Business and Economic
Research Limited

Report to:

Community Outcomes Bay of Plenty – Economic Transformation Sub-group

BAY OF PLENTY REGION ECONOMIC TRANSFORMATION: STAGE 1: SITUATION ANALYSIS

Final Report

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1 Executive Summary

This report presents a picture of the economy of the Bay of Plenty Region. It provides information on most aspects of the components that influence economic development. It also includes a projection of what employment in the region may look like in 2011 and 2021.

The report is the first stage of a process that will ultimately produce an economic development strategy for the Bay of Plenty Region. It provides the available base quantitative information that will contribute to the formation of the economic development strategy.

The Bay of Plenty Region in this analysis encompasses eight territorial authorities broken into three Sub-regional groupings. They are:

- western Bay of Plenty – Tauranga City, Western Bay of Plenty District;
- eastern Bay of Plenty – Whakatane, Kawerau District, Opotiki District; and
- southern Bay of Plenty – Rotorua District, South Waikato District, Taupo District.

While each of these territorial authorities has unique economic development issues, the report shows that there are significant similarities, linkages and opportunities that extend across territorial authorities. A wider collaborative approach is the best way to attend to these issues and exploit these opportunities.

Resources and settlements

The Region has a productive climate and a range of soil types suitable for horticulture. There are significant opportunities based around geothermal and aquaculture initiatives. Another under-developed resource/opportunity is land-based Māori trusts, with great potential for growth.

The region has a major settlement in Tauranga, which provides a high level of business, social and recreational services. Smaller settlements in the Region are also serviced through Rotorua, Taupo, Whakatane and Tokoroa. Rotorua and Taupo serve as both local centres, and as major tourist centres. The region is well placed to benefit from, and has good transport links to, Auckland and Hamilton.

The Bay of Plenty Region has a strong advantage over other regions in that it is a “nice” place to live. That is, it has a high quality of life based around climate, natural environment, access to activities and proximity to main centres, which is a lifestyle desired by many New

Zealanders. This means that people tend to move to the region and create jobs rather than moving to the region for a job. This creates a different paradigm of population driven growth rather than job driven growth, which requires different strategies when looking at encouraging regional development.

The Region has relatively sound infrastructure, linking communities within the region but also with the rest of New Zealand and internationally. The report identifies some roading, broadband, international air-links and energy issues that should be addressed.

Governance

The Region identified in this strategy encompasses eight territorial authorities, and two regional councils. There are a number of central government agencies, whose administrative regions are not currently aligned. There is some coordination within the region, both between territorial authorities, and also in areas covered by Environment Bay of Plenty.

For the regional strategy to be successful and for maximum effect, there will need to be a coordinated effort by all local and central government participants, as well as industry groups such as the Regional Tourism Organisations. This will require a willingness to change on the part of all parties involved.

On the positive side, there is consistency in the issues and the approaches being offered by nearly all of the organisations involved. The existing economic development strategies are, at the higher level, consistent in their goals, the key issues, and on how they intend to achieve their goals. Central government agencies have indicated a willingness to work with the regions to align strategic objectives. Businesses cross arbitrary regional boundaries and will do what they need to do to be successful.

Moving forward, to maximise the assistance that is being made available by government, the Region needs to bring these local strategies together and create a fully regional strategy. This will be the sum of the parts but will also, and importantly, cover off key regional issues and challenges that are typically not addressed at a local strategy level. Examples of this are the need to address national infrastructure (as opposed to local infrastructure), needs that will affect the long term competitiveness of the region like broadband access, and how to maximise the regional impact that can be gained from tourism.

Population

Around 316,000 people live in the Bay of Plenty Region. Over the last decade, the Region's population has grown at a rate slightly faster than New Zealand. This growth has not been consistent within the region, with strong population growth in the western Bay of Plenty Sub-region, and areas of population decline in the eastern Bay of Plenty Sub-region and South Waikato District. The Region is also facing an ageing population, with the 65+ age group increasing at almost twice the national rate.

A relatively high proportion of the Region's population identify as Māori. This is across all territorial authorities but especially in the eastern Bay of Plenty Sub-region. Generally, the Region's population has lower qualification levels and a higher proportion of people on low incomes or unemployed. This trend is more pronounced in the eastern Bay of Plenty Sub-region. Participation rates are lower than average, reflecting the older population in the Region.

The Region has a disproportionate number of secondary schools in the lowest and highest decile groups while eastern Bay of Plenty Sub-region has 12 of 13 secondary schools in the bottom four deciles. The Region has a lower proportion of student enrolments than nationally.

The distribution of population growth and the changing demographics (older population) raise challenges for the Region that will need to be addressed in the economic development strategy. Unless these inconsistencies are addressed, the region can not achieve its economic potential. This will become a major barrier to future growth and development.

The ageing issue is interesting as statistics show increasing participation in the workforce in the older age groups and a trend for people working past retirement age. Further, there is an industry based around aged services that the Region can develop further.

Similarly, there are opportunities to address and lift the performance of the eastern Bay of Plenty Sub-region, which will contribute to some of the employment issues raised in the projections.

Industry

The Bay of Plenty Region employed 125,000 Full-time Equivalents in 2006. Together, they produced $10.45 billion in GDP through almost 36,500 businesses.

There are definite industry synergies within the Bay of Plenty Region that can benefit from an aligned, consistent, regional development approach. Key driver industries are based around primary industry and processing. These industries are based on competitive advantages in resources and in expertise and are likely to continue to be the key drivers into the foreseeable future.

Key driver industries in the Region are forestry and wood processing, and agriculture/horticulture. Tourism is a growth area, with a solid international base in Rotorua, but with huge potential based around Māori culture and history and geothermal/nature-based activities.

Within certain Territorial Authorities, the reliance on a single industry is a concern, for example, wood processing in Kawerau and forestry and logging in South Waikato. However, the Region as a whole has a definite advantage in the forestry/wood processing area and will benefit from a consolidated approach.

Agriculture, particularly around Kiwifruit, is strong. Over 80 percent of New Zealand's Kiwifruit crop is grown in the Region, driven by a competitive advantage around climate and soil, but increasingly moving to expertise and research.

The Region has strong tourism potential. Rotorua has a well developed international tourist infrastructure. Taupo and Tauranga are recognised destinations for domestic tourists. There are strong tourist draw-cards such as geothermal activity and Māori culture and history that the Region can build on. In addition, the Region is building a reputation for hosting international sporting events. There are five Regional Tourist Organisations operating in the Region. There are issues around coordination and infrastructure that can be addressed in a Region-wide strategy.

The Region needs to consider the shape of its future economy. The concentration of so called ‘knowledge’ industries is low. Globally, increased wealth is being focused on these industries. The Region needs to consider how it can encourage new knowledge-based industries, which can either be linked to the existing activities or not, to ensure future prosperity.

Projections

The Bay of Plenty Region is expected to continue to grow by around 1.4%pa to 2021. Growth will be concentrated in the western Bay of Plenty sub-region and areas such as Kawerau District and South Waikato District are projected to decline even further (albeit only slightly).

Employment is expected to grow by around 2.5%pa between 2006 and 2021. The manufacturing sector will require the most employees followed by retail trade and property and business services. Fastest growth is expected to occur in the transport and storage, manufacturing and wholesale trade industries.

Population growth in the Region is unlikely to sustain historical employment growth rates. This is so even with improved labour market performance. Population to 2021 is expected to increase by 57,000 residents, while employment growth will require 56,000 Full-Time Equivalents over the same period.

This suggests that more of the same is not a viable economic development strategy to maintain historical growth rates. There will need to be changes in population policy and labour market strategies. Industry involvement will be required, as there will need to be changes in either how businesses operate or the composition of industry in the Region.

A wider Regional strategy is necessary to take advantage of the variation across the region in resources, population, labour markets and industry compositions. The strategy will also need buy-in and participation from central government agencies.

Next steps

The report has pulled together a wide range of available information and data necessary to make informed decisions on a regional development strategy. However, as the regional development strategy is formulated, there is likely to be further information required, existing datasets can be refined, and new information may be required.

The analysis is quantitative in nature. Most of our conclusions are based on the data gathered, inflected with our own experience on how this data reflects on regional development issues. The issues identified here need to be tested and confirmed with further qualitative analysis to identify why the data is what it is and what, if anything needs to be done about it.

As in any project there will be constraints in terms of what can and cannot be achieved. This is a reflection not only of budget, but also on what can be influenced. Once the issues have been identified and the approaches determined we will have a list of strategic options. These will need to be prioritised, implemented and then the outcomes measured, based on the budget, timeframe and achievable outcomes.

Bay of Plenty Region Economic Transformation: Situation Analysis

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2 Introduction

2.1 Purpose

The purpose of this report is to provide an economic description of the Bay of Plenty Region. The information in the report will guide and contribute to the development of a regional economic growth strategy.

The report provides:

- an overview/stock-take of the regions' geography, physical infrastructure and social and institutional capital;
- analysis of demographic and industry trends;
- regional indicators;
- forecast of regional growth by industry; and
- discussion of issues that arise out of the above.

This approach is consistent with the guidelines to developing a regional economic development as set out by the Ministry of Economic Development (MED). Their framework is set out in Table 1.

Table 1. MED regional economic development framework

Phases	Matters to consider	Output
Phase 1: Mobilise	• Identify possible stakeholders • Build on stakeholders roles • Maintain stakeholder input	Communication Strategy
Phase 2: Research	• **Gather relevant qualitative and quantitative data** • **Identify the region's positioning in the New Zealand economy** • **Identify key drivers and stakeholders**	**Regional Economic Profile**
Phase 3: Vision	• Bring together relevant stakeholders and existing visions • Articulate a vision and high level goals for all stakeholders	Vision and Goals
Phase 4: Analyse	• Your strengths, weaknesses, opportunities and threats • Link in with other plans and planning processes • Seek stakeholder input and expertise	Results of Analysis
Phase 5: Prioritise	• Identify possible strategic objectives • Prioritise • Select your strategic objectives	Strategic Objectives
Phase 6: Action Plan Another step of consultation to test how planners understanding reflects stakeholder concerns	• Identify possible activities • Schedule realistic and achievable activities • Communicate an action plan	Action Plan
Implement		
Phase 7: Evaluate and Update	• Appraise action plan • Evaluate effectiveness in meeting goals • Provide feedback to stakeholder • Review and update action plan, including the profile	Updated Strategy and Action Plan

Source: Ministry of Economic Development

MED suggests a seven stage process in terms of developing and implementing a regional economic development strategy from mobilisation through to evaluation.

The focus of this section is on the second stage, which is the research phase. The output is a regional economic profile – which we have called a situation analysis. Consistent with the framework, this report will focus on:

- collation and analysis of relevant data;
- descriptive analysis of economic indicators;
- comparison to national averages;
- provision of historical trends and CGE projections;
- placing this in the context of the New Zealand economy; and
- identifying the key drivers.

2.1.1 Regional coverage of the strategy

To allow analysis, quantitative information is aggregated at three levels – Regional, Sub-regional and Territorial Authorities (TAs). These are shown in Table 2.

Table 2. Regional analysis levels

Region	Sub-region	Territorial Authority
Bay of Plenty Region	eastern Bay of Plenty Sub-region	Opotiki District Whakatane District Kawerau District
	western Bay of Plenty Sub-region	Western Bay of Plenty District Tauranga City
	southern Bay of Plenty Sub-region	South Waikato District Taupo District Rotorua District.

Throughout this report, reference to the Bay of Plenty Region indicates the Region as defined in this report, rather than the more narrowly defined Regional Council area, unless otherwise noted. Eastern Bay of Plenty Sub-region includes Opotiki, Whakatane and Kawerau Districts. Western Bay of Plenty Sub-region includes Western Bay of Plenty District and Tauranga City. Southern Bay of Plenty Sub-region includes South Waikato, Taupo and Rotorua Districts.

This analysis is unique in that it covers an area that has not generally been analysed. There is a significant amount of data collected at the regional council level. However, this strategy region is not consistent with the Bay of Plenty Regional Council boundaries. In terms of the regional council boundaries of New Zealand, Tauranga City and Kawerau, Opotiki, Whakatane and Western Bay of Plenty Districts all fall within the Environment Bay of Plenty.

Most of Rotorua district falls within the Environment Bay of Plenty boundaries, while a large part of Taupo district, including the town of Taupo, fall outside the boundaries. South Waikato District and Taupo District are under the jurisdiction of Environment Waikato.

Similarly, for other administrative data and information there are inconsistencies with the strategy region. For example, health data is by District Health Board (DHB) areas, with the strategy region covered by three DHBs. Regional Tourism Organisations (RTOs) also have inconsistent boundaries, with the strategy region covered by five separate RTOs.

Most issues with identifying regional data are in relation to South Waikato District, which is within the Waikato Regional Council boundaries. Similarly, it is generally in the Waikato administrative data for most government departments - and most administrative data is only available at the ‘regional council’ area. Taupo is also in the Waikato Regional Council area, but has less issue in relation to administrative boundaries.

Therefore, where possible we collect information at the TA level. For ease of presentation in the report, data and discussion is at the aggregated Bay of Plenty Region level with further detail included as necessary.

2.1.2 Period covered

Where possible, we have collected historical data back to 1996. The data is provided annually or five yearly depending upon the information source. For example, census data is only available every five years so 1996, 2001, 2006 whereas the BERL regional database is available annually so this data can be provided for the periods 1996, 1997,…,2006. The frequency for other data depends upon availability. For presentation, we provide 1996 and 2006 figures in the tables. The accompanying spreadsheets, however, have all available data.

The BERL CGE projections are for five years and fifteen years ahead – so 2011 and 2021. This is consistent with the historical data and, because it is not looking too far forward, provides a more robust and likely projection.

2.1.3 Information sources

Information in this report is collected and derived from a range of sources. The main sources used are:

- Statistics New Zealand – Census Data; Population Estimates; HLFS
- BERL – Regional Database of industry and employment; CGE projections.

- Council reports/publications/websites
    - Regional Economic Development Strategies (five)
    - RTO discussions and websites
- Other government departments
    - Ministry of Education/TEC
    - Ministry of Transport/LTSA
    - Ministry of Economic Development
    - Ministry of Tourism/Tourism Research Council.
- Discussions with businesses and stakeholders

2.2 Format of report

The next section of the report provides some discussion around regional economic development, the purpose of this report, and other work being done in the wider region on regional economic development.

Chapters 4 and 5 review the geography and infrastructure within the Bay of Plenty Region. Infrastructure includes the settlement hierarchy as well as physical and social infrastructure. These chapters are a snapshot of the Region at the current time.

Chapter 6 looks at the demographic trends in the Region, namely population, labour market and social trends. There is a separate chapter (chapter 7) providing a brief overview of Māori in the Region.

Chapters 8 and 9 analyse economic growth indicators broken down by industry groups at the Region and Sub-regional level. Chapter 10 looks specifically at the tourism sector.

In Chapter 11 the report provides population and industry projections out to 2021. Key findings and next steps are discussed in chapters 12 and 13.

Because of the large amounts of information collected, we have an accompanying appendix containing a number of datasets, methodology and a synthesis of Sub-regional strategies.

3 Background

3.1 Bay of Plenty Region strategy

For the purposes of promoting regional economic development, the wider Bay of Plenty Region currently operates as five relatively separate Sub-regions. These Sub-regions currently form the basis for five New Zealand Trade and Enterprise Regional Partnerships, with each Sub-region having its own economic development agency and strategy. However, these strategies focus at the sub-regional level and there is no overall strategy for the wider Bay of Plenty Region.

Considering the inter-dependencies and linkages between the regions, common opportunities and threats, a more region-wide approach to economic development is warranted.

The purpose of this report is therefore to provide an economic overview, at a regional and Sub-regional level, of the wider Bay of Plenty Region.

The Bay of Plenty strategy region includes the TAs within the Environment Bay of Plenty boundaries. That is, Western Bay of Plenty District, Tauranga City, Whakatane District, Opotiki District, Kawerau District and Rotorua District. The strategy also includes South Waikato District and Taupo District, which are in the Waikato Regional Council boundaries.

South Waikato District and Taupo District as well as being adjacent to, both have strong economic ties with, Rotorua District and therefore the wider Bay of Plenty Region. For South Waikato District, this is around forestry and, for Taupo, it is around tourism.

TAs in the Bay of Plenty Region have formed into Sub-regional groupings, based on a number of factors. Tauranga City and Western Bay of Plenty District make up the western Bay of Plenty Sub-region. Whakatane, Opotiki and Kawerau Districts form the eastern Bay of Plenty Sub-region. Both of these Sub-regions have put together their own regional economic development strategies. Rotorua District, Taupo District and South Waikato District have individual regional economic development strategies. For the purpose of this report we have combined the three and classified them as the southern Bay of Plenty Sub-region.

3.2 Sub-regional economic development strategies

BERL has undertaken a synthesis of the five existing strategies and has included a matrix comparing them in an appendix. We have also used the strategies to inform areas of this report, for example, industry sectors.

In general, there is remarkable consistency in the high level visions and goals of the five strategies. These tend to flow through to the key themes and action plans. The following three tables compare the vision, goals and key themes from the five Sub-regional strategies.

Table 3. Sub-region visions

	Taupo	Rotorua	South Waikato	Western BoP	Eastern BoP
Vision	A great place to live and invest where the community, economy and environment are enhanced	Leading prosperity naturally. Sustainable development brings prosperity to improve the standard of living and the quality of life of Rotorua's citizens	A dynamic thriving District built on the unique qualities of its people, industries and natural strengths	The western BoP is the business location of choice based on sun, sea, soil and skills, resulting in a highly productive, competitive and export-based economy	Te tini o Toi, Kia tipu, kia puawai – to grow, to blossom, the myriads of Toi

Table 4. Sub-region goals/principles

	Taupo	Rotorua	South Waikato	Western BoP	Eastern BoP
Goals/ principles		Sustainable Development through:	Treat all people equitably;	Per capita GDP growth > national average;	Increasing regional GDP in the region;
		More productive enterprises;	Foster new ideas and initiatives;	Increasing value of exports as % of total output;	
		Higher incomes;	Leave the whole more prosperous;	Increasing business profitability;	Increasing net foreign exchange earnings for the region.
		More and better jobs;	Have economic growth which is not at the expense of the environmental or social wellbeing of the community;	Household income increasing faster than nationally;	
		Strong tax base for public facilities;		Reduction in % of households in the bottom quartile of national income;	
		Better social, environmental and cultural qualities.	Work in collaboration with others to deliver benefits for all.	Halve skill gaps;	
				Level of skills increase relative to national average.	

Table 5. Sub-region themes

	Taupo	Rotorua	South Waikato	Western BoP	Eastern BoP
Themes	Business development;	Adding value to the economy;	Stimulate employment growth;	Innovation and entrepreneurship;	Identify very specific gaps in regional industry value chains
	Māori economic development;	A dynamic place;	Support existing businesses;	Lifestyle – "the place, the people";	
	Sector strategies;	The business environment;	Develop capacity in all resources;	Business environment – "the basics";	
	Community strategies.	Education and skills;	Develop a positive image;	Education and skills – "the people";	
		Building networks and growing capacity	Reduce barriers to economic development;	Networked economy – "the linkages"	
			Attract new investments and industries.		

4 Geography

The wider Bay of Plenty Region covers 28,892 square kilometres, of which 18,782 square kilometres is land. The Region sweeps from Lottin Point in the east to Waihi Beach in the west. The land is mostly bounded by the watersheds of river catchments, and includes the Rotorua and Taupo Lakes.

The prominent features of the Region include islands such as Matakana, Mayor (Tuhua) and an active volcano, Whakaari/White Island. White Island sits 48km offshore from Whakatane. It has been built up by continuous volcanic activity over the past 150,000 years. About 70 percent of the volcano is under the sea, making this massive volcanic structure the largest in New Zealand. More than 10,000 people visit White Island every year. The number of tourists has grown steadily over the past 10 years. Four helicopter operators take visitors to the island -- three from Rotorua and one from Whakatane. A number of launch operators, mostly based in Whakatane, run charter trips to the island.

Other distinctive landmarks include Mt Maunganui, Mt Tarawera and Putauaki (Mt Edgecumbe), the Tauranga and Ohiwa Harbours and the lakes in the Rotorua and Taupo districts. There are also five other estuaries - the Maketu, Little Waihi, Whakatane, Waiotahi and Waioeka/Otara estuaries.

The Taupo Volcanic Zone crosses the Region in a line from Lake Taupo to White Island. Two major features of this zone are the extensive geothermal areas and the number of earthquake fault lines which run parallel to the zone.

4.1 Soil and climate

Soils within the Bay of Plenty Region are vulnerable to erosion because of their low density and low clay content. However, given suitable care, the Region's soils can be retained in a highly productive state. In other parts, however, existing vegetation is a significant factor in ensuring relatively low erosion activity and enhanced aesthetic and natural values. Much of this vegetation is on land that is unsuitable or marginal for other land uses.

The Region is largely exposed to humid northerly and north-easterly airstreams. The Region can be subject to heavy rainfalls, although rainfall frequency is less than in many parts of the country. Annual rainfall follows variations in topography and varies from 1400 mm near the coast to 4000 mm on the highest parts of the Raukumara ranges. Wind patterns are modified by topography and the lowland areas of the Region are subject to less wind than many other parts of New Zealand. The Region has lower than average wind speed and wind run and inversions (which trap warm air under a layer of cold air) occur in many parts of the Region, particularly in winter.

4.2 Land

About one quarter of the Region has no on-site forestry or farming capability. This land still has a use in the form of protection of other assets, wildlife habitats, recreation and tourism. In comparison with the North Island as a whole, this Region has little rolling to moderately steep hill country. This is because the Bay of Plenty Region's topography is heavily influenced by the greywacke steep-lands in the eastern Bay of Plenty Sub-region and volcanic activity in the southern Bay of Plenty Sub-region. The west (north of the Kaimai Ranges) was established by the volcanic plateau and is characteristically flat with deeply incised watercourses.

Table 6. Land cover in the Bay of Plenty Region

Land cover / land use	Percentage
Indigenous forest	47.3
Exotic pasture	23.8
Production forests	20.1
Mixed scrub	4.1
Water	1.8
Horticulture	1.0
Urban areas	0.8
Bare ground	0.5
Coastal sand	0.2
Coastal wetlands	0.2
Urban open space	0.1
Inland wetlands	0.1
Cropping lands	0.1
Exotic scrub	0.0

source: Environment Bay of Plenty

The more intensive land uses (e.g. horticulture and dairying) are located on fertile land in the western Bay of Plenty Sub-region and low lying coastal plains, while the extensive forestry uses dominate the less fertile areas in the eastern and southern Bay of Plenty Sub-regions. Plantation forestry is of major importance to the Region's economy. The wider Bay of Plenty Region contains one of the biggest concentrations of plantation forests (405,650 ha) in New Zealand, which equates to approximately 23 percent of New Zealand's exotic plantation forest (1,800,000 ha).

Dairying in the Region is predominately located on fertile, mid-coastal lowlands. The Region produces about 80 percent of national kiwi-fruit and 30 percent of national citrus output, mainly centred on the western Bay of Plenty Sub-region. The soils and climate in the eastern Bay of Plenty Sub-region are well recognised for producing early 'premier' crops such as kiwi-fruit.

Sheep, beef and deer farming are carried out in the Region. Sheep and beef grazing are not as important to the Bay of Plenty Region as they are to most other regions in the country, due to the dominance of forestry and dairying. However, it is a common land use in the highland, steep sloped areas. There is an increasing ratio of cattle to sheep emerging in the Bay of Plenty Region.

4.3 Minerals

Production figures indicate that industrial minerals (particularly rock, sand and gravel for roading and building (the Region currently produces no metallic minerals) make a significant contribution to the Bay of Plenty economy ($22 million in 2003). The Bay of Plenty is also the leading pumice producing region in New Zealand. There is ongoing prospecting and exploration interest in the Bay of Plenty Region for high value metallic minerals e.g. gold and silver. Areas of potential interest for gold and silver include those where historical gold production has occurred, as well as areas in the Taupo Volcanic Zone displaying high prospectivity for epithermal gold mineralisation.

The Bay of Plenty Region has multiple known occurrences of several minerals associated with volcanic activity. An example of current extraction is amorphous silica at Tikitere. Detailed groundwork would be required to identify and refine other areas for potential future extraction of these minerals.

In regional terms, the locations of quarries for the extraction of aggregate, pumice and sand can be grouped spatially into four areas of activity:

(a) Te Puke/Paengaroa/Pongakawa extending west to the southern limits of Tauranga.

(b) An area around Whakatane.

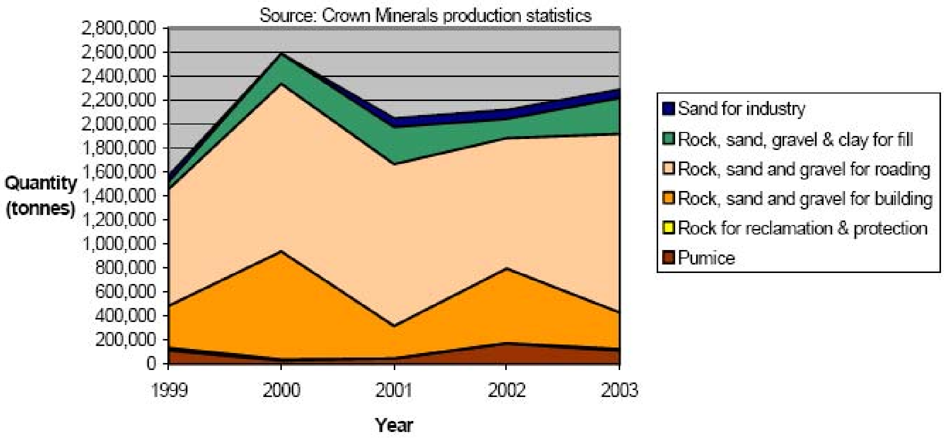
(c) An area around Murupara.

(d) Sites adjacent to Rotorua (to a more limited extent).

Previous mineral resource assessments have noted that there are limited sources of good quality roading and building aggregate close to Rotorua and Tauranga. Areas of andesite of the southern Coromandel Volcanic zone represent potential future extraction sites of high quality aggregate in the western Bay of Plenty Sub-region. The Bay of Plenty Region has deposits of many other minerals, particularly those associated with volcanic activity. Multiple deposits of sulphur, clays, limestone, obsidian, titanium, diatomite and perlite are known throughout the Region in relatively small scales.

Shingle and sand components (e.g. Greywacke) of gravel have a commercial value and rivers are an important source of industrial aggregate for construction and roading purposes, particularly in the eastern Bay of Plenty Sub-region. Gravel excavation tends to be undertaken at sites close to markets and where access is convenient.

Figure 1. Industrial minerals in the Bay of Plenty Region[1]



In 2002 there were 16 permits, licences or applications for permits in the Bay of Plenty Region (excluding South Waikato and Taupo Districts). Of these, three were prospecting permits, two were exploration permits and three were applications for prospecting or exploration. The remaining eight mining permits or licences were for aggregate, pumice or sand extraction.

4.4 Energy

Electricity is currently generated from two main resources in the Region, water and geothermal energy. Some major industries also have the capacity to generate electricity from wood via furnaces and steam boilers. Geothermal steam is a major energy source for wood processing industries.

The western and eastern Bay of Plenty Sub-regions have to import other forms of energy, such as electricity, petroleum and coal from outside the wider Region to meet demand.

The South Waikato District accommodates hydro-lakes, which feed into the national grid. Natural gas is imported and reticulated throughout the Region and transmitted beyond. The importance of the Region's hydrological and geothermal resources has long been

[1] Excludes South Waikato and Taupo.

recognised nationally and by local electric power suppliers. Further development of the Region's energy resources is contemplated.

The Region's geothermal resources are from both volcanic and non-volcanic origins (see Map 1).They are made up of:

- geothermal fluid that often contains dissolved gases;
- minerals - e.g. silica metals;
- unique features such as geysers, hot pools, bubbling mud pools, steaming ground and deposits of silica;
- unique ecosystems containing a diversity of plant; and
- animal life.

Geothermal resources are important to Māori for many reasons including customary uses - e.g. cooking, flax-dying, bathing - and spiritual well-being and healing.

All of the Region's volcanic geothermal resources are located in the Taupo Volcanic Zone. All of the non volcanic ones are in the Tauranga-Maketu area. Non-volcanic geothermal resources have much lower temperatures (30 - 70°C) than those of volcanic origin.

Geothermal resources of the Bay of Plenty Region are shown in Table 7.

