2013

Invest Bay of Plenty

SUMMARY OF BAY OF PLENTY STRATEGY DOCUMENTS

A summary of strategy documents found in the Bay of Plenty region with an indication of geographic impact and strategic implication.


Business
People
Environment

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Executive Summary

Approximately 60 strategy documents were reviewed to understand how industry, industry groups, central government, local government and independent researchers see the Bay of Plenty's future unfolding. The review reveals optimism but cautions that the future will be shaped by climatic uncertainty, changing demographics and a range of external factors such as migration, NZ's economic fortunes and the success of key businesses.

Key themes are:

PEOPLE THEMES	DISCUSSION
Aging Demographic and associated Implications	Population is ageing but Māori are becoming relatively more youthful demographic. Ageing is unequal across the region. Consequences may be exacerbated by net outflow of youth and an influx of retirees. A greater tax burden on young to support an aged population may accelerate structural ageing - exacerbating the challenge ahead.
Social Needs	Affordable Housing may affect labour markets and key industries (by as much as a 6% reduction in jobs). Housing affordability remains an issue in the east where wages and employment rates are low. A low skill base, ageing and migration loss further compound the challenges ahead.
BUSINESS THEMES	
On-going drive for efficiency and impacts on labour market	Growth will come through efficiency gains and businesses building new markets. Greater efficiency may result in larger operational units, greater reliance on technology and a reduced reliance on a low-skilled workforce. The drive for "market" efficiency may further stretch the gap between rich and poor. Education is key.
Māori Economy	Growth in the Māori economy will need to be underpinned by great leadership, collective asset utilisation, growing business networks and developing high value product. The Māori economy shares the collective challenge to retain youth and particular issues in the East where the proportionately larger Māori population is in decline.
Employment	A low skills base and poor access to training are significant issues. Outside the main centres a lack of engagement in education or training poses problems looking forward. Strategic relationships between key tertiary providers and industry and a focus on raising education levels of Māori are required. Some rural areas are in decline and events like PSA will affect others. Adding value to logs is necessary to lift forestry-based employment, though structural challenges like external trade tariffs are a challenge.
Shift of youth to large centres for work and skills	There is a migration-driven bite in New Zealand's age structure across the young adult ages, which is pronounced in non-urban areas. The Bay of Plenty lags university qualifications with Māori males lagging most of all. From ages 25 on there is net migration into the Bay, suggesting leavers depart for education and return when trained.
Volatility and uncertainty	Some industries are now planning for a future of climatic volatility and change. This requires additional infrastructure to ride out supply peaks and troughs. Demographic uncertainty is also a key consideration for some businesses.
Settlement Pattern	The rural to urban shift is creating change – but presents opportunities. Treaty settlements may affect the settlement pattern though challenges of education, land tenure and the rural-urban drift may challenge this.
Constraints to development investment	Economic growth will inevitably hit resource capacity constraints. In the short term, continued growth of the forestry sector requires replanting and water shortages in the east may limit dairy there. A lack of fee-simple land may limit development in some areas.

ENVIRONMENT THEMES	
We are becoming more resource constrained	The environment will matter more to fuel increasing resource demand. Sustainability is key. For Māori, in particular, development will need to proceed within an environmental world view. The extent to which this may affect land use or environmental outcomes is unclear. An overarching environment “strategy”/ business case appears to be lacking.

AFFORDABLE HOUSING IN THE BAY OF PLENTY REGION

November 2013

This study was prepared for the Centre for Housing Research, Aotearoa New Zealand and the Department of Labour by Capital Strategy/ SGS Economics and Planning, in 2007. The study investigates the links between housing, work, infrastructure and regional development across the Bay of Plenty region. Areas of particular focus include: affordable housing in housing markets under stress; regional economic development issues, including regional growth and labour markets; residential water and waste-water infrastructure, transport infrastructure and social infrastructure (schools). The other key study objective was to enable a locally owned solutions plan to be developed and implemented. The study area covers Western (including Tauranga City and Western Bay of Plenty District) and Eastern Bay of Plenty (including Whakatane, Kawerau, and Opotiki).

What this Looks Like

Figure 1 Income Distribution, Housing Rents and Housing Prices, Bay of Plenty

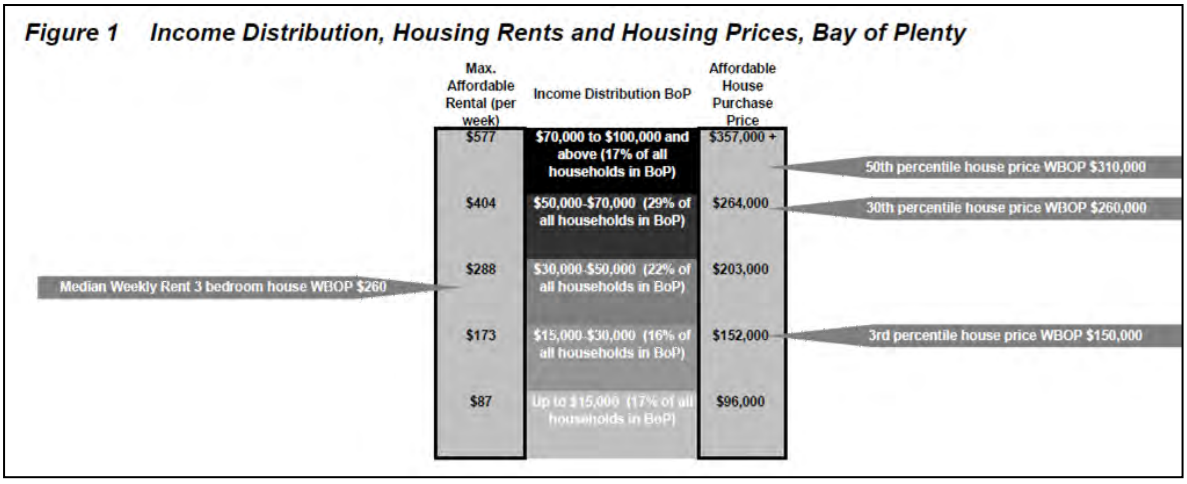
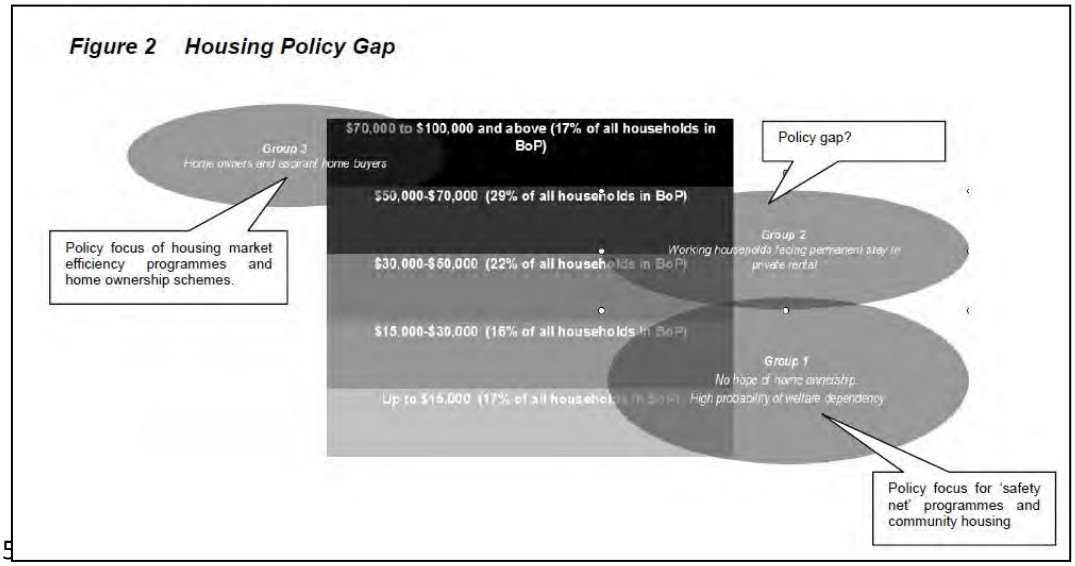


Figure 2 Housing Policy Gap



Key Points

The Western BOP region's population is projected to nearly double over the next 50 years, from 130,000 in 2001 to 284,000 in 2051. This corresponds to an increase from 49,000 households in 2001 to 117,900 in 2051. As a whole, the number of Eastern BOP residents is expected to remain fairly stable between 2001 and 2051.

In 2001, between 7,453 (13%) and 8,800 (17%) households in the Bay of Plenty region, live in housing stress. Household stress is when household income data for both rental and owned homes, compared with outgoing costs for rents or mortgage and rates) exceeds certain thresholds. In percentage terms the problem is greatest in Kawerau (16% - 21%) and Opotiki (17% - 22%), in actual numbers, the problem is greatest in Tauranga (4,911 – 6,031 households).

Between 2001 and 2031, there is/was potential for 55,000 additional jobs compared to 6,695,000 jobs in 2001. Approximately 74% of jobs will be paying less than $40,000. One third of jobs growth will be in professional and semi-professional jobs. There will be significant jobs growth, in areas such as service and sales, clerks, plant and machine operators, agriculture and fishery workers.

The rate of new household formation, will require a sustainable supply of a skilled professional trade's workforce (e.g. carpenters, electricians, plumbers), to build and maintain these homes.

There is a conservative projected need for between 3,000 and 5,100 affordable dwellings for workers over the 2001 – 2031 period. Lack of affordable housing is anticipated to restrict labour supply to key regional industries which could result in regional 'GDP' being lower by $280 million and 6,640 fewer jobs (-12%).

Market efficiency issues identified in the study include:

- Delivery of Trunk Infrastructure to Greenfield Land
- Difficulties in Assembling and Releasing Brownfield / Infill Land
- Timely Release of Greenfield Land
- High Cost of Infrastructure and Up-front Charging
- Housing for Seasonal and Low Skilled Workers. Lack of Local Sponsors for Innovative Home Ownership Finance Products

Third (Housing) Sector and Safety Net Housing issues:

- Reluctance by Institutional Investors to Support Affordable Housing Projects.
- The link between Māori Economic Development and Provision of Affordable.
- Housing on Māori Owned / Controlled Land Support Infrastructure.

What this Means

The main findings and solutions of this study were based on 3 key themes:

1. Maintaining a healthy and competitive land and housing market;
2. Maintaining a commitment to adequate and appropriate 'safety net' housing; and
3. Accelerating the development of a 'Third Sector' in the region's housing market.

Both Western and Eastern regions require more affordable houses and improved public transport infrastructure. Improved public transport would improve access links between affordable housing, work, and recreation and improve routes intra regionally. Both regions would benefit from additional Third Sector housing, through developing some sustainable organisations of scale, building partnerships, and utilising shared service arrangements. However, the West requires thousands of new affordable houses now, and in the future. The East also requires more affordable housing, but with a projected stable or declining population in some towns, its priorities are quality rather than quantity driven. Housing conditions in some areas of the East is poor. This region has a greater need for indirect assistance on housing related skills (budgeting, maintenance) and enhancing the community housing sector.

Proposed study solutions:

- Establishing an Overarching Housing Policy Framework for Regional Action
- Market Efficiency
- Sustainable Development – Capturing the Multiplier
- Benefit from Integrated Housing Policy
- Dealing with Housing Stress
- Key Principles and Elements
- Key Market Efficiency Issues in the BOP – Some Solutions
- Delivery of Trunk Infrastructure
- Assembling and Releasing Brownfield / Infill Land
- Greenfield Land Release
- High Cost of Infrastructure and Up-front Charging
- Housing for Seasonal and Low Skilled Workers
- Innovative Home Ownership Finance Products
- Safety Net and Third Sector Housing Issues in the Bay of Plenty – Some Solutions
- Reluctance by Institutional Investors to Support Affordable Housing Projects
- The Link Between Māori Economic Development and Provision of Affordable
- Housing on Māori Owned / Controlled Land
- Support Infrastructure

Confidence

Medium. Information and references used were sourced from an initial literature review; input from the reference group was made up of key stakeholders, four facilitated workshops and individual interviews.

Assumptions stated and supported by corresponding material contained within the Appendices or referenced. Growth statistics are predominantly based on SmartGrowth Growth Demand research 2003 and are therefore outdated. Growth rates aren't occurring as quickly as anticipated, therefore demand for affordable housing is predicted to be less than currently proposed.

An estimate was produced of the numbers of households in the region that are currently suffering housing stress. The estimate was established by comparing household income data for both rental and owned homes, with outgoing costs for rents or mortgage and rates.

A key part of the analysis used in this study was based on an input-output model of the Bay of Plenty region, customised for the purpose of estimating future demand for affordable housing. The increase in job numbers was estimated within occupations, which can be deemed to be in the lower range of the income distribution. The input - output model was used to estimate the economic cost of not responding adequately, to demonstrate needs for affordable housing.

References

Affordable Housing: The Community Housing Sector in New Zealand. Prepared for CHRANZ by Capital Strategy Ltd and SGS Economics & Planning Pty Ltd. 2007.

Ministry of Social Development. Bay of Plenty Regional Plan 2006-2007. Evaluation of home ownership education courses and support services: initial findings 2005.

Synthesis of findings of the HNZC Mortgage Insurance Scheme/Kiwibank In-Reach Pilot 2003-2005, Review of Low

Deposit Rural Lending 2005 www.msd.govt.nz

Ministry of Social Development. Outcomes Framework for the Evaluation of the Rural Housing Programme (RHP) in Northland, the East and the Eastern BOP 2004, www.msd.govt.nz

Ministry of Social Development. Social Report Indicators for Low Incomes and Inequality: Update from the 2004 Household Economic Survey.

Ministry of Social Development. The Social Report 2005.

National Bank. Regional Trends - May 06, Quarterly Economic Forecasts.

NZIER. New Zealand's Regional Economic Performance for MED 2004

NZIER. Quarterly Predictions, Projecting Regional Employment and GDP, Long-term projections for the Western BOP (2002).

NZ Treasury. Affordability of Housing: Concepts, Measurement and Evidence. March 2006,

SmartGrowth. Inception Report (Oct 03), Growth Demand Research, Resource Supply

SmartGrowth Ministerial Briefing Paper May 2005. Prepared for the Hon. Steve Maharey, Minister of Housing and Minister of Social Development and Employment. May 2005.

SmartGrowth Strategy and Implementation Plan Review 2006 / 2007. November 2006.

SmartGrowth. 50 Year Strategy and Implementation Plan (May 04) www.smartgrowthbop.org.nz

SmartGrowth Tangata Whenua Forum – Constraints and Opportunities on Multiple Owned Māori Land in the Western Bay Sub region.

Statistics New Zealand. Agricultural Production Survey, June 2005.

Statistics New Zealand. BOP Region Community Profile (and sub regions) www.stats.govt.nz

Statistics New Zealand. Census 2001 and 2006.

BAY OF PLENTY AVIATION STOCKTAKE BACKGROUND AND TECHNICAL DISCUSSION PAPER

October 2013

A technical summary of each airport (Tauranga, Rotorua, Whakatane and Taupo) has also been undertaken, to allow an understanding of the constraints development opportunities and limitations that may have an impact on how the Region develops its Aviation Strategy to coordinate investment and activities in the aviation sector.

What this Looks Like

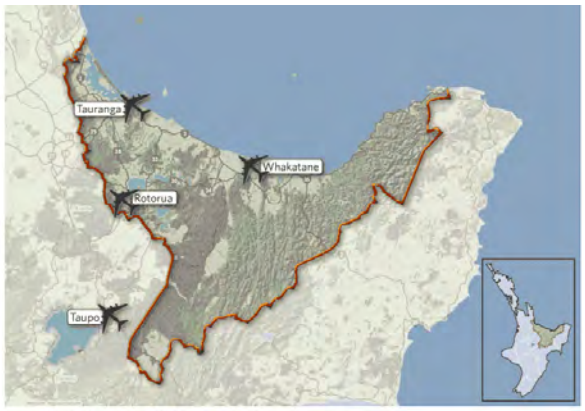


Figure 1: Airports within or close to the Bay of Plenty

Figure 6 Bay of Plenty Tourists by Origin of Guest[9]

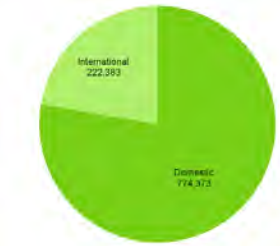


Figure 7 Origin of Tourists by Region[9]

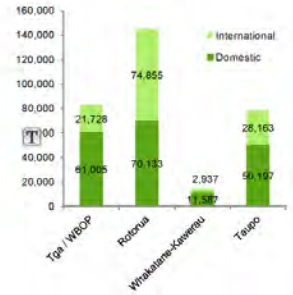


Figure 9 Rotorua and Tauranga Domestic Passenger Trends[12]

Key Points

The sustainable growth and viable operation in the Region will be closely linked with economic development, population growth and tourism. Commercial decisions and investment in airport infrastructure will be directly linked to the economic viability and will be based on external demand.

Population growth is predicted to occur in the Tauranga and Western Bay of Plenty areas, with Rotorua remaining fairly constant while the rural areas are expected to contract. The region's population is growing at a slower rate, than the national rate. In the 15 years to 2010, the Bay of Connections had an average population growth of 1.3 per cent per annum. The regional population is forecast to grow by around 42% between 2011 and 2051 or by about 119,500 people. However, BERL indicates a sharp decline in population growth in the Bay of Plenty (along with the other measures: employment, GDP, business units growth and relative openness index) through the BERL Regional Rankings. This decline is due to the impact of the PSA virus upon the kiwifruit industry resulting in a downturn in performance across all of the measures. Population growth dropped to 0.01 per cent in 2012 for the Bay of Plenty region. While GDP increased by 1.3 per cent, close to

1,700 Full Time Equivalent jobs were lost in the primary sector with another 570 in construction. The wholesale and distribution sector bucked the trend with 751 new jobs.

Tauranga Airport serves the domestic market and is suitable for smaller B737 variants and has a 20 year Master Plan. Consideration for the operation of larger domestic jet variants or Trans-Tasman capable aircraft would require investigation into a runway extension and strengthening of the existing pavements. The site has a number of physical constraints.

Whakatane Airport (NZWK/WHK) is the smallest of the three airports in the Bay of Plenty and facilitates a range of GA, commercial helicopter, and Code 2B/C Turboprop operations. The airport is a non-certified aerodrome that can service a maximum aeroplane seating capacity of 30 passengers. Air New Zealand Link provides regular return services to and from Auckland using Beech 1900D aircraft. The airport has a less than functional lay out plan and an active airport community with residential leased hangers. Development plans include a flight training school.

Rotorua (NZRO/ROT) is a Trans-Tasman jet capable International Airport. In recent years Rotorua International Airport has undertaken significant developments and has a master plan.

What this Means

There is a lack of regional co-ordination to provide guidance, strategic, policy and advocacy support to the aviation industry in the Region. There does not appear to be much shared understanding of growth projections which can lead to inconsistent approaches to planning and investing. It appears that developing stronger ties between the airports and agreeing a regional approach to airport strategic development would provide a sensible next step prior to undertaking further investigative work or study. This would allow the building of a consensus on how to approach aviation in the Bay of Plenty and an integrated approach to develop the regional aviation infrastructure and complementary commercial operation in partnership with passenger and freight operators, both domestic and international.

Confidence

Medium- High. Growth assumptions of 1.3% are sourced from Bay of Connections and 1% from BERL. The document was drafted by AECOM and shows an internal review process has been undertaken.

References

Bay of Connections Growth Strategy, Bay of Connections, December 2011, p17.

Statistics NZ

Bay of Plenty Regional Transport Trends and Issues Bay of Plenty Regional Land Transport Strategy Supporting Paper No.05

BERL Regional Rankings 2011

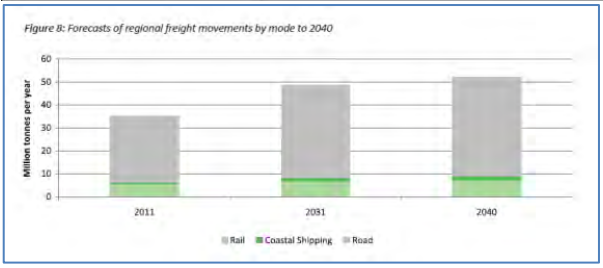
Whakatane Airport Business Plan

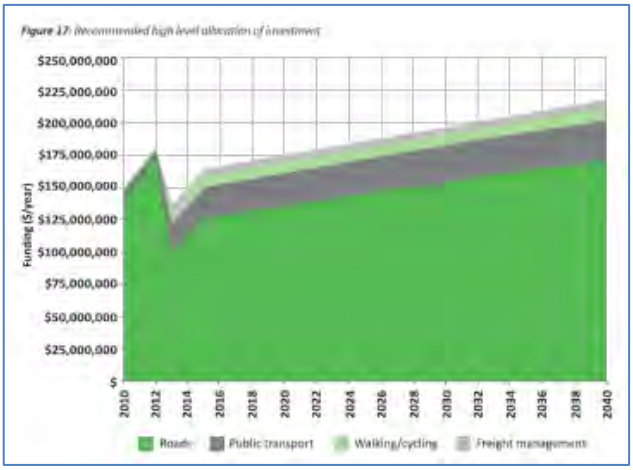
BAY OF PLENTY REGIONAL LAND TRANSPORT STRATEGY 2011-2041

October 2013

The Bay of Plenty Regional Land Transport Strategy (RLTS) sets the direction for the regions land transport system for the next 30 years. It identifies what is needed to contribute to the aim of achieving an affordable, integrated, safe, responsive, and sustainable land transport system, while assisting economic development, safety, personal security, improving access and mobility, protecting and promoting public health and ensuring environmental sustainability. The RLTS vision is the 'Best transport systems for a growing economy and a safe and vibrant Bay lifestyle'.

What this Looks Like





Key Points

The RLTS:

- Outlines the context within which the regional transport system operates
- Identifies regional transport issues, a vision and outcomes;
- Describes a strategic option to achieve the vision and outcomes; and
- Outlines how the strategic options will be implemented.

Key features of the Bay of Plenty Transport system includes the following nationally important infrastructure: the Port of Tauranga, the state highway network and the East Coast Main Trunk rail line linking Auckland, Hamilton and Tauranga and east to forestry hubs in Kawerau and Murupara. Other features include: regional airports, urban bus networks, the local road network and off highway network of forestry routes, local walking and cycling networks

Transport demands of the Bay of Plenty economy include:

- Export industries key commodity flows of kiwifruit, logs and timber products, milk and dairy products.
- Movement of higher value commodities to and from Auckland.
- Aquaculture has the potential to generate large future freight movements.

- Community – forecast growth in the service sectors which will lead to increasing demand for commuter and other private travel.
- Tourism – key flows include domestic and international travellers entering the region by road from Auckland and the Central North Island, airport traffic, and cruise ship passengers disembarking at the Port of Tauranga.

Key deficiencies included route security, freight capacity (predicted 63% increase in freight in the region by 2040), urban congestion mainly in Tauranga and Rotorua, inter-regional connections, rural accessibility and road safety.

What this Means

The BOP transport system will be optimised. Analysis of future regional travel demand found that a 'business as usual' approach would result in levels of private vehicle use, which would present significant challenges especially in urban areas at peak times.

Bay of Plenty transport system is critical to enhancing the performance of the regional and national economy. The region is both a producer of primary and value-added products and services, and a gateway for international exports and imports through the Port of Tauranga. Domestic and international connections are fundamentally important to the region. There are two key factors the region:

1. The need to support commodity flows of basic and processed commodities to international and domestic markets, which are proposed to increase over time. Subsequently, there is a need to improve access to the Port and ensure the efficient flow of goods. It is recommended this is done by improving freight management, for example, rail capacity improvements, the development of a strategic freight network in conjunction with a more efficient rail network, intermodal hubs, freight integration and freight priority measures.
2. The need for improved accessibility between urban centres. Nationally critical road and rail corridors provide the key connections between areas of production in (1) the Bay of Plenty and Waikato regions; and (2) the Port of Tauranga and Auckland; this means focusing investment on transport system solutions to not only enhance the regional and national economy and gateway connections but to also minimise access disruptions for the region e.g. route security in the east.

Modelling of regional travel demands found that even in a low travel demand scenario, car-based transport modes (driver and car passenger) will make up approximately 74% of trips and 85% of kilometres travelled in the region in 2040. So continued investment in roading improvements is necessary.

Confidence

High – The RLTS is a statutory requirement of the Land Transport Management Act 2003. The document references a number of supporting documents which contain justification for assumptions made.

The assumption that freight will increase by 63% is based on the Bay of Plenty Regional Freight Study.

It is assumed that higher levels of investment will be required in an optimised future system this is based on the Bay of Plenty Transport Futures Study.

References

Bay of Plenty Regional Land Transport Strategy 2011-2041

No. 01 Resident Perceptions of Future Growth

No. 02 Stocktake of Operational Strategy

No. 03 Bay of Plenty Regional Freight Study

No. 04 Analysis of Road Safety Trends

No. 05 Bay of Plenty Regional Transport Trends and Issues

No. 06 Bay of Plenty Transport Futures Study

No. 07 Study of the Relationship between an Aging Population and the Transport System in the Bay of Plenty Region

No. 08 Bay of Plenty Demand Management Study

No. 09 Bay of Plenty Economic Development and Transport Study

No. 10 Bay of Plenty Regional Transport Targets and Monitoring

No. 11 Assessment of Consistency with Resource Management Act Documents

Bay of Connections – Bay of Plenty Regional Economic Development Strategy 2008

Bay of Plenty Regional Passenger Transport Plan 2006

Bay of Plenty Regional Rail Strategy 2007

Bay of Plenty Regional Strategic Roading Plan 2010 (Draft)

Bay of Plenty Regional Walking and Cycling Strategy 2009

Bright Economy – Rotorua Economic Development Strategy

Coastal Shipping Strategy 2005

Getting There, on Foot, by Cycle 2005

Integrated Transport Strategy for Tauranga 2006

National Energy Efficiency and Conservation Strategy 2007 (and 2010 Draft)

National Infrastructure Plan 2010

National Rail Strategy 2005 (and KiwiRail Turnaround Plan)

New Zealand Transport Strategy 2008

Rotorua Transport Strategy 2006

Rotorua Transport Demand Management Strategy 2008

Smart Economy – Western Bay of Plenty Economic Development Strategy 2007

SmartGrowth – Western Bay of Plenty Sub-region 2007

BAY OF CONNECTIONS AQUACULTURE STRATEGY

September 2013

This strategy is focused on the growth and development of a world class aquaculture industry in the Bay of Plenty over the next 20 with export sales of $250m by 2025.

What this Looks Like

The Bay of Plenty region is home to the largest approved marine farm in NZ. The 3,800ha farm off the coast of Opotiki is owned and operated by three parties Whakatohea Iwi (54%), Sealord (26%) and NZ Sea Farms (20%). An additional 4,009ha farm is located in Otamrakau and was in the process of being approved in 2009. The only 'in water' activity to occur in the area are commercial mussel farming trials, despite both mussel farms applying for approval. When fully operational the two areas would represent around a third of total aquaculture space in New Zealand.

The majority (90%) of current marine aquaculture is limited to seven regions: Marlborough, Tasman, Waikato, Northland, Auckland, Canterbury and Southland.

There are some small scale oyster farms approved in the Ohiwa Harbour.

Indicative Potential Economic Estimates

Impact (annually)	Farming	Processing	Total
Output (expenditure)	$266m	$164M	$430M
GDP (value-added)	@162M	$66M	$228M
Employment (FTE's)	1,632	1,513	3,145

The estimated GDP contribution of around $228M is the equivalent of the hospitality sector in the region in 2006.

Infrastructure needed to support the industry:

- Good transport links.
- Large supply of water and secure energy.
- 3,145 additional employees.

Key Points

Over 44% of the BOP region is coastal and there is a strong appetite for aquaculture development in the region. This fast growing sector has 'outstanding potential'. Key opportunities include marine farming, large-scale off shore mussel farms and other aquaculture activities using the waterways and lakes in the region to farm eels and other species. Other opportunities include aquaculture processing and export activities.

Approximately $6M worth of aquaculture related research has occurred to date. This research found that the region's waters are among the most productive in New Zealand.

The strategy includes an action plan which focuses on the following areas: implementation/ administration partnerships, integration; research and development (R&D); education and training; infrastructure; advocacy for enabling legislation and regulations; market and Māori development.

What this Means

Key actions include:

- Providing leadership - Regional Aquaculture Organisation was developed in 2010. Collaborate with other regions to leverage off their experience. Participate in R & D initiatives e.g. NZ Aquaculture R & D strategy.
- Exploring new opportunities including new species, technology and the use of geothermal energy sources for land based aquaculture. Commercial viability needs to be checked.
- Seek funding and support.
- Marine Science, technology education and training.
- Infrastructure support for Marine and Aquaculture industries (transport and processing) are key to the success of the industry. Good accessiblity by road,sea and air transport is needed. Processing – the availabity of clean and plentiful water source and a secure energy supply are essential. Completion of a regional aquaculture infrastructure audit.
- A skilled and engaged workforce is vital for the success of the aquaculture industry, increasing the quality and quantity of the labour force in the Bay is a key goal.
- Develop a suitable open ocean harbour entrance to support harvesting activities.
- Bay of Plenty aquaculture brand development and marketing.
- Completion of the University of Waikato study 'Freshwater Aquaculture Opportunities in the Bay of Plenty'.

Confidence

Moderate. The strategy was developed in conjunction with key business leaders. Assumptions were not clearly stated, although it is assumed that the mussel farm trials have or will be successful.

References not stated.

References

Bay of Connections Aquaculture Strategy 2013.

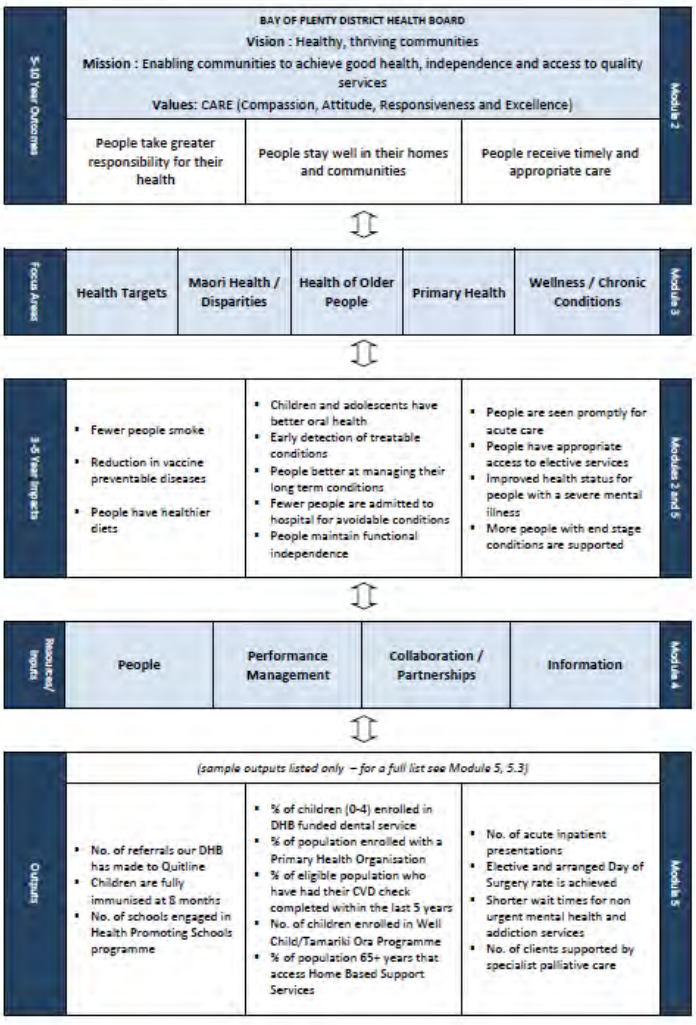
BAY OF PLENTY DISTRICT HEALTH BOARD ANNUAL PLAN 2012/13

November 2013

The Bay of Plenty District Health Board (BOPDHB) is charged with the responsibility of delivering health services for the people of the Bay of Plenty. This Plan represents a combined Annual Plan 2012/13 and Statement of Intent 2012-15 and is a statutory obligation.

What this Looks Like

BOPDHB's Performance Story:



Key Points

The BOPDHB are measured against the following:

- The national health targets;
- The Minister of Health priorities including - Delivering Better, Sooner, More Convenient Care; Integrated Care Shorter Waiting Times; Health of Older People; Regional Integration; and Improved Access and Reduced Waiting Times.
- BOPDHB's Strategic Priorities:
  - Health Targets. The Health Targets provide specific focus for action to improve both patient care and health outcomes for our population. The BOPDHB has made significant improvements in its performance against the health targets, particularly with respect to immunisation and better help for smokers to quit.
  - Maori Health / Disparities. The long-term goal is for Maori within the Bay of Plenty to have the same level of wellness as non-Maori. Key to achievement in this area includes the role of the Runanga in governance structure, and work on Whanau Ora and integrated contracts.
  - Health of Older People. The aim is to be proactive in the management of services for the impending population increase in older people, particularly given the

associated high cost of care for this proportion of the population. The emphasis will be on wellness, encouraging healthy, independent living with access to quality services.

- Primary Health. The BOPDHB will take a whole of sector approach, working in partnership to achieve wellness improvement and Better, Sooner, More Convenient services. This approach will see a reduced reliance on hospitals and increased access to primary care services.
- Wellness/Chronic conditions. The BOPDHB will support services that enable people to become healthier and reduce the need for treatment. This will include reduced obesity, smoking cessation, high immunisation rates and for people who have developed a chronic condition, the aim is to reduce cancer wait-times, increase the volume of funded respiratory First Specialist Assessments and colonoscopies to reduce wait-times; implement a diabetes care improvement package as a replacement for the recently discontinued Diabetes Annual Review; and explore the introduction of locally delivered radiotherapy services.

What this Means

The BOPDHB believes that innovation in service delivery is required to ensure the sustainability of public health services in a financially constrained environment. The organisation is a complex, receiving an annual revenue of some $654M to plan, provide and fund a full range of health and disability support services in the most efficient and effective way possible. Efficiency in the coming years will require innovation and significant redesign and reconfiguration to continue to provide a high level of service within financial constraints.

The 2012/13 is likely to be a particularly challenging year for the DHB. The organisation is facing a number of cost and funding pressures.

Confidence

High. The document is an annual plan and therefore is auditable and its information must be reliable. District Annual Plans are reviewed by the Minister of Health.

References

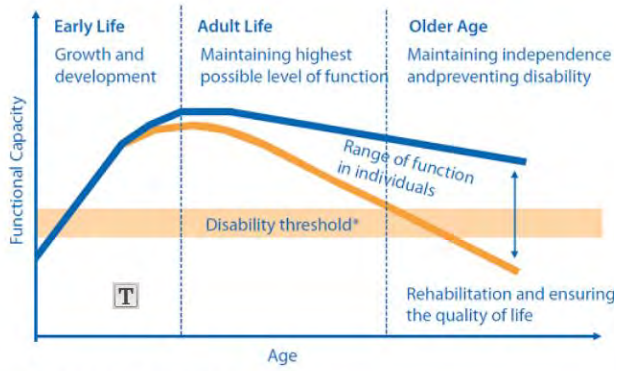
BOPDHB Annual Plan, 2012

BOPDHB HEALTH OF OLDER PEOPLE STRATEGIC PLAN 2012-2017

November 2013

The purpose of this document is to review current services for older people in line with (1) the New Zealand strategy; (2) current government policy (3) international and New Zealand best practice, and (4) identify and prioritise actions for local services to meet the challenges ahead. Given the ageing population, making savings or significant reductions in services for older people is unrealistic. However, implementation of this strategy will result in better management of the current and predicted rate of growth to levels that will be more sustainable in the future.

What this Looks Like



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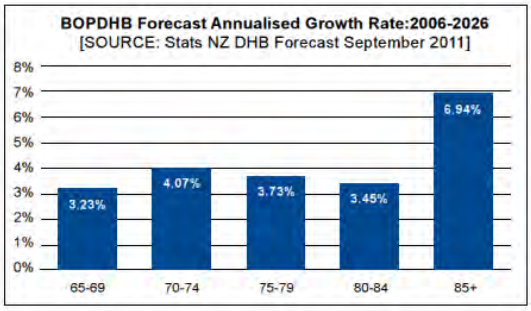


Figure 1

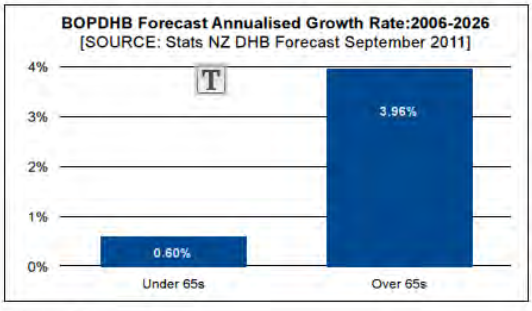
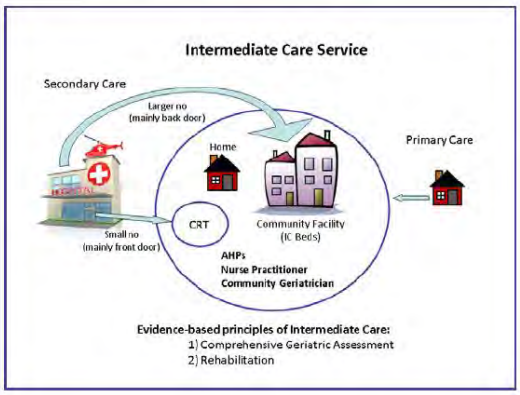


Figure 2

Appendix 2: Intermediate Care Service - Proposed Model



Key:
CRT = Community Response Team
AHP = Allied Health Professionals

Key Points

The Bay of Plenty's population is ageing, with the number of people aged over 80 predicted to grow at a rate of approximately 6% per annum. The health expenditure consumed by older people is projected to increase from 40% in 2002 to 63% in 2051.

Most older people are well, independent and living in their own homes. However, disease and chronic conditions are more common in old age.

The strategy advises that it is preferable to keep older people independent and living in their own homes for as long as possible. This costs less and is preferred by the vast majority of service users.

Increasing demand over time will not be able to be met merely by ramping up the existing systems of care. Systems need to change in order to respond to increased demand, alongside a relative constriction of supply.

What this Means

This Strategy identifies nine standards that encompass the Government's Health of Older People Strategy (2002) as well as health problems that are particularly significant for older people, namely:

- stroke;
- falls and bone health;
- dementia and mental health in older people; and
- medications management.

In each of these areas, timely intervention by evidence-based services reduces long-term needs and healthcare costs, but these services are not uniformly available and access to them can be haphazard.

To meet the Ministers expectations regarding older people the following is proposed: better engagement with primary / community care to develop integrated services for older people that support their continued safe, independent living at home, especially after hospital discharge; and an emphasis on developing organised stroke services and better dementia care.

To achieve the strategies objective, a detailed implementation plan will be developed following a prioritisation process for the recommendations. It is envisaged that a number of work streams will be necessary to implement the recommendations in a staged process. Details of shifts in current funding, investments required and where appropriate, expected savings, costs avoided or reductions in forecast growth, will be outlined with each work stream.

Confidence

Moderate – High. References for statistics used are provided. The purpose of this document is to give effect to Government strategy direction over a longer timeframe than the annual plan provides.

References

BOPDHB Health of Older People Strategic Plan 2012-2017, July 2012.

Ministry of Health. Population Ageing and Health Expenditure: NZ 2002-2051.

Minister of Health Letters of Expectations. Letters dated 26 January and 3 February 2012.

Statistics New Zealand District Health Board Forecast Sep 2011.

BOPDHB MAORI HEALTH PLAN 2013/14

November 2013

This plan describes Bay of Plenty District Health Board's (BOPDHB) priorities in Māori health for the 2013-2014 year. The plan identifies the leading causes of mortality and morbidity for Māori and provides a focus for the DHB to coordinate activity and improvements with stakeholders.

