative approach. This is potentially an EDA initiative.
- Convening more Institute of Director events in the wider region (currently these are run at a very low annual frequency) for the purposes of building business governance skills in the region and potentially recruiting new external Board members capable of having a positive influence on existing businesses.

These types of strategies are at a very detailed and operational level, but they are very important enablers for the sector and industry initiatives outlined earlier in this report. In small communities modest increases in business activity can have a huge effect on employment rates and community confidence.

We believe there needs to be a programme set up in a sub-region like Horowhenua to refine the model. It could draw on many or all of the interventions in the list above. It could employ the "surge" technique which is a very good one for effecting behaviour change. If successful it could be rolled out further through the region. Such an approach would need a multi-agency, multi-channel commitment.

Relevant current central government initiatives:

- Business R&D and business development support through NZTE and Callaghan Innovation funding and programmes including export programmes such as 'Better by Capital'.
- NZTE Regional Investment Attraction programme.
- Rural broadband initiative, establishment of the Mobile Black Spot Fund and further roll-out of ultra-fast broadband – creating a platform for adoption of technology by business.

[97] A medium-sized business in Foxton established a Board of Directors and achieved considerable development as a result.

- Better Public Service result areas such as 'one-stop online shop' and 'digital transactions'.
- Inland Revenue Business Transformation programme aimed at giving small and medium-sized businesses simpler and faster ways to deal with tax.

INTERVENTIONS SUMMARY

NZTE/BUSINESS AND LOCAL AUTHORITY LEADERS:

- Further explore and apply the initiatives listed under the "How" section of this section of the Study to targeted small businesses with an initial focus on those located in Whanganui and Levin.
- Assess the possibility of accelerating broadband roll-out across the region, but especially in Whanganui and Levin to support a focused programme of growing business strength and capability.
- Invest in up skilling and digital technology for business. This could involve running similar programmes to the Whanganui District Council digital capability programmes, in other parts of the region.

GROWING BUSINESSES

THE ENABLER AT A GLANCE

What? – the opportunity

Why? – will it succeed

Why not? - obstacles

How ? – interventions, actions and arrangements

Instill a growth focus in small enterprises:

- Enable businesses to take up opportunities.
- Focus on business owner and management skills.
- Build greater resilience.
- Sharper market focus.
- Wider networks.

Overcome:

- In-the-business focus.
- Fear of risk-taking.
- Lack of networks and connections.

Leverage off:

- Desire of local leaders to build capability.
- Increasing ambition for success.
- Existing educational and informational sources.
- Enhanced digital capability.

Act to:

- Get beside businesses with potential.
- Support owners and managers with skills and advice.
- Enable businesses to take opportunities.

SECTION SEVEN: ACTIONS AND INSTITUTIONAL ARRANGEMENTS

7. ACTIONS AND INSTITUTIONAL ARRANGEMENTS

The essence of the approach we recommend to the follow-up to this Study is contained in two words:

- **Acceleration -** the premise that the opportunities described in this Study exist but they are unlikely to be realised in any timely way without intervention. The intervention must be designed to accelerate the realisation process. This report is the starting point.
- **Momentum –** the fact that these opportunities are the product of intense study and represent the best chance for harnessing focused community action on them.

The structure we propose as the means for achieving acceleration and momentum assumes public funding from ratepayers and taxpayers for a facilitating entity which is proposed in this section of the Study. We are aware that discussion is already taking place on how opportunities could be carried forward in Northland and in the Bay of Plenty. This section is a contribution to that discussion.

TWO PHASES

We envisage a two phased approach: a pre-commercial and a commercial phase. These are described as follows:

i. **Pre-commercial** – this is a developmental phase with the focus on pre-feasibility work. This work could take various forms depending on the requirement. In most cases this is likely to involve public and private involvement.
This phase would encourage participation of stakeholders, draw on their ideas and build momentum around the opportunity. It would seek to test the viability of the opportunity, prepare a detailed intervention and support strategy and identify risks. The pre-commercial phase would operate largely on public funding.

ii. **Commercial** – this is the point at which genuine investors – public or private – take over work on the opportunity as part of the realisation process. At this stage the responsibility would fall on individuals or consortia to bring together a business case that they believe is investable. In doing this they will have access to the various enabling activities supplied by such public agencies as NZTE, MPI and MBIE. It is expected that a pathway to realisation will be created to maximise the chances of success.

    The commercial phase would likely operate with a larger portion of private funding.

The implementation focus within this Study is the pre-commercial phase. It is expected that once the commercial phase is entered commercial interests will take over the initiative. It is possible that commercial interests may only take over part of the opportunity and further pre-commercial activity may be required in other areas.

FEATURES

The following characteristics should permeate the thinking about implementation:

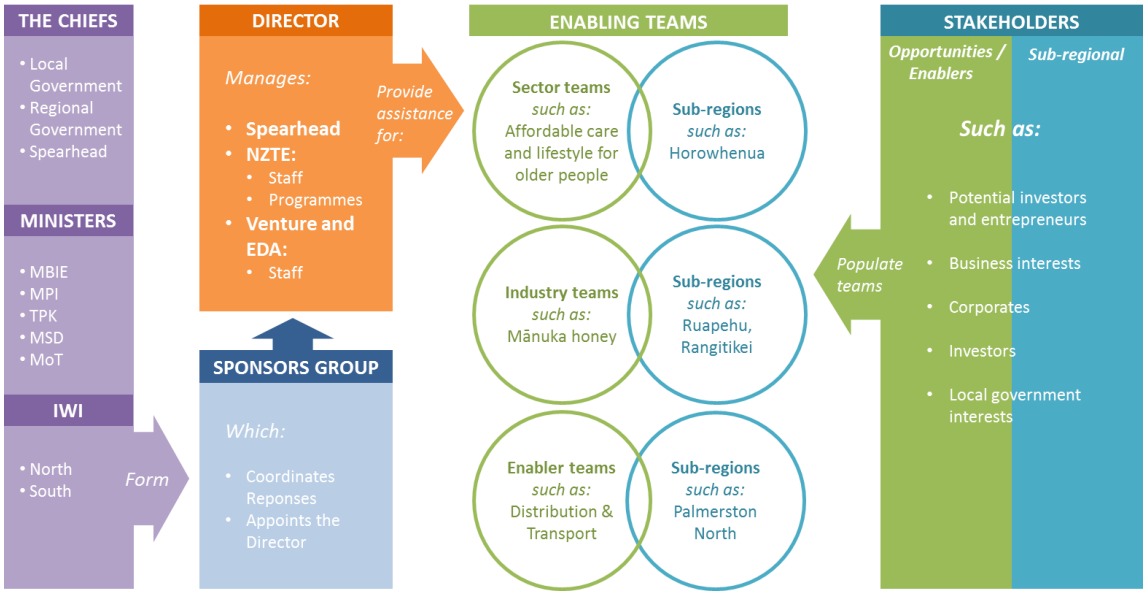
- **Flexible response** – some opportunities relate to mature industries such as the dairy industry with existing organisational, industry and enterprise structures. Others, such as Mānuka honey, are early stage.
- **Interventions** – a carefully selected set of intervention actions have been identified within this Study for each opportunity. This is intended as the starting point for implementation (the pre-commercial activity). Some implementation points are more tangible and specific than others.
- **Place-based** – this is the current international thinking about economic development in western countries where regions have suffered from global impacts as is evident in Manawatū-Whanganui. It is part of our justification for engaging Districts in the realisation of opportunities.
- **Fast failures** – it is expected that under further scrutiny some of the opportunities will not stack up on criteria, for example, reasonable cost of realisation and lack of leaders (champions). Implementation resources will be limited so that if opportunities are not proving viable or there is lack of support the investigation should be halted at an early stage and the effort should be focused on other, more promising alternatives.
- **Nimbleness** – systems and structures need to be designed for maximum nimbleness in the implementation effort. This will encourage quick changes of direction if the situation warrants it.
- **Shared leadership** – it is hoped that parties with an interest in an opportunity will coalesce around it and assist with the process towards realisation. If such support is not forthcoming at an early stage then this alone may label an opportunity a fast failure.
- **Halo effect** – it is intended that the single-minded focus on specific opportunities will have a halo effect and that stakeholders will be drawn into that focus and contribute to it.
- **Project-focus** – the intention is to establish structures that will enable success, overcome challenges and bring together resources. It is not to create structures that collapse under their own weight. Light and active would be the hallmark and where the purpose has been served they would be dismantled.

PROGRAMME STRUCTURE

The structure for the implementation programme could be made up of a number of components. Read the diagram (Figure 37) from left to right. First are the sponsors – the chiefs (local government), Minister(s) and Iwi. They could self-appoint to form a Sponsors' Group which is the core governance group of the Programme. The Sponsors' Group could appoint a director (orange box) who would manage appointed and seconded staff who could provide assistance to enabling teams. A possible structure for the teams and the Sponsors' Group is outlined over the page.

Enabling teams – one for each opportunity – could be a blend of stakeholders and district council representatives or nominees. Stakeholders are from industry or sector groups.

FIGURE 37: PROGRAMME STRUCTURE



ENABLING TEAMS

We propose stakeholder teams as the foundation of the implementation programme. They could be made up of parties with "skin in the game". Each could be based around a single opportunity to ensure they are focused and single-minded. These facilitated teams could have a specific set of tasks to do to complete the feasibility and transfer of the opportunity into the commercial phase (see section below).

Teams could be comprised of those with a direct interest in the opportunity including those who have the potential to gain from the opportunity. It is difficult to envisage conflicts of interest, but rather it is hoped that enabling interests will be to the fore.

The teams could be facilitated by external people unless the teams felt they had the internal resources to do it themselves. The facilitators could be employed by the Director and backed by a support structure.

The teams' programmes would differ enormously. For example, Mānuka honey is a relatively new industry but there is extensive work going on via a PGP project and other industry initiatives. The requirement would be to tap into this activity and become an extension of it. Conversely, the distribution and transport hub is almost totally a commercial idea and, in part, is already a reality. The team may focus itself on indicative future directions for distribution development so that both industry and local government can be pursuing a commonly agreed goal.

To summarise, the team structure could be as follows:

Status: Established under the auspices of Horizons Regional Council (on behalf of the Chiefs)

Association: Each team could be associated with a particular opportunity and one (or perhaps two) districts who wish to pursue that opportunity. Those districts would work in close association with the team.

ToR: Members could be appointed by the district mayor(s) in association with the Sponsors' Group.

Estimated 10 meetings over 10 months.

Normal meeting procedure could apply.

Members should commit for the duration – no alternates.

Participants, not representatives.

Support: Facilitator could be supplied by the programme (probably externally sourced).

Supported by writer/analyst (possibly from the local EDA).

Reporting: To the programme director.

The task of the enabling teams could be to prepare:

1. A "Growth Acceleration Programme" report (GAP Report) for the particular opportunity on which they are working. This would be an in-depth assessment of the commercial potential of the opportunity and a 'map' of the potential and actual players in it. It could be known as the GAP report and would demonstrate how to bridge the gap between idea and action.
2. A "Growth Realisation Programme" presentation (GRIP presentation) for each opportunity. This could comprise a facilitated programme of communication to all interested parties outlining the nature of the opportunity, its potential, risks, etc. The purpose of this would be to recruit participants for a commercial entity(s) that could pick up the opportunity and take it forward. This could be known as the GRIP Report and would focus on getting stakeholders/investors to grip up onto an opportunity. It is more of a "sales' report for investors and would essentially package the GAP report as a presentation.

Support for the teams would be crucial to their success. Inevitably some weight could fall on Horizons to use their resource of scientists, facilitators, planners and other specialist staff to assist teams with information and advice. It would also be important that teams can draw on the resources of Government departments. It could be the task of the Sponsors' Group to ensure that these types of resources are as available as possible.

SPONSORS' GROUP

In this model the Sponsors' Group would be the governance group representative of the funders of the programme. It could be comprised of representatives from the region (nominated by the chiefs), from Central Government (nominated by the responsible Ministers) and iwi.

The sponsors' group oversees the programme in partnership with Horizons Regional Council who jointly appoints a director for the whole programme.

The Sponsors' group could be comprised of:

- Regional Council appointee - 1.
- Territorial Authority appointees – 2.
- Central Government appointee – senior official(s).

- Iwi – two representatives (north and south).

The key role of the Sponsor Group could include:

- Funding.
- Enabling central and local government participation and contribution.
- Determine KPIs; define success; set priorities.

ToR: Self-appointed jointly by the Chiefs, Central Government and iwi.

Estimated 2-3 meetings over 10 months.

Normal meeting rules could apply.

There for the duration – no use of alternates.

A proper Terms of Reference should be developed.

Support: Secretarial services from the Programme Directorate.

DISTRICTS

The districts are very important to the implementation plan. This is because the districts are the ones feeling the pain of lack of economic growth. They have the burning platform and also the most to gain.

Each of the opportunities could be identified with one (or two) districts – e.g. Mānuka honey (Rangitikei andWhanganui), Older people care and lifestyle (Horowhenua), Hill country sheep and beef (Rangitikei and Whanganui), Tourism (Ruapehu and Whanganui) and Fresh vegetables (Horowhenua, Rangitikei and Ruapehu).

All opportunities could be designed to have wider implications than one district (but the designated district should be the starting point or initial focus).

All districts are nearing completion of their Long Term Planning (LTP) process with their communities and an alignment with councils' LTP and other plans will need to be considered as part of the development of regional economic action planning.

DIRECTOR

It is envisaged that the Director would have a high level of autonomy relying heavily on the appointment of the right sort of person. The reason for this autonomy is to encourage flexibility and nimbleness. The following arrangements could apply:

Appointment: By Horizons Regional Council in consultation with the Sponsors' Group.

Employer: Horizons Regional Council.

Funding: From the Sponsors' Group.

Term: 2 years.

Location: Palmerston North.

Responsibility: Management of the Programme Directorate.

Staff: Facilitators (external).

Policy analyst (seconded from Horizons or Central Government).

Writer (seconded from EDAs).

Secretarial support.

Consulting support.

PROCESS AND ROLL-OUT

The preparation of this Study represents a once-in-a-decade opportunity to jump-start economic growth in the region. To be successful implementation needs to be strategically sound and well resourced.

All opportunities do not need to be progressed at once. Some naturally appear to be more immediate, while others are long term. It is recommended that they are advanced in groups or tranches and there are feedback loops to learn from, as part of the implementation process to apply to subsequent opportunities.

The opportunities are presented in this Growth Study in a rough order of probability of realisation with the first having the strongest probability. Some of the opportunities are built on strong existing industries and involve incremental growth, whereas others could be considered more as green-fields opportunities.

The Growth Study has and will generate momentum and this momentum should not be lost.

The following roll-out plan for 2015/16 is proposed. It is deliberately conservative in terms of the number of opportunities pursued. This is on the basis that it is better to do fewer well than the reverse:

Stage One: **Set-up:** Appointments, sponsor and governance, establishment

(July/Aug).