Table 7. Geothermal resources in the Bay of Plenty Region

Site	Resource Type
Awakeri	Non-volcanic hot water occurrence
Kawerau	Volcanic geothermal field
Lake Rotoiti	Volcanic geothermal area
Manaohau	Non-volcanic hot water occurrence
Matata	Volcanic geothermal prospect
Mayor/Tuhua Island	Volcanic hot water occurrence
Moutohora Island (Whale Island)	Volcanic hot water occurrence
Papamoa/Maketu	Non-volcanic geothermal field
Pukehina	Non-volcanic hot water occurrence
Rotokawa/Mokoia Island	Volcanic geothermal field
Rotoma/Puhi Puhi	Volcanic geothermal field
Rotoma/Tikorangi	Volcanic geothermal field
Rotorua	Volcanic geothermal field
Taheke	Volcanic geothermal field
Tauranga/Mount Maunganui	Non-volcanic hot water field
Tikitere/Ruahine	Volcanic geothermal field
Waimangu/Rotomahana/Tarawera	Volcanic geothermal field
Whakaari (White Island)	Volcanic geothermal area

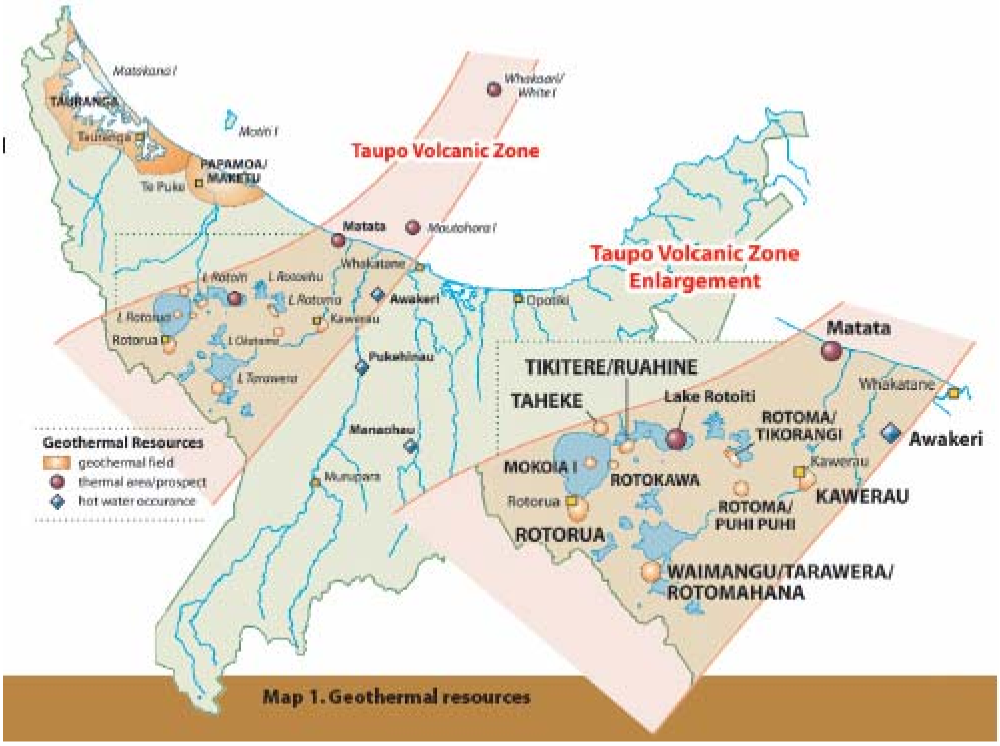
source: Environment Bay of Plenty

Five geothermal fields in the Bay of Plenty Region provide heat and water for a variety of uses. The main uses for geothermal water are:

- domestic - e.g. swimming pools, spas, space heating;
- commercial - e.g. motel and commercial swimming pools or spas;
- space heating, horticultural space heating;
- municipal swimming pools; and
- industrial processing and power generation.

The main user is industry, accounting for 62 percent of total use. Twenty percent is for commercial use with ten percent for domestic and eight percent municipal.

Figure 2. Geothermal resources in the Bay of Plenty Region



In total, some 63,850 tonnes of geothermal water is consented for daily use from the Tauranga field, which is 50 percent of the amount used across the entire Region. The Kawerau geothermal field has 40 percent of the total region-wide consented use and Rotorua has eight percent. The Tikitere and Rotokawa fields together make up less than two percent of the geothermal water used. In the Tauranga field, water temperature is between 30 and 70°C.

The most extensively used volcanic geothermal fields are Kawerau and Rotorua. Tikitere and Rotokawa (also volcanic fields) have only small quantities extracted and are regarded as undeveloped.

Kawerau is the most heavily utilised volcanic field in the Region. Developed in the 1950s as an energy source for the pulp and paper industry, it supplies one main industrial user with 53,700 tonnes per day. Geothermal fluid and steam is drawn-off from a series of bores to provide energy for pulp and paper manufacture and timber-drying. Left-over fluid is used to generate electricity.

The Rotorua field has a large number of individual bore owners - though not as many as there used to be - who use geothermal water for domestic and commercial purposes. During the 1970s and 1980s the intensive abstraction of hot water from the field by more than 400 users resulted in a reduction in activity of the world-famous geysers at Whakarewarewa and other geothermal surface features. Today there are 141 bores, 51 percent of which are for domestic use. The remaining bores include commercial users such as motels which use the water for swimming pools and spas.

4.5 Fresh water

The Bay of Plenty Region has a network of lakes, rivers and streams running from far inland to the coast. Many are widely used for recreation, support ecological values and are also a valuable source of water for industry, agriculture and horticulture. Major rivers and lakes in the Region are shown in Table 8 and Table 9.

Table 8. Major rivers in the Bay of Plenty Region

River	Length (km)	Catchment size (km^2)
Rangitaiki	214	3,000
Motu	165	1,427
Waikato	158	
Whakatane	112	1,786
Waioeka	97	1,185
Tongariro	80	
Oraka	67	
Tarawera	59	984
Raukokore	57	392
Kaituna	55	1,230
Waihou	42	
Waipa	41	
Wairoa	19	470

source: Environment Bay of Plenty

Table 9. Major lakes in the Bay of Plenty Region

Lake	Size (ha)	Catchment size (ha)
Lake Taupo	61,600	280,300
Lake Rotorua	8,079	50,777
Lake Tarawera	4,165	14,494
Lake Rotoiti	3,457	11,861
Lake Okataina	1,104	5,676
Lake Rotoma	1,104	2,914
Lake Rotomahana	897	7,994
Lake Rotoehu	795	5,673
Lake Rerewhakaaitu	579	3,816
Rotokakahi (Green Lake)	452	1,872
Lake Okareka	334	1,865
Tikitapu (Blue Lake)	146	567
Lake Okaro	32	407
Lake Aniwhenua	250	(Hydro-electric Lake)
Lake Matahina	250	(Hydro-electric Lake)
McLarens Lake		(Hydro-electric Lake)
Lake Arapuni	910	
Lake Whakamaru	700	
Lake Moana-nui	8	

source: Environment Bay of Plenty

Resource consent is required for any water take of greater than 15m^3/day from surface water or 35m^3/day from groundwater. As at June 2005, groundwater resource consents made up 64 percent of all water take consents held, with surface water making up the remaining 36 percent. The two graphs below show the overall trends for the total numbers of surface and ground water resource consents granted (excluding geothermal) and volumes allocated for July 2000 to June 2005 in the Region (excluding parts of Taupo and South Waikato Districts outside the Bay of Plenty Regional Council boundaries).

Figure 3. Water consents granted

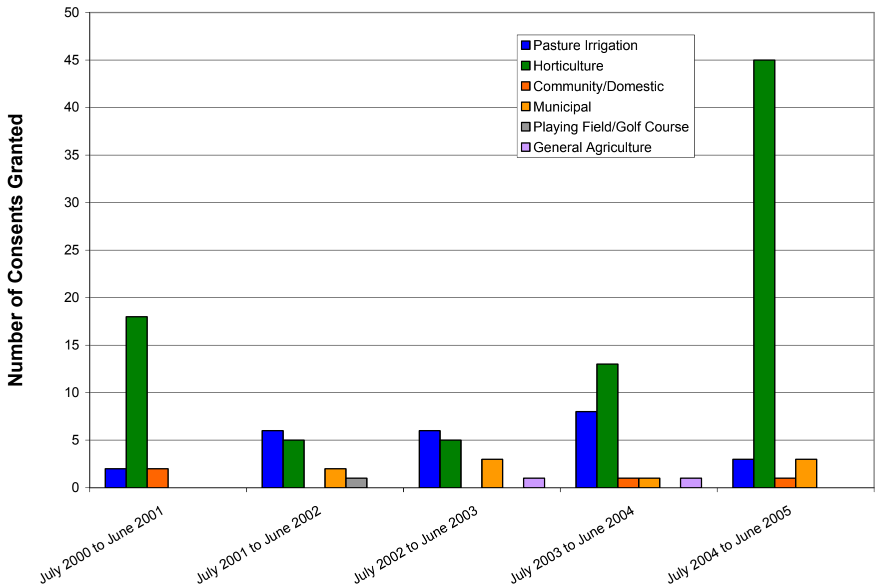
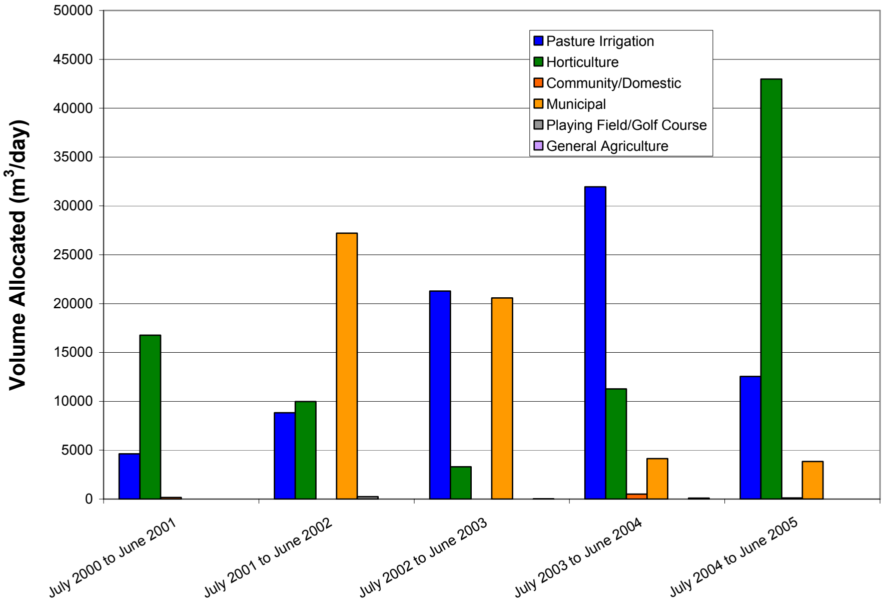


Figure 4. Volumes of water allocated by use



Note that 2004 was the first time that resource consents were granted for horticulture frost protection.

4.6 Coastal environment

The coastal environment of the Bay of Plenty Region is a distinctive physical feature of the Region. It contributes significantly to the unique identity of the area and provides an impressive range of social, recreational, cultural and economic resources. The total coastal perimeter of the Region is 688 kilometres in length. This is made up of 259 kilometres of open coast (from Waihi Beach to Cape Runaway) and 369 kilometres of estuaries. Approximately 37 percent of the Bay of Plenty Region is classified as Bay of Plenty coast.

In recognition of the different values and specific needs of various parts of the Bay of Plenty coastal marine area, zones have been established having specific provisions for activities within their boundaries:

4.6.1 Port Zone

The purpose of the Port Zone is to enable efficient use of the existing port within a confined area to avoid potential conflict with other activities. The Region's sole Port Zone is located within Tauranga Harbour. It includes the main navigation channels through the harbour entrance up to the harbour bridge and all the berthing areas associated with the Sulphur

Point and Mount Maunganui wharfs. This zone also includes some public and recreational facilities such as the marina and boat ramps adjacent to the harbour bridge.

4.6.2 Harbour Development Zone

The purposes of the Harbour Development Zone are to enable development of vessel related tourism, recreational, and commercial fishing activities, concentrate structural development, maintain and enhance public access to the waterfront. The Harbour Development Zone is restricted to three locations within the coastal marine area.

1. Adjacent to Tauranga City's central business district.

2. The Whakatane River estuary.

3. The Waioeka River estuary at Opotiki.

The zone has high cultural and recreational values and there is potential for tourism related activities.

4.6.3 Coastal Management Zone

The purpose of the Coastal Management Zone is to manage activities within it based on a case by case approach having regard to the values of the site and to allow developments to be considered in accordance with their actual and potential effects on the environment. Accordingly most activities in this zone are specified as discretionary activities. The total area of this zone constitutes more than 95 percent of the Bay of Plenty Region coastal marine area. There may well be uses and developments which would be appropriate within this zone.

4.7 Implications of resource endowment

The Bay of Plenty is endowed with a productive climate and a range of soil types suitable for horticulture, and therefore quite intensive production. These soils are also in significantly large areas (as compared with many regions in New Zealand), and they are therefore capable of supporting production of crops with highly-developed production systems and marketing infrastructure.

The major present example is kiwi-fruit, and to a lesser extent avocados. Kiwi-fruit, as well as illustrating a substantial production base, also has significant research and technology support, and a progressive approach to ongoing product and market development.

Other horticultural crops produced in the Region include the expanding avocado production. There appears to be potential for increasing the production base of avocado, producing products ranging from fresh fruit to avocado oil and derived products. Avocado has a high content of the beneficial form of cholesterol, and it is likely that avocado oil will increase its popularity. It is also possible that a research base could develop to find specific biochemical fractions with high-value outlets, in much the same way that Fonterra and its predecessors have generated a range of markets for fractions of milk protein and fat.

A recent horticultural success is the major production unit producing top quality packaged tomatoes in a climate-controlled environment. The production unit uses heat from the exhaust water from a geothermal electricity generation plant at Mokai, near Taupo. The geothermal and horticultural developments are driven by a far-sighted Māori land Trust, Tuaropaki E which, with its sister Trust Waipapa B, has hitherto been mainly confined to large-scale pastoral farming of sheep and beef cattle in the area. The tomato production and marketing industry is a joint-venture with interests from Europe, and under the main brand-name Beekist has captured a major share of the trans-Tasman supermarket trade in tomatoes.

This is an excellent example of characteristics of potential future resource-based successes. It shows the potential for high-tech horticulture; the fresh initiatives coming in a number of areas as local land-based Māori Trusts and Incorporations move into a broad range of sound resource-based business developments; the imaginative use of existing, previously ‘free' resources like geothermal energy. Fresh water is another resource that has been tapped in South Waikato.

Other resource-based developments can be expected as research and technology is applied to various products and by-products of Pinus Radiata, and its forest growing environment, as well as the various plants and biota in the indigenous forest. With Scion (previously Forest Research Institute FRI) and the natural remedy firm Comvita in the Region, the potential is to promote and grow this area of research by attracting other relevant Institutes or Universities to participate locally. Comvita is moving towards a greater transTasman operation which will give it more leverage.

The geography of the Bay of Plenty Region provides for growing complementarity between the dispersed, resource-based industries providing the drive for the settlements around the Region on the one hand, and on the other hand the dynamo of the larger centres particularly Tauranga attracting the higher level services to business and the community that previously were only available in or from Auckland.

A second string to the Region's bow is that it has a climate and environment that attracts people. People tend to move to the Region for lifestyle reasons rather than for work. This suggests 'population driven' growth rather than 'job driven' growth. This is beneficial in that the region has a situation where growth is driven by population as well as industry related growth/productivity. This phenomenon needs to be considered as part of any regional economic development strategy.

5 Settlements and infrastructure

Infrastructure plays an important role in the economic and social wellbeing of a Region. It is the means through which businesses and individuals interact with each other. This section is broken down into settlements and physical and social/institutional infrastructure. It aims to provide a snapshot of the population distribution and the key infrastructure in place in the Region.

5.1 Settlements[2]

Major settlements in the Region are shown in Table 10. The five biggest settlements in the Region account for approximately two-thirds of the total regional population, with half the total regional population in Tauranga City and Rotorua alone.

Table 10. Major settlements[3]

Major Settlements	Population (30 June 2006 est.)
Tauranga	111,500
Rotorua	54,800
Taupo	22,300
Whakatane	18,850
Tokoroa	13,600
Total Major Settlements	**221,050**
Total, Bay of Plenty Region	**322,620**
Total, New Zealand	**4,140,300**

Source: Statistics NZ

Urban settlement patterns across the different TAs in the area vary considerably. Table 11 shows the number of settlements in each of four settlement-size bands in the Bay of Plenty. Towns are spread quite evenly across the different bands.

Table 11. Size of settlements

	Bay of Plenty Region	
Number of Residents	**Settlements**	**Population**
500 to 1,000	8	5,388
1,001 to 2,000	5	7,656
2,001 to 5,000	8	25,596
5,001 +	7	229,914
Total	**28**	**268,554**

Source: Statistics NZ

[2] Note that in this analysis, settlement size below the major settlements (Table 10) is based on 2001 census data. This can be updated with 2006 census numbers when they become available.

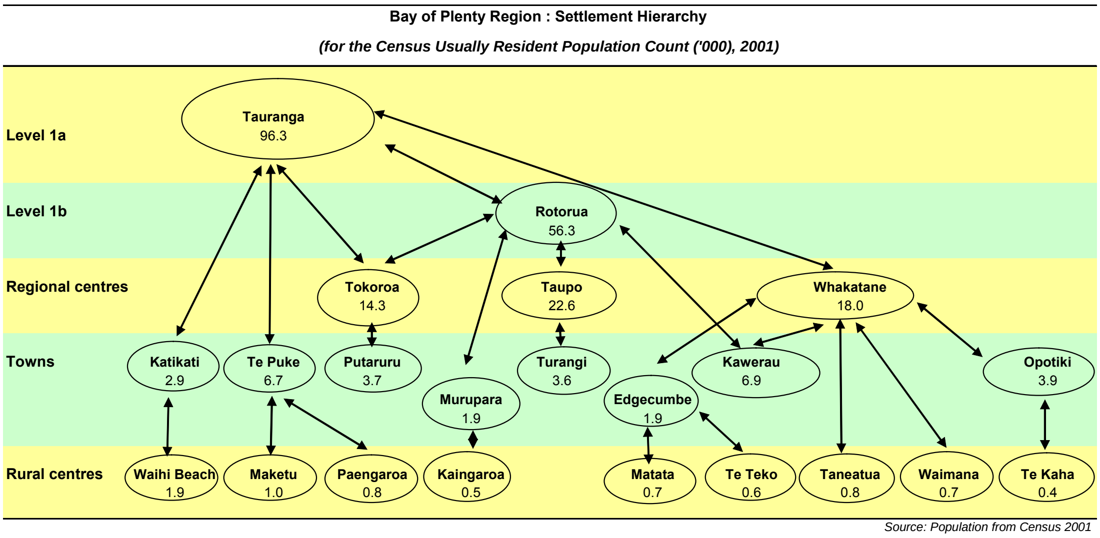
There are a number of smaller settlements within the Region. Of the 28 settlements in the Region, 21 of them (75%) have fewer than 5,000 residents and eight (30%) have less than 1,000 residents.

Of special interest is the Western Bay of Plenty district, which had seven settlements with between 500 and 7,000 residents as of the 2001 census. This district is unusual in that its residents are spread over a number of different towns, with its largest settlement, Te Puke, having less than 20 percent of all residents in the district.

Each of the other TAs had at least 43 percent of their population within their largest town as of the 2001 census. As Table 12 shows, Taupo, Rotorua, South Waikato and Whakatane all have more than 50 percent of their population within the boundaries of their largest towns. Opotiki District has 43.5 percent of residents within its main town.

With the large number of settlements, particularly of the smaller ones, the inter-relationships between the settlements of the Region become important, particularly as smaller settlements are reliant on larger settlements for specialist professional services. A settlement hierarchy for the Bay of Plenty Region is presented in Figure 5.

Figure 5. Settlement hierarchy



Tauranga is the main centre for the Region, with Rotorua a secondary centre and Tokoroa, Taupo and Whakatane regional centres.

Tauranga is the alpha city in the Region and has direct links to five other settlements including Rotorua and two of the three regional centres (Rotorua and Whakatane).

[3] Note that major settlements is based on June 2006 sub-national population estimates, which are different from the

The geography of the Region suggests that smaller centres also play key roles. For example, Whakatane also has five links and towns such as Te Puke support two smaller rural centres (Maketu and Paengaroa).

Outside the Region, Tauranga links upwards to Hamilton and Auckland. Rotorua and Tokoroa also have upward links to Hamilton and Auckland. Opotiki links the Bay of Plenty Region to the Gisborne Region.

Table 12 shows the proportion of the population that resides in the largest settlement in each TA. Note that Tauranga City and Kawerau District are considered settlements in their entirety and so 100 percent of the area's population lives within the largest settlement.

Table 12. Settlements proportion of population

Territorial Authority	Proportion of residents in largest settlement
Tauranga	*100.0*
Kawerau District	*100.0*
Rotorua District	81.6
Taupo District	64.4
South Waikato District	61.5
Whakatane District	54.2
Opotiki District	43.5
Western Bay Of Plenty District	17.7

Source: Statistics NZ

Western Bay of Plenty District has a high proportion of its residents outside of its main settlement. At the other end of the scale, over 80 percent of Rotorua District residents are within its major settlement.

The main implication of this section is that settlements in the Region are relatively small and reliant upon each other. Further, the larger towns in the Region are quite reliant on Tauranga City for provision of specialist professional services, as they are unlikely to have high-level services available within their own districts.

5.2 Physical infrastructure

Physical infrastructure provides the means for businesses and individuals to operate, move and interact. This report focuses on transport, telecommunications and energy as the variable components of physical infrastructure.

2006 census population figures presented in Section 6.1.1.

5.2.1 Transport

Sea Transport

The Port of Tauranga is the country's largest in terms of export volume, with most throughput in the primary industries of kiwi-fruit, dairy and forestry. Main imports through the port include petroleum, fertiliser, coal, and dry and liquid bulk. Exports for the year ended 30 June 2006 totalled 7.35 million tonnes, made up of logs and other forestry products (56.7%), dairy products (11.4%), kiwi-fruit (9.0%), other primary exports (5.9%) and other products (16.9%). Imports totalled 4.93 million tonnes, mostly coal (22.9%), oil products (22.0%) and fertiliser bases (9.2%).

The Port of Tauranga is linked to MetroPort Auckland by rail. Shipping lines contracted to use MetroPort Auckland call at the Port of Tauranga where import cargo destined for Auckland is offloaded at the Tauranga Container Terminal. Cargo is then railed to MetroPort Auckland before distribution to its final destination. The same process happens in reverse for Auckland-sourced export cargo. It assembled at MetroPort Auckland, railed to Tauranga and loaded on to the vessel.

There are also wharfs in Whakatane, Ohope and Opitiki.

Air Transport

Four main airports serve the Bay of Plenty Region: Tauranga Airport, Rotorua Airport, Taupo Airport and Whakatane Aerodrome. In addition, there are aerodromes at Tokoroa, Rangitaiki and Opotiki.

A feasibility study looking into the possibility of establishing a regional airport was carried out by URS Australia Limited, with a final report produced in mid-2006. The study concluded that a regional airport was not financially viable at this point.

Rotorua District Council is currently considering the possibility of opening up Rotorua Airport to trans-Tasman flights. Its runway is at least 1,622 metres in length at present, large enough to land jet aircraft according to airport management.

Rail Transport

Rail plays a crucial role in the regional economy, as it is the means for transporting imports to the MetroPort in South Auckland from the Port of Tauranga, as well as the means for much of the exports sent to the Port of Tauranga for shipping. The rail network links Murupara, Kawerau and Te Puke with Tauranga from the east. The rail continues west toward Hamilton, joining up with the line from Rotorua before continuing on to Auckland.

There are no direct rail links between Rotorua and Tauranga. There are also no passenger rail routes in the Region, although the *Regional Passenger Transport Plan – Bay of Plenty Region (2006)* does mention that the idea is being considered.

Taupo is one of the few main centres in New Zealand not linked to the rail network.

Road Transport

State Highway (SH) 2 runs from Gisborne in the east through Opotiki, south of Whakatane, through Te Puke to Tauranga. It then continues to the north-west, where it later joins SH1 just south of Auckland. SH1 also passes through Taupo on its way north-west, passing through Tokoroa. SH35 links Opotiki to Gisborne around the East Coast. A number of logging trucks use the road between Cape Runaway (east of Opotiki) to the port in Tauranga.

SH33 branches south off SH2 from Tauranga, later joining SH30 all the way to Rotorua. SH30 from Rotorua is the main road through to Whakatane. South from Rotorua, SH30 leads on towards Tokoroa in the South Waikato District, joining SH1 at Upper Atiamuri. SH5 links Rotorua to Taupo.

Table 13. Roads

	Land Transport Roads Infrastructure		
Area	**Sealed Urban Roads**	**Sealed Rural Roads**	**km2 Area / km Sealed Road**
Total, New Zealand	**16,423**	**32,819**	**4.58**
Bay of Plenty Region	**1,394**	**2,564**	**5.37**
Western Bay Of Plenty	**612**	**594**	**1.90**
Tauranga City	484	0	0.35
Western Bay Of Plenty District	128	594	2.94
Eastern Bay of Plenty	**219**	**653**	**8.67**
Opotiki District	27	119	21.22
Whakatane District	153	533	6.47
Kawerau District	39	1	0.55
Southern Bay of Plenty	**563**	**1,317**	**6.06**
South Waikato District	111	338	4.04
Taupo District	213	429	10.83
Rotorua District	239	550	3.32

Source: Land Transport NZ (Jun, Dec 2005), Statistics NZ

Table 13 describes the road transport infrastructure and use in the Bay of Plenty Region. As would be expected, built-up TAs like Tauranga City and Western Bay of Plenty District tend to have the highest concentration of roads, although Kawerau District is an interesting anomaly.

Vehicle ownership rates are highest in Tauranga City and Taupo District, and lowest in Kawerau District. Overall, ownership rates mirror the national average at 1.45 residents per vehicle. Traffic congestion is a problem at times in Tauranga City, but is not a major issue in the rest of the Bay of Plenty Region. Spending on roads per resident is highest in Whakatane District and lowest in Kawerau District. Spending per capita is 14.3 percent below the national average in the Bay of Plenty Region.

Major projects underway in the Region include the Harbour Link project, which will provide a continuous four lane expressway from Takitimu Drive to Mount Maunganui. The estimated cost of the project is $255 million. In addition, the Tauranga Eastern Corridor project is in the design phase. Potentially a $100 million plus project, this would relieve congestion on the main access route to Tauranga from the east, used by vehicles travelling from Opotiki, Whakatane, Gisborne, Te Puke, Rotorua and Taupo.

Passenger Transport

According to the *Draft Bay of Plenty Regional Land Transport Strategy (2006)*, only 0.6 percent of people in the Bay of Plenty Regional Council Region use the bus or train to travel to work, versus 78 percent using private motor vehicles.

Bus service

According to the *Regional Passenger Transport Plan – Bay of Plenty Region (2006)*, there are bus services operating in Tauranga and Rotorua. Services in both areas are overseen by the Regional Council.

In Tauranga, there are 11 routes covering the city from Mount Maunganui in the north, to Papamoa Beach in the east, Greerton in the south and Belvedere in the west. Bus services are contracted out to the Bayline Group Limited.

In Rotorua, services are provided by Reesby Buses Limited, over ten routes. There are over 40 trips a day on each route.

Taupo runs a single bus route between three and four times a day, six days a week.

Intra-regional bus services are presented in Table 14.

Table 14. Intraregional bus services

• Opotiki to Tauranga via Whakatane	• Matata to Whakatane
• Kawerau to Tauranga via Whakatane	• Rotorua to Tauranga
• Whakatane to Tauranga	• Katikati to Tauranga

Funding for passenger transport projects comes from various sources. Land Transport NZ funds regional councils for passenger transport through Transfund on a “number of passenger carried” basis. Local government (i.e. regional and local authorities) is required to meet 50 percent of contract payments for passenger services (local share cost) and 50% of administration costs.

Taxi and Ferry

Various ferry services operate at Tauranga harbour, serving Matakana Island. A launch operates from Sulphur Point to Panepane Point, mostly for forestry workers and school students.

5.2.2 Telecommunications

Telecommunications access in the Bay of Plenty roughly follows national trends. Of some note is the substantial percentage of households still without any telecommunications access in the eastern Bay of Plenty Sub-region area, in particular the Opotiki and Kawerau Districts (9.5 and 7.1 percent respectively). Meanwhile Tauranga is ahead of the national averages for telephone, mobile phone, and fax machine access.

Mobile phone coverage south-east of Lake Taupo is limited, as is coverage in the area east of Rotorua. Kawerau and Opotiki have very limited mobile phone cover on either of the main networks.

Broadband

There is little availability of broadband outside of the major centres. Last year Environment Bay of Plenty commissioned a business case study to look for ways that local government can support the development of a regional broadband network.

There is a need for radio spectrum to provide access to broadband in the rural and remote areas. At this stage the Bay of Plenty Region has not been able to achieve this, partly because of a lack of true competition among providers stimulating investment in the Region. The Region’s councils are discussing access to radio spectrum to ensure broadband availability in rural and remote areas with the Minister for Information Technology.

There have also been some setbacks to the intended network expansion in the Tauranga area by TelstraClear with recent actions apparently signalled by Vodafone.

The provision of appropriate levels of broadband access to allow business and community development in the main centres and around the Region is a cornerstone to attracting leading businesses and people to locate in the Region. Provision of broadband is topical and finding a solution is necessary to support development of virtually all industries in the Region, including dairy production and tourism.

5.2.3 Energy

Electricity in the Region feeds off one Transpower link. While this is seen by Transpower as an issue in its annual report, it is not a priority.

Mighty Power, based in Waikato, is looking into the potential shifting of some of its power sideways to the Bay of Plenty instead of the current north (Auckland) focus.

Renewable energy

According to a study conducted by Sinclair Knight Merz[4], potential exists to make greater use of various renewable natural resources in the Bay of Plenty. Geothermal energy generation can be increased by up to 100 Megawatt electrical (MWe). In addition, small and medium-scale projects would allow an increase in capacity of 20 Megawatts (MW) in hydro-electric power within the Region. This number could be many times larger (up to 715 MW) if access to Department of Conservation (DoC) land was allowed. The report identifies 51 schemes with a total of 695 MW that fall within DoC or native Forests land. Ethanol from grain crops currently grown in the Bay of Plenty could total 20 million litres a year, while energy from woody biomass derived from low-grade forestry could produce 800 GWh per year of electrical energy.