What this Looks Like

Table 3. Leading causes of avoidable mortality and hospitalisation for BOPDHB 2003-5.[10]

	Avoidable Mortality		Avoidable Hospitalisation	
	BOPDHB	NZ	BOPDHB	NZ
Māori	1 CVD – IHD	CVD – IHD	Respiratory infections	Respiratory infections
	2 Lung cancer	Lung cancer	Cellulitis	Cellulitis
	3 Road traffic injuries	Diabetes	Angina	Angina
	4 Diabetes	COPD	COPD	COPD
	5 COPD	Road traffic injuries	Asthma	Asthma
Other	1 CVD – IHD	CVD – IHD	Respiratory infections	Angina
	2 Lung cancer	Lung cancer	Angina	Respiratory infections
	3 Colorectal cancer	Colorectal cancer	Cellulitis	Cellulitis
	4 Suicide & self harm	Suicide & self harm	Road traffic injuries	Road traffic injuries
	5 Road traffic injuries	Road traffic injuries	Gastroenteritis	ENT infections

Summary of Indicators[1]

National Priorities		Indicators		Baseline Māori	(BOPDHB) Non Māori	Target
Data Quality	1	Ethnicity data accuracy		*Audit tool to be implemented in 2013*		
Access to care	2	Percentage of Māori enrolled in PHOs		92%	97%	100%
	3	ASH rates per 100,000 (Year to Q1 Sep 2012)	0-74 yr	4,103	1,935	3,707
			0-4 yr	11,270	7,352	10,141
			45-64 yr	4,003	1,340	3,671
Maternal health	4	Percentage of Māori infants fully and exclusively breastfed (for the 6 months ending Dec 2012)	6 weeks	60%	70%	74%
			3 months	52%	57%	63%
			6 months	23%	28%	27%
Cardiovascular disease and diabetes	5	Percentage of eligible Māori who have had their cardiovascular risk assessed within the past 5 years (to Q2 2012)		52%	67%	90%
	6	Acute coronary syndrome management		*See indicator action table (page 16)*		
Cancer	7	Breast screening rate (to 31 Dec 2012)		57%	69%	70%
	8	Cervical screening rate (to Sep 2012)		63%	84%	80%
Smoking	9	Percentage of hospitalised smokers provided with cessation advice (Feb 2013)		96%	96%	95%
	10	Percentage of smokers presenting to primary care provided with cessation advice		44%	44%	90%
Immunisation	11	Percentage of infants fully immunised by 8 months of age		83%	88%	90%
	12	Percentage of the population (>65 years) who received the seasonal influenza immunisation		62%	64%	75%
Rheumatic fever	13	Reduced acute rheumatic fever hospitalisations				Baseline & target data to be confirmed
Local Priorities						
Respiratory health	14	Asthma hospitalisation rate (0-14 years) (per 100k)		989	371	371
Access to services	15	Did-Not-Attend (DNA) outpatient appointments (Feb 2013)		6.4%	13.6%	5%
Oral health	16	Preschool dental clinic enrolments (Dec 2012)		44%	66%	70%

Key Points

A population health approach is taken to Māori health. The DHB will continue to work with its partner organisations to address the causes of health inequality, and work directly with health sector stakeholders to address the key indicators. Progress will be monitored through the Māori Health Plan Steering Group (MHSG).

Key health service providers in BOPDHB include:

- two public hospitals; Tauranga (349 beds) and Whakatane (123 beds); and
- three PHOs (which had enrolled 92% of the eligible Māori population and 98% of the non- Māori in September 2011).

The BOPDHB Māori population is skewed towards the younger age groups, with higher proportions in the 0-14 and 15-24 age groups, but fewer older adults and elderly.

From 2006 to 2026, the BOPDHB's Māori population will grow by a greater amount (35.5%), than the local non-Māori/non-Pacific population (21.5%), and the national Māori population (29.9%).

Deprivation increases toward the east of the DHB, where Māori make up more of the population.

Māori experience poorer education, income, unemployment, and housing outcomes than non-Māori.

Approximately 45,870 Māori were enrolled in primary health care in 2011. Compared to the total of the Māori population 49,200, in 2006 equates to 93% of the BOPDHB Maori population being enrolled.

What this Means

The Maori Health Plan outlines a plan for how to address Maori health inequalities, based on a number of indicators and proposed target measures.

It does not state progress made to achieve these indicators.

Confidence

Moderate to High. References to information were provided. Maori population projections are sourced from BOPDHB Health Needs Assessment.

Rational was provided for the selection of indicators.

Population data is dated e.g. 2006 census.

References

Bay of Plenty DHB Health Needs Assessment. Wellington: Ministry of Health, 2008.

Ministry of Health. Primary Health Care. PHO Enrolment Demographics 2012 Q1 (July - September 2011).

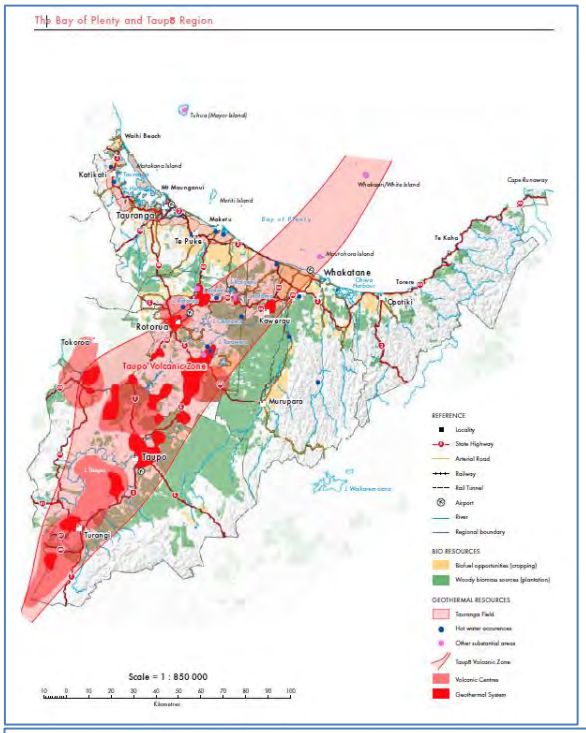
BOPDHB. Māori Health Plan Quarter 2 Update. Tauranga : BOPDHB, 2011

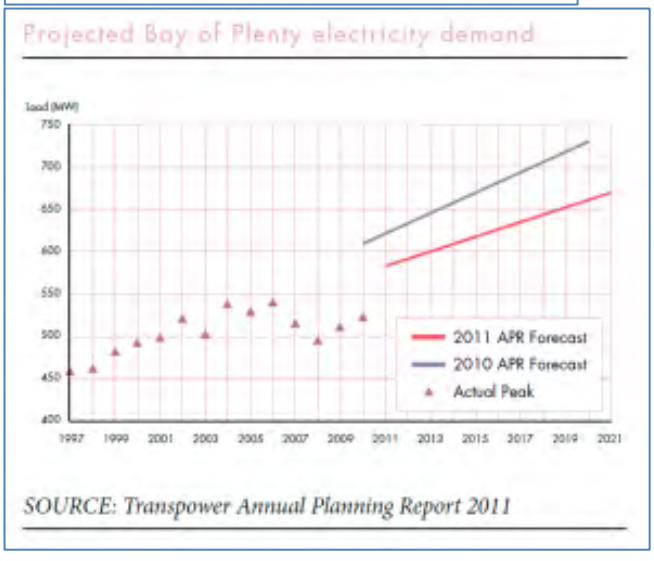
BAY OF PLENTY ENERGY STRATEGY

September 2013

The aim of this strategy is to achieve its vision of wealth and wellbeing via energy. The strategy covers all aspects of energy sourcing, supply and use in the region including that related to transport, business and residential homes. The focus is on energy for current wealth and wellbeing while conserving and maintaining sustainable energy availability for future generations.

What this Looks Like





Key Points

The goal of the strategy is '*by 2030 the Bay of Plenty has additional energy investments of $3 billion and 13,000 new jobs. By 2040 we have an extra $4 billion investment and 24,000 new jobs.*'

The region is rich in energy resources with unique opportunities to explore renewable sources, including geothermal, further.

The region is a net importer of electricity. Electricity generation capacity within the region is around 400MW and is mainly made up of geothermal and hydro generation. The remaining electricity demand is met by electricity imported from other regions.

Processing primary produce requires the greatest energy use, with wood processing being the most energy intensive. Industry makes up 51.6% of the total regional energy use in 2009.

What this Means

Energy demand and the demand for quality energy from industrial and commercial activities is anticipated to increase in the future. Industrial and commercial users want to ensure reliability of energy supply for their operations.

Various authorities expect national transport energy use to remain at current levels, and possibly decline until 2016. Then an increase is expected.

Over the next two decades the transport industry is expected to change its energy sources from petrol/diesel to liquid biofuels and bio diesel blends and increase its use of electric vehicles.

The Bay of Plenty's electricity demand is predicted to grow at around 1.64 per cent annually over the next decade from 602MW in 2011 to 698MW by 2021. This is slightly lower than the national average of 1.8 per cent annually based on business as usual – in other words, no endeavour to attract high energy use industries to the region. Recent patterns of demand since the 2008 economic crisis have been slower than previous long term predictions.

A key action is to develop an Energy Action Group whose purpose is to provide leadership – by driving and owning initiatives that will contribute to the goal of the strategy.

The strategy contains an action plan with four major focus areas:

1. Resources - develop and manage clean energy production through geothermal, biomass and solar opportunities, improving technical capability, investing in research and development particularly regarding trying to get over the biofuel feasibility threshold, and focusing on technology commercialisation.

2. Supply - secure and affordable through an enabling regulatory regime, infrastructure and a secure grid strength e.g. Opotiki aquaculture restrictions.

3. Use - wise and efficient. Develop an energy efficiency culture in the region and minimise costs of production by securing contracts with suppliers.

4. Growth - investment in partnerships are of critical importance to the implementation of this strategy along with export and international connections and investment promotion, facilitation, and selling the region.

Over the next 15-50 years the region could attract more than $4B in the discovery of new approaches, technologies and sustainable energy-related developments:

- Extensive geothermal direct heat supply to industry.
- A new hydro and geothermal electricity generation plant, which is currently under investigation and is expected to be installed throughout the next decade.
- Te Mihi (166MW) and Nga Tamariki (110MW) are currently under construction and Tauhara 2 (250MW) is consented.
- A new wind generation.
- Transport biofuel manufacture from forest resources including forest harvest residues, and potentially fuel crops (up to $1b in investment).
- Stimulating demand for new bio-products arising from use of the biomass and geothermal resources.
- Enhanced tourist related activities based on geothermal resources.
- Warm and healthy low energy homes and commercial buildings based on solar space and water heating initiatives or on geothermal heat pumps.
- Increased use of wood-based fuels for industrial, institution and residential heating.
- Investment in energy efficiency.
- Investment in health/wellbeing projects such as home insulation.
- In the longer-term significant solar electricity generation.

Long term energy targets include:

- Generating more than 10% of New Zealand's electricity demand (becoming a net exporter).
- Producing more than 10% of New Zealand's liquid transport fuels (ethanol and biodiesel).
- Significant growth in energy-intensive processing industries and tourism activities using direct use of geothermal energy.
- Major reductions in carbon emissions.

Confidence

Moderate. Assumptions are stated e.g. projected electricity demand is based on BAU

and recent patterns of demand since have been slower given the 2008 economic crisis.

Projected electricity demand is based on 2011 figures which are now out of date. Transpower's 2013 annual report contains more current information.

The key assumption is that electricity demand will grow; it's not clear what this assumption is based on.

References

Bay of Connections Aquaculture Strategy 2013.

National Energy Strategy

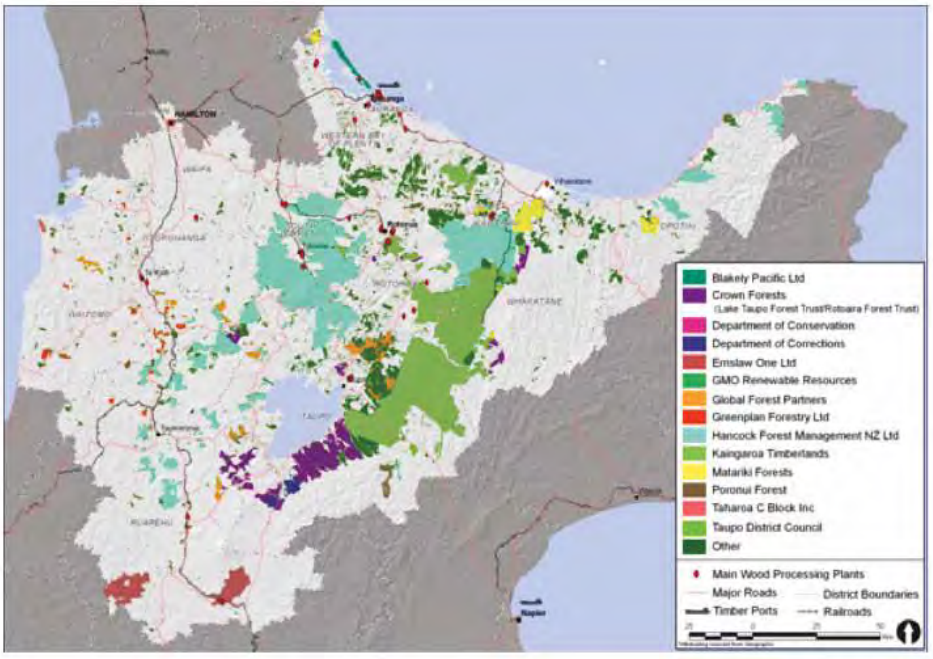
Energy End Use Database, Energy Efficiency and Conservation Authority

BAY OF PLENTY FORESTRY AND WOOD PROCESSING STRATEGY

October 2013

The aim of the strategy is to provide a clear pathway to achieve increased values from the regions forest harvest, and increased productivity growth through investment in niche enterprise opportunities, and innovative uses of raw wood materials, modern manufacturing equipment and skills to achieve its vision to be a 'World-class forest and wood processing region.'

What this Looks Like



Over the past 40 to 50 years forestry has made a significant contribution to the regional GDP. The Bay of Plenty economy in 2010 generated $10.17 billion in GDP (10%). There were 104,800 FTE's, which made up 6% of New Zealand employment and each FTE in the forest industry contributed $215,000 to regional GDP. There were 34,100 businesses, which made up 7% of businesses in New Zealand.

Key market opportunities are in the rapidly growing economies of China and India, and in traditional markets in Australia and the United States.

The Bay of Plenty and Central North Island regions will provide New Zealand's largest supply of uncommitted forest harvest in the next 30 years.

Key Points

The point of this strategy is to support the accelerated development of a market-led, globally focussed, high value wood products industry. With the key goal being to add value to over 70% of logs harvested in the region by 2020. The Central North Island's forests and infrastructure could handle an increased

capacity to process 70% of the harvest domestically. By 2020 this could divert approximately 1.7 million m³ of logs marked for export in to local processing each year. Further than this, it is estimated the Central North Island could support twice this level of increased processing and still maintain a market for export logs.

Adding value to logs harvested will be achieved by increasing productivity and the value of forest harvest, resulting in increased regional employment opportunities in the forest industry e.g. more log harvesting and wood processing jobs.

Authentic partnerships and stakeholder collaboration are key to the success of the strategy.

The strategy action plan which forms the basis of the strategy is made up of two key parts:

1) The investment environment including creating a Bay of Plenty Forestry and Wood Action Group; focus on enabling rules and regulations; improving market development; remaining competitive; incentives and assistance – facilitating and creating an optimal business environment in the Bay of Plenty for the industry to grow and prosper; and securing log supply through working with Woodco to undertake an economic analysis and improving site productivity, trees, and new land planting.
2) The infrastructure – enabling access and improving capacity (e.g. HPV heavier trucks on approved routes increases productivity up to 20%); exploring low carbon and bio fuel opportunities; promoting trees as a sustainable land use; encouraging research and development; and a skilled and educated workforce which is informed by industry needs.

What this Means

A large proportion of the trees harvested annually are exported as whole logs, with no local processing. More than 60% of the forest products tonnage exported through the Port of Tauranga are logs (reduced from 70% due to strong demand from China for export logs from an increasing harvest, and retrenchment of sawmilling capacity). In the next 10 years the log harvest in the Bay of Plenty area is forecasted to increase by 2 and 3 million m3 per annum due to national and international demand for raw wood materials.

Without a large jump in capacity (e.g. if no new or additional wood processing facilities are installed in this time), all of the increased harvest (nearly half) will be exported as logs, with only a limited contribution to the region's wealth.

The strategy identifies the need to attract investment for the construction of six individual processing plants (1 x structural, 1 x plywood/LVL, 2 x appearance and 2 x industrial) with a combined processing capacity of 1.7million m³ per annum and a labour force requirement estimated at 720 people. Potential wood processing sites highlighted include: Kawerau site, with a combination of renewable energy (geothermal), transport infrastructure, engineering and service industries, and additional land re-zoned for industrial use, Rotorua (Waipa valley), Taupo and Murupara.

In addition to expansion through major plant construction, the strategy looks to support opportunities from niche small scale, high value-add products across the wood processing spectrum, and to provide a platform to other biochemical, bio-fuel and bio-product markets.

Confidence

Medium to High –Resource material used to support statements have been included.

The key assumption is that log harvest in the Bay of Plenty area is forecasted to increase by 2 and 3 million m3 per annum due to national and international demand for raw wood materials.

All forestry export prices are expected to increase, but a major price assumption is that the New Zealand dollar exchange rate with the United States dollar will fall back closer to long term average levels.

References

Agrifax March, 2011. www.nzxagri.com/agrifax

Carbon Forestry in the BOP Region. G West et al, Scion, June 2011.

McKinsey Quarterly, August 2007

Ministry of Agriculture and Forestry. Situation and Outlook for New Zealand Agriculture and Forestry, 2011.

NZS 3604: Timber Framed Buildings (Prior to a revision of the timber grading standards in 2004, finger jointed timber supplied a

significant part of the residential construction market.

“Plywood and Oriented Strand Board in the Pacific Rim and Europe, 2011-2015”. BIS Shrapnel Forestry, April 2011

Poyry Forest Industry, 2011. “A high level assessment for future opportunities of wood products from New Zealand.” Prepared for Bay of Plenty Regional Council, April, 2011.

Report on Wood Processing Strategic Competitive Factors. Prepared for: Bay of Connections Economic Strategy – Growth Plan, Bay of Plenty Regional Council, by John Galbraith Limited. October, 2010.

The low carbon business case for attracting energy intensive industries to New Zealand. Dr Ben McNeil. Report prepared for New Zealand Trade and Enterprise, July, 2011

Update of the Bay of Connections Regional Economic Development Strategy: Economic and Industry Profile of the Bay of Plenty Region, June 2011, BERL Economics

THE FUTURE OF FREIGHT LOGISTICS - BOP FREIGHT LOGISTICS STRATEGY

October 2013

This Bay of Connections strategy is an action plan for leading the region in excellence in supply chain, distribution and logistics for freight in the next five years; and a 'World class freight logistics' region by 2020.

What this Looks Like

The combined volume of all container traffic in Australia, New Zealand and Oceania is under 4% of total world volume.

Key Points

Logistics means the management of services and goods flowing from the origin point and the consumption point to fulfil the customer's requirement. Freight logistics contributes over $400 million to BOP GDP and employs 3,100 FTE's. Employment in BOP freight logistics is expected to grow to 4,400 FTE's by 2026.

Collaboration and partnership with key stakeholders such as key agencies, neighbouring regions including Waikato and Auckland and central government are key focus areas which will allow businesses to work together, pool resources, and share logistics information to achieve supply chain efficiencies.

A key component to the strategy is the action plan which is made up of 8 major areas:

- Leadership and planning – form a logistics action group to champion and implement a multi-industry sector, multi-modal (road, rail, shipping, warehousing and port) inter-regional logistics action plan.
- Partnership and integration.
- Development and innovation.
- Enabling legislation and regulation.
- Enabling technology.
- Logistics information.
- Health and safety and the environment.
- Workforce development.

What this Means

The cost of getting goods to the market is typically just under 10% of business turnover which is considered a significant cost to

businesses. Efficient logistics scheduling can reduce these supply chain costs by around 20%.

Freight volumes to 2030 are expected to increase as follows and needs to be planned for:

Export Sector	Current Freight Volume & Values 2010/11	Future Freight Volumes to 2031	From/To & Method of Transport
Exports			
Dairy	588,000 tonnes per year	+ 7,000 TEU vessels	Railed to POT from outside region
Kiwifruit	757,000 tonnes per year (75% exported break bulk 25% containerised)	To $1.25M tonnes (+250%) Note PSA disease short term risk	75% from East & 25% west by road
Logs	4.4M tonnes per year	To $5.5M by 2020	2/3rds by rail
Sawn	981,000 tonnes (75% into containers)		Mainly by road
Pulp & Paper	1,337,000 tonnes (containerised Kawerau newsprint at site, Kinleith at Sulphur Point)		Paper 100% by rail
Aquaculture	Mussel 100 tonnes per day – 50 tonnes/1.5FEU per day exported 8-10 months per year		By road from Coromandel - Tauranga
Imports			
Retail & Other	3.4M tonnes	50% growth	Mainly by road
Oil products	1.2M tonnes	Strong growth	Mainly by road
Grain & Stock feed	1.1M tonnes	26% pa	
Fertiliser bases	530,000 tonnes	Strong growth	

Confidence

Moderate- High – Strong growth in freight volumes is anticipated based on improvements in agriculture based productivity and increase in logs and forest products, dairy and kiwifruit.

It is also assumed that the cost of getting goods to market is too high and can be reduced, through the implementation of a multi-industry sector, multi-modal (road, rail, shipping, warehousing and port) inter-regional logistics action plan being implemented.

References

Bay of Connections Regional Economic Development strategy Update.

The Future of Freight Logistics - Bay of Plenty Freight Logistics Strategy 2011.

BAY OF CONNECTIONS MĀORI ECONOMIC DEVELOPMENT STRATEGY AND ACTION PLAN

September 2013

The strategy and action plan are designed to support better outcomes for Māori including successful Māori people, thriving Māori business, Iwi/collectives leading economic growth in the wider Bay of Plenty region (Eastern Bay, Western Bay, Rotorua and Taupo). This can be achieved by working with stakeholders to identify those areas where additional common effort has the best chance of delivering results. These documents have been developed under the Bay of Connections Regional Economic Strategy framework. The strategy contributes to the Bay of Connections and its sector strategies.

The strategies vision is "Mauri oho, Mauri mahi, Mauri ora - Māori creating wealth, jobs and prosperity across the region.

Key Points

Māori make a significant contribution to GDP mainly through agriculture and forestry, particularly in Rotorua $387M and Tauranga $256M.

Approximately 77,800 Māori live in the BOP region, with 27,316 employed, and a high proportion (44%) of youth under 15 years.

The strategy identifies six strategic priority areas and associated actions:

1. Strategic Leadership – through leadership group, capability, capacity building, and increasing governance effectiveness.
2. Collective Asset Utilisation – Māori Asset and Land scoping study, and creating collaboration opportunities.
3. Business Networks- enhancing connections between Māori businesses, organisations and key industries.
4. High Value Business Growth – growing exporters, sharing innovation, supporting new ventures and facilitating access to finance.
5. Capital and Investment – Investor showcase/forum and mentoring.
6. Education and Skill Development – improving Rangitahi education success and workforce development.

What this Means

Next phase of work the BOC Māori Assets and Land Scoping Study will identify potential land development opportunities particularly for MPI, Te Tumu Paeroa.

Confidence

Moderate. The strategy was overseen by an Advisory Group, with work undertaken by a partnership between BERL, University of Waikato and Tahana Ltd.

References

Bay of Connections Māori Economic Development Strategy and Action Plan, September 2013

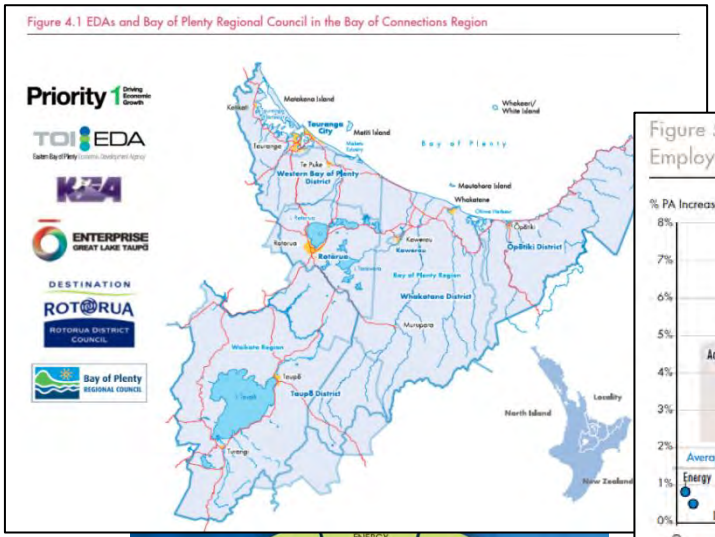
BAY OF CONNECTIONS REGIONAL ECONOMIC GROWTH STRATEGY

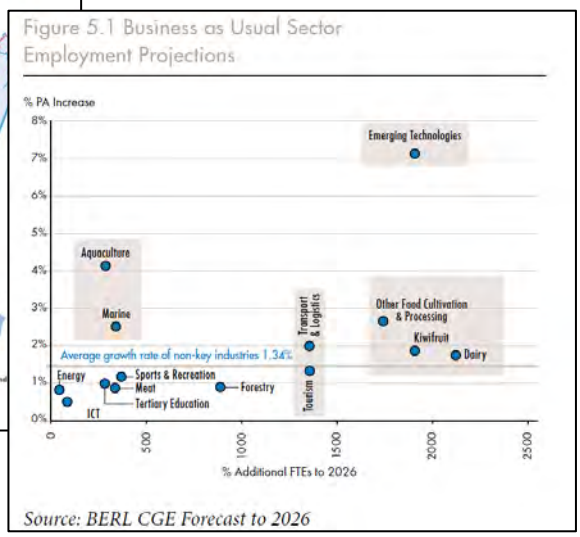
October 2013

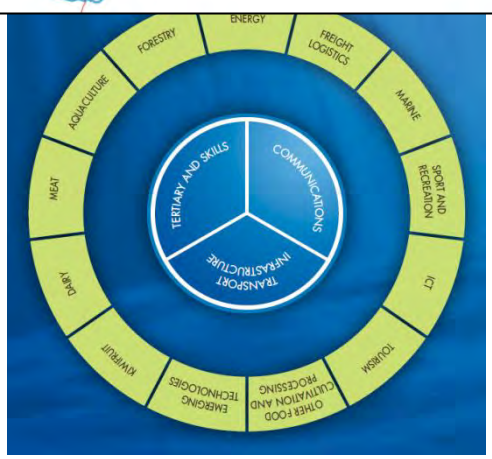
The Bay of Connections (BOC) Regional Economic Growth Strategy is a regional economic framework which identifies and supports sector strategies that encourage economic growth in the Bay of Plenty region. Other key areas of focus include: addressing the maintenance of strong governance, monitoring and reviewing sector support progress, providing for effective communication and on-going collaborative leadership. The strategy is driven by the BOC governance group in partnership with the Bay of Plenty Regional Council, New Zealand trade and enterprise, and the region's economic development agencies - Priority One in Tauranga/Western Bay of Plenty, Rotorua Economic Development, Toi EDA in Whakatane, Kawerau and Ōpōtiki, KEA in Kawerau, and Enterprise Great Lake Taupō in Taupō.

The vision of the Bay of Connections growth strategy is to 'grow a prosperous region, supported by sustainable sectors' and its mission is to 'deliver sector based strategies and action plans that generate and encourage additional sustainable employment for the Bay of Plenty region'.

What this Looks Like







Key Points

The Bay of Connections area accounts for just over 7 per cent of New Zealand's population (303,400 people in 2010) and generates 6.5 per cent (118,000 FTEs) of all full time employment (FTEs) in New Zealand. It also contributes just over 6 per cent towards the economy as measured by the Gross Domestic Product ($11.5B) and accounts for 7 per cent of all businesses in New Zealand (38,700). In general GDP in the BOC area has performed slightly better than the national average over the longer term (10 and 15 years).

There are 3 sub regions within the BOC area:

- Western (including Western Bay of Plenty and Tauranga) containing 51% of the BOC area population, 51% employment and 50% GDP;
- Central (including Rotorua and Taupo) containing 33% of the BOC area population, 34% employment and 35% GDP; and
- Eastern (including Kawerau, Whakatane and Opotiki) containing 16% of the BOC area population, 14% employment and 14% GDP.

Population growth in the BOC area has experienced 1.3 per annum growth over the last 15 years. The population has grown slightly faster than the national average (1.26 per cent per annum). Most of this growth has occurred in Tauranga and the Western Bay of Plenty.

What this Means

Taking a business as usual scenario employment is projected to grow at a rate of 1.5 per annum (1.8% in key sectors), which is 1.5 times the expected national rate of 0.97 per cent per annum and 1.4 times faster employment rate that in non-key sectors key sectors. This level of employment growth would mean an increase of almost 2,000 FTE's annually, with the Western Bay of Plenty area having almost 150,000 FTE's by 2026.

The New Zealand economy will continue to focus on export-based sectors, with primary production being the mainstay, along with continued development of the successful value added manufacturing sector. The international market will remain uncertain and volatile over the next decade. In terms of global trends, people are ageing, becoming more mobile (nationally and internationally) and demanding more in terms of the quality and quantity of goods and services.

The environment and resources will matter more in terms of increasing demand, as well as what is demanded. Sustainability is a key concept.

The five current sector strategies are summarised in the strategy including – Aquaculture, Forestry and Wood Processing, Energy, Harbour Central Marine Precinct, and Freight Logistics. These documents, except the Harbour Central Marine Precinct, are reviewed separately.

Confidence

Medium-High – BOC is a reputable collective.

Information used in figures/tables were sourced from the BERL Regional Database 2010

Assumptions include population growth of 1.2% and an employment growth rate of 1.5 per annum or 1.8%. Sources for these statistics were not provided.

References

Bay of Connections Regional Economic Development Strategy 2011

BERL Regional Database 2010

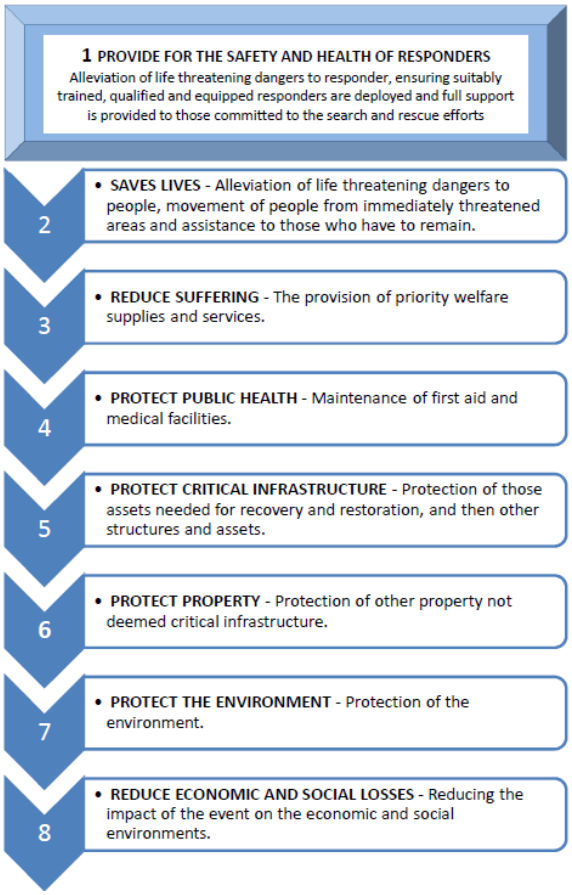
BAY OF PLENTY CIVIL DEFENCE EMERGENCY MANAGEMENT GROUP PLAN 2012-2017

November 2013

The Bay of Plenty Civil Defence Emergency Management (CDEM) Group has prepared this group plan to enable effective and efficient CDEM in the region. It has been designed to strengthen the four areas of emergency management – reduction, readiness, response and recovery. This will in turn assist the Bay of Plenty CDEM Group in achieving its vision of a resilient Bay of Plenty where communities understand and manage their risks.

The plan outlines the intentions for CDEM for the next five years and is consistent with the national framework for CDEM in New Zealand and covers the period 2012 to 2017.

What this Looks Like



Key Points

Some population related challenges include: isolated limited and potentially vulnerable communities, such as remote rural communities and the small permanent population of Mōtītī Island, which are highly reliant on limited transport linkages and the large number of holiday homes in parts of the region (Mount Maunganui/Pāpāmoa, Ōhope, Waihī Beach and Rotorua Lakes), which pose an additional problem by being potentially occupied by visitors who may be unfamiliar with the hazards associated with the Bay of Plenty region. Additionally, if an emergency was to affect the Auckland region, it is probable that many thousands of Aucklanders would attempt to self-evacuate to their holiday homes in the Bay of Plenty.

Other risks include the POT increases the risk of a significant chemical emergency to occur and the region has high proportions of farming and horticulture leaves the Bay of Plenty particularly vulnerable to weather related events, and disease.

The Bay of Plenty has an extensive number of natural hazards including volcanic, earthquake, storms and tsunami.

Even though the Bay of Plenty region has a higher than average status for a number of 'preparedness' measures in respect of being 'fully prepared' for an emergency, research

indicates that this figure is only 12%. Fully prepared means having an emergency survival plan that includes what to do when away from home, having emergency survival items and water and regularly updating these items.

What this Means

A key way to achieve the vision is to focus on the following actions:

- Strengthened relationships between agencies involved in CDEM.
- Cooperative planning and action between the various emergency management agencies and the community.
- Commitment to deliver more effective CDEM through risk reduction, readiness, response and recovery.

Confidence

High. The group plan is a legislative requirement and was originally developed in 2008 and has been progressively updated through consultation with stakeholders and the public.

Assumptions stated particularly around risk determination. A systematic approach was taken to ensure that a logical and consistent process was followed when identifying and assessing risks, consulting and communicating with communities and, where appropriate, implementing cost-effective measures to reduce risk.

Information used in the risk profile (demographics etc.) was sourced from Statistics NZ medium projections. These need to be checked for relevance against the Census 2013 results.

References

Colmar-Brunton research 2011

Statistics New Zealand projections of medium fertility, medium mortality and medium migration.

Bay of Plenty Civil Defence Emergency Management Group Plan 2012-2017

BAY OF PLENTY LABOUR MARKET AND ECONOMIC PROFILE

November 2013

This report provides insights into the performance of the labour market and economy in the Bay of Plenty catchment. It presents historical information as well as forecasts of the demand for skills and qualifications. The Bay of Plenty economy is expected to grow by 2.9% per annum between 2011 and 2016 compared with 3.0% in the national economy. The number of positions in Bay of Plenty requiring a level 7+ is expected to increase by 3,832 between 2011 and 2016, ranking it as the qualification level with the largest absolute increase in demand.

Positions with the qualifications in the field of study of engineering and related technologies are expected to experience the highest increase in demand between 2011 and 2016. The number of positions requiring this field of study is estimated to increase by 1,947 over the five year period.

What this looks like

Table 6. Broad industries ranked by number of jobs created (2009 -2010)

Rank		Employment 2009	Employment 2010	Jobs created	Annual % growth
1	Agriculture, fishing and forestry	10,849	11,220	370	3.4%
2	Business and property services	9,286	9,473	188	2.0%
3	Education	4,813	4,992	179	3.7%
4	Accommodation, restaurants and bars	3,165	3,329	164	5.2%
5	Transport and storage	3,611	3,763	152	4.2%
6	Wholesale and retail trade	13,581	13,721	140	1.0%
7	Construction	6,145	6,268	123	2.0%
8	Manufacturing	7,053	7,146	94	1.3%
9	Communication services	473	564	91	19.1%
10	Health and community services	9,161	9,197	36	0.4%
11	Government administration and defence	1,419	1,453	34	2.4%
12	Cultural, personal and other services	3,506	3,521	15	0.4%
13	Electricity, gas and water supply	46	53	6	13.7%
14	Mining	110	93	-17	-15.3%
15	Finance and insurance	1,283	1,240	-44	-3.4%
	Total	**74,503**	**76,033**	**1,530**	**2.1%**

Source: Infometrics and Statistics New Zealand

Gross trends

The construction industry is expected to grow strongly over the next five years. Although it is only the Auckland and Canterbury regions suffering from an undersupply of property at present, the pick-up in residential construction is expected to be relatively broadly based.

Following the world financial crisis, credit conditions will be tighter and individuals will have a lower appetite for spending. This will constrain the retail sector. As a major employer of lower skilled labour this will slow the growth in demand for lower skilled occupations.

The accommodation hospitality industry will continue to expand in the region in the medium term with associated demand for hospitality related occupations such as hospitality managers, food trades workers, hospitality workers and food preparation assistants.

The demand for health, personal, community and education services will continue growing with an expanding and ageing population. After a decade of rapid spending growth in public health it is likely that this area will experience much lower rates of spending growth over coming years.

The increasing resilience of remaining manufacturers suggests that the manufacturing industry will enjoy a better ride in the post-recession period with the possibility of modest employment growth. The food processing sector will benefit from high world commodity prices, growing demand from India and China and new free trade agreements. Demand for factory process workers, other labourers and food trades workers and specialist managers will benefit from growth in this industry.

Business services growth will continue at a reduced rate and mean growth in demand for many highly skilled occupations including business, legal and IT professionals.

Agriculture will continue to prosper in the medium term on the back of strong international demand for agricultural commodities, although its growth rates are not likely to match the rates experienced in the pre-recession boom.

The combinations of qualifications and fields of studies that are most likely to see an increase in their demand are Level 4 Engineering and Related Technologies estimated to be 1,180 units, followed by Level 7+ Management and Commerce (850) and Level 4 Architecture and Building (774).

Key drivers

The Bay of Plenty is a relatively low skilled economy. The industry most overrepresented in Bay of Plenty relative to the national economy is agriculture, fishing and forestry(14.8% of the region's employment compared with 6.6% to the national economy). The next most overrepresented industries are transport and storage (4.9% compared with 4% nationally) and health and community services (12.1% compared with 10.3% nationally).

Confidence

Moderate to High. The data and methodology is robust but economic forecasting is inherently difficult.

Source

2011 Infometrix. Labour Market and Economic Profile, Bay of Plenty.

REGIONAL FUNDERS FORUM BAY OF PLENTY SNAPSHOT

November 2011

This document was produced for the Bay of Plenty Regional Funders Forum in 2007 to provide a complete picture of the Bay of Plenty communities, characteristics, needs and aspirations. The snapshot was developed by Department of Internal Affairs Office for the Community and Volunteer Sector. There are 4 philanthropy NZ members, 20 known grant makers based in the region and 131 known national grant makers/corporate citizens that provide support to the region. All were invited to be part of this forum.

Key Points

General interesting Facts

- Bay of Plenty's residents are more likely to be involved in helping or voluntary work for an organisation, group or marae than NZ overall.
- Health-wise, the region's population has levels higher than the national average of smoking, suicide and suicide attempts, cancer, cardiovascular disease, diabetes and violence.
- At 7%, Bay of Plenty had the second lowest proportion of elected women members of regional councils in the 2004 local authority elections (ahead of the West Coast of the South Island).
- At 31.4%, Bay of Plenty has the second highest level of Māori who can hold a conversation about everyday things in Māori, as a proportion of the Māori population (behind Gisborne). (2001)
- Housing affordability: For the quarter ending February 2007 prices in Waikato/Bay of Plenty region are at 100.6% of the national average.
- Importance of Arts: Most New Zealanders value the arts and their contribution to our national identity, our society and the economy. For more than half the NZ population (56%), the arts are part of their daily lives.

Statistics Summary and Issues Identification

- In 2001 239,412 people, 78.2% identifying themselves as being of European ethnicity and 27.9% as Māori (compared with 14.7% nationally.
- The local Māori population suffers from a disproportionate level of social and economic barriers. Māori represent 66.1% of the region's unemployment-related benefit clients, 59.3% of clients in receipt of a domestic-purposes-related benefit, 44.5% of those receiving a Sickness Benefit and 37.1% of clients receiving an Invalid's Benefit.
- Most of the region's Māori beneficiary population is centred in geographic locations with few economic opportunities. Across the Bay, 47 communities have been identified as Limited Employment Locations – areas in which there are limited work opportunities and public transport options allowing the residents to work elsewhere. These are predominantly small, rural communities with higher than average Māori populations.
- Economically, the region draws heavily on the forestry, agriculture, tourism and retail industries for its employment. Within the labour market, one of the region's key issues is skill

and labour shortages. Uneven levels of economic development have meant that the available work resource is not located where the region's jobs are. The Department of Labour/MSD Quarterly Regional Labour Market Report shows particularly strong growth in employment in the Bay of Plenty (up 15.3%) in the March 2007 quarter.

Community Outcomes

There is a Community Outcomes – Bay of Plenty Forum which includes the regions local authorities, two health boards and 20 central government agencies to promote cross sector co-operation and information sharing among agencies. The forum has identified three issues as priorities for collaboration:

1. Healthy Eating, Healthy Action;
2. Safer Communities and
3. Housing.

Local service mapping reports from local bodies Community Reports identify community priorities and the services that currently support the communities are useful. There were three.

Tauranga priorities:

1. Families whose children have challenging behaviour.
2. Families affected by domestic violence.
3. Families caring for older family members.
4. Families needing affordable accommodation.
5. Families in need of respite.

Murupara priorities which need to be addressed by social services in Murupara:

1. Economic development.
2. Well-being of local people.
3. Promotion and revitalisation of the town.

Rotorua priorities relating to youth offending in the Rotorua area:

1. Alcohol and drugs.
2. Non-engagement in education.
3. Programmes and activities for youth.
4. Mental health.

Other aspirations are summarised in the Long Term Plans (refer to attached).