Stage Two: **Sub-regional (district) briefings:** This would involve in-depth briefings to District audiences convened by the Councils on the opportunities in their area.

(Sept).

Stage Three: **Invite proposals** - from Districts to mount an enabling team in the district on their priority opportunity. The number of teams initiated at this time would require careful consideration in terms of support resources - 3-4 groups is thought to be sufficient for the first round, but as activity matures new groups could be formed. Building teams with the right stakeholders and positive dynamics will be vital to their success. Time should be taken to get this right.

(Sept/Oct).

Stage Four: **Reporting** – complete first cluster of GAP reports. These would be followed by a GRIP presentation phase aimed at transferring the opportunity into the commercial sector.

(July/Aug 16).

Stage Five: **Evaluation -** evaluate the work of the first echelon of enabling groups at the end of year one (including the process used and its effectiveness) and apply the learnings to other groups underway or being formed. This could take the form of a stock-take meeting with the chiefs, Minister representatives and iwi to ensure that the programme is performing as best possible.

(Continue programme on a sequential basis).

Districts would be invited to engage around their priority opportunity (possibly more than one). They would be asked to present a proposal to the Programme Director as to how they would go about undertaking the task. The Director would outline the resources available. An enabling team would only proceed if all parties were satisfied that it was well formed, adequately resourced and that there was a clear commitment from the district drive the process and the Programme Director to support it. A template or checklist of requirements could be useful to help district assess their readiness.

THE ENABLERS

Only three enablers have been chosen as priority interventions. They are Transport and Distribution, Productivity of Māori Land and Growing Businesses. Like opportunities, they require some investigation to validate their choice as the most important. An intervention programme then needs to be developed.

Our recommendation is the same as for opportunities – that a team is formed around each enabler with staff support from either local government or private sector interests such as from iwi or the Chamber of Commerce and that the programmes are funded and mounted as a priority. Transport and distribution is essentially a local authority issue, Māori land is an iwi interest and growing businesses is a Chamber and sector group interest.

The teams could be appointed as part of the Director's responsibility and could report through the same channels as those for opportunities.

OTHER SUPPORT STRUCTURES

Besides the direct support provided by the Programme Director and the sponsors as already outlined, there would be the need for additional support and inputs. These could be as follows:

Website: A website specifically for the Programme. This could be linked to the Horizon's site or be standalone. The site could have:

- Tabs on each of the opportunities / sub-regions.
- Agendas, minutes and background papers relating to each of the teams.
- Initially models for the GAP and GRASP reports and as they complete the actual reports would be available.
- Space for public and news media participation.

Facilitation: Facilitator skills are crucial to the success of the programme. It is envisaged that there will be a facilitator assigned to each team with one facilitator acting for two teams at any one time. Some form of practice training and on-going mentoring/supervision would be required to rapidly build capability.

Status: The teams would need to feel that they are valued and supported. A launch event attended by representatives of the Chiefs and even a Minister would reinforce the mandate the teams would need to get results and the status they would have in the community.

Communication: A sense of public momentum and interest around the programme would help propel it forward. This would require a carefully constructed communications and engagement package to support the programme.

SECTION EIGHT:
SUB-REGIONAL PROFILES

8. SUB-REGIONAL PROFILES

This section contains a detailed sub-regional analysis for readers who are looking for a sub-regional perspective and to understand how we reached our conclusions. Table 24 provides a single-glance summary of the profile of each district. These data are reproduced in each individual section.

TABLE 24: SUB-REGIONAL PROFILES

See over page

TABLE 24: SUB-REGIONAL PROFILES

	Manawatū-Whanganui region	Ruapehu district	Whanganui district	Rangitikei district	Manawatū district	Palmerston North city	Tararua district	Horowhenua district	NZ	Manawatū-Whangnaui region % of NZ	Ruapehu district % of NZ	Whanganui district % of NZ	Rangitikei district % of NZ	Manawatū district % of NZ	Palmerston North City % of NZ	Tararua district % of NZ	Horowhenua district % of NZ
People																	
Population	231,200	12,450	43,500	14,550	28,500	83,500	17,450	31,200	4,442,100	5.2%	0.3%	1.0%	0.3%	0.6%	1.9%	0.4%	0.7%
Population density (per km^2)	10	2	18	3	11	233	4	29	16	63.9%	11.3%	113.0%	20.0%	72.5%	1472.5%	24.7%	181.2%
Age composition (% of regional total)																	
0-14	21%	23%	20%	21%	21%	20%	22%	19%	20%	5.2%	0.3%	1.0%	0.3%	0.7%	1.8%	0.4%	0.7%
15-24	14%	13%	12%	12%	12%	18%	11%	11%	14%	5.3%	0.3%	0.9%	0.3%	0.6%	2.5%	0.3%	0.6%
25-64	49%	50%	48%	49%	51%	49%	50%	46%	51%	4.9%	0.3%	0.9%	0.3%	0.6%	1.8%	0.4%	0.6%
65+	16%	13%	19%	17%	16%	13%	17%	23%	14%	6.1%	0.3%	1.3%	0.4%	0.7%	1.7%	0.5%	1.2%
Maori share	21%	43%	24%	25%	15%	17%	22%	23%	16%	7.1%	0.8%	1.5%	0.5%	0.6%	2.1%	0.6%	1.1%
- Of which aged under 25	53%	50%	51%	48%	53%	56%	52%	52%	52%								
Aged dependency ratio	26	21	31	28	25	19	28	41	22								
Skills, income and work																	
Tertiary educated (% of population)	23%	17%	21%	18%	21%	29%	17%	16%	29%	78%	59%	71%	62%	73%	100%	57%	55%
Personal income	25,000	24,100	23,600	25,700	28,400	27,000	25,100	21,800	28,500	88%	85%	83%	90%	100%	95%	88%	76%
Household income	50,000	44,400	43,800	48,600	57,700	58,500	47,500	39,200	63,800	78%	70%	69%	76%	90%	92%	74%	61%
Employed	100,521	5,520	17,484	6,816	13,668	37,332	7,857	11,760	2,001,009	5%	0%	1%	0%	1%	2%	0%	1%
Employment rate(1)	59%	63%	55%	64%	65%	61%	63%	51%	62%	95%	101%	88%	103%	104%	98%	101%	82%
Unemployment rate(2)	8%	8%	10%	6%	6%	8%	6%	10%	7%	110%	114%	135%	85%	82%	106%	86%	142%
Participation rate(3)	64%	68%	61%	68%	69%	66%	67%	56%	67%	96%	102%	90%	101%	103%	98%	100%	84%
Average firm size (excl. zero sized)	10	7	10	7	7	14	6	8	11	89%	65%	91%	59%	66%	125%	54%	72%
Housing																	
Home ownership rate(4)	65%	55%	66%	65%	71%	62%	67%	69%	65%	101%	85%	102%	101%	110%	96%	104%	106%
House price(5)	$223,588	$138,465	$182,365	$142,772	$242,304	$289,439	$150,712	$203,725	$488,674	46%	28%	37%	29%	50%	59%	31%	42%
House price to household income ratio	4.5	3.1	4.2	2.9	4.2	4.9	3.2	5.2	7.7	58%	41%	54%	38%	55%	65%	41%	68%
Weekly rent (6)	$246	$180	$206	$199	$270	$299	$179	$218	$375	66%	48%	55%	53%	72%	80%	48%	58%
Rental share of household income	26%	21%	24%	21%	24%	27%	20%	29%	31%	84%	69%	80%	70%	80%	87%	64%	95%
Gross rental yield(7)	5.7%	6.7%	5.9%	7.2%	5.8%	5.4%	6.2%	5.6%	4.0%	144%	169%	147%	181%	145%	135%	155%	140%
Household income after housing costs																	
After rent(8)	37,203	35,054	33,092	38,272	43,677	42,938	38,174	27,846	44,318	84%	79%	75%	86%	99%	97%	86%	63%
After mortgage payments(9)	35,585	35,473	32,043	39,396	42,079	39,840	37,784	26,066	32,296	110%	110%	99%	122%	130%	123%	117%	81%

All data 2013 unless otherwise stated

Notes

(1) employed share of working age population

(2) unemployed share of labour force

(3) labour force share of working age population

(4) Owned or in trust share of total stated

(5) Dec-2014, QVNZ average house price

(6) Nov-2014, MBIE average rent

(7) Annual rent share of house price. Does not assume vacancy or take any operating costs.

(8) Household income less annualised weekly rent

(9) Household income less mortgage payments assuming 20% deposit, 7% long term interest rate and 30 year term.

RUAPEHU

Ruapehu has a smaller and younger population than the region as a whole. It has a similar age profile to New Zealand as a whole. The Māori population is large at 43%, compared to 16% nationally. The population has been shrinking at 1.5%pa[98] (vs. 1.1%pa growth nationally). Personal and household incomes are much lower than the national average, due to lower wages rather than lower participation in work. Home ownership is low, even though houses are affordable relative to incomes.

Ruapehu's biggest employers are in farming, tourism and government:

- Sheep and beef farming and agriculture support services are the biggest employers, but they have been shedding jobs over the past decade (over 20% of jobs lost in the past decade).
- Tourism (especially related to the ski fields and increasingly related to mountain biking) creates jobs in accommodation, hospitality (cafes, restaurants and bars) and retail (supermarkets, for example).
- Government has a strong presence through defence, education and health (although many organisations have been contracting over the past decade).
- There are two relatively large industrial sectors: heavy and civil engineering, which have grown strongly in recent years; pulp, paper and board manufacturing, which are declining sharply. Neither industry indicated an expectation of significant growth in the near future; in fact, survival was seen as the imperative.

TABLE 25: SUB-REGIONAL PROFILE - RUAPEHU

	Ruapehu district	NZ	% of NZ
People			
Population	12,450	4,442,100	0.3%
Population density (per km^2)	2	16	11.3%
Age composition (% of regional total)			
0-14	23%	20%	0.3%
15-24	13%	14%	0.3%
25-64	50%	51%	0.3%
65+	13%	14%	0.3%
Māori share	43%	16%	0.8%

[98] Between 2001 and 2013 censuses

- Of which aged under 25	50%	52%	
Aged dependency ratio	21	22	
Skills, income and work			
Tertiary educated (% of population)	17%	29%	59%
Personal income	24,100	28,500	85%
Household income	44,400	63,800	70%
Employed	5,520	2,001,009	0%
Employment rate(1)	63%	62%	101%
Unemployment rate(2)	8%	7%	114%
Participation rate(3)	68%	67%	102%
Average firm size (excl. zero sized)	7	11	65%
Housing			
Home ownership rate(4)	55%	65%	85%
House price(5)	$138,465	$488,674	28%
House price to household income ratio	3.1	7.7	41%
Weekly rent(6)	$180	$375	48%
Rental share of household income	21%	31%	69%
Gross rental yield(7)	6.7%	4.0%	169%
Household income after housing costs			
After rent(8)	35,054	44,318	79%
After mortgage payments(9)	35,473	32,296	110%

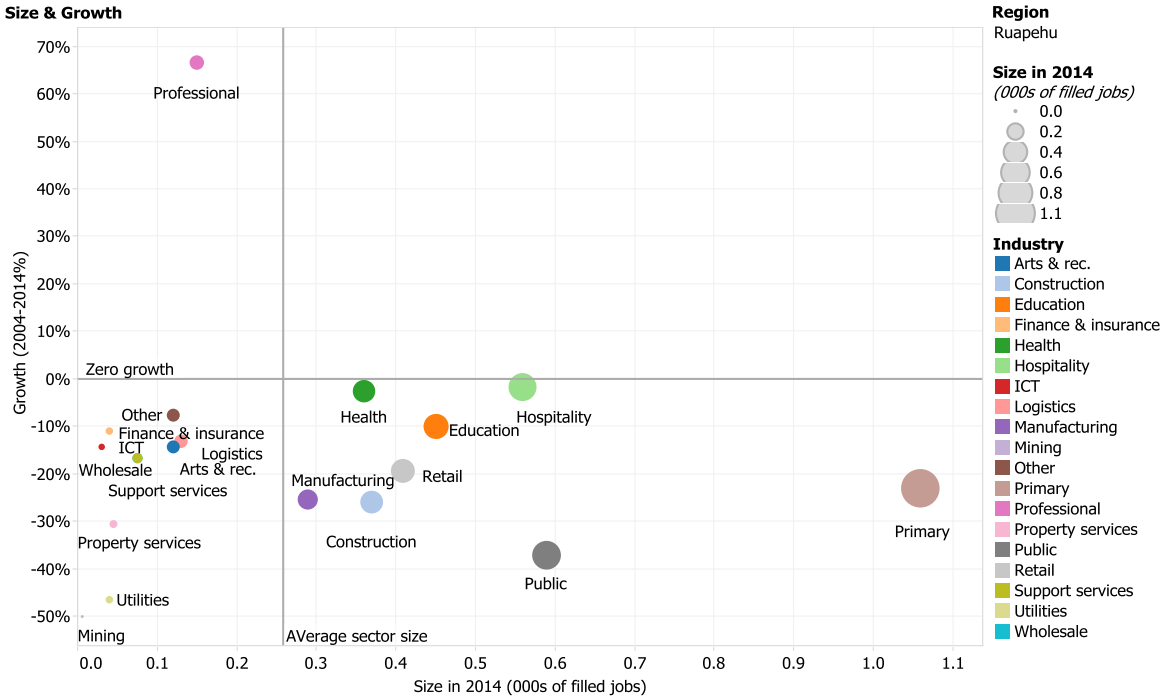
All data 2013 unless otherwise stated

Notes
(1) employed share of working age population
(2) unemployed share of labour force
(3) labour force share of working age population
(4) Owned or in trust share of total stated
(5) Dec-2014, QVNZ average house price
(6) Nov-2014, MBIE average rent
(7) Annual rent share of house price. Does not assume vacancy or take any operating costs.
(8) Household income less annualised weekly rent
(9) Household income less mortgage payments assuming 20% deposit, 7% long term interest rate and 30 year term.

Ruapehu exhibits all the characteristics of the region identified in the earlier regional profile section of this Study with some to extreme. The cost of housing is low. Overall population is low reflecting the level of economic activity in the district. As Figures 38 & 39 illustrate, there are really no growth sectors in the district, aside from growth in the small professional services sector, nor are there obvious areas of comparative advantage.