Table 15. Energy

	Power Source		
	Hydropower	**Biomass**	**Geothermal**
Existing Source	163 MW		14 Mwe
Potential Source			
Minimum	20MW	800 GWh or 420 million litres of ethanol	70 Mwe^
Maximum	715 MW*		170 Mwe

Source: Sinclair Knight Merz

[4] *Renewable Energy Assessment Bay of Plenty Region (2006)*

Power generation

- Bay of Plenty Electricity provides electricity through its hydro-electric plant at Aniwhenua (25 MW) and its geothermal plant at Kawerau (6.3 MW). It also provides gas through natural gas plants at Edgecumbe (10 MW) and Kapuni (25.3 MW).

- Other electricity suppliers in the Region include Mercury Energy, which produces 49 MW of geothermal power at Mokai, and around 16 MW at Rotokawa, in addition to its huge hydroelectric system which produces in excess of 1000 MW along the Waikato River.

- Contact Energy has geothermal plants at Poihipi (57 MW), Ohaaki (104 MW) and Wairakei (16 MW).

- Genesis Power has hydro plants at Piripaua (42 MW), Tuai (60 MW) and Kaitawa (36 MW), as well as at Tokaanu (240MW) and Rangipo (120MW).

- King Country Energy has a hydro plant at Kuratau (3 MW). Meridian Energy and Trustpower also have a presence in the Region.

The grid

The Bay of Plenty Region is to some extent constrained in its development at present by the limits on the capacity of the national grid bringing electricity into, and transmitting it around the Region.

This is true of many parts of the country and the two approaches to ensuring ongoing availability of sufficient electricity are

i) increasing capacity at bottlenecks in the grid bringing centrally generated power into the Region; and

ii) constructing distributed generation from local energy sources at or near the main demand nodes.

Bay of Plenty is a major existing generator, as well as having other resources, particularly geothermal available for new, distributed generation plants. As a major existing generator, Bay of Plenty Region will wish to ensure that as more electricity is required within the Region, the pricing of obtaining that from the grid reflects its location close to source, with low transmission losses.

5.2.4 Water and Sewerage

Water supply

Each territorial authority has completed an assessment of water and sanitary services in their district as required by the Local Government Act 2002[5]. Water supply providers in the Bay of Plenty Region are usually operated by a combination of both private and public (Council) organisations. Households that are connected to the main water supply in the western Bay of Plenty Sub-region currently meet the Drinking Water Standards for New Zealand 2005 (DWSNZ 2005).

Rotorua and Whakatane districts currently require upgrades to certain parts of the network to meet DWSNZ 2005 (predominately rural areas). Additional to infrastructure upgrades and mains flushing, Whakatane will also produce a Public Health Risk Management Plan for all supplies. Taupo, Kawerau, Opotiki, and South Waikato districts do not currently meet DWSNZ 2005 mainly due to security of supply (whether lake or underground) and water quality. Infrastructure upgrades from Taupo and South Waikato district councils' water supply schemes are expected to be compliant with the new DWSNZ 2005 standards in the future.

Outside of reticulated communities listed above, many households and marae in rural areas rely upon localised water sources (shallow bores, springs, streams or roof water).

All water supply schemes in the Bay of Plenty Region show there is adequate capacity to meet current demand. Forecasts also show the schemes will meet future demand in growth, albeit negligible growth in Kawerau and South Waikato districts. However, South Waikato consent conditions may produce a constraint during seasonal demand fluctuations. In addition, Opotiki requires any new subdivision to provide all of the infrastructure and treatment upgrades.

Waste Water

Western Bay of Plenty Sub-region waste water systems currently meet demand and resource consent conditions of its treatment and disposal. Both Tauranga City and Western Bay of Plenty district councils are planning infrastructure upgrades to meet future demand to 2020.

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[5] The assessment of water and sanitary services summaries for each district can be found in the respective councils' Long Term Council Community Plan (a.k.a. Ten Year Plan). For full assessment documents please contact the relevant council.

Taupo and Rotorua urban areas waste water systems also meet consent standards. However, the remainder of the Rotorua and Taupo districts are served almost exclusively by septic tanks. Most of these areas have few issues with disposal of wastewater, but lakeside communities pose serious health and environmental risks of contamination of ground and lake water. Sewerage reticulation for most lakeside communities will be provided within the next ten years.

Whakatane District Council is currently investigating capacity issues resulting from overflows in various waste water schemes in addition to general infrastructural upgrades. These are to meet the consent conditions for waste water disposal, which are up for renewal. Kawerau also requires improvements to its treatment services in order to meet its consent conditions.

The majority of Opotiki's households are connected to septic tanks, which pose no significant issues to the community or the environment. If new subdivisions wish to connect to the district council's current waste water schemes, developers will pay for any infrastructure upgrades.

Current and planned infrastructure for waste water schemes in the Bay of Plenty Region will meet future demand according to Territorial Authorities' LTCCPs. Significant infrastructure upgrades are required in Rotorua, Taupo, Whakatane, Tauranga, and Western Bay of Plenty districts. Meanwhile, Kawerau, Opotiki, and South Waikato districts will focus infrastructure on quality of treated discharge rather than increased quantity of flow due to low population growth forecasts. Councils with septic tank treatments will also focus on community education to ensure community and environmental issues are minimised.

5.3 Social infrastructure and institutions

Social infrastructure and institutions covers resources necessary for the development and interaction of individuals within the Region. The main areas covered are Governance, education and health. We also consider research and emergency services (fire and police).

5.3.1 Governance

This section looks at the local and central government institutions within the Bay of Plenty Region.

<u>Local Governance</u>

The local governance structure consists of regional and district councils. Each TA is made up of a number of wards.

Table 16. Local governance levels

Regional Council	Territorial Authorities	Wards
Environment Bay of Plenty	Tauranga City	Otumoetai-Bethlehem; Te Papa-Welcome Bay; Mt Maunganui-Papamoa
	Western Bay of Plenty	Waihi Beach; Katikati; Kaimai; Maketu; Te Puke
	Whakatane	Galatea-Murupara; Taneatua-Waimana; Edgecumbe-Tarawera; Whakatane-Ohope
	Opotiki	Waioeka-Waiotahi; Opotiki; Coast
	Kawerau	Kawerau
	Rotorua	North; West; East; South
Environment Waikato	Taupo	Taupo; Kaingaroa; Mangakino-Pouakani; Turangi-Tongariro
	South Waikato	Tokoroa; Putaruru; Tirau

- The key issue is that the Taupo and South Waikato districts are in the Waikato regional council area, which may have resourcing and regulatory implications.

Central Government Agencies

Central government agencies are important levers for regional economic development. At 48 percent of GDP, New Zealand has one of the largest public sectors' in the world. As a result, influencing what government spends can have a significant impact on the local or regional economy. For example, if a District Health Board aimed (within set procurement practices) to purchase from within its own region then it would provide a significant economic boost to that region. The importance of the public sector can be seen in the high levels of total employment in education, health and communities activities. Typically these sectors will employ a higher percentage of women as well as offering higher base level salaries than much of the private sector but conversely will not accelerate the wealth creation within the region.

Influencing the direction of Government expenditure is no mean task given the variety and nature of public investment and expenditure. Public expenditure is rarely, if ever, applied with a unified outcome in mind, instead it is directed at many, not necessarily, consistent goals.

Even when the net is tightened to only look at the objectives and goals of government agencies that seek to affect competitiveness it is not easy. For example the goals of FRST, NZTE and TEC are closely aligned but rarely will the goals each is seeking be fully aligned when it comes to budget allocations, as each are working to differing strategies and outcomes.

This said, at a local level it is important to align public sector activity and budgets that impact upon local and regional economic development. The objective is synergy between national and local strategy and alignment with the needs of the private sector. This is an area that is often missed in terms of the strategies that are in place to date. The current strategies tend to focus on the local budgets and tend to overlook the effect that more effective alignment of local resources with Government resources could have upon the economy.

The role of co-ordination by local and regional councils is not easy given the differing regional boundaries that are used by different Government Departments or Ministries, as few seem to operate to the same boundaries. Gaining greater alignment of regional activities is a critical step in being able to align government monies to a regional strategy.

The Government's Economic Transformation Agenda seeks to reduce the number of regions that are targeted for assistance to 14. To be fully effective it is important that the regions that are chosen are consistently used by government in allocating other funding. The most obvious region boundary to take is that of the Regional Councils. This can only be achieved by government agreement. Equally, there needs to be a commitment by Government agencies to align their strategies with those of the region. This has tended to occur with the regional labour market strategies but not in the case of other departments and budgets.

The spending activities of the following Government Departments, Ministries and Agencies will have a direct effect upon economic development and the competitiveness of regions:

Table 17. Government activity in economic development in the region

Policy	***Programme delivery***
Ministry of Economic Development	New Zealand Trade and Enterprise
Department of Internal Affairs	Foundation for Research Science & Technology
Ministry of Foreign Affairs and Trade	Tertiary Education Commission
Department of Labour	Work and Income New Zealand
Ministry of Social Development	Creative New Zealand
Ministry of Research Science & Technology	Crown Research Institutions
Ministry of Tourism	Pacific Business Trust
Ministry of Education	Sport and Recreation New Zealand
Te Puni Kokiri	Transit New Zealand
Ministry of Pacific Island Affairs	
Ministry of Culture and Arts	
Ministry of Transport	
Ministry of Agriculture and Forestry	
Ministry of Fisheries	

These bodies need to be incorporated into any regional strategy and to provide some idea of their commitment to achieving the strategic outcomes defined within a regional strategy. Without commitment from Government (given the total expenditure) it is difficult to see how an effectively joined up regional strategy can be achieved. Therefore while Government is looking to the regions to develop strategies the region must look to ensure that the Government backs these strategies by participation in their development and in budget allocations to the actions. To date this has not been evident as the budget allocation process is not partnership based but internally focused. This should be addressed.

The Government's Economic Transformation Agenda has effectively fired a starting gun requesting that regions reconsider their economic development strategies and prepare them at a higher level than is currently the case in most regions. This raises a number of issues for regions. Some regions are easily recognised, for example Wellington; others like the Bay of Plenty are more difficult. However, it is clear that those regions that can effectively detail their strategy and their needs will be able to gain a greater slice of what economic development budgets will be available especially given the move towards contestable funding.

Central government agencies not only need to be aware of, or agree with, regional strategies, but need to be part of the process and ensure that their programmes are aligned as much as possible with the regional strategies.

Of particular importance is the contribution of transfer payments to beneficiaries. Many of the smaller towns, in particular, may have a high proportion of their population on benefits or other transfer payments from government. Any decisions in this area are, therefore, likely to have a significant flow-on effect into these towns.

5.3.2 Education

Table 18 summarises the education infrastructure in the Bay of Plenty Region. (See section 6.4.1 for decile level of schools)

Table 18. Education infrastructure

		Schools		Tertiary Providers				
Area	Early Childhood Inst.	Sec schools	Total	PTEs	ITPs	Wananga	Univer sities	COEs
Total, New Zealand	**3754**	**476**	**2596**	772	20	3	8	2
Bay of Plenty Region	**397**	**40**	**210**	**50**	**2**	**2**	**0**	**0**
Western Bay Of Plenty	**153**	**8**	**65**	**21**	**1**	**1**	**0**	**0**
Tauranga City	120	6	39	19	1	0	0	0
Western Bay Of Plenty District	33	2	26	2	0	1	0	0
Eastern Bay of Plenty	**85**	**13**	**57**	**6**	**0**	**1**	**0**	**0**
Opotiki District	20	2	16	1	0	0	0	0
Whakatane District	55	10	34	4	0	1	0	0
Kawerau District	10	1	7	1	0	0	0	0
Southern Bay of Plenty	**159**	**19**	**88**	**23**	**1**	**0**	**0**	**0**
South Waikato District	30	4	21	1	0	0	0	0
Taupo District	33	7	21	5	0	0	0	0
Rotorua District	96	8	46	17	1	0	0	0

Source: MoE (Feb 2007)

Tertiary

Although the Bay of Plenty Region does not have its own university (see Table 18 above), the University of Waikato has a campus in Tauranga, with approximately 500 students enrolled.[6] The University of Waikato at Tauranga collaborates with the Bay of Plenty Polytechnic, at which first and second-year courses in the University's Bachelor of Management Studies (BMS) are undertaken.

There are two polytechnics based in the Region – the Bay of Plenty Polytechnic in Tauranga (with an Agriculture Centre at Edgecumbe), and the Waiariki Institute of Technology, which has campuses at Whakatane, Rotorua and Taupo.

The Radi National Centre of Excellence in Wood Manufacturing is a partnership between FITEC, Waiariki Institute of Technology and the University of Auckland. Qualifications offered include a Diploma and Advanced Diploma in Wood Manufacturing Excellence as well as a Bachelor of Engineering with a specialization in Wood and Woodfibre composites in collaboration with the University of Auckland. MaintainNZ, a centre of maintenance engineering, is based in Kawerau.

Te Wānanga o Aotearoa has campuses offering a range of courses in Whakatane, Tauranga, Tokoroa, Rotorua and Taupo.

Primary and Secondary

According to the Ministry of Education (MoE), there were 210 registered schools in the Bay of Plenty Region as of February 2007, approximately 8.1 percent of the national total. Of these, 88 (42%) were in the southern Bay of Plenty Sub-region, 65 (31%) were in the western Bay of Plenty Sub-region and 57 (27%) were in eastern Bay of Plenty Sub-region.

There were 46 schools in the Rotorua District and 39 in Tauranga City. The third largest number of schools was in Whakatane, which had 34.

Early Childhood Education

There were 397 early childhood education institutions in the Bay of Plenty Region, around 11 percent of all early childhood education institutions in New Zealand as of February 2007, according to MoE figures. The southern and western Bay of Plenty Sub-regions both had 159 (40% each) of institutions with the remaining 85 in the eastern Bay of Plenty Sub-region. Tauranga City had 120 institutions, while Rotorua district had 96.

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[6] In 2007, a graduation ceremony was held for 92 Bay of Plenty based graduates.

Crown Research Institutes (CRIs)

CRIs with a presence in the Region include Scion (the New Zealand Forest Research Institute), the Institute of Geological and Nuclear Sciences (GNS), HortResearch (the Horticulture and Food Research Institute of New Zealand), and the National Institute of Water and Atmospheric Research (NIWA).

- Scion is based in Rotorua District, and is focused on creating plant-based biomaterials and new manufacturing processes in order to ensure sustainability of supplies of renewable plant resources. Major areas of research include commercial forestry R&D, biomaterials research and sustainable consumer products. This CRI employs around 380 people across its Rotorua and Christchurch locations.

- GNS has a Research Centre at Wairakei in the Taupo District. The stated purpose of this CRI is to "understand natural processes in the earth's crust and physics-based technologies and to transform this knowledge into economic and social benefits for New Zealand".

- HortResearch has a kiwi-fruit breeding programme in Te Puke in Western Bay of Plenty District.

- NIWA, which provides atmospheric (climate) and aquatic sciences and services, has field offices at Rotorua and Turangi in the Taupo District.

5.3.3 Health

District Health Boards and Hospitals

The Bay of Plenty Region, as defined in this report, is served predominantly by two District Health Boards (DHBs), the Lakes DHB and the Bay of Plenty DHB. The South Waikato District currently falls under the Waikato DHB.

Two hospitals serve the Lakes DHB. They are situated in Rotorua and Taupo, and provide a total of 210 beds. The DHB has a budget in excess of $200 million.

Two main hospitals serve the Bay of Plenty DHB. Tauranga Hospital has 321 beds, and Whakatane Hospital has 160 beds. The DHB also operates Community Health Centres at Te Puke, Opotiki, Te Kaha and Murapara. The DHB employs around 2,500 people and has a budget of some $400 million.

Primary Health Organisations

Primary Health Organisations (PHOs) were set up to carry out the Ministry of Health's Primary Health Care Strategy. PHOs are funded and monitored by the local DHB.

There are five PHOs in the Bay of Plenty DHB catchment area. There are two in the Lakes DHB area.

Medical Practitioners

Table 19. Medical practitioners

	Total Medical Practitioners			
Medical Practitioners	New Zealand	Bay of Plenty*	Lakes DHB	Bay of Plenty DHB
General Practitioners	**3,006**	**211**	73	138
House Officers	**842**	**67**	22	45
Medical Officers of Special Scale	**303**	**18**	8	10
Other	**244**	**0**	0	0
Primary Care	**138**	**0**	0	0
Registrar	**1,319**	**48**	10	38
Specialists	**2,873**	**156**	54	102
Total	**8,725**	**500**	167	333

* Excludes South Waikato District *Source: NZHIS*

As shown in Table 19, the Bay of Plenty Regional Council area had 211 GPs as of 2003, as well as 156 specialists. In addition, there were 67 house officers within the two DHBs.

5.3.4 Business organisations

Chambers of Commerce provide business networking and assistance at a regional level.

There are five chambers of commerce servicing business in the Bay of Plenty Region, which are shown in Table 20.

Table 20. Chambers of Commerce

Chambers of Commerce	Chamber of Commerce Tauranga Region Inc Eastern Bay Chamber of Commerce – Whakatane Rotorua Chamber of Commerce Taupo Chamber of Commerce Waikato Chamber of Commerce;

5.3.5 Police and Fire Services

Police

The Bay of Plenty Police District boundaries are consistent with the Bay of Plenty Region as defined in this report. The regional headquarters are in Rotorua and there are 23 police stations distributed around the Region.

Fire

The New Zealand Fire Service operates around 30 fire stations in the Region, mostly staffed by volunteer fire fighters.

6 Demographic Trends

This section looks at population changes over the last ten years across three censi periods – 1996, 2001 and 2006.

6.1 Population

“Growing regions don’t have declining populations.”

6.1.1 Total Population

Table 21. Population in the Bay of Plenty Region

Area	1996	2001	2006	% Change 1996-2001	% Change 2001-2006	% Change 1996-2006
Total, New Zealand	**3,618,303**	**3,737,277**	**4,027,797**	*3.3*	*7.8*	*11.3*
Bay of Plenty Region	**283,287**	**297,594**	**315,873**	*5.1*	*6.1*	*11.5*
western Bay Of Plenty Sub-region	**112,746**	**129,138**	**145,713**	*14.5*	*12.8*	*29.2*
Tauranga District	77,775	90,906	103,635	*16.9*	*14.0*	*33.2*
Western Bay Of Plenty District	34,971	38,232	42,078	*9.3*	*10.1*	*20.3*
eastern Bay of Plenty Sub-region	**50,328**	**48,990**	**49,197**	*-2.7*	*0.4*	*-2.2*
Opotiki District	9,375	9,201	8,976	*-1.9*	*-2.4*	*-4.3*
Whakatane District	33,123	32,814	33,300	*-0.9*	*1.5*	*0.5*
Kawerau District	7,830	6,975	6,921	*-10.9*	*-0.8*	*-11.6*
southern Bay of Plenty Sub-region	**120,213**	**119,466**	**120,963**	*-0.6*	*1.3*	*0.6*
South Waikato District	25,011	23,472	22,641	*-6.2*	*-3.5*	*-9.5*
Taupo District	30,693	31,521	32,421	*2.7*	*2.9*	*5.6*
Rotorua District	64,509	64,473	65,901	*-0.1*	*2.2*	*2.2*

Source: Statistics NZ Census

While the Bay of Plenty Region as a whole experienced growth similar to that of New Zealand over the years 1996 to 2006, there was wide variation within the Region. With 33.2 percent growth over the ten-year period, Tauranga District ensured that the western Bay of Plenty Sub-region managed 29.2 percent growth over the period.

Meanwhile net growth in the southern Bay of Plenty Sub-region was marginal, at 0.6 percent. While some growth was experienced in Rotorua and Taupo Districts, this was almost completely offset by a drop in population in South Waikato District.

Eastern Bay of Plenty Sub-region had negative growth over the period (-2.2%), with Kawerau District enduring the biggest decline in population in the Region, at 11.6 percent for the ten years.

6.1.2 Age

Table 22. Population by age group

	Age Groups										% Change 1996 - 2006				
	0-14		15-29		30-44		45-64		65+						
Area	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006	0-14	15-29	30-44	45-64	65+
Total, New Zealand	**832,077**	**867,576**	**808,044**	**813,615**	**833,733**	**891,810**	**721,782**	**959,343**	**422,667**	**495,603**	**4.3**	**0.7**	**7.0**	**32.9**	**17.3**
Bay of Plenty Region	**72,282**	**73,497**	**56,442**	**53,940**	**62,649**	**65,202**	**57,300**	**77,769**	**34,638**	**45,453**	**1.7**	**-4.4**	**4.1**	**35.7**	**31.2**
western Bay Of Plenty Sub-region	**25,179**	**30,690**	**20,370**	**23,811**	**24,381**	**29,748**	**24,747**	**36,864**	**18,072**	**24,591**	**21.9**	**16.9**	**22.0**	**49.0**	**36.1**
Tauranga City	16,689	21,582	14,736	17,955	16,668	21,339	16,269	24,699	13,404	18,054	29.3	21.8	28.0	51.8	34.7
Western Bay Of Plenty District	8,490	9,108	5,634	5,856	7,713	8,409	8,478	12,165	4,668	6,537	7.3	3.9	9.0	43.5	40.0
eastern Bay of Plenty Sub-region	**14,598**	**12,912**	**10,068**	**8,214**	**11,079**	**9,666**	**9,657**	**12,087**	**4,950**	**6,309**	**-11.5**	**-18.4**	**-12.8**	**25.2**	**27.5**
Opotiki District	2,796	2,466	1,695	1,377	2,013	1,629	1,860	2,250	1,020	1,245	-11.8	-18.8	-19.1	21.0	22.1
Whakatane District	9,231	8,496	6,657	5,640	7,359	6,696	6,444	8,262	3,438	4,200	-8.0	-15.3	-9.0	28.2	22.2
Kawerau District	2,571	1,950	1,716	1,197	1,707	1,341	1,353	1,575	492	864	-24.2	-30.2	-21.4	16.4	75.6
southern Bay of Plenty Sub-region	**32,505**	**29,895**	**26,004**	**21,915**	**27,189**	**25,788**	**22,896**	**28,818**	**11,616**	**14,553**	**-8.0**	**-15.7**	**-5.2**	**25.9**	**25.3**
South Waikato District	7,437	6,036	5,412	3,915	5,535	4,635	4,665	5,214	1,971	2,850	-18.8	-27.7	-16.3	11.8	44.6
Taupo District	7,932	7,203	6,303	5,646	7,008	6,951	6,141	8,214	3,294	4,407	-9.2	-10.4	-0.8	33.8	33.8
Rotorua District	17,136	16,656	14,289	12,354	14,646	14,202	12,090	15,390	6,351	7,296	-2.8	-13.5	-3.0	27.3	14.9

Source: Statistics NZ Census

Over the period from 1996 to 2006, New Zealand experienced growth in all five age groups indicated in Table 22 above, with the majority of growth happening in the 45-64 and 65+ age groups. Meanwhile, growth in the 15-29 age group was marginal, at 0.7 percent.

Over the same period, the Bay of Plenty Region had even more spectacular growth in the 45+ age groups, with 31.2 percent growth in the 65+ age group. Of concern is the 4.4 percent drop in the population aged 15 to 29.

Growth was fastest across all age groups in the western Bay of Plenty Sub-region, most notably in Tauranga District. All Districts experienced growth in the 45+ categories, while all the districts in the southern Bay of Plenty Sub-region and eastern Bay of Plenty sub-regions experienced negative growth in all the under 45 categories.

Also concerning is the significant decrease in the younger age groups and the increase in the older age groups. For example, a 75 percent increase in 65+ combined with a 30 percent decrease in 15-29 year olds in Kawerau District over relatively short (ten year) period has major implications across a range of strategic areas.

This suggests that strategies should focus on the issue of an ageing population, with concentrations in certain areas. Note, however, that this trend can provide opportunities as well as threats.

6.1.3 Ethnicity

"Diverse ethnic groups are a key driver of creativity and innovation."

Table 23. Ethnicity (%)[7]

	% of Resident Population who Classify Themselves as									
	European		NZ Maori		Pacific Islander		Asian		Other / Unspecified	
Area	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006
Total, New Zealand	**71.7**	**61.2**	**14.5**	**13.3**	**4.8**	**6.2**	**4.4**	**8.3**	**4.6**	**10.9**
Bay of Plenty Region	**64.6**	**59.1**	**28.2**	**24.5**	**2.1**	**2.9**	**1.3**	**2.6**	**3.8**	**10.9**
western Bay Of Plenty Sub-region	**78.4**	**67.2**	**16.4**	**15.2**	**0.9**	**1.7**	**1.3**	**2.9**	**3.1**	**13.0**
Tauranga City	78.8	67.5	15.7	14.9	1.0	1.7	1.5	3.1	3.0	12.8
Western Bay Of Plenty District	77.5	66.4	17.8	15.8	0.7	1.7	0.8	2.3	3.3	13.8
eastern Bay of Plenty Sub-region	**48.3**	**47.2**	**45.5**	**41.2**	**1.0**	**2.2**	**0.8**	**1.3**	**4.5**	**8.1**
Opotiki District	40.3	40.2	53.8	49.8	0.8	2.2	0.6	0.8	4.6	7.0
Whakatane District	53.4	50.8	40.2	36.7	0.8	1.9	0.8	1.4	4.8	9.1
Kawerau District	36.3	39.7	58.0	51.0	2.0	3.1	0.9	1.5	2.8	4.7
southern Bay of Plenty Sub-region	**58.4**	**54.3**	**32.1**	**28.6**	**3.6**	**4.7**	**1.5**	**2.8**	**4.3**	**9.6**
South Waikato District	56.7	53.2	29.6	26.6	9.0	10.2	0.8	1.8	4.0	8.3
Taupo District	62.0	60.3	30.4	24.9	2.0	2.4	0.9	1.6	4.7	10.9
Rotorua District	57.5	51.9	33.9	31.0	2.3	3.8	2.1	3.7	4.2	9.5

Source: Statistics NZ

Māori make up a relatively significant proportion of people in the Bay of Plenty Region. Overall, around a quarter of the population identify as New Zealand Māori compared to only 13 percent nationally. The proportions are even higher in eastern Bay of Plenty Sub-region (41 percent). In Kawerau District, over 50 percent of the population identify as Māori and in Opotiki District the figure is 50 percent.

The biggest change in ethnic composition of the Region occurred in the Asian group, which doubled its representation in the Region in percentage terms. This trend was fairly constant throughout the districts within the Region, with the exception of Opotiki District, where the fraction of the population classifying themselves as Asian rose only 33 percent.

[7] Of special note, however, is the huge rise in the number of people who do not classify themselves under any one of the traditional categories – European, NZ Maori, Pacific Islander or Asian. The ability in the 2006 Census to classify oneself as a "New Zealander", led to a spike in the percentage of people falling into the last category in Table 23 above. The proportion of the population classifying themselves as New Zealander in the Bay of Plenty Region was 11 percent and ranged from 15 percent in Western Bay of Plenty District, down to six percent in Kawerau District.

Table 24. Population born outside of New Zealand

Area	NZ-born	Overseas-born	Not Specified	Overseas Born* 0-9 years since arrival	Overseas Born* 10+ years since arrival
Total, New Zealand	**73.5**	**21.8**	**4.7**	**49.2**	**50.8**
Bay of Plenty Region	**80.8**	**13.9**	**5.3**	**40.0**	**60.0**
western Bay of Plenty Sub-region	**80.0**	**15.7**	**4.4**	**42.7**	**57.3**
Tauranga District	80.0	16.2	3.8	42.5	57.5
Western Bay Of Plenty District	79.8	14.5	5.7	43.2	56.8
eastern Bay of Plenty Sub-region	**83.8**	**9.5**	**6.7**	**31.5**	**68.5**
Opotiki District	85.3	5.8	9.0	24.5	75.5
Whakatane District	83.0	10.5	6.5	34.9	65.1
Kawerau District	85.8	9.1	5.0	17.6	82.4
southern Bay of Plenty Sub-region	**80.6**	**13.5**	**5.9**	**38.1**	**61.9**
South Waikato District	80.7	12.7	6.5	25.9	74.1
Taupo District	81.4	12.8	5.8	35.5	64.5
Rotorua District	80.2	14.2	5.7	43.2	56.8

* Excludes unspecified arrival times

Source: Statistics NZ (2006 Census)

- The Bay of Plenty Region has a higher proportion of its population born in New Zealand than nationally.
- Of those born overseas, the Bay of Plenty Region has a higher proportion of those that had been in New Zealand for at least ten years.
- Recent migrants are more likely in the larger TAs such as Tauranga City and Rotorua District.

6.2 Business demographics

This section looks at the qualifications, occupations and labour force status of the Bay of Plenty Region compared to New Zealand.

6.2.1 Qualifications

"Populations with higher qualification levels tend to lead to more prosperous regions."