Funding

- Funders based in the Bay of Plenty region make at least $8,478,718 available to the region annually.
- The 'national' funders offer more than $912 million to New Zealand communities and community organisations annually, including at least $759m from government funders.
- In 2005/2006, Lotteries Grants Board allocated $1,606,280 to the Bay of Plenty/Gisborne region for distribution to the community.
    - The Bay Trust made grants totalling $3,631,006 in the financial year ending 31 March 2007.

Confidence

Medium. Statistics based Census NZ data 2001 and 2006, Government Department, FundView or Massey University research.

The data and information used is dated if it was up to date then confidence would be high.

Bay of Plenty area the same as regional council boundaries.

References

Census of Population and Dwellings, Regional Summary, Census 2001 & 2006, Statistics NZ

Statistics NZ Community Profiles contain detailed statistics by area

2001 Household Expenditure Survey

Leading Social Development: Regional Plan 2006/2007, Ministry of Social Development

Funding Information Service: FundView, BreakOut and CorporateCitizens

Ministry of Social Development The Social Report 2006

Ministry of Social Development Regional Indicators 2006

Benefit statistics sourced from Ministry of Social Development's Information Analysis Platform
as at 31 March 2006.

Home Affordability Report – Massey University

Long Term Council Community Plans 2006 of:

- Environment Bay of Plenty
- Kawerau District Council
- Opotiki District Council
- Rotorua District Council

- Taupo District Council
- Tauranga City Council
- Western Bay of Plenty District Council

	Cared for, Clean & protected environment	Healthy, safe, caring communities	Value on learning and excellence/ education, training opportunities for all	Quality, reliable affordable infrastructure	Development to fit environment/ Environmentally responsible development and support the community	Prosperous and strong sustainable economy	Open, effective, informed, transparent and inclusive leadership	Respected and values culture and heritage	Community leadership and governance or fair and efficient leadership	Healthy housing	Vibrant, diverse, creative, active, vital, strong spirit, distinctive, fulfilling, communities/	Independence and viability	Services and facilities that meet needs/excellent facilities and services	Purposeful work	Easy to move around
BOPRC	√	√	√	√		√	√	√			√				
Kawerau	√	√	√	√		√			√	√	√	√			
Opotiki	√		√		√			√	√		√		√	√	
Rotorua	√	√√	√			√		√			√		√		
Taupo	√	√√				√					√				
Tauranga	√	√			√	√					√				√
WBOPDC		√					√				√				
Whakatane	√	√	√	√	√	√	√				√				

BAY OF PLENTY REGIONAL LAND TRANSPORT STRATEGY SUPPORTING PAPER NO. 09

October 2013

This report examines economic development and transport in the Bay of Plenty and identifies ways in which the transport network could be developed to support economic development in the region. The report is an input into the development of an updated Bay of Plenty regional Land Transport Strategy.

What this Looks Like

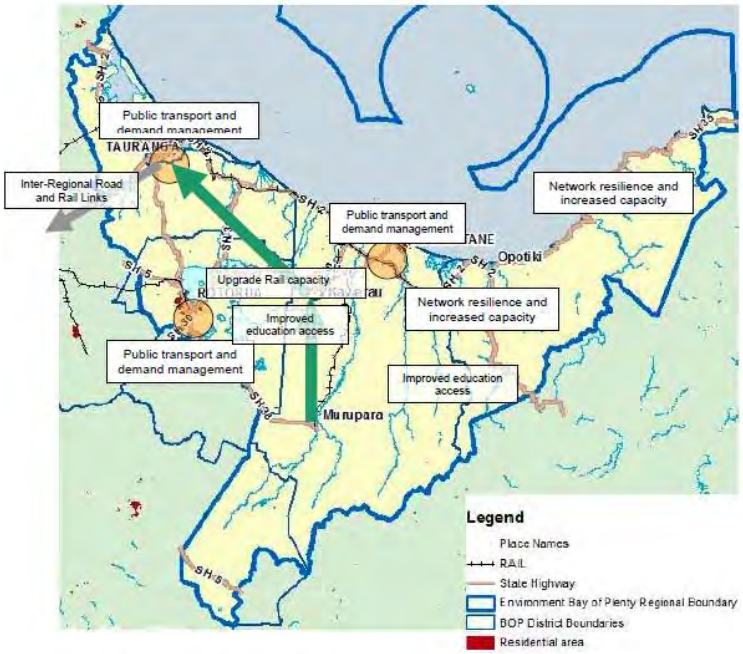


Figure E.1 Focus for future transport investment

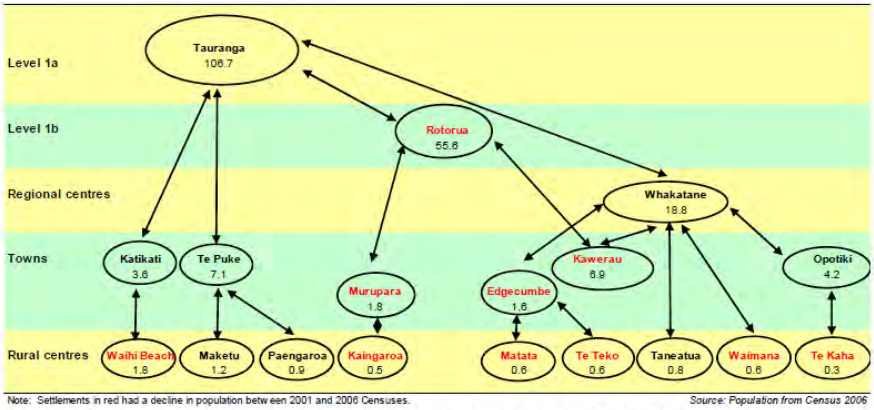


Figure 4.1 Bay of Plenty settlement hierarchy (for the census Usually Resident Population Count 2006 (000's))

Key Points

The main findings of the study are that the future transport system best able to support economic development in the region, will be one with a strong focus on providing for access to jobs in the main urban areas, as this is where a step change in economic activity is most likely to be achieved and supported by transport improvements.

Transport infrastructure can make a positive contribution to economic development.

Future network issues include:

- Network resilience and route security particularly in the east.
- Capacity of the transport network for freight within the region. There are likely to be issues with increased movements of logs and processed timber by road and rail from Murupara and Kawerau. Forecasts from the Bay of Plenty Freight Study indicate that the scale of the freight task in the region including both flows within and to and from the region will increase by about 60-65%.
- Congestion and interactions in urban areas. Issues with increased traffic and increasing size of ships likely to compound the peak freight flows into and out of the port.
- Inter-regional links.
- Rural Isolation – east of the region is relatively remote.

What this Means

The transport system likely to make the greatest contribution to the desired patterns of economic development is one with a substantial focus within the main urban areas of Tauranga and to a lesser extent Rotorua. This would aim to provide good connections between residential suburbs and central areas and take advantage of measures for traffic demand management to minimise the effects of congestion.

The transport system will still need to recognise the importance of freight movements which are often required to share roads and corridors with cars and passenger transport and should seek to minimise conflicts between heavy vehicles and other road users.

The emphasis within the cities will need to be supported by a range of measures across the region to support the movements of freight including:

- Increased capacity and resilience of the key transport links in the east of the region.
- Improving the capacity of the road and rail links to Kawerau and points further south.
- Improving the links to Hamilton and Auckland to allow better connectivity with these cities. This would be important both for the movement of freight and of passengers.

Confidence

Medium-High. Information sources referenced. Freight growth estimates are based on information contained within the Freight study.

It is assumed that growth will be focused in main urban areas.

Statistics used to justify employment were sourced from the BERL database while population and population projections were sourced from Statistics NZ 2006.

References

BERL TLA Database

Statistics NZ

Paling, R, Sanderson, S. and Williamson J., 2011, Linkages between New Zealand Cities, report prepared for the Ministry of Economic Development.

Rice, P.G. and A.J. Venables 2004 'Spatial determinants of productivity; analysis for the regions of Great Britain', CEPR discussion paper no 4527.

Richard Paling Consulting (2010 a) Bay of Plenty regional Freight Study for Environment Bay of Plenty

BAY OF PLENTY TRANSPORT FUTURES STUDY

October 2013

The Bay of Plenty Regional Council has commissioned McCormick Rankin Cagney (MRC) to investigate the future performance of the region's land transport system in response to a range of non-transport factors and transport interventions. The outputs of this study are intended to inform the development of strategic options for the next Regional Land Transport Strategy (RLTS). This study assesses the performance of the transport system across the entire region, without attempting to analyse the contribution of individual projects.

The results of this study showed that we cannot continue along this path of transport planning based on the 'do minimum' or 'business as usual approach' will led to unacceptably high levels of vehicle use. Transport priorities need to focus on disincentivising private car use, improving freight efficiency and promoting walking/ cycling and public transport modes.

What this Looks Like

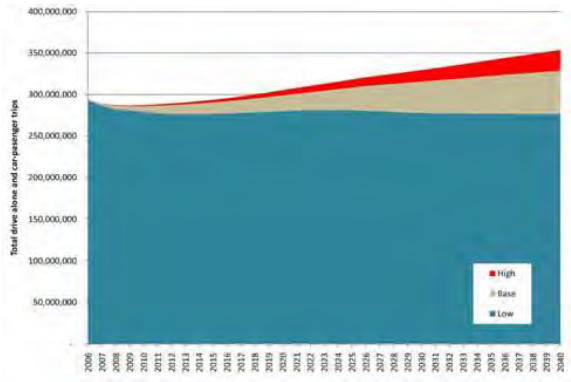


Figure 42 Cumulative impacts of alternative future scenarios on total driver and car-passenger trips (2006-40)

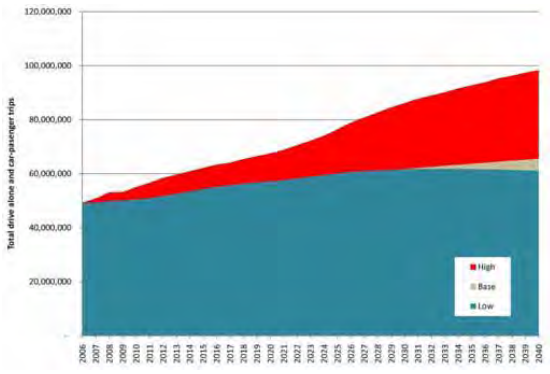


Figure 43 Cumulative impacts of alternative future scenarios on total public transport and walking/cycling trips (2006-40)

In a "do minimum" option, we forecast that current trends would see considerable growth in the numbers of driver journey to work trips in the Bay of Plenty region. No amount of investment in road infrastructure could accommodate this growth. Hence, there is an on-going need for investment in the regional transport system, especially those infrastructure and services that are able to accommodate growth in a way that is both cost-effective and sustainable.

Also, in a "business as usual" option, driver travel demand continues to increase. Driver journey to work mode share reduces in percentage terms (from 76% to 72%) although the total number of vehicles trips continues to grow. The "do minimum" scenario is not an option and even the "business as usual" option would be likely to result in unacceptably high levels of vehicle use, especially in urban areas at peak times. As a result, there is a need for a shift in transport priorities if future objectives of the region are to be met.

The cumulative effects of changes to fuel prices, parking costs, economic growth, and vehicle ownership were tested. The results suggest that these factors have a major influence on future travel demands. Perhaps more importantly, the effects of these variables are correlated; low fuel prices, high economic growth, and higher vehicle ownership are likely to occur in tandem, and vice versa.

However, average per capita travel demand is reducing over time, not only in Bay of Plenty but across NZ, Australia and the US. Factors contributing to this decline are: namely an ageing population, on-going developments in information and communications technology, and high and volatile fuel costs.

The analysis found that cumulative effects of changes in fuel prices, parking costs, economic growth, and vehicle ownership have a major influence on future travel demands. Perhaps more importantly, the effects of these variables are correlated; low fuel prices, high economic growth, and higher vehicle ownership are likely to occur in tandem, and vice versa. The key messages from this analysis were that:

- Volatility is the norm rather than the exception
- Continued importance of the road network in the foreseeable future
- Non car modes increase market share.

There is also a strong rational for the region to contribute to the efficient movement of freight. The reasons include:

- Due to the relatively high economic value of freight, improving its efficiency is likely to deliver economic benefits.
- The negative externalities such as emissions to air, water, and soil, provide an incentive for government policies to support efficient freight movement.
- Improved road freight efficiency would reduce congestion for all road users. Several opportunities exist to improve the connections between road, rail, and shipping networks.

Freight volume on the rail network is expected to increase.

What this Means

To support the recommended strategic transport option, MRC made the following recommendations:

Demand-side measures:

- Parking reforms – remove minimum parking requirements and implement performance-based parking policies that rely on prices to manage demand; and
- Information and communications technologies – facilitate increased uptake of telework, home delivery services, and car-share; and
- Time-of-use pricing – initiate a high-level discussion on the merits of time of- use pricing (premised on assumptions of mode and fiscal neutrality).

Sustainable transport improvements:
- Public transport – downtown terminals, integrated ticketing, bus priority measures, new interchanges, and park and ride; and
- Walking / cycling – delivery of strategic urban cycle networks in Tauranga (40 km) and Rotorua (30 km)

 Freight management: Establishment of a contestable regional fund to support freight initiatives that deliver external benefits to the region

 Road network: Remains the backbone of the regional transport system. Investment should focus on improvements to:
- Connectivity – increasing the resilience of the wider road network.
- Quality – improving vehicle fuel efficiency and reduces tyre wear
- Safety – heightened focus on road safety for all road users.

Confidence

High the document references a number of supporting documents, which contain justification of assumptions made.

Mode choice regression models used for this research were based on a variety of demographic, socio-economic, and transport trends were able to explain a reasonable amount of the variation in journey to work (JTW) mode share observed around the region in the 2006 census.

References

Amazon. (2009). Amazon Kindle is the Most Gifted Item Ever on Amazon.com – On Christmas Day, for the First Time Ever, Customers Purchased More Kindle Books Than Physical Books. Retrieved from http://phx.corporateir.net/phoenix.zhtml?c=176060&p=irolnewsArticle&ID=1369429&highlight=.

BITRE. (2009). Urban passenger transport: how people move about in Australian cities. Canberra: Bureau of Infrastructure, Transport, Regional Development, and Local Government.

Bonnel, P. (2003). The estimation of aggregate modal split models. *European Transport Conference* (p. 20). Retrieved from

http://halshs.archivesouvertes.fr/docs/00/09/23/35/PDF/aet_2003.pdf.

BTS. (2010). Table 4-15: Bus Fuel Consumption and Travel. Retrieved from www.bts.gov/publications/national_transportation_statistics/html/table_04_15.html.

Corpuz, G., & Peachman, J. (2003). Measuring the impacts of internet usage on travel behaviour in the Sydney Household Travel Survey. *ATRF Conference* (pp. 1-15). Sydney. Retrieved from www.transport.nsw.gov.au/sites/default/file/tdc/documents/atrf-2003-hts-paper.pdf.

DEFRA. (2007). *Passenger transport emissions factors: Methodology paper*. London, UK. Retrieved from www.defra.gov.uk/environment/business/reporting/pdf/passengertransport.pdf.

Donovan, S. (2009). How Free is Your Parking? Winnipeg: Frontier Centre for Public Policy. Retrieved from www.fcpp.org/pdf/FB077 How Free Is Your Parking.pdf.

Donovan, S. (2010). *Winning the Battle with Congestion - The benefits of accurate pricing* (p. 15). Retrieved from www.fcpp.org/publication.php/3387.

Donovan, S., & Genter, J. (2008). Managing Transport Challenges when Oil Prices Rise. Wellington: New Zealand Transport Agency.

Donovan, S., Petch, B., Genter, J., & Mumby, N. (2009). Valuing Urban Design. Wellington: New Zealand Transport Agency.

Eliasson, J. (2007). Cost-benefit analysis of the Stockholm congestion charging system. Stockholm: The World Bank. Retrieved from http://siteresources.worldbank.org/INTTRANSPORT/Resources/StockholmcongestionCBAEliassonn.pdf.

Environment Bay Of Plenty. (2010). *Project Brief: Transport Futures Study*. Whakatane.

Federal Highway Administration. (1999). *Guidebook on Methods to Estimate Non-Motorized Travel: Supporting Documentation* (p. 180).

Genter, J. A., Schmitt, L., & Donovan, S. (2008). The Missing Link: Parking as the integration of transportation and land use. New Plymouth.

Genter, J., Donovan, S., & Badland, H. (2008). Valuing the Health Benefits of Walking and Cycling. (N. Z. T. Agency, Ed.). Wellington: Land Transport New Zealand.

Hugosson, M. B., & Sjöberg, A. (2006). Facts and results from the Stockholm Trials. Stockholm: Congestion charge secretariat, City of Stockholm. Retrieved from *146 Transport Publication 2011/06 – Bay of Plenty Transport Futures Study* http://www.stockholmsforsoket.se/upload/The Stockholm Trial, facts and results_ExpertGroup Summary June 2006.pdf.

Kenworthy, J. (2003). Transport Energy Use and Greenhouse Gases in Urban Passenger Transport Systems: A Study of 84 Global Cities. Melbourne: Institute for Sustainability and Technology Policy.

KiwiRail. (2010). *The KiwiRail Turnaround Plan*. Wellington, N.Z. Retrieved from www.kiwirail.co.nz/uploads/KiwiRail Turnaround Plan (Brochure).pdf.

Litman, T. (2006). *Parking management best practices* (p. xx, 292 p.). Chicago, Ill. : American Planning Association.

Litman, T. (2009). Parking Requirement Impacts on Housing Affordability. Victoria: Victoria Transport Policy Institute.

Marsden, G. (2006). The evidence base for parking policies - a review, *13*, 447-457.

MED. (2006). New Zealand's Energy Outlook to 2030. Wellington: Ministry of Economic Development.

MED. (2007). New Zealand Energy Strategy to 2050 - Powering our Future. Wellington: Ministry of Economic Development.

MOT. (2006a). Tackling Congestion in Auckland - Auckland Road Pricing Evaluation Study.

Wellington: Ministry of Transport. Retrieved from www.transport.govt.nz/assets/NewPDFs/Auckland-Road-Pricing/arpes-summarydocument.pdf.

MOT. (2006b). *A strategy for domestic sea freight*. Retrieved from www.transport.govt.nz/ourwork/Documents/Sea-Change-2008.pdf.

National Infrastructure Unit, T. (2010). *National Infrastructure Plan* (p. 143). Wellington, N.Z. Retrieved from www.infrastructure.govt.nz/plan/mar2010.

Oum, T. H. (1989). Alternative models and their elasticity estimates. *Journal of Transport Economics and Policy*, (May), 163-187.

Puentes, R., & Tomer, A. (2008). *The road… less travelled: An analysis of vehicle miles travelled trends in the U.S.* Retrieved from www.brookings.edu/~/media/Files/rc/reports/2008/1216_transportation_tomer_puentes/vehicle_miles_traveled_report.pdf.

Sanni, T., & Abrantes, P. (2010). Estimating walking modal share: a novel approach based on spatial regression models and GIS. *Journal of Maps*, 192-198.

Seibert, C. (2008). There is no such thing as a free parking space. *Policy*. Australia: Center for Independent Studies.

Shoup, D. C. (1999). The trouble with minimum parking requirements. *Transportation Research Part A: Policy and Practice*, *33*(7-8), 549-574. Retrieved from http://www.sciencedirect.com/science/article/B6VG7-3X6B5574/2/287896b5f634141b8c0dcce0feca8ce2.

Shoup, D. C. (2005). *The high cost of free parking* (p. xviii, 734 p.). Chicago: Planners Press, American Planning Association. *Transport Publication 2011/06– Bay of Plenty Transport Futures Study 147*

Sorenson, P. (2009). *Moving Los Angeles* (pp. 16-25). Retrieved from http://www.uctc.net/access/35/access35.pdf.

Vickrey, W. S. (1963). Pricing in Urban and Suburban Transport. *Public Economics: Selected Papers by William Vickrey* (Vol. 53, pp. 350-383). Cambridge, UK: Cambridge University Press.

DISTRICT STRATEGIC PLAN 2005-2015

October 2013

The Bay of Plenty District Health Board (BOPDHB) strategic plan outlines steps that the DHB will take towards achieving its vision – healthy, thriving communities through delivering on the following health outcomes: healthy children, youth, families, Māori; independent and dignified ageing; and independence for people with disabilities; Improved health and independence for people with chronic conditions; and health equity.

What this Looks Like

Health needs assessment outcomes.

Issue	BOPDHB Status
Birth	BOP has a higher rate than NZ.
Growth	Rapid population growth occurring particularly among older people
Need	High population health needs for some groups (e.g. people with lower socio-economic status, Māori, older people, children, people who live in rural areas)
Cardiovascular disease	Major cause of death and hospitalisation
Death rates	Māori males aged 45-64 have high rates of many conditions (e.g. cancer, injury, diabetes)
Suicide	High rate for young men, particularly Māori
Smoking	Slightly higher than the NZ rate and Kawerau district has the highest smoking rate in the country (excluding the Chatham Islands)
Cancer	Higher lung cancer bowel cancer and melanoma rates than the NZ rate.
Obesity	Approximately one in five people compared with one in 10 a decade ago
Alcohol and substance abuse and misuse	Slightly higher than the NZ rate
Oral health	Worse compared to the NZ rate, and worse for Māori compared to Non Māori

Key Points

BOPDHB is responsible for the health of the people of the 200,000 in the Bay of Plenty district.
The organisation is governed by the Board, with
three statutory committees and two sub-committees. The organisation employs approximately 2,700 staff.

To achieve core health outcomes the BOPDHB will:

- develop collaborative, partnerships and networks to address the social

determinants of health and tangata whenua determinants of health;
- reduce health disparities, particularly the health status of Māori and other population groups;
- emphasise preventative intervention;
- target chronic conditions and co-morbidities;
- undertake actions that optimise appropriate, quality, integrated programmes; and
- provide disability support services for people aged over 65.

One key service issue relates to provider capacity and capability:

- Particularly with the rural isolation of some areas – recruitment, retention and workforce development is difficult.
- Appropriate level of competencies across the care continuum – the distribution of consistent levels of key competencies for delivering quality services varies across the BOPDHB area.
- Chronic condition burden – the increasing rates of complex chronic conditions, including multiple chronic conditions, within the BOPDHB population requires new approaches to preventing, detecting and managing health outcomes.

What this Means

Increased population growth is anticipated creating volume changes. Greater efficiencies are being sought in the review of all services and processes in the hospital in parallel with building redevelopment. The integration with primary care, and changes to models of care all of are also expected to deliver efficiency gains.

Significant capital expenditure planned or being considered within the next 10 years includes:

- Renovation or expansion of Tauranga Hospital 2004/2005 financial year, with an expected project cost of $110 million.
    - Renovation or expansion of Whakatāne Hospital.
    - Tauranga and Whakatāne Adult Community Mental Health Services require additional facilities to provide for growth in services for the next five to 10 years.
    - Replacement of significant equipment (e.g. Radiology equipment) purchase of new technology (e.g. telemedicine, mobile dental) an estimated additional $88,000 between 2011-2025.

Confidence

Medium. The report was developed through s83A of the Local Government Act consultation in accordance with its statutory obligations under the New Zealand Public Health and Disability Act 2000. The process to develop the strategy is therefore robust.

The core assumption is that there is going to be increased demand and pressure on hospital services in the future, given increased population growth particularly the large aging population cohort.

However the report and statistics are dated.

References

BOPDHB Health Board District Strategic Plan 2005-2015, 2006

There are numerous relevant strategies most of which are summarised in the Ministry of Health. Stocktake of Strategies and Other Key Policy Documents, November 2001.

Other high level strategies include:

- New Zealand Health Strategy (2000)
- New Zealand Disability Strategy (2001)
- He Korowai Oranga (2001)
- Child Health Strategy (1998)
- Health of Older People Strategy (2002)

BOPRC IWI MANAGEMENT PLAN SUMMARY

November 2013

Twenty Iwi Management Plans (IMPs) were summarised and the outcomes used to inform the Regional Policy Statement review process in 2009. This review highlights key issues for Māori and identifies those with specific mention of economic development or land use development.

In order to understand iwi views on the present place of the Māori environmental resource management system it is necessary to be aware of its history. The goal of Māori environmental management is the maintenance of mauri through kaitiakitanga. For Māori, sustainable management involves sustaining the mauri of natural, physical and metaphysical resources. The Māori Environmental Resource Management System is based on the traditional beliefs of Māori, starting from the belief and understanding of creation.

Key Points

The top key environmental issues in priority order[1] (although points 2 & 3 are even) raised by Māori are as follows:

- Protecting the taonga, waahi tapu and heritage.
- Recognition of the Te Tiriti O Waitangi.
- Preserving and promoting tikanga, customs and protocols.

Other important issues in priority order include:

- Land development - forestry, land conversion/clearance including of wetlands, native flora and fauna, agriculture, and horticulture. Māori are concerned about the type and extent of land clearance associated with these activities and its impact, in the form of erosion and sedimentation of waterways, upon traditional food gathering areas, sacred sites, natural habitats and ecosystems. Indigenous forests is of major importance for a number of tribes in the eastern Bay of Plenty Region where issues arise in the fundamental differences between Māori land ownership and general land. Ngati Awa, Whakatohea and Whanau-a-Apanui have expressed concerns about the decay and destruction of indigenous forests. For others, the restriction on the use of their resources by those who seek to conserve indigenous forest is an issue.

Other key interest areas identified include in priority order:

- Consultation.
- Kaitiakitanga.
- The Māori Environmental Resource Management System. Highlighted was the need to provide incentives for the creation or support of appropriate Māori institutions to develop modern tikanga or practices consistent with

1 Priority meaning the issue was raised by the majority of the iwi/hapu. Those ranked higher were issues raised by all or most iwi/hapu. Those of lower ranking are those which a few iwi/hapu raised. All issues are important.

kaupapa Māori. These would have the role of educating and training people, identified and supported by iwi/hapu/whanau, into the Māori environmental resource management system.

- Fresh water quality and Pollution. There are clearly effects on mauri caused by water pollution, agricultural spray, fertilizer run-off and effluent discharge, as expressed by Ngai Tamarawaho and other iwi/hapu of the horticultural area of Tauranga Moana.
- Infrastructure, Urban Growth, and industrial development
- Freshwater quantity / ownership
- Coastal resources and pollution, kaimoana
- Natural Hazards
- Papakainga, Marae and multiple owner Māori land.

Issues raised by less than half the IMP's include in priority order:

- Air Quality
- Protection of sensitive information
- Monitoring and enforcement
- Consent Applications
- Fisheries
- Local Authorities (imposing on mana moana, mana whenua)
- Geothermal. The exercise of kaitiakitanga should apply to geothermal resources, especially those whose surface features have been traditionally used by iwi and hapu. Recognition that Māori claims to geothermal resources include involvement in the management of those resources. The importance of geothermal resources for the tangata whenua that have historical association with geothermal fields has not been fully recognised. It is not always recognised that the tangata whenua with mana whenua over a geothermal site, exercising their rangatiratanga, determine the kaitiaki of that site.
- Enhancing the quality of life for descendants.
- Recognising iwi, hapu, whanau.
- Hazardous substances and waste management.
- External conflicts (environment, tourism, population growth).

What this Means

The purpose of the IMP review was to provide input into the Regional Policy Statement and due to this the summary relates to key environmental issues and interests of iwi and hapu but not necessarily demographic changes and economic development aspirations.

Te Runanga o Ngati Whakaue ki Maketu have investigated a number of economic development initiatives but lack capital, land and resources to commence ventures. At the initial stage the economic development focus is on the Inshore Aquaculture management Area. Currently the hapu are conducting a feasibility study into inshore aquaculture at Maketu. The hapu are also concerned about the Tauranga Northern Link and the Rangiuru Business Park and the potential effects on the environment that will result from construction.

Nga Potiki were concerned over the extension of residential, and commercial areas to Te Tumu, the infrastructure demands for Te Tumu growth and the intensification of Western Bay Of Plenty District Council as parallel growth to Tauranga District Council.

Ngaiterangi Iwi in 1995 were concerned about the activities of the Port of Tauranga including the reclamation of Sulphur Point and its effects on the environment. Indiscriminate and uncontrolled emissions into the air arising from agricultural, horticultural, residential, recreational, commercial, and industrial activities including from the airport.

Confidence

Medium. The report summarises key environmental issues for the purpose of providing input into the Proposed Regional Policy Statement. A number of these plans are out of date and past views and aspirations may have changed.

References

Ngaiterangi Iwi

Tawharau o nga hapu o Whakatohea

Te Arawa Trust Board Iwi

Te Awanui

Voices- Nga korero Whakahiahia o Ngaiterangi Me Ngati Pukenga

Nga Potiki

Voices- Ko te tirotirohia a mua a Ngati Ranginui - Vision 2020

Nga Aukati Taonga o tapuika me Waitaha

Nga Taonga Tuku Iho: Pirirakau Hapu

Nga Tai Iwi

Ngaiterangi Iwi Inc. Society

Ngati Manawa

Ngati Pikiao Whanui

Ngati Pukenga

Ngati Rangiwewehi

Ngati Umutahi Whenua

Rangitaiki Hapu Coaltion

Te Runanga o Tuwharetoa Ki Kawerau

Te Whanau a Te Ehutu

Upokorehe Hapu.

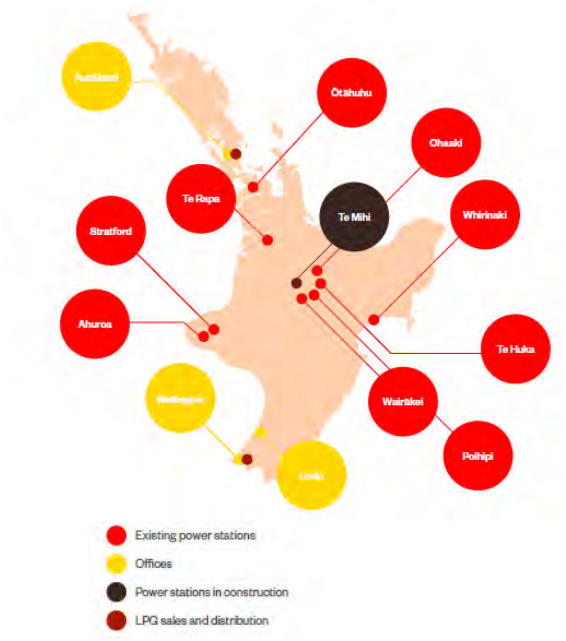
CONTACT ENERGY LTD ANNUAL REPORT 2013

November 2013

Contact Energy provides electricity, natural gas and LPG to residential, small business, commercial and industrial customers nationwide. Their head office is centrally located in Wellington, and a further 22 operational sites across the country from Auckland to Invercargill.

What this Looks Like

Where Contact Operate in the North Island



Key Points

Contact Energy supply 23 per cent of New Zealand and are one of New Zealand's largest electricity generators and retailers. With $3.5B worth of assets and they are New Zealand's largest online energy company.

Contact own and operate 11 power stations across New Zealand and generates around a quarter of New Zealand's electricity.

In 2013 energy sales volume was in line with the prior year at 8,277 GWh with a 3 per cent year-on-year decline in mass market to 4,067 GWh being offset by a 3 per cent increase in commercial and industrial sales to 4,210 GWh.

What this Means

In February 2013 it was reported Contact was restructuring the business with the loss of approximately 100 jobs this was due to the electricity market in New Zealand being both oversupplied in terms of generation capacity and stagnant in terms of demand growth.

In the near future priority will be given to completing their major capital investment programme, both with the commissioning of Contact's Te Mihi power station and the roll-out of the retail systems upgrade.

Confidence

Low -Medium. Assumptions not stated.

This is an annual plan and therefore it's targeted at shareholders and contains financial

statements which need to be robust and auditable. There has been decline in demand for the past 3 years and an increasingly competitive market as a result a lot of switching occurs yet the plan doesn't specifically advise how it will address this issue in the future, other than completing major investments and the roll out of a systems upgrade.

References

Not stated.

DEPARTMENT OF LABOUR ANNUAL IN DEPTH LABOUR REPORT - 2008

December 2013

This was the last such regional report produced.

Across Bay of Plenty Region, youth labour market performance has been variable. Results for Tauranga City were generally better than the regional average, while some of the smaller more rural districts (especially Kawerau and Opotiki Districts) produced weaker than average results.

Educational attainment in the smaller areas is low and participation in employment or training are also low.

The youth population is projected to grow by 15.7% in the period between 2006 and 2031, focussed on the West, with contracting youth population in the East. Retail Trade was by far the largest employer of youth in Bay of Plenty Region in 2006

What this Looks Like

Map 2: Concentration of youth in Bay of Plenty Region

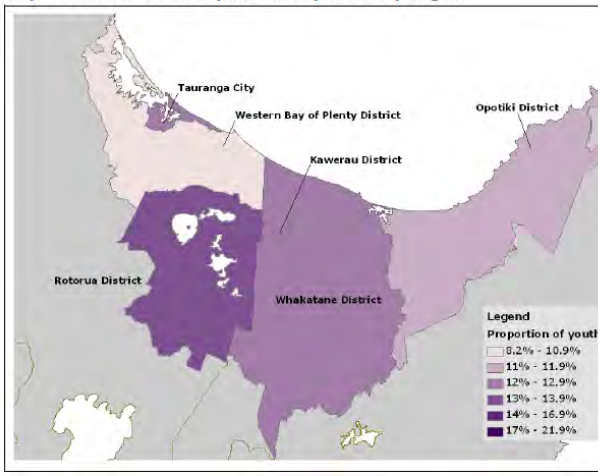


Figure 1: Concentration of youth in BOP

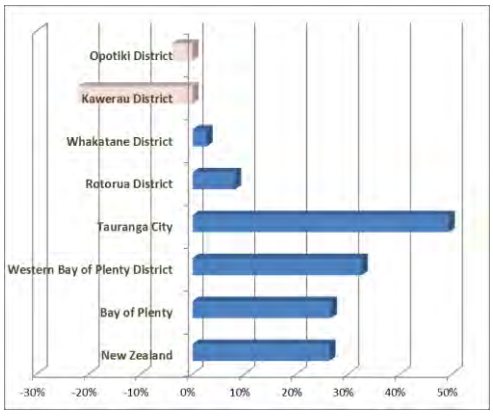


Figure 2: Forecast Growth in youth population to 2031

Chart 6: NEET rates for youth in Bay of Plenty Region in 2006

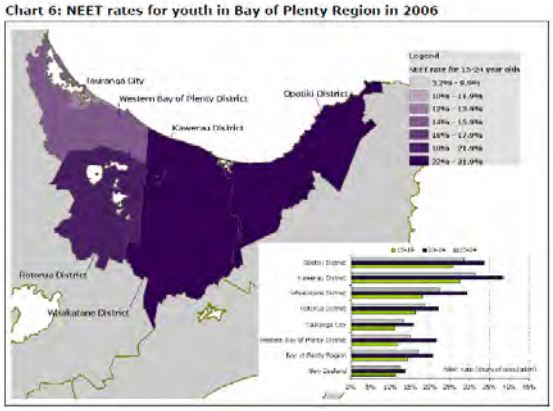
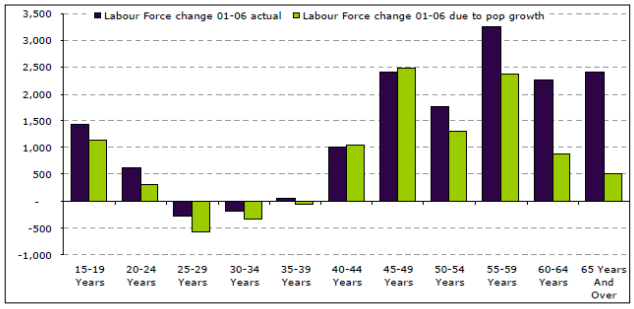


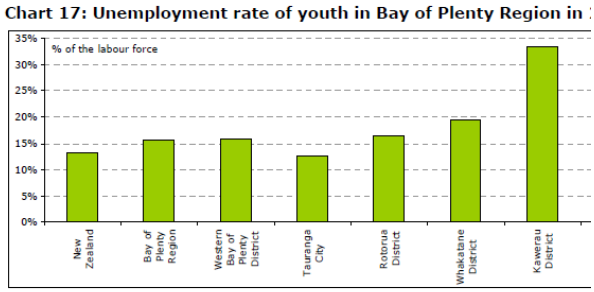
Figure 3: % Youth Not Working or Training

Chart 10: Labour force change in Bay of Plenty Region



Source: 2006 Census of Population and Dwellings, Statistics New Zealand

Figure 4: Labour force change'01 – '06 in BOP



Source: 2006 Census of Population and Dwellings, Statistics New Zealand

Figure 5: Youth Unemployment Rate

What this Means

The youth population is projected to grow by 15.7% in the period between 2006 and 2031, faster than the growth rate for youth nationally.

Numerically, Bay of Plenty Region will have the third largest growth in youth numbers. Youth population growth is projected to be concentrated in Tauranga City (up 42.6%) and Western Bay of Plenty District (up 9.0%). Rotorua District will experience growth of only about 2% in its youth population. The three eastern districts are expected to have less youth in 2031 than they did in 2006.

Migration statistics show a consistent net outflow of youth from Bay of Plenty Region from 1996 to 2006. The population flowed into Bay of Plenty Region at ages above 25, which may suggest that, once their education phase is complete, people start to move (or return) to this region.

Bay of Plenty Region performed relatively poorly in terms of school leaver education attainment. Except for Tauranga City and Western Bay of Plenty District, all districts had an above average share of students with little or no formal attainment.

The proportion of youth in Bay of Plenty Region holding a post-school qualification in Engineering and Related Technologies, Food, Hospitality and Personal Services, and Agriculture, Environmental and Related Studies was relatively high, whilst a relatively low proportion were qualified in technical fields such as Natural and Physical Sciences.

Retail Trade was by far the largest employer of youth in Bay of Plenty Region in 2006, followed by Accommodation, Cafés and Restaurants, and Construction. The two industries that experienced the fastest growth in youth employment between 2001 and 2006 were Construction (up almost 100%) and Finance and Insurance (up by 49%). Trades Workers (a skilled occupation group) added the most youth workers between 2001 and 2006, with many likely to be employed in Construction.

Key Points

Educational attainment, ageing and migration appear to be driving labour participation rates. A shift in participation rates is required to lift economic outcomes and compensate for an ageing population. Growth will only come through improvements in efficiency.

Confidence

Moderate-High. The projection, though dated, build on census-derived data and economic modelling, both of which are underpinned by solid research.

References

Annual In Depth Regional Report, Bay of Plenty. Department of Labour. March 2008. Note: this report had a youth focus.

TE ARA WHAKAMUA HOU (THE JOURNEY FORWARD) EAST COAST BAY OF PLENTY CONSERVANCY STRATEGIC DIRECTION 2010-2015

October 2013

BOP Conservancy Strategy was in the process of being reviewed when restructuring occurred so the updated version was never signed off and is not available to the public. This document provides an interim update. The strategy is an internal DoC guide to provide a clear picture of the conservancy, its places and people, the relative priorities and the way the organisation wants to work to achieve the department's vision that New Zealand is the greatest living space on earth.

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What this Looks Like

Key Points

The East Coast Bay of Plenty Conservancy encapsulates the western and eastern parts of the Bay of Plenty stretching from west of Tauranga city, inland to the Waikato River, Rotorua, across to Gisborne and up to the East Cape. The total area of the conservancy is 2.3 million hectares with public conservation lands including 637,000 ha or 27.6% of the region and includes the following parks: Te Urewera National Park; Whirinaki Forest Park; Raukumara and Kaimai Mamaku Conservation Parks.

Current challenges include: the worldwide economic recession, the physical scale of the conservancy; in the past being reactive and working in a silo.

Focused priority areas:

- Urewera (including the Waikaremoana Catchment and the Northern Te Urewera Mainland Island);
- Whirinaki;
- Raukumara (including Pukeamaru Scenic Reserve; Waioeka Gorge

Scenic Reserve and Conservation Area and the Urutawa Conservation Area);

- Kaimai-Mamaku;
- Volcanic and Geothermal Environments;
- Coastal Ecosystems, Forests and Dunelands;
- Freshwater Wetlands;
- Islands; and
- Marine Environments.

What this Means

The need to establish and build strong new internal and external relationships with a range of iwi authorities, territorial authorities agencies commercial and tourism industry.

The organisation has identified the need to be proactive and more collaborative.

Key activities for high priority areas include:

- Increasing their profile and visitor and tourism opportunities.
- Examining economic and social opportunities with iwi and hapu.
- Establishing ecological corridors with landowners and key agencies.
- Increasing protection and restoration through community lead restoration projects.
- Increasing public awareness and understandings of ecosystems.

Confidence

Low-Medium. The document is an internal document and the key underlying assumption is that the organisation cannot continue to operate as it has in this economic climate and needs to build relationships to leverage off collaborative efforts.