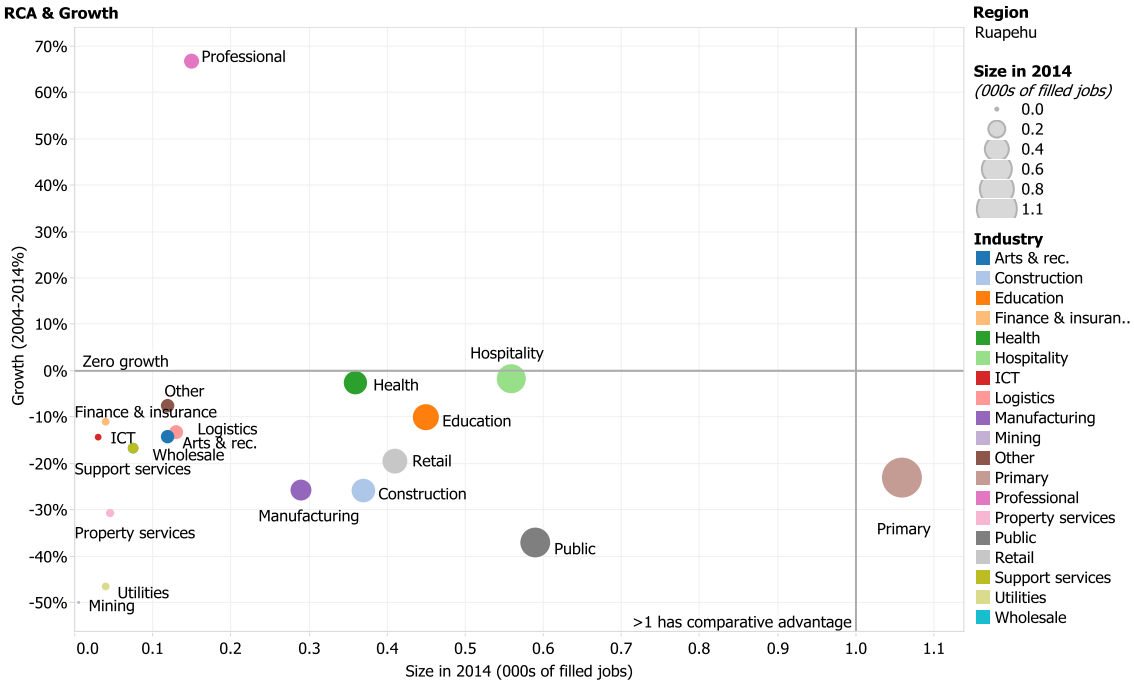
Our investigations have concluded that there is one significant area of advantage and this lies in opportunities associated with the tourism industry, but it requires careful development so that it is a quality offering with strong revenues attached. While not a provider of large incomes, because of the small population of the district, tourism has the potential to make a significant difference to both GDP and employment.

FIGURE 38: INDUSTRIES, SPECIALISATIONS, SIZE AND GROWTH - RUAPEHU



Source: Statistics New Zealand, NZIER

FIGURE 39: REGIONAL COMPARATIVE ADVANTAGE - RUAPEHU



Source: Statistics New Zealand, NZIER

There are also a number of other modest opportunities that have the potential to contribute incrementally to the district's economy – the production and export of fresh vegetables and modest improvements in sheep and beef productivity. Our assessment is that the key ingredient is leadership to identify and exploit these opportunities.

OPPORTUNITIES IDENTIFIED BY LOCAL INFORMANTS

Tourism - tourism is regarded as a major opportunity and has been dealt with in detail in the tourism section of the report. It comprises a primary opportunity in mountain biking together with support opportunities in packaging the range of adventure tourism opportunities into a single and marketable package.

Sheep and beef – this is a main stay of the district economy, though there is little potential for growth beyond the productivity approach outlined in this report. Promoting wider farmer awareness of alternative fertiliser products e.g. rock phosphate and fine particle fertiliser and options to reduce the cost of transporting fertiliser were discussed.

Dairying – this is growing in the area, particularly on the flat volcanic soils close to Ohakune. Methods for growing this sector are similar to those in other parts of the region. Informants presented the opportunity of 'brands' associated with the attractiveness of the Mt Ruapehu landscape. While tempting, we do not see this as viable at this time because there is not the scale of activity to support the investment required.

Wild game - opportunities to continue to grow the volume of wild venison and wild boar products were identified.

Vegetables – there is already a significant vegetable industry in the area. It was noted that the Ruapehu District has some unique advantages for vegetable growing, particularly root

vegetables. The district could do more to capitalise on: 'point of origin' branding, the particular quality and flavour of Ohakune sourced product and the, the comparatively low use of fungicides, biocides and other pest suppressant chemicals because of the effect of the district's cold climate.

Growth opportunities relate to product exports. Export regulations are viewed as being a challenge to deal with. Locals would welcome assistance to find methods to streamline the pathway through them. Water reticulation and irrigation were viewed as being a valuable contingency against the risks to production during dry summer months. Some informants viewed the cost and complexity of the water management regime to also be a challenge. They had some uncertainty about water availability, particularly from ground water sources.

Mānuka honey - the unique advantage associated with the Ruapehu District is the large size of the area of regenerating forest, with Mānuka dominance. Some informants believe there is an opportunity for a town like Taumarunui to establish itself as 'honey central'[99]. This could include local branding, advanced processing and production of medicinal honey products.

Specialty fruits - Ruapehu has pockets of very good land capable of growing fruits and nut trees. Informants from Taumarunui saw an opportunity to establish cooperatives for packaging and marketing and to achieve the benefits of scale. Advantage was also seen in researching and publishing a report documenting the suitability of the fruit and nut growing opportunities in the area or a 'resource inventory' of the comparative strengths of the district and, in addition, a platform to enable the connection of individuals and enterprises who are currently engaged in these activities.

Forestry - Winstone Pulp International (WPI) is a key contributor to local GDP. The scale of production reflects input costs, the value of the New Zealand dollar and the prices able to be secured on the international market. The current infrastructure and plant have latent capacity which is able to be ramped up when conditions justify it. There are challenges operating in a remote area relating to staff- many current skilled employees have their homes at other locations.

Freight - WPI transport their product to the Port of Napier by rail. The train returns empty. A more active search may assist to identify opportunities for backfill freight.

Education and training - informants, particularly those based in Taumarunui, saw benefit in broadening the range and depth of the training courses in the area to help build the skills needed by existing and new enterprises e.g. truck and tractor drivers and computing skills.

Recruiting and bonding professionals - vetinarians, medical professionals and other skilled professionals/trades are difficult to secure in small towns because of their remoteness. Informants called for an expansion of bonding schemes as a means of building necessary expertise in their communities.

Contact centre - towns like Taumarunui have a stable population, cheap real estate and a skilled work force suited to the competitive supply of contact centre services. Informants

[99] Te Kuiti is also proposing that it be viewed as 'honey central'.

suggested that these advantages be more actively marketed to potential clients such as part of the Business Process Outsourcing discussed in this report.

Business leadership - business leaders in both Ohakune and Taumarunui saw advantage of establishing a 'development group' to carry forward the types of initiatives displayed at the various meetings held as part of the Growth Study. The uniting force was the desire to avoid being the Ohura of the future (Ohura is seen by most as a ghost town following business closures in the town).

WHANGANUI

Whanganui is a modest-sized district accounting for 1% of New Zealand's population. The population has been declining slowly at 0.2%pa[100]. The population is older than the national average. More Māori, typically young, live in Whanganui than across New Zealand as a whole. Incomes are lower than the national average, due to fewer employment opportunities and more jobs in lower paid industries. Lower housing costs tend to compensate lower incomes for home owners.

The largest employers are in health, aged care, education, farming, processing and transport:

- School education is a big employer, but it has shed jobs in the past decade. The future of Whanganui Collegiate was threatened but now seems assured for the foreseeable future.
- In contrast, health, aged care and public safety increased hiring.
- Sheep and beef farming is a large employer, but it is shedding staff. However, this has been offset by increased hiring in meat and meat product manufacturing.
- Road freight transport is a large employer and is growing strongly.
- The supermarket, grocery and hospitality sectors (cafes, restaurants and bars) are also big employers.
- Successful light industrial enterprises have succeeded in Heads Road and there is no strong indication of further expansion with the exception of the new Open Country Dairy plant in the area.
- Small scale development around the old port is underway.

[100] Between 2001 and 2013 censuses

TABLE 26: SUB-REGIONAL PROFILE – WHANGANUI

	Whanganui district	NZ	% of NZ
People			
Population	43,500	4,442,100	1.0%
Population density (per km^2)	18	16	113.0%
Age composition (% of regional total)			
0-14	20%	20%	1.0%
15-24	12%	14%	0.9%
25-64	48%	51%	0.9%
65+	19%	14%	1.3%
Māori share	24%	16%	1.5%
- Of which aged under 25	51%	52%	
Aged dependency ratio	31	22	
Skills, income and work			
Tertiary educated (% of population)	21%	29%	71%
Personal income	23,600	28,500	83%
Household income	43,800	63,800	69%
Employed	17,484	2,001,009	1%
Employment rate(1)	55%	62%	88%
Unemployment rate(2)	10%	7%	135%
Participation rate(3)	61%	67%	90%
Average firm size (excl. zero sized)	10	11	91%
Housing			
Home ownership rate(4)	66%	65%	102%
House price(5)	$182,365	$488,674	37%
House price to household income ratio	4.2	7.7	54%

Weekly rent[6]	$206	$375	55%
Rental share of household income	24%	31%	80%
Gross rental yield[7]	5.9%	4.0%	147%
Household income after housing costs			
After rent[8]	33,092	44,318	75%
After mortgage payments[9]	32,043	32,296	99%

All data 2013 unless otherwise stated

Notes
(1) employed share of working age population
(2) unemployed share of labour force
(3) labour force share of working age population
(4) Owned or in trust share of total stated
(5) Dec-2014, QVNZ average house price
(6) Nov-2014, MBIE average rent
(7) Annual rent share of house price. Does not assume vacancy or take any operating costs.
(8) Household income less annualised weekly rent
(9) Household income less mortgage payments assuming 20% deposit, 7% long term interest rate and 30 year term.

Whanganui illustrates all the characteristics of a district struggling with its future. While the cost of commercial property and housing is low, the population is shrinking, ageing, and jobs are few. Unemployment is amongst the highest in the region and participation rates are comparatively low. Tertiary education rates are also comparatively low creating an issue for development of the region. As Figures 40 and 41 illustrate, there are really no growth sectors in the district except health which is publicly funded, nor are there obvious areas of comparative advantage. Areas such as manufacturing, though large by regional standards, are contracting and not producing new jobs.

The primary sector is relatively small for a district that has a significant hinterland. Much of it is hill country so development of the sheep and beef production would benefit this district. There are also opportunities in tourism and Mānuka honey. The difficulty for Whanganui is that none of these opportunities is sufficiently substantial that it might represent a "game-breaker".

That said, Whanganui is an attractive city with a strong local sense of identity and a commitment to improvement. In our assessment, the opportunities consist of using that community cohesiveness to incrementally build business and enterprise, but with more energy and gusto than is the case at present. Arguably business costs such as rentals are sufficiently low to represent a significant advantage, but these are not yet making the required difference to the accumulation of activity. Whanganui is one of those centres where the concentration needs to be on small steps, but lots of them. Particularly relevant from our schedule of opportunities are:

- Sheep and beef development.
- Tourism.
- Mānuka honey.
- Growing Businesses.

However, in addition to this there is the need for a focus on community and civic amenities and city-based development such as the river and waterfront. In this respect Treaty Settlements may provide some of the break-through required to move the district forward. The following section identifies some of the projects that were communicated to us by district informants.

OPPORTUNITIES IDENTIFIED BY LOCAL INFORMANTS

Approach to economic development - the Whanganui District Council has rejuvenated its economic development structure and resourcing. Three Boards have been established under the banner 'Whanganui and Partners', with members drawn from local businesses. They have responsibility for leading economic development initiatives. The priority early focus is on visitor industries. Later focus will be directed toward education opportunities. An early project is to promote 'Whanganui in a Box' as a concept to:

- Grow existing businesses.
- Attract new business, investment and tourists.
- Build relationships with Whanganui Alumni.
- Promote Whanganui as the 'right location' for conferences and events.

The concept involves Whanganui and Partners converting a 40Ft shipping container into a promotional hub for Whanganui.

Hill country farming - farming remains the main stay of the district economy. Education, succession planning, farm integration (hill country and flat country), discussion groups, new equity partnerships, innovation, courage and tech transfer were all seen as the interventions to promote growth. These and interventions related to unlocking the potential of Māori freehold land are more fully addressed earlier in the report.

Specialist crops, nuts and fruits - as with Ruapehu, informants suggested that work be carried out to better define the best use of land with different capabilities.

Coastal Spring Lamb - the model applied by Coastal Spring Lamb to the development of this product has proven successful and may prove valuable if replicated elsewhere. The essential features are:

- The quality control of product (triple grading approach with taste and tenderness the key).
- Traceability.
- Provenance – part of a coherent story.
- Co-branding with Foodstuffs and mutual endorsement. The target posted by Coastal Spring Lamb is to crack the international market by the end of 2015. They currently sell 30,000 lambs domestically.

Whanganui – Digital River - Whanganui City is serviced by an optic fibre ultra-fast broad band service. The completion of the fibre deployment in the urban areas of Whanganui has been supported by a number of initiatives by the District council which are designed to extract maximum benefit from the deployment. These have ranged from programmes to assist businesses to develop an on-line presence, enhancing on-line local government services and establishing a Digital Leaders Forum to search for opportunities to gain

advantage from the Broadband infrastructure. The UFB provides very good download speeds and has enabled one company to develop and market film and commercials globally. Other companies could take similar advantage of this opportunity.

Sport recreation and fitness - Whanganui has always been known as a provider of facilities suited to high performance sports. New opportunities include marketing Whanganui Collegiate as a summer school for Indian cricketers (catering for a growing Indian middle class) and convening an international event, perhaps to be known as the 'Iron Wakarama Māori' Race over the distance of 100 km from Pipiriki to Whanganui. Of similar interest is the potential for growing cultural tourism experiences which connect the Marae of the Whanganui River to tourism, educational and recreational experiences.