Table 25. Qualifications (%)

	% of People over 15 with											
	No Qualification		Secondary Qualification		Basic Vocational Qualification		Higher Vocational Qualification		Bachelor's Degree or Above		Unspecified	
Area	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006
Total, New Zealand	**32.2**	**22.4**	**26.5**	**31.4**	**3.1**	**4.1**	**14.6**	**17.6**	**8.0**	**14.2**	**15.5**	**10.4**
Bay of Plenty Region	**36.9**	**26.1**	**24.3**	**29.1**	**3.3**	**4.8**	**15.0**	**19.4**	**4.5**	**8.7**	**16.1**	**11.9**
Western Bay Of Plenty	**35.7**	**24.4**	**25.2**	**30.3**	**3.3**	**4.7**	**16.1**	**20.7**	**4.6**	**9.6**	**14.9**	**10.4**
Tauranga City	35.5	23.9	25.4	30.4	3.3	4.9	16.0	20.8	4.7	10.2	15.1	9.8
Western Bay Of Plenty District	36.3	25.5	25.0	29.9	3.3	4.2	16.5	20.4	4.3	8.2	14.6	11.8
Eastern Bay of Plenty	**41.0**	**30.2**	**21.4**	**26.4**	**2.9**	**4.7**	**13.5**	**17.8**	**3.7**	**6.9**	**17.5**	**14.0**
Opotiki District	45.9	34.3	19.9	25.3	2.6	4.2	11.3	15.1	2.5	5.3	17.7	15.8
Whakatane District	38.6	27.8	21.9	27.0	2.9	4.7	14.5	18.9	4.3	8.1	17.8	13.5
Kawerau District	45.9	36.8	21.0	25.0	3.5	5.5	11.9	15.5	2.0	3.1	15.7	14.1
Southern Bay of Plenty	**36.3**	**26.7**	**24.4**	**28.8**	**3.5**	**5.0**	**14.4**	**18.4**	**4.7**	**8.3**	**16.6**	**12.8**
South Waikato District	42.8	34.5	22.6	26.6	2.7	4.4	13.3	16.1	3.1	4.8	15.5	13.6
Taupo District	36.5	25.1	24.2	29.6	3.4	4.9	14.7	19.7	4.3	8.0	16.9	12.8
Rotorua District	33.9	24.9	25.2	29.1	3.8	5.2	14.7	18.6	5.5	9.5	16.8	12.6

Source: Statistics NZ Census

Percentage gains occurred across all categories of qualifications over the ten year period. The percentage of people not specifying their education level, as well as those with no qualification, dropped substantially between 1996 and 2006. In the Bay of Plenty, those with a secondary or higher qualification rose from 47 to 62 percent of the 15+ population. Of special note was the percentage of people with Bachelor's degrees or above, which almost doubled in the Region over the ten-year period. Indeed, the percentage more than doubled in Opotiki (2.5% to 5.3%) as well as Tauranga (4.7% to 10.2%).

6.2.2 Occupations

"Generally, high growth regions have a greater proportion of people in professional than manual occupations."

A change in the classification of occupations between the 2001 and 2006 census makes comparisons between 2001 and 2006 numbers difficult. In Table 26, the categories of employment have been lined up in such a way as to roughly match 1996 and 2001 data to 2006 data. However, there is still a lot of overlap between categories.

Table 26. Occupations (%)

Area	Managers	Profes-sionals	Technicians and Trades Workers	Clerical and Administrative Workers	Sales Workers	Community and Personal Service Workers	Machinery Operators and Drivers	Labourers	Not Elsewhere Included(2)
	% of Employed People over 15 in 2006 Working as								
Total, New Zealand	**17.1**	**18.9**	**12.2**	**12.1**	**9.4**	**7.9**	**5.8**	**11.0**	**5.7**
Bay of Plenty Region	**18.2**	**15.5**	**12.9**	**10.9**	**9.1**	**7.9**	**6.6**	**13.1**	**5.8**
western Bay Of Plenty Sub-region	**18.8**	**16.2**	**13.3**	**11.6**	**9.9**	**7.5**	**5.6**	**12.0**	**5.1**
Tauranga City	16.3	17.5	13.8	12.3	11.2	8.1	5.7	10.5	4.6
Western Bay Of Plenty District	24.6	13.2	12.0	9.9	6.8	6.0	5.5	15.9	6.2
eastern Bay of Plenty Sub-region	**17.5**	**15.0**	**11.9**	**10.0**	**7.5**	**7.5**	**7.4**	**15.0**	**8.0**
Opotiki District	21.5	12.8	9.3	8.4	6.9	7.3	5.1	18.8	10.0
Whakatane District	18.2	16.2	12.4	10.7	7.8	7.4	6.7	13.3	7.4
Kawerau District	8.1	11.0	12.8	8.2	7.1	9.0	14.7	19.8	9.1
southern Bay of Plenty Sub-region	**17.7**	**14.9**	**12.7**	**10.4**	**8.6**	**8.7**	**7.4**	**13.7**	**5.9**
South Waikato District	18.6	11.0	11.6	9.1	7.2	7.4	11.0	17.6	6.6
Taupo District	18.5	13.0	13.4	9.9	8.9	9.6	6.9	14.3	5.5
Rotorua District	17.0	17.1	12.7	11.0	8.9	8.6	6.6	12.2	5.9

source: 2006 Census

- Occupations in the Bay of Plenty Region are relatively consistent with national proportions. There are fewer professionals, clerical and administrative workers and a higher proportion of machinery operators and drivers and labourers.
- Western Bay of Plenty Sub-region has the highest proportions of the four "high skill" occupations.
- Eastern Bay of Plenty Sub-region has the highest proportion of labourers, especially in Kawerau District and Opotiki District.
- Southern Bay of Plenty Sub-region has the highest proportion of community and personal service workers.

6.2.3 Incomes[8]

"Higher incomes are a reflection of more prosperous regions."

[8] Note that around 11 percent of individuals in the Bay of Plenty Region did not specify their income. Nationally, around 10 percent of individuals did not declare their income.

Table 27. Personal Incomes (%)

Area	% of People over 15 Earning						
	<$25k	$25k-$40k	$40k-$50k	$50k-$70k	$70k-$100k	>$100k	Unspecified
Total, New Zealand	**52.9**	**22.7**	**9.6**	**10.3**	**4.6**	**7.6**	**10.5**
Bay of Plenty Region	**55.3**	**22.9**	**8.8**	**9.4**	**3.7**	**5.8**	**11.3**
western Bay Of Plenty Sub-region	**55.0**	**23.0**	**8.9**	**9.5**	**3.6**	**6.2**	**9.4**
Tauranga City	54.7	23.2	9.0	9.6	3.5	6.0	8.8
Western Bay Of Plenty District	55.9	22.5	8.7	9.3	3.8	6.7	10.9
eastern Bay of Plenty Sub-region	**59.9**	**19.8**	**7.4**	**8.7**	**4.2**	**5.6**	**14.2**
Opotiki District	66.4	19.4	6.1	6.1	2.0	4.7	16.3
Whakatane District	57.1	20.7	8.0	9.7	4.5	6.1	13.6
Kawerau District	65.3	15.6	6.3	7.6	5.2	3.0	14.2
southern Bay of Plenty Sub-region	**53.8**	**23.9**	**9.1**	**9.6**	**3.6**	**5.5**	**12.5**
South Waikato District	57.4	21.4	7.9	9.6	3.7	4.6	13.3
Taupo District	52.2	24.8	9.7	9.7	3.6	5.6	11.9
Rotorua District	53.5	24.3	9.2	9.5	3.5	5.7	12.5

Source: Statistics NZ Census

- Middle income levels in the Bay of Plenty Region are relatively similar to the national average.
- The Region as a whole has a lower proportion of high income (>$70,000) and a higher proportion of low income (< $25,000) people. This trend is especially marked in Opotiki. Kawerau also has a high proportion of people on low incomes.
- Opotiki, Kawerau and South Waikato Districts have a high proportion population with unspecified incomes.

6.3 Labour market

The labour market section looks at regional labour force data (employment, unemployment, not in the labour force and participation rate) and job vacancies by occupation group. Labour market data is taken from Statistics New Zealand Census and the Job Vacancy Monitor is from the Department of Labour.

The Department of Labour pulls together an in-depth regional report for the various regions[9]. The report contains similar information to that contained in this report, but with additional detail in certain areas. This report was not released in time to be incorporated into this section. We suggest that the strategy team should work with the Department of Labour to ensure that existing and future regional reports incorporate the regional boundaries and contains the labour market data necessary to measure activity and performance.

[9] Department of Labour. Annual In-Depth Regional Report – Bay of Plenty Region. Note, however, that there is still a boundary issue, with Taupo and South Waikato included in the Waikato regional report.

6.3.1 Regional labour market

"Lower unemployment, higher employment and participation levels will improve regional GDP."

Table 28. Labour market (%)

	Labour Market (%)														
	Employed Full-time			Employed Part-time			Unemployed			Not in Labour Force			Participation rate		
Area	1996	2001	2006	1996	2001	2006	1996	2001	2006	1996	2001	2006	1996	2001	2006
Total, New Zealand	**46.4**	**47.4**	**50.1**	**14.0**	**14.2**	**14.9**	**5.1**	**5.0**	**3.5**	**34.6**	**33.3**	**31.5**	**65.4**	**64.6**	**68.5**
Bay of Plenty Region	**42.8**	**43.8**	**47.6**	**14.0**	**14.7**	**15.0**	**6.4**	**6.0**	**4.0**	**36.8**	**35.5**	**33.5**	**63.2**	**62.1**	**66.5**
western Bay Of Plenty Sub-region	**41.3**	**42.6**	**46.9**	**13.8**	**14.7**	**15.2**	**5.4**	**5.2**	**3.2**	**39.6**	**37.5**	**34.6**	**60.4**	**60.6**	**65.4**
Tauranga City	40.0	41.3	46.2	13.4	14.4	14.8	5.6	5.5	3.3	41.1	38.8	35.6	58.9	59.4	64.4
Western Bay Of Plenty District	44.2	45.9	48.7	14.8	15.3	16.2	4.8	4.4	3.1	36.1	34.4	32.0	63.9	63.5	68.0
eastern Bay of Plenty Sub-region	**39.1**	**39.9**	**43.6**	**13.7**	**14.3**	**14.6**	**8.4**	**8.6**	**5.7**	**38.8**	**37.2**	**36.0**	**61.2**	**60.8**	**64.0**
Opotiki District	32.1	34.8	40.5	13.5	13.9	14.5	8.9	9.3	6.0	45.5	42.1	39.1	54.5	55.9	60.9
Whakatane District	41.0	42.2	45.7	14.4	14.8	15.0	7.8	7.9	5.3	36.9	35.1	34.1	63.1	62.9	65.9
Kawerau District	39.1	35.5	37.7	11.3	12.4	12.6	10.7	11.5	7.9	38.9	40.6	41.8	61.1	57.3	58.2
southern Bay of Plenty Sub-region	**45.8**	**46.7**	**49.9**	**14.3**	**14.9**	**14.9**	**6.6**	**6.0**	**4.2**	**33.2**	**32.4**	**30.9**	**66.8**	**64.4**	**69.1**
South Waikato District	44.2	45.8	45.8	13.5	13.8	14.0	8.1	6.8	5.1	34.2	33.6	35.1	65.8	63.7	64.9
Taupo District	45.0	45.8	51.3	15.5	15.9	15.9	5.6	5.1	2.9	33.8	33.1	29.9	66.2	63.9	70.1
Rotorua District	46.8	47.5	50.6	14.1	14.8	14.7	6.5	6.1	4.6	32.6	31.7	30.1	67.4	65.0	69.9

Source: Statistics NZ Census data

- The percentage of people employed full-time in eastern Bay of Plenty Sub-region remained well below the regional and national averages throughout the period, which corresponded with the higher unemployment rates in the sub-region (5.7% in 2006 versus a regional average of 4.0%).

- Participation rates rose across the Bay of Plenty Region, in line with the national trend, reaching 66.5 percent in 2006, although this was still 2.0 percent below the rate for New Zealand.

- Southern Bay of Plenty Sub-region achieved a participation rate above the national average (69.1%), with Taupo District's rate as high as 70.1 percent.

6.3.2 Job vacancies

"Regional job vacancies reflect demand for labour and therefore business activity."

Job vacancies are collected by the Department of Labour through their Job Vacancy Monitor. Vacancies are broken down into occupation groups. Unfortunately South Waikato District vacancies cannot be differentiated from the Waikato Region and so are not included in the following table.

Table 29. Job vacancies

	Annual Vacancies									
	Bay of Plenty*					New Zealand				
Occupation Group	Dec-03	Dec-04	Dec-05	Dec-06	% Change 2003-2006	Dec-03	Dec-04	Dec-05	Dec-06	% Change 2003-2006
Legislators/Admin/Managers	198	240	314	337	70.2	4,422	4,766	5,720	5,588	26.4
Professionals	344	509	649	548	59.3	7,436	8,781	9,614	8,958	20.5
Ass. Professionals/Technicians	527	611	636	642	21.8	9,316	11,589	11,265	9,909	6.4
Clerks	535	680	886	785	46.7	10,720	12,859	12,849	11,259	5.0
Service/Sales Workers	938	1,192	1,430	1,473	57.0	13,371	15,614	16,992	16,752	25.3
Agriculture/Fishery Worker	248	366	597	820	230.6	3,673	3,931	4,497	4,426	20.5
Trades Workers	651	751	803	722	10.9	9,102	10,123	9,479	8,105	-11.0
Plant/Machine Operators	332	590	770	701	111.1	5,586	7,367	8,382	7,132	27.7
Elementary Occupations	387	644	780	783	102.3	4,452	5,722	6,323	6,142	38.0
Not classifiable	130	125	110	132	1.5	1,145	1,226	990	969	-15.4
Total	**4,290**	**5,708**	**6,975**	**6,943**	**61.8**	**69,223**	**81,978**	**86,111**	**79,240**	**14.5**

* Excludes South Waikato District

Source: Job Vacancy Monitor

- Between 2003 and 2006, the number of job vacancies advertised annually within the Bay of Plenty Region rose 61.8 percent, compared with a national increase of 14.5 percent.

- New vacancy figures remained strong in the Region despite a large dip in national vacancies advertised between 2005 and 2006.

- Regional percentage increases in job vacancies outstripped the national averages in all categories of employment. Most notable were the gains in agriculture and fishery, plant and machine operators, and elementary occupations. Each of these industries saw vacancies double over the last four periods.

- There was the 10.9 percent rise in vacancies for trades' workers in the Bay of Plenty Region, compared with a fall of 11 percent at a national level.

6.4 Social trends

This section looks at social activity and trends occurring in the Bay of Plenty Region across education, health, housing, crime and access to telecommunications.

6.4.1 Education

"Access to quality education facilities is a key driver in people's location decisions."

Table 30. Secondary school decile levels

Area	Secondary Schools* Decile 1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	Unspecified	Total
Total, New Zealand	**87**	**88**	**98**	**88**	**75**	**40**	**476**
% in decile	*18.3*	*18.5*	*20.6*	*18.5*	*15.8*	*8.4*	*100.0*
Bay of Plenty Region	**16**	**9**	**9**	**5**	**1**	**0**	**40**
% in decile	*40.0*	*22.5*	*22.5*	*12.5*	*2.5*	*0.0*	*100.0*
western Bay of Plenty Sub-region	**0**	**1**	**4**	**2**	**1**	**0**	**8**
Tauranga City	0	1	2	2	1	0	6
Western Bay Of Plenty District	0	0	2	0	0	0	2
eastern Bay of Plenty Sub-region	**10**	**2**	**0**	**1**	**0**	**0**	**13**
Opotiki District	2	0	0	0	0	0	2
Whakatane District	7	2	0	1	0	0	10
Kawerau District	1	0	0	0	0	0	1
southern Bay of Plenty Sub-region	**6**	**6**	**5**	**2**	**0**	**0**	**19**
South Waikato District	1	3	0	0	0	0	4
Taupo District	4	1	2	0	0	0	7
Rotorua District	1	2	3	2	0	0	8

* Excludes Special and Correspondence Schools *Source: MoE (2007), Statistics NZ*

- The Bay of Plenty Region has a disproportionate number of schools in the lowest and highest decile groups
- Ten of the thirteen secondary schools in eastern Bay of Plenty Sub-region are in the bottom two deciles.
- Opotiki and Kawerau Districts only have decile 1 and 2 secondary schools.

Table 31 shows the number of teachers in the Bay of Plenty Region and identifies an aggregated student: teacher ratio. A lower ratio suggests that teachers have smaller class sizes on average.

Table 31. Teachers

Area	Teachers: Primary and Intermediate	Composite	Secondary	Special	Total FTEs	Student: Teacher ratio
Total, New Zealand	23,357	2,007	18,044	909	44,317	**17.2**
Bay of Plenty*	1,658	204	1,156	23	3,041	**16.9**

* Excludes South Waikato District *Sources: MoE (April 2005), Statistic NZ*

- The Bay of Plenty Region has a better student to teacher ration than for New Zealand.

Table 32. Student enrolments

Area	Student Enrolment 1996	2001	2006	% Change in Enrolment 1996-2001	2001-2006	1996-2006
Total, New Zealand	697,325	733,924	760,761	5.2	3.7	9.1
% of Under-15 Population	83.8	86.6	87.7	3.3	1.3	4.6
Bay of Plenty	45,391	49,175	50,736	8.3	3.2	11.8
% of Under-15 Population	62.8	66.7	69.0	6.2	3.5	9.9

* Excludes South Waikato District *Sources: MoE, Statistics NZ*

Area	Student Enrolment 1996	2001	2006	% Change in Enrolment 1996-2001	2001-2006	1996-2006
Total, New Zealand	697,325	733,924	760,761	5.2	3.7	9.1
% of 5-19 Population	85.5	87.1	85.2	1.9	-2.2	-0.3
Bay of Plenty	45,391	49,175	50,736	8.3	3.2	11.8
% of 5-19 Population	74.9	76.6	75.6	2.3	-1.3	1.0

* Excludes South Waikato District *Sources: MoE, Statistics NZ*

- A lower proportion of Bay of Plenty Region residents are enrolled in schools compared to the national average. This is a bigger issue in the under 15 population.

6.4.2 Health

"Access to quality health services is a key driver in people's location decisions."

Table 33 shows the number of medical practitioners by type in the two DHBs in the Region. Again, South Waikato cannot be included in the analysis as it sits outside the DHB boundaries.

Table 33. Medical practitioners

Medical Practitioners	Total Medical Practitioners: New Zealand	Bay of Plenty*	Lakes DHB	Bay of Plenty DHB	Rate per 10,000 Residents: New Zealand	Bay of Plenty*	Lakes DHB	Bay of Plenty DHB
General Practitioners	**3,006**	**211**	73	138	**7.5**	**7.2**	7.4	7.1
House Officers	**842**	**67**	22	45	**2.1**	**2.3**	2.2	2.3
Medical Officers of Special Scale	**303**	**18**	8	10	**0.8**	**0.6**	0.8	0.5
Other	**244**	**0**	0	0	**0.6**	**0.0**	0.0	0.0
Primary Care	**138**	**0**	0	0	**0.3**	**0.0**	0.0	0.0
Registrar	**1,319**	**48**	10	38	**3.3**	**1.6**	1.0	1.9
Specialists	**2,873**	**156**	54	102	**7.1**	**5.3**	5.5	5.2
Total	**8,725**	**500**	167	333	**21.7**	**17.1**	17.0	17.1

* Excludes South Waikato District *Sources: NZHIS (2003), Statistics NZ*

- The number of GPs per 10,000 residents in the Region is only slightly below that for New Zealand.

- As can be expected in a provincial region, the Bay of Plenty has a lower proportion of specialist services than nationally.

6.4.3 Housing

"Affordable housing is a key driver in people's location decisions".

Home ownership

Table 34 presents census data on the proportion of households that own the home that they live in.

Table 34. Home ownership

	% of Households								
	Owned			Not Owned			Not Specified		
Area	1996	2001	2006	1996	2001	2006	1996	2001	2006
Total, New Zealand	**67.7**	**64.6**	**62.7**	**28.3**	**30.7**	**31.1**	**4.0**	**4.7**	**6.2**
Bay of Plenty Region	**67.9**	**64.4**	**62.2**	**28.5**	**30.4**	**31.0**	**3.6**	**5.3**	**6.7**
western Bay Of Plenty Sub-region	**71.1**	**66.2**	**64.6**	**25.8**	**29.3**	**29.4**	**3.0**	**4.5**	**6.0**
Tauranga City	70.3	64.5	63.2	26.8	31.1	31.2	2.9	4.4	5.5
Western Bay Of Plenty District	73.1	70.2	68.1	23.4	25.0	24.7	3.4	4.8	7.2
eastern Bay of Plenty Sub-region	**66.3**	**64.4**	**61.2**	**29.2**	**30.2**	**31.7**	**4.4**	**5.4**	**7.1**
Opotiki District	64.7	62.9	56.9	30.8	30.9	34.0	4.5	6.2	9.1
Whakatane District	65.5	64.7	62.0	29.7	30.4	31.1	4.8	4.8	6.9
Kawerau District	72.2	64.9	62.8	25.1	27.9	31.6	2.7	7.3	5.6
southern Bay of Plenty Sub-region	**65.1**	**62.3**	**59.7**	**31.0**	**31.6**	**32.8**	**3.9**	**6.1**	**7.5**
South Waikato District	65.8	64.8	59.7	30.1	29.5	31.6	4.1	5.7	8.7
Taupo District	63.0	61.0	59.1	33.2	32.8	33.3	3.8	6.1	7.6
Rotorua District	65.9	62.0	59.9	30.3	31.8	33.0	3.8	6.2	7.1

Source: Statistics NZ

- Home ownership across the Region is very similar to the national average. It is highest in the western Bay of Plenty Sub-region and lowest in the southern Bay of Plenty Sub-region.

- Opotiki District has the lowest level of home ownership (56.9%) and Western Bay of Plenty District has the highest (68.1%).

House prices

Average house prices are derived from Quotable Value New Zealand data. Sub-regions are weighted averages of the TA average sales price and number of sales. Similarly, Bay of Plenty Region prices are a weighted average of Sub-region average sales price and number of sales.

Table 35. Average house prices in the Bay of Plenty Region

Average House Price	Jun-04	Jun-05	Jun-06	%change 04-05	%change 05-06
Total, New Zealand	**$287,902**	**$308,775**	**$340,829**	**7.3%**	**10.4%**
Bay of Plenty Region	**$236,975**	**$278,093**	**$300,956**	**17.4%**	**8.2%**
western Bay Of Plenty Sub-region	**$295,533**	**$371,005**	**$393,871**	**25.5%**	**6.2%**
Tauranga City	$301,404	$375,839	$395,529	24.7%	5.2%
Western Bay Of Plenty District	$267,178	$346,281	$384,716	29.6%	11.1%
eastern Bay of Plenty Sub-region	**$165,911**	**$223,508**	**$244,237**	**34.7%**	**9.3%**
Opotiki District	$133,744	$171,609	$197,899	28.3%	15.3%
Whakatane District	$211,260	$280,927	$289,622	33.0%	3.1%
Kawerau District	$69,884	$95,332	$127,354	36.4%	33.6%
southern Bay of Plenty Sub-region	**$183,281**	**$202,788**	**$238,354**	**10.6%**	**17.5%**
South Waikato District	$74,579	$86,541	$112,832	16.0%	30.4%
Taupo District	$266,941	$306,227	$343,353	14.7%	12.1%
Rotorua District	$171,055	$195,530	$230,526	14.3%	17.9%

source: QVNZ

- House prices in the Bay of Plenty Region are below the national average.
- House Prices in the western Bay of Plenty Sub-region and in Taupo District are above the national average.
- South Waikato and Kawerau Districts have the lowest average house prices in the Region.
- House prices in the eastern and western Bay of Plenty Sub-regions have been easing, whereas southern Bay of Plenty Sub-region has seen increases in average house prices.

<u>Rental prices</u>

Rental prices are taken from the Department of Building and Housing website and relate to tenancy bonds. Weighted averages are used to determine Bay of Plenty Region and Sub-regions.

Table 36. Average rents in the Bay of Plenty Region

	Sep-06 to Feb-07	
Average rent for a 3 bedroom house	**Average rent**	**median rent**
Total, New Zealand	**$296**	**$285**
Bay of Plenty Region	**$256**	**$255**
western Bay Of Plenty Sub-region	**$287**	**$286**
Tauranga City	$294	$293
Western Bay Of Plenty District	$252	$250
eastern Bay of Plenty Sub-region	**$227**	**$227**
Opotiki District	$164	$165
Whakatane District	$259	$260
Kawerau District	$173	$170
southern Bay of Plenty Sub-region	**$232**	**$230**
South Waikato District	$157	$160
Taupo District	$261	$265
Rotorua District	$235	$229

source:DBH

- Rent is cheaper in the Bay of Plenty Region than nationally.
- Rents are highest in the western Bay of Plenty Sub-region
- South Waikato district has the lowest rents, followed by Opotiki District and then Kawerau District.

6.4.4 Crime

"Lower crime rate reflects a more prosperous, cohesive community and attracts people to a region."

Crime rates are taken from New Zealand Police annual reports. Regional boundaries mean we cannot easily separate out the South Waikato District[10] for inclusion into the analysis.

Table 37. Crime rates

	Crime Per 10,000 Population					Total Crimes					% of Crimes Resolved				
				% Change					% Change					% Change	
Area	Jun-04	Jun-05	Jun-06	Jun-05	Jun-06	Jun-04	Jun-05	Jun-06	Jun-05	Jun-06	Jun-04	Jun-05	Jun-06	Jun-05	Jun-06
Total, New Zealand	**1,053.7**	**968.8**	**1,035.9**	**-8.1**	**6.9**	**426,149**	**396,018**	**426,469**	**-7.1**	**7.7**	**45.1**	**44.2**	**44.2**	**-2.0**	**0.0**
Bay of Plenty Region	**1,286.3**	**1,122.1**	**1,135.6**	**-12.8**	**1.2**	**40,263**	**35,499**	**36,159**	**-11.8**	**1.9**	**48.8**	**50.2**	**48.7**	**2.9**	**-3.0**
western Bay Of Plenty Sub-region	998.8	955.9	969.1	-4.3	1.4	13,768	13,501	13,987	-1.9	3.6	50.5	47.6	46.2	-5.7	-2.9
eastern Bay of Plenty Sub-region	1,192.4	890.4	1,056.1	-25.3	18.6	5,681	4,230	4,991	-25.5	18.0	50.5	57.6	55.4	14.1	-3.8
Taupo District	1,402.5	1,269.9	1,202.6	-9.5	-5.3	7,984	7,239	6,822	-9.3	-5.8	47.0	56.7	55.3	20.6	-2.5
Rotorua District	1,817.2	1,491.1	1,477.6	-17.9	-0.9	12,830	10,529	10,359	-17.9	-1.6	47.3	46.0	44.5	-2.7	-3.3

Source: New Zealand Police

[10] Although administrative data on the District can be provided by the Tokoroa police station.

- The Bay of Plenty Region had a crime rate significantly (9.6%) higher than the national average with high crime rates in Rotorua and Taupo Districts.

- There was a substantial decrease in crime levels in Rotorua and Taupo Districts over the last two years. Taupo District's crime rate has fallen 14.3 percent in the last two years, while Rotorua District's has dropped 18.7 percent. This contributed to a Bay of Plenty Regional improvement of 11.7 percent, compared with a national reduction of 1.7 percent.

- Overall, the Bay of Plenty Region has a resolution rate 4.5 percent higher than the national average.

6.4.5 Telecommunications

"Ability to access and use high speed, quality telecommunications is a pre-requisite to business performance and location decisions".

Table 38 shows the percentage of households with access to various forms of telecommunications. Note that in this case access is a case of affordability and requirement rather than the ability to access.

Table 38. Access to telecommunications

	% of Households with Access to				No Telecommunications Access*
	Telephone	Mobile Phone	Fax Machine	Internet	
Area	2006	2006	2006	2006	2006
Total, New Zealand	**91.6**	**74.2**	**26.0**	**60.5**	**2.0**
Bay of Plenty Region	**88.4**	**74.2**	**27.4**	**56.0**	**2.9**
Western Bay Of Plenty	**91.5**	**75.7**	**30.2**	**59.8**	**1.7**
Tauranga City	91.8	75.3	27.0	59.5	1.6
Western Bay Of Plenty District	91.0	77.0	38.5	60.6	1.8
Eastern Bay of Plenty	**84.4**	**66.5**	**23.6**	**48.9**	**6.0**
Opotiki District	78.5	55.3	23.5	38.6	9.5
Whakatane District	87.0	68.5	25.0	52.6	4.9
Kawerau District	79.5	70.9	16.5	43.8	7.1
Southern Bay of Plenty	**85.9**	**75.4**	**25.4**	**54.0**	**3.2**
South Waikato District	83.6	74.5	22.0	47.7	3.7
Taupo District	87.1	77.7	31.1	58.1	2.7
Rotorua District	86.0	74.5	23.6	54.0	3.3

Source: SNZ Census 2006

The number of households with land-line ("telephone") access in fact dropped between 1996 and 2006 across the country. This was as a result of the rise in use of mobile phones, with many people electing not to have home phones as well as mobile phones.

The eastern Bay of Plenty and southern Bay of Plenty Sub-regions have a higher proportion of people with no telecommunications access. In particular, 9.5 percent of Opotiki District residents have no telecommunications access.

Internet usage is lower in the Bay of Plenty Region than nationally. The eastern Bay of Plenty Sub-region has the lowest access at 48.9 percent, while Opotiki District (38.6%) and Kawerau District (43.8%) have the lowest access amongst the TAs in the Region.

7 Māori

Māori play a significant role in the Bay of Plenty Region accounting for around a quarter of the Region's population compared to only 13 percent nationally. The proportions are even higher in eastern Bay of Plenty Sub-region (41 percent). In Kawerau District, over 50 percent of the population identify as Māori and in Opotiki District the figure is 50 percent. Māori population growth rates and age distribution suggests they will continue to form an increasing part of the Region's population.

In the Bay of Plenty Region, Māori have significant business and land assets, which will impact on industrial development. Their culture and history plays a crucial role in the development of the tourism industry in the Region.

Based on social demographics, improving the performance of Māori will have a significant effect on the Region's economic and social performance.

Information for this section comes from a variety of sources including the Te Arawa[11] Rohe Social and Economic Profile October 2006. The information in this section is based on desktop research. Documented and authoritative public information on Māori, particularly at a regional level, is difficult to find. Approaching the various Māori organisations and stakeholders will likely result in more detailed, accurate information.