References

Te ara whakamua hou (The journey forward) East Coast Bay of Plenty Conservancy Strategic Direction 2010-2015, 2010

FEDERATED FARMERS

October 2013

A meeting occurred with Nigel Billings a Bay of Plenty Federated Farmers representative on 1st November 2013. The results of the meeting are recorded here.

Key Points

Federated Farmers general information

- The majority of dairy farms are located in the Eastern bay with Western bay being mixed with horticulture and small dairy blocks, Rotorua Lakes have water quality issues and in Taupo a number are converting cows to sheep.
- Traditionally Federated Farmers key focus/investment areas include: roads, water and rates.
- Rabo bank survey showed that farmers make above the national average income.

Summary of key components to dairy farming:

- Money to manage effluent, and environmental issues.
- Good roading.
- Good reliable supply of electricity. No 'brown outs' voltage changes which occur frequently.
- Large and steady water supply. If water was available for irrigation out east then a lot of land could be converted to dairying. A number of farmers would like to see this happen. Water allocation –past consents allow for generous quotas and may not be being utilised. If water allocation could be understood better through research then there may be more water available than initially anticipated. Currently water in all rivers is over allocated. TrustPower was noted as tying up the Rangitaiki River water allocation.
- Bulk water storage. Climate Change has resulted in three droughts in the last 3 years. Usually a drought only affects one part of the country so feed can be shifted around to cater for shortfalls however when the drought affects the whole country then mass water storage is required for farmers to use the water for irrigation. However this is expensive and needs to be a central government response.
- Community soft infrastructure is desirable.
- Internet access and cell phone coverage.
- Succession Planning. Aging population is an issue for sheep farmers whose children often aren't interested in continuing the business due to low economic returns. Lots are being subdivided and sold off for family.

What this Means

- Opotiki population is in decline and farmers are finding it difficult to recruit staff. Farmers want high incomes, modern communities and access to facilities.
- Farming is becoming more high tech and as a result farm workers are soon going to need a tertiary qualification. Workers need to know about health and safety; have computer skills; farming; animal health knowledge etc.; and being technologically aware. The importance of the local Tertiary facility in assisting with this was considered crucial.
- A high technology example is of a farmer in Morrinsville with a 60 bail milking shed

which can milk 600 cows in 2 hours and be run by one person.

- As well as an increase in technology used on farms, the other key trend is that dairy farms are consolidating and intensifying.

Confidence

Medium. Information provided was based on practical experience.

A key assumption is that land use in the Eastern Bay will continue to be dominated by dairy farming.

References

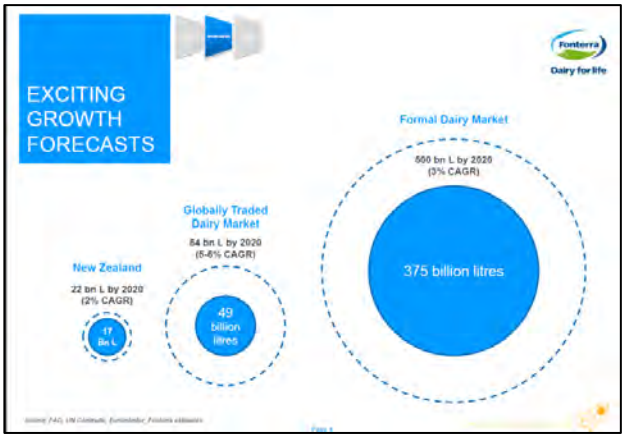
Western Water Sustainability Strategy – Potential land use Change.

FONTERRA STRATEGY REFRESH

October 2013

The Fonterra Group strategy aims to grow volumes and value of dairy products by focusing on emerging markets and products that meet growing consumer demand for dairy nutrition.

What this Looks Like



Key Points

The global demand for dairy products is projected to increase from 375 billion to 500 billion by 2020.
New Zealand (NZ) currently supplies 17 billion litres of dairy which could increase to 22 billion by 2020.

What this means

Fonterra have identified ways in which to achieve this target through the:

- Optimisation of NZ milk;
- Focus, investment and driving growth in key fast growing markets (e.g. Asia including China, Latin America, and MENA).
- Investment in innovation.
- Develop selected leading positions in paediatric ingredients and maternal brands.
- Selectively invest in 'Milk Pools'.
- Reduce overheads.
- Exit unprofitable, uncompetitive and non-core categories and markets

Confidence

Low-Moderate. The summary strategy has been reviewed; the full document was not available online.

The key underlying assumption is that demand is projected to increase based on expanding Asian markets and economic conditions. Supply of dairy products is also assumed to increase through greater efficiencies.

It is not clear whether the effects of the botulism scare have not been included in projections.

References

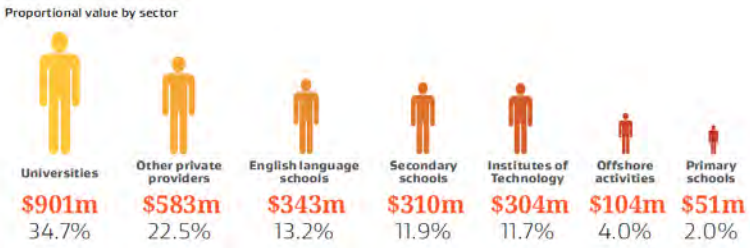
Fonterra Strategy Refresh, 2012

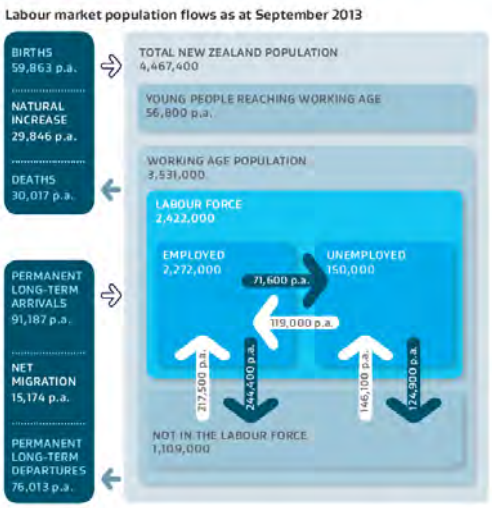
BUSINESS GROWTH AGENDA PROGRESS REPORT

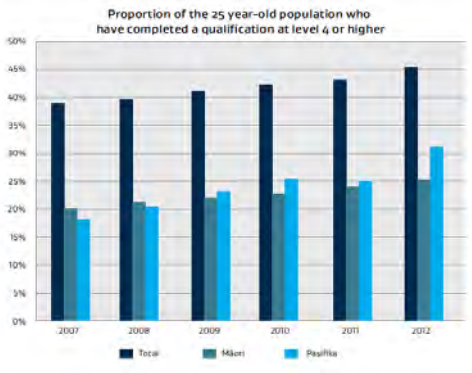
November 2013

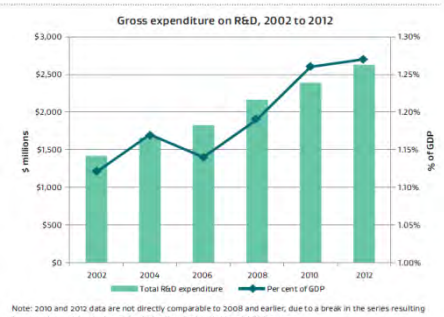
The purpose of the Government's growth agenda is to build a stronger economy by creating conditions for firms to be more productive and internationally competitive. This progress report provides an update on the progress being made in each of the six key areas. It gives a clear picture of the advances in each area of work and projects the Government is focused on, both to provide transparency to businesses and to obtain feedback. The Business Growth Agenda is central to the Government's second priority: building a more productive and competitive economy.

What this Looks Like









Key Points

The six key inputs areas have made the following progress:

- **Export markets** – 23/55 initiatives completed. Highlights include: the launch of NZ story; actions to help improve New Zealand firms' access to international markets, signing a comprehensive economic partnership agreement with Chinese Taipei; initiatives designed to make it easier to trade from New Zealand – including the Trade Single Window; increasing value from tourism including the development of new multi- entry visas for Chinese visitors, agreement on a new $402 million New Zealand International Convention Centre, and increased government investment for initiatives; and activities to support New Zealand's $2.6 billion international education sector.
- **Capital markets –** 20 actions completed. Highlights include: responsible fiscal management; the introduction of the Financial Markets Conduct Act (September 2013) which reduces unnecessary costs on businesses seeking to raise capital; the completion of two Government share offers (Mighty River Power and Meridian); improving the management of Crown capital; and the launch of a new service by NZTE.
- **Innovation** – 28/56 actions completed. Highlights include: the establishment of Callaghan Innovation which is charged with working across the whole innovation system to accelerate the growth, scale, intensity and success of innovation in NZ firms; the provision of an additional $98 million (for a total of $566 million) over four years for the new Callaghan Innovation business R&D grants; the provision of $31.3 million over four years to provide repayable funding for start-ups to assist them to become business-ready; the passing of the Patents Act in August; significant progress on the development of innovation infrastructure, including the rollout of ultra-fast broadband, and the development of several innovation hubs around the country; and the announcement of 10 National Science Challenges to tackle New Zealand's biggest science-based issues and opportunities.
- **Skilled and safe workplaces –** 31/62 initiatives completed. Key highlights include: the delivery of more qualifications than ever before by our tertiary system; improvements to vocational training and skills, including launching the Vocational Pathways, announcement of changes to industry training, ongoing reforms to apprenticeships; changes to modernise and simplify the welfare system and to focus on individuals' capacity to work, including the introduction of three new benefits to replace most of the previous main benefits; and launching Working Safer a workplace health and safety system reform.
- **Natural Resources** -16 /49 initiatives completed. Highlights include: finalising the first stage of the freshwater reforms; proposed improvements to the resource management system to improve planning, greater national consistency and guidance, more efficient and effective resource consenting and improvements in council performance; the new framework to manage responsible economic development of New Zealand's Exclusive Economic Zone (EEZ); a number of initiatives to partner with Māori to improve the productivity of Māori land under the Sustainable Farming Fund and Primary Growth Partnership programmes; an oil and gas exploration 2013 season, with at least 13 firm commitments to drill exploration, appraisal and development wells offshore. In addition, some 27 new onshore wells are expected; five new minerals exploration permits as a result of the Northland 2012 competitive minerals tender process.
- **Infrastructure.** Actions costly and long term. Key highlights include: delivering actions to ensure a fast and efficient roading network; major announcements on the next generation of transport projects for Auckland; ongoing work to rebuild Christchurch; more than 320,000 premises now able to connect to the ultra-fast broadband network. Initiative delivering improved wireless broadband to more than 137,000 rural households; establishing Crown Irrigation Investments Limited, to

support the development of proposals that maximise the long-term economic growth benefits from irrigation; announcing the first 11 Special Housing Areas and a comprehensive work programme to address five key areas affecting housing affordability – land supply, provision of infrastructure, productivity in the construction sector, costs of building materials and costs and delays in the regulatory process.

Maori economic development. Six key goals including: greater educational participation and performance; skilled and successful workforce; increased financial literacy and savings; government, in partnership with Māori, enables growth; active discussions about the development of natural resources; Māori Inc as a driver of economic growth.

The Green Growth Advisory Group made 26 recommendations in its report Greening New Zealand's Growth, on how NZ can build a more productive and competitive economy, reinforced by high-quality environmental outcomes.

Regulatory reform cuts across all six Business Growth Agenda workstreams.

What this Means

The Ministers forward summarises the progress made as follows: 'We are already starting to see significant progress towards achieving these results. Forecasts show New Zealand's economic growth is gaining momentum, unemployment is falling and the Government is on track to return to surplus by 2014/15. While a number of challenges remain, the considerable work underpinning our Business Growth Agenda (BGA) has put us in a strong position to tackle these challenges and deliver a stronger economy by building business confidence and addressing the issues that matter to firms.'

Confidence

Moderate-High. This report summarises progress made on a number of reports reflecting the 6 key workstreams. The document has been drafted by NZ Government so the information provided will be accurate.

References

Business Growth Agenda 2011/12

The Business Growth Agenda Progress Report 2013

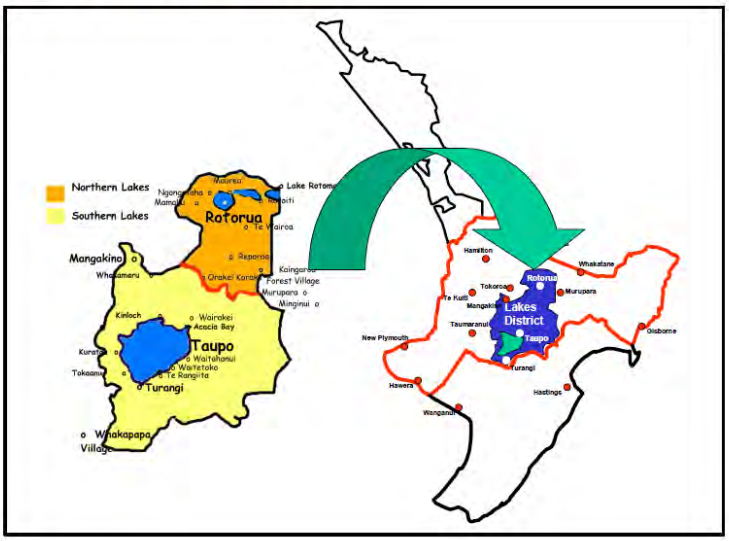
LAKES DISTRICT HEALTH BOARD ANNUAL PLAN 2012

November 2013

The Bay of Plenty District Health Board (BOPDHB) are charged with the responsibility of delivering health services for the people of Rotorua and Taupo. This plan represents a combined Annual Plan 2012/13 and Statement of Intent 2012-15 and is a statutory obligation. Lakes DHB's vision statement Healthy Communities - Mauriora!

What this Looks Like

Lakes DHB Boundaries



Key Points

Lakes DHB has six key strategic priorities:

- child and youth health services;
- older people's health services;
- mental health and addiction services;
- hospital and specialist services;
- primary and community health services;
- people with long term conditions

The Lakes DHB has performed strongly on five out of the six Minister's health targets.

Lakes DHB key achievements:

- leader in in the better help for smokers health target.
- a collaborative approach by Surgical and Elective Services teams has seen an improved access to elective surgery target.
- the opening of a new three-level building called Whakaue Rauoranga for clinical services.
- stronger relationships with primary care providers in the region, and a strong primary care focus resulting in improved immunisation rates, a reduction in Ambulatory Sensitive Hospitalisation rates, a drop in acute admissions and the decreasing

proportion of under-15s being admitted to acute wards.

- a decrease in the proportion of patients waiting longer than six months for First Specialist Assessment which dropped to zero at the end of 2012.
- Lakes DHB has continued to work closely with its primary care partners resulting in an agreement in a Diabetes Care Improvement Package which they are moving towards implementing over time. In addition, the Lakes Care Pathway Group has agreed a cellulitis pathway, which means patients can be managed in the community instead of going into hospital.

What this Means

Despite increasing financial pressures and commitment to a facilities improvement programme, Lakes DHB continues to' live within its budget'.

Regional integration is one of the key health sector priorities to improve cost efficiencies and drive infrastructure developments. Lakes DHB has led much of the regional work over the past year. Ongoing Midland DHB shared services work has successfully seen the increased function of HealthShare, with the appointment of a new chief executive and the transfer of staff, clinical networks and services to the new entity. Six service priorities identified as requiring regional action are being led through a strong clinical governance framework.

Primary care is the cornerstone of health care. Lakes DHB continues to support and link with the Midlands Health Network for Taupo/Turangi and Health Rotorua PHO to deliver seamless and efficient pathways.

Confidence

High. The document is an annual plan and therefore is auditable and its information must be reliable. The Minister of Health signs off on each DHB's District Annual Plan (DAP).

References

Lakes DHB Annual Plan, 2012

GROW WHAKATĀNE BUSINESS AND ECONOMIC DEVELOPMENT ACTION PLAN SHORT VERSION 2013 – 2016

November 2013

Grow Whakatāne Action Plan aims to increase the number and size of businesses and the economy in Whakatāne District over the next three years. It recognises that driving change requires a collaborative approach, so focuses on providing real clarity around the leadership roles of three key players: Toi EDA, Whakatāne District Council and Eastern Bay Chamber of Commerce. Whakatāne District visions include: a population that grows to a level that provides for more sustainable retail and business success; that District has enough affordable housing options to attract and support workers from the wider Eastern Bay; that businesses throughout Whakatāne have the support they need to grow their capacity and capability for business success; that Whakatāne residents have increasing levels of education, employment and internet connectivity (compared to the national average); that Māori in Whakatāne District have the means to create a successful and economically and environmentally sustainable future for their whanau. Other visions/outcomes include residents throughout rural and urban Whakatāne have the business knowledge and internet connectivity to improve the economic prosperity of themselves and their communities; and that Older people from the Eastern Bay have the support and services they need to live, play and contribute in Whakatāne 'to the end; young people in Whakatāne have the ability to gain skills and employment while remaining in Whakatāne and that Whakatāne becomes a viable lifestyle choice for expats and others relocating or establishing businesses.

Key Points

Whakatāne has the largest population in the Eastern Bay being the hub for residential, retail, service and the hospital for the wider Eastern Bay. The area has land and resources dedicated to horticulture, agriculture and dairy industries throughout the district. There are opportunities with the significant land and money being returned to local Iwi in Treaty negotiations. The township is the gateway by to White Island. Whakatāne airport provides air travel and air freight services and contains port facilities that could support Ōpōtiki aquaculture initiatives.

- Barriers to development include:
  - Comparatively lower levels of education and income than New Zealand's average.
  - Limited business, industrial or residential land available outside Māori ownership.
  - One quarter of district lives rurally with limited internet connectivity.
  - Airport size only accommodates NZ Beech 1900D aircraft which are being phased out.
  - Lack of mainstream tertiary study opportunities leading to drop in youth population.
  - Very high average levels of deprivation across Whakatane district.

- Limited land for affordable residential housing to support blue collar employment.

What this Means

Development priorities for now and in the future:

1. Attract investment through building partnerships that deliver strategic land investments to support economic growth; through supporting public-private-iwi partnerships to develop affordable housing options for employees; and actively attract central government funding to Whakatāne District for community and economic development.
2. Industry support and capacity building by developing a business-friendly culture in Whakatāne District; supporting the strategic location and expansion of business and industry and advocating for needs within the Bay of Connections Māori Economic Development Strategy. Other actions include future proofing the Whakatāne Airport to support industry, business and tourism; driving actions within Bay of Connections industry-specific strategies to achieve positive economic outcomes in Whakatāne District (including capitalising on geothermal industry and assessing harbour access for Opotiki aquaculture); and supporting industry-led endeavours within dairy, horticulture and agriculture sectors that provide economic growth in Whakatāne District.
3. Export facilitation though establishing fast broadband connectivity across towns and rural parts of Eastern Bay; advocating for and promoting the roading infrastructure that improves the Whakatāne economy and lifestyle; actively seeking out central government funding to support R&D and export market development; and supporting strategic maintenance of rail and port access for Whakatāne business and industry.
4. Skills development and training by building strategic relationships between key tertiary providers and industry in the district to enable employment-focused tertiary education and research; supporting opportunities that raise education levels of Māori in Whakatāne District; growing business and community computer literacy; and actively developing business knowledge and skills in Whakatāne young people.
5. Business support and capability building through enabling cost-effective business capability development opportunities for Whakatāne District businesses; growing local businesses through a culture and process of local mentoring support; and sharing and celebrating business and industry success.
6. District Promotion by leading collaborative business and visitor tourism across the wider Bay of Plenty; clearly identifying Whakatāne's points of difference for consistent collective district promotion; developing a dominant international brand for Whakatāne District as 'The Gateway to White Island'; by reinforcing domestic branding of Whakatāne District as a 'Naturally Active' recreation lifestyle and events destination; positioning Whakatāne as an educational and cultural tourism hub; and through cost-effectively promoting Whakatāne District's business and visitor attractions

Confidence

Low - Medium. The document reviewed is the short version of the strategy. It is assumed that the full version would contain any references. It focuses on the positive opportunities for Whakatane.

Actions to address issues listed may be difficult to achieve and are potentially unrealistic e.g. future proofing the airport, proposed actions are unlikely to have the scale of response needed to future proof the airport.

The core assumption is that the township needs more businesses.

References

Not stated.

HORTICULTURE INDUSTRY STRATEGY – GROWING A NEW FUTURE

October 2013

The strategy examines how the New Zealand horticulture industry is performing, why it must change to meet future demands and what must be done to achieve its goal of doubling its value to $100 billion by 2020.

What this Looks Like

Key Points

The sector faces increasing competition in the same market from producers whose costs of production and delivery to market are lower than New Zealand's (NZ).

What this Means

The solution lies in changing behaviour and attitude and the need to grow and market more value-added products, capture intellectual property and dominate market niches.

The strategy encourages sectors with a solid foundation in science and research to increase investment (e.g. existing cultivar development programme, health attribute identification/ extraction programmes or an on-farm technology development programme) in order to differentiate their products to progressively increase premiums.

Further, all sectors need to get together and create scale to invest in establishing a science platform, improve quality, production efficiencies and security of supply, and reduce the competition between New Zealand companies in target markets.

Confidence

Moderate. Research conducted by Deloitte involved two rounds of industry consultation; responses were used as a base and filtered through an advisory group into value drivers and then key strategic outcomes. This information formed the basis of the strategy.

The main assumption this strategy is based on is that recent years of growth in industry revenue will not continue, it will decline by 2020.

References

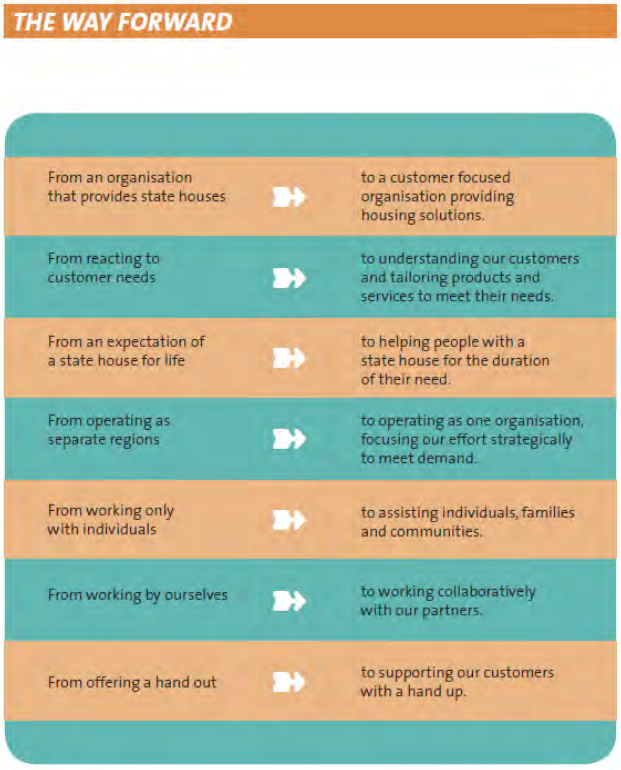
Horticulture Industry Strategy – Growing a New Future, June 2010

HELPING NEW ZEALANDERS IN THEIR TIME OF HOUSING NEED – HOUSING NZ CORPORATION

October 2013

The plan identifies the challenges faced by the Housing NZ Corporation (HNZC) and establishes a direction and framework for what HNZC will do within its business to address those challenges, as they have defined them. Housing New Zealand's purpose is to help house those who need it most.

What this Looks Like



Key Points

The organisation provides housing for over 200,000 people and looks after 69,000 state houses throughout New Zealand. Half of the occupants of state houses are under the age of 20, a third of the occupants are of Māori ethnicity (37%) and a third are of Pacific ethnicity (36.6%). The most common household types include smaller households such as single people, single parent families, and larger families. Approximately 5,000 tenants pay a market rent and may be able to rent in the private market.

The demand for housing outweighs supply. There are 3,500 high need applicants (10,000 people) on the waiting list.

The strategic plan signals that significant operational changes need to occur along with a shift in traditional attitudes towards state housing.

The Minister of Housing has recognised the challenges that the Corporation faces and established the Housing Shareholders Advisory Group (HSAG) to undertake a sector-wide review of the provision of social housing in New Zealand, and make recommendations for change. HSAG produced a report with recommendations which it consulted with in 2010. Decisions by Government at the time were yet to be made. Until there are decisions

by Government that change the policy settings that Housing New Zealand operates within, the Corporation continues to implement its five year Strategic Plan.

What this Means

Changing society - it's no longer the nuclear family. Housing Corporation customers now include single people, single parents, people with high social needs, complex health and other problems, and larger families of five, six, or more.

Changing paradigm - the organisation is refocusing on how they operate, focusing on customers and their individual circumstances, and providing housing for those most in need for the duration of their need by developing a customer segmentation framework to better understand current and future customers, their profiles and needs.

Working with others - partners, the community, and the private sector to help more of our customers through the development and implementation of the Provider and Stakeholder Work programme.

Also helping customers who are able to find independent housing, such as private rental or home ownership, to do so.

Māori Strategic Plan – Te Au Roa, was created to improve the housing outcomes for Māori. Orama Nui is a 10-year housing strategy for Pacific peoples to more effectively respond to their housing needs and support their housing aspirations, including achieving home ownership.

There is a focus on Auckland which represents a significant and growing part of the NZHC's business with 45% of state houses being located in the Auckland region, and applicants for state housing making up around half of the total national waiting list.

The Strategy recognises that Auckland's future growth requires HNZC to be proactively engaged in developing Auckland. Strong relationships with central and local government, community housing organisations and iwi are critical to the success of this strategy. Establishing a collaborative relationship with the Auckland Transition Agency and the new Auckland Council are immediate priorities.

The Enterprise Transformation Programme (ETP) is a key enabler to help achieve the Strategic Plan by improving performance through better systems and processes. ETP will redesign our key processes and provide staff with the tools and technology they need to deliver customer-focused services. The programme is designed to help the organisation become more customer-driven, improve efficiency and effectiveness, and help us reduce risks.

Confidence

Moderate. The strategic plan is integral to annual planning.

The core assumption is that demand for state housing will continue to increase it is not clear what this is based on whether it is a result of the current economic climate making it difficult to secure and stay in work or population growth. Further supply of state housing will not be able to meet demand without radical reforms.

References

Helping New Zealanders in their time of housing need - Housing NZ Corporation Strategic Plan.

INDUSTRIAL SYMBIOSIS KAWERAU (STUDIES)

October 2013

Industrial Symbiosis is a smarter way of companies sharing and utilising their resources so that nothing goes to waste, which leads to commercial opportunities, job creation and better environmental outcomes. Their vision: Kawerau is the destination of choice for industrial symbiosis opportunities that increase the prosperity and resilience of the community

What this Looks Like

Taupo Volcanic Zone – Geothermal Wells

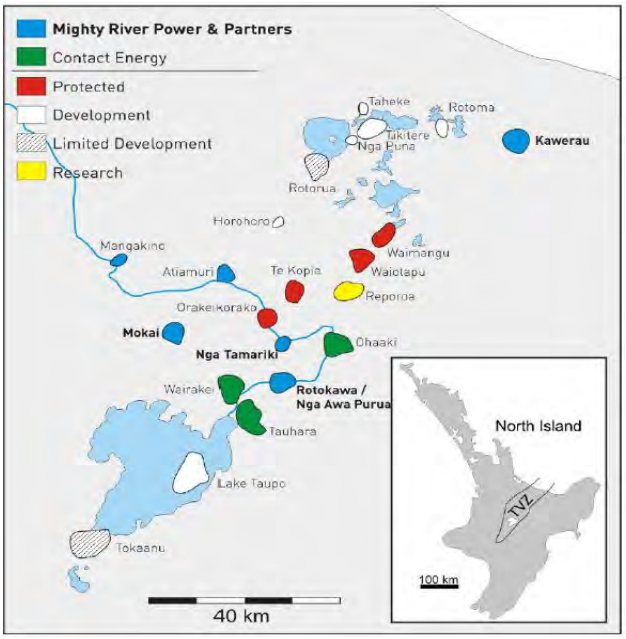


Figure 3: HPMV Route [illegible]to / Bay of Plenty [15]

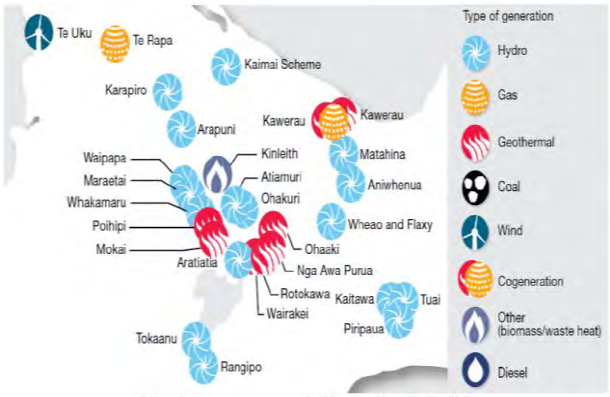


Figure 3: Generation sources in the central North Island [1]

Figure 4: Bay of Plenty electrical grid network [3]

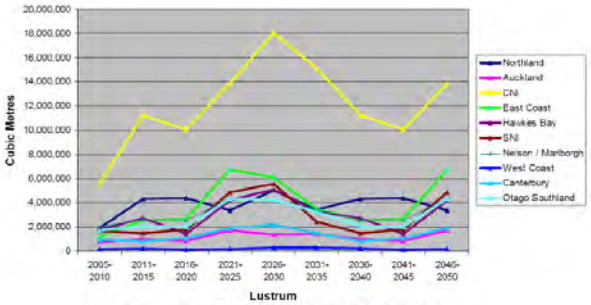


Figure 1: Regional Wood Supply projections by Scion 2007 [2]

Key Points

The industrial symbiosis initiative adopts progressive practices that embrace change, leading to a new industrial evolution of smarter, cleaner businesses.

This initiative aims at attracting businesses to Kawerau by providing 'smarter, cleaner and working together' opportunities.

Key selling points:

- Key infrastructure is in place, road, rail and close proximity to the Port of Tauranga. With the potential for an additional rail siding. Kawerau's infrastructure can cater for a population of 15,000 people, compared to its current 7,000. Council is financially secure with no debt and is setting aside funds for asset replacement.
- The utilisation of geothermal energy for direct industrial use and renewable resources.
- The ability to manufacture of products such as biofuels, adding further value to wood fibre, or capturing and processing a range of waste streams to create new products.
- Electricity resources. Completion of a 100-megawatt power station in Kawerau during 2008 increased New Zealand's geothermal capacity by 25%. This facility alone meets approximately one third of residential and industrial demand in the region, while new plants are in development to further increase capacity.
- Direct heat use (for heating and cooling) available for aquaculture, agriculture and industrial purposes.
- Large pool of skilled labour with over 60 years of heavy industry experience.
- Forestry resources - Annual harvests from this region exceed 11 million m³ and continue to grow, offering a large and consistent supply of raw material.
- Industrial land available.
- Minerals from geothermal fluids.
- Kawerau produces biomass residues in abundance. Opportunity for biomass conversion businesses.

What this Means

Only key constraint to development in Kawerau is electricity. Due to the current nature of the local 110kV network, generation in the Kawerau region is constrained during periods of low load and/or high generation. This occurs with load reduction at NST and/or high hydro inflows. The constraint limits the amount of generation that may be dispatched on the grid and can be due to either a significant drop in demand or a surge in supply from regular patterns. To increase transmission capacity Transpower will replace an interconnecting transformer with a 250 MVA transformer in 2014. In the interim Transpower will reconfigure the network.

The Central North Island (CNI) Forest region is forecast to provide New Zealand's largest supply of uncommitted forest harvest over the next 30 years. By 2021 it is estimated the CNI harvest will increase to about 12 million m³ per annum, which after allowing for some increased capacity within existing mills, is expected to provide between 5 and 6 million m³ of uncommitted, unpruned logs annually. There is a need for the ability to process greater numbers of logs.

Confidence

Medium-High. Assumptions are supported by relevant Study's which draw on a number of additional references e.g. forest projections are sourced from Bay of Plenty Forestry and Wood Processing Strategy.

The base assumption that underlies this report is that currently there is a shortage of businesses in Kawerau.

References

Analysis of wood processing opportunities in Kawerau using the WoodScape model.

October 2013

IS Kawerau – Industrial Land Background Study

IS Kawerau – Existing Industry & Support Services Background Study

IS Kawerau – Kawerau Geothermal Field Background Study

IS Kawerau – Infrastructure and Transport Background Study

IS Kawerau – Electricity Resource Background Study

IS Kawerau – Direct Heat Background Study

IS Kawerau – Labour Resources Background Study

IS Kawerau – Forestry Background Study

IS Kawerau – Minerals Background Study

IS Kawerau – Biomass Residues Background Study

Bay of Plenty Forestry and Wood Processing Strategy

LABOUR FORCE PARTICIPATION IN NEW ZEALAND

September 2013

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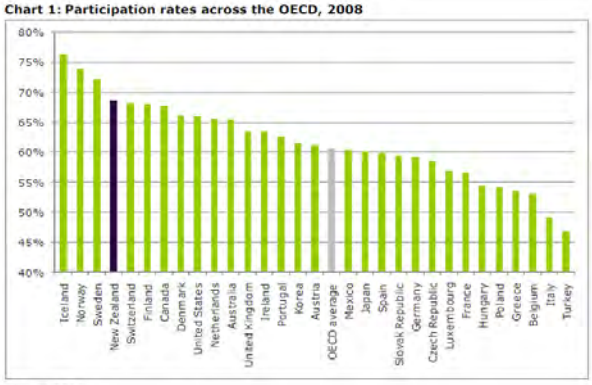
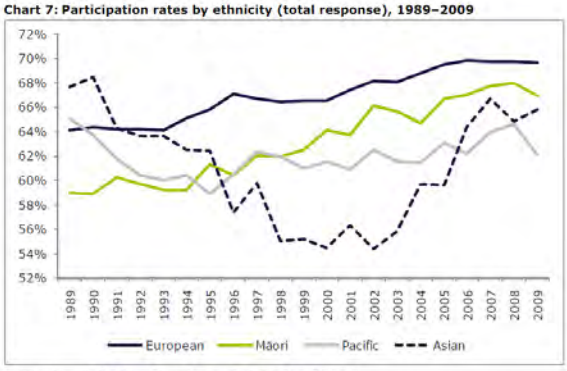
What this Looks like

Chart 1: Participation rates across the OECD, 2008



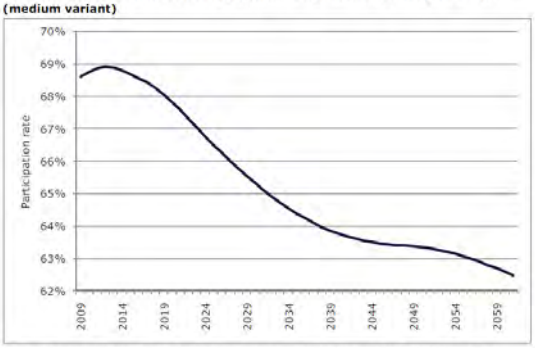
Source: OECD

Chart 7: Participation rates by ethnicity (total response), 1989–2009



Source: Household Labour Force Survey, Statistics New Zealand

Chart 16: Statistics New Zealand projected change in total participation rate (medium variant)



Source: Calculations based upon the mid-range projections of the labour force (2006 base) and population (2009 base) from Statistics New Zealand

Gross Trends

Population ageing means the recent growth seen in labour force participation is likely to come to an end, with the labour force participation rate projected to decline over the medium term. Falling participation will have a dampening effect on economic growth.

Most other OECD countries are in a similar situation with respect to population ageing.

Key Facts:

- New Zealand has a very high rate of labour force participation compared to the rest of the OECD but also has low labour productivity,
- The labour force has become older over the past 20 years, and overall participation would have declined by 1.4 percentage points if age-specific participation rates had stayed at their 1989 level. In fact, participation increased by 4.4 percentage points due to increased participation rates for females and older workers,
- Europeans have the highest participation, despite having a relatively high share of people aged 65+ years. Māori participation has increased the most over the past 20 years, while Asian and Pacific participation has fallen.
- The number of average hours worked per week for employed people fell from 38.8 hours in 1989 to 37.0 hours in 2009. This was related to the increased participation of older workers and females who work fewer hours on average than prime-aged males (aged 25–54 years). The participation of prime-aged males has fallen slightly.
- Ageing will put downward pressure on the overall participation (fall by 3.1% between 2009 and 2029) rate and on average hours worked.

- Even sharp increases in net migration and/or participation of older workers would still leave us needing to improve productivity to maintain our recent growth in GDP per capita.
- In the short term then, the economic recovery is forecast to lead to a rise in participation. The downward pressure on participation due to population ageing will be felt in the longer term
- Under BAU the National labour force will be 436,000 smaller than the total required to maintain our current rate of GDP per capita growth of 1.9%.

Key Drivers

Population ageing.

Confidence

Moderate-High. The forecasts are have been prepared by the NZ Government and are built upon several scenarios. Demographic drivers are well-known.

Source

Labour force participation in New Zealand Recent trends, future scenarios and the impact on economic growth. NZ Department of Labour, 2010.

Note Multiple references cited in body of report.

LAKES DISTRICT HEALTH BOARD DISTRICT STRATEGIC PLAN 2005-2015

October 2013

The Lakes District Health Board (LDHB) strategic plan outlines steps that the DHB will take towards achieving its vision – Healthy Communities – Mauriora. The three strategic priorities are: Māori Health; Service Improvement and Reducing Inequalities. LDHB is the organisation responsible for planning and funding most of the health services in the district and has a population health focus. It is responsible for working within allocated resources to improve, promote and protect the health of the population (102,000) within the Lakes district, and to promote the independence of people with disabilities.

What this Looks Like

If 2005 funding was secured then upgrades to Rotorua and Taupo hospitals will be made.

In the next 20 years focus on innovative health promotion to reduce preventable illnesses.

Process changes will occur to:

- Reduce the length of hospital stays;
- Enhance access to services; and
- Improve emergency department service delivery through a combination of short stays and medical assessment units.

Key Points

The Lakes DHB area has a high Māori population 35% which is more than twice the proportion in all of NZ population (15%).

Health Needs Assessment 2004 identified that the health status of the Lakes population across a range of measures is among the worst in the country. Lakes DHB ranks 20th out of 21 DHB's for health inequalities. The majority of Māori in the Lakes DHB area smoke (50.1%), and Rotorua high schools to have the highest rate of tobacco uptake in New Zealand.

Lakes DHB's greatest focus until 2015 and beyond, will be on reducing inequalities in the area of child and foetal health and better management of chronic diseases.

There are two hospitals Rotorua and Taupo. Rotorua hospital has 184 inpatient beds including maternity, elderly services, ICU/CCU, children's medical, mental health, surgery and day stay and 32 inpatient beds at Taupo. It is anticipated that expansion will occur primarily in community and ambulatory secondary service delivery areas but that inpatient bed numbers will remain at approximately the same over the next 5-10 years providing acute demand can be controlled. Although population growth and other demographic changes are likely to increase demand on secondary health services, having a strategic emphasis on primary and day stay, community, ambulatory care and mental health should enable bed numbers to be held at current levels.

What this Means

Over the next 20 years the in the Lakes District Māori population will increase and the population will become older and frailer with more people suffering from chronic diseases such as diabetes and an increased rate of co-morbidities. Other

particular trends indicate increasing rates of mental health issues, respiratory illness, cardio-vascular disease, renal failure, alcohol and drug abuse and depression. Much of this illness is preventable through early intervention and adoption of healthy lifestyles in socially and culturally supportive communities. Strong inter sector engagement will play a key part in this improvement.

The Lakes Health Service Improvement Project (LHSIP) looks to address these issues through the development and implementation of a Clinical Services Plan and Business Case (for the 2005 capital allocation round) for more facility developments at both Rotorua and Taupo Hospitals. The project involves improved and innovative service delivery (principally ambulatory care), process changes to reduce length of stay, enhanced access to services such as chemotherapy and renal dialysis and a combination of short stay and medical assessment units to improve the efficiency of service delivery in emergency departments.

Services will need to be provided in new and innovative ways. Whilst some developments and improvements have occurred, current models of care continue to fail to meet needs effectively, are clinically unsustainable given health workforce trends and are not affordable in the future.

Confidence

Moderate. The report was developed through s83A of the Local Government Act consultation in accordance with its statutory obligations under the New Zealand Public Health and Disability Act 2000. The process to develop the strategy is therefore robust.

Information used to develop this strategy is dated e.g. 2004 needs assessment.

The core assumption is that demand for hospital services is expected to increase, however it is not clear what this is based on e.g. population growth, ageing is mentioned however given the high proportion of Māori living in Rotorua who are predominantly young it is not clear. Increased demand will be met by increased efficiencies meaning shorter hospital stays and quicker turn over.

References

ASH Survey

Lakes DHB Health Needs Assessment 2004

Lakes DHB Health Board District Strategic Plan 2005-2015, 2005

NZ Health Survey

Public Health Intelligence Research

There are numerous relevant strategies most of which are summarised in the Ministry of Health. Stocktake of Strategies and Other Key Policy Documents, November 2001.