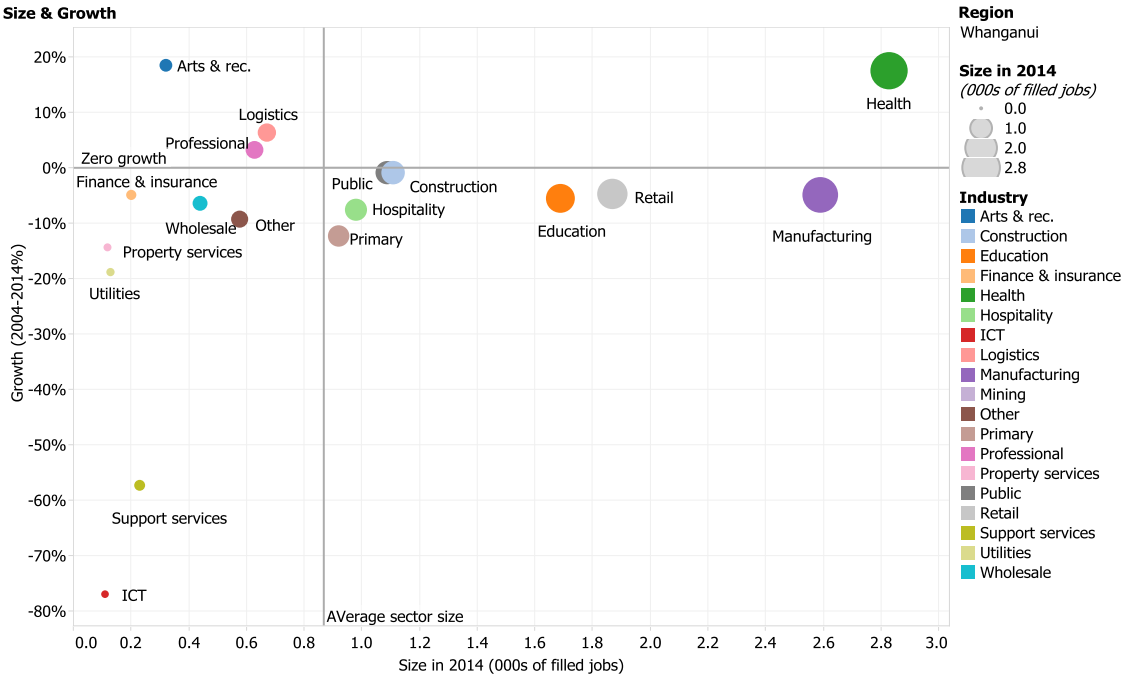
Freight logistics centre - Whanganui is growing as a logistics centre for the efficient packaging and distribution of freight. Business leaders have leveraged charter train arrangements established with the Port of Wellington and Kiwi Rail (daily freight). The area is also suited to this use because of the comparative low cost of real estate ($38 per m^2 compared to $64 per m^2 in Auckland) and the 80,000 per m^2 of available warehouse space to hub and redistribute product. These arrangements also align with the transport of products from 'Open Country Dairy Ltd' processing facilities located on Heads Road.

Open Country Dairy (OCD) - New Zealand's third largest milk processing Company is expanding its presence in Whanganui. A second whole milk drier is currently under construction. A third drier is a possibility. The factors contributing to the decision by OCD to grow the size of its facilities in Whanganui seen as relevant to other potential developments include: low cost real estate; reliable and competitive cost of labour; good supportive infrastructure and a business friendly council.

Skills development / training - some Whanganui-based companies are constrained in their growth because they are having trouble finding employees with the right skills**.** Key informants have suggested there is a general need to improve the quality of the skills development training and youth pathways (better guidance to students) in the District through such programmes as 100% Sweet.

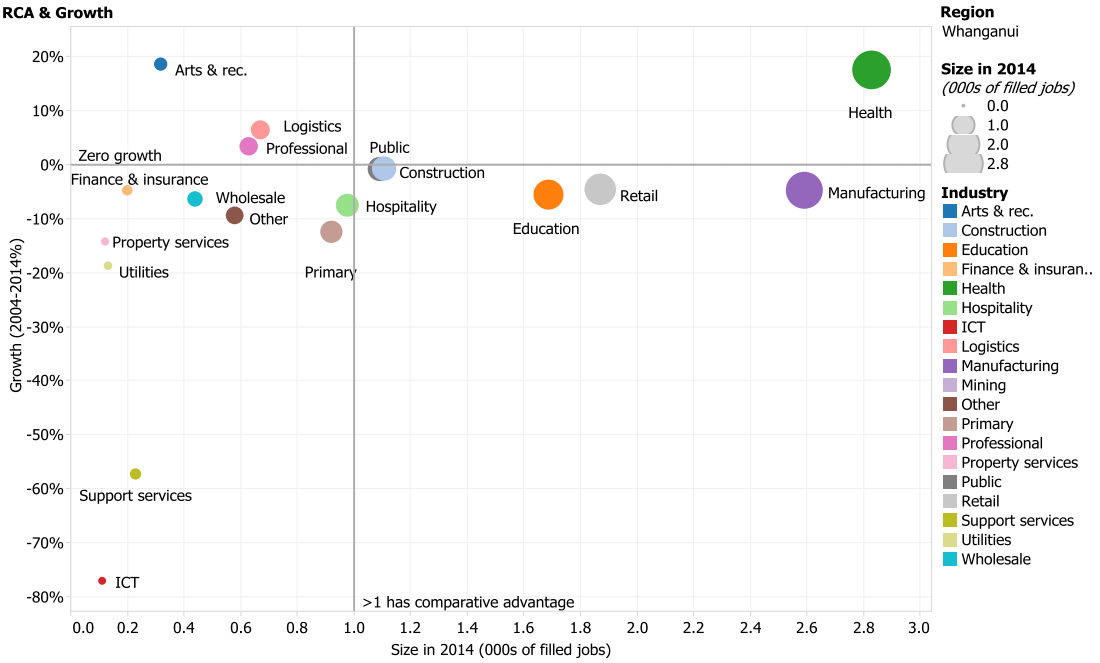
Image / Whanganui reputation / brand - some informants suggested that a long term issue for the district is to address how Whanganui is perceived. They recommended adoption of focused programmes to market the comparative advantage of the City particularly to manufacturing businesses currently located in South Auckland on both economic and lifestyle grounds.

FIGURE 40: INDUSTRIES, SPECIALISATIONS, SIZE AND GROWTH - WHANGANUI



Source: Statistics New Zealand, NZIER

FIGURE 41: REGIONAL COMPARATIVE ADVANTAGE - WHANGANUI



Source: Statistics New Zealand, NZIER

Developments of facilities and services at the Whanganui Port - the District Council and some business leaders have an ambitious programme to rejuvenate and increase economic activity at the Whanganui Port. Current proposals include:

- Progressive reclamation of 4.6 hectares.
- Construction of additional sea wall and sea surge protection.
- Marina development and slipway construction.
- Development of recreational facilities including a café etc. and the hospitality sector.
- Construction of a boat trailer park and covered boat storage area and other services to meet the needs of the 700-900 recreational boat owners who are known to use the area in any one year.
- Reconstruction of 'Wharf One' to make it sound and suited to heavy lift crane use and able to support expanded coastal shipping operations (NB. The area is currently serviced by one Coastal trading vessel – the "Anatoki").
- Extension of the rail corridor to Wharf Street (700 metres).
- Expansion of current commercial boat construction and servicing activities.
- Additional support for the coastal petroleum and mineral exploration industry (including Trans-Tasman Resources, when and if they are successful with their attempts to secure consent to mine iron-sand resources).
- Cycle way access to town.
- Limited adjustment to stop banks and surge/river training works.

The driver behind these proposals is to identify and secure existing and future uses of the port and have them actively contribute to the economic, environmental and social revitalisation of Whanganui. To achieve those objectives, basic works are required to improve the appearance and security of the area.

Whanganui District Council's holding company is making progress on this proposal in partnership with Whanganui iwi group Tupoho Investments Ltd. A joint venture has been established to develop a business plan for the area (draft currently in development).

Whanganui District Council's objectives focus on partial privatisation of the Port to maximise throughput. This is viewed as being essential if the potential of the area as a service port for local freight is to be capitalised upon, as part of an integrated regional logistic chain. To achieve this objective the Council want to make the area 'fit' for this purpose. This will include refurbishment of Wharf One at a cost of $1 - $2 million. It is understood than the District Council have committed an interest free loan of $1million to start this task. They propose to eventually lease the area to a port operator.

The Harbour Endowment Trust, operating with a Crown grant of property, has the legal and financial capacity to borrow against its assets to fund part of the Port upgrading. Negotiations are proceeding with a view to having river management responsibilities, including river training arms and stop-banks taken over by Horizons Regional Council. Other investors and partners will be required. The sum of $10m has been suggested by project proponents as being needed to give the project the kick start it requires. An

incremental and pragmatic approach is proposed. The opportunity is seen as being critical to building the mana and attractiveness of the area.

RANGITIKEI

Rangitikei is a small district with 0.3% of the national population. Its population has been slowly shrinking at 0.5%pa[101], losing young working age people. Incomes are lower than the national average, due in part to household composition with more older people and single person households. Engagement in work is a little higher than the national average and unemployment lower. Home ownership costs are substantially lower than the national average.

The Rangitikei District is a mix of very versatile flat country and hard hill country dissected by the Rangitikei River and supported by a number of small service towns. Its economy is mainly rural-based:

- The largest employers in Rangitikei are farm-based. The sheep and beef sectors are the largest, but are in decline. Meat and meat product manufacturing is growing strongly. Dairy is also growing. But agriculture services, historically a large employer, are contracting modestly.
- Retailing is also a big employer. Most evident are supermarkets and groceries, cafes and restaurants, and other retailing.
- Pumps and compressor manufacturing is a unique regional offering, which is a large and growing employer. It is the most unique industry of the district and region, as measured by the regional comparative advantage metric.
- Speirs Foods is a significant food processing enterprise in Marton, with a national supply chain and distribution network
- Road freight transport is contracting (but growing in neighbouring Whanganui and Manawatū).

[101] Between 2001 and 2013 censuses

TABLE 27: SUB-REGIONAL PROFILE - RANGITIKEI

	Rangitikei district	NZ	% of NZ
People			
Population	14,550	4,442,100	0.3%
Population density (per km^2)	3	16	20.0%
Age composition (% of regional total)			
0-14	21%	20%	0.3%
15-24	12%	14%	0.3%
25-64	49%	51%	0.3%
65+	17%	14%	0.4%
Māori share	25%	16%	0.5%
- Of which aged under 25	48%	52%	
Aged dependency ratio	28	22	
Skills, income and work			
Tertiary educated (% of population)	18%	29%	62%
Personal income	25,700	28,500	90%
Household income	48,600	63,800	76%
Employed	6,816	2,001,009	0%
Employment rate(1)	64%	62%	103%
Unemployment rate(2)	6%	7%	85%
Participation rate(3)	68%	67%	101%
Average firm size (excl. zero sized)	7	11	59%
Housing			
Home ownership rate(4)	65%	65%	101%
House price(5)	$142,772	$488,674	29%
House price to household income ratio	2.9	7.7	38%

Weekly rent[6]	$199	$375	53%
Rental share of household income	21%	31%	70%
Gross rental yield[7]	7.2%	4.0%	181%
Household income after housing costs			
After rent(8)	38,272	44,318	86%
After mortgage payments(9)	39,396	32,296	122%

All data 2013 unless otherwise stated

Notes
(1) employed share of working age population
(2) unemployed share of labour force
(3) labour force share of working age population
(4) Owned or in trust share of total stated
(5) Dec-2014, QVNZ average house price
(6) Nov-2014, MBIE average rent
(7) Annual rent share of house price. Does not assume vacancy or take any operating costs.
(8) Household income less annualised weekly rent
(9) Household income less mortgage payments assuming 20% deposit, 7% long term interest rate and 30 year term.

Rangitikei has the aged profile characteristic of New Zealand with a deficit of people in the income earning age groups. Personal and household incomes are below national averages reflecting a significant beneficiary population. Employment is strong reflected in the unemployment and work participation rates. House prices and rentals are significantly lower than the national average. Home owners, in particular, are in a strong position.

As Figures 42 and 43 illustrate, there is modest growth taking place in traditional industries which represent comparative advantage for the district. Education is also a strong point, largely represented by schools in the district.

Of the recommendations in this report, land use intensification and especially the use of irrigation is the most important. The District has a significant amount of high quality land that could be made more productive. Because of its labour requirements, the export of vegetables would significantly boost the local economy and would flow into the rural town of Marton which is struggling to hold its own.

Poultry and grain growing and processing also have potential in the district, particularly southern river plains.

OPPORTUNITIES IDENTIFIED BY LOCAL INFORMANTS

Informants suggested the district's opportunities are centred in land use intensification, including pastoral irrigation and better use of the hill country.

Vegetable growing and marketing - vegetable growing is currently concentrated in the Horowhenua and Ohakune parts of the region. Some Rangitikei land owners also grow vegetables, including squash, for export. The soils and water resources of the district are suited to expanded vegetable production.

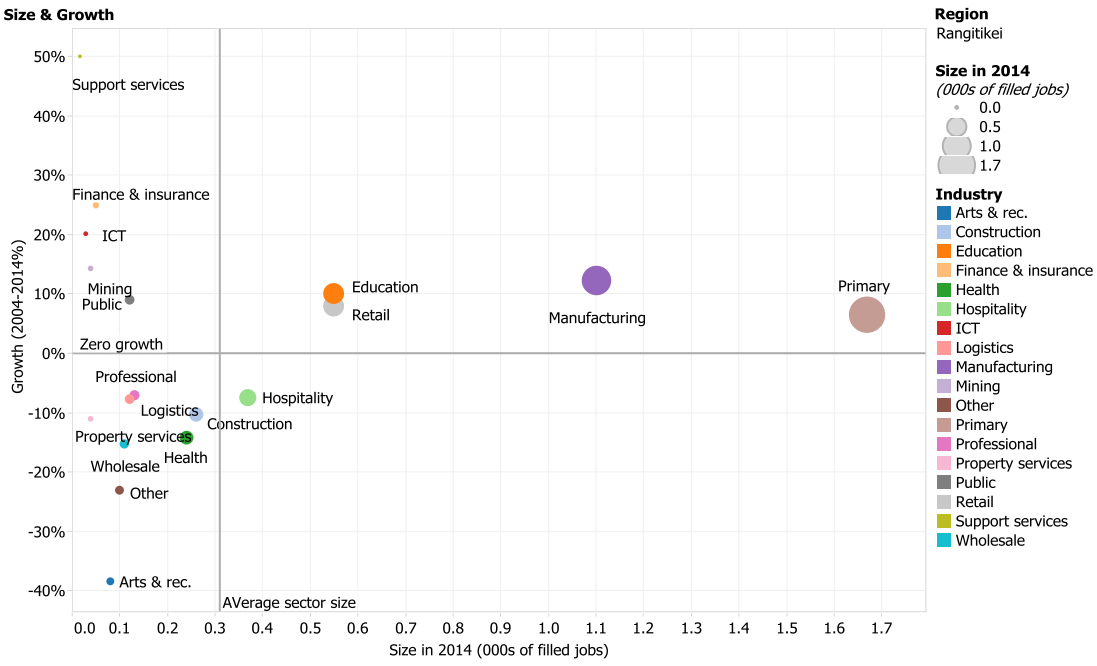
While it is not the role of this report to identify the potential associated with any particular company, it is noted that Speirs Foods Ltd, based in Marton, has 2,000 m^2 of

vegetable processing capability and currently has 200 product lines – mostly fresh salads - for distribution to supermarkets throughout New Zealand. This company has indicated its desire to locally source more of the ingredients for its product lines and to build on the region's growing 'brand' as a food centre.

One grower in the area currently supplies peas to McCains in Hawkes Bay. One of the competitive advantages of the Rangitikei location is the use of low temperature deep bore water. The temperature of this water means the peas require less processing and therefore generally are of a higher quality. Opportunity exists to more fully capitalise on this advantage by not only expanding pea growing but also diversifying into other products.