7.1 Iwi

This section looks at the main iwi in the Bay of Plenty region. Iwi boundaries do not reflect TA or Regional Council boundaries. Table 39 presents the main iwi in the Bay of Plenty Region.

Table 39. Main iwi in the Bay of Plenty Region

Area/Rohe	Iwi
Bay of Plenty	Whakatohea; Te Whanau a Apanui; Ngati Awa; Tuhoe; Ngai-te-Rangi
Rotorua	Te Arawa
Taupo/South Waikato	Ngati Tuwharetoa, Ngati Maniapoto; Ngati Raukawa

There are ten main iwi in the Bay of Plenty region. In Rotorua, the Main iwi is Te Arawa. In Taupo it is Ngati Tuwharetoa. In the South Waikato it is Ngati Raukawa.

[11] Te Arawa rohe is geographically similar to the Bay of Plenty Region although does not include South Waikato or the eastern Bay of Plenty Sub-regions.

- There are 162 registered marae in the Bay of Plenty Regional Council area.
- There are 32 Marae in the South Waikato District[12].

7.2 Collectively owned Māori assets

The Te Arawa rohe has the highest concentration of Māori land blocks (over 1,500), trusts and incorporations of any rohe in New Zealand. For example, 20 percent of land in the Rotorua District is Māori owned. It is estimated that the actual aggregate value of collectively owned assets in the Te Arawa rohe is close to $1 billion.

Further, there are three treaty settlements currently being negotiated, which are expected to provide a further $250 million to Te Arawa collective assets.

7.3 Significant Māori Trusts and Incorporations

The following table provides a list of significant Māori Trusts and Incorporations in the Bay of Plenty Region.

Table 40. Significant Māori trusts and incorporations in the Bay of Plenty Region[13]

Total asset values of Trusts and incorporations	Trusts and incorporations
> $50 million	Pukeroa Oruawhata Trust
$25 million to $50 million	Ngati Whakaue Tribal Lands Incorporated Ngati Whakaue Education Endowment Trust Board
$10 million to $25 million	Rotoiti 15 Trust Rotoma No 1 Block Incorporation Kapenga M Trust Tumunui Lands Trust Tautara Matawhaura Whanagamoa Trust Te Tumu Kaituna 14 Trust Rangatira E Trust Onuku Trust Kokako Trust
$5 million to $10 million	Taheke Paengaroa Trust Waerenga East and West Incorporation Paehinahina Mourea Trust Haumingi No 3 Trust

Source: Tahana, Te Puni Kokiri (2006)

[12] http://en.wikipedia.org/wiki/South_Waikato_District

[13] Excludes Taupo and South Waikato.

7.3.1 Taupo District[14]

There are around 600 incorporations in the Taupo District, many of which are small and manage uneconomic portions of land. Major trusts and incorporations include the Lake Taupo and Lake Rotoaira Forest Trusts[15] and the Opepe Incorporation, which manage significant resources on behalf of their shareholders. The Tuaropaki Trust has developed the Mokai geothermal power station and manages the Tuaropaki and Waipapa land blocks. Ngati Kahungunu have investments in the Mangakino area by way of the Mangakino Township Incorporation and the Pouakani Trust.

[14] Information is from the Taupo District Economic Development Strategy.

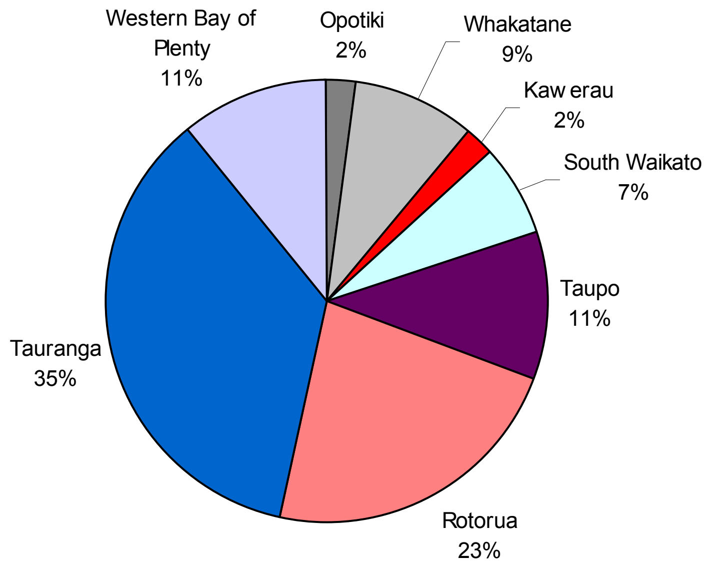
[15] Who own 22,500ha and 9,500ha of forest area.

8 Key Indicators

In this section we look at the key performance indicators for the Bay of Plenty Region. Indicators covered include employment, GDP, Business Units, and Productivity. Analysis here is at the combined Bay of Plenty Region and the 19 industry level. However, data is also available at the TA level by 53 industries, where we provide some discussion in the text.

As can be seen in Figure 6, 35 percent of all employment in the bay of Plenty is in Tauranga, followed by Rotorua at 23 percent. These two TAs account for almost 60 percent of all employment in the Bay of Plenty Region. Taupo and Western Bay of Plenty each have roughly 11 percent of total FTEs, while Whakatane accounts for nine percent of employment. The South Waikato District holds seven percent of all employment in the area, while Opotiki District and Kawerau District each account for around two percent.

Figure 6: 2006 employment in the Bay of Plenty Region



Comparing Sub-regions, the eastern Bay of Plenty Sub-region accounts for around 13 percent of all employment, the southern Bay of Plenty Sub-region accounts for 41 percent and the remaining 46 percent is in the western Bay of Plenty Sub-region.

It is important to bear in mind the relative size of each TA and Sub-region when considering the data presented below.

8.1 Summary of indicators

Table 41 presents the Region's employment, value added and business units broken down by 19 industries and the importance of that industry in that measure.

Table 41. Bay of Plenty Region key measures by industry 2006

Sectors (2006)	FTEs	%	GDP (06$m)	%	Business units	%
Agriculture	13,838	*11.1%*	729	*7.0%*	8,019	*22.0%*
Forestry	2,105	*1.7%*	533	*5.1%*	665	*1.8%*
Fishing	303	*0.2%*	24	*0.2%*	135	*0.4%*
Mining	298	*0.2%*	39	*0.4%*	33	*0.1%*
Utilities	547	*0.4%*	246	*2.4%*	54	*0.1%*
Manufacturing	17,490	*14.0%*	1,775	*17.0%*	1,901	*5.2%*
Construction	12,191	*9.8%*	682	*6.5%*	3,983	*10.9%*
Wholesale trade	6,293	*5.0%*	711	*6.8%*	1,335	*3.7%*
Retail trade	15,948	*12.8%*	781	*7.5%*	3,552	*9.7%*
Hospitality	7,306	*5.9%*	228	*2.2%*	1,155	*3.2%*
Transport, storage	4,928	*3.9%*	482	*4.6%*	1,124	*3.1%*
Communications	1,166	*0.9%*	373	*3.6%*	208	*0.6%*
Finance and insurance	1,907	*1.5%*	345	*3.3%*	749	*2.1%*
Business and property services	12,474	*10.0%*	1,874	*17.9%*	9,299	*25.5%*
Government administration	2,773	*2.2%*	324	*3.1%*	150	*0.4%*
Education	7,532	*6.0%*	389	*3.7%*	721	*2.0%*
Health and community services	10,240	*8.2%*	583	*5.6%*	1,364	*3.7%*
Cultural and recreational services	3,131	*2.5%*	199	*1.9%*	823	*2.3%*
Personal services	4,342	*3.5%*	128	*1.2%*	1,175	*3.2%*
Totals	**124,813**	***100.0%***	**10,445**	***100.0%***	**36,445**	***100.0%***

source:BERL Regional Database, Statistics NZ

The Bay of Plenty Region employed around 125,000 FTEs in 2006. Manufacturing[16] was the most significant employer in the Region accounting for 14 percent of employment. It was followed by retail trade (12.8%), agriculture (11.1%) and business and property services (10.0%).

The Bay of Plenty Region GDP was $10.45 billion in 2006. The biggest contributors to GDP in 2006 were business and property services (17.9%) and manufacturing (17%).

There were around 36,500 business units in the Bay of Plenty Region in 2006. Most businesses were in the business and property services (25.5%) and agriculture (22%) industries followed by construction (10.9%) and retail trade (10.9%).

[16] Note that manufacturing also includes food and wood processing, which in many TAs form the bulk of activity in the industry.

8.1.1 *Sub-region key measures*

Table 42. western Bay of Plenty Sub-region key measures by industry 2006

Sectors (2006)	FTEs	%	GDP (06$m)	%	Business units	%
Agriculture	6,806	*11.7%*	344	*7.0%*	4,107	*21.8%*
Forestry	185	*0.3%*	47	*1.0%*	140	*0.7%*
Fishing	253	*0.4%*	20	*0.4%*	105	*0.6%*
Mining	133	*0.2%*	24	*0.5%*	15	*0.1%*
Utilities	265	*0.5%*	133	*2.7%*	12	*0.1%*
Manufacturing	7,602	*13.1%*	729	*14.8%*	1,026	*5.4%*
Construction	6,649	*11.4%*	373	*7.6%*	2,386	*12.7%*
Wholesale trade	3,491	*6.0%*	394	*8.0%*	807	*4.3%*
Retail trade	7,612	*13.1%*	372	*7.6%*	1,716	*9.1%*
Hospitality	2,380	*4.1%*	74	*1.5%*	425	*2.3%*
Transport, storage	2,586	*4.4%*	262	*5.3%*	540	*2.9%*
Communications	888	*1.5%*	284	*5.8%*	98	*0.5%*
Finance and insurance	1,005	*1.7%*	175	*3.6%*	427	*2.3%*
Business and property services	6,511	*11.2%*	1,000	*20.3%*	5,176	*27.5%*
Government administration	1,150	*2.0%*	133	*2.7%*	33	*0.2%*
Education	2,833	*4.9%*	146	*3.0%*	245	*1.3%*
Health and community services	5,231	*9.0%*	295	*6.0%*	699	*3.7%*
Cultural and recreational services	848	*1.5%*	57	*1.1%*	316	*1.7%*
Personal services	1,820	*3.1%*	56	*1.1%*	556	*3.0%*
Totals	**58,247**	***100.0%***	**4,919**	***100.0%***	**18,829**	***100.0%***

source:BERL Regional Database, Statistics NZ

Manufacturing, retail trade and business and property services are key industries in the western Bay of Plenty Sub-region. There is still a significant primary industry as well.

In the western Bay of Plenty Sub-region, the large employers are manufacturing and retail trade (both 13.1%) followed by agriculture (11.7%), construction (11.4%) and business and property services (11.2%).

GDP is generated mainly in business and property services (20.3%) and manufacturing (14.8%).

Business units are largely in the business and property services (27.5%), agriculture (21.8%) and construction (12.7%). In general, there are a large number of small, owner-operator businesses in these industries.

Table 43. eastern Bay of Plenty Sub-region key measures by industry 2006

Sectors (2006)	FTEs	%	GDP (06$m)	%	Business units	%
Agriculture	2,759	*16.5%*	150	*11.1%*	1,537	*31.5%*
Forestry	322	*1.9%*	82	*6.0%*	135	*2.8%*
Fishing	32	*0.2%*	3	*0.2%*	22	*0.5%*
Mining	12	*0.1%*	2	*0.2%*	4	*0.1%*
Utilities	44	*0.3%*	17	*1.2%*	9	*0.2%*
Manufacturing	2,787	*16.7%*	301	*22.4%*	194	*4.0%*
Construction	1,441	*8.6%*	80	*5.9%*	383	*7.8%*
Wholesale trade	481	*2.9%*	54	*4.0%*	109	*2.2%*
Retail trade	2,090	*12.5%*	102	*7.6%*	441	*9.0%*
Hospitality	599	*3.6%*	19	*1.4%*	128	*2.6%*
Transport, storage	456	*2.7%*	45	*3.3%*	108	*2.2%*
Communications	77	*0.5%*	25	*1.8%*	25	*0.5%*
Finance and insurance	201	*1.2%*	40	*3.0%*	79	*1.6%*
Business and property services	1,136	*6.8%*	176	*13.1%*	1,052	*21.5%*
Government administration	447	*2.7%*	52	*3.9%*	35	*0.7%*
Education	1,530	*9.2%*	79	*5.9%*	166	*3.4%*
Health and community services	1,480	*8.9%*	89	*6.6%*	182	*3.7%*
Cultural and recreational services	261	*1.6%*	17	*1.3%*	97	*2.0%*
Personal services	563	*3.4%*	15	*1.1%*	178	*3.6%*
Totals	**16,719**	***100.0%***	**1,348**	***100.0%***	**4,884**	***100.0%***

source:BERL Regional Database, Statistics NZ

In the eastern Bay of Plenty Sub-region, manufacturing and agriculture are the key driver industries.

Manufacturing and agriculture account for similar proportions of employment in the Sub-region (16.7% and 16.5% respectively).

In terms of contribution to GDP, manufacturing is still the major industry accounting for 22.4 percent of value added. Business and property services adds 13.1 percent to GDP, while agriculture adds 11.1 percent.

The most business units are in agriculture (31.5%) followed by business and property services (21.5%). Manufacturing only accounts for 4.0 percent of business units suggesting larger manufacturing businesses.

Table 44. southern Bay of Plenty Sub-region key measures by industry 2006

Sectors (2006)	FTEs	%	GDP (06$m)	%	Business units	%
Agriculture	4,273	*8.6%*	235	*5.6%*	2,375	*18.7%*
Forestry	1,598	*3.2%*	405	*9.7%*	390	*3.1%*
Fishing	18	*0.0%*	1	*0.0%*	8	*0.1%*
Mining	153	*0.3%*	12	*0.3%*	14	*0.1%*
Utilities	239	*0.5%*	96	*2.3%*	33	*0.3%*
Manufacturing	7,101	*14.2%*	744	*17.8%*	681	*5.3%*
Construction	4,102	*8.2%*	229	*5.5%*	1,214	*9.5%*
Wholesale trade	2,322	*4.7%*	263	*6.3%*	419	*3.3%*
Retail trade	6,247	*12.5%*	306	*7.3%*	1,395	*11.0%*
Hospitality	4,327	*8.7%*	135	*3.2%*	602	*4.7%*
Transport, storage	1,886	*3.8%*	175	*4.2%*	476	*3.7%*
Communications	201	*0.4%*	64	*1.5%*	85	*0.7%*
Finance and insurance	701	*1.4%*	130	*3.1%*	243	*1.9%*
Business and property services	4,827	*9.7%*	698	*16.7%*	3,071	*24.1%*
Government administration	1,175	*2.4%*	139	*3.3%*	82	*0.6%*
Education	3,169	*6.4%*	164	*3.9%*	310	*2.4%*
Health and community services	3,528	*7.1%*	200	*4.8%*	483	*3.8%*
Cultural and recreational services	2,022	*4.1%*	125	*3.0%*	410	*3.2%*
Personal services	1,958	*3.9%*	57	*1.4%*	441	*3.5%*
Totals	**49,847**	***100.0%***	**4,178**	***100.0%***	**12,732**	***100.0%***

source:BERL Regional Database, Statistics NZ

Industry drivers in the southern Bay of Plenty Sub-region are spread between manufacturing (14.2%) and agriculture (8.6%), which are largely linked through the processing of raw primary goods (forestry and agriculture). Retail trade employs 12.5 percent of all FTEs, while tourism's importance to the Sub-region is reflected in the relatively high employment in the hospitality industry (8.7%).

Business and property services produces the second-most GDP, at 16.7 percent of the total, through 24.1 percent of businesses.

8.2 Employment

Table 45 presents FTE employment broken down by 19 industries for the Bay of Plenty Region. Data is presented for the latest three years and for 1996. The table also shows the change in employment for the last two periods and for the last ten years.

Table 45. Bay of Plenty Region employment by Industry

	Employment Number FTEs				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	12,868	14,111	13,574	13,838	-3.8	1.9	0.7
Forestry	3,410	3,132	2,610	2,105	-16.7	-19.3	-4.7
Fishing	206	322	331	303	2.7	-8.4	3.9
Mining	131	271	263	298	-3.1	13.3	8.6
Utilities	1,049	550	591	547	7.5	-7.5	-6.3
Manufacturing	16,569	17,498	17,681	17,490	1.0	-1.1	0.5
Construction	7,681	10,281	11,316	12,191	10.1	7.7	4.7
Wholesale trade	4,507	5,176	5,901	6,293	14.0	6.6	3.4
Retail trade	13,378	15,460	15,699	15,948	1.5	1.6	1.8
Hospitality	5,168	6,611	6,697	7,306	1.3	9.1	3.5
Transport, storage	4,308	4,868	4,945	4,928	1.6	-0.3	1.4
Communications	1,095	1,097	935	1,166	-14.8	24.7	0.6
Finance and insurance	1,961	1,774	2,078	1,907	17.1	-8.2	-0.3
Business and property services	7,747	11,276	11,961	12,474	6.1	4.3	4.9
Government administration	2,866	2,431	2,590	2,773	6.5	7.1	-0.3
Education	6,916	7,522	7,781	7,532	3.4	-3.2	0.9
Health and community services	6,108	9,440	10,303	10,240	9.1	-0.6	5.3
Cultural and recreational services	1,746	2,686	2,897	3,131	7.8	8.1	6.0
Personal services	3,053	3,863	4,064	4,342	5.2	6.8	3.6
Bay of Plenty	**100,767**	**118,368**	**122,216**	**124,813**	**3.3**	**2.1**	**2.2**
New Zealand	**1,484,116**	**1,690,949**	**1,751,699**	**1,809,041**	**3.6**	**3.3**	**2.0**

source:BERL Regional Database, Statistics NZ

The employment figures across various industries in the last decade give a very broad picture of the economic changes occurring in the Region. The number of FTEs employed in the Bay of Plenty in 2006 was 124,800, an increase of 2.2%pa on the 100,800 FTEs employed in 1996. This rate is slightly higher than the 2.0%pa compound growth for New Zealand as a whole.

The additional 24,000 FTEs employed were mainly in construction, business and property services, and wholesale trade (11,000); health and community services, cultural and recreational services, and personal services (6,800); and hospitality and retail trade (4,700).

The biggest drop in employment occurred in forestry, which shed 1,300 FTEs, or 38 percent of employment since 1996. The only other major job losses occurred in utilities, where around 500 FTEs (or 48% of all employment in the industry) were lost. Almost all of these losses in fact occurred in the electricity and gas supply industry. As GDP in the electricity and gas supply industry did not fall we can safely assume that the productivity in this industry improved as new technology was introduced.

By and large, changes in employment in the Bay of Plenty Region mirrored those of New Zealand. Industries in which growth rates were almost identical to the national averages included utilities, construction, retail trade, hospitality, transport and storage, business and property services, government administration, education, health and community services, as well as personal services.

8.2.1 Sub-region employment

Employment by Sub-region is provided to identify any unique regional trends.

Table 46. western Bay of Plenty Sub-region employment

	Employment Number FTEs				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	5,703	7,198	6,951	6,806	-3.4	-2.1	1.8
Forestry	289	273	236	185	-13.6	-21.5	-4.4
Fishing	118	256	262	253	2.6	-3.6	7.9
Mining	57	138	132	133	-4.1	0.4	8.8
Utilities	298	224	247	265	10.5	7.0	-1.2
Manufacturing	6,127	7,065	7,316	7,602	3.5	3.9	2.2
Construction	3,723	5,752	6,387	6,649	11.0	4.1	6.0
Wholesale trade	2,259	2,925	3,395	3,491	16.1	2.8	4.4
Retail trade	5,534	7,113	7,413	7,612	4.2	2.7	3.2
Hospitality	1,264	2,091	2,206	2,380	5.5	7.9	6.5
Transport, storage	2,205	2,584	2,452	2,586	-5.1	5.5	1.6
Communications	511	588	604	888	2.7	47.1	5.7
Finance and insurance	872	948	1,250	1,005	31.8	-19.6	1.4
Business and property services	3,444	5,964	6,059	6,511	1.6	7.5	6.6
Government administration	996	905	985	1,150	8.9	16.7	1.4
Education	2,194	2,704	2,795	2,833	3.4	1.4	2.6
Health and community services	2,765	4,464	5,311	5,231	19.0	-1.5	6.6
Cultural and recreational services	469	729	797	848	9.3	6.4	6.1
Personal services	1,169	1,604	1,719	1,820	7.1	5.9	4.5
Western BoP	**39,998**	**53,524**	**56,516**	**58,247**	**5.6**	**3.1**	**3.8**
New Zealand	**1,484,116**	**1,690,949**	**1,751,699**	**1,809,041**	**3.6**	**3.3**	**2.0**

source:BERL Regional Database, Statistics NZ

Employment growth in the western Bay of Plenty Sub-region has been at almost twice the national rate over the last ten years.

Employment in the western Bay of Plenty Sub-region is spread across several industries, with retail trade and manufacturing each employing over 7,600 FTEs and agriculture, construction and business and property services employing over 6,000 FTEs. This suggests a relatively broad based economy.

In the western Bay of Plenty Sub-region the most rapid growth over the last ten years has been in fishing and mining, albeit off a small base. Growth has been across the board generally, apart from employment falls in forestry and utilities and only slow growth in finance and insurance, government administration, and transport and storage.

Employment in agriculture and forestry has declined in each of the last two years, quite significantly in forestry.

Table 47. eastern Bay of Plenty Sub-region employment

	Employment Number FTEs				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	2,687	2,764	2,627	2,759	-4.9	5.0	0.3
Forestry	800	344	326	322	-5.1	-1.3	-8.7
Fishing	53	45	44	32	-1.6	-27.2	-4.9
Mining	17	12	17	12	40.7	-26.3	-3.4
Utilities	118	83	105	44	26.2	-58.0	-9.4
Manufacturing	3,089	2,677	2,721	2,787	1.7	2.4	-1.0
Construction	1,025	1,132	1,269	1,441	12.2	13.5	3.5
Wholesale trade	394	405	455	481	12.3	5.7	2.0
Retail trade	1,920	2,163	2,109	2,090	-2.5	-0.9	0.8
Hospitality	452	518	527	599	1.7	13.7	2.9
Transport, storage	393	443	483	456	9.0	-5.6	1.5
Communications	107	57	81	77	42.6	-4.5	-3.1
Finance and insurance	216	174	184	201	5.7	9.0	-0.7
Business and property services	871	1,083	1,268	1,136	17.1	-10.4	2.7
Government administration	432	419	499	447	19.0	-10.4	0.4
Education	1,408	1,529	1,562	1,530	2.2	-2.1	0.8
Health and community services	960	1,425	1,414	1,480	-0.7	4.7	4.4
Cultural and recreational services	141	229	268	261	17.3	-2.8	6.4
Personal services	465	498	501	563	0.6	12.5	1.9
Eastern BoP	**15,548**	**15,998**	**16,462**	**16,719**	**2.9**	**1.6**	**0.7**
New Zealand	**1,484,116**	**1,690,949**	**1,751,699**	**1,809,041**	**3.6**	**3.3**	**2.0**

source:BERL Regional Database, Statistics NZ

Employment in the eastern Bay of Plenty Sub-region is definitely focused on agriculture (2,759) and manufacturing (2,787). The next largest industry in terms of employment is retail trade.

Employment growth over the last two years has not been as good as nationally and, over the last ten years, employment growth has been at around a third of national growth.

Most growth has been in health and community services, adding 520 FTEs in the ten years from 1996, while the highest percentage growth has been in cultural and recreational Services, which rose 6.4%pa.

Forestry lost the most FTEs during the decade, down 478, while the largest percentage losses were in utilities, down by 9.4%pa.

Table 48. southern Bay of Plenty Sub-region employment

	Employment Number FTEs				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	4,478	4,149	3,995	4,273	-3.7	7.0	-0.5
Forestry	2,321	2,515	2,048	1,598	-18.6	-22.0	-3.7
Fishing	34	22	24	18	13.4	-26.2	-6.3
Mining	57	122	114	153	-6.2	34.1	10.4
Utilities	633	243	239	239	-1.6	-0.3	-9.3
Manufacturing	7,353	7,756	7,644	7,101	-1.4	-7.1	-0.3
Construction	2,934	3,398	3,660	4,102	7.7	12.1	3.4
Wholesale trade	1,854	1,846	2,051	2,322	11.1	13.2	2.3
Retail trade	5,923	6,184	6,177	6,247	-0.1	1.1	0.5
Hospitality	3,452	4,002	3,964	4,327	-0.9	9.1	2.3
Transport, storage	1,710	1,841	2,010	1,886	9.2	-6.1	1.0
Communications	477	452	250	201	-44.7	-19.8	-8.3
Finance and insurance	873	651	644	701	-1.1	9.0	-2.2
Business and property services	3,432	4,230	4,635	4,827	9.6	4.2	3.5
Government administration	1,438	1,107	1,106	1,175	-0.1	6.3	-2.0
Education	3,314	3,289	3,423	3,169	4.1	-7.4	-0.4
Health and community services	2,382	3,551	3,578	3,528	0.8	-1.4	4.0
Cultural and recreational services	1,137	1,728	1,831	2,022	6.0	10.5	5.9
Personal services	1,419	1,761	1,844	1,958	4.7	6.2	3.3
Southern BoP	**45,221**	**48,845**	**49,238**	**49,847**	**0.8**	**1.2**	**1.0**
New Zealand	**1,484,116**	**1,690,949**	**1,751,699**	**1,809,041**	**3.6**	**3.3**	**2.0**

source:BERL Regional Database, Statistics NZ

Over the decade, employment growth in the southern Bay of Plenty Sub-region grew at half the national rate.

The most new FTEs in 2006 were added in construction, up 441 FTEs in the year, followed by hospitality, agriculture and wholesale trade.

Substantial losses occurred in manufacturing (down 543 FTEs), forestry and education.

Over the decade, the best gains in percentage terms were in mining (10.4%pa) and cultural and recreation services (5.9%pa), while the number of FTEs increased most in business and property services (1,396 FTEs), construction, and health and community services.

Job losses were largest in forestry and utilities, dropping by 723 and 394 FTEs respectively.

8.3 GDP

Table 49 presents GDP broken down by 19 industries for the Bay of Plenty Region. Data is presented for the latest three years and for 1996. The table also shows the change in GDP for the last two periods and for the last ten years.

Table 49. Bay of Plenty Region GDP by Industry

	Value Added or GDP ('06, $m)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	597	723	724	729	0.1	0.8	2.0
Forestry	561	607	544	533	-10.3	-2.0	-0.5
Fishing	15	22	23	24	5.5	4.9	4.8
Mining	19	42	39	39	-9.2	1.2	7.5
Utilities	294	237	255	246	7.8	-3.5	-1.8
Manufacturing	1,384	1,761	1,778	1,775	0.9	-0.2	2.5
Construction	382	630	668	682	6.1	2.1	6.0
Wholesale trade	422	607	669	711	10.2	6.3	5.4
Retail trade	523	712	769	781	8.0	1.5	4.1
Hospitality	173	203	216	228	6.4	5.6	2.8
Transport, storage	372	477	481	482	0.9	0.1	2.6
Communications	173	315	285	373	-9.5	30.8	8.0
Finance and insurance	253	318	395	345	24.4	-12.6	3.1
Business and property services	1,518	1,821	1,816	1,874	-0.2	3.2	2.1
Government administration	270	283	310	324	9.6	4.4	1.8
Education	303	387	393	389	1.6	-0.9	2.5
Health and community services	364	537	584	583	8.8	-0.2	4.8
Cultural and recreational services	122	185	195	199	5.3	2.0	5.0
Personal services	87	119	123	128	3.9	4.0	3.9
Bay of Plenty	**7,832**	**9,985**	**10,267**	**10,445**	**2.8**	**1.7**	**2.9**
New Zealand	**114,765**	**147,128**	**152,541**	**155,885**	**3.7**	**2.2**	**3.1**

source:BERL Regional Database, Statistics NZ

The Bay of Plenty Region generated $10.45 billion in GDP in 2006. The Region accounts for around 6.7 percent of national GDP.

GDP in the Bay of Plenty Region has increased by 2.9%pa over the last ten years, slightly behind the New Zealand average annual GDP growth of 3.1 percent.

Fastest GDP growth over the last ten years has been in the Communications industry, averaging 8.0 percent per year.

Significant growth over the last ten years has also occurred in mining (7.5%pa), construction (6.0%pa), wholesale trade (5.4%pa) and cultural and recreational services (5.0%pa).

There has been a decline in contribution to GDP over the last ten years in utilities (-1.8%pa) and forestry (-0.5%pa).

8.3.1 Sub-region GDP

Table 50. western Bay of Plenty Sub-region GDP

	Value Added or GDP ('06, $m)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	264	346	346	344	0.0	-0.5	2.7
Forestry	48	53	49	47	-7.0	-4.7	-0.1
Fishing	9	17	18	20	5.4	10.4	8.7
Mining	8	23	23	24	-3.4	7.3	11.5
Utilities	85	108	121	133	11.4	10.4	4.5
Manufacturing	498	668	697	729	4.4	4.6	3.9
Construction	185	353	378	373	6.8	-1.3	7.2
Wholesale trade	212	343	385	394	12.2	2.4	6.4
Retail trade	216	328	363	372	10.8	2.5	5.6
Hospitality	42	64	71	74	10.8	4.4	5.8
Transport, storage	207	264	246	262	-6.7	6.4	2.4
Communications	81	169	184	284	9.0	54.3	13.4
Finance and insurance	112	161	235	175	46.1	-25.5	4.6
Business and property services	713	988	943	1,000	-4.6	6.1	3.4
Government administration	94	103	116	133	12.6	14.1	3.5
Education	96	139	141	146	1.5	3.8	4.3
Health and community services	164	252	297	295	17.6	-0.7	6.0
Cultural and recreational services	33	53	56	57	6.4	0.5	5.6
Personal services	35	51	54	56	5.8	3.6	4.8
Western BoP	**3,103**	**4,485**	**4,723**	**4,919**	**5.3**	**4.1**	**4.7**
New Zealand	**114,765**	**147,128**	**152,541**	**155,885**	**3.7**	**2.2**	**3.1**

source:BERL Regional Database, Statistics NZ

The western Bay of Plenty Sub-region achieved GDP growth double that of the national economy in 2006, and 50 percent better on an annual basis over the last decade.