Other high level overarching strategies include:

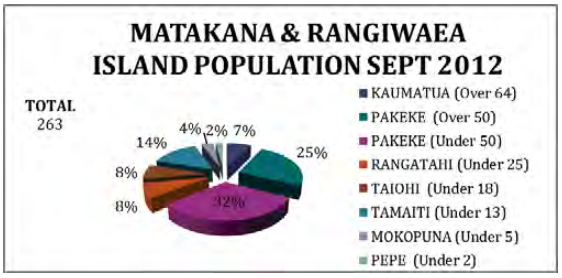
- New Zealand Health Strategy (2000)
- New Zealand Disability Strategy (2001)

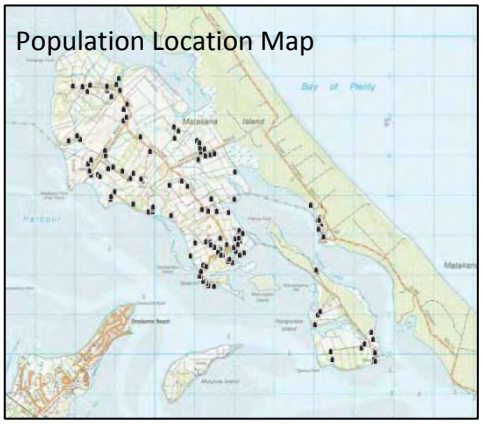
MATAKANA RANGIWAEA HAPŪ MANAGEMENT PLAN 2012

November 2013

The primary purpose of this Hapū Management Plan is to act as a reference and guide. This Plan provides practical direction for anyone who needs to consult or engage with the Hapū of Matakana and Rangiwaea Island and emphasizes the values, reasoning and special relationship the Hapū has with their whenua, ngahere, awa and moana and other taonga.

What this Looks Like





Key Points

The Hapū social aspirations are for 'our people to lead healthy and culturally fulfilling lives'.

Long term leases over Māori freehold blocks are coming to an end and this considered an ideal opportunity for Hapū to progress future economic aspirations.

Employment and economic opportunities on the islands are limited or provided in a part time only capacity. Consequently the plan notes that Hapū members struggle financially.

Kiwifruit is an important export crop from these islands that provides work for locals and a return on the investment to the owners. The disease PSA represents a significant threat for the economies, and has recently infected the

orchards on Matakana Island. Other economic threats and challenges involve: threats to the environment that harm economic development, threats to the culture that negatively affect economic development transportation monopoly and high user costs for residents, changing land use, changing land tenure systems.

The population of Matakana and Rangiwaea Island has steadily declined since the 2001 census. With a small population of 263 people Hapū has had difficulty securing government support e.g. limited local and central government sponsored social services.

What this Means

Looking at the future the Hapū plans to achieve their social aspirations through: a fully functioning marae, accessible Hauora services, quality education and training, sustainable employment, recreation and sporting activities, durable housing and papakainga initiatives.

Economic goals are to be achieved through: conducting economic activity that is consistent with and enhances the values of the Hapū; allowing development on the islands that directly benefits the whanau and Hapū; preference for whanau or Hapū managed operations; land retained and utilised for economic development; only permitting economic development that is appropriate and sustainable; and whanau and Hapū are actively involved in robust decision-making of the islands' future.

In relation to population trends the Hapū anticipates the population decline to reverse as a result of Hapū establishing papakāinga and gaining funding for social and other housing projects.

Confidence

Medium – while this plan is predominantly an aspirational document, demographics are sourced from Statistics NZ 2012 and assumptions are stated. A number of reference documents are included, however no details are provided regarding the secured funding for papakainga housing or social projects or the expected return of Hapu as a result of establishing papakainga housing.

References

Cultural Values Assessment Report November 2011

Matakana Island Claims Committee – November 2000

Matakana Island Community and Incorporated – Rules

Perspectives of Matakana Island – February 2012

Quick Stats about Matakana Island Statistics New Zealand – October 2012

Submission to the District Plan – Heritage Chapter 2008

The Archaeological of Matakana Island – 2011

Wahi Taonga and Wahi Tapu

MEDIUM-LONG TERM EMPLOYMENT OUTLOOK LOOKING AHEAD TO 2021

December 2013

The employment outlook for the 2011-21 March year period is outlined in this paper, broken down by industry and occupation. This information is used by the Ministry of Business, Innovation and Employment's (the Ministry) to prepare medium-long term policy advice relating to immigration policy settings, and priority setting for tertiary education and industry training. As such, it provides an important insight to the direction anticipated for the NZ economy at large.

What this Looks Like

Table 3: Employment growth for skill groups for 5 & 10 years and annual changes

Skill-level	2011-16 (5 Years) (000)	2011-16 (5 Years) (%)*	2011-21 (10 Years) (000)	2011-21 (10 Years) (%)*	2016-21 (5 Years) (000)	2016-21 (5 Years) (%)*
Highly skilled	81.6	2.2%	149.9	1.9%	68.3	1.7%
Skilled	39.0	1.6%	75.6	1.5%	36.5	1.4%
Semi-skilled	31.7	0.9%	76.6	1.1%	44.9	1.2%
Elementary skilled	27.8	1.7%	52.7	1.5%	24.8	1.4%
Total	**180.3**	**1.6%**	**354.8**	**1.5%**	**174.5**	**1.4%**

* average annual changes

Source: MBIE CGE model runs for 2011-16 and 2011-21 periods; 2016-21 period results derived.

Table 4: Top 25 occupational groups ranked by 2016-21 Employment Changes

ANZSCO - 3 Digit Occupational Groups	2011-16 (000)	2011-16 (%)*	2016-21 (000)	2016-21 (%)*
Business Administration Managers	8.7	3.2%	8.7	2.7%
Insurance Agents and Sales Representatives	6.8	2.5%	7.3	2.4%
Miscellaneous Labourers	7.5	2.1%	7.2	1.8%
Sales Assistants and Salespersons	7.4	1.4%	6.9	1.2%
Personal Carers and Assistants	6.7	2.7%	6.9	2.4%
Construction, Distribn. & Prodn. Managers	7.2	2.8%	6.5	2.2%
Retail Managers	6.3	3.2%	6.3	2.7%
Accountants, Auditors & Company Secretaries	5.9	3.5%	5.8	2.9%
Advertising, Public Relns. and Sales Managers	5.0	3.2%	4.9	2.7%
School Teachers	2.5	0.5%	4.8	0.9%
General Clerks	5.9	1.6%	4.6	1.2%
Accommodation and Hospitality Managers	4.0	3.2%	4.0	2.7%
Information and Organisation Professionals	4.0	2.5%	3.9	2.2%
Bus. and System Analysts, & Programmers	4.2	3.0%	3.8	2.4%
Social and Welfare Professionals	3.8	2.4%	3.6	2.0%
Truck Drivers	3.3	2.0%	3.5	1.9%
Office and Practice Managers	3.5	3.2%	3.5	2.7%
Architects, Designers, Planners/Surveyors	3.0	2.8%	3.3	2.7%
Hospitality Workers	3.9	1.8%	3.1	1.3%
Sales, Marketing and Pub. Relns Professionals	3.0	3.0%	3.0	2.7%
Defence Force Members, Fire Fighters & Police	2.3	1.9%	3.0	2.2%
Logistics Clerks	2.5	2.3%	2.8	2.3%
Real Estate Sales Agents	2.7	2.7%	2.8	2.5%
Construction and Mining Labourers	2.7	2.3%	2.7	2.1%
Storepersons	2.2	2.0%	2.4	2.0%
All Occupational Groups Total	**180.3**	**1.6%**	**174.5**	**1.4%**

Key Points

The employment outlook over the medium-longer term is for steady and moderate employment growth on average, declining slightly further out.

Total employment is expected to increase by 180,300 over the 2011-16 period, and by about 174,500 over the subsequent five years to 2021.

This represents employment growth of about 1.6% per year (or 36,000 on average) and about 1.4% per year (or about 34,900 on average), respectively.

This employment outlook is conditional on average annual GDP growth of 2.7% and 3.0% over the 2011-16 and 2016-21 periods, respectively.

The unemployment rate over the projection period is expected to trend down to 4.8% by 2016 and 4.0% by 2021. Increasing labour supply constraints arising from an ageing population underpin this outlook.

Growth will be greatest in skilled areas – weakest in semiskilled areas (i.e. clerical)..

Higher labour supply costs and increased capital investment are expected to contribute to annual productivity growth rising by more than one-third from 2016 to 2021 compared with the previous 5 years.

Already high overall participation levels may not be sustainable. In the medium-longer term greater reliance will need to be placed on rising productivity for economic growth. To compensate, industries will need to turn to capital investment to maintain growth.

What this means

This medium-longer term growth is expected to be a mix of an export-led growth and growth driven by domestic household spending. Beyond this, with shrinking workforce, productivity gains will only be possible through capital investment.

The IMF's latest World Economic Outlook (July 2013) highlights difficult conditions for sustained world economic growth following its April 2013 report. These conditions are set in the context of uncertainty in the global economy and the importance of action by individual countries and regional bodies such as the European Union

Confidence

Moderate-High. The model underpinning these forecasts is widely used and trusted. Demographic projections are well grounded in research and predictable biological and social processes. Barring significant changes to migration or significant economic perturbations, these broad trends should hold.

References:

Medium-Long Term Employment Outlook Looking ahead to 2021. MBIE November 2013.

MIGHTY RIVER POWER ANNUAL REVIEW – SMART THINKING 2013

November 2013

Mighty River Power is one of New Zealand's largest electricity companies – with its core business based on reliable, low fuel cost, high capital cost electricity production (generation) and sales (retailing) to New Zealand homes and businesses. The company typically generates about 17% of New Zealand's electricity and operates the nine hydro stations on the Waikato River, five geothermal power stations in the central North Island and a multi-unit gas-fired station in Auckland. More than 90% of its electricity production is from renewable resources.

What this Looks Like

Key Points

Mighty River Power is one of the world's largest geothermal power station owners, and has developed one of the world's largest recent geothermal development programmes according to the annual plan. Mighty River Power has invested more than $1.4 billion in geothermal development since FY2006. The organisations latest geothermal development; is the 82MW Ngatamariki power station, located 17kms North-East of Taupo which generates 2,800 GWh annually. As a result of this power station, geothermal makes up 40% of Mighty River Powers annual production. The organisation has the availability of 96.5% of base load geothermal generation.

The Waikato Hydro System is a combination of eight dams, nine hydro stations and 39 generating units – harnessing the power of water to produce about 10% of New Zealand's annual electricity requirement.

One of the organisations strengths is based on having three different fuels. The organisation also has hydro and geothermal production, which is renewable, with low operating cost and makes up more than 90% of total annual production, along with flexible gas generation for times when it is valuable. This means that although hydro volumes in the Waikato were well below average, the organisation could

cheaply buy from the market to cover our sales portfolio. When national wholesale prices are low, Mighty River Power has the ability to manage this downside earnings risk. These variations in volumes are small, relative to the overall national supply and have little influence on national wholesale electricity pricing. For example in FY2013 the lower hydro volumes represented less than 1% of national supply.

The strengths of a large geothermal component (now over 40% of total production) means greater resilience and provides for a reliable base-load generation – running 24/7. As this is the only renewable resource and is 'not dependent on the weather', it is regarded as a 'premium' renewable resource.

Innovative GLO-BUG pre-pay technology, where consumers can pay as they go has 17,000 New Zealand customers.

What this Means

The organisation is focused on strong forecasted growth in operations earnings and a lift in underlying profitability forecast at the time of the Company's IPO. Hydro inflows to the Waikato catchment have been lower than average, through the traditionally wetter months of July and August but, as demonstrated in the previous two financial years, Mighty River Power has some ability to manage this downside earnings risk, when national wholesale prices are low.

In September 2013, the Waikato Regional Council announced that there would be no review of Mighty River Power's resource consent conditions for the operation of the Waikato Hydro System.

Confidence

Medium. While no references are provided this document is an annual report and therefore needs to be based on robust evidence and is auditable.

There is the assumption that the organisation anticipates strong forecasted earnings growth, despite demand for energy not growing.

It is assumed that no matter how low the water levels from the Waikato are, they can be managed and won't affect electricity supply.

References

Not stated

MINISTRY OF EDUCATION

October 2012

A meeting occurred with Gavin Sowry Network Manager Ministry of Education on 1st November 2013. The results of the meeting are recorded here.

Key Points

The MOE are keen to engage with and build relationships with Councils.

The Ministry plan for network requirements by tailoring population projections and progressions.

What this Means

Growth areas which have increased demand pressures for greater provision of education facilities occurs in Tauranga. Outside of Tauranga, generally including rural areas are in decline. Waihi has pockets of growth.

Papamoa - Beca are updating 2006 population projection, community flow, and analysis with recent census statistics along the Papamoa spit east to Kaituna. Growth in this area has occurred faster than anticipated e.g. Golden Sands are into their second stage of development 18 classrooms total role of 405. However demand has meant that they are expanding into a third stage where the roll will grow to 600, this will likely result changes to the enrolment schemes of schools along the coast and the potential identification of new school sites in targeted areas.

Pyes Pa – The Ministry have the Kennedy road site, which was recently reviewed to check if it was the most appropriate. There are issues in developing the site regarding the timing and provision of staged infrastructure of development.

Tauriko – there is potential for land use change with Bob Clarkson's land which would result in more children, Tauriko school has capacity to cater for this.

Omokoroa – there is no current need for an additional school, however demand will likely to be reviewed in early 2014.

Growth in school aged children anticipated in Bethlehem and Otumoetai can be catered for within current schools.

Recently a review of Kawerau schools has occurred resulting in school closures and mergers. Social sector trials are occurring in Murupara which is an interagency response.

Trends in Rotorua for school aged children are movement between schools.

Confidence

Medium. The Ministry is currently reviewing their demographic assessments with Statistics NZ 2013 census data.

Assumptions for previous growth were based on amended Statistics NZ 2006, 2001, 1996 population and projections to include actual development (consented dwellings), number of births progressed through age periods, and predicted growth in school aged children based on the number of households from Council approved structure plans and the average 2.6 people per household.

Information provided was based on practical experience.

A key assumption is that land use in the Eastern Bay will continue to be dominated by dairy farming.

References

Beca, Papamoa Population Projections

MOVING FOR EMPLOYMENT REASONS

December 2013

This paper suggests that only a small minority of the working age population - including those who change local labour markets and/or move long distances - move primarily to enhance returns to employment. Most change their address as a way of adjusting consumption and/or realigning social relationships and treat employment primarily as an enabler rather than a primary motivator of movement.

What this Looks Like

Table 4: Main reasons for moving from previous residence to new residence

	Frequency	Percent	Cumulative Percent
Social	1,016	18.88	18.88
Education	226	4.20	23.08
Employment	573	10.65	33.72
Housing cost	1742	32.37	66.09
Housing size/satisfaction	1140	21.18	87.27
Environment	494	9.18	96.45
Other reasons	171	3.18	99.63
No response	20	0.37	100.00
Total	5,382	100.00	

Source: Statistics New Zealand, Dynamics of Motivation and Migration Survey (DMM).

What this Means

Few movers cite employment as their main reason for moving - employment remains a necessary rather than a sufficient condition for moving.

Most see their move as a way of adjusting consumption or realigning social relationships rather than enhancing returns to employment.

Employment moves for income gain tend to be more localised. The more distant moves associated with employment are most likely to be forced or involuntary moves.

Most migrants experience little or no income gain or productivity improvement following their move.

Confidence

High. This study examined primary data in order to uncover motivations for employment moves.

References

Moving for Employment Reasons. Morrison, Clark, Nissen, Didham. California Center for Population Research November 2010.

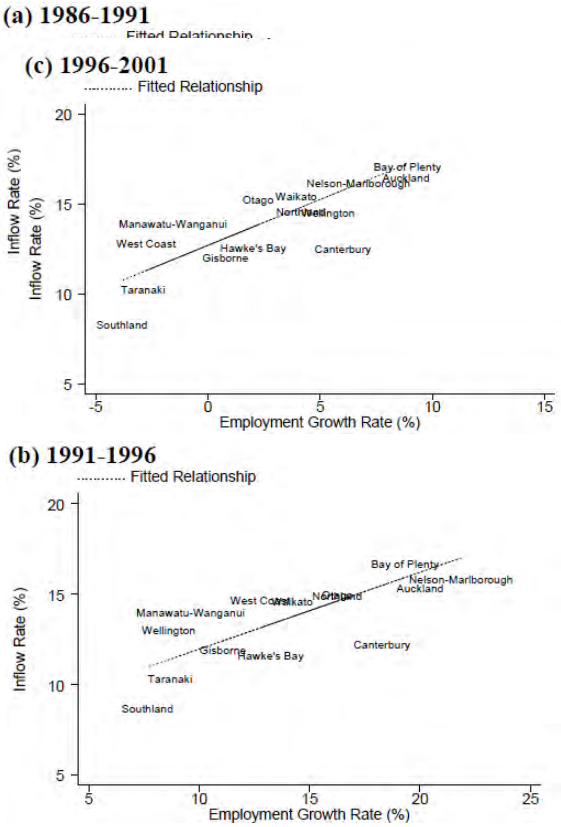
Dynamics of Motivation of Mobility (DMM) survey (Statistics New Zealand).

MOVING TO JOBS?

December 2013

This paper examines whether New Zealand residents move from low-growth to high-growth regions, using New Zealand census data from the past three inter-censal periods (covering 1986-2001). If higher employment growth were the only factor affecting the relative attractiveness of regions, areas showing high rates of job growth would be expected to show high rates of inward migration. In practice, as well as jobs (which are a factor) relative attractiveness depends also on other differences across regions, and on the characteristics of individuals living in different regions.

What this Looks Like



What this Means

Higher employment growth rates within New Zealand regions are linked to larger migrant inflows. For the metropolitan regions of Auckland, Canterbury and Wellington a high proportion of immigrants arrive from outside of New Zealand.

For the non-metropolitan regions in-migration is predominantly from within New Zealand.

A migrant's decision to leave a region is not closely related to poor or declining employment prospects. No significant negative relationship was found between employment growth rates and outflows over the three study periods.

Mobility is more labour-market related during periods of growth (than it is, say, in periods of decline).

Internal migration flows are related to relative local labour market conditions.

Adjustment to a local labour demand shock occurs through migration, and relatively quickly (i.e. an areas labour market fortunes can change remarkably fast).

Confidence

Moderate. This is a small study extrapolating gross trends. The study is unable to control a range of factors than may also affect labour markets and alludes to factors such as relative housing quality etc.

References

http://motu-www.motu.org.nz/wpapers/03_07.pdf. MOVING TO JOBS? Dave Maré and Jason Timmins Motu Economic and Public Policy

Research Trust Motu Working Paper1 # 2003-072 June 2003.

A SOCIAL REPORT AND INDICATORS 2010

November 2013

This Ministry of Social Development Social report provides a picture of progress towards better social outcomes for New Zealanders. It uses a set of statistical indicators to monitor trends across key dimensions of people's lives at national, regional and territorial authority levels.

The Social Report 2010 builds on the social wellbeing framework established in The Social Report 2001. The report is updated and revised each year as new or better data becomes available, this is the 10th edition.

What this Looks Like

Figure SU2 **Social wellbeing in New Zealand, relative to the OECD**

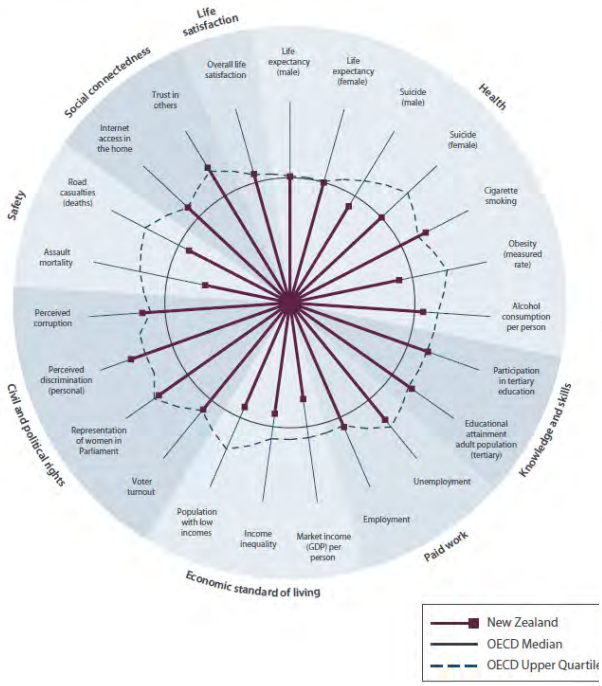
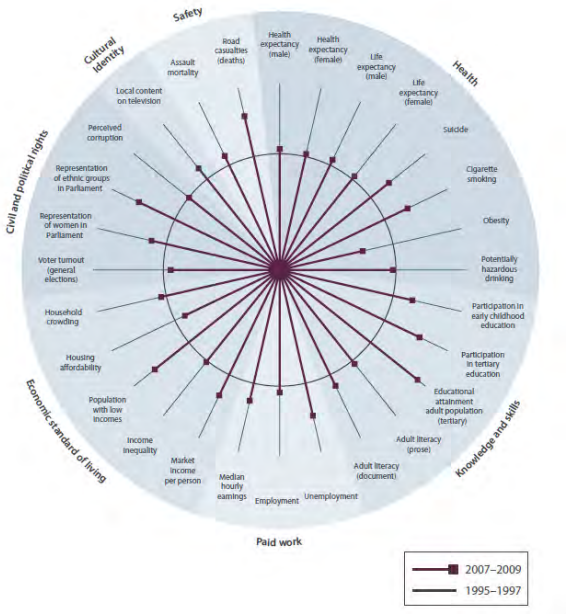


Figure SU1 **Changes in social wellbeing, 1995–1997 to 2007–2009**



Key Points

The social report has four key aims:

- to report on social indicators that complement existing economic and environmental indicators
- to compare New Zealand with other countries on measures of wellbeing
- to contribute to better-informed public debate
- to aid planning and decision making and to help identify key areas for action.

What this Means

Social wellbeing in New Zealand has improved since the mid-1990s. There are better health outcomes compared with the mid-1990s. Progress has been made in education participation and achievement. There are improved paid work outcomes but the impact of the recession is showing.

There are mixed outcomes in the Economic Standard of living domain – market income per person fell, income inequality barely changed, population with low incomes has improved continuously since mid 1990's, housing affordability (measured by the proportion of households spending more than 30% of their disposable income on housing), remains the same between 2007-2009, falling significantly from the mid 1990s.

There has been some improvement in civil and political rights outcomes. Cultural identity outcomes are mixed and there is no change in the leisure and recreation domain. Overall life satisfaction for New Zealanders is high.

New Zealand compares favourably to other OECD countries. For most indicators, outcomes for Māori and Pacific people have improved, since the mid 1990s. Outcomes for Asian and other ethnicities are mixed. Outcomes are generally better for females than for males in the Health and Knowledge and Skills domains, but are missed in other domains. People living in deprived areas generally experience poorer outcomes, particularly in health.

Confidence

High. The document was drafted by the Ministry of Social Development.

There were 43 social wellbeing indicators and criteria were listed for how these were determined.

The report clearly indicates the changes between this version and previous versions.

For the majority of indicators, disaggregation by socio-economic status or disability status is not possible because the indicators rely on data sources that do not collect this information, or the sample sizes are too small to allow such a breakdown. The way we present data for ethnic groups is constrained by the way it has been collected. Definitions of ethnicity are inconsistent across data sources and change over time.

Population and indicator data for regions and territorial authority boundaries is available in a regional social report section of the social report website. The regional section uses the same indicators as the national report, or aligned indicators where equivalent data is not available.

Time series data is provided where possible.

The most current data available at the time was used, although noting that some information comes in five-yearly periods population census, either directly (e.g. household crowding) or indirectly (e.g. life expectancy for the Māori population).

References

Coombs, G. (2006) "Wellbeing and happiness in OECD countries" Economic Roundup Autumn 2006.

The Treasury, Australian Government: Canberra. List 2008 New Zealand General Social Survey

Duncan, G. (2005) "What do we mean by 'Happiness'? The relevance of subjective wellbeing to social policy" Social Policy Journal of New Zealand, Issue 25.

Durie, M. (2001) "A Framework for Considering Māori Educational Advancement", Opening Address to the Hui Taumata

Matauranga Turangi/Taupo, 24 February 2001.

Electoral Commission (2008b) Māori, Pacific and Asian MPs 1990–2005,

Howden-Chapman, P. and Tobias, M. (eds) (2000)

Social Inequalities in Health: New Zealand 1999 Ministry of Health: Wellington.

Jensen, J., Krishnan, V., Hodgson, R., Sathiyandra, S. and Templeton, R. (2006) New Zealand Living Standards

2004 Nga Ahuatanga Noho o Aotearoa Ministry of Social Development: Wellington.

Range of Statistics New Zealand Information including Population Projections 2006(base)–2026 update, (2010h) National Family and Household Projections: 2006(base)–2031; National Population Income Survey (1997–2009) (2009b) Household Economic Survey 1988–2009 New Zealand Income Survey: June 2009

NGATI PUKENGA IWI KI TAURANGA TRUST IWI MANAGEMENT PLAN 2013

November 2013

The plan shows how the iwi want their resources managed and culture respected and identifies the key topics that they expect to have a voice on.

Their mission is Kia tu pakari a Ngati Pūkenga i roto i te ao whanui - Ngāti Pūkenga will stand tall and proud in the wider world

What this Looks Like

Key Points

Ngāti Pūkenga is a small tribe that makes up approximately 1% of the total Māori population.

According to records, at July 2011 Ngāti Pūkenga members numbered 3,274. The majority of people live in the North Island. The largest concentration is in Tauranga with high numbers of also living in the Waikato and Auckland regions. The population is youthful with 57% being aged 29 years or younger, and the median age is 24 years. There are more women than men - 53%women and 47%men.

Statistical data shows that 30% of Ngāti Pūkenga leave school with a formal qualification. Many of their members live in low socio-economic conditions. Their people face high unemployment and low incomes.

Key social issues and challenges fall into 3 broad categories:

1. Housing/papakainga – Pūkenga nohonga.
2. Family health and wellbeing –Whanau hauora.
3. Education and employment – Whakākoranga and tūranga mahi.

At the time of the 2006 census, half of Ngāti Pūkenga's employed were earning less than $20,000.00. This is $4,400.00 less than the national median.

Many of their people live at the lower end of the socio-economic table. Their tribe is working from a relatively small economic base.

What this Means

The iwi are at a turning point and are keen to capitalise on the economic opportunities that come with the return of some of their lands and settlement funds.

The fundamental aspiration for Ngāti Pūkenga is to be economically independent, and have the ability to be self-sustaining.

There are two main economic issues and challenges:

1. Capability – the desire to develop a self-sustaining business and structures for good health and wellbeing for iwi. The need to develop a commercial asset base and income. It will also be important to identify opportunities for partnerships, JV's.
2. Education - Develop and implement an education strategy.

Confidence

Low -Medium –This plan is predominantly an aspirational document. Sources for demographics are not stated.

References

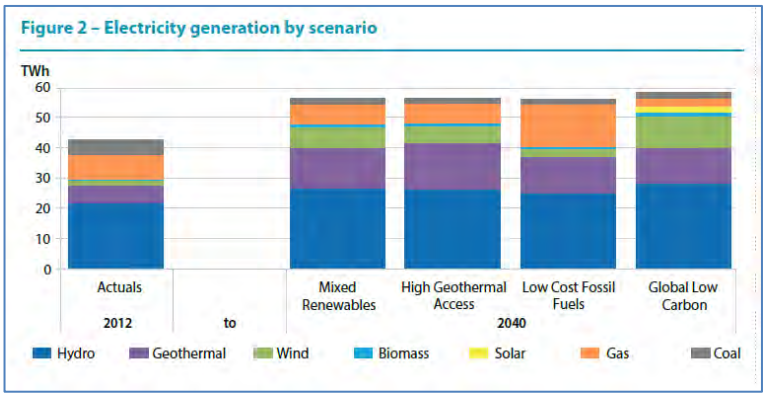
- Governance Policies Manual (undated)
- Draft Communication Plan 2001
- Environmental Scan 2011
- Map books 2011
- Whanau Ora and Wellbeing Strategy – 5 Year Plan – Oct 2007-Oct 2012
- Trust Strategic Vision 2009 – 2020
- Resource Management Plan 1993
- Trust Deeds

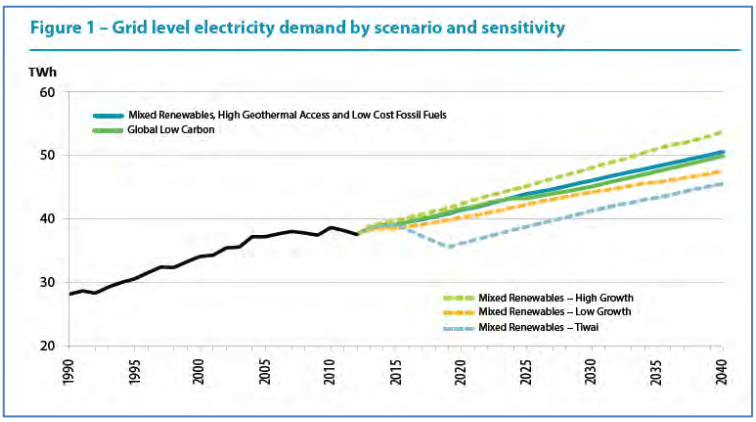
NEW ZEALAND'S ENERGY OUTLOOK: ELECTRICITY INSIGHT

November 2013

This Ministry of Business, Innovation and Employment document explores the long-term future for electricity in New Zealand using a scenario analysis. Based on this analysis, key insights are provided for investors, grid planners, policy makers and consumers. The insight provides modelling results to 2040, and is the first part of a series of Energy Outlook Insight publications, which will focus on different parts of the energy system.

What this Looks Like





Key Points

The document is focused on electricity and has two main parts: the first defines scenarios and sensitivities; the second part presents 'key insights' about electricity supply, greenhouse gas emissions, and prices.

Key insights include:

- lower demand growth and excess supply should put strong downward pressure on prices for the next decade;
- electricity emissions likely to reach close to 1990 levels by the mid 2020s;
- geothermal energy is key to potentially limiting price increases;

From 1990 to 2004, electricity demand increased rapidly, growing by over 2% per annum on average, as a consequence of strong growth in the economy and population. Since then, electricity demand growth has slowed to an average of only 0.5% per annum, on the back of a weak global economy and the devastating Christchurch earthquakes

What this Means

The document notes that not one scenario can be used to predict the future, but by considering the scenarios and sensitivities together, general conclusions about the future can be made.

Confidence

High. The document uses preliminary modelling results from the Draft Electricity Demand and Generation Scenarios (EDGS) 2013. Draft EDGS will include scenarios and demand forecasts, that consider several key variables that are uncertain. Once finalised, the EDGS must be used by Transpower when forming major capital expenditure proposals. On this basis the information is considered to be robust.

The online data-tables and technical information, please visit our website www.med.govt. nz/sectors-industries/energy/energy-modelling.

The document makes the following assumptions:

- The price of energy reflects the underlying cost of new supply, to ensure new investment occurs and to encourage efficient energy use.
- Timely investment in the lowest cost generation, is facilitated through transparent markets and efficient resource allocation mechanisms.
- Competition, and careful regulatory scrutiny of network investment decisions, ensures prices reflect underlying costs.

References

NZ's Energy Outlook Electricity Insight, 2013.

NEW ZEALAND FOREST AND WOOD PRODUCTS INDUSTRY STRATEGIC ACTION PLAN

November 2013

This strategy provides a pathway to shape a strong and profitable forest wood products sector for the future. This will be achieved by working together (forest owners, wood processors and manufacturers, investors, employees and contractors, exporters, researchers, the Government and local authorities) to address the challenges and to make the most of opportunities. The industry's vision is to more than double export earnings to $12 billion by 2022 and it is anticipated that there will be additional environmental and social benefits.

What this Looks Like

* Katz – *Proposed Export Revenue Targets for the Forest and Wood Products Industry Strategic Action Plan*, Alphametrik, 2012. Note: this report is draft and still subject to change.

Key Points

Forest growing and wood processing contributes about 3% of New Zealand's annual income

(GDP), employs around 31,800 people (about 1.4% of the labour force) and, after dairy and meat, is the nation's third-largest merchandise export earner.

Total export earnings from the industry for the year ended June 2011 were $4.5 billion, 10% of all merchandise exports and up 17% on exports for the June 2010 year. Approximately 70% of forest production was exported, either as logs or processed products. Export logs accounted for 47% of the total harvest volume for the year ended June 2011.

An additional 10 million m^3 of logs per annum will be available for harvest from the early 2020's which provides a key opportunity is to expand processing capacity and add value to logs before exporting.

What this Means

Key strategic action areas include:

- Developing markets and products – There is growing competition with timber for residential framing which needs to be investigated. There are opportunities for framing for non-residential buildings. Future growth in Asian countries is predicted to continue with the opportunity to develop higher-value markets for New Zealand's wood products. In the Years ending 30 June 2010 to 2011, log exports to China increased by 53% in value terms. China alone is forecasted to have a 150 million m^3 wood fibre deficit by 2017. Australia is another key target market that can't meet its growing wood fibre needs.
- Focus on developing innovative High-value wood processing and manufacturing
- Research and innovation is needed.
- Create a stable and enabling Operating environment by removing barriers, unnecessary costs and compliance requirements, and creating an environment that will attract investment, encourage growth and retain talent including working with Government. Security of supply is often cited as a barrier to investment in wood processing, so exploring innovative business models around supply agreements that are of mutual benefit to both forest owners and wood processors is of value.
- To make it happen, funding support and a structure to delivery on outcomes is needed. Pan-industry resources and actions beyond the current capacity of industry associations are essential.

Confidence

Low-Medium – Assumptions for statistics used and anticipated growth are not stated but this strategy is built on the Forest Industry Strategic Study which could provide further justification.

A key assumption is that there will be an additional 10 million m^3 of logs per annum available for harvest from the early 2020's.

References

Forest Industry Strategic Study

New Zealand forest and wood products industry strategic action plan

NZ KIWIFRUIT GROWERS INCOPORATION STRATEGIC PLAN

October 2013

This NZ Kiwi Fruit Growers Incorporation's (NZKFGI) one page strategic plan sets out the vision 'to be a strong grower organisation that demonstrates industry leadership in which growers and other industry participants actively participate'. Its mission is to represent, protect and enhance the commercial and political interests of New Zealand kiwifruit growers.

Key Points

The organisation focuses on: Membership; advocacy; communication; having a credible voice and safeguarding the Single Point of Entry.

The organisation is based at Mount Maunganui.

What this means

Key projects for the organisation this year include:

- Active participation in the Kiwifruit Industry Strategy Project including in the development of grower focused cost models.
- Complete the China Inquiry.
- Maintain the grower support and well-being programmes.
- Develop OGR Reporting.
- Run entity member training in supply and pool operations.
- Develop new industry leaders and tools for succession planning. Increase reliable and skilled labour supply as Gold3 production increases.
- Liaise with Government focusing on: Retention of the Single Point of Entry, industry's continued access to sprays and Free Trade Agreements (especially the Trans Pacific Partnership and Korean Trade Agreement).

Projects on hold and subject to the Kiwifruit Industry Strategy Project:

- Direct Grower Contracts;
- Improved supply chain reporting and transparency;
- Global Pool Operational Review; and
- Reviewing NZKGI strategic plan.

Confidence

Low-Moderate. The report focuses on future actions and does not use statistics to justify its position or actions.

Underlying assumptions were not stated.

References

NZKFGI Strategic Plan, 2013

THE OPOTIKI HARBOUR TRANSFORMATION PROJECT - THE KEY STEP TO A BRIGHTER FUTURE (2009)

November 2013

The Opotiki Harbour Transformation Project is comprised of two interdependent projects: one is the Eastern Seafarms aquaculture venture – the country's largest offshore marine farm, the other is a large scale infrastructure project to improve the navigability of the Opotiki Harbour entrance. Together these projects have the potential to transform the Opotiki community from high levels of deprivation and social spend, to social and economic independence.

What this Looks Like

In order to achieve the Opotiki Harbour Transformation the following work areas have been identified.

Task	Estimated Completion Date
Eastern Seafarms Commercial Trials	2012
Comprehensive Impact Assessment	2011
Integrated Land Use Planning	2012
Cost – Benefit Analysis	2012
Business Case	2012
Securing Funding (Entrance Improvements)	2012/13
Infrastructure Construction (Harbour Entrance – 2 year construction period)	2013-2015

Key Points

The two projects are linked Eastern Seafarms the proximity of the marine farm to servicing and processing facilities is a key determining factor in the long-term viability of the farm's development. Currently, the nearest suitable port is Tauranga, however its distance makes it unfeasible. Locating the servicing base in Opotiki is the most cost effective option, subject to a reliable entrance being created.

The Bay of Plenty Community Trust, 'BayTrust' has signed a Memorandum of Understanding with Opotiki District Council for a five-year commitment to help advance the Opotiki Harbour project and the benefits it will bring.

What this Means

- Employment of 936 people
- Provision of $27.3 million in household income
- Contribution of $34.6 million to Opotiki's GDP
- An increase of $44.9 million in output
- Industry learning opportunities

Confidence

Moderate – the document is a project plan and advertising tool to secure support and investment.

A project update would be valuable as this report was undertaken in 2009.

References

NZ Aquaculture strategy

Bay of Plenty Regional Economic Development Strategy “Bay of Connections”

A social and economic analysis of the potential benefits of the Eastern Seafarms marine farm and the harbour entrance URS 2005.

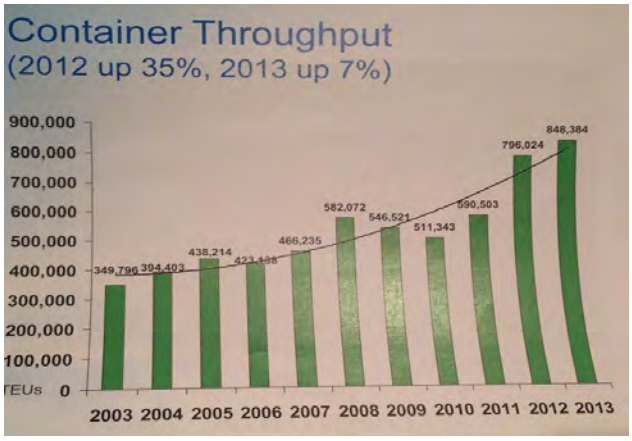
PORT OF TAURANGA

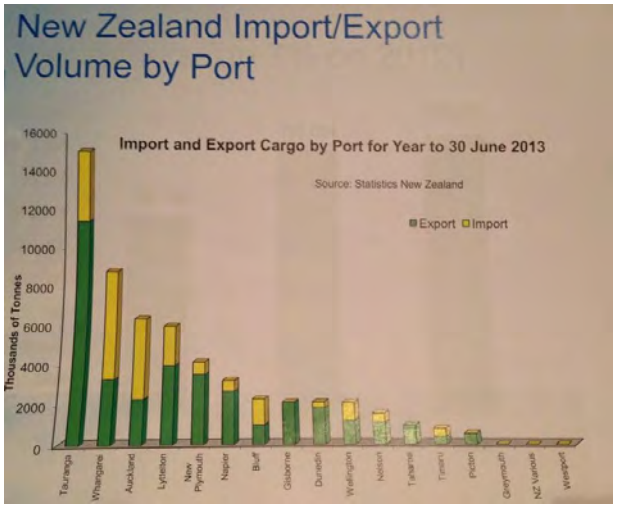
November 2013

This review is a summary of two documents provided by the Port of Tauranga (POT): Dr Warren Hughes Dredging Consent Evidence dated 12 November 2010 and a Port of Tauranga PowerPoint presentation 2013.

The POT is New Zealand's largest container port and port by volume 19.1million tones.

What this Looks Like





Key Points

The POT is a key national and BOP regional economic asset. It is NZ's largest international export port and currently accounts for 25% of total seaport exports and 14.4% of imports by value in the country.

A range of important NZ export commodities are handled by the POT including logs, other forest products, dairy/other primary products and kiwifruit plus more.

The Port's catchment area extends well beyond the BOP region and incorporates the Auckland base Metroport initiative of POT including an inland dry port service with a dedicated rail link to the POT. The Port's operations in Tauranga include a major transit warehousing capability and container wharf/cool store facilities at Sulphur Point.

Analysis indicated that the POT contributes to 51% of the BOP GDP and 6% of the national GDP.

The economic significant of the POT for the BOP and NZ economies is evidenced by the export tonnage through NZ sea ports. POT exports almost 3 times those of Ports of Auckland (POT's closest competitor) with 7.979 b tonnes compared to 2.998 tones.

NZ's future prosperity will depend on the profitability export of bulk commodity food products and non-food commodities such as logs and other wood products.