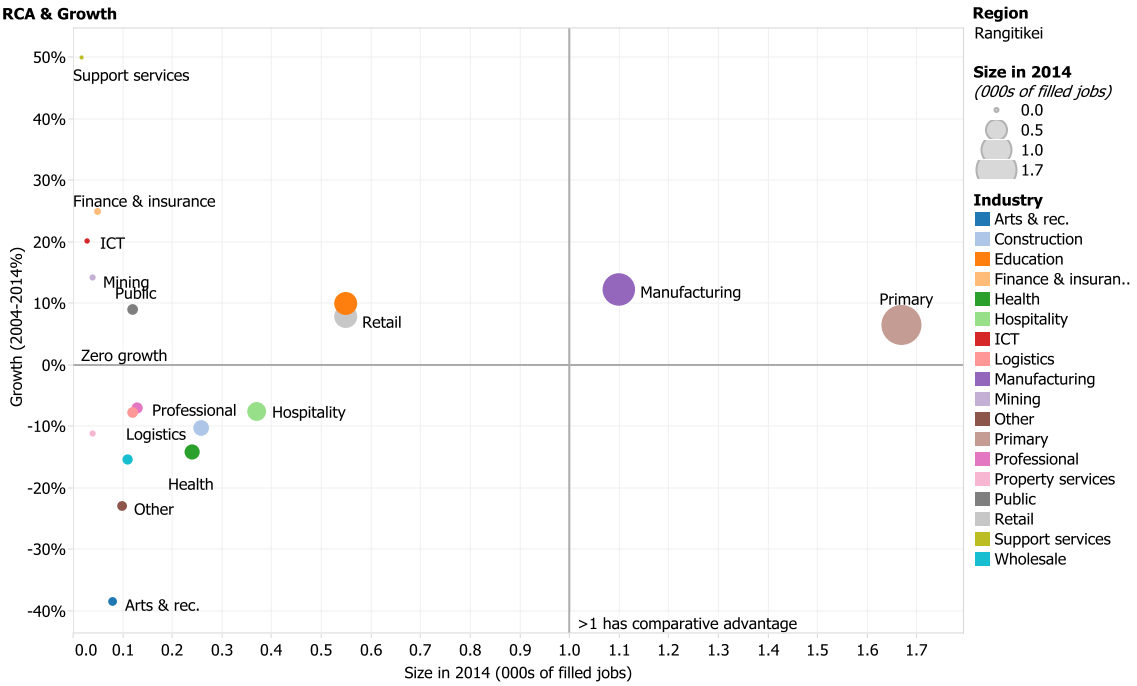
Freight distribution - In general terms informants have said there is opportunity to make better use of Marton's unique location as the meeting place of two highways and three rail networks. This could include establishment, with the support of Kiwi Rail, of a Marton-based rail siding. We understand this opportunity is currently being actively explored. If such a siding was constructed it could also be used to improve the logistics of transporting the 10,500 tonnes pa of meat and bone meal and wheat currently imported from Australia via Port of Napier for use by a significant local pet food manufacturer.

FIGURE 42: INDUSTRIES, SPECIALISATIONS, SIZE AND GROWTH – RANGITIKEI



Source: Statistics New Zealand, NZIER

FIGURE 43: REGIONAL COMPARATIVE ADVANTAGE - RANGITIKEI



Source: Statistics New Zealand, NZIER

National scale grain complex - several informants have identified the establishment of a national scale grain complex in the District as being a unique opportunity for the region. This is described in the section of this Study on "Poultry meat production and grain growing and processing". Our examination of this opportunity indicates that it is worth pursuing.

Air transportation of fresh product to international markets from Ohakea - several business leaders in the area have been actively exploring the logistics, cost-benefit and market opportunities associated with the use of Ohakea air base for the direct export of fresh vegetable and other products with short shelf life. This opportunity is explored earlier in this report as part of the discussion on transport and distribution.

Goat and sheep milk - some informants noted growing market demand for non-dairy milk products. Initial assessment of market returns suggest these may be very competitive when compared to current dairy prices[102]. To be successful, such a venture would need to operate at global scale for both grazing and processing and would require access to substantial numbers of good quality breeding stock which are currently in short supply. Informants also noted the synergy which could be achieved by working with Food HQ to ensure that all steps in the supply chain, including the application of state of the art product storage and processing technology, were fully explored and applied.

Pasture and crop irrigation - the irrigation section of this report addresses irrigation opportunities in the region. In summary, informants noted that the Rangitikei River has

[102] Goat milk was returning $19 kg MS with only $9 input costs at December 2014 pers. comm. Hugh Dalrymple.

unallocated 'run-of-the-river' water available for allocation for use for irrigation purposes. Horizons Regional Council has said that other water is also available in the area for harvesting when the river is at higher flow levels and or for extraction from ground water sources. The extraction, storage and reticulation of this water would provide the backstop to land use intensification, including expanded dairying and cropping. Already, provided that nutrient loss limits are adhered to, the suitability for dairying of the sand country located between Whanganui and Levin has been proven.

Sheep and beef - Rangitikei was identified as having capacity to produce higher volumes of hill country sourced sheep and beef meat. (See elsewhere in this report for details, especially the "Sheep and beef farming and processing" section).

Land locked Māori land - Rangitikei was said to have more land (not necessarily Māori land) constrained by multiple ownership, absentee owners, fragmentation and access problems than other districts in the region. One informant said that possibly as much as 14% of the District was without land access. It is beyond the brief of this study to document the exact scale of this issue but to make progress, a first step would be to determine the location of this constraint and then assess the cost and benefit of putting in place roads and other means of access.

Tourism - the beauty of the landscape and recreational opportunities associated with the Rangitikei River was said by informants to sometimes be overlooked in favour of a focus on Tongariro and Whanganui National Parks. The area is said to abound with conservation and recreation opportunities. The suggested interventions included leveraging off Ruapehu opportunities (discussed in the "Tourism and visitor services" section of the Study and refocusing earlier joint regional tourism work - Te Kahui Tupua,[103]- with high yield tourists being a potential target market. We agree that there are opportunities but they are isolated and need to be brought together into larger packages, which is discussed in more depth in the Tourism section.

Real estate, brand and connection - the common message offered by key informants was that the Rangitikei District should establish a district food brand and build 'provenance' from it. Equally important was the call to have:

- The comparative low cost of land and other production inputs recognised by investors located at more expensive locations.
- Local government 'roll out the red carpet rather than the red tape', in other words develop readiness approaches to potential industries and businesses.
- Local government to facilitate the process of keeping business leaders talking with each other and help them find the synergies to leverage shared opportunities.

[103]This was a $3 million project funded by the Ministry of Tourism as part of its major regional initiative [MRI] programme.

The Council informed us that they see merit in key actions along the following lines:

- Promote the quality of life, housing affordability, new tourism activities, ultra-fast broadband, river and outdoor activities and multi-sport opportunities.
- Develop a central business hub that includes information on regulatory requirements, financial advice, leases, available resources in the District including a register of vacant business and facilities.
- Encourage further development of the agriculture sectors by assisting them to grow more of what they are good at and processing it locally.
- Seek out and progress irrigation opportunities through increased community understanding and engagement.
- Develop strategies with the District's schools and employers to create employment opportunities.

MANAWATŪ

Manawatū is a modest-sized district accounting for 0.6% of the New Zealand population. In contrast to some other parts of the region, the population has been growing at a moderate 0.7%pa[104] (compared to 1.1% nationally). Incomes are comparable to the national average and around 30% higher after mortgage costs for the typical house. Employment is relatively high and unemployment low.

The district's largest employers fall into four categories:

- Government is a large employer through defence and school education. Both have grown strongly over the past decade.
- Residential care services or aged care is a large employer and hiring grew by 33% in the past decade.
- Farming and related processing are large employers in sheep, beef and dairy farming, meat and meat product manufacturing, and services to agriculture. There is significant critical mass in agricultural production. Transport is also growing strongly.
- Retailing is a large employer. Supermarkets are not hiring more, but cafes and restaurants are.

[104] Between 2001 and 2013 censuses

TABLE 28: SUB-REGIONAL PROFILE – MANAWATŪ DISTRICT

	Manawatū district	NZ	% of NZ
People			
Population	28,500	4,442,100	0.6%
Population density (per km^2)	11	16	72.5%
Age composition (% of regional total)			
0-14	21%	20%	0.7%
15-24	12%	14%	0.6%
25-64	51%	51%	0.6%
65+	16%	14%	0.7%
Māori share	15%	16%	0.6%
- Of which aged under 25	53%	52%	
Aged dependency ratio	25	22	
Skills, income and work			
Tertiary educated (% of population)	21%	29%	73%
Personal income	28,400	28,500	100%
Household income	57,700	63,800	90%
Employed	13,668	2,001,009	1%
Employment rate (1)	65%	62%	104%
Unemployment rate (2)	6%	7%	82%
Participation rate (3)	69%	67%	103%
Average firm size (excl. zero sized)	7	11	66%
Housing			
Home ownership rate (4)	71%	65%	110%
House price (5)	$242,304	$488,674	50%
House price to household income ratio	4.2	7.7	55%

Weekly rent [6]	$270	$375	72%
Rental share of household income	24%	31%	80%
Gross rental yield [7]	5.8%	4.0%	145%
Household income after housing costs			
After rent [8]	43,677	44,318	99%
After mortgage payments [9]	42,079	32,296	130%

All data 2013 unless otherwise stated

Notes
(1) employed share of working age population
(2) unemployed share of labour force
(3) labour force share of working age population
(4) Owned or in trust share of total stated
(5) Dec-2014, QVNZ average house price
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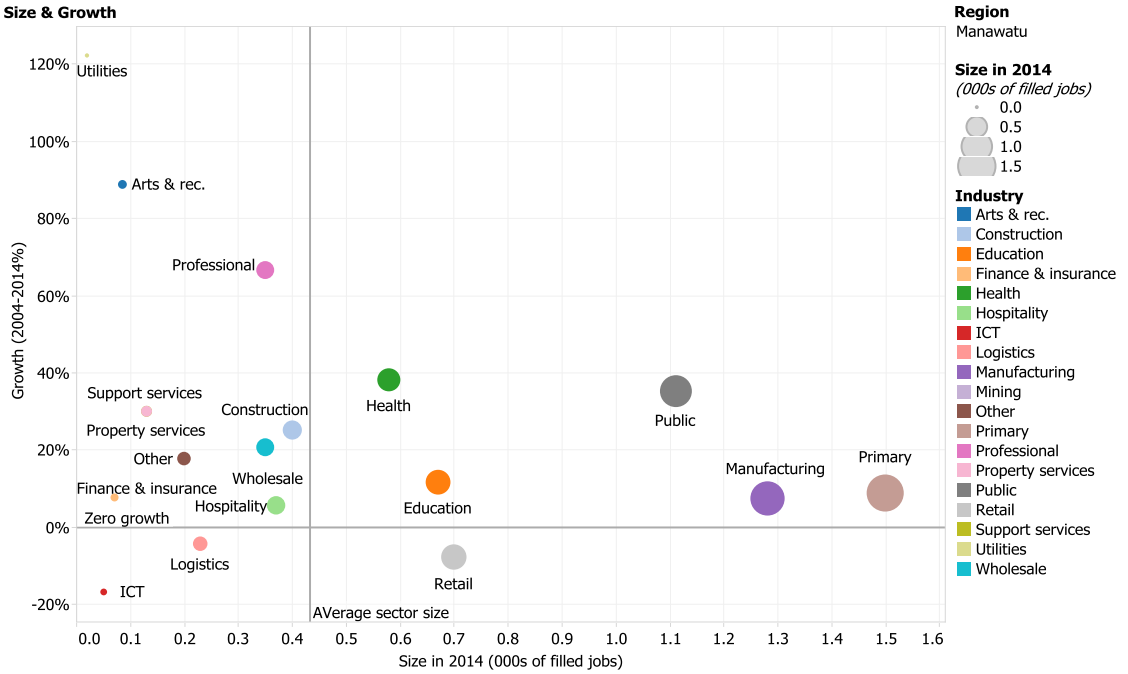
(8) Household income less annualised weekly rent
(9) Household income less mortgage payments assuming 20% deposit, 7% long term interest rate and 30 year term.

Feilding could be described as a single-minded town. It is agricultural through and through. It has achieved high standards of performance both on the land and in the processing facilities in the region. This is reflected in the reasonable household incomes, good employment participation and low unemployment.

It is a stable community with a high home ownership rate and a good house price to household income ratio.

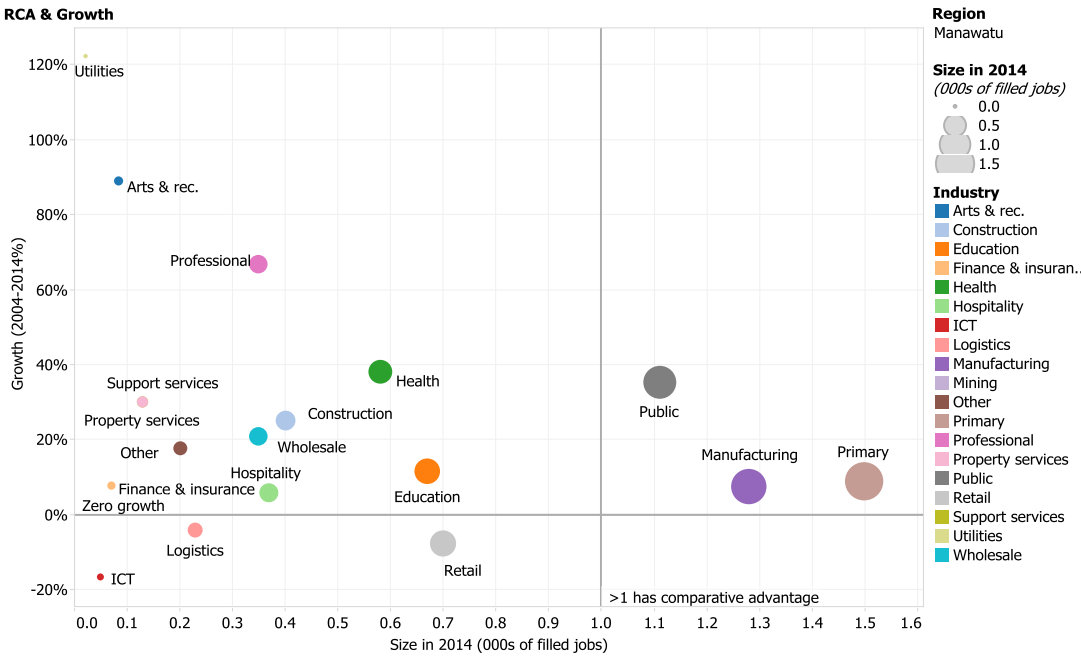
Recommended opportunities that will benefit Manawatū include all those with an agricultural focus – land use intensification, sheep and beef and emerging industries such as Mānuka honey. Its already significant manufacturing base could be expanded with primary sector-related processing and manufacturing.