In 2006, the largest increases in contribution to GDP occurred in communications (up $100 million), business and property services, and manufacturing.

Based on available data, the largest fall in GDP appears to have been in finance and insurance (down $60 million in 2006), but this may be due to an error in the 2005 figure for the industry, as the 2006 figure seems more in line with the 2004 value. The construction industry saw GDP decline $4.8 million.

Over the long term, business and property services gained $287 million, at 3.4%pa. Manufacturing and communications each added at least $200 million more to GDP in 2006 than in 1996, with communications tripling its contribution.

The only industry with negative GDP growth over the ten years was forestry, down 0.1%pa.

Table 51. eastern Bay of Plenty Sub-region GDP

	Value Added or GDP ('06, $m)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	125	148	147	150	-0.4	1.6	1.9
Forestry	132	67	68	82	2.1	19.8	-4.7
Fishing	4	3	3	3	1.1	-16.6	-4.2
Mining	3	2	3	2	43.6	-21.2	-0.7
Utilities	33	34	46	17	32.5	-63.8	-6.8
Manufacturing	262	290	290	301	-0.1	4.1	1.4
Construction	51	68	75	80	9.6	7.2	4.7
Wholesale trade	37	48	52	54	8.4	4.8	4.0
Retail trade	75	99	103	102	4.0	-0.8	3.2
Hospitality	15	16	17	19	6.8	10.0	2.1
Transport, storage	30	46	49	45	6.4	-7.7	4.1
Communications	17	16	25	25	51.4	0.1	3.9
Finance and insurance	29	36	38	40	3.9	7.1	3.2
Business and property services	160	170	188	176	10.5	-6.2	1.0
Government administration	41	49	60	52	21.8	-12.7	2.5
Education	62	79	79	79	0.3	0.3	2.5
Health and community services	57	84	84	89	-0.1	5.3	4.4
Cultural and recreational services	12	16	19	17	17.1	-8.4	4.3
Personal services	13	14	14	15	0.3	6.1	1.6
Eastern BoP	**1,156**	**1,286**	**1,358**	**1,348**	**5.6**	**-0.7**	**1.6**
New Zealand	**114,765**	**147,128**	**152,541**	**155,885**	**3.7**	**2.2**	**3.1**

source:BERL Regional Database, Statistics NZ

The eastern Bay of Plenty Sub-region experienced negative GDP growth in 2006, while over the last decade it has achieved 1.6%pa growth, half the national average.

In 2006, forestry GDP rose $13.5 million, despite the fall in forestry employment in the Sub-region. Manufacturing, construction and health and community services also made strong gains.

GDP fell significantly in business and property services as well as utilities in 2006, together contributing almost $41 million less to the Sub-regional economy.

Since 1996, manufacturing (up $39.7 million) and health and community services have increased their GDP contribution the most, while construction has managed the greatest percentage gains, at 4.7%pa.

Meanwhile, the GDP contribution of forestry is down more than a third ($50 million less) while that of utilities has halved, having lost $17 million.

Table 52. southern Bay of Plenty Sub-region GDP

	Value Added or GDP ('06, $m)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	208	229	230	235	0.3	2.2	1.3
Forestry	382	487	427	405	-12.4	-5.2	0.6
Fishing	3	1	2	1	16.5	-15.5	-5.5
Mining	8	17	13	12	-23.7	-4.6	4.2
Utilities	176	94	89	96	-5.4	8.6	-5.8
Manufacturing	624	803	791	744	-1.5	-6.0	1.8
Construction	146	208	216	229	3.6	6.3	4.6
Wholesale trade	173	217	233	263	7.4	12.9	4.3
Retail trade	232	285	303	306	6.2	1.0	2.8
Hospitality	116	123	128	135	4.0	5.6	1.5
Transport, storage	135	167	186	175	11.6	-6.2	2.7
Communications	75	130	76	64	-41.3	-15.9	-1.6
Finance and insurance	112	120	122	130	1.5	6.3	1.5
Business and property services	645	663	686	698	3.5	1.8	0.8
Government administration	136	130	134	139	2.5	3.7	0.2
Education	145	169	173	164	2.2	-5.2	1.2
Health and community services	142	201	204	200	1.4	-1.8	3.5
Cultural and recreational services	78	116	120	125	3.2	4.4	4.9
Personal services	39	53	55	57	3.1	3.8	3.8
Southern BoP	**3,573**	**4,215**	**4,186**	**4,178**	**-0.7**	**-0.2**	**1.6**
New Zealand	**114,765**	**147,128**	**152,541**	**155,885**	**3.7**	**2.2**	**3.1**

source:BERL Regional Database, Statistics NZ

The southern Bay of Plenty Sub-region experienced negative growth in GDP in 2005 and 2006 while, over the decade, growth has been half the national average.

The largest rises in GDP in 2006 were in wholesale trade (up $30 million), construction and business and property services.

Manufacturing and forestry together shed almost $70 million in GDP over 2005 figures, while transport and storage, and communications each also contributed substantially less to GDP in 2006.

Over the last ten years, manufacturing has added an extra $120 million to GDP, although this equates to just 1.8%pa growth. Other strong gains were experienced in wholesale trade, construction and retail trade, each up at least $70 million over the decade.

By far the biggest drop in GDP occurred in utilities, down $79 million. Communications saw its GDP fall $11.3 million in the ten-year period.

8.4 Business units

Table 53 presents geographic business units broken down by 19 industries for the Bay of Plenty Region. Data is presented for the latest three years and for 1996. The table also shows the change in the number of businesses for the last two periods and for the last ten years.

Table 53. Bay of Plenty Region business units by industry

	Business Units (number)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	7,324	8,121	8,148	8,019	0.3	-1.6	0.9
Forestry	530	724	703	665	-2.9	-5.4	2.3
Fishing	97	160	138	135	-13.8	-2.2	3.4
Mining	25	32	31	33	-3.1	6.5	3.0
Utilities	73	56	52	54	-7.1	3.8	-3.0
Manufacturing	1,546	1,856	1,863	1,901	0.4	2.0	2.1
Construction	2,343	3,370	3,636	3,983	7.9	9.5	5.4
Wholesale trade	995	1,232	1,260	1,335	2.3	6.0	3.0
Retail trade	2,967	3,387	3,479	3,552	2.7	2.1	1.8
Hospitality	786	1,090	1,135	1,155	4.1	1.8	3.9
Transport, storage	905	1,086	1,117	1,124	2.9	0.6	2.2
Communications	221	225	221	208	-1.8	-5.9	-0.6
Finance and insurance	475	648	711	749	9.7	5.3	4.7
Business and property services	3,758	8,569	8,874	9,299	3.6	4.8	9.5
Government administration	181	164	167	150	1.8	-10.2	-1.9
Education	600	703	691	721	-1.7	4.3	1.8
Health and community services	671	1,233	1,310	1,364	6.2	4.1	7.4
Cultural and recreational services	541	798	797	823	-0.1	3.3	4.3
Personal services	817	1,139	1,140	1,175	0.1	3.1	3.7
Bay of Plenty	**24,855**	**34,593**	**35,473**	**36,445**	**2.5**	**2.7**	**3.9**
New Zealand	**318,029**	**421,468**	**432,613**	**443,369**	**2.6**	**2.5**	**3.4**

source:BERL Regional Database, Statistics NZ

There were around 36,400 businesses in the Bay of Plenty Region in 2006, accounting for just over eight percent of all businesses in New Zealand.

Most businesses in the Region are in business and property services (25.5%), followed by agriculture (22%), construction (10.9%) and retail trade (9.7%).

Between 1996 and 2006, the number of businesses in the Bay of Plenty Region increased at a faster rate than in New Zealand as a whole (3.9% vs. 3.4%).

The fastest growth in business units was in business property services (9.5%pa) followed by health and community services (7.4%pa) and construction (5.4%pa).

8.4.1 Sub-region business units

Table 54. western Bay of Plenty Sub-region business units

	Business Units (number)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	3,608	4,165	4,214	4,107	1.2	-2.5	1.3
Forestry	210	162	155	140	-4.3	-9.7	-4.0
Fishing	34	136	115	105	-15.4	-8.7	11.8
Mining	12	17	16	15	-5.9	-6.3	2.4
Utilities	22	10	9	12	-10.0	33.3	-6.0
Manufacturing	615	972	993	1,026	2.2	3.3	5.3
Construction	1,178	1,972	2,150	2,386	9.0	11.0	7.3
Wholesale trade	496	709	744	807	4.9	8.5	5.0
Retail trade	1,251	1,597	1,651	1,716	3.4	3.9	3.2
Hospitality	204	376	391	425	4.0	8.7	7.6
Transport, storage	478	514	529	540	2.9	2.1	1.2
Communications	99	101	99	98	-2.0	-1.0	-0.1
Finance and insurance	227	351	397	427	13.1	7.6	6.5
Business and property services	1,668	4,740	4,940	5,176	4.2	4.8	12.0
Government administration	60	32	37	33	15.6	-10.8	-5.8
Education	202	236	228	245	-3.4	7.5	2.0
Health and community services	308	606	657	699	8.4	6.4	8.5
Cultural and recreational services	169	289	301	316	4.2	5.0	6.5
Personal services	339	542	540	556	-0.4	3.0	5.1
Western BoP	**11,180**	**17,527**	**18,166**	**18,829**	**3.6**	**3.6**	**5.4**
New Zealand	**318,029**	**421,468**	**432,613**	**443,369**	**2.6**	**2.5**	**3.4**

source:BERL Regional Database, Statistics NZ

The western Bay of Plenty Sub-region saw business units rise by 663 in 2006, while over the decade, growth of 5.4%pa has resulted in more than 7,600 new businesses.

The Sub-region added 236 new businesses to each of the business and property services, and construction industries in 2006, strongly pointing to the population-driven growth seen in the Sub-region.

Agriculture lost 107 businesses in 2006, while forestry lost 15 businesses, or 9.7 percent of its total.

Between 1996 and 2006, it was much of the same on the growth side, with business and property services experiencing strong increases of 12.0%pa in businesses, adding 3,500, and construction contributing 1,200 new units.

Forestry lost one-third of its businesses over the ten years, while the small number of utilities businesses halved.

Table 55. eastern Bay of Plenty Sub-region business units

	Business Units (number)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	1,440	1,570	1,547	1,537	-1.5	-0.6	0.7
Forestry	120	142	142	135	0.0	-4.9	1.2
Fishing	20	19	19	22	0.0	15.8	1.2
Mining	1	5	4	4	-20.0	0.0	14.9
Utilities	9	11	10	9	-9.1	-10.0	0.1
Manufacturing	303	187	183	194	-2.1	6.0	-4.4
Construction	281	322	339	383	5.3	13.0	3.1
Wholesale trade	87	114	110	109	-3.5	-0.9	2.3
Retail trade	458	447	455	441	1.8	-3.1	-0.4
Hospitality	71	124	132	128	6.5	-3.0	6.1
Transport, storage	87	103	107	108	3.9	0.9	2.2
Communications	26	23	24	25	4.3	4.2	-0.4
Finance and insurance	57	73	76	79	4.1	3.9	3.3
Business and property services	468	1,018	1,032	1,052	1.4	1.9	8.4
Government administration	32	39	39	35	0.0	-10.3	0.8
Education	119	165	165	166	0.0	0.6	3.4
Health and community services	94	174	182	182	4.6	0.0	6.9
Cultural and recreational services	53	109	102	97	-6.4	-4.9	6.2
Personal services	117	173	173	178	0.0	2.9	4.3
Eastern BoP	**3,841**	**4,818**	**4,841**	**4,884**	**0.5**	**0.9**	**2.4**
New Zealand	**318,029**	**421,468**	**432,613**	**443,369**	**2.6**	**2.5**	**3.4**

source:BERL Regional Database, Statistics NZ

The eastern Bay of Plenty Sub-region added 43 new businesses in 2006, up 0.9 percent on 2006, although this percentage was significantly below national growth. Over the long-term, the picture was much better, with 2.4%pa growth (1,043 new units) since 1996.

Construction and business and property services together added 64 new businesses in 2006, but this was partially offset by losses in retail trade (down 14 units) and agriculture.

Since 1996, business and property services (up 584 units) and construction have performed best. Agriculture grew at 0.7%pa, above the 0.4%pa growth in agriculture business units achieved at national level.

Meanwhile, manufacturing lost 109 businesses in the ten years, shrinking 4.4%pa.

Table 56. southern Bay of Plenty Sub-region business units

	Business Units (number)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	2,276	2,386	2,387	2,375	0.0	-0.5	0.4
Forestry	199	420	406	390	-3.3	-3.9	6.9
Fishing	43	5	4	8	-20.0	100.0	-15.4
Mining	12	10	11	14	10.0	27.3	1.7
Utilities	42	35	33	33	-5.7	0.0	-2.4
Manufacturing	628	697	687	681	-1.4	-0.9	0.8
Construction	884	1,076	1,147	1,214	6.6	5.8	3.2
Wholesale trade	412	409	406	419	-0.7	3.2	0.2
Retail trade	1,259	1,343	1,373	1,395	2.2	1.6	1.0
Hospitality	512	590	612	602	3.7	-1.6	1.6
Transport, storage	340	469	481	476	2.6	-1.0	3.4
Communications	96	101	98	85	-3.0	-13.3	-1.3
Finance and insurance	190	224	238	243	6.3	2.1	2.5
Business and property services	1,622	2,811	2,902	3,071	3.2	5.8	6.6
Government administration	89	93	91	82	-2.2	-9.9	-0.8
Education	280	302	298	310	-1.3	4.0	1.0
Health and community services	269	453	471	483	4.0	2.5	6.0
Cultural and recreational services	320	400	394	410	-1.5	4.1	2.5
Personal services	361	424	427	441	0.7	3.3	2.0
Southern BoP	**9,834**	**12,248**	**12,466**	**12,732**	**1.8**	**2.1**	**2.6**
New Zealand	**318,029**	**421,468**	**432,613**	**443,369**	**2.6**	**2.5**	**3.4**

source:BERL Regional Database, Statistics NZ

The southern Bay of Plenty Sub-region increased its business units by 266 in 2006, at a rate just below that achieved nationally. Over the decade to 2006, growth was 2.6%pa, with an addition of 2,900 businesses.

In 2006, the greatest gains were in business and property services and construction, together adding 235 units.

The number of business units in forestry and communications fell substantially in the year, both in units and percentage terms.

Since 1996, business and property services has added 1,449 businesses, while construction has contributed 330 more.

The fishing industry has experienced substantial contraction, with business units down 15.4%pa since 1996, or 35 units.

8.5 Business size

Table 57 presents business size broken down by 19 industries for the Bay of Plenty Region. Data is presented for the latest three years and for 1996. The table also shows the change in the size of businesses for the last two periods and for the last ten years.

Table 57. Bay of Plenty Region business size by industry

	Business Size (FTEs per unit)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	1.8	1.7	1.7	1.7	-4.1	3.6	-0.2
Forestry	6.4	4.3	3.7	3.2	-14.2	-14.7	-6.9
Fishing	2.1	2.0	2.4	2.2	19.1	-6.4	0.5
Mining	5.3	8.5	8.5	9.0	0.1	6.5	5.4
Utilities	14.3	9.8	11.4	10.1	15.8	-10.9	-3.4
Manufacturing	10.7	9.4	9.5	9.2	0.7	-3.1	-1.5
Construction	3.3	3.1	3.1	3.1	2.0	-1.7	-0.7
Wholesale trade	4.5	4.2	4.7	4.7	11.5	0.7	0.4
Retail trade	4.5	4.6	4.5	4.5	-1.1	-0.5	0.0
Hospitality	6.6	6.1	5.9	6.3	-2.7	7.2	-0.4
Transport, storage	4.8	4.5	4.4	4.4	-1.3	-0.9	-0.8
Communications	4.9	4.9	4.2	5.6	-13.2	32.5	1.3
Finance and insurance	4.1	2.7	2.9	2.5	6.8	-12.9	-4.7
Business and property services	2.1	1.3	1.3	1.3	2.4	-0.5	-4.2
Government administration	15.8	14.8	15.5	18.5	4.6	19.2	1.6
Education	11.5	10.7	11.3	10.4	5.2	-7.2	-1.0
Health and community services	9.1	7.7	7.9	7.5	2.7	-4.5	-1.9
Cultural and recreational services	3.2	3.4	3.6	3.8	8.0	4.7	1.7
Personal services	3.7	3.4	3.6	3.7	5.1	3.7	-0.1
Bay of Plenty	**4.1**	**3.4**	**3.4**	**3.4**	**0.7**	**-0.6**	**-1.7**
New Zealand	**4.7**	**4.0**	**4.0**	**4.1**	**0.9**	**0.8**	**-1.3**

source:BERL Regional Database, Statistics NZ

Overall, businesses in the Bay of Plenty Region are significantly smaller than in New Zealand, at 3.4 FTEs per business versus 4.1 FTEs per business in 2006. The average business size is also shrinking faster than it is nationally, over the short-term and the long-term.

Business size grew the most in government administration, with an average three more FTEs at each business unit in 2006 compared to 2005. Communications added 1.4 FTEs per business during the year.

Businesses shrank the most in education and forestry, with the latter experiencing a 14.7 percent decline in business size.

Over the ten years since 1996, the strongest growth in business size has been in mining, at 5.4%pa (3.7 extra FTEs per business unit). Cultural and recreational services and government administration have also experienced strong growth.

On the negative side, utilities, forestry, finance and insurance, health and community services, and manufacturing have all seen business size shrink faster than the national average over the ten years.

8.5.1 *Sub-region business size*

Table 58. western Bay of Plenty Sub-region business size by industry

	Business Size (FTEs per unit)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	1.6	1.7	1.6	1.7	-4.6	0.5	0.5
Forestry	1.4	1.7	1.5	1.3	-9.6	-13.1	-0.4
Fishing	3.4	1.9	2.3	2.4	21.3	5.6	-3.5
Mining	4.8	8.1	8.3	8.8	1.9	7.1	6.3
Utilities	13.5	22.4	27.5	22.1	22.8	-19.7	5.1
Manufacturing	10.0	7.3	7.4	7.4	1.4	0.6	-2.9
Construction	3.2	2.9	3.0	2.8	1.8	-6.2	-1.2
Wholesale trade	4.6	4.1	4.6	4.3	10.6	-5.2	-0.5
Retail trade	4.4	4.5	4.5	4.4	0.8	-1.2	0.0
Hospitality	6.2	5.6	5.6	5.6	1.5	-0.8	-1.0
Transport, storage	4.6	5.0	4.6	4.8	-7.8	3.3	0.4
Communications	5.2	5.8	6.1	9.1	4.8	48.6	5.8
Finance and insurance	3.8	2.7	3.1	2.4	16.5	-25.2	-4.8
Business and property services	2.1	1.3	1.2	1.3	-2.5	2.6	-4.8
Government administration	16.7	28.3	26.6	34.9	-5.8	30.9	7.7
Education	10.9	11.5	12.3	11.6	7.0	-5.7	0.6
Health and community services	9.0	7.4	8.1	7.5	9.7	-7.4	-1.8
Cultural and recreational services	2.8	2.5	2.6	2.7	4.9	1.3	-0.3
Personal services	3.4	3.0	3.2	3.3	7.5	2.9	-0.5
Western BoP	**3.6**	**3.1**	**3.1**	**3.1**	**1.9**	**-0.6**	**-1.4**
New Zealand	**4.7**	**4.0**	**4.0**	**4.1**	**0.9**	**0.8**	**-1.3**

source:BERL Regional Database, Statistics NZ

The western Bay of Plenty Sub-region experienced a drop in business size in 2006 after strong gains in 2005. Over the long-term, business size has decreased at a rate similar to that experienced nationally. On average, businesses in the Sub-region are 24 percent smaller than in New Zealand as a whole.

Government administration business size grew 30.9 percent in 2006, adding an extra 8.2 FTEs per business unit. Strong gains were also seen in communications, up 48.6 percent, or 3.0 FTEs per business.

Utilities and finance and insurance each saw substantial drops of around 20.0 percent in business size during 2006.

Over the long-term, however, utilities businesses have grown employment at a rate of 5.1%pa, with 8.6 more FTEs at each business in 2006 than in 1996. Government administration has experienced the sharpest growth, with business size doubling over the ten years.

Finance and insurance, manufacturing, and health and community services all saw business size fall significantly over the decade.

Table 59. eastern Bay of Plenty Sub-region business size by industry

	Business Size (FTEs per unit)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	1.9	1.8	1.7	1.8	-3.5	5.7	-0.4
Forestry	6.7	2.4	2.3	2.4	-5.1	3.8	-9.8
Fishing	2.7	2.4	2.3	1.5	-1.6	-37.1	-6.0
Mining	17.4	2.4	4.2	3.1	75.9	-26.3	-15.9
Utilities	13.3	7.5	10.5	4.9	38.8	-53.3	-9.5
Manufacturing	10.2	14.3	14.9	14.4	3.9	-3.4	3.5
Construction	3.6	3.5	3.7	3.8	6.5	0.5	0.3
Wholesale trade	4.5	3.6	4.1	4.4	16.4	6.6	-0.3
Retail trade	4.2	4.8	4.6	4.7	-4.2	2.2	1.2
Hospitality	6.4	4.2	4.0	4.7	-4.4	17.3	-3.0
Transport, storage	4.5	4.3	4.5	4.2	5.0	-6.5	-0.7
Communications	4.1	2.5	3.4	3.1	36.7	-8.3	-2.8
Finance and insurance	3.8	2.4	2.4	2.5	1.5	4.9	-3.9
Business and property services	1.9	1.1	1.2	1.1	15.5	-12.1	-5.3
Government administration	13.4	10.7	12.8	12.8	19.0	-0.1	-0.5
Education	11.8	9.3	9.5	9.2	2.2	-2.7	-2.5
Health and community services	10.3	8.2	7.8	8.1	-5.1	4.7	-2.3
Cultural and recreational services	2.7	2.1	2.6	2.7	25.4	2.2	0.1
Personal services	4.0	2.9	2.9	3.2	0.6	9.3	-2.3
Eastern BoP	**4.0**	**3.3**	**3.4**	**3.4**	**2.4**	**0.7**	**-1.7**
New Zealand	**4.7**	**4.0**	**4.0**	**4.1**	**0.9**	**0.8**	**-1.3**

source:BERL Regional Database, Statistics NZ

Business size growth kept pace with the national rate in 2006, after a strong 2005. Over the long-term, business size has fallen faster than the national rate.

In 2006, the strongest gains in business size were in hospitality, with 0.7 more FTEs at each business, a rise of 17.3 percent.

The biggest decrease in business size was in utilities, an industry that seems to be subject to relatively large fluctuations in business size and employment within the Sub-region. Fishing also experienced a large decline in business size.

Between 1996 and 2006, the size of mining businesses fell by 15.9%pa, with businesses in 2006 being one-fifth the size they were in 1996. Utilities and forestry also saw businesses shrink by four to eight FTEs each.

The strongest rise in business size occurred in manufacturing, with 3.5%pa growth, or 4.2 additional FTEs per business over the decade.

Table 60. southern Bay of Plenty Sub-region business size by industry

	Business Size (FTEs per unit)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	2.0	1.7	1.7	1.8	-3.7	7.5	-0.9
Forestry	11.6	6.0	5.0	4.1	-15.8	-18.8	-9.9
Fishing	0.8	4.3	6.1	2.3	41.8	-63.1	10.8
Mining	4.8	12.2	10.4	10.9	-14.8	5.4	8.5
Utilities	15.0	6.9	7.3	7.2	4.4	-0.3	-7.0
Manufacturing	11.7	11.1	11.1	10.4	0.0	-6.3	-1.1
Construction	3.3	3.2	3.2	3.4	1.1	5.9	0.2
Wholesale trade	4.5	4.5	5.1	5.5	11.9	9.7	2.1
Retail trade	4.7	4.6	4.5	4.5	-2.3	-0.5	-0.5
Hospitality	6.7	6.8	6.5	7.2	-4.5	11.0	0.6
Transport, storage	5.0	3.9	4.2	4.0	6.4	-5.1	-2.3
Communications	4.9	4.5	2.6	2.4	-43.0	-7.5	-7.1
Finance and insurance	4.6	2.9	2.7	2.9	-6.9	6.7	-4.5
Business and property services	2.1	1.5	1.6	1.6	6.1	-1.6	-2.9
Government administration	16.1	11.9	12.2	14.3	2.1	18.0	-1.2
Education	11.8	10.9	11.5	10.2	5.5	-11.0	-1.5
Health and community services	8.9	7.8	7.6	7.3	-3.1	-3.8	-1.9
Cultural and recreational services	3.6	4.3	4.6	4.9	7.6	6.2	3.3
Personal services	3.9	4.2	4.3	4.4	4.0	2.8	1.2
Southern BoP	**4.6**	**4.0**	**3.9**	**3.9**	**-1.0**	**-0.9**	**-1.6**
New Zealand	**4.7**	**4.0**	**4.0**	**4.1**	**0.9**	**0.8**	**-1.3**

source:BERL Regional Database, Statistics NZ

The southern Bay of Plenty Sub-region has an average business size similar to that of New Zealand. However, business size has shrunk faster than it has nationally, both in the short-term and the long-term.

Government administration saw business size increase by 18.0 percent in 2006. Hospitality and wholesale trade also experienced strong gains, up 11.0 percent and 9.7 percent respectively over 2005 figures.

Fishing, forestry and manufacturing business sizes fell the most in 2006, with fishing unit size down 3.8 FTEs, or 63.1 percent.

Since 1996, forestry, utilities and communications have each seen business size halved, while mining business unit size has more than doubled, with an additional 6.1 FTEs per business in 2006. Fishing has tripled its average business size since 1996, despite a poor 2006.

8.6 Labour productivity

Table 61 presents labour productivity broken down by 19 industries for the Bay of Plenty Region. Data is presented for the latest three years and for 1996. The table also shows the change in productivity for the last two periods and for the last ten years.

Table 61. Bay of Plenty Region labour productivity by industry

	Productivity (06$s per FTE)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	46,360	51,262	53,320	52,707	4.0	-1.1	1.3
Forestry	164,456	193,813	208,498	253,226	7.6	21.5	4.4
Fishing	73,813	67,825	69,664	79,783	2.7	14.5	0.8
Mining	144,033	156,518	146,677	130,945	-6.3	-10.7	-0.9
Utilities	280,473	430,515	431,526	449,945	0.2	4.3	4.8
Manufacturing	83,501	100,670	100,558	101,464	-0.1	0.9	2.0
Construction	49,733	61,238	59,007	55,926	-3.6	-5.2	1.2
Wholesale trade	93,594	117,339	113,404	112,999	-3.4	-0.4	1.9
Retail trade	39,120	46,053	48,998	48,944	6.4	-0.1	2.3
Hospitality	33,512	30,691	32,219	31,184	5.0	-3.2	-0.7
Transport, storage	86,388	97,906	97,306	97,749	-0.6	0.5	1.2
Communications	158,273	287,168	304,763	319,614	6.1	4.9	7.3
Finance and insurance	129,239	179,014	190,134	181,097	6.2	-4.8	3.4
Business and property# services	195,944	161,474	151,850	150,244	-6.0	-1.1	-2.6
Government administration	94,302	116,342	119,646	116,715	2.8	-2.4	2.2
Education	43,769	51,398	50,467	51,667	-1.8	2.4	1.7
Health and community services	59,571	56,879	56,702	56,922	-0.3	0.4	-0.5
Cultural and recreational services	69,751	69,002	67,390	63,591	-2.3	-5.6	-0.9
Personal services	28,526	30,695	30,327	29,509	-1.2	-2.7	0.3
Bay of Plenty (#)	**77,726**	**84,355**	**84,010**	**83,683**	**-0.4**	**-0.4**	**0.7**
New Zealand (#)	**77,329**	**87,009**	**87,082**	**86,170**	**0.1**	**-1.0**	**1.1**

excl owner-occupied dwelllings sector

source:BERL Regional Database, Statistics NZ

On average, labour productivity in the Bay of Plenty Region is slightly lower than nationally ($83,680 versus $86,170).

Productivity growth in the Bay of Plenty Region has been slower than in New Zealand over the last ten years (0.7%pa versus 1.1%pa).

The greatest gains in productivity growth over the last ten years have been in the communications industry (7.3%pa) followed by utilities (4.8%pa) and forestry (4.4%pa).

Productivity has declined in several industries over the last ten years (business and property services, mining, cultural and recreational services, hospitality, health and community services)

Productivity per FTE is highest in the utilities industry followed by communications and forestry, with forestry productivity experiencing significant gains over the last two periods.