POT is currently the port of choice for major commodity exporters by a 3 to 1 margin over the Ports of Auckland. POT's exports amount to 25% of all sea-port exports by value for all of NZ. Shipper's Council report estimates the POT having a value of $388million per year value to NZ and recommends Tauranga to be North Island International Hub Port.

The port experiences continued growth despite the economic down turn. In 2013 trade volumes of 19.065m tonnes are up 3% (up 25% between 2011-2012) and container volumes increased by 7% from 796,024 in 2012 to 848,384 in 2013.

Larger vessels will be able to access the POT once dredging is complete; consent was approved in March 2013. Justification for deepening and widening the harbour entrance came for analysis of input-output model which assessed effects or linkage values on different sectors including kiwifruit growing, sheep and beef farming etc resulting from activities at major facilities such as POT, Auckland Airport etc.

Vessels will go from 4,600 TEUs (width of 13 containers) to 8,200 TEUs (width of 18 containers). Larger vessels provide cost savings, have a lower carbon footprint. Larger ships (greater than 4,000 TEU) are predicted to increase in by taking up 43% global slots in 2005, 68% of global slots in 2013 and 80% of global slots in 2030. The average container ship has increased in size too by 24% since 2008, from an average size of 2,610 TEU to 3,250 TEU. The total number of containers rose by 8% since 2008 the capacity increased by 35%.

The POT has a low water draughts (level) of 11.7m LW and is consented to 14.5m, other NZ ports include Otago 11.8m LW (consented to 13.5) and Auckland 11.4m LW the rest are 10.6m LW and shallower.

What this Means

The economic impact of the POT extends outside the region. Most of the revenue received by exporters through the POT comes from outside the BOP region e.g. Dairy Processing ($1.7B) and Basic Metals ($324m from NZ Steal). Of the total Free on Board export value (value of goods at NZ ports before export) through POT for exporters $8.8B in 2010 $5.3b or 60.6% comes from outside the BOP region. The POT is a valuable link for exporters to the rest of NZ. The POT impact on the BOP region is that 51.3% of GDP, due to approximately 80% of NZ's kiwifruit being grown in the BOP and is a major export commodity with $814m in exports through the Port in June 2010. In 2010 the POT operations impact on the BOP region was generating a revenue of $13,824.500M, net household income $2,291.86M, Employed 62,057M. Impacts on the NZ economy generated $27,699.34M in revenue, $4,439.57M net household income, $113,399M employment and contributed to $10,861.83M in value added GDP. Impacts of the POT from cruise ship passenger expenditure in the BOP region in 2010 includes $41.84M revenue, $8.95M net household income, employment of 345 people and added value in the order of $17.48M.

The POT are well placed to cater for future increasing sized container ships.

They are also preparing for this through terminal expansion which occurred in 2013. Future terminal expansion is proposed in long term plans. There are also plans for Prime Point Timaru.

Confidence

Medium - High. Research used to support evidence always needs to be robust as it needs to stand up in a legal setting.

The PowerPoint may be targeted at shareholders.

Estimates regarding the benefits of larger vessels and justification for deepening the port entrance comes from a 112 sector input output models of the BOP and NZ economies which was based on Statistics NZ data for the year ended December 2009.

References

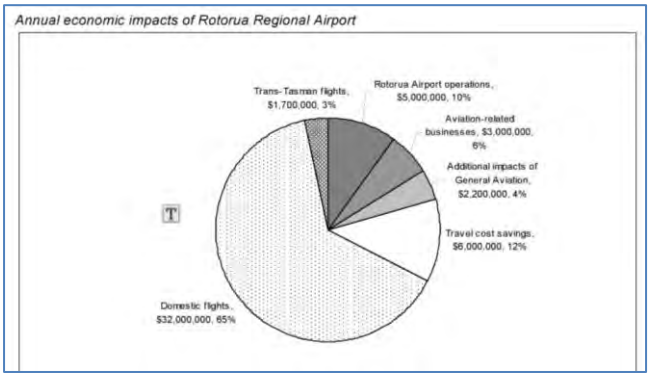
Shippers Council Report

ECONOMIC IMPACTS OF ROTORUA REGIONAL AIRPORT

November 2013

This report estimates the overall economic impact of Rotorua Regional Airport1 using the 'collection of benefits' method. The aim is to give a total picture of the economic value of the airport to the regional economy.

What this Looks Like



Key Points

Rotorua Airport benefits include:

- The one-off economic impact of capital development at Rotorua Regional Airport over the past decade was more than $62 million.
- Rotorua Regional Airport directly contributes approximately $5 million per annum to the regional economy.
- Aviation-related businesses operating from Rotorua Regional Airport contribute approximately $3 million per annum. Additional direct impacts of General Aviation on the regional economy, based on 80-90 landings per week, are estimated at $2.2 million per annum.
- Local outbound travellers save an estimated $6 million per year in travel costs.
- The economic impact of inbound visitors on domestic flights is at least $32 million.
- The economic impact of visitors on trans-Tasman flights is at least $1.7 million.

What this Means

The overall economic impact of Rotorua International Airport to the regional economy as at 2010/11 is conservatively estimated at $62 million in one-off investment over the past decade plus $50 million on-going per annum.

The document summarised the past and current economic benefits of Rotorua airport however did not project anticipated future economic benefits.

Confidence

Low-Medium – Information sources were stated and those used were either Rotorua DC documents or those written by the authors. Assumptions were provided however they are not consistent e.g. the average spend assumption in 2010 varies from $130 to $221.

Further the key underlying assumption given this is marketing airport economic opportunities are that the airport needs more business.

References

Rotorua District Council (2003) 'Updating the estimated value of Rotorua Regional Airport –

the relevance of figures produced for RECT in 2001', compiled by APR Consultants Ltd.

Rotorua District Council (2005) 'Rotorua Resident Survey – in conjunction with the trans-Tasman demand study', undertaken by APR Consultants Ltd.

Rotorua District Council (2005) 'Survey of Rotorua and Taupo Businesses – in conjunction with the trans- Tasman demand study', undertaken by APR Consultants Ltd

Rotorua District Council (2005) 'Rotorua Regional Airport: Trans-Tasman Demand and Economic Impact Assessment', compiled by APR Consultants Ltd, September 2005.

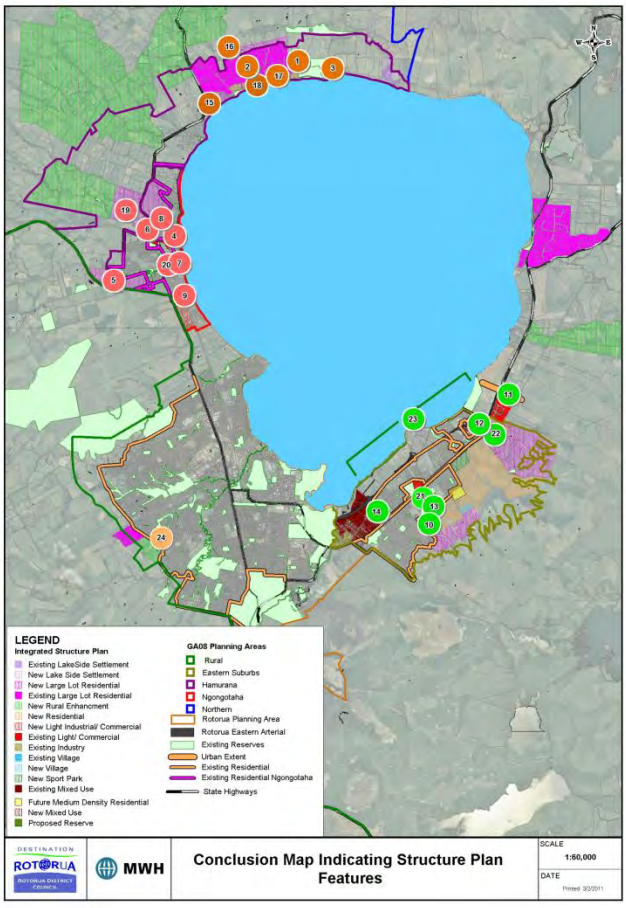
ROTORUA BASIN STRUCTURE PLAN

November 2013

The Rotorua Basin Structure Plan combines the Eastern Basin and Western Basin Structure Plans both developed in 2008. The document is informed by the integrated transport assessment which encompasses the entire area and analyses growth areas.

The purpose of the Rotorua Basin Structure Plan (the Structure Plan) is to establish a vision for 2051 for the eastern and western side of the lake. The timing of the development of the Structure Plan is to coincide with the review of the District Plan

What this Looks Like



Key Points

The greatest population growth is anticipated to occur primarily in eastern suburbs, with more modest amounts of growth in the Central Business District (CBD) and gradual growth in the rural areas north of Hamurana. Economic development will be focused in the CBD as this has the largest amounts of land allocated for industrial and business activities. The nature of the economic activity varies across the Rotorua District with the CBD being the centre for retail and commercial activity whilst the rural area is based on primary production and processing.

What this Means

Key structure plan features:

- Two stage development programme up to 2021 and 2021-2051.
- Additional residential growth areas provided around existing residential development, with the largest amount of growth identified within the Ngati Whakaue Wharenui Road Area. To the west residential development is expected to occur around the two main settlements of Ngongotaha and Hamurana. The urban footprint of Ngongotaha is slightly expanded and Hamurana retains mostly larger residential densities.
- Eastgate will provide for additional business-park type activities and the

land opposite Mt Ngongotaha on the eastern side of Fairy Springs Road is identified for light industry. An industrial hub is also proposed on the western end of the airport.

- A significant sports park is required on the eastern side of the lake.
- The need for infrastructure (water, stormwater and wastewater) to support development.
- Transport effects of the Structure Plan includes additional vehicles on the road network resulting in congestion and greater travel times during peak periods, particularly along the key corridors of Te Ngae Road and Ngongotaha Road. Proposed solutions include the Rotorua Eastern Arterial, and on the western side short term intersection upgrades and new roads within proposed developments.

Confidence

Low. The Rotorua Basin Structure Plan aligns population and economic growth to meet Councils Growth Assumptions 2008 Report which is based on Statistics NZ Medium to High growth projections which show positive grown. Actual population numbers and those of the 2013 census show a stable to slightly declining population.

References

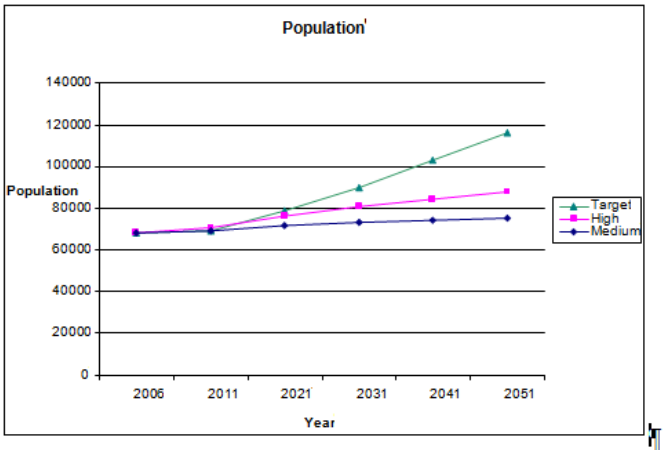
Rotorua District Council Growth Assumptions 2008 Report

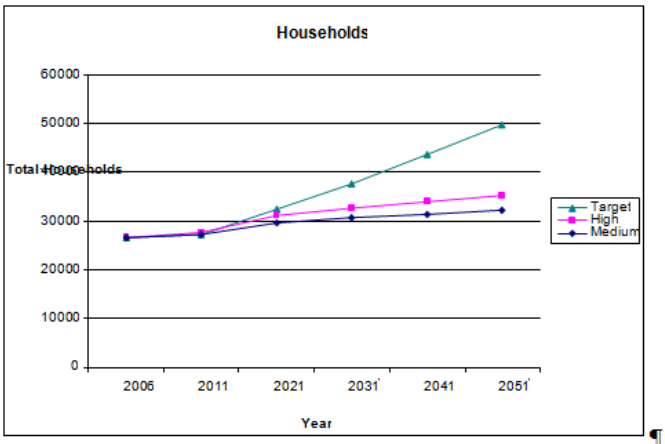
GROWTH ASSUMPTIONS 2011 FOR THE ROTORUA DISTRICT

November 2013

This report has been prepared through analysis of statistical data and indicators to provide growth assumptions for the Rotorua district through to 2051.

What this Looks Like





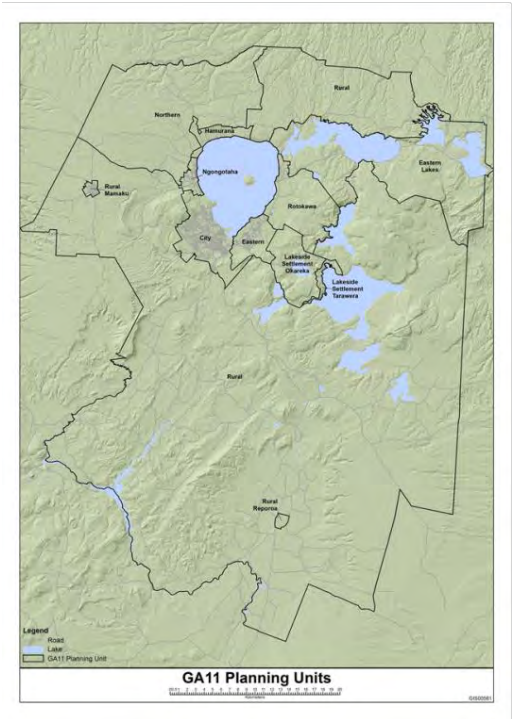
Key Points

This report predicts the current trend of negative net migration will slow or stop as a result of growth and a strong economy, and an increase in population attributed to increased lifespan of the New Zealand population. Further the population is anticipated to grow rather than a decline as forecast by Statistics NZ.

The growth assumptions have been developed in order to ensure that there is sufficient infrastructure provided to manage the increase in population and visitors over the next 10, 20 and 40 year periods, and to ensure that there is sufficiently zoned land to enable projected growth to occur.

What this Means

A range of population and household projections were developed for the GA11



Confidence

Growth assumptions have been developed for a medium population forecast, an additional 2,968 HUE's for 2011-2021 and 4,669 HUE's 2021-2051, and for a high population forecast 4,123 HUE's for 2011-2021 and 6,758 HUE's 2021-2051. These growth assumptions provide the basis of the Rotorua Sustainable Economic Growth Strategy and the draft District Plan. Further they will also inform Asset Management Plans, the Long Term Plan and the Spatial Plan for the Rotorua District.

Statistics NZ population projections show a declining population. Further, initial 2013 census results show a slight decline in Rotorua's population. On this basis, the medium or high population forecasts used are too high. The foundation of statistics for this document, the Rotorua Sustainable Economic Growth Strategy, the draft District Plan and the Spatial Plan will therefore also be inaccurate.

References

Ministry of Economic Development Summary Forecasts

Statistics NZ

Bedford Report review

ROTORUA SUSTAINABLE ECONOMIC GROWTH STRATEGY

October 2013

This five year strategy sets a clear direction for economic development in Rotorua to achieve their vision of 'Rotorua – Living the Dream. World class in every way. The key aim is to lift Rotorua's economic performance and to promote increased collaboration and communication between the Rotorua Business Leaders and Rotorua District Council. A project reference group was developed by these groups to guide the development of the Strategy. The document is an update of the Rotorua Economic Strategy and was adopted in 2011.

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Key Points

Rotorua has not achieved the anticipated economic and population growth, potential reasons range from poor perception and reputation management to perceived low skill levels and socio economic status of residents (and therefore lower purchasing power), restricted range of high skilled and well-paid jobs, and restricted range of services available.

While the economy has become more diversified over the past decade, economic performance has not.

Between 2009 and 2010:

- District GDP fell by 1%, compared to a national fall of 0.4% (ranking Rotorua 44th out of the 72 territorial local authorities or TLAs).
- Agriculture grew by 0.6% compared to national growth of 2.4%.
- Tourism accommodation declined by 3.1% compared to the national fall of 1.5%, and estimated tourism sector production declined by
- 2.8% compared to the national fall of 1.9%.
- Transport and logistics production fell by 11.2% compared to the national fall of 6.2%.
- Machinery and equipment manufacturing declined by 19.5% compared to the national fall of 16.3%.
- Employment growth fell by 3.8% against the national fall of 2.5% (ranking it 63 out of 72 TLAs). Also, while estimated district population grew by 0.6% to 68,600 in 2010, New Zealand's population grew by 1.2% over the same period.
- The number of businesses declined by 2.8% in Rotorua, while nationally the fall was only 1.7%.
- Forestry and wood processing grew by14% compared to the national growth of 5%

What this Means

Key opportunities for Rotorua include:

- Forestry and wood processing
- Tourism
- Geothermal
- Research and Development
- The Lakes
- Education
- Agriculture
- Location

Many hapu and iwi have been involved in settlements under the framework of the Treaty of Waitangi. These groups are now in a position where they would like to invest in projects that will provide greater returns than previously achieved.

Key focus areas include:

- Attracting investment and residents targeting Auckland and internally.
- Business and Industry retention and development, plus start up assistance. Creating a business friendly district.
- Formation and implementation of a plan to capitalise on the commercialisation opportunities presented by SCION's activities, such as: Targeting the attraction of companies to the SCION and/or surrounding business park area that would add value to the informal SCION-based forest science cluster.
- Implementing industry sector strategies. E.g. Rotorua to become the hub for Forestry and wood processing R&D.
- Tourism – focus on International and domestic brand strength, aggressively target markets (Auckland and Australia eastern seaboard, Asia), collaboration joint marketing. There was concern over dated tourism product.
- Geothermal resources in and around Rotorua to be utilised as sources of sustainable energy.
- Māori economic development and research e.g. Work with the pilot Te Arawa Land Use Futures Incubator initiated by Rotorua Lakes and Land Trust, aimed at providing a targeted group of Māori landowners with administrative capacity and resources to engage in future land-use planning decisions around Rotorua lakes.
- The Lakes – lifestyle products and development of a range of new businesses in lakes environments from golf, walking and mountain bike activities to spa, lifestyles services and residential development (e.g., rural environment services companies).
- Education - Skills development, education, research and Innovation.
- Regional City Scale – work with others to assess infrastructure requirements, Spatial Plan, review opportunities to leverage Rotorua airport.

Confidence

Low-Medium. Information regarding views were sourced from surveys conducted in 2006 and may be dated.

Growth assumptions are based on a medium population forecast, an additional 2,968 HUE's for 2011-2021 and 4,669 HUE's 2021-2051, and for a high population forecast 4,123 HUE's for 2011-2021 and 6,758 HUE's 2021-2051.

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References

BoC Integrated Regional Tourism Strategy

Government Economic Growth Agenda

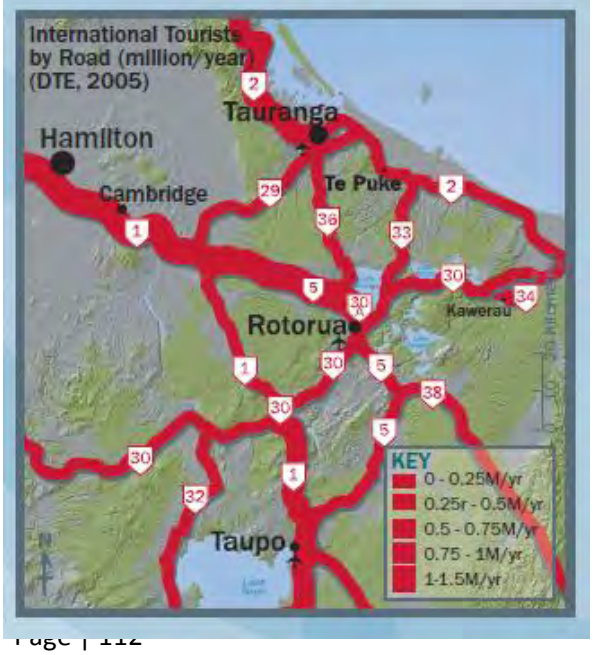
Rotorua sustainable economic growth strategy (Ministry of Economic Development)

ROTORUA INTEGRATED NETWORK STRATEGY 2014-2042

October 2013

The purpose of Rotorua Integrated Network Strategy (RINS) is to guide and inform land transport programmes and future growth management planning, while also ensuring investment in the transport network is optimised to help determine funding priority for Rotorua District Council, the NZ Transport Agency and the Bay of Plenty Regional Council.

What this Looks Like



Key Points

The strategy:

- Defines the role of the Rotorua transport network and its contribution to the Upper North Island and NZ as a whole.
- Identifies the shape and form of the Rotorua transport network into the near future, identifying deficiencies and improvements.
- Supports and informs Rotorua District Council's District Plan and supports long-term economic drivers that underlie the district's growth.
- Guides better integration of land use and transport planning to achieve a safe, efficient and affordable transport system that supports economic and environmental outcomes for the district.
- Ensures the transport system provides for a range of travel choices and is developed in a way that makes best use of the existing network.

What this Means

Primary drivers for economic activity and growth in Rotorua are freight and tourism. SH30/33 corridor to Tauranga carries the majority of freight from and passing Rotorua to the Port of Tauranga. Logs and timber products, horticulture and aggregate are expected to have sustainable increases by 2031.

Rotorua's planning framework targets prosperity and improved lake water quality.

Rotorua has a high proportion of tourism-related employment such as in accommodation, retail and food services. There are opportunities in research and in geothermal-related tourism and industry. Rotorua is planning for growth slightly higher than Statistics NZ medium projections. The average number of people in Rotorua households is expected to drop, so more houses will be needed for the same population.

CBD revitalisation and improved accessibility are target areas. Majority of development is expected to occur in the Eastern Suburbs with modest growth in the city centre and gradual growth in the rural areas north of Hamurana in the medium to long term.

The township is made up of 4 corridors with key activities (Rotorua Eastern (REA), Urban Network (Victoria Street Arterial, Rotorua Transport Centre), Western and Southern) each with key. The future of the urban network and eastern corridor depends on SH30 Te Ngae Road and SH30A Amohau Street. Commitment to the final form of the eastern corridor and cross city connection is required to allow RDC and the NZTA to decide how to best optimise the network in the interim.

Growth assumptions should be reviewed following the next census.

Confidence

Medium - High – The document highlights the key assumptions regarding growth (being based on medium Statistics NZ projections) and development, noting several times that these need to be revised with the 2013 census updates.

References

Rotorua Integrated Network Strategy 2013

ROTORUA SUSTAINABLE ECONOMIC GROWTH STRATEGY

October 2013

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References

BoC Integrated Regional Tourism Strategy

Government Economic Growth Agenda

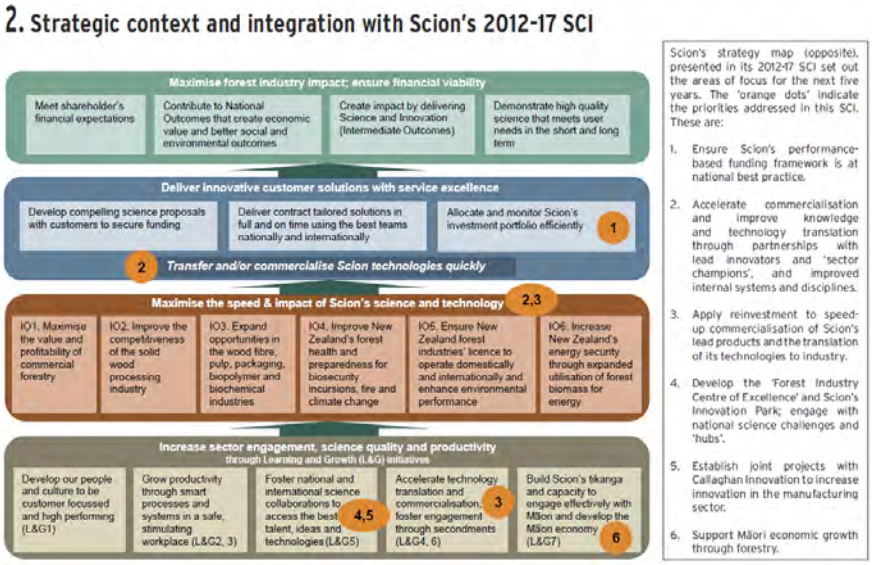
Rotorua sustainable economic growth strategy (Ministry of Economic Development)

SCION CORPORATE STATEMENT OF INTENT 2013-2018

October 2013

Scion is a New Zealand Crown Research Institute that specialises in research, science and technology development for the forestry, wood product and wood-derived materials and other biomaterial sectors. The organisations purpose is to drive innovation and growth from these sectors to build economic value and contribute to beneficial environmental and social outcomes for New Zealand. This statement sets out Scion's strategy, science and innovation plans, and investment priorities for the next 5 years in order to achieve their vision of 'Prosperity from trees - Mai i te ngahere oranga'.

What this Looks Like



Scion's strategy map (opposite), presented in its 2012-17 SCI set out the areas of focus for the next five years. The 'orange dots' indicate the priorities addressed in this SCI. These are:

1. Ensure Scion's performance-based funding framework is at national best practice.
2. Accelerate commercialisation and improve knowledge and technology translation through partnerships with lead innovators and 'sector champions', and improved internal systems and disciplines.
3. Apply reinvestment to speed-up commercialisation of Scion's lead products and the translation of its technologies to industry.
4. Develop the 'Forest Industry Centre of Excellence' and Scion's Innovation Park; engage with national science challenges and 'hubs'.
5. Establish joint projects with Callaghan Innovation to increase innovation in the manufacturing sector.
6. Support Māori economic growth through forestry.

Key Points

Over the past year, Scion's external operating environment has changed with respect to: an uplift in market demand and prices for logs (especially China) and wood-derived products; changes to climate change legislation and international agreements; the formation of Callaghan Innovation on 1 February 2013; a forest grower mandate to introduce a commodity levy; heightened attention to the management of water quality; increased foreign direct investment interest in New Zealand forests; and, through Government research, science and technology policy, the setting of national science challenges and formation of innovation 'hubs'.

Scion plans to establish further partnerships with Māori trusts and incorporations with significant forest assets and large areas of under-utilised land with good potential for forestry.

Scion is contributing to a Rotorua-based 'Forest Industry Centre of Excellence' in order to attract new investment into the sector and facilitate regional economic growth. Their North Drive Innovation Park, industry tenants on campus (some 27 entities) and the Bay of Plenty tertiary initiative are central elements of

this. External investment is being sought to enable the construction of a multi-functional building for aligned companies during 2014.

Workforce development, a high performance, customer-focussed culture is being built through a comprehensive staff development programme, changes to Scion's remuneration framework and improvements in recruitment. Scion is three years into implementing a 10-year capital asset plan to develop a highly attractive work environment through the modernisation of buildings, laboratories and equipment; and installing pilot plant to support the scale-up of our most promising technologies.

The strategy focuses on two critical areas commercialisation and technology translation and their contribution to the impact of new technology and knowledge developed at Scion to support the forest industry's target to achieve '$12 billion of exports by 2022'.

What this Means

Log harvest is anticipated to grow by 10 million m3 over the next decade to 33+ million m3. The report highlights the need to focus on understanding and developing high margin export markets for radiata pine products, and increase New Zealand wood processing competitiveness through initiatives in product innovation (e.g. to improve value recovery from residues), improving efficiency (such as lean manufacturing methods, new capital investment), market development and supply chain coordination.

Despite the challenging economic circumstances, Scion expects to grow revenues in 2013/14 by 5.6% to $47.839 million. Notwithstanding external shocks, Scion expects to sustain its financial performance and capacity to invest in initiatives to 2022.

For the industry's long term viability, to improve the competitiveness of forestry as a land use and to attract new investors, and replanting rates need to increase to 20,000 hectares of new forest per year.

There is anticipated global demand for softwood log supply 2020+ given the predicted shortfall in supply; likely recovery of the carbon price post 2015.

Opportunities for forest growing research to improve forestry returns through improved tree genetics and nutrition, matching genotypes to sites, and reducing impacts of foliar diseases. Through these means, yields of forests could be doubled over the next 20 years to 35 m3 per hectare per year while concurrently improving wood uniformity and stiffness.

Forest growers voted to support the introduction of a commodity levy in March 2013. If sanctioned by Government, as expected, the levy may be operational by 1 January 2014 and is projected to raise an estimated $6.5 million per annum (with approximately 50% allocated to research).

Confidence

Medium-High – The document is for a government research institute so its predictions need to be as reliable as possible and based on fact.

Assumptions are stated and reliable and recent references are used. For example growth in revenue by 5.6% to $47.839M is heavily dependent on securing current levels of funding in the 2013 MBIE science investment round. The financial forecasts to June 2018 account for the on-going tentative global economic recovery; the challenges wood and wood fibre processors face with a high exchange rate and high log prices; the strong domestic stimulus for wood products arising from the Christchurch rebuild and Auckland housing shortage; continued expansion of Māori interests in forestry; and forest growers adopting a commodity levy (likely from 1 January 2014) with about 50% to be allocated to research and development.

The core assumption is that international demand for logs will be continue to grow particularly in emerging markets Asia-China, and that there will be a softwood log shortage post 2020. These shortages could be due to either increased development/building and need for wood materials or Australian and the EU banning illegal logging.

Log harvest is also anticipated to grow however reasons for this aren't c.

References

FAO (2012) New Zealand forestry science and innovation plan.

MBIE Government's business growth agenda. Sourced 7 May 2013

Woodscape (2013) Summary Report: Overall outcomes, key messages and recommendations for next steps. Scion's report to the NZ Wood Council (February 2013).

KPMG (2013) Indicative value analysis of New Zealand's privately owned indigenous forests. Report to MPI (March 2013).

PWC (2013) Growing the productive base of Māori freehold land. Sourced 7 May 2013 at

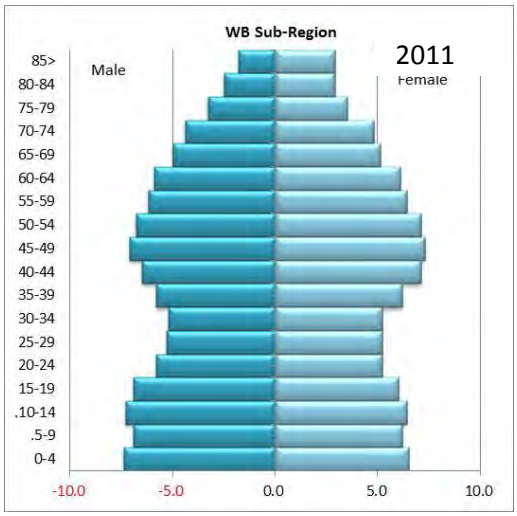
Scion Statement of Corporate Intent 2013

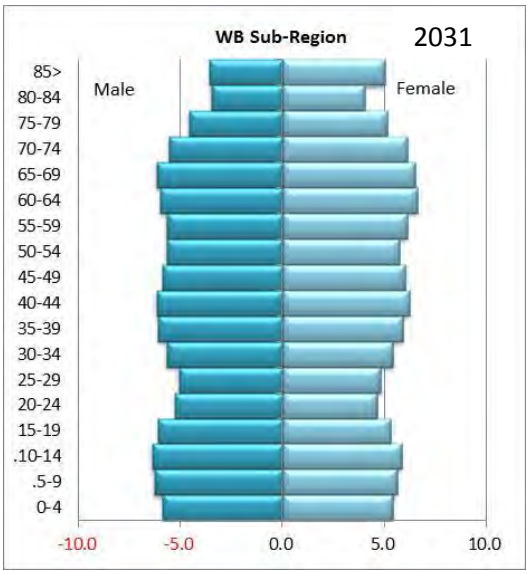
THE IMPLICATIONS AND OPPORTUNITIES OF AN AGEING POPULATION IN THE WESTERN BAY OF PLENTY SUB-REGION

November 2013

The specific purpose of this research is to identify the implications and opportunities of population ageing within the context of health, housing, employment and transportation in order to recommend policy approaches that will help shape settlement patterns and future urban form in the Western Bay of Plenty sub-region.

What this Looks Like





Key Points

The population of the Western Bay of Plenty is aging and will influence the economy and every aspect of life. The influence of global markets, a rapidly ageing labour force, a growing youthful Māori population and potential inward migration as an attractive family, 'retirement' and business lifestyle destination create uncertainty.

The demographic differences between the Tauranga City, Western Bay of Plenty District and Māori profiles highlight a need to 'drill down' to understand ageing and ethnic diversity in the region. The significant differences indicate a need for specificity in policy making.

The sub-region is facing an imminent shift in the dependency ratio of young to old, such that the number of 65+ year olds to children (0-14 years) will cross over in 2016. For the Western Bay of Plenty District considered in isolation, the structural crossover is projected to occur in 2013.

What this Means

It is anticipated that by 2050 there will be at least 800,000 households headed by older people in New Zealand. About a quarter of the population will be 65+ years. Most people 65+ will live in their own homes, but the numbers of households headed by an older person in the rental market will more than double. Older

people will typically live alone or with an older partner, with the older-old living alone. More than a million older people will not be in paid labour and well over half a million can be expected to have a disability that impairs their mobility. Around 325,000 older people will not have a drivers licence and even more are likely to be dependent on public transport, walking or on other forms of transport.

A diminishing workforce caused by the retiring of the boomer generation and the on-going non-replacement in post boomer generations (low birth-rate).

WBOPDC residents are aging more rapidly. The district includes naturally occurring retirement communities such as Waihi Beach, Katikati, Omokoroa and Maketu. In the sub-region Tauranga will experience a shift in the median age from 38.9 years in 2006 and 41.7 in Western Bay of Plenty District to 44.9 years in 2031 (Tauranga City - 41.7 years, Western Bay of Plenty District Council - 48.1 years).

The Māori population of the sub-region is not ageing.

A number of actions for updated SmartGrowth Strategy start addressing this issue including:

- ensuring routine inclusion of demographic change analysis (e.g. population ageing impact) and consideration for the needs of older people (age friendly assessments) in all development, policies and programmes (including civil defence plans and climate change responses).
- SmartGrowth undertaking an investigation into the requirements of liveable communities including requirements for an aging population.
- Recommending policies to ensure well-designed, affordable homes, having regard to the ethos of Lifetime Homes (universal design), Lifetime Neighbourhoods and the desire of people to age-in-place.
- Establishing an ageing centre of excellence to foster health, social and economic innovation.
- Improving the participation of Māori youth in tertiary education that supports local industry, particularly the sciences.
- The Bay of Plenty Regional Council strengthening its investment in economic development by: Investing in research to analyse workforce implications and identifying business opportunities arising from population ageing in the sub region; and establishing an ageing innovation cluster within Bay of Connections. To increase the number of 65+ people who choose to remain active in the workforce.
- Tapping into the growing mature consumer market.

There are two key factors relevant to increasing and future proofing productivity and economic growth:

- Adaptation. Workplace, work mode and workforce, Adapting and valuing maturity in human resource strategies. Responding to worker shortage in existing industries.
- Innovation Responding to a changing 'bonanza' consumer market, that seeks independence and quality of life, 'living-longer-more'. The market also includes more older-old with frailty, home care, age-friendly ageing in place needs, with technology assistance. It is expected that there will be many new products to support the healthcare industry. Innovation in the workplace will be essential to maximise on-going productivity, in a low labour climate.

Confidence

Moderate. The authors note that the document was completed in a limited timeframe and notes that the social, economic and housing challenges of population ageing within a cultural context have not been considered.
The main assumption is that people will age in place and won't move. Key drivers for moving include: accessibility to medical care, support and being to be closer to family (which may not be in the Bay of Plenty Region).

References

New Zealand Business of Ageing Report: Realising the Economic Potential of an Ageing

Population 2011-2051. Ministry of Social Development

BOP DHB Health of Older people Strategy 2012.

Statistics New Zealand, 2009, (Series 5)

Statistics NZ August 2012 National Labour Force Projections: 2006(base)–2061

Statistics NZ Projections Overview July 2012.

Gordon,C. 2002. All Our Futures. SmartGrowth.
Gordon, C. 2008 CG Consulting Smart Ageing Action Plan

Davey, J. 2006. The Labour market, in implications of population ageing: opportunities and risks. Institute of Policy Studies, Victoria University. Wellington

Stephenson J, Scobie G. 2002. The Economics of Population Ageing. New Zealand Treasury.

NZ Dept Labour. 2008, Forces For Change in the Future of Labour Market in New Zealand.

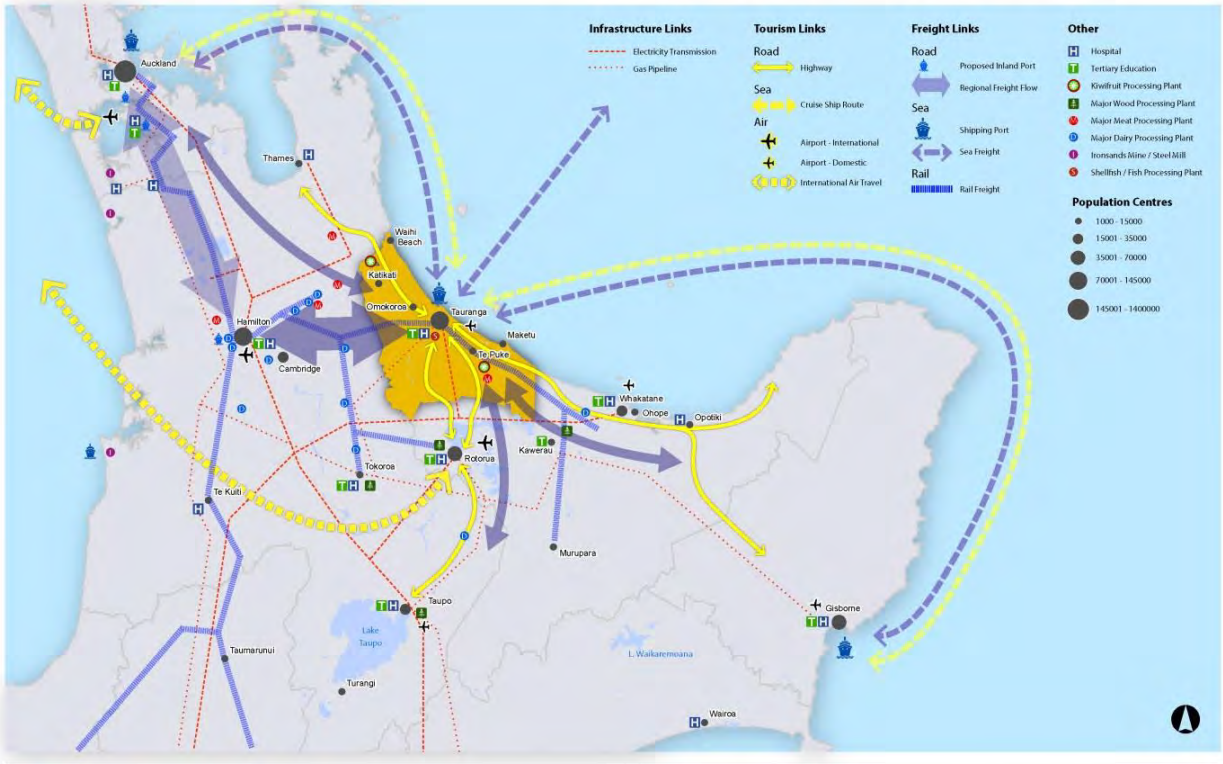
A Silver Opportunity? Rising Longevity and its implications for Business. 2011The Economist Intelligence Unit.

SMARTGROWTH

November 2013

The SmartGrowth Strategy and Implementation Plan are the western Bay of Plenty sub-regional spatial plan which sets the strategic vision and direction for growth and development in the western Bay on key social, environmental, economic and cultural objectives. The strategy was recently reviewed and relaunched on 1 November 2013. The update focuses on: Strengthening visionary leadership and collaboration; sustaining and improving the environment; building the community; growing a sustainable economy; recognising tangata whenua cultural identity and change; and integrated planning and the settlement pattern. The SmartGrowth vision is 'Western Bay a great place to live, learn and play.

What this Looks Like



SmartGrowth
Building our futures together

Map 2
Inter-Regional Connectivity

Key Points

The settlement pattern is a key SmartGrowth component and provides a blueprint for growth and development of residential and business land and associated infrastructure.

Local issues highlighted include: reconciling urban growth needs with impacts on the natural environment; integrating land use planning and investment understanding the Bay's position in NZ Inc; understanding the Bay's role in securing the supply chain for exports through the Port of Tauranga; providing opportunities for recreation and parks; and improving knowledge capacity through lifelong learning.

Environmental issues highlighted include: the deterioration of water quality, loss of wetlands and growing pressure on the marine environment from recreation, aquaculture, coastal development and sedimentation.

The Bay is the third oldest region in NZ and is an age driven growth region. In 2013, 16% of the regional population was over 65 years compared to 13% nationally this is predicted to increase to 25% on 2031 regionally and 21% nationally. In the next 20 years 90% of the growth projected for the region will be in the 65 years plus age group. The aging population will increase competition for workers and push up labour and consumption costs.