FIGURE 44: INDUSTRIES, SPECIALISATIONS, SIZE AND GROWTH – MANAWATŪ DISTRICT



Source: Statistics New Zealand, NZIER

FIGURE 45: REGIONAL COMPARATIVE ADVANTAGE – MANAWATŪ DISTRICT



Source: Statistics New Zealand, NZIER

OPPORTUNITIES IDENTIFIED BY LOCAL INFORMANTS

Key informants from the Manawatū District viewed their area as the hub for the region of intensive agriculture, agri-business technology, agricultural servicing, innovation, precision agriculture and primary sector processing. Salient examples of this were quoted as being the:

Cross slot no-tillage seed systems – supplied from the district to global markets as a prime example of agri-business innovation (albeit with a current need for significant capital injection).

Proliant Ltd – who will take cattle blood from New Zealand's slaughter plants and use the blood plasma to produce bovine serum albumin[105] (BSA) for export. (Proliant have commenced construction of a new $24 million factory near Feilding. This will create between 25 and 30 jobs for the town and provide an expected economic boost of about $90m for New Zealand in the next decade).

Snap Chill Ltd – who are a Foxton-based company providing a hi-tech, low cost, non-glycol, relatively high speed and low energy cost solution to the need to rapidly cool milk. Farm dairy milk vats are used to achieve the temperature required by Fonterra and other processors to meet quality control purposes, using low cost energy windows.

The Building Clever Companies (BCC) group – who are developing plans for setting up an agri-tech accelerator which would have national reach into the regions.

Figured Agri-Business who provide a complete cloud-based livestock tracking, farm budgeting and forecasting tool that works hand-in-hand with Xero to help farmers improve farm performance and profits and leads the trend toward ICT based precision agriculture and information-rich farm decision-making.

Interpine Forest Consulting and Data Management Company – specialising in information technology and optimal decision making for the forestry industry.

Other opportunities discussed included:

Innovation – key informants suggested there was opportunity to build from the agri-business and technology strength of the region to create a concentrated 'district of innovation' where new businesses were cloned or grown as a result of 'like minds working together'.

Food HQ – details about this Massey University-based support and research centre for innovation in foods are provided earlier in the report but for now it is simply noted that, in the view of Manawatū District informants, there is considerable opportunity for Food HQ to build from the success of Proliant by doing more to make the Manawatū the centre of 'new world' food products and processes.

Precision agriculture – there is an opportunity to the limits of precision agriculture by developing technologies which produce more, with fewer inputs and less waste. Cloud based and integrated information systems were viewed as being the critical measure for

[105] BSA is used in pharmaceuticals to test blood and vaccines and in medical research.

assisting primary sector decision makers to optimise the sustainability of their production systems including, for example, by using technology to help avoid leaving $1b of unused grass in the paddock annually and by adopting time saving and efficiency promoting technologies.

Convene science agri-business fair – informants believed that an important additional element for sharing the benefits of innovation was to find better ways of transferring information from Massey, Food HQ, and the market and about the comparative performance of farmers producing similar products on similar land. They also noted the need to make such transfers 'two ways' so that researchers and innovators, in turn were more aware of the problems and challenges faced on the farm and therefore, were better able to focus their research efforts.

Making better use of the skills of 'partners' – informants from a number of districts noted the frequency with which the husband or wife of persons employed on a farm or in the Manawatū-based defence industry were often not able to apply their full skills and productive capacity simply because of the limits imposed by their isolated location. Suggestions for how this may be overcome included:

- **Establish more boutique/artisan products:** build a network of like-minded people, particularly in small towns connected to established tourist routes, to develop, market or supply specialist craft products and foods.
- **Speed up the roll out of high speed internet:** improve opportunities for skilled professionals to operate their business at distance.

'Farming is OK' – several of the agricultural-based informants noted the difficulty they were experiencing in recruiting good people to help them with their farming enterprises. They called for a number of programmes including:

- Making the agricultural and primary sector an attractive career option by developing a 'workplace accord' around standards.
- Supporting young people to transition from school to training to work by rejuvenating the current approach to 'careers advice' with high tech awareness tools, industry engagement and more careful planning for the needs of the workforce of the future.

Medium scale water storage and irrigation – the summer of 2014/15 took its toll on agricultural production because of drought conditions. Key informants were strong in their call for more effort to identify locations, for example, sub-catchments of the Oroua River, within which 100-plus farmers could collaborate to meet the costs of water storage and reticulation. The benefits of such research and the resultant investment decisions were seen to be that they would overcome the effects of the 1:3 yearly drought, which appears to be the current pattern, to create certainty for stock management and increase production by 25-33%.

PALMERSTON NORTH CITY

Palmerston North is the largest city in the region, accounting for nearly 2% of the New Zealand population. Massey University boosts the youthful population, but the city does not keep many of the young people after completion of the studies due to lack of opportunities. Incomes in the city are a little lower than the national average, but equal after rental costs or over 20% higher after mortgage costs. Employment conditions are similar to the national total, with slightly lower employment and slightly higher unemployment.

The Palmerston North economy has the hallmarks of a regional city and government town. The city's largest employers are the university, defence and other service industries:

- Tertiary education is the largest district employer, although Massey University has cut headcount in the past decade. Science and research with an agricultural bias are associated with the university.
- Hospital, defence and school education are also large employers.
- An ageing population and good healthcare also supports a large and growing aged residential care sector.
- The city's strategic location in the central North Island and its proximity to strong freight networks means that there is also a large logistics sector (in transport, warehousing and storage).
- As the largest city in the region, it also acts as the retail and hospitality capital.

TABLE 29: SUB-REGIONAL PROFILE – PALMERSTON NORTH CITY

	Palmerston North city	NZ	% of NZ
People			
Population	83,500	4,442,100	1.9%
Population density (per km^2)	233	16	1472.5%
Age composition (% of regional total)			
0-14	20%	20%	1.8%
15-24	18%	14%	2.5%
25-64	49%	51%	1.8%
65+	13%	14%	1.7%
Māori share	17%	16%	2.1%
- Of which aged under 25	56%	52%	
Aged dependency ratio	19	22	
Skills, income and work			
Tertiary educated (% of population)	29%	29%	100%
Personal income	27,000	28,500	95%
Household income	58,500	63,800	92%
Employed	37,332	2,001,009	2%
Employment rate (1)	61%	62%	98%
Unemployment rate(2)	8%	7%	106%
Participation rate(3)	66%	67%	98%
Average firm size (excl. zero sized)	14	11	125%
Housing			
Home ownership rate(4)	62%	65%	96%
House price(5)	$289,439	$488,674	59%
House price to household income ratio	4.9	7.7	65%

Weekly rent[6]	$299	$375	80%
Rental share of household income	27%	31%	87%
Gross rental yield[7]	5.4%	4.0%	135%
Household income after housing costs			
After rent[8]	42,938	44,318	97%
After mortgage payments[9]	39,840	32,296	123%

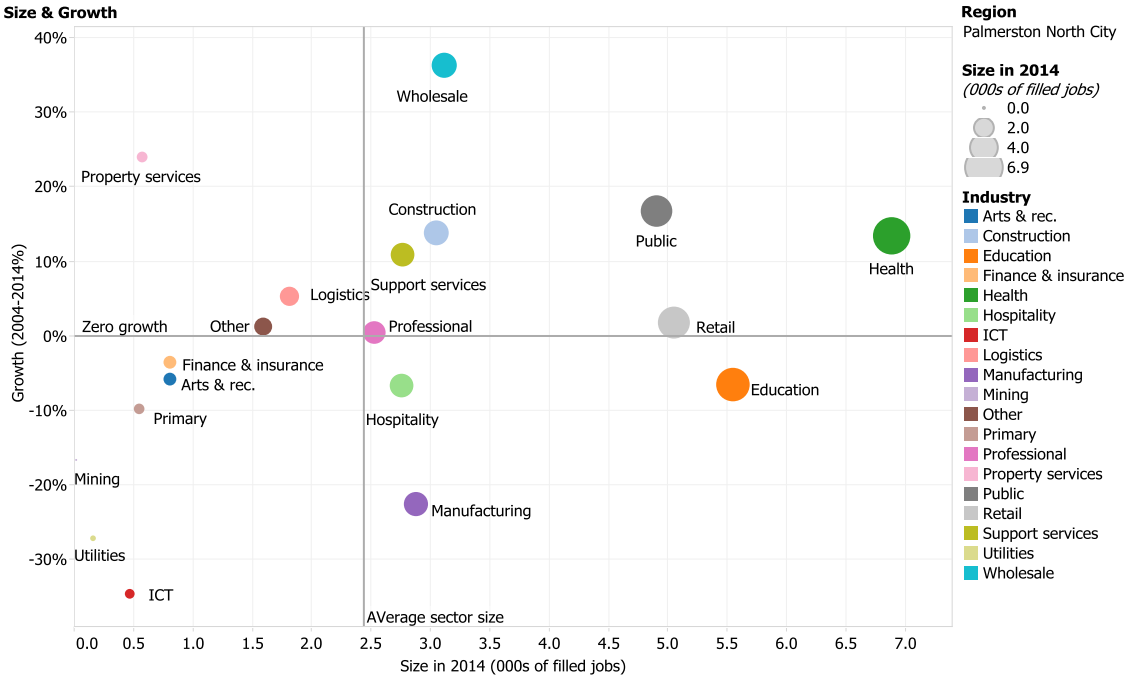
All data 2013 unless otherwise stated

Notes
(1) employed share of working age population
(2) unemployed share of labour force
(3) labour force share of working age population
(4) Owned or in trust share of total stated
(5) Dec-2014, QVNZ average house price
(6) Nov-2014, MBIE average rent
(7) Annual rent share of house price. Does not assume vacancy or take any operating costs.
(8) Household income less annualised weekly rent
(9) Household income less mortgage payments assuming 20% deposit, 7% long term interest rate and 30 year term.

Despite being the main urban centre, it is not a strong economic performer, nor the growth and vitality centre the region needs. With personal and household incomes below the national average, unemployment slightly above the average and home ownership rate that is below the average (despite modest house prices and rentals), it does not exude strength and purpose. Palmerston North needs to focus on its own development not only for its own sake but to become more of a powerhouse for the region.

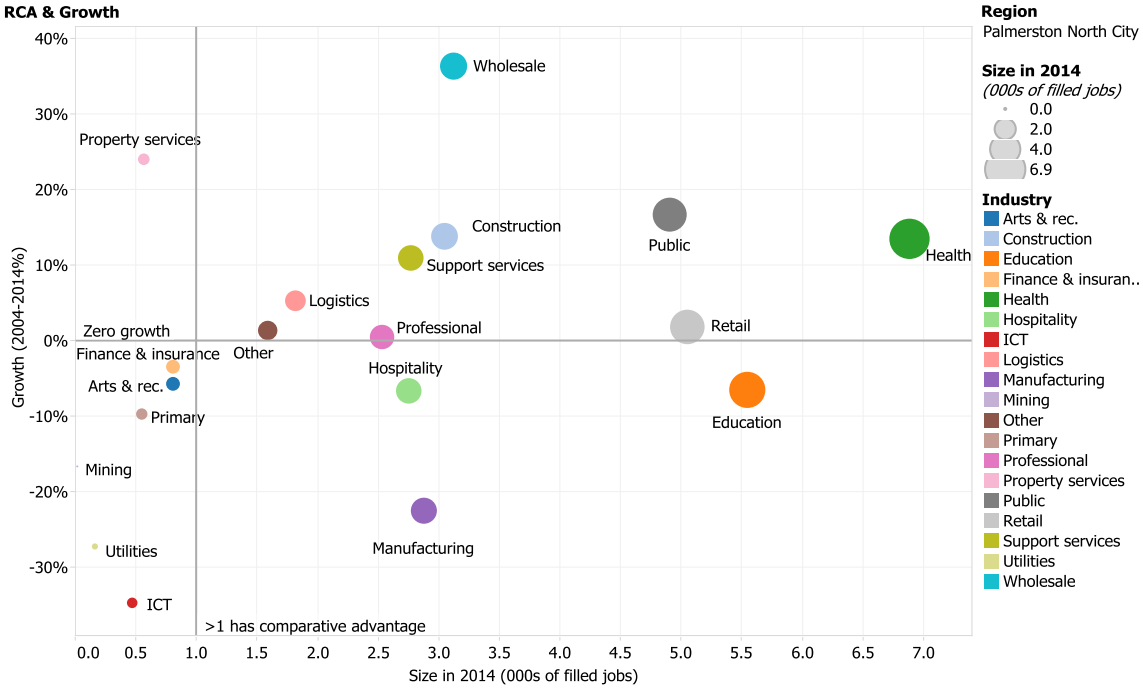
Figures 46 and 47 reflect more growth areas than is evident in other parts of the region though most growth is in publicly funded areas – health and public sector. Education is significant in size, but is flagging in growth terms. Manufacturing, which could be associated with an urban centre, is modest in size and growth. The development of hi-technology businesses in and around the city is vital for the success of the region.

FIGURE 46: INDUSTRIES, SPECIALISATIONS, SIZE AND GROWTH – PALMERSTON NORTH CITY



Source: Statistics New Zealand, NZIER

FIGURE 47: REGIONAL COMPARATIVE ADVANTAGE – PALMERSTON NORTH CITY



Source: Statistics New Zealand, NZIER

Of the opportunities identified in this study distribution and transport is very important to the district. The application of technology and innovation to the agri-business sector is another significant area of potential development but this requires a committed and hard-edged strategy to its achievement which is so far not evident. Equally important is the "Outsourcing" opportunity in all its various facets.

Arguably the most important thing Palmerston North can be for the region is a social centre. The region requires a heart that attracts people and launches them into the local economy. This requires Palmerston North to see itself as the centre of the region and not as an isolated entity.

OPPORTUNITIES IDENTIFIED BY LOCAL INFORMANTS

Encourage local spending - as noted earlier in this report, Palmerston North is a large employer of public sector services including the health, education, defence and transport sectors. It also has a range of important medium scale manufacturing and processing plants. Informants stated that the biggest challenge for the city was to encourage persons employed in these sectors to make investments, grow businesses and spend their recreation in the city rather than taking advantage of the city's central location and good transport network to go 'elsewhere for the weekend.'

Build on existing strengths - Palmerston North also has some quite unique and highly successful manufacturers and processes of products and services. These businesses provide resilience and diversity to the local economy and a base from which aligned component supply industries can grow. Opportunities exist to continue to build like-minded or synergistic businesses from the success of those which already exist. A related need is to find business leaders who are committed to the growth of Palmerston North and then establish a way to get the sparks flowing between them. Those mentioned by informants as being particularly relevant to the above opportunities included:

- NZ Pharmaceuticals – manufacturer of bio-chemicals from by-products of the meat industry.
- Ashurst Engineering –focused on fabrication for energy generation.
- Prepared Foods – New Zealand's largest processor of abalone and processor of ready to eat meals.
- Steelfort Engineering - New Zealand's last manufacturer of lawn mowers.
- EziBuy – supplier of internet ordered goods.
- Noske Kaeser – provider of air conditioning, firefighting and refrigeration systems.
- Integration Technologies – supplier of oil industry retail automation systems.