8.6.1 Sub-region productivity

Table 62. western Bay of Plenty Sub-region labour productivity

	Productivity (06$s per FTE)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	46,297	48,063	49,793	50,577	3.6	1.6	0.9
Forestry	164,456	193,813	208,498	253,226	7.6	21.5	4.4
Fishing	73,813	67,825	69,664	79,783	2.7	14.5	0.8
Mining	143,742	170,602	171,808	183,613	0.7	6.9	2.5
Utilities	286,182	484,570	488,300	503,645	0.8	3.1	5.8
Manufacturing	81,286	94,584	95,329	95,951	0.8	0.7	1.7
Construction	49,824	61,449	59,120	56,065	-3.8	-5.2	1.2
Wholesale trade	93,798	117,215	113,319	112,895	-3.3	-0.4	1.9
Retail trade	39,121	46,073	49,001	48,904	6.4	-0.2	2.3
Hospitality	33,512	30,691	32,219	31,184	5.0	-3.2	-0.7
Transport, storage	94,084	102,071	100,338	101,267	-1.7	0.9	0.7
Communications	158,273	287,168	304,763	319,614	6.1	4.9	7.3
Finance and insurance	128,377	169,926	188,405	174,616	10.9	-7.3	3.1
Business and property# services	207,003	165,710	155,617	153,646	-6.1	-1.3	-2.9
Government administration	94,044	114,035	117,869	115,229	3.4	-2.2	2.1
Education	43,769	51,398	50,467	51,667	-1.8	2.4	1.7
Health and community services	59,413	56,484	55,854	56,312	-1.1	0.8	-0.5
Cultural and recreational services	69,806	72,452	70,531	66,624	-2.7	-5.5	-0.5
Personal services	29,906	31,710	31,324	30,632	-1.2	-2.2	0.2
Western BoP (#)	**77,582**	**83,785**	**83,572**	**84,449**	**-0.3**	**1.0**	**0.9**
New Zealand (#)	**77,329**	**87,009**	**87,082**	**86,170**	**0.1**	**-1.0**	**1.1**

excl owner-occupied dwelllings sector *source:BERL Regional Database, Statistics NZ*

The western Bay of Plenty Sub-region had an average labour productivity value of $84,449 in 2006, 2.0 percent below the national average. Nevertheless, productivity grew in 2006, compared to a decline seen at a national level. Over the decade, productivity growth in the Sub-region has broadly followed the national trend.

Forestry experienced an impressive 21.5 percent ($44,700) gain in productivity in 2006, following up on a strong 2005. Fishing, mining, utilities and communications all grew productivity by at least 3.1 percent.

Meanwhile, finance and insurance saw labour productivity fall 7.3 percent ($13,800) in 2006.

Over the decade, communications and utilities, both capital-intensive industries, saw large increases in productivity, achieving 7.3%pa and 5.8%pa respectively.

Business and property services labour productivity fell 2.9%pa, as employment rose strongly.

Table 63. eastern Bay of Plenty Sub-region labour productivity

	Productivity (06$s per FTE)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	46,413	53,554	56,137	54,313	4.8	-3.2	1.6
Forestry	164,456	193,813	208,498	253,226	7.6	21.5	4.4
Fishing	73,813	67,825	69,664	79,783	2.7	14.5	0.8
Mining	143,755	173,478	176,939	189,357	2.0	7.0	2.8
Utilities	282,494	414,522	435,231	375,302	5.0	-13.8	2.9
Manufacturing	84,754	108,336	106,430	108,172	-1.8	1.6	2.5
Construction	49,310	60,175	58,810	55,535	-2.3	-5.6	1.2
Wholesale trade	93,169	117,379	113,213	112,340	-3.5	-0.8	1.9
Retail trade	39,120	45,895	48,945	49,027	6.6	0.2	2.3
Hospitality	33,512	30,691	32,219	31,184	5.0	-3.2	-0.7
Transport, storage	76,479	103,166	100,664	98,468	-2.4	-2.2	2.6
Communications	158,273	287,168	304,763	319,614	6.1	4.9	7.3
Finance and insurance	135,209	207,399	203,768	200,235	-1.8	-1.7	4.0
Business and property# services	183,505	156,942	148,024	154,873	-5.7	4.6	-1.7
Government administration	94,513	117,710	120,465	117,308	2.3	-2.6	2.2
Education	43,769	51,398	50,467	51,667	-1.8	2.4	1.7
Health and community services	59,701	59,031	59,443	59,818	0.7	0.6	0.0
Cultural and recreational services	81,907	71,325	71,201	67,101	-0.2	-5.8	-2.0
Personal services	27,798	28,761	28,648	27,022	-0.4	-5.7	-0.3
Eastern BoP (#)	**74,326**	**80,368**	**82,506**	**80,631**	**2.7**	**-2.3**	**0.8**
New Zealand (#)	**77,329**	**87,009**	**87,082**	**86,170**	**0.1**	**-1.0**	**1.1**

excl owner-occupied dwelllings sector *source:BERL Regional Database, Statistics NZ*

The eastern Bay of Plenty Sub-region saw labour productivity drop by 2.3 percent in 2006, after a strong 2005. Over the decade, the Sub-region's performance has been just below that of the country.

Forestry achieved an increase in productivity of 21.5 percent in 2006, or $44,700 per FTE. Communications and Business and property services also made strong gains.

Utilities experienced the sharpest decline in productivity, down 13.8 percent, or almost $60,000 per FTE.

Over the long-term, however, utilities has been one of the top performers, with 2.9%pa average productivity growth. Communications (7.3%pa) and forestry (4.4%pa) performed best in percentage terms.

Cultural and recreational services, and business and property services had the most substantial drops in productivity over the ten years, at 2.0%pa and 1.7%pa respectively.

Table 64. southern Bay of Plenty Sub-region labour productivity

	Productivity (06$s per FTE)				%pa change		
	1996	2004	2005	2006	2005	2006	1996 to 2006
Agriculture	46,409	55,283	57,605	55,064	4.2	-4.4	1.7
Forestry	164,456	193,813	208,498	253,226	7.6	21.5	4.4
Fishing	73,813	67,825	69,664	79,783	2.7	14.5	0.8
Mining	144,410	138,907	113,103	80,512	-18.6	-28.8	-5.7
Utilities	277,402	386,254	371,242	404,174	-3.9	8.9	3.8
Manufacturing	84,820	103,567	103,471	104,733	-0.1	1.2	2.1
Construction	49,766	61,235	58,878	55,837	-3.8	-5.2	1.2
Wholesale trade	93,435	117,526	113,588	113,290	-3.4	-0.3	1.9
Retail trade	39,120	46,084	49,012	48,966	6.4	-0.1	2.3
Hospitality	33,512	30,691	32,219	31,184	5.0	-3.2	-0.7
Transport, storage	78,747	90,794	92,798	92,752	2.2	0.0	1.7
Communications	158,273	287,168	304,763	319,614	6.1	4.9	7.3
Finance and insurance	128,620	184,657	189,589	184,901	2.7	-2.5	3.7
Business and property# services	188,001	156,660	147,972	144,567	-5.5	-2.3	-2.6
Government administration	94,417	117,710	120,861	117,945	2.7	-2.4	2.2
Education	43,769	51,398	50,467	51,667	-1.8	2.4	1.7
Health and community services	59,701	56,511	56,876	56,611	0.6	-0.5	-0.5
Cultural and recreational services	68,225	67,238	65,464	61,867	-2.6	-5.5	-1.0
Personal services	27,628	30,316	29,855	29,180	-1.5	-2.3	0.5
Southern BoP (#)	**79,023**	**86,285**	**85,015**	**83,812**	**-1.5**	**-1.4**	**0.6**
New Zealand (#)	**77,329**	**87,009**	**87,082**	**86,170**	**0.1**	**-1.0**	**1.1**

excl owner-occupied dwelllings sector *source:BERL Regional Database, Statistics NZ*

Labour productivity in the southern Bay of Plenty Sub-region fell in the last two years, while growth over the decade was 0.6%pa versus a national rate of 1.1%pa.

Forestry, utilities and communications all improved productivity significantly in 2006, by between 4.9 percent and 21.5 percent. These industries also grew strongest over the decade, with gains of between 3.8%pa and 7.3%pa.

Mining productivity dipped 28.8 percent, or $32,600 per FTE. Cultural and recreational services productivity dropped 5.5 percent.

Over the long-term, the biggest fall in productivity was also in mining, with each FTE producing $63,900 less in 2006 than in 1996 (-5.7%pa).

8.7 Key indicators summary

The Bay of Plenty Region employs around 125,000 FTEs in 36,500 businesses generating around $10.5 billion in GDP. The majority of activity is in Tauranga City and Rotorua. Manufacturing, which includes primary processing, is the most significant employer in the Region, accounting for 14 percent of employment. Labour productivity in the Region is slightly lower than nationally (97% of national).

The Region's employment has been growing faster than nationally over the last ten years, driven mainly by growth in cultural and recreational services, construction and health and community services. Employment growth over the last ten years has been driven mainly by the western Bay of Plenty Sub-region, with the eastern and southern Bay of Plenty Sub-regions growing at less than half the national average growth.

GDP growth over the last ten years has tracked slightly below the national average. Again, the western Bay of Plenty Sub-region has driven GDP growth, averaging 4.7%pa compared to only 1.6%pa for both the eastern and southern Sub-regions.

Labour productivity growth over the last ten years has also lagged behind New Zealand, averaging 0.7%pa compared to 1.1%pa. In this measure, all Sub-regions are performing worse than New Zealand.

9 Industry Analysis

This section is a desk-based analysis of industries in the Bay of Plenty Region using the BERL regional database to identify the current industry mix and the changes in industry mix over the last decade (1996-2006).

The analysis covers location quotients, employment, GDP, business units, and business size. We will look at proportions and changes in growth rates across each of these measures. The analysis is at the Bay of Plenty Region level, supported by information at the more disaggregated levels. Percentages and growth rates are compared to the national average, giving an idea of the Region's positioning and potential roles in the wider New Zealand economy.

We also provide a list of significant businesses in that industry in the Region. Note that this is not an exhaustive list and that significance is a relative term. It is hoped that as the strategy develops, these lists get added to.

Through this section we analyse industries at different levels of aggregation. At the most detailed, employment and business unit numbers are available at the 440 industry level. GDP is available from the 53 industry level. Table 65 shows how the industries are broken down at the different levels. We have not included the 440 industry breakdowns as this would have made the table too unwieldy.

Table 65. Industry breakdowns

Two Industries	Seven Industries	19 Industries	53 Industries
Export Industries	Primary	Agriculture	Agriculture
			Services to Agriculture; Hunting and Trapping
		Forestry	Forestry and Logging
		Fishing	Commercial Fishing
		Mining	Coal Mining
			Oil and Gas Exploration
			Metal Ore Mining
			Other Mining
			Services to Mining
	Primary-linked	Manufacturing	Food, Beverage and Tobacco
			Textile, Clothing, Footwear & Leather Mfg
			Wood and Paper Product Manufacturing
			Printing, Publishing and Recorded Media
			Petroleum, Coal, Chemical & Assoc Prod Mfg
			Non-Metallic Mineral Product Manufacturing
			Metal Product Manufacturing
			Machinery and Equipment Manufacturing
			Other Manufacturing
	Transport and Storage	Transport and Storage	Road Transport
			Rail Transport
			Water Transport
			Air and Space Transport
			Other Transport
			Services to Transport
			Storage

Two Industries	Seven Industries	19 Industries	53 Industries
Population driven industries	Housing-linked	Construction	General Construction
			Construction Trade Services
		Wholesale Trade	Basic Material Wholesaling
			Machinery and Motor Vehicle Wholesaling
			Personal and Household Good Wholesaling
		Business and Property Services	Property Services
			Business Services
		Utilities	Electricity and Gas Supply
			Water Supply, Sewerage and Drainage Services
	Hospitality and Retail	Hospitality	Accommodation, Cafes and Restaurants
		Retail Trade	Food Retailing
			Personal and Household Good Retailing
			Motor Vehicle Retailing and Services
	Social services	Government Administration	Government Administration
			Defence
		Education	Education
		Health and Community Services	Health Services
			Community Services
	Other business services	Communications	Communication Services
		Finance and Insurance	Finance
			Insurance
			Services to Finance and Insurance
		Cultural and Recreational Services	Motion Picture, Radio and Television Services
			Libraries, Museums and the Arts
			Sport and Recreation
		Personal Services	Personal Services
			Other Services
			Private Households Employing Staff

9.1 Location quotients

The location quotient is a measure that examines the relative concentration of industry employment in a particular area relative to another larger, or base, area. In this case, New Zealand is the base area. The measures provide a potentially valuable insight into a local labour market's industry structure, relative to the larger base area.

When the ratio is larger than 1.0, the percentage of the employed in the industry locally is higher than the percentage of the employed in the larger area. Likewise, when the ratio is smaller than 1.0 the percentage of people employed in this industry locally is smaller than the larger area.

Generally, a location quotient greater than 1.0 suggests that the industry is a key element in local economic activity. Such an industry could also be associated with exporting to, or providing services for, other neighbouring areas or overseas. In this context, neighbouring as well as wider national economic conditions will, to a degree, influence the development of this industry. Conversely, a location quotient less than 1.0 suggests that the industry is relatively less established in the economic activity of the area. In addition, goods or services associated with this industry could be being imported from neighbouring areas (or overseas) to satisfy the demand within the area.

Here we identify the ten industries with the highest and lowest location quotients at the different region levels. The industry analysis is at the 53 industry level.

9.1.1 Bay of Plenty Region

Table 66 shows the ten industries in the Bay of Plenty Region with the highest location quotients. Industries in the top ten tend to reflect importance to the industry of the forestry, agriculture and tourism industries.

Table 66. Top ten location quotients - Bay of Plenty Region

Rank by FTE location quotient	Industry	Location Quotient
1	Forestry and Logging	4.216
2	Wood and Paper Product Manufacturing	3.326
3	Other Transport	2.400
4	Services to Agriculture; Hunting and Trapping	2.158
5	Other Mining	1.616
6	Services to Mining	1.570
7	Agriculture	1.358
8	Road Transport	1.268
9	Accommodation, Cafes and Restaurants	1.263
10	Motor Vehicle Retailing and Services	1.233

source:BERL Regional Database, Statistics NZ

- There are four industries with a location quotient at least twice that of the New Zealand average.
- Forestry is a key export industry in the Region. In particular:
  - Forestry and logging has a location 4.2 times as high as that for New Zealand.
  - Wood and Paper Product manufacturing has a location quotient 3.3 times as high as that for New Zealand.
- The high location quotient for Other transport (2.4 times the New Zealand average) reflects activity around Port Tauranga.

9.1.2 Western Bay of Plenty Sub-region

Table 67 presents the ten industries in the western Bay of Plenty sub-region with the highest location quotients. Interestingly, the key industries are agriculture, mining and fishing.

Table 67. Top ten location quotients – western Bay of Plenty Sub-region

Rank by FTE location quotient	Industry	Location Quotient
1	Services to Agriculture; Hunting and Trapping	3.113
2	Other Mining	2.529
3	Commercial Fishing	2.008
4	Storage	1.546
5	Electricity and Gas Supply	1.474
6	General Construction	1.450
7	Basic Material Wholesaling	1.385
8	Wood and Paper Product Manufacturing	1.342
9	Construction Trade Services	1.340
10	Services to Transport	1.333

source:BERL Regional Database, Statistics NZ

- Three industries have location quotients at least twice as high as the national average.
- There is 3.1 times more employment in the agricultural services industry in the western Bay of Plenty Sub-region than nationally.
- Other mining employs 2.5 times as many FTEs as nationally.
- There is twice as much employment activity in commercial fishing in the western Bay of Plenty Sub-region as nationally.

9.1.3 Eastern Bay of Plenty Sub-region

Table 68 presents the ten industries in the eastern Bay of Plenty sub-region with the highest location quotients. The four industries with the highest location quotients are in the forestry and agriculture industries.

Table 68. Top ten location quotients – eastern Bay of Plenty Sub-region

Rank by FTE location quotient	Industry	Location Quotient
1	Wood and Paper Product Manufacturing	6.360
2	Forestry and Logging	4.813
3	Services to Agriculture; Hunting and Trapping	2.319
4	Agriculture	2.184
5	Education	1.470
6	Motor Vehicle Retailing and Services	1.305
7	Machinery and Equipment Manufacturing	1.277
8	Food Retailing	1.256
9	Health Services	1.183
10	Construction Trade Services	1.095

source:BERL Regional Database, Statistics NZ

- There are four industries with a location quotient at least twice that of the New Zealand average.
- Forestry is extremely important to the eastern Bay of Plenty sub-region. In particular:
    - wood and paper product manufacturing has a location quotient of 6.36.
    - forestry and logging has a location quotient of 4.81.
- Services to agriculture and agriculture both have location quotients more than twice the national average.

9.1.4 Southern Bay of Plenty Sub-region

Table 69 presents the ten industries in the southern Bay of Plenty Sub-region with the highest location quotients. Even more extreme than the eastern Bay of Plenty sub-region are the location quotients for forestry industries. The difference between the two is that, in southern Bay of Plenty Sub-region, forestry and logging has a higher quotient than wood and paper product manufacturing.

Table 69. Top ten location quotients – southern Bay of Plenty Sub-region

Rank by FTE location quotient	Industry	Location Quotient
1	Forestry and Logging	8.014
2	Wood and Paper Product Manufacturing	4.626
3	Services to Mining	3.767
4	Sport and Recreation	1.874
5	Accommodation, Cafes and Restaurants	1.873
6	Water Supply, Sewerage and Drainage Services	1.846
7	Libraries, Museums and the Arts	1.787
8	Road Transport	1.517
9	Motor Vehicle Retailing and Services	1.222
10	Agriculture	1.174

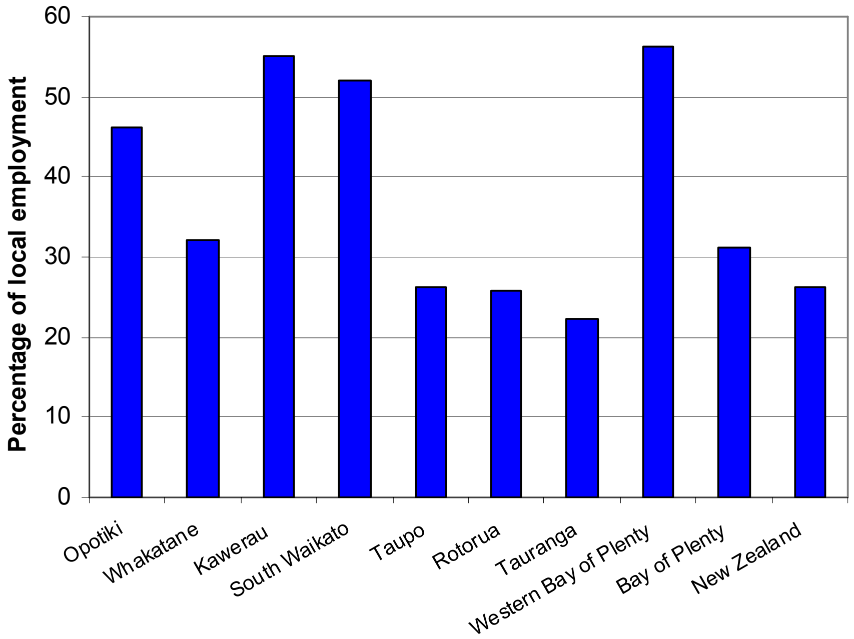
source:BERL Regional Database, Statistics NZ

- Three industries have location quotients at least three times as high as the national average.
- Forestry and logging has a location quotient of 8.01, confirming the importance of forestry to the Region. As well Wood and paper product manufacturing has a location quotient of 4.63.
- Services to mining has a location quotient 3.77 times higher than the national average.

9.2 Export industries

The export industries are made up of primary industries such as agriculture, forestry, fishing and mining, along with manufacturing and transport and storage. As can be seen in the chart, the export industries are of varying importance to local economies within the Bay of Plenty Region.

Figure 7. Export industries

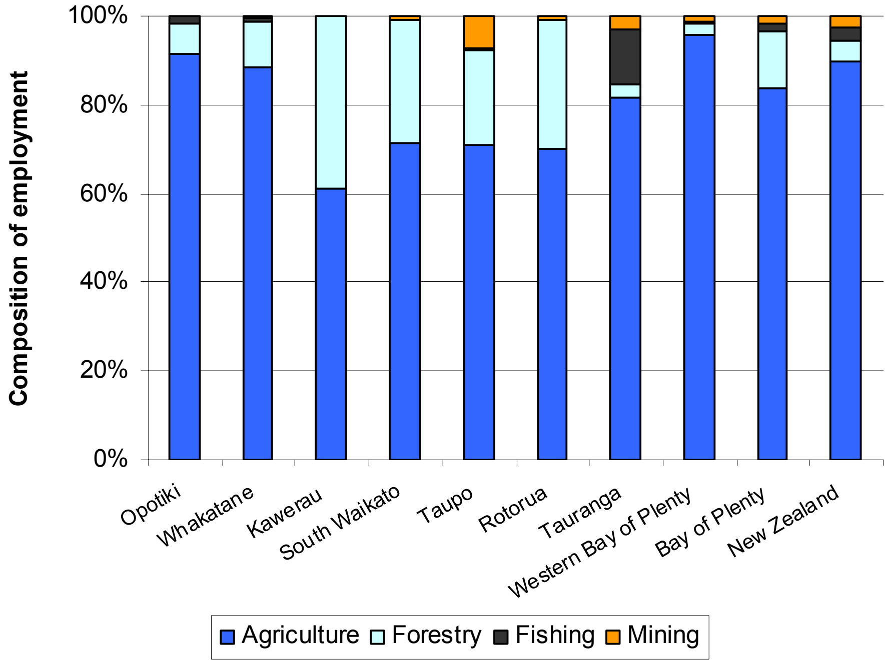


Export industries form a significant part of the Region's economy. In Kawerau, South Waikato and Western Bay of Plenty Districts, export industries account for more than 50 percent of employment. Export industries account for 46 percent of employment in Opotiki District. Their relevance is relatively less important in the larger 'provincial' towns of Rotorua and Tauranga, and also in Taupo, where domestic tourism plays a significant role.

Primary industries

The primary industries group is made up of agriculture, forestry, fishing and mining. Figure 8 shows the varying levels of employment within the four primary industries in each of the TAs.

Figure 8. Employment in primary industries



<u>Key points</u>

- Agriculture is the dominant primary industry in each TA, in particular Western Bay of Plenty and Opotiki Districts, where it accounts for more than 90 percent of primary employment.

- Forestry is a significant industry in Kawerau, South Waikato, Taupo and Rotorua Districts. It is responsible for more than a third of primary employment in Kawerau District and more than a quarter of primary employment in South Waikato District.

- Fishing is a very small industry except in Tauranga City.

- Mining is of some significance in Taupo District, employing almost 10 percent of primary industries FTEs.

The primary sector (agriculture, forestry, fishing and mining) shrank by around 70 FTEs over the ten-year period, but results were mixed. The agriculture industry added almost 1,000 FTEs between 1996 and 2006, in contrast to the decline in employment in this industry in New Zealand as a whole. These FTEs were mostly added in Tauranga City, and were categorised as services to agriculture not elsewhere classified.

There has been significant rationalisation in employment in the forestry and logging sector. This is in line with national trends where plantings have been reduced and siviculture techniques are less labour intensive. There is evidence of conversions of forestry to dairy in the Region.

Due to the historic importance of the forestry sector to the industry, the impacts are more significant. Forestry and logging employment in the Region as a whole has fallen by 4.7%pa over the last ten years.

This rationalisation of employment appears to have hit hardest in the smaller districts. Over the last ten years, forestry employment in Kawerau District has declined by 70 percent, Whakatane District by 62 percent and Taupo District by 53 percent. Although forestry employment in South Waikato District has fallen nine percent, this was in a Regional environment which saw forestry employment fall 4.7%pa between 1996 and 2006.

Mining employment more than doubled during the ten years, adding 170 FTEs, mostly in Taupo (+90 FTEs).

Fishing was up 100 FTEs over ten years, but almost exclusively due to rises in Tauranga City (120 FTEs) and Western Bay of Plenty District (20 FTEs). Elsewhere, fishing employment dropped. Aquaculture is a potential growth industry within the fishing sector.

Aquaculture

There are currently three oyster farms in the Ohiwa Harbour approximately two hectares each in size. There is also one small-scale (4 ha) permit for a mussel farm at Factory Bay, and a land-based paua proposal at Te Kaha that has not yet been developed. Applications are currently being processed for two large offshore mussel farms – a 4,750 hectare farm off Opotiki and a 4,009 hectare farm off Otamarakau.

Extensive research suggests there is plenty of capacity for the environment (44% of the Bay of Plenty's region's total boundary area are coastal waters) to cope with more aquaculture ventures, with the eastern Bay of Plenty Sub-region having more potential than the western Bay of Plenty Sub-region. The Bay of Plenty Region has excellent growing conditions. Both local and central government have recently indicated their support for developing the aquaculture industry in the Bay of Plenty Region.

Some limitations for the aquaculture industry include untried technology (off shore); high capital cost with significant risks; and long, untried planning process. The basic infrastructure for aquaculture development is largely in place, although some extra supporting infrastructure is required in some parts of the region. Tauranga has processing facilities for mussels (currently processes mussels from Coromandel). Opotiki District

Council is investing resources into developing aquaculture infrastructure in Opotiki (initiated by the 4,750ha mussel farm proposal).

Location quotients

At a Regional level, there are significantly elevated levels of employment in forestry and logging (4.22); and services to agriculture; hunting and trapping (2.16).

The western Bay of Plenty Sub-region has high location quotients in services to agriculture; hunting and trapping (3.11); and other mining (2.53); and commercial fishing (2.01).

Within the western Bay of Plenty Sub-region, Tauranga City has significantly above-average employment in commercial fishing (2.37), while Western Bay of Plenty District has the highest services to agriculture; hunting and trapping (9.77) location quotient in the Region. The Western Bay of Plenty district also has elevated levels of employment in other mining (6.36); agriculture (4.47); and forestry and logging (2.41).

With its strongly primary-based economy, it is no surprise that the eastern Bay of Plenty Sub-region has high location quotients in forestry and logging (4.81); services to agriculture; hunting and trapping (2.32); and agriculture (2.18).

As would be expected, at the TA level, location quotients range from 3.98 in Kawerau District to 6.61 in Opotiki District within the forestry and logging industry. Employment within the agriculture industry in Opotiki District is 4.25 times more likely than at national level and 2.14 times as likely in Whakatane District. In services to agriculture; hunting and trapping, Opotiki District has a location quotient almost seven times the national average.

Very high concentrations of employment in the forestry and logging (8.01), and services to mining (3.77) industries are evident in the southern Bay of Plenty Sub-region.

At the TA level in the southern Bay of Plenty Sub-region, South Waikato District has a forestry and logging employment concentration almost 16 times the national average, while in Taupo and Rotorua Districts, the concentration is more than six times the national average. Taupo District has a location quotient of 13.87 for services to mining.

Significant businesses

Table 70. Significant primary industry businesses

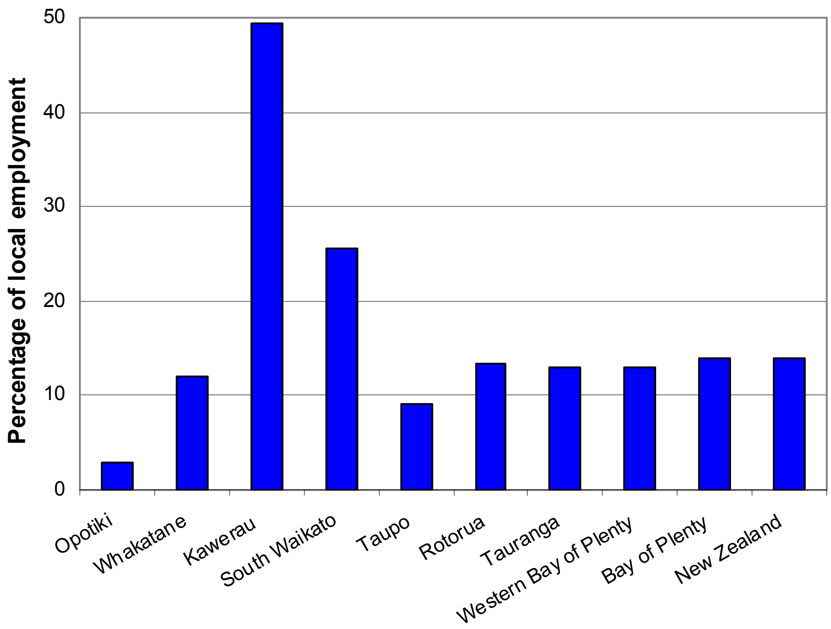
Primary Industries			
Ngati Whakaue Tribal Lands	Agriculture	agriculture	Rotorua
Satara Co-operative Group Ltd	Kiwifruit	horticulture	Tauranga
Zespri International Ltd	Kiwifruit	horticulture	Tauranga
Eastpack	Kiwifruit	horticulture	Whakatane
OPAC	Kiwifruit	horticulture	Opotiki

Primary-linked Industries

Manufacturing in the Bay of Plenty Region is strongly linked to the forestry industry. The manufacturing sector had mixed fortunes, but overall employment was up 0.5%pa over the ten-year period.

Most of the FTE gains occurred in western Bay of Plenty Sub-region. Tauranga City added 1,000 FTEs, mostly in wooden structural component manufacturing, printing, structural steel manufacturing and boatbuilding. The western Bay of Plenty Sub-region added 450 FTEs, mostly in food, beverage and tobacco (including wine manufacturing). Whakatane District added more than 300 FTEs, almost exclusively in dairy product manufacturing and pulp, paper and paperboard manufacturing. Meanwhile, Kawerau District lost 850 FTEs in wood and paper product manufacturing, although this was partly offset by an increase of 140 FTEs in industrial machinery and equipment manufacturing.

Figure 9. Processing and manufacturing employment



As can be seen in Figure 9, the importance of manufacturing to the Kawerau District employment picture cannot be overstated, at around 50 percent of all FTEs in the district. South Waikato District also has a large manufacturing presence. Manufacturing is significantly smaller in terms of its contribution to employment in other areas, most notably Opotiki District, where it accounts for less than four percent of employment.