What this Means

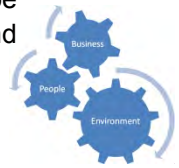
Priority actions are divided into the three main categories, people, business and environment.

People:

- Develop and implement a SmartGrowth communication and engagement strategy and ensure sufficient effort and resources are applied.
- Universal design housing – develop a factsheet; and bring together organisations to identify barriers and recommend policies to ensure well designed, affordable homes.
- Promote Intergenerational, live-able communities by engaging the DHB and other government agencies and the social sector to identify impacts of demographic change on housing health, business and communicates and to identify innovative and collaborative approaches; and ensuring best practice community engagement guidelines incorporate age-friendly community engagement processes with mature people.
- Establish a Regional Tertiary Facility.
- Ensure training and development programmes give consideration to the impact of population aging on the local economy.
- Advocate and support the development of key facilities that support arts and cultural outcomes within the sub region.
- Promote and provide for walking and cycling.
- Cultural heritage database project plan and project implementation.
- Facilitate papakāinga development.
- Support land use aspirations resulting from treaty settlements.
- Prepare a report from the 2013 census data regarding tangata whenua iwi and Māori in the areas of housing, employment, education and income.
- Undertake a detailed demographic update based on the 2013 census data.

Business:

- Facilitate a Business Friendly Process through undertaking a stocktake of potential Council processes barriers to economic development; adopt common sets of metrics for assessing business friendly councils; recognise and support the Core Cities China Engagement Strategy7.
- Support the establishment of business and innovation parks.
- Provide enabling environments for events.
- Promote Māori Economic development by enabling outcomes of the BOC Māori Economic Development Strategy to be progressed through SmartGrowth and



undertake a stocktake of potential Council process barriers to Māori economic development.

- Identify and support the implementation of key anchor projects with the city centre strategy.
- Research workforce implications of an aging population.
- Investigate the role of Council and other agencies in facilitating the availability of property and land for housing affordability projects.
- Facilitate the delivery of the Housing Affordability Pilot Project.
- Advocate for housing affordability.
- Investigate and scope project to research current employment trends and potential future employment needs.

Environment:

- Assess the likely future water demand against available resource.
- Tauranga Moana (harbour & its catchments) – finalise & implement Mountains to Sea Plan, Implement the Tauranga Harbour Programme, investigate the need for a marine spatial plan.
- Investigate opportunities to improve water quality across the sub-region.
- Undertake a literature review to identify the impact and opportunities of climate change on our sub-region.
- Establish the SmartGrowth Environment forum and facilitate outcomes.
- On-going improvement in transport modelling.
- Assess identified and possible future urban growth areas to inform the settlement pattern review.
- Confirm residential intensification approach.
- Determine whether alternative opportunities for a water and wastewater servicing are appropriate for the Rangiuru Business Park.
- Assess infrastructure funding options.
- Provide limited flexibility for industrial development.
- Assess the cost of infrastructure associated with business land.
- Assess business land uptake rates.
- Engage with the community on natural hazard risk.
- Natural Hazards framework actions.
- Establish potential mitigation of tsunami risk in established Urban Growth Areas.
- Freight to the Port of Tauranga is anticipated to increase with improvements sought to the freight routes, and investigations into increased rail. Investigate and progress required network and safety improvements for the movement of freight to the Port on SH2, SH29, Rote K, Merrilees Road, Totara Street. In relation to rail freight identify the capital works required to support the significant increase in projected freight to and from the Port of Tauranga investigate the capacity and route security of the Kaimai rail tunnel; continue to investigate and plan for crossing loops and double-tracking to the Kaimai Tunnel portals over the long term; and support research into increasing opportunity for rail freight transportation.
- Maintain, refine and implement a package of interventions in the eastern and northern corridor and develop ones for the southern and western corridors.
- Assess alternative infrastructure technologies and delivery mechanisms

Confidence

High. All statistics used based on research documents. The documents range in their assessments some basing assumptions on old or incomplete data. Demographic forecasts were produced by the University of Waikato based on Statistics NZ national and sub-national projections post 2001 census and applied different assumptions and

methodology in terms of net migration to a TLA level.

Two key assumptions are that the sub regional population will continue to grow and that growth will occur in identified areas, this also has wider land use implications. In order to check this a priority SmartGrowth action is to review the settlement pattern.

References

Bay of Connections Strategy

Housing Affordability Strategies Making Housing More Affordable in the western Bay of Plenty

SmartArts Strategy - 2013 Update

Smart Ageing Action Plan - Providing leadership in the development of ageing communities

Smart Economy - Western Bay of Plenty Economic Development Strategy

SmartGrowth Research Report: Maximising the social benefits of land use planning to build communities and support economic growth in the western Bay of plenty.

SmartGrowth Research Report: The implications and opportunities of an aging population in the western Bay of Plenty Sub-region.

SmartGrowth Research Report: Industrial Land Study

SmartGrowth Research Report: Commercial Land Study

SmartGrowth Research Report: 2012/13 Smart Economy Review

SmartGrowth Research Report: Development of Māori Land and Post Treaty Land use issues

SmartGrowth Research Report: Tangata whenua Aspirational Plan 2012 – Horahia o mata ki a Meremere Tuahiahi

Social Infrastructure Stocktake Report

Sub regional infrastructure capacity Development viability reports on Omokoroa, Te Puke and Te Tumu

Tauranga Harbour Sedimentation Study Growth Management Key Issues - Overview Report

Review of Restrained Growth Paper - An implementation update The Effects of Urban Limits on Development Growth management: Role of Demographic Projections

Understanding and meeting the present and future social needs of western Bay of Plenty communities - Stage

Water Sustainability Strategy Western Bay Sub-Region

Research relating to Integrated Planning and the Settlement Pattern can be found in the following links:

Refer to SmartGrowth for other research references:

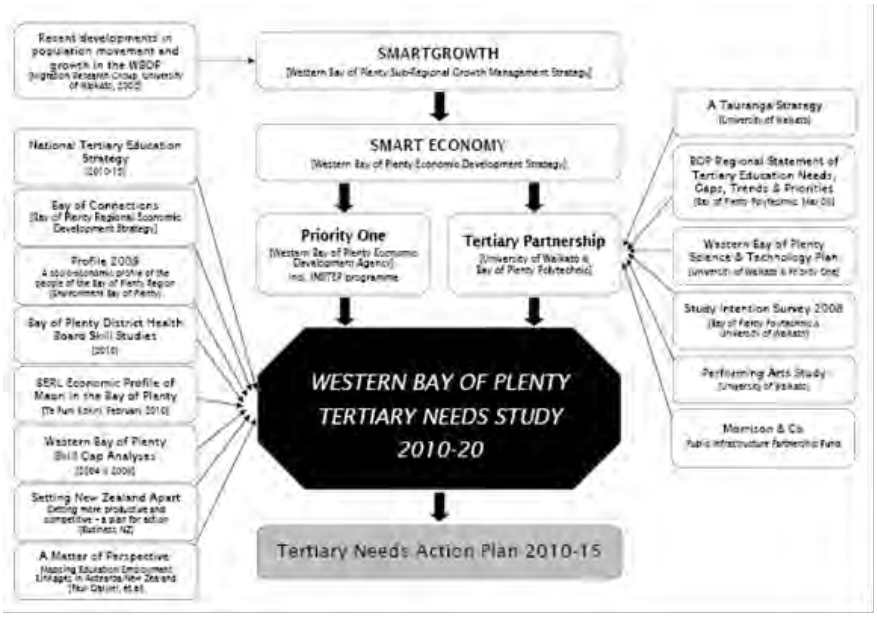
- Residential Land Research
- Business Land Research
- Natural Hazards Research
- Infrastructure Research

BOP TERTIARY EDUCATION AND RESEARCH ACTION PLAN 2010-2015

October 2013

This Action Plan looks predominantly at tertiary provision in the Western Bay of Plenty sub-region. The overall goal of the plan is to improve tertiary education and research provision and outcomes for the wider Bay of Plenty region. The plans vision is to provide 'High-quality, regionally relevant tertiary education and research underpins the economic and social development of the Bay of Plenty region.' The plan contains three key action areas: regional collaboration, target priority sectors and groups, and develop and innovative ecosystem.

What this Looks Like



Key Points

This action plan gives effect to and is based on the following:

- New Zealand Tertiary Education Strategy;
- The Review of Tertiary Education Needs for the Western Bay of Plenty Region: 2010-2020; and
- A range of economic development and growth management strategies and actions.

Key issue areas requiring government support:

1. The under provision of tertiary education is reflected in the outward migration of people in the 18-25 demographic.
2. Lower than average participation in tertiary education within the region. Statistics show that those living in the Western Bay of Plenty are close to average in their educational and vocational qualifications, with the exception of university qualifications, where they lag behind.

3. The region's economy is predominantly low skill/low wage.
4. Māori males in the region experience low levels of participation in tertiary studies.
5. Current funding caps do not take into account the significant growth in both enrolments and the region in general.
6. On-going skill shortages indicate there is a need to further align tertiary programmes with business needs.
7. High proportion of 'micro' businesses within the region without resources to invest in up-skilling and re-training staff.
8. There is a critical need for research and development to support the region's key sectors.

Tertiary education is under-resourced and has traditionally been an 'export' industry within the sub-region. The result has been a relative absence of young adults and a relatively low incidence of tertiary qualifications in the population. This has been, and continues to be, an impediment to economic growth.

Populations with higher qualification levels tend to lead to more prosperous regions. Bay of Connections strategy acknowledges that economic growth has been above the national average and will continue to be so, the region's economic base is essentially low skill and low income. To assist in achieving a more prosperous future "the economy needs to be transformed into one that is high value, high income, innovative and export-led. This means enhanced investment is needed in tertiary education, research and development, as well as a focus on basic numeracy and literacy to up skill the whole workforce".

What this Means

Targeted provision of tertiary education and research initiatives outlined in this paper will help overcome the problems listed above, and contribute significantly to improvements in regional and national productivity. The plan also shows progress against those actions.

During 2006 a Deed of Cooperation between the Bay of Plenty Polytechnic and the University of Waikato was approved by the Councils of both institutions. The Bay of Plenty Tertiary Education Partnership (BoPTEP) was formed under the Deed and first met on 21st April 2006. The deed was renewed in 2009 and includes representation from SmartGrowth.

The research action plan reviews a number of documents and details actions which need to occur for a new tertiary institution.

The University of Waikato and the Bay of Plenty Polytechnic have consulted extensively with key stakeholders in the region. On the basis of the consultation and the analysis of market research, the following high level needs were identified:

- comprehensive, post-secondary education and training;
- broad spectrum research capabilities and advanced practice;
- access to research-related global networks relevant to commerce, industry and the professions in the region;
- early identification, protection and commercialization of intellectual property generated by business and industry in the region;
- a shared approach to recruitment of international students.

Bay of Connections actions included:

- support the development of a coordinated statement of regional tertiary education needs and a collaborative regional tertiary education strategy and provision for the region, including all tertiary providers;
- promote sector-focused tertiary education and research;
- maintain collaborative relationships between education providers, key industry sectors, business support organisations and local government.

The Review of Tertiary Education Needs for the Western Bay of Plenty Region key recommendations of the study included:

- the development of a commonly shared, collaborative vision and the action plan to guide strategic

investment and align the delivery of programmes to meet regional needs and enhance economic activity and community outcomes;
- on-going work to ensure prospective learners are aware of the region's tertiary education and training opportunities;
- continued linkages into key sectors of the community to ensure tertiary education training and research meets business and community needs;
- higher level tertiary training and research initiatives in the following sectors are opportunities in which the region would strengthen its competitive advantages:
  - aquaculture
  - environmental management (including coastal, urban and freshwater sciences)
  - food and horticulture
  - information and communications technology logistics and supply chain
  - powder metallurgy
  - health and wellbeing
  - tourism
  - performing arts and music
  - business practice
  - law
  - education.

The following actions have been identified to assist in developing an innovative eco-system supporting high quality regionally relevant tertiary education that drives innovation in the Bay of Plenty:

- improve secondary school transitions
- increase provision of leadership / organisational transformation training (including Māori economic potential)
- increased collaborative efforts to attract international students
- provision of a 'one stop shop' website for all locally provided programmes and courses
- clustering of training and research into key industry sectors to develop centres of excellence.

Confidence

Medium. The document highlights key issues and progress made towards addressing them. It also summarises key outcomes from other documents.

The key assumption is that students currently go elsewhere for tertiary education and that if a facility was located in the region more students would stay and attend. Once education is completed it is anticipated that the former students would stay and secure high paid positions and contribute to the economy.

Statistics provided were based on former strong population forecasts which aren't reflected in the 2013 census.

It should be noted that a new Tertiary Action Plan will be developed for the whole BOP region in 2014. It is unclear whether this will supersede this one or whether it will cover a different area.

References

Issues sourced from: Your Bay of Plenty – Regional Business and Central Government Economic Forum, 2007

New Zealand Tertiary Education Strategy

A Review of Tertiary Education Needs for the Western Bay of Plenty Region: 2010-2020

Smart Growth – Western Bay of Plenty Sub-Regional Growth Management Strategy

Your Bay of Plenty – Regional Business and Central Government Economic Forum, 2007

THE DEMOGRAPHIC FORCES SHAPING NEW ZEALAND'S FUTURE.WHAT POPULATION AGEING [REALLY] MEANS.

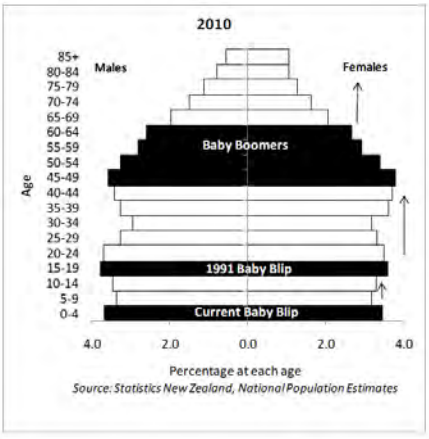
November 2013

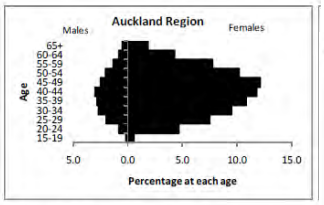
This National Institute of Demographic and Economic Analysis, University of Waikato paper outlines the key demographic forces shaping New Zealand's future. It ranges broadly across birth rates, life expectancy and migration to show how this converging demography will result in a regionally-disparate future. It identifies a migration-driven bite in New Zealand's age structure across the young adult ages, which is pronounced in non-urban areas. The analysis argues that while rural regions have long lost young adults and the sun-belt regions gained older populations, what differs is that this phenomenon is now occurring alongside population ageing, rendering such age structures as no longer conducive to growth. The converging trends will not only make responding to baby boomer retirement more difficult, but will increase competition for workers and push up labour and consumption costs. With the exception of larger urban areas and some retirement zones, it shows that sub national growth in much of New Zealand, has already ended and that this scenario will continue to unfold until zero growth or population decline embraces all but the major urban areas.

What this Looks Like

Age Sex Structures for Selected Industries.2006 Statistics NZ Customised Census Database, Industry (ANZSIC96 V4.1) and Status in Employment by Age Group and Sex

Figure 6: Age-Sex Structure, New Zealand, 2010





A012 Grain, Sheep and Beef Cattle Farming

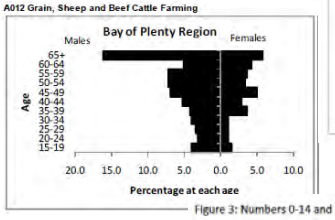


Figure 2: Projected change by age group, 2011-2016 and 2011-2026 (Medium Series).

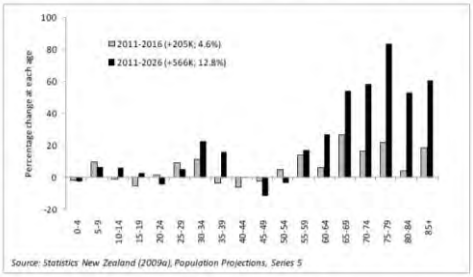


Figure 3: Numbers 0-14 and 65+ years, Observed and Projected, New Zealand 1901-2061

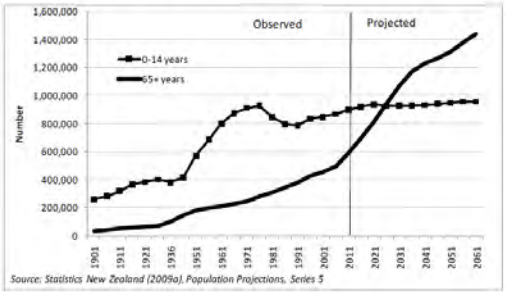
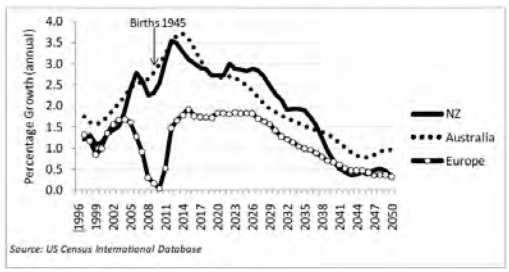


Figure 5: Projected annual increment in 65+ year old population, New Zealand, Australia and Europe



Key Points

This paper outlines the issues and their implications. It argues firstly that New Zealand has already entered a demographically-tight labour market that will see increasing competition for workers, and increased labour and consumption costs. This labour market 'tightness' will last for at least 15 years, at which time a brief respite may arrive, in the form of a modest baby blip. New Zealand's ability to survive to and beyond that date will depend very much on the investment it makes in these young people - and those who are currently children and youth - in the ensuing period.

Secondly, the analysis argues that New Zealand is facing the permanent end of population growth in many of its regions and that this concomitant process is poorly understood and will make responding to baby boomer retirement and ageing even more difficult.

What this Means

With the exception of larger urban areas and some retirement zones, it has shown that sub-national growth in New Zealand has all but ended. There is academic debate as to whether regional population decline will cause a problem. Some argue that it won't unless coupled with national decline; others argue that it will because it is coupled with population aging.

In the short to medium term, young New Zealanders will be in ever-shorter supply and ever-greater demand, as each successively larger cohort of baby boomers retires and is replaced by a successively smaller cohort of labour market entrants. The 'bite' in the age structure between the two groups will see an ensuing competition for labour market participants (both here and globally), that will arguably result in higher wages, causing labour and consumption costs to increase.

This will occur first and most profoundly in the non-urban regions, where the reducing labour supply and population-ageing side of the population growth will end. These dynamics have been unfolding sequentially and inexorably over the past 15 years, and will continue to unfold more rapidly from this year, as population ageing accelerates, until zero growth or population decline occurs in all but the major urban areas.

The social realities of a population ageing, will also become apparent at the local level, which is where labour has to be found, services delivered and revenue gathered. Many responses to population ageing need to be directed at the local level, and all need to take into account the specific drivers of each region's demography:

- numerical ageing potentially exacerbated by an influx of retirees;
- structural ageing potentially exacerbated by net migration loss of youth; and
- natural and/or absolute decline accelerated by either or both.

Finally, New Zealand's ability to respond to its ageing population depends very much on its investment in its youthful population. The currently 'larger' youthful cohorts (aged 15-19 years and also those being born) are the last that New Zealand is assured of. The size of future birth cohorts – even if fertility rates increase – will depend very much on the size of the reproductive age population, which stands to be further diminished by emigration. Future fertility levels will also be potentially reduced if the taxation burden on young New Zealanders is greatly increased, thereby accelerating structural ageing. Investment in New Zealand's particularly youthful Māori population will be critical on all counts.

Confidence

Medium-High. This is an academic paper and would have been subject to academic rigour prior to publication. The study includes references for all statements made. The majority of statistics used were sourced from Statistics NZ and were based on medium or high growth scenarios. Recent Census 2013 figures indicate that growth has occurred at a slower rate than anticipated.

References

Cameron, M., Barrett, P., Cochrane, W., McNeill, K. (2010) "Agricultural change and

social sustainability in rural New Zealand" The International Journal of Environmental, Cultural, Economic and Social Sustainability, 6(3)77-91.

Jackson, N.O. (2006) "When is a baby boom not a baby boom? Nine points of caution when interpreting fertility trends" People and Place, 14(4)1-13.

Jackson, N.O. (2007) "Population ageing in a nutshell: a phenomenon in four dimensions" People and Place, 15(2)12-21.

Jackson, N.O. (2010) "Towards a theory of incipient decline. A Trans-Tasman perspective" Presentation to Australian Population Association Biennial Conference, Gold Coast, December 1-3.

Jackson, N.O. (2011) "Māori and the *potential+ demographic dividend" NIDEA Working Paper No 2, National Institute of Demographic and Economic Analysis, University of Waikato.

Jackson, N.O. and Felmingham, B. (2002) "As the population clock winds down. Indicative effects of population ageing in Australia's States and Territories" Journal of Population Research, 19(2)97-117.

Lee, R.D. and Reher, D. (eds.) (2011) Demographic Transition and its Consequences, Population and Development Review, Supplement to Volume 37, New York, Population Council: 219 222).

Pool, I., Baxendine, S., and Cochrane, B. (2004) "Components of Regional Population Growth, 1986-2001" PSC Discussion Paper No 44, Hamilton, University of Waikato.

Pool, I., Baxendine, S., Cochrane, B., and Lindop, J. (2005a) "New Zealand Regions, 1986-2001: Population Dynamics" PSC Discussion Paper No 52, Hamilton, University of Waikato.

Pool, I., Baxendine, S., Cochrane, B., and Lindop, J. (2005b) "New Zealand Regions, 1986-2001: Population Structures" PSC Discussion Paper No 53, Hamilton, University of Waikato.

Pool, I., Baxendine, S., Cochrane, B., and Lindop, J. (2005c) "New Zealand Regions, 1986-2001: Population Geography" PSC Discussion Paper No 54, Hamilton, University of Waikato.

Pool, I., Baxendine, S., Cochrane, B., and Lindop, J. (2005d) "Description and Spatial Analysis of Employment Change in New Zealand Regions 1986-2001" PSC Discussion Paper No 57, Hamilton, University of Waikato.

Pool, I., Baxendine, S., Cochrane, B., and Lindop, J. (2006a) "New Zealand Regions, 1986-2001: Labour Market Aspects of Human Capital" PSC Discussion Paper No 60, Hamilton, University of Waikato.

Pool, I., Baxendine, S., Cochrane, B., and Lindop, J. (2006b) "New Zealand Regions, 1986-2001: Dependency and Development of Social Capital" PSC Discussion Paper No 62, Hamilton, University of Waikato.

Statistics New Zealand (various years) National Population Estimates.

Statistics New Zealand (various years) Subnational Population Estimates, 30 June.

Statistics New Zealand (various years) Births.

Statistics New Zealand (various years) Demographic Trends.

Statistics New Zealand (various years) Abridged Life Tables.

Statistics New Zealand (2009a) Projected Population of New Zealand by Age and Sex (Base -2061).

Statistics New Zealand (2009b) Projected Population Structure and Components of Territorial Authority Areas, 1996-2031 update (2006-Base).

Statistics New Zealand (2009c) Live Births, Total and Māori, Quarterly.

Statistics New Zealand (2011a) Subnational Population Estimates by Age and Sex, 30 June 2006-2010

Statistics New Zealand (2011b) Estimated Resident Population at 30 June (1996+), Table DPE052AA.

Teitelbaum, M.S. and Winter, J.M. (1985) "Population dynamics and policies, 1945-64" The Fear of Population Decline, Orlando, Academic Press, Inc: 63-79.

TV 3 (2011) The Baby Boomers, The Nation, May 14th.

van der Gaag, N. (1999) “Regional population decline in EU. Recent trends and future perspectives” Statistics in Focus. Theme 1 (3), The Hague: Netherlands Interdisciplinary Demographic Institute/Eurostat.

van Nimwegan, N. and Heering, L. (eds) (2009) English Translation (Rose, R) “Population decline and policy” Population Issues in the Netherlands (WPRB), Demos, Vol 26, Special Issue: 12-16.

Zodgekar, A. and Khawaja, M. (2002) “Population dynamics and compositional changes in New Zealand’s population” Joint Special Issue, Journal of Population Research/New Zealand Population Review: 137-150.

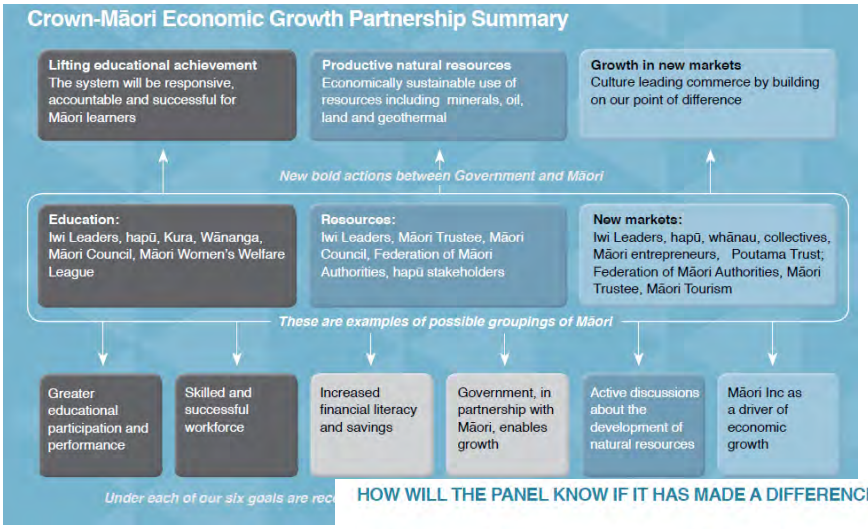
HE KAI KEI AKU RINGA - THE CROWN-MĀORI ECONOMIC GROWTH PARTNERSHIP

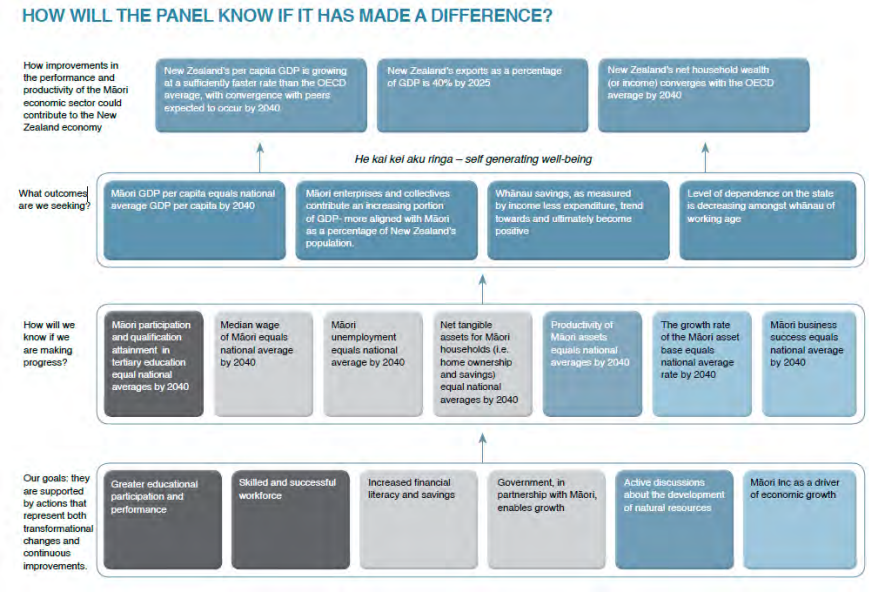
November 2013

The aim of this strategy is to develop a more productive, innovative and internationally connected Māori economic sector to deliver prosperity to Māori, and resilience and growth to the national economy. This will be achieved by lifting per capita income and improving export performance, which will lift the Māori contribution to the New Zealand economy and improve quality of life for Māori and all New Zealanders.

The vision for Māori economic development is he kai kei aku ringa – literally, to provide the food you need with your own hands.

What this Looks Like



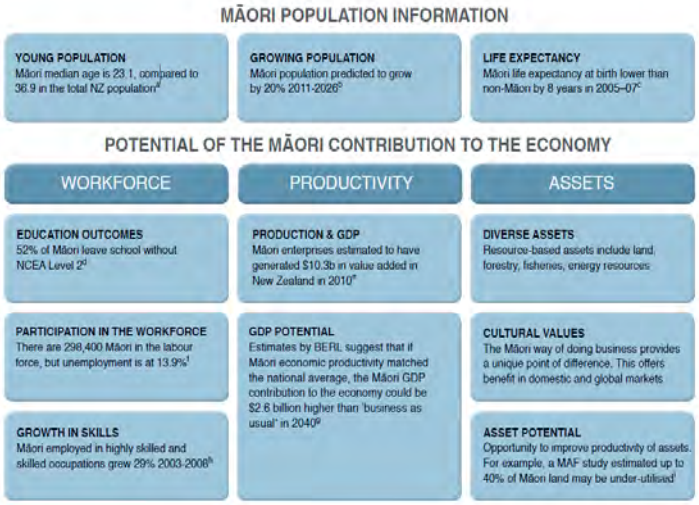


Key Points

A new approach is proposed that is Whanau centric and the concept of Māori Inc – Māori Leaders.

There has been a change in conversation among Māori and other stakeholders – with less focus on social services and interventions than in previous kōrero, and instead, a stronger spotlight on and interest in economic opportunities.

Addressing socioeconomic outcomes will be critical.



What this Means

The strategy identifies three key transformational changes needed including:

1. Education – Government and Māori work together to consider new models of compulsory schooling that better meet Māori needs.
2. Natural Resources - Government and Māori accelerate discussions on the development of natural resources.
3. Māori working together to drive growth - Build relationships and manage logistics in export markets, particularly China.

In order to achieve economic growth Māori need the right skills and education, effective institutions, access to resources and capital, and the ability to innovate. An action plan has been developed for this strategy that sets out six key goals for lifting the Māori contribution to the economy to 2040, with practical recommendations for each between 2012 and 2017.

- Greater educational participation and performance
- Skilled and successful workforce
- Increased financial literacy and savings
- Government, in partnership with Māori, enables growth
- Active discussions about development of natural resources
- Māori Inc as a driver of economic growth

Confidence

High the report is undertaken by a Government agency. Demographics are based on Statistics NZ data (refer to references), economic statistics are sourced from BERL, Statistics NZ Labour Force Survey 2012 and TPK Summit information.

52% of 2010 Māori school leavers left with qualifications below NCEA Level 2. Data provided by Ministry of Education.

References

BERL (2011). The Asset Base, Income, Expenditure and GDP of the

2010 Māori Economy.

Māori median age: Statistics New Zealand.

Māori Population Estimates: at 30 June 1991-2011.

NZ median age: Statistics New Zealand.

National Population Estimates: March 2012 Quarter. Statistics New Zealand (2008). National Ethnic Population

Projections: 2006 (base)-2026. Statistics New Zealand. New Zealand Life Tables 2005-2007.

BERL (2011). The Asset Base, Income, Expenditure and GDP of the

2010 Māori Economy. Wellington, New Zealand.

Statistics New Zealand (2012). Household Labour Force Survey: March 2012 quarter.

Information provided by BERL (2012).

Te Puni Kōkiri (2009). Moni Utunga Māori: Māori earnings. Information

Sheet for Māori Economic Summit. Wellington, New Zealand.

Ministry of Agriculture and Fisheries (2011). Māori Agribusiness in New Zealand: A study of the Māori freehold land resource.

The MAF report on Māori agribusiness in New Zealand.

Ministry of Economic Development, Treasury and Statistics New Zealand (2011). 2011 Economic Development Indicators.

4 Statistics New Zealand (2012). Youth not in employment, education or training: September 2011 quarter.

THE STATE OF READINESS OF THE BOP'S LOCAL GOVERNMENT INFRASTRUCTURE

September 2013

There are two main growth options to achieve the government's growth targets: drive growth through a resource-lead development scenario, or lead growth by attracting people to the Bay of Plenty's natural qualities. A resource lead focus may require further investment in roads, ports and broadband infrastructure to optimise transport advantages in the west and could involve further development of high-end tourism in Rotorua (and roading improvements to support). The future of Whakatāne appears linked to the development of industrial capacity at Kawerau and a potential sea-food industry in Ōpōtiki – which requires a range of flow-on infrastructure improvements.

An environment-lead scenario requires greater investment in public infrastructure such a busses connecting places within the Region to high quality amenities and development typologies to protect and make the most of the Region's natural assets. Great care is required to ensure growth leverages existing natural advantages.

What this Looks Like

Kawerau has a surplus of infrastructure and declining population. High rates of growth in the west are placing pressure on existing infrastructure and creating financial pressures there. The east has vulnerabilities such as security of energy supply (Edgecumb sub-station).

Infrastructure investment at Ōpōtiki could address many concerns there (substantial funds have been committed to deepen the harbour to accommodate aquaculture). Forestry dominates primary industry in Rotorua and Kawerau, Fishing dominates primary industry for Tauranga. Whakatāne/Ōpōtiki may grow their fishery.

Tauranga and WBOPD will continue to grow, Rotorua is less clear. Whakatāne DC is investing in infrastructure at Ōhope and Whakatāne to accommodate limited growth. Kawerau population growth is essentially static with capacity to grow while Ōpōtiki is appears to be in population decline – and has stormwater issues at times of flood.

Generally, infrastructure is adequate in Rotorua but funding remains a challenge in Tauranga. The east has obvious synergies with Kawerau having surplus employment land, Whakatane having obvious locational appeal and Opotiki being poised for growth in the seafood sector – but having infrastructural challenges and, perhaps, a need to work more collaboratively with Whakatāne to provide housing.

What this Means

Population densities across the Bay are relatively low and employment density in Tauranga peaks at about 55 people per Ha – comparable with Hutt city but below inner Auckland. Growth remains focussed on the West, with population growth in Rotorua essentially static and some parts of the east in decline. The bay has a relatively old population – but Rotorua stands out with comparatively more younger residents.

Recent growth appears to have been at the expense in individual's purchasing power which shrunk in 2009; the Region remains exposed to external shocks due to its strong export focus.

Agriculture accounts for 45% of the regions employment and per employee is a very high output sector.

The "form" of our cities is not good and may be insufficient to attract, retain and promote the level of growth required under the governments growth agenda. "Step" change is required to produce the quality environment required.

Key Drivers

Infrastructure investment cannot be assumed to flow into improved productivity, particularly where infrastructure is substantially complete. However, investment in transport infrastructure can lead to productivity improvements through increasing employment density/urban agglomeration – in Auckland income elasticity of 3% with density has been found. It is, however, important to look wider than the infrastructure fix being proposed to see whether other limitations are constraining growth.

Growth will drive infrastructure spend and creates opportunities to further optimise infrastructure and achieve efficiencies. So, arguably, growth could be seen as an opportunity – not just a financial challenge.

Alternatively, in order to grow the economy one must attract high-value workers and provide an environment conducive to wealth generation. High quality urban form and increasing densities may be important pre-requisites in as much as they reflect a healthy economy as they drive efficiencies, information sharing and active communication. Sprawl can impose substantial costs on the wider economy through the need for extensive infrastructure and commitment to ongoing maintenance. The direct drain on the economy of unproductive and costly travel can be substantial. A shift change towards a new mixed-use, intensive paradigm is required.

Confidence

Moderate. The forecasts are built on the BERL economic model which assumes predictable rates of employment within industries as the economy grows. However, a number of factors can undermine these predictions - such as government policy, step-transformations in a particular industry and perturbations like disease or financial stress.

References

The State of Readiness of the BOP's Local Government Infrastructure for Growth: BERL August 2011.

TRANSPOWER ANNUAL PLANNING REPORT 2013

November 2013

Transpower is the owner, operator and planner of the National Grid – the high voltage electrical transmission system that stretches across both North and South Islands, connecting generation sources to local substations that serve rural and urban customers. The National Grid also facilitates the competitive wholesale electricity market.

The purpose of this report is to signal proposed and possible transmission investments to provide greater certainty to market participants about Transpower's transmission planning process so that they can confirm their own.

The report identifies existing National Grid capabilities, demand and generation forecasts for the next 10- 15 years and the ability to meet future demand and generation needs; the role of the transmission grid in facilitating generation; future investment required to meet these needs through grid backbone transmission plans for the main North Island and South Island transmission corridors, and for the HVDC link and 13 regional plans.

What this Looks Like

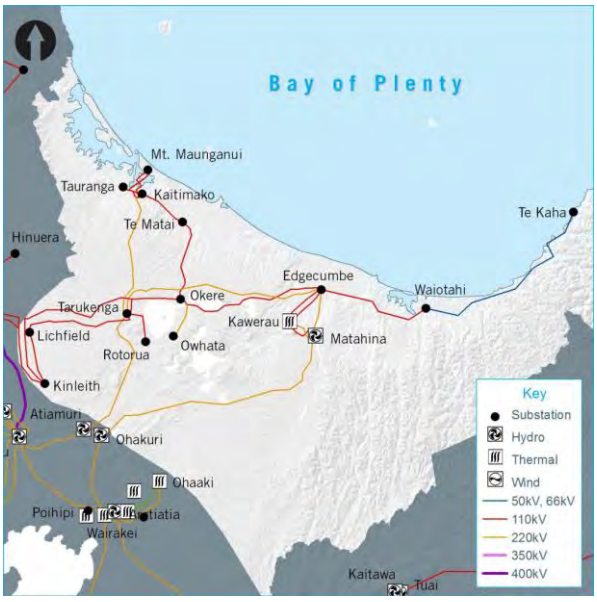


Figure 10-2: Bay of Plenty transmission schematic

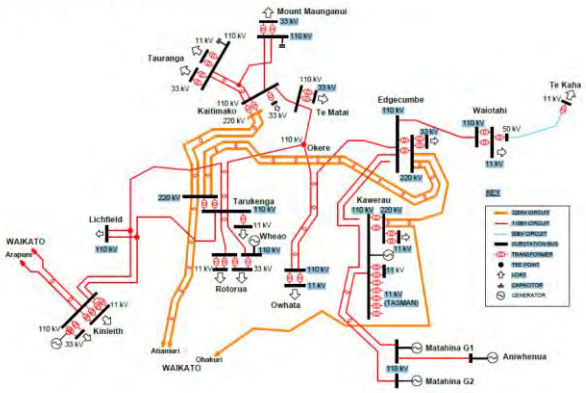
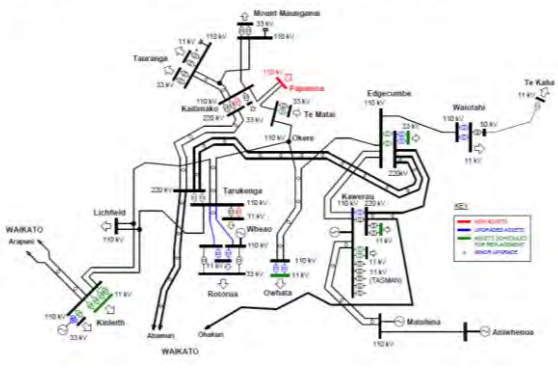


Figure 10-4: Possible Bay of Plenty transmission configuration in 2028



Key Points

The demand growth rate has flattened (due in part by new consumer technologies and increasing energy efficiency) from 548 MW in 2013 to 660 MW by 2028. The average demand in the Bay of Plenty Region is 1.2% per annum (lower than the national average 1.5%) and the current generation capacity is approximately 388 MW, with a 160MW deficit which is imported through the National Grid during peak load conditions, with any surplus exported during light load conditions.

Even with a reduced demand for electricity, where and how electricity is generated will change. Older uneconomic generation is being retired and new generation will be developed close to where the resource is –where it is geothermal, wind, gas or hydro. The reliance on renewable energy sources will remain for many years.

Transpower have advised that the projects identified in this report will enable the grid to meet forecast demand and solve the grid related issues predicted to occur over the next 10-15 years and assist in optimising investment.

What this Means

In the Bay of Plenty smaller upgrade projects and incremental changes are proposed. Where there is less certainty over future transmission capacity, investment in newer technologies is making operations more efficient.

There is also a low capacity connection issue 110 kV Tarukenga–Kinleith–Arapuni connection. This connection is presently split at Arapuni to prevent it overloading.

Transpower are also discussing with Powerco and Unison options to increase the: capacity into and around Rotorua which may involve line upgrades between Tarukenga and Rotorua and/or new supply transformers at Rotorua and Owhata; and supply security by building a new grid exit point at Papamoa to alleviate load growth at Mount Maunganui.

Generation and interruptible load connected directly or indirectly to the Kawerau 110 kV bus must sometimes be constrained to prevent overloading of the 220/110 k transformers. An interim reconfiguration has occurred of the 110 kV grid between Edgecumbe, Kawerau and Matahina to allow greater generation export. The interim grid reconfiguration applies until the Kawerau–T12 transformer is replaced with a higher-rated transformer in early 2014. This will relieve the existing generation constraints and allow for a small increase in future generation injecting into the Kawerau 110 kV bus.

Other long-term planning for recent projects has indicated a range of possible developments in the 10-20 year range.

In the longer term, one possible development is a connection from north of Tauranga to the existing Waihou substation in the Waikato region. This may be required to meet long-term load growth in the 'fast-growing' Tauranga area, and improve security during maintenance outages.