Palmerston North is the heart of the Manawatū - A consistent message received from a wide range of key informants was that not only Manawatu, but the region as a whole needs a heart. The city needs to attract and keep more talent in the region. More effort is required to make the city more attractive and exciting. Suggestions included urging the Council to invest more in street works and public recreational, cultural and art facilities and amenities.

Defence - Government policy will result in the consolidation of defence training facilities, services and people from other centres to both Linton and Ohakea. Support industries

located in Palmerston North will benefit from this growth, as will the hospitality industry. The challenge for the hospitality sector will be to make Palmerston North the preferred location for defence personnel to spend their discretionary dollars. A further challenge, as mentioned earlier in this document, will be to provide employment opportunities for partners of those employed in the defence industry.

Secure existing businesses - another message shared by Palmerston North informants (of equal relevance in other districts) was the importance of public agencies, including those from both local and central government, recognising the value of existing large and important private sector employers by seeking out ways to enable them to grow and by making their lives as easy as they can be. Examples included: streamlining regulatory demands; providing robust infrastructure (water and transport) and; keeping rate demands and other local authority costs down.

Education opportunities - Palmerston North has been a long term supplier of education and training services for international students. Some of this has been supplied by Massey University. Other services have been supplied by the Universal College of Learning or UCOL. UCOL has three campuses in the lower half of the North Island of New Zealand and also provides on-line learning. Interest in New Zealand from international students waxes and wanes. Informants have suggested that a more courageous marketing campaign would realise growth opportunities.

Air freight - the presence of EziBuy in the city, as well as manufacturers of shelf-ready, short run or light weight precision products for international markets, have been important in sustaining a daily air freight service from Palmerston North to Auckland. Such a service will continue to be important. It is understood that an upgrade of this air freight fleet is planned. This provides a base for consideration of expansion in both volume and weight – to the benefit of both the transporter and the businesses needing to transport their products to market. Expanded market opportunities may follow.

TARARUA

Tararua is a small, largely rural district with a shrinking population. Its population is also ageing. Incomes are below the national average.

The largest employers in Tararua are farming and processing-related:

- Sheep and beef sector employment is stagnant, but dairy hiring is growing slightly. Agriculture support services, meat and dairy processing are all shedding labour.
- Retail is large (by district standards) and growing, but residential care and school education are in decline.
- It has suffered from the closure of the Oringi Freezing Works in 2008 although the abandoned plant is being used for a number of small scale business developments.

TABLE 30: SUB-REGIONAL PROFILE – TARARUA

	Tararua district	NZ	% of NZ
People			
Population	17,450	4,442,100	0.4%
Population density (per km^2)	4	16	24.7%
Age composition (% of regional total)			
0-14	22%	20%	0.4%
15-24	11%	14%	0.3%
25-64	50%	51%	0.4%
65+	17%	14%	0.5%
Māori share	22%	16%	0.6%
- Of which aged under 25	52%	52%	
Aged dependency ratio	28	22	
Skills, income and work			
Tertiary educated (% of population)	17%	29%	57%
Personal income	25,100	28,500	88%
Household income	47,500	63,800	74%
Employed	7,857	2,001,009	0%
Employment rate(1)	63%	62%	101%
Unemployment rate(2)	6%	7%	86%
Participation rate(3)	67%	67%	100%
Average firm size (excl. zero sized)	6	11	54%
Housing			
Home ownership rate(4)	67%	65%	104%
House price(5)	$150,712	$488,674	31%
House price to household income ratio	3.2	7.7	41%

Weekly rent[6]	$179	$375	48%
Rental share of household income	20%	31%	64%
Gross rental yield[7]	6.2%	4.0%	155%
Household income after housing costs			
After rent[8]	38,174	44,318	86%
After mortgage payments[9]	37,784	32,296	117%

All data 2013 unless otherwise stated

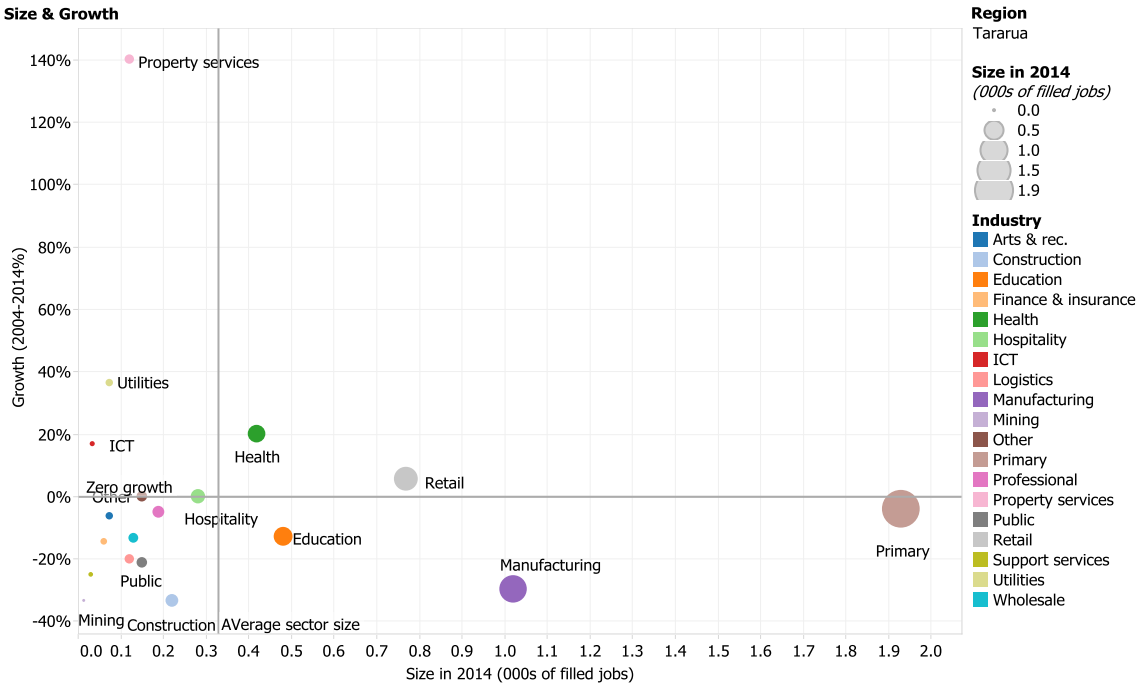
Notes
(1) employed share of working age population
(2) unemployed share of labour force
(3) labour force share of working age population
(4) Owned or in trust share of total stated
(5) Dec-2014, QVNZ average house price
(6) Nov-2014, MBIE average rent
(7) Annual rent share of house price. Does not assume vacancy or take any operating costs.
(8) Household income less annualised weekly rent
(9) Household income less mortgage payments assuming 20% deposit, 7% long term interest rate and 30 year term.

Taraua suffers severely from the loss of young people, the only benefit of which is that it has a good unemployment rate (below the national average) and a high employment rate. The result of this loss of young people is a lack of labour in key industries. House prices are very low, as are rents. As is evident from Figure 51, there are almost no industries in the growth segment and the only activity of some scale is agriculture, which is losing employment and is below the growth threshold. Primary activity is also the only area of activity that could be described as a comparative advantage. The one-dimensional nature of the district's economy is a major difficulty when it comes to achieving growth.

The key question is: how will the opportunities and enablers identified in this report assist Tararua? There are modest opportunities in tourism, Mānuka honey and potential for productivity improvements in sheep and beef farming. There is significant activity aimed at boosting the local economy amongst some locals (for example, projects at the old Oringi Freezing Works) and it is this enthusiasm and commitment from groups and individuals that is going to make the difference in the long run. Arguably, another comparative advantage, besides the primary sector is this small number of committed people.

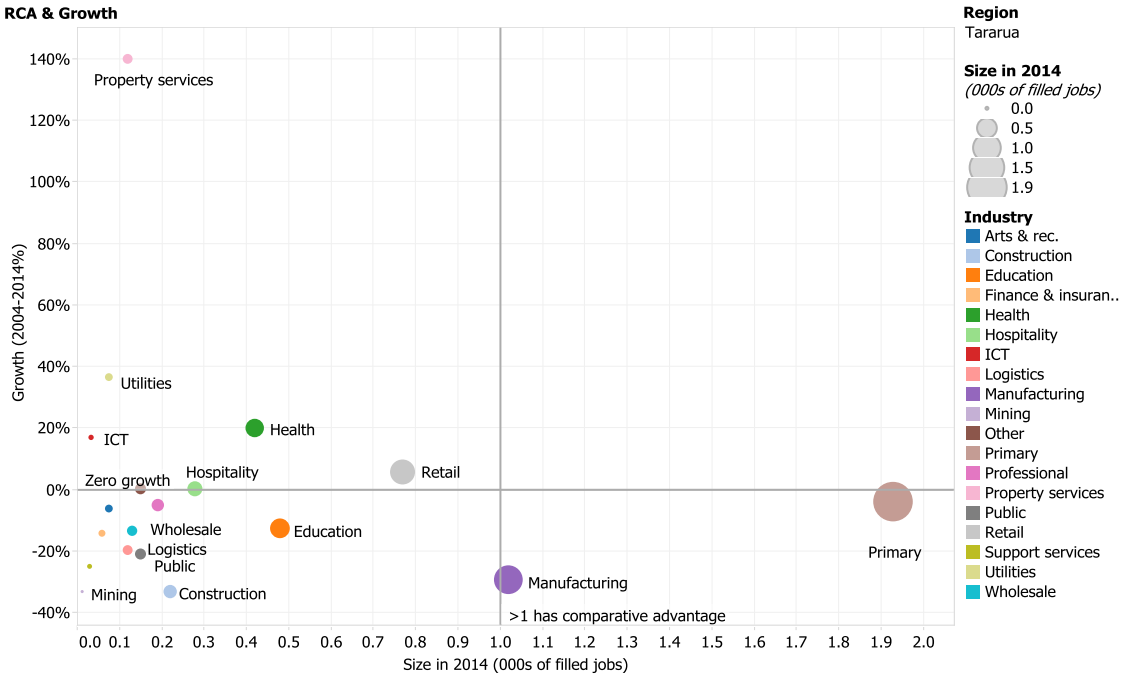
There are a number of small to medium-sized businesses located in Pahiatua, Dannevirke, Norsewood and other small towns which need to build on the networks and leverage the associated skills contained within like-minded businesses. These collaborations are capable of adding to the efficiency and reducing the cost of the supply chain. This is particularly pertinent to clothing manufacture lines.

FIGURE 48: INDUSTRIES, SPECIALISATIONS, SIZE AND GROWTH - TARARUA



Source: Statistics New Zealand, NZIER

FIGURE 49: REGIONAL COMPARATIVE ADVANTAGE – TARARUA



Source: Statistics New Zealand, NZIER

OPPORTUNITIES IDENTIFIED BY LOCAL INFORMANTS

Super fund - informants suggested that several Tararua businesses had market opportunities and capacity to grow but were short of equity. The recommendation was that the managers of the New Zealand Superannuation Fund be encouraged to chunk down investment packages to enable them to back smaller scale regional investment opportunities. The size of package of most interest to businesses located in places like Tararua was $2-5 million.

Iwi settlement funds - with recent good progress with Treaty Settlement negotiations, iwi key informants noted their willingness to partner with business entrepreneur – for learning and leverage of skills and to achieve the best return on new capital. Land development was viewed as a priority given that it can be held in perpetuity.

Cracking the export market - of particular interest were opportunities in the clothing market noting the strength of existing Tararua businesses in the manufacture of safety clothing, uniforms, sports attire and clothing using merino wool and other natural fibres. Interventions such as the "Growing Business" enabler outlined in this report are applicable to this district.

Internet marketing - some Tararua businesses are growing by increasingly becoming the broker or middle-man in a supply chain rather than simply a manufacturer. The example was quoted of a clothing manufacturer who was sourcing materials from NZ, organising product manufacture in China or Philippines and then marketing and selling the product via the internet, with the New Zealand brand and provenance given due emphasis. Distribution was then carried out with the help of NZ Post. The model was viewed as a good one to set up as a case study for others to emulate.

Tourism - it was of concern to Tararua informants that the tourism attractions in their area sometimes get overlooked by domestic and international visitors in favour of better known attractions in Hawke's Bay and Ruapehu. Attention was drawn to the comparative attractiveness of the uncrowded outdoor recreation opportunities provided in the northern Tararua and Ruahine Ranges including hunting, trekking and fishing. Attention was also drawn to the mountain biking and walking opportunities associated with upgraded tracks and facilities around the Manawatū Gorge and the eastern part of the region. The suggestion was made that the District needed to establish better links to the tourism marketing initiatives established to promote southern Hawke's Bay attractions and to grow packages of related multi-day activities.

Skilled labour - some Tararua clothing manufacturers noted the difficulties they were experiencing recruiting skilled machinists and other staff. Options suggested to address this situation includedtraining New Zealanders and supporting the migration of experienced machinists from the Philippines and elsewhere. The preferred path was to do both with an emphasis towards using local people for local jobs through programmes such 'youth pathways', designed to match school leavers to training and then to job opportunities.

Local government regulation - businesses everywhere referenced the challenges they faced in dealing with local government regulatory requirements. One informant noted the near loss of a new business suited to Dannevirke simply because it was all made too difficult. Reference was also made to the challenges now faced in converting land to

dairying because of nutrient loss limits. The suggested interventions to overcome these challenges have been well canvassed in the Productivity Commission's report 'Towards Better Local Government Regulation, Productivity Commission, May 2013 ' Informants wanted the recommendations of this report implemented.

Better use of stranded assets - the Oringi Business Centre near Dannevirke is an outstanding example of how stranded assets may be used to create new employment opportunities. The original Oringi Freezing Works closed in 2008. Water and waste disposal, refrigeration and chilling, storage, rail, stable power, space to expand, good truck access and the ability to manufacture goods in premises which can be made sterile all remain as assets capable of expanded use by new businesses. The facility was taken over by Scanpower Customer Trust which has actively marketed the benefits of the site and has now established six separate substantial businesses on the site with more to come. The essential ingredients for success were: motivated and activated leadership; good governance; extensive marketing and; price competitiveness. The site has additional capacity to expand.

Road infrastructure - Tararua informants urged that investment in upgrading the Saddle Road and Pahiatua Track connections between the east and west of the Tararua divide continue. This was viewed by informants as a sensible contingency measure and also as a means of transporting agricultural product and workers between different parts of the region.

Attractiveness of small towns - a challenge for the Tararua District is to encourage the 50 extra people needed to operate the expanded Fonterra plant at Pahiatua to live in the local area. Informants suggested this may be best achieved by promoting the comparative low cost and general attractiveness of rural and small town living.

Best use of land use capability - Tararua District Council has completed an extensive assessment of the match between location, land and climate requirements and the likely ability to grow niche products such as feijoa. This was known as the 'Go Project'. The approach adopted by the Council may have value for adoption in other districts. One of the big opportunities identified within the report and in ancillary research was that of expanding all aspects of the flax industry. Potential uses included use in bio-composite materials, gels, seed oil, pulp and paper and for phyto-medical purposes. Environmental benefits, including the water quality benefits associated with the use of flax in planting riparian strips, were also identified. Current constraints included market development and the construction of efficient harvesting and processing equipment.

HOROWHENUA

Horowhenua has a modest-sized population, which is barely growing at 0.2%pa compared to 1.1% nationally[106]. The population is relatively old (23% over 65, compared to 14% nationally).

Horowhenua is larger than Ruapehu, Rangitikei and Tararua. It has a large and growing over 65 age group and significant deficits in the youth and income earning age-groups.

The demographics and industry structure mean than the labour market is relatively weak. Compared to New Zealand as a whole, the population is less likely to be in employment and earns less. In fact, the district has a surprisingly high unemployment rate, indicating some availability of labour. Housing is not sufficiently cheap to alleviate low regional incomes.

The two largest employers are schools (for young people) and residential care (for older people). Farming is the backbone of the district – although in relatively unique offerings:

- School education is a large employer, but it is not growing.
- Residential care and allied health services are growing strongly. This is consistent with an ageing population.
- Farming and processing are important parts of the economy. Dairy, horticulture (mushroom and vegetable growing), poultry farming and meat processing are the largest employers.

Its proximity to Wellington is a key strength in its economy and this will be aided with the completion of the Transmission Gully and Kapiti Expressway roading projects in the area over the next few years. Capital injection is also expected from two impending Treaty of Waitangi settlements.

Of the opportunities identified in this study, those most relevant to Horowhenua are care of older people and retirement living which we believe is a potential game-breaker for the district and the enabler “Growing Businesses”. Fresh vegetables and poultry are also significant opportunities but as both involve major effort on developing export markets they have to be seen as longer term. There is a significant foundation of manufacturing in the district which, with improved performance, could strengthen the local economy, but these industries (such as textiles) are always going to struggle with their lack of critical mass.

TABLE 31: SUB-REGIONAL PROFILE - HOROWHENUA

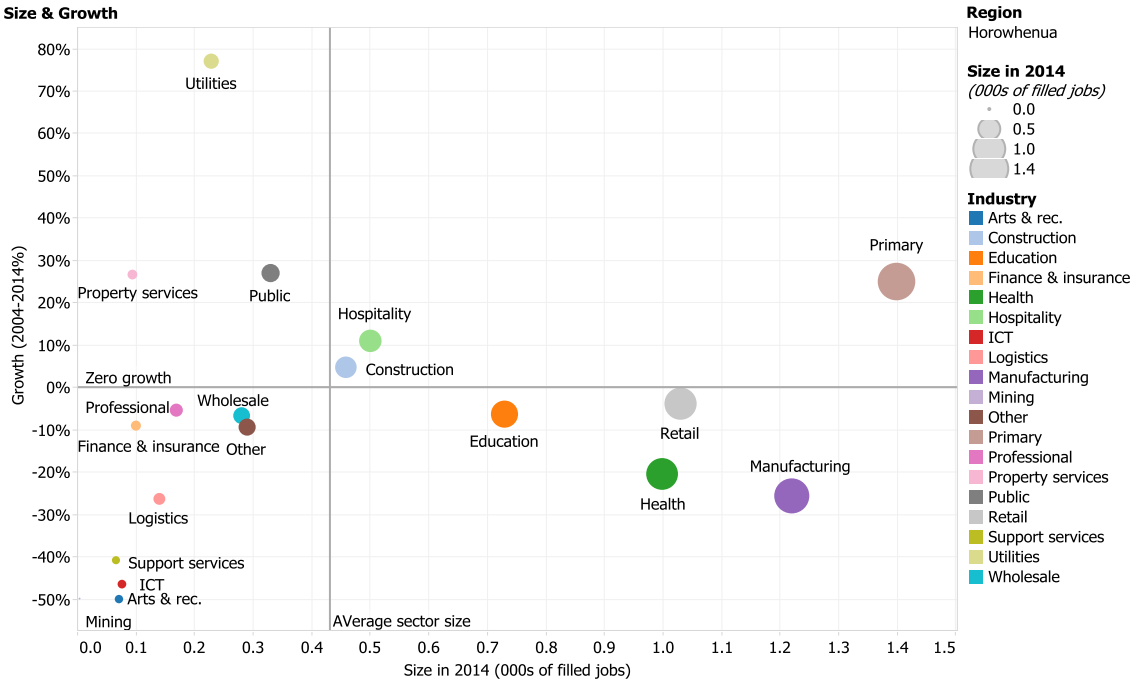
	Horowhenua district	NZ	% of NZ
People			
Population	31,200	4,442,100	0.7%
Population density (per km^2)	29	16	181.2%
Age composition (% of regional total)			
0-14	19%	20%	0.7%
15-24	11%	14%	0.6%
25-64	46%	51%	0.6%
65+	23%	14%	1.2%
Māori share	23%	16%	1.1%
- Of which aged under 25	52%	52%	
Aged dependency ratio	41	22	
Skills, income and work			
Tertiary educated (% of population)	16%	29%	55%
Personal income	21,800	28,500	76%
Household income	39,200	63,800	61%
Employed	11,760	2,001,009	1%
Employment rate (1)	51%	62%	82%
Unemployment rate (2)	10%	7%	142%
Participation rate (3)	56%	67%	84%
Average firm size (excl. zero sized)	8	11	72%
Housing			
Home ownership rate (4)	69%	65%	106%
House price (5)	$203,725	$488,674	42%
House price to household income ratio	5.2	7.7	68%

Weekly rent (6)	$218	$375	58%
Rental share of household income	29%	31%	95%
Gross rental yield (7)	5.6%	4.0%	140%
Household income after housing costs			
-After rent (8)	27,846	44,318	63%
-After mortgage payments (9)	26,066	32,296	81%

All data 2013 unless otherwise stated

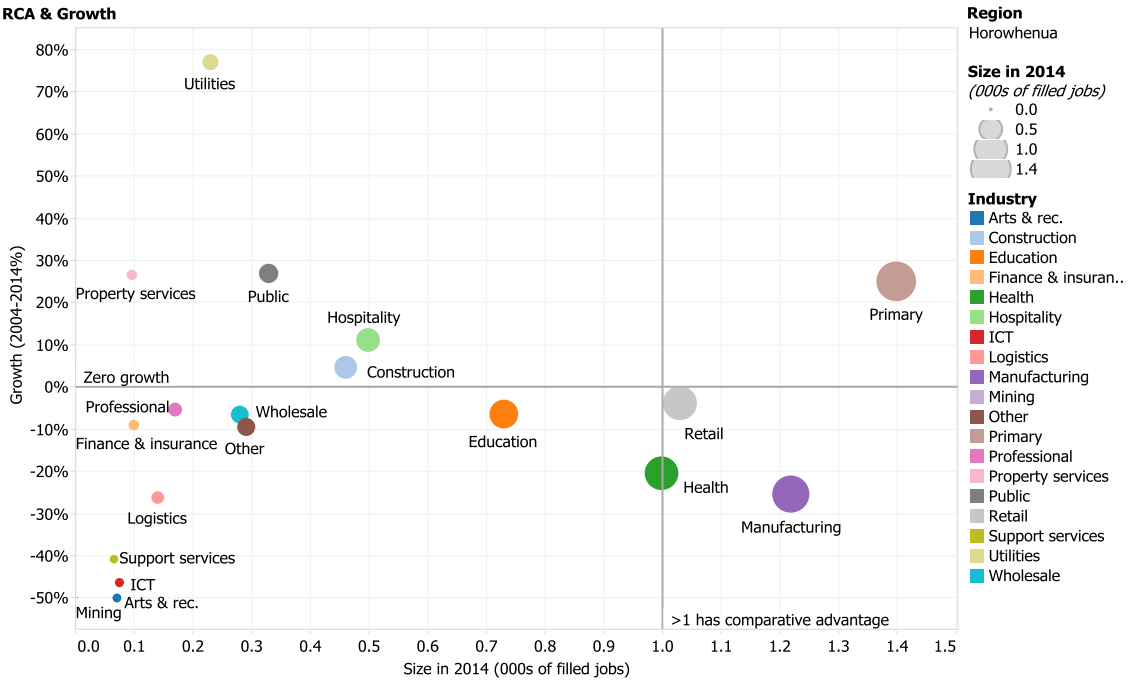
Notes
(1) employed share of working age population
(2) unemployed share of labour force
(3) labour force share of working age population
(4) Owned or in trust share of total stated
(5) Dec-2014, QVNZ average house price
(6) Nov-2014, MBIE average rent
(7) Annual rent share of house price. Does not assume vacancy or take any operating costs.
(8) Household income less annualised weekly rent
(9) Household income less mortgage payments assuming 20% deposit, 7% long term interest rate and 30 year term.

FIGURE 50: INDUSTRIES, SPECIALISATIONS, SIZE AND GROWTH – HOROWHENUA



Source: Statistics New Zealand, NZIER

FIGURE 51: REGIONAL COMPARATIVE ADVANTAGE – HOROWHENUA



Source: Statistics New Zealand, NZIER

OPPORTUNITIES IDENTIFIED BY LOCAL INFORMANTS

Connectivity is the key to market opportunity - market opportunities in the District will expand with the completion of Transmission Gully and the Expressway projects. These are part of the 'Roads of National Significance' programme. Informants noted this will provide a market of 700,000 people within an hour's drive of Levin. This will enable more goods and services to be supplied to a wider market e.g. joinery or aluminum windows to be supplied for house construction in Wellington. It will also bring the Horowhenua area 'closer' for Wellington residents for the purchase of holiday homes or as a place to retire.

Input costs - in terms of enablers, the region has land and labour at rates which are very competitive when compared to Auckland and Wellington. There is very little knowledge outside Levin of these comparative costs. More information and marketing is required, for example, marketing the fact that house prices are half those of the average price in New Zealand together with the marketing of other district attributes would seem to be a priority.

Other advantages of the area include the stable workforce, reduced living costs, good soil, good schools, good health facilities and proximity to accessible tertiary education facilities. Marketing needs to change external perceptions about the District, as an informant said "to see the comparative benefits of the opportunity for business set up, holiday home purchase or retirement in the Horowhenua".

Modernising and reinvigorating family companies - informants suggested that the Horowhenua area has a high proportion of family-owned companies which were established in the 1960s and 1970s. These companies were said to be sometimes insular in their outlook and have been slow to embrace the tools which characterise companies established more recently. These tools include ICT, HR management skills, methods to

protect unique IP, collaboration with partner industries and the use of external advisors. In particular, it was suggested there is a big gap in the web-readiness of many of these smaller businesses, with some not having a website at all, and others applying outdated technology. Assistance was said to be required to create a more 'wired community'. One suggested intervention was to bring in a team of ICT-savvy graduates with formal training in website development and online selling, and then send them out to improve the websites and web-readiness of local businesses as a shared resource (note: this wouldn't necessarily need to be funded by central government, though perhaps an opportunity for cost sharing between central government, local government and local businesses would be an advantage).

Local supply chains and cluster opportunities - businesses in the district don't appear to be well linked to each other, meaning that opportunities to reduce transport or logistic costs or to reduce the cost of input products are sometimes missed. These clusters of businesses cover engineering, food processing, fabric and clothing manufacturing and retirement and healthcare providers. Informants suggested that these supposed "like-minded businesses" don't talk to each other enough – particularly to other businesses upstream and downstream in their supply chains. Informants suggested there was a need for a skilled individual or platform to help them build a more collaborative approach. In more particular terms, possible interventions to support better supply chain integration might be:

- Refresh the local business networking institutions in order to get more businesses alongside each other and improve supply chain knowledge or, as one informant put it – "energise our own backyard".
- Encourage industry and the District Council to collaborate in establishing a new industrial or manufacturing park to enable like-minded companies to co-locate
- Employ a coordinator or facilitator to seek out and foster networking opportunities and to promote 'clusters' of like-minded people who can leverage synergies e.g. small engineering, manufacturing, textile industries working together
- Take advantage of a new NZTE 'coalition programme' which looks to establish better connection between different but like-minded players in a supply chain

External focus (or lack of it) - informants suggested some Horowhenua businesses tended to be inward looking rather than market focused. The lack of a Board of Directors in many of the companies to provide strategic guidance was said to contribute to this problem. The classic 'working in the business rather than on the business' was said to apply to many of these businesses. As a result, these businesses were said to lack the strategy and drive to grow beyond the SME level. As one informant said: "they are afraid to grow and they need help to build the courage to go there" and that this sometimes implies "taking the family hands off the reins by pulling in external expertise". Interventions to overcome this challenge may include working with the Institute of Directors to develop a 'shared' Board of Directors (or Advisory Board) that a number of businesses might tap into. The focus of such advice should be toward strategy development, growth and marketing.

Scale for export success - many Horowhenua businesses were said to lack the scale necessary to address export opportunities. Instead businesses were said to sometimes undercut each other in an attempt to gain a greater domestic market share. Possible interventions to overcome issues related to a lack of scale and also to improve export opportunities identified by informants included:

- Better linking to NZTE to crack the export opportunity barrier noting this is a distinct limiting factor affecting the growth of both the horticultural – particularly asparagus - and manufacturing sectors.
- Cost-sharing around market development initiatives, perhaps modelled off the 'Seafood into China' initiative applied a few years ago. This could be something for NZTE to assist with. The objective would be to reduce the average fixed cost of exporting for small firms.
- Better using the region's people-connections, for example by inviting existing current Chinese market gardeners in the district to build marketing opportunities through and with the Chinese relatives of existing market gardeners to boost international linkages.

Water storage and reticulation - some informants suggested agricultural productivity in the Horowhenua area could be improved by working harder to establish irrigation opportunities, including further exploring local deep ground water sources and tapping into the water storage capacity at the Mangawhero Dam near Shannon.

Elderly care sector - 36% of the population living in the lower North Island in 2030 will be over the age of 65. Horowhenua will be extremely accessible to the larger population base of Wellington. The location, particularly with the benefit of current road improvement projects will also enable children living and working in Wellington to travel with ease to see their parents. The comparative cost of elderly care services and homes in the Horowhenua may be particularly attractive to those with moderate incomes. (Note - more detail on this opportunity and the interventions which may help to unleash it is provided earlier in this report).

SECTION 9:
APPENDIX 1 – TECHNICAL ADVISORY GROUP (TAG)

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Name	Organisation
Rob Bartley	Bartley Group
Allan Benbow	Metalform
Anne-Marie Broughton	Te Ranga Tupua/Te Kaahui o Rauru
Mark Cleaver	Massey University
Dennis Emery	Ngāti Kauwhata, Ngati Raukawa
Bernie Higgins	Higgins Group Ltd
Grant Huwyler	Te Ranga Tupua
David Lanham	Palmerston North Airport
Michael McCartney	Horizons Regional Council
John Signal	Venison Packers Feilding
Andrew Watters	MyFarm
Cam Lewis	Lewis Dairies and Tendertips

SECTION 10: **APPENDIX 2 – REFERENCES**

10. APPENDIX 2 – REFERENCES

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