The Plan notes that there is the potential for significant additional geothermal generation in the eastern Bay of Plenty area, around Kawerau. If significant generation eventuates, then a staged transmission capacity upgrade will be required.

Confidence

Medium – High. The document states its assumptions and acknowledges that there are uncertainties in transmission planning, and forecasting future electricity demand is a continuing challenge. Using the Electricity Commission demand forecasts Transpower use a top down approach developed in 2011 was used to derive national and regional peak demand forecasts and a bottom up approach to derive individual GXP peak demand forecasts.

The peak demand forecast represents a prudent forecast that has a probability of exceedance (POE) of 10% until 2018, and then is assumed to grow at a mean growth rate.

An underlying assumption is that growth in Tauranga will be fast paced. This should be revised based on recent 2013 Census projections.

Transpower have developed a new set of generation scenarios for use in this work. They are broadly consistent with the scenarios published in the Electricity Commission's 2010 Statement of Opportunities.

References

Electricity Commission's 2010 Statement of Opportunities.

Transpower Annual Planning Report 2013

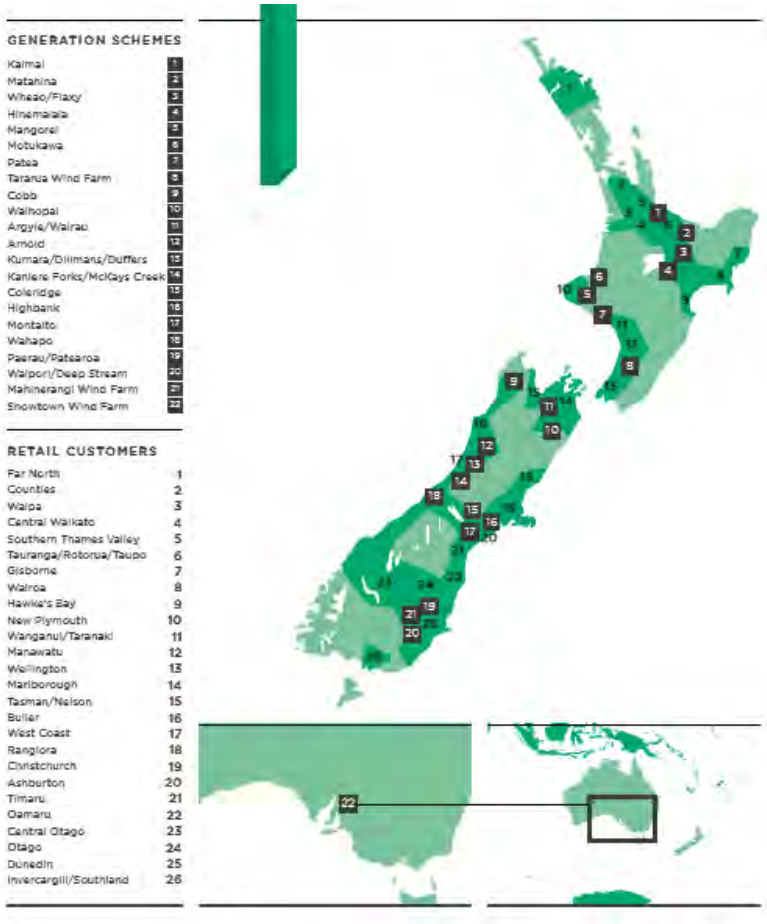
TRUSTPOWER

November 2013

A meeting occurred with Laura Marra (Senior Planner) and Peter Lilley (Hydro Development and Strategy Manager) TrustPower on 1st November 2013. The results of the meeting are recorded here along with information for the TrustPower 2013 Annual Plan. TrustPower provide 6% of the total electricity produced in NZ and have 50% of schemes (36 small to medium sized), providing 65% of hydro energy in NZ.

TrustPower's goal is to be recognised as a leading supplier of utilities at home and beyond our shores. To achieve this TrustPower has three key strategic areas of activity. These are New Zealand energy markets, irrigation and water markets and Australian renewable energy.

What this Looks Like



Key Points

TrustPower own 630MW of hydro and wind generation spread throughout New Zealand and the 100MW Snowtown Wind Farm in South Australia.

They produce an average of 2,800GWh per year, supplying electricity to around 206,000 customers and providing 43,000 telecommunications services to 26,000 customers throughout New Zealand. TrustPower have 481 full time equivalent employees working throughout New Zealand and three employees in Adelaide. Around 65% of New Zealand employees are based in our Tauranga head office which will remain here.

The BOP region is a net importer of energy.

Energy provision is 50/50 residential and industrial split (excluding Te Wai which makes up approximately 15%). There majority of TrustPower consumers are aging rural and organisation are now targeting Generation X & Y and shifting to an urban retailer. Competition is higher in this market and they can't compete on pure energy so their strategy is 'multi products'.

Modest population growth, the increased number of appliances in bigger homes has been offset by increasing household energy efficient appliances.

Climate change is a big issue. Balancing the entire network is now routine given the volatility. 'Normal is no longer normal, abnormal is normal'. Plants need to be flexible and additional storage required e.g. Rangitaiki.

There has been no increase in demand for the past 6 years. However, demand for energy is not increasing but more resources are required to provide the same amount.

Temperatures are increasing and equalising through summer and winter. This is an issue because typically electricity supply timing correlated to demand periods, with demand spreading supply may not be able to be met.

Total generation in New Zealand was lower than the previous year with hydro production close to the long term average and wind production below the long term average. In Australia our Snowtown 1 Wind Farm output was close to the long term average. Projects are being put on hold e.g. the proposed small hydro investment at the Arnold Power Scheme.

What this Means

Increasing challenges with volatile weather. Energy security is a key priority.

There are only modest opportunities for new assets and enhancing existing assets in the region. There is a new hydropower opportunity.

There is geothermal potential to add into the national grid but this has transmission requirements.

There is future potential for solar energy in the next 20 years for homes and as sites.

Confidence

Medium. Part of the information provided was sourced from the most up to date annual plan which needs to be accurate for auditing purposes. Also trends discussed included climate change challenges, stable demand are recurring energy sector themes.

An assumption stated during the meeting was that the national headquarters will remain in Tauranga in its current location.

References

None stated

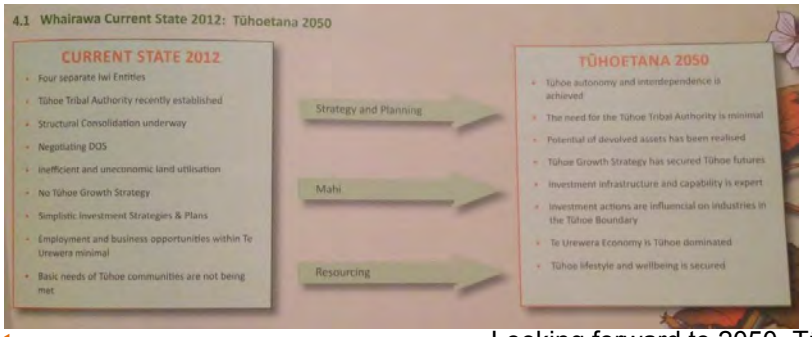
TUHOE ANNUAL PLAN 2012-2013

November 2013

This annual plan provides a path of how to achieve the vision of Tūhoe vision *'the permanency of Tuhoetana*

through Te Mana Motuhake o Tuhoe'e' through the identification of key prioritised actions, associated risk, engagement required, and timeframes.

What this Looks Like



Key Points

Key areas of work in 2012:

1. Build the Tūhoe Cultural Heritage Repository and confirm systems which enable a collaborative information storage.
2. Construct and imbed succession strategies.
3. Formulate, plan and build the Te Uru Taumatua Information Framework.
4. Strengthen Tūhoe Tribal capability and responsibility of Te Urewera.
5. Formulate a Tūhoe biodiversity stocktake of Te Urewera.
6. Build Tūhoe rural planning capability.
7. Fortify Tūhoe representative institutions for quality decision making.
8. Return a Tūhoe system of self-sufficiency.
9. Raise Tūhoe economic potential.
10. Establish Te Uru Taumatua capability.

What this Means

Looking forward to 2050, Tūhoe will:

- Have fully integrated blueprint plans and information networks to build the capability of the organisations and tribe.
- Be responsible guardians and can give back to the land.
- Have measures in place which replenish Te Urewera for future generations of Tūhoe.
- Have tribal communities that can lead and provide for their own needs.
- Have Tūhoe institutions that can replenish themselves naturally and with strength.
- Dominate Te Urewera economies.

Confidence

NA this is an aspirational document. Made on the basis of current resources.

References

None stated.

UPPER NORTH ISLAND FREIGHT STORY – SUMMARY OF CRITICAL ISSUES

October 2013

This document summarises the critical issues of the Upper North Island (UNI) Freight Story which is a collective partnership approach with an upper North Island 'freight lens' used to determine issues or areas that are limiting the ability to 'reduce the cost to do business in New Zealand.' The story also supports informed decision making on key land use, infrastructure and investment, to improve economic performance of the UNI and New Zealand.

Freight efficiencies will result in cheaper goods for New Zealanders, a competitive advantage for importers and exporters with better and more reliable access to new or existing markets potentially growing trade, creating new business opportunities and growing our wealth and economy.

What this Looks Like

Key Points

The upper North Island of New Zealand is critical to New Zealand's economic success. More than 55% of New Zealand's freight travels through the Northland, Auckland, Waikato and Bay of Plenty regions, and collectively these regions generate over 50% of New Zealand's gross domestic product and contains just over half the population

The freight task in the upper North Island is predicted to double by 2035 from 126M tonnes. Despite these big numbers, the Upper North Island Freight Story (the Story) points to New Zealand being able to respond by a process of evolution and not revolution to this growth.

Freight efficiencies will result in cheaper goods for New Zealanders, a competitive advantage for New Zealand importers and exporters with better and more reliable access to new or existing markets potentially growing trade, creating new business opportunities and growing our wealth and economy.

Seven critical issues are highlighted below, a number of actions have already been undertaken as

well as further actions agreed. A shared evidence base has also been developed.

What this Means

The seven critical issues identified are the:

1. Strategic Road and Rail Network Constraints.
2. Delivery of the High Productivity Motor Vehicle (HPMV) programme – a coordinated whole of journey network approach needed.
3. Utilisation of industrial land and the need to understand the likely supply and demand for industrial land (amount, type and location) so public investment can be provided and appropriately staged.
4. Lack of strategic, integrated land use and transport planning and investment. A more strategic approach would increase certainty for industry and public sector agencies and support effective industry, local government and central government planning and investment.
5. Lack of shared and accurate data (e.g. freight flows, commodities, origins and destinations for both road and rail) means it is difficult for public agencies to make well informed, collective decisions about land use and transport planning and investment that will increase efficiencies for business and public investment.
6. Need to understand costs of freight supply chains for critical industries in the upper North Island in order to support development / alignment of initiatives by industry and the public sector to reduce the cost to do business.
7. Challenging local government and central government funding structures and requirements (i.e. legislation, policy and application) are hindering 'smart investment' decisions due to their multitude and complexity.

Confidence

High. A range of resources have been relied upon (those relevant to the BOP region have been included in references).

The assumption of the freight task doubling by 2035 is based on the UNI Freight Study Evidence Base (separate reviewed document).

References

Bay of Plenty Regional Council. 2011. Bay of Plenty Economic Development and Transport Study. Richard Paling Consulting, Ascari Partners and BERL.

Bay of Plenty Regional Council. 2011. Bay of Plenty Regional Land Transport Strategy 2011-2041.

Bay of Plenty Regional Council. 2008. Review of Reports on Railway Crossings on Tauranga Harbour. URS Corp

Kawerau District Council. 2012. Putauaki Structure Plan.

NZTA, Rotorua District Council & Bay of Plenty Regional Council. 2012. Draft Rotorua Integrated Network Strategy 2012-2042. Gray Matter.

NZTA and SmartGrowth. 2012. Draft Tauranga Urban Network Study.

Port of Tauranga. 2010. Port operations presentation to Regional Advisory Group. August

Rotorua District Council. 2012. Rotorua district industrial areas.

SmartGrowth. September 2012. Industrial Land Research. McDermott Consultants

Tauranga City Council. 2007. Tauranga City Centre Strategy.

Tauranga City Council. 2006. Rail Corridor from Kaimai Tunnel to Te Puke – Widening for Double Tracks. Opus

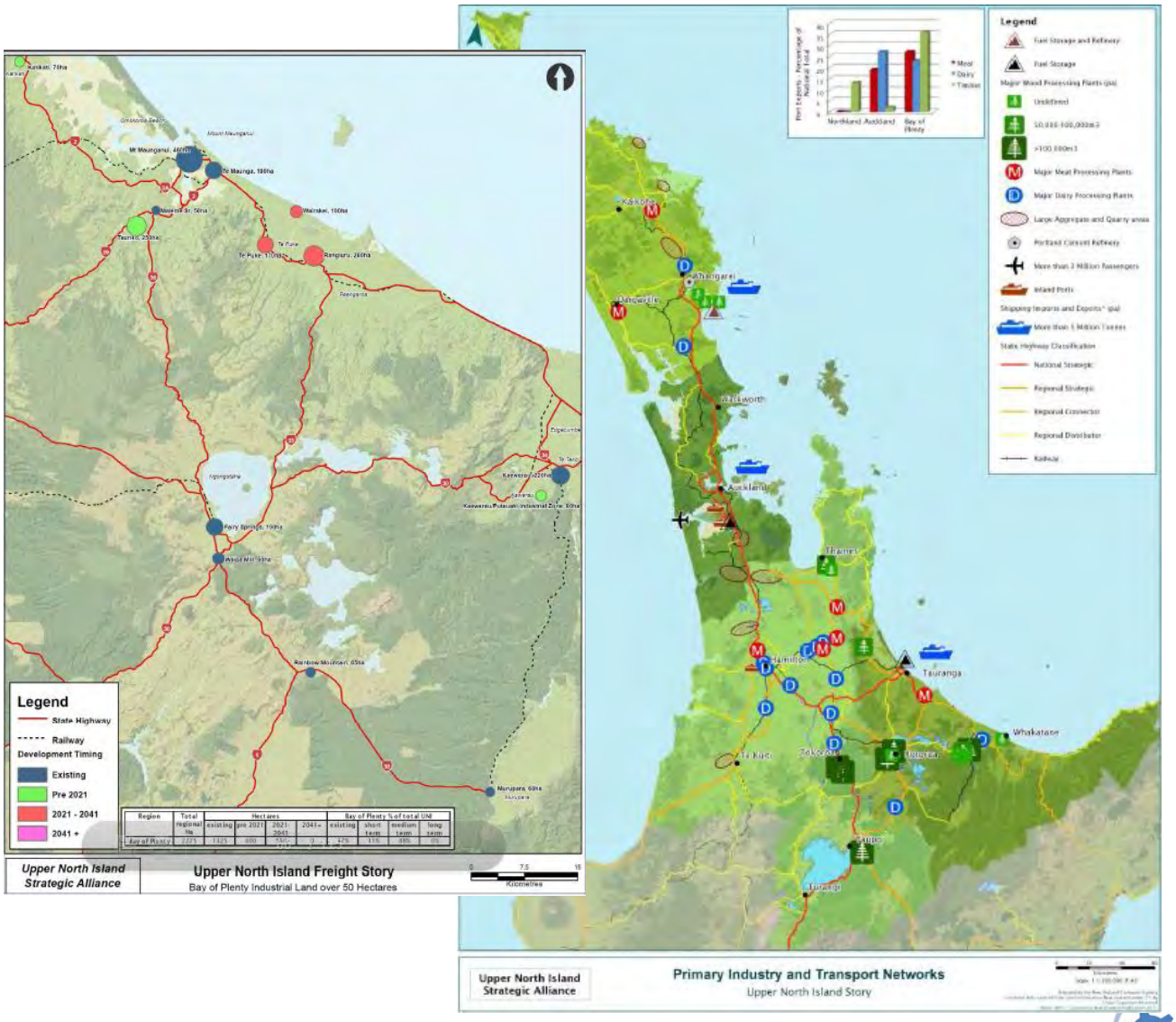
Whakatane & Kawerau District Councils. 2007. Whakatane and Kawerau Districts Industrial Land Strategy: Discussion Document. Property Economics.

UPPER NORTH ISLAND FREIGHT STORY – SHARED EVIDENCE BASE

October 2013

This is the supporting document for the Upper North Island Freight Story – Summary of Critical Issues, which includes the 'shared evidence base' for each of the identified critical issues. This document provides decision makers with information relating to the critical issues identified in the Story and will be used as a key reference for any relevant freight-related decisions by the partner organisations. The evidence base has been developed by the ten partner organisations within the Story, working and sharing information with other local government, industry, operator and port partners.

What this Looks Like



Key Points

There are seven critical areas with issues and actions four are focused on in this document:

8. Strategic Road and Rail Network Constraints
9. HPMV
10. Utilisation of industrial land
11. Challenging local government and central government funding structures

What this Means

1. Strategic Road and Rail Network Constraints

Infrastructure & Issue	Solution
SH1 Pokeno to Piarere (SH1/29) Primary freight route connecting Auckland and Waikato regions to Bay of Plenty and south. Conflicts between freight and local traffic in urban centres along SH1. Also includes HPMV structural constraint	Promote, develop and protect SH1 and SH29 as a strategic long term corridor connecting Auckland and the Waikato with the Bay of Plenty, including though protection of corridor options. Optimise use of available freight capacity on cross Kaimai routes via road (SH2/27, SH1/29 etc), rail (NIMT/ ECMT) and coastal shipping to determine best modal responses and timing. Proposed land use policy which identifies Future Proof industrial land allocation and staging
Tauranga Central Corridor Constraints on the expansion of key road freight corridors including to the Port of Tauranga. Mixing of freight and commuter traffic. Likely to increase in the future with the further development of the Port of Tauranga and projected freight and population increases.	Road network improvements for capacity and travel time reliability (SH29 Hairini Link Stage 4 design and construct and Maunganui-Girven intersection improvements design and construct included in NLTP 2012-15) Optimise staged development of land to south and west of Tauranga city. Integrated network improvements for capacity and travel time reliability in Northern Corridor.
Tauranga Central Rail Corridor Amenity conflicts and reverse sensitivity as train movements increase and CBD development continues. Shunting in CBD area caused by limited port rail capacity. Line failure would have major implications for the road network if freight was transferred to the road.	Short term: Port of Tauranga increasing rail capacity – underway. Medium to long term: Reverse sensitivities and CBD level crossings need addressing at local level.

2. Delivery of the High Productivity Motor Vehicle (HPMV) programme

HPV route Port of Tauranga (POT) to Taupo SH's 2, 33, 30 & 5 Kaituna River Bridge needs strengthening. Kawaunui Stream (Hickey's Bridge) and Waingaehe bridge need detailed assessment HPV route Kawerau to POT SH's 2 & 34 Kaituna River Bridge needs strengthening. Moores Bridge (Awatarariki Stream), Kaikokopu Canal (Mangatoetoe), Rangitaiki 49 Bridge - Class 1 needs detailed assessment.

3. Utilisation of industrial land

A stocktake of industrial land is included in this report. The Bay of Plenty has a diverse range of industrial land, ranging from the Port of Tauranga; general industrial parks and forestry sites. In total, there is approximately 2270 hectares of land over the study period, of which 70% is existing land. Within the SmartGrowth area there are several large under construction or proposed developments, namely Tauriko, Wairakei, Rangiuru and Te Puke. Industrial Bay of Plenty area with issues or specific infrastructure requirements include:

- Tuariko 250ha requires 3 waters.
- Wairaki 100ha requires 3 waters, extension of Te Okuroa Drive (10 years time) and Papamoa East interchange (15 years time). High cost of infrastructure an issue.
- Rangiuru 280ha requires 3 waters and TEL interchange, issues with significant cost of infrastructure. Private development and there is uncertainty around the level of demand for industrial land in this location.
- Te Puke 170ha requires 3 waters, new access roads and intersection with SH2 – currently unfeasible.
- Katikati 70ha requires 3 waters.
- Putauaki Industrial Zone 80ha, access to SH34 upgrades required. Rail future

crossing place, needs extension of reticulated mains water & wastewater.

4. Challenging local government and central government funding structures - evidence and analysis set can be found in the Central and Local Government Funding Structures for Land Transport Paper.

Confidence

High. A core assumption is that freight volumes will increase based on continued economic growth including the future ability for the POT to cater for larger ships.

All assumptions stated e.g. The amount of industrial land required for the WBOP sub-region to 2051 was estimated to be between 170ha (low scenario) and 520ha (high scenario). The high scenario is based on the SmartGrowth population projections being achieved (275,000 people at 2051 compared with approx. 160,000 today) and that imports continue to grow at the current rate. Note that the high scenario is substantially lower than long-term trends for industrial land uptake in the WBOP sub-region. Conceivably, industrial land needs may therefore be greater than the high growth scenario.

References

Bay of Plenty Regional Council. 2011. Bay of Plenty Economic Development and Transport Study.

Bay of Plenty Regional Council. 2011. Bay of Plenty Regional Land Transport Strategy 2011-2041.

Bay of Plenty Regional Council. 2008. Review of Reports on Railway Crossings on Tauranga Harbour.

Kawerau District Council. 2012. Putauaki Structure Plan.

NZTA, Rotorua District Council & Bay of Plenty Regional Council. 2012. Draft Rotorua Integrated Network Strategy 2012-2042. Gray Matter.

NZTA and SmartGrowth. 2012. Draft Tauranga Urban Network Study.

Port of Tauranga. 2010. Port operations presentation to Regional Advisory Group. August

Rotorua District Council. 2012. Rotorua district industrial areas.

SmartGrowth. September 2012. Industrial Land Research. McDermott Consultants

Tauranga City Council. 2007. Tauranga City Centre Strategy.

Tauranga City Council. 2006. Rail Corridor from Kaimai Tunnel to Te Puke – Widening for Double Tracks. Opus

Whakatane & Kawerau District Councils. 2007. Whakatane and Kawerau Districts Industrial Land

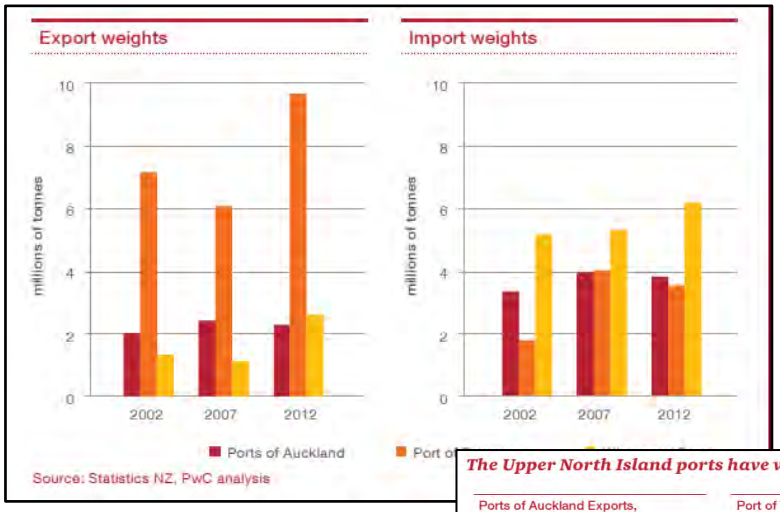
Strategy: Discussion Document. Property Economics.

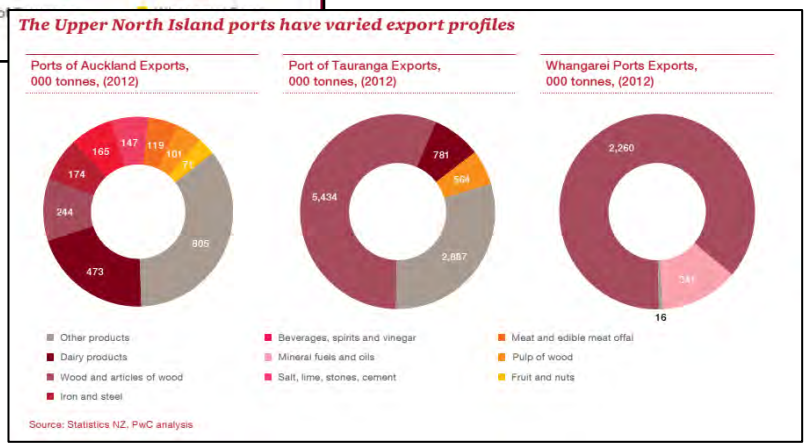
UPPER NORTH ISLAND PORT AND PORT-RELATED INFRASTRUCTURE SUPPLY AND DEMAND STUDY

September 2013

This report examines current and future freight demand, the capacity of key port and port related infrastructure supply to form a view of potential infrastructure investment requirements at the Upper North Island port network (covering the Port of Auckland, Port of Tauranga, and Whangarei sea ports) for the next 30 years.

What this Looks Like





Key Points

The ports are projected to experience strong growth over the next 30 years, due to continued growth in the trade of primary products, and the on-going development of transhipping at POA and POT. At POT, container throughput is expected to grow by between 2.5% and 3.1% per annum over the period. Bulk throughput will also grow, but at a slower projected rate of between 1.7% and 2.3% per annum.

A key finding of this study was that the port network has capacity to meet the projected freight task over the next 30 years provided that efficiency gains, incremental investments in infrastructure and the uptake of already consented berth developments, reclamations, channel and berth deepening works are undertaken in a planned and timely manner. At the Port of Tauranga (POT) consents have been secured to dredge berths up to 16m and its channels to 17.1m, and to extend the berth length by 170m. The report does not forecast significant issues for land transport infrastructure.

Based on current projections the benefits of substantial changes to the port system, such as establishing a new port, currently outweigh the costs involved.

What this Means

The POT will need to complete a full container berth extension, requiring resource consent(s). The POT has long term plans to extend the container berth 285m south at Sulphur Point. The extension will likely require an upgrade of air traffic control systems at Tauranga airport, due to flight path conflicts.

Additional bulk infrastructure will be required and there is sufficient bulk berthage and storage space too cater for protected volumes; although there may need to be operational reconfigurations rather than substantial development. These changes involve the extension of the bulk berths by up to 1,000m south, potentially conflicting with the dolphin berths in the same area. The POT also has the potential to develop an additional kilometre of berth space, and has recently required 8 hectares of land which they may deploy to provide greater operational flexibility.

Improvements to Tauranga Rail including the East Coast main trunk line between Auckland and Tauranga will most likely be required, including passing loops, signalling improvements, and ultimately double tracking. Rail connections to Murupara and Kawerau will also need to be improved to cater for projected log traffic. This will involve the deployment of increased rolling stock, passing loops or improved signalling. These changes are anticipated to be progressive, based on commercial arrangements between KiwiRail, POT and the forestry companies.

Confidence

Moderate to High. Underlying assumptions are that the Ports require improved efficiencies and assume increasing freight volumes based on predicted strong internal economic conditions.

More specifically the strong economic condition forecasts are built on analysis of trade patterns and port throughput over the last ten years, supplemented by: qualitative information from industry participants; high level forecasts of economic growth in the Upper North Island, New Zealand and amongst key trading partners; expected demographic changes; and physical constraints in respect of agricultural production in New Zealand.

The main historical data source used is Customs/Statistics New Zealand data on export and import weights and volumes, by product, by port and by origin-destination between 2002 and 2012. A heavy reliance is placed on data compiled by the ports.

References

Upper north island port and port-related infrastructure supply and demand study, November 2012

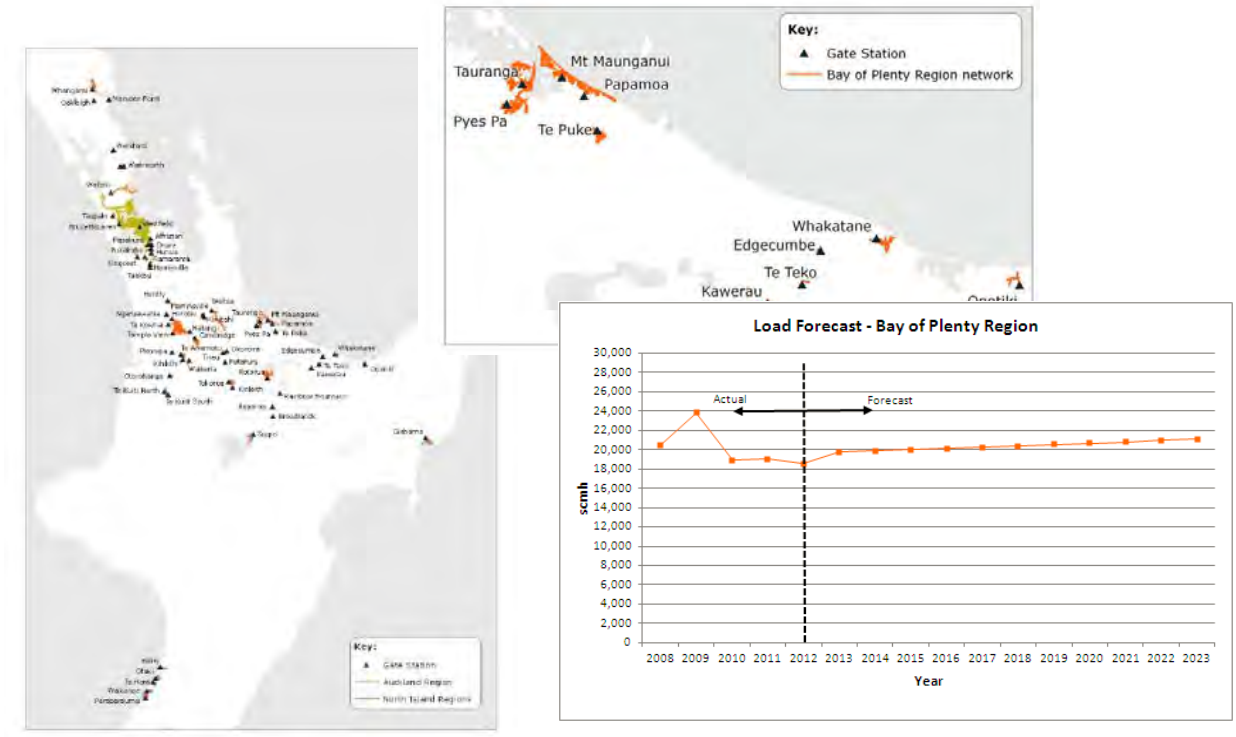
VECTOR GAS DISTRIBUTION ASSET MANAGEMENT PLAN

November 2013

The purpose of this Asset Management Plan (AMP) is to accurately represent Vector's asset management practices and forecasted ten year capital and maintenance expenditure on the gas distribution network as required under the Commerce Commission's Gas Distribution Information Disclosure Determination 2012 between 2013 and 2023.

Vector aims to be: "New Zealand's first choice for integrated infrastructure solutions that build a better, brighter future"

What this Looks Like



Key Points

About 4,527 consumers are connected to the Tauranga network system. They are predominately residential consumers; only around 8% are commercial/industrial gas users.

Vector faces significant on-going uncertainty, in relation to the current investment landscape and the still evolving regulatory environment. The past three years ending June 2012 show a period of moderate to low growth.

Gas demand (and sales volume) are primarily influenced by economic activities in an area, price and availability of substitute fuels (e.g. electricity, fuel oil etc.), marketing effort, population / household growth, socio-

economic factors, climate and the investment decisions made by large industrial and commercial gas consumers. In the short-term, gas demand is very sensitive to climatic conditions. A cold snap, for example, could drive up the demand for gas significantly.

The Tauranga network system is supplied from the transmission system from two gate stations, located at Te Reti in the central Tauranga and Pyes Pa in the South West. Vector gas distribution takes an IP10 supply from Tauranga gate station at a NOP of 1,000kPa and an MP4 supply from Pyes Pa gate station at a NOP of 400kPa. The 2012 peak demand in the Tauranga network system was 2,254scmh at in 2012. Tauranga and Pyes Pa gate stations recorded flows of 1,745scmh and 509scmh respectively.

What this Means

Given development pressures, Vector anticipates the highest load growth to occur around the Grasshopper, Pyes Pa and Bethlehem areas. There is also an expectation of some new major industrial and commercial loads requiring connections in the next ten years.

Although the current demand forecast indicates no constraints in the IP10 system, network modelling of the IP and MP4 pressure systems indicates that these pressure systems have only sufficient capacity to meet current loads, including recently committed loads plus projected incremental base-load growth up to 2015. Beyond this time, the system becomes constrained and is forecast to fall below the MinOP criteria during the planning period. The preferred option improve the system capacity is to up-rate the IP10 system to 1,700kPa.

A range of other upgrades will be required across the region to better improve the network pressure and security of supply in Tauranga (town, the Mount and Papamoa) MP4 system, in Whakatane the District Regulating Station DR-80034-WH due to anticipated increased hospital demand, upgrading work to increase the capacity was completed in 2013.

Confidence

Medium. References were included and assumptions stated as follows:

Vector has assumed that economic growth will resume at relatively modest to low levels (around 2.3% annually) in the short to medium term (actual dates not specified) and that new connection growth patterns will continue at higher historical rates. Given climate change volatility growth rates even low ones may be too high. Anecdotal evidence from the power industry indicates that they could remain stable.

Growth in Tauranga was based the original SmartGrowth information in the assumption that the Grasshopper development (Tauriko Business Estate) was the largest project in the region, with Pyes Pa area also planned to be developed continuously over the next few years. This has now been superseded by the revised Strategy 2013. So Tauranga growth assumptions are out of date.

The assumption that Whakatane hospital will increase demand for gas was made and the author advised that this was confirmed by the Whakatane hospital.

References

Smart Growth Strategy 2051 (Revised May 2007), West Bay of Plenty

OATIS stands for Open Access Transmission Information System.

Opotiki District Council website, http://www.odc.govt.nz/AboutOpotiki/Pages/AboutOpotiki.aspx

WHAKATANE PROPOSED DISTRICT PLAN S32 REPORT - STRATEGY

November 2013

This s32 analysis is an evaluation that assesses both: (1) the extent to which each objective is the most appropriate way to achieve the purpose of the RMA and (2) whether the proposed policies and methods are the most appropriate way in which to achieve the objectives in terms of their efficiency and effectiveness. The objectives and policies in this Chapter are strategic in nature, and these key strategic themes are reflected throughout the Plan.

Key Points

Key issues identified included:

- Growing Our District – unplanned, uncoordinated development, development susceptible to natural hazards and insufficient land to accommodate future housing and changing demographic.
- Opportunities for Business
- Safe and Resilient Communities
- A Strong Rural Base - being undermined by residential or lifestyle subdivision, and incompatible activities.
- Creating Liveable Spaces – good urban design
- Our Special Places – Māori and Iwi
- Our Special Places – Natural and Cultural Resources.

What this Means

- Population projections have been revised down to medium and UGS development yields amended accordingly.
- There are adequate household yields available to accommodate the potential growth rates for the District.
- Other potential growth areas requested have been assessed and provision made for the inclusion of:
  - Keepa and Shaw/Huna Road Zoning Options
  - Development of Existing Urban Area - Opihi/Piripai
  - Existing Urban Area - Port Ohope through Comprehensive development plans.

Confidence

Medium-High – Assumptions stated and tested e.g. UGS and population projections based on a high growth rate were reviewed. These have been amended to medium growth rates to align with the LTP and projected an additional 540 HEU in 15 years. Note: Census 2013 results show a slight population decline for Whakatane.

References

Whakatāne Urban Growth Strategy – Revised Growth Projections (2012)

Whakatāne Integrated Urban Growth Strategy (2010)

Review of Whakatāne and Ohope Residential Growth Strategy 2009 (Beca, July 2009)

Whakatane and Ohope Residential Growth Strategy (Beca 2001)

Whakatāne & Kawerau Districts Industrial Land Strategy Discussion Document (Property Economics, September

2006 and March 2007)

Kawerau Logistics and Distribution Opportunities Preliminary Investigation (Toi-EDA, May 2009)

Update by Property Economics on land requirements for a population of 25,000 (January 2010)

Whakatāne Retail Strategy (BBO, August 2005)

Whakatāne Large Format Retail Assessment Future Land Requirements (Property Economics, August 2005)

Whakatāne District Business Land Demand (Property Economics, August 2008)

Whakatāne Commercial Land Assessment (Property Economics, November 2009)

Whakatāne Transportation Study (BBO and Gabites Porter, 2007)

Whakatāne Township Network Investigation Report, (Gabites Porter, August 2007)

Port Ohope Concept Plan Background Report (2006)

Piripai Urban Development Options Report (2012)

Piripai Urban Development Summary Report (2011)

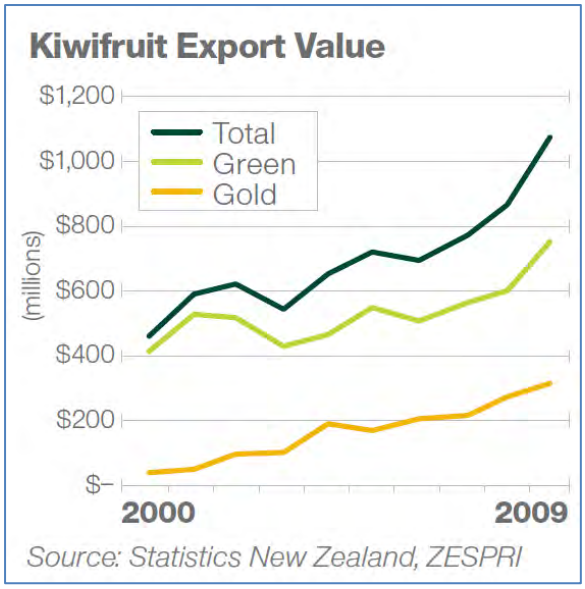
Various Iwi Management Plans and Iwi Scoping Reports and verbal feedback as a result of hui

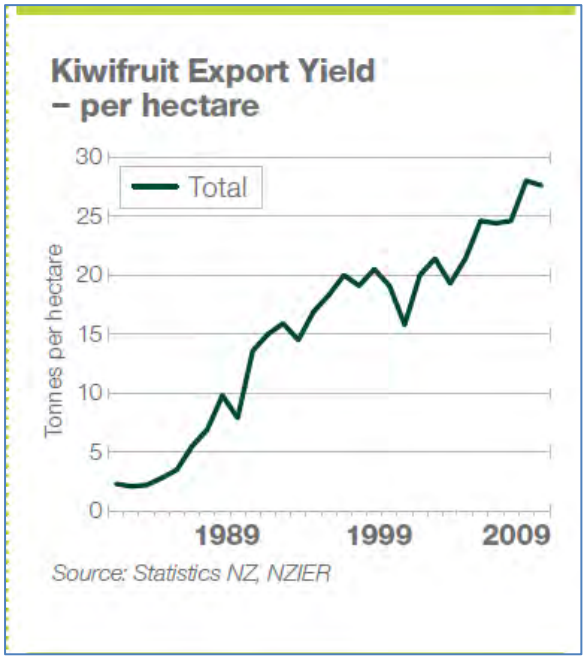
ZESPRI 2050

October 2013

This strategic plan outlines ZESPRI's historic performance, how it has been achieved, their future goals, how they will be achieved and what's need from Government to make it happen. The aim and promise made is to triple ZESPRI's export earnings by 2025 to $3 billion, mainly by boosting the productivity of its green and gold kiwifruit varieties and expanding the product portfolio toward higher value gold and developing new cultivars.

What this Looks Like





Key Points

Global production of kiwifruit reached 1.8 million tonnes in 2009 of this approximately 60% is exported and traded on the international market.

ZESPRI has a 30% share of globally-traded kiwifruit volume, but achieves a share of more than 70% of the value generated by the top three exporters (NZ, Italy and Chile).

The organisation experienced a compound annual growth (CAGR) rate of 9.88 per cent, due largely to a dramatic expansion in production of both green and gold (gold being hugely successful), while maintaining the highest prices in kiwifruit globally. ZESPRI's 9.88 per cent CAGR places the kiwifruit industry ahead of all other primary industries in New Zealand in terms of growth.

What this means

ZESPRI aims to grow the kiwifruit category globally, to increase kiwifruit's share of the global fruit bowl, and to maintain differentiation of the ZESPRI® brand to command a price premium.

- Increase productivity performance for both gold and green.
- Continue to broaden the product portfolio from a predominance of green to higher-value gold, and offer new cultivars.
- Continue to invest in marketing, innovation (currently 2.5%) and research.

- Increase land used by the kiwifruit industry by about 3,200 hectares.
- Maintain current marketing arrangements focusing on high value markets first: Japan and Asia totalling $90M worldwide, in particular the stability that the single point of entry system allows.

Confidence

Low-Moderate the document is light on detail due to commercial sensitivities and is more marketing focused.

Key assumptions are that demand for kiwifruit will continue to grow rapidly and that supply can be met despite PSA and through increased efficiencies, and an increased conversion of land to kiwifruit.

References

Zespri 2050, June 2010

Statistics NZ, NZIER

Statistics New Zealand, ZESPRI