Location quotients

In a Region that accounts for more than one-quarter of New Zealand's plantation forests, it is no surprise that the wood and paper product manufacturing industry has high levels of employment compared to the national average, at 3.33 in 2006.

The western Bay of Plenty Sub-region is the least reliant of the three sub-regions on the wood and paper product manufacturing industry, but the Western Bay of Plenty District nevertheless has a location quotient of 2.13 for the industry.

The eastern Bay of Plenty Sub-region, on the other hand, has a wood and paper product manufacturing location quotient of 6.36. Within its TAs, the figure is 3.51 in Whakatane District and as high as 24.24 in Kawerau District. The latter also has a high employment concentration in machinery and equipment manufacturing, at 5.09 times the national average.

Wood and paper product manufacturing employment also has very high concentration levels in the southern Bay of Plenty Sub-region, at 4.63 times the national average. The figure is even higher in South Waikato District, at 10.28, while in both Taupo and Rotorua Districts the location quotient is around 3.50.

The South Waikato District also has a location quotient of 1.78 in the metal product manufacturing industry.

Significant businesses

Table 71. Significant primary linked businesses

Primary-linked Industries			
Carter Holt Harvey Tasman	Wood processing - pulp	forestry	Kawerau
Norske Skog Tasman Ltd	Wood processing - paper	forestry	Kawerau
SCA Hygiene Australasia	Wood processing - tissue	forestry	Kawerau
Claymark Industries Ltd	Forestry and wood processing	forestry	Rotorua
La Grouw Corporation Ltd	Forestry and wood processing - lockwood	forestry	Rotorua
McAlpines	Forestry and wood processing	forestry	Rotorua
PF Olsen & Company Ltd	Forestry management	forestry	Rotorua
Red Stag Timber Ltd	Forestry and wood processing	forestry	Rotorua
Tenon - Mt Maunganui Plywood	Manufacturing	forestry	Tauranga
Timber Finishings Ltd	Manufacturing - Wood	forestry	Tauranga
Pukepine Sawmills Limited	Wood processing	forestry	Te Puke
Carter Holt Harvey Whakatane Mill	Wood processing - cardboard	forestry	Whakatane
New Zealand Forest Products Ltd	Pulp and Paper	forestry	South Waikato
Dominion Salt (NZ) Ltd	Refinery - salt	food processing	Tauranga
Goodman Fielder	Manufacturers - food	food processing	Tauranga
International Pet Foods Ltd	Meat processing	food processing	Tauranga
North Island Mussels Ltd	Mussel processing	food processing	Tauranga
Sanford Ltd	Seafood Processing	food processing	Tauranga
Fonterra Co-operative Group Ltd	Manufacturing - dairy products	food processing	Whakatane
AFFCO New Zealand Limited	Meat processing	food processing	Te Puke
Comvita New Zealand Limited	Manufacturing - food and health products	food processing	Te Puke
Champion Mt Maunganui	Manufacturing - food and health products	food processing	Tauranga
Allied Engineering	Industrial engineering	manufacturing	Kawerau
Damar Industries Ltd	Manufacturing - paint, varnish &/or solvents	manufacturing	Rotorua
Hayes International	Manufacturing - aluminium fabrication	manufacturing	Rotorua
Sealed Air - Cryovac	Manufacturing - packaging	manufacturing	Rotorua
Altex Coatings Limited	coatings	manufacturing	Tauranga
Ballance Agri-Nutrients Ltd	Manufacturing - fertiliser	manufacturing	Tauranga
Firth	Manufacturing - concrete	manufacturing	Tauranga
Orica Chement	Manufacturing - concrete	manufacturing	Tauranga

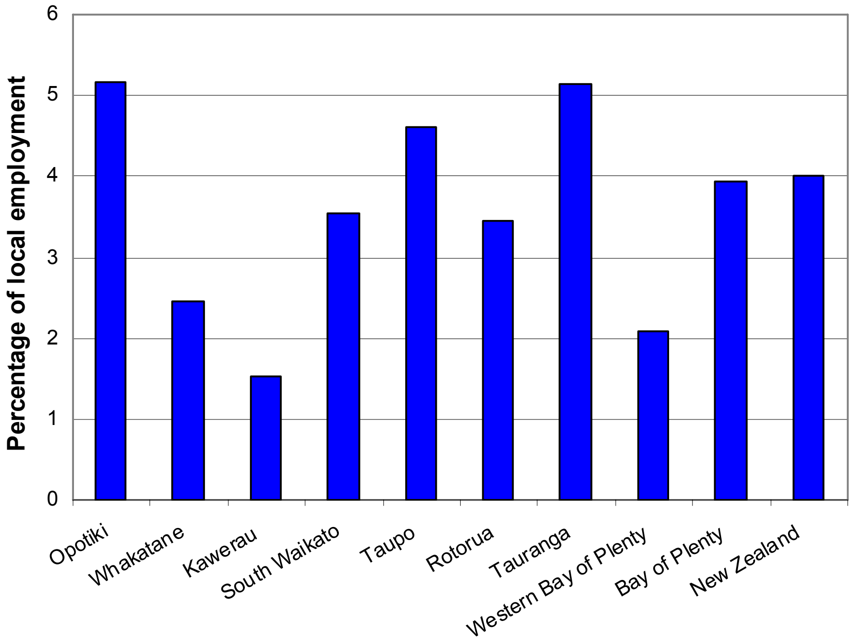
Transport and storage industries

Employment in the transport industry in the region is dominated by road freight transport. This is likely due to two factors: the export of timber products out of the region, and the transport of imports from Tauranga City harbour to Metroport in south Auckland[17].

However, freight to and from other regions may have risen, although the contribution of forestry was down substantially (e.g. down 5.6% just in the June 2006 year). Total tonnage handled by the port was up 7.8 percent (1.9%pa) between 2002 and 2006). Indeed, 350 FTEs were added in Tauranga City during the period, with between 80 and 150 FTEs added to each of Kawerau, Opotiki, Western Bay of Plenty and Taupo Districts. On the negative side, Western Bay of Plenty District lost 250 FTEs in the storage industry.

[17] (According to http://www.port-tauranga.co.nz/metroport_auckland/, Port of Tauranga uses only rail to transport imports to Metroport.

Figure 10. Transport & storage employment



Considering the presence of the port in Tauranga City, it is no surprise that more than five percent of employment is within this industry in Tauranga City, more than double the percentage found in Whakatane and Western Bay of Plenty Districts, and triple the percentage in Kawerau District, as Figure 10 shows.

<u>Location quotients</u>

At the Regional level, other transport has a location quotient of 2.40, while the figure for road transport is 1.27.

Within the western Bay of Plenty Sub-region, storage has an employment concentration 1.55 times the national average, with Tauranga City's figure at 1.81. The City also has a relatively high services to transport location quotient of 1.68.

In the eastern Bay of Plenty Sub-region, Opotiki District has location quotients of 5.07 for storage and 1.87 for road transport, while Whakatane District has quotients of 10.93 for other transport[18], and 2.47 for water transport.

The southern Bay of Plenty Sub-region has a road transport location quotient of 1.52, with values of 1.76, 1.68 and 1.37 in South Waikato, Taupo and Rotorua Districts respectively.

[18] Not exactly sure why this is so high. We may need to test this number with the District Council.

Significant businesses

Table 72. Significant transport and storage businesses

Transport and Storage Industries			
Independent Stevedoring Ltd	Cargo handling	transport	Tauranga
Port of Tauranga Limited	Port	transport	Tauranga
Toll Holdings Ltd	On-wharf logistics	transport	Tauranga

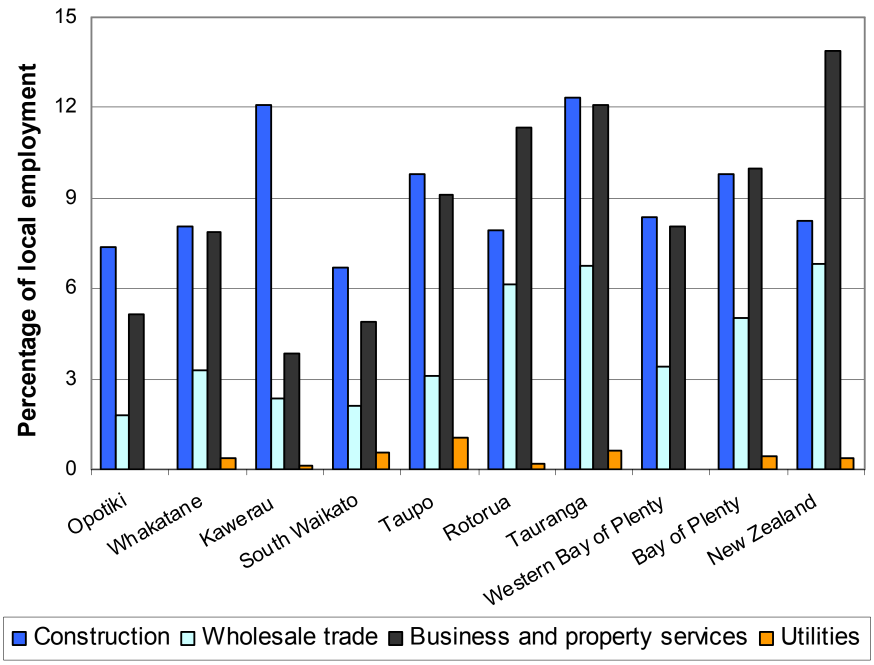
9.3 Population-driven industries

Population driven industries are those industries that are based around people and their personal, business, social and recreational needs. They tend to be service based and/or local in delivery. However, they also include industries such as building and construction, retail and wholesale and telecommunications and utilities. We have grouped these industries into four main areas. These are discussed below.

Housing-linked Industries

Housing-linked industries include construction, wholesale trade, business and property services, and utilities. These industries largely followed national trends throughout the Region.

Figure 11. Housing-linked employment



Employment in these four industries leapt 6,000 FTEs (73%) in Tauranga District between 1996 and 2006, driven by the rapidly-rising population. Western Bay of Plenty District did even better in percentage terms, with employment in these four industries up almost 80 percent.

South Waikato District fared worst in terms of construction employment, with FTEs rising just 0.9%pa (45 FTEs). This reflects the resident population patterns in the area.

Employment in wholesale trade was up substantially over the ten-year period, but fell 20 FTEs (24%) in Kawerau District. Most of these losses were in chemical wholesaling.

Utilities employment lost 500 FTEs over the ten-year period (-6.3%pa), at an even faster rate than experienced nationally (-4.9%).

Location quotients

As these industries are housing-linked, location quotients are likely to be highest in areas of strong population growth.

Tauranga City has significant location quotient values in electricity and gas supply (1.92); general construction (1.65); and basic material wholesaling (1.54).

The southern Bay of Plenty Sub-region has a location quotient of 1.85 in water supply, sewerage and drainage services, mainly as a result of the 1.93 quotient for the industry in Rotorua. The electricity and gas supply employment concentrations in Taupo and South Waikato Districts are also relatively high, at 3.15 and 1.54 respectively.

Significant businesses

Table 73. Significant housing-linked businesses

Housing-linked Industries			
Marra Construction Ltd	Construction	construction	Tauranga
Works Infrastructure Ltd	Infrastructure management/engineering	construction	Tauranga
TrustPower Limited	Electricity retailer	utilities	Tauranga
Bay of Plenty Electricity	Utilities	utilities	Whakatane
Horizon Energy	Utilities	utilities	Whakatane

Hospitality and Retail industries

The hospitality industry followed the national trend very closely, with growth in FTEs in all districts except Kawerau District, where growth was flat (down just three FTEs in the period). The Western Bay of Plenty District led the way with more than 1,100 FTEs added since 1996 (Tauranga City – 920, Western Bay of Plenty District – 180). Interestingly, the biggest growth (1,050 FTEs) occurred in the cafes and restaurants and the pubs, taverns and bars industries (growth was over 100% over the period for each of these industries, but only 36%

for accommodation), indicating that a lot of the growth may have been locally-driven, rather than due to increased inter-regional or international tourism.

Retail trade depends on tourism as well as rises in the local population. Employment in the industry rose in all districts except Kawerau (-1.1%pa) and South Waikato (-2.1%pa) Districts. The declining populations in these districts no doubt explain a lot of this. The Western Bay of Plenty District, where population growth is rapid, saw 3.2%pa average gains in employment between 1996 and 2006, adding almost 2,100 FTEs. Gains within the industry were across the board, from supermarkets and groceries to takeaway food retailing and automotive repairs, again indicating the strong link to population growth.

Figure 12. Hospitality and retail employment

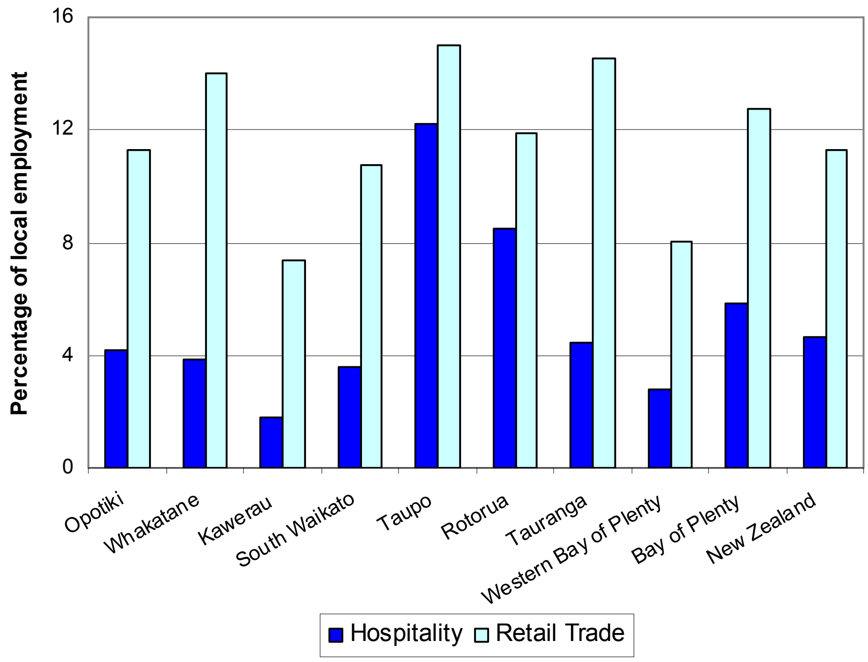


Figure 12 indicates the percentage of FTEs employed in the hospitality and retail trade industries across the eight TAs. In Taupo District, these two industries account for 27 percent of all employment. The hospitality industry employs 8.5 percent of the workforce in Rotorua District and 12.2 percent in Taupo District, while it employs less than five percent in each of the other TAs. Meanwhile, one-seventh of all FTEs in Whakatane District, Tauranga City and Taupo District are employed in retail trade. The retail trade sector employs between 7.4 percent (Kawerau District) and 11.9 percent (Western Bay of Plenty District) of FTEs in the other Districts.

Location quotients

The hospitality-linked industry, accommodation, cafés and restaurants, has a slightly elevated location quotient in the Bay of Plenty Region, at 1.26.

The figure in the southern Bay of Plenty Sub-region is 1.87, mainly due to a value of 2.63 in Taupo District and 1.83 in Rotorua District, which has a significant tourism focus.

Motor vehicle retailing and services has a value of 1.23 in the Region, with the highest location quotients in Opotiki (1.54) and Whakatane (1.39) Districts. Tauranga City has a figure of 1.32.

The Western Bay of Plenty District has a food, beverage and tobacco industry quotient of 1.58.

Social Service industries

Particularly strong growth occurred in Western Bay of Plenty District in health and community services, adding 2,450 FTEs (mostly in health services, non-residential care services and childcare). Opotiki District added 130 FTEs in health and community services.

The education industry was almost flat over the period, with the greatest rises in Tauranga City (700 FTEs) and Whakatane District (200 FTEs). The biggest rises in Whakatane District and Tauranga City were in higher, preschool and special school education, while employment in primary education fell by over 200 FTEs. Other Districts lost between 20 and 60 FTEs each.

Employment in government administration followed the national trend, down at 0.3%pa. Gains did occur in Tauranga City and Taupo and Whakatane Districts, almost all in local government administration.

Figure 13. Social services employment

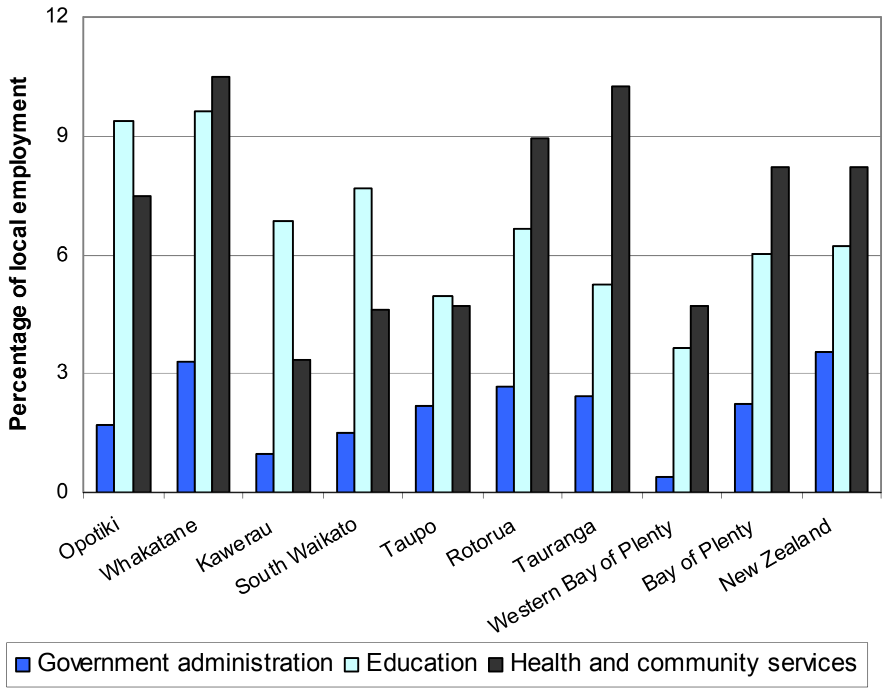


Figure 13 shows that employment in government administration was significantly lower throughout the region than the New Zealand average, other than in Whakatane District, the current seat of the Regional Council.

The proportion of FTEs within the education industry in the region is roughly the same as in New Zealand. More than nine percent of FTEs are in education in Opotiki District and Whakatane District, while only four percent of FTEs are in this industry in the Western Bay of Plenty District.

Employment in health and community services varied between 3.4 percent (Kawerau District) and 10.5 percent (Whakatane District) of FTEs.

Location quotients

Education accounts for a relatively high proportion of employment in the eastern Bay of Plenty Sub-region, with a location quotient of 1.47, mainly due to values of 1.55 in Whakatane District and 1.51 in Opotiki District. Opotiki District has a location quotient of 1.46 for community services, while Whakatane District has a figure of 1.51 for health services.

Significant businesses

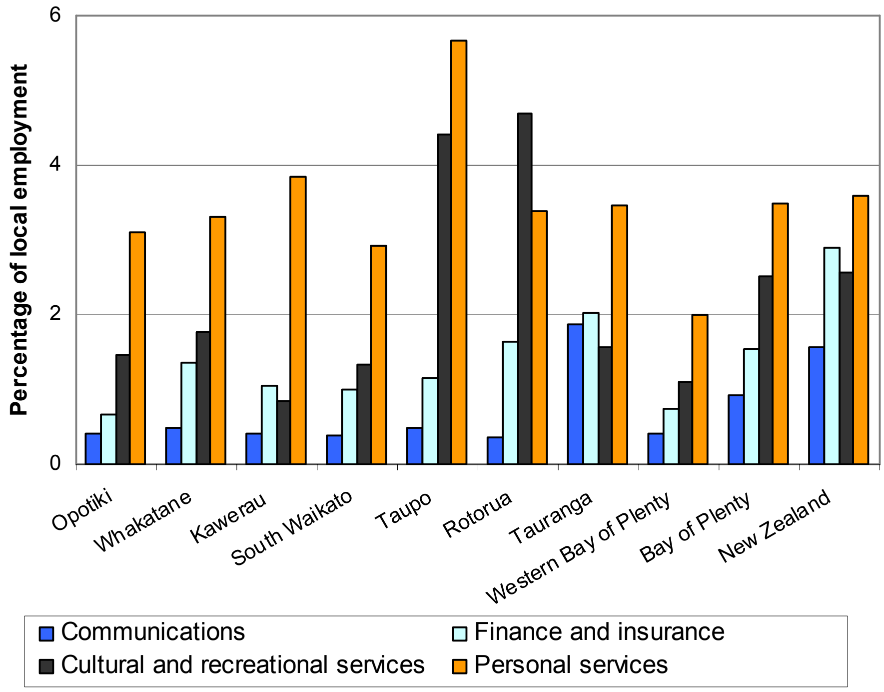
Table 74. Significant social service businesses

Social Services Industries			
Waiariki Institute of Technology	Education	education	Rotorua
Bay of Plenty Polytechnic	Education	education	Tauranga
Te Whare Wananga o Awanuiarangi	Education	education	Whakatane
SCION Research	Crown research	research	Rotorua
Lakes District Health Board	Public health	health	Rotorua
Bay of Plenty District Health Board	Public Health	health	Tauranga
Te Runanga o Ngati Awa	Iwi authority	social services	Whakatane

Other Business Services

Other business services is made up of four sub-industries – communications; finance and insurance; cultural and recreational services; and personal services.

Figure 14. Other business services



Growth in employment in the communications, and finance and insurance industries was fairly flat across the Bay of Plenty Region. There was significant growth in the Western Bay of Plenty District, where the two industries added 500 FTEs between them (mostly in postal services and telecommunications services). Rotorua District experienced the biggest drop in communications employment, shedding 240 FTEs, mostly in banks, postal services and courier services. Flat regional growth may be linked to improved productivity in these industries.

In the communications industry, most TAs had relatively low employment levels, at around 0.5 percent of total employment, whereas almost two percent of Tauranga District's FTEs were in communications. Similarly, employment in finance and insurance tended to be significantly higher in Tauranga District (2%) and Rotorua District (1.7%) compared to the other TAs (0.7% to 1.4%).

Education employs more than nine percent of FTEs in Opotiki and Whakatane Districts, but substantially smaller proportions in the other TAs, with only four percent of employment in Western Bay of Plenty District. Health and community services employs between 3.4 percent (Kawerau) and 10.5 percent (Whakatane) of all FTEs. Tauranga District's health and community services industry employs 10.3 percent of FTEs.

Taupo and Rotorua each have cultural and recreational services industries that employ well over 4 percent of FTEs within their respective TAs, while the rate is far lower in other TAs, falling between 0.8 percent (Kawerau) and 1.8 percent (Whakatane).

Tauranga added 550 FTEs to employment in personal services, including religious organisations and hairdressing and beauty salons.

Employment in personal services accounts for 5.7 percent of FTEs in Taupo District, and between 2.9 percent (South Waikato District) and 3.8 percent (Kawerau District) in the other TAs.

<u>Location quotients</u>

The southern Bay of Plenty Sub-region has relatively high location quotients for sport and recreation (1.87) and libraries, museums and the arts (1.79). This is mainly due to Taupo District's high employment concentration in the former (2.21) and Rotorua District's employment levels in the latter (2.34). Rotorua District also has significant employment levels in sport and recreation, at 2.07 times the national average.

<u>Significant Businesses</u>

It is likely that these businesses are relatively small or branch related. However, there may be some that are significant players in smaller towns.

9.4 Industry analysis summary

It is difficult to go past the importance of forestry and horticulture industries and the associated processing to the Bay of Plenty Region. The importance increases as you go down to Sub-regions and then even further to the TA level. When you start getting a location quotient of 24 for wood and paper products in Kawerau and 15.9 for forestry and logging in South Waikato you can see the importance of a single industry on some districts in the Bay of Plenty Region.

The importance of tourism is also important in the Rotorua and Taupo Districts, where accommodation, cafes and restaurants had location quotients of 1.83 and 2.63 respectively.

10 Tourism

Tourism is analysed separately as it is not a defined industry in itself but rather a combination of a portion of businesses from a number of industries. For example, a portion of retail sales can be to tourists. However, tourists do not account for all retail sales. As such, the same analysis as for the previous industries is not possible as we cannot determine the portions of all industries.

This section looks at existing tourism infrastructure and activity. Then it looks at tourism trends and forecasts.

Tourism data is collated through the Tourism Research Council. Data is collected in a variety of regional groupings in most cases by Regional Tourism Organisation (RTO). Apart from having a number of RTOs in the Bay of Plenty Region, the RTO areas of responsibility do not fit neatly into the Bay of Plenty Region (as defined in this report).

Where possible we have included the Waikato and Eastland RTOs in the tables. However, because a significant majority of the RTO activity is outside the Bay of Plenty Region, we have not included their numbers when aggregating to the Bay of Plenty Region but do mention them separately.

10.1 Tourism infrastructure

10.1.1 Regional Tourism Organisations

Regional Tourism Organisations (RTOs) play a leading role in the New Zealand tourism sector. They act as a bridge between tourism operators, national tourism bodies and local and central government. RTOs are also responsible for destination marketing - the promotion of their regions to potential domestic and international visitors.

Currently there are 30 RTOs across New Zealand. They vary widely in size, structure, and the scope of activities they undertake. RTOs are largely funded by local authorities.

There are five RTOs involved within the Bay of Plenty Region: Bay of Plenty, Rotorua, Lake Taupo, Eastland, and Waikato. The Bay of Plenty, Rotorua and Lake Taupo RTOs operate completely within the Bay of Plenty Region (as defined in this report). However, the Eastland RTO also covers Gisborne; and the Waikato RTO obviously covers the rest of the Waikato Region.

Table 75 provides a concordance between RTOs and TAs.

Table 75. RTO boundaries

Regional Tourism Organisation (RTO)	Territorial Authority
Bay of Plenty RTO	**Tauranga City** **Western Bay of Plenty District** **Whakatane District**
Rotorua RTO	**Rotorua District**
Taupo RTO	**Taupo District**
Waikato RTO	**South Waikato District Council** Franklin District Thames-Coromandel District Hauraki District Waikato District Matamata-Piako District Hamilton City Waipa District Otorohanga District Waitomo District
Eastland RTO	**Opotiki District** Gisborne Region

The Lake Taupo, Rotorua and Bay of Plenty RTOs are all within the Bay of Plenty Region. South Waikato is in the Waikato RTO but it accounts for only a small portion of the total Waikato RTO numbers. The bolded TAs are those involved in this Bay of Plenty Regional Economic Development Strategy. It is immediately obvious that

a) the regional strategy will need to include a number of RTOs (five); and

b) some RTOs will have interests outside of the Bay of Plenty Regional Economic Development strategy.

The number of RTOs, their funding structures, boundaries, strategies and roles raise unique challenges when considering tourism indicators and, indeed, an encompassing tourism strategy for the Bay of Plenty Region. Several of the RTO areas have already developed tourism strategies[19], which will need to be acknowledged and incorporated into any encompassing strategy. There are also a number of smaller niche tourism organisations and strategies in place such as the Rotorua Sustainable Tourism Charter.

10.1.2 i-SITE centres

i-SITE Visitor Centres provide up-to-date information about local attractions, transport and accommodation as well as provide tourists with bookings or reservations.

[19] Such as Smart Tourism, Bay of Plenty Tourism Strategy;

i-SITE Visitor Centres are the officially recognised provider of New Zealand tourism related information. Accreditation to the i-SITE network ensures that staff members are knowledgeable and provide objective, quality information.

There are nine i-SITE locations in the Bay of Plenty Region.

Table 76. i-SITES in the Bay of Plenty Region

Sub-Region	i-SITES
western Bay of Plenty Sub-region	Tauranga, Mt Maunganui
eastern Bay of Plenty Sub-region	Whakatane, Opotiki
southern Bay of Plenty Sub-region	Tokoroa, Tirau, Rotorua, Turangi, Taupo

10.2 Major attractions and events

The Bay of Plenty Region has a number of significant attractions and events for international and domestic visitors alike. It is too much to try to capture all of the existing information on tourism activities, attractions and opportunities. Indeed these are already available to a large extent in a number of RTO strategies.

However, we do try to capture the major intrinsic infrastructure that gives the Region its unique selling point in terms of attracting tourists. Of course these differ between domestic and international visitors but, overall, they provide the Region with a competitive advantage over other regions and a means on which to build a sustainable and growing tourism sector.

At a regional level, tourism attractions can be built around the natural environment (lakes, mountains, forests, sea, geothermal, fresh water springs), the cultural (Māori, New Zealand history), and the built (aviation attractions in Tauranga, adventure tourism, spa and wellness market) to name a few.

The following lists are incomplete and can be populated as the tourism strategy progresses. They aim to provide the major attractions and events that can attract visitors from outside the Region.

Table 77. Key attractions and events in the Bay of Plenty Region

Area	Attractions	Events
Rotorua RTO	Rotorua Art and History Museum	Rotorua Marathon
	Polynesian Spa	Xterra Multisport
	Skyline skyrides	World Waterskiing Championships
	Cultural tourism	Bike the lake
Taupo RTO	Huka Falls	A1 Grand Prix
	Lake Taupo	Ironman New Zealand
	Tongariro National Park	Lake Taupo Cycle Challenge
	Hot Springs	Maxxis FIM International Six day Enduro
		Great Lake Relay
Bay of Plenty RTO	White Island	Tarnished Frocks and Divas
	Mt Maunganui	Jazz Festival
	Kiwi-fruit industry	Garden and Art Festival
	Salt water hot pools	Sporting events – cycling, ironman, surf carnival
	Aviation tourism	
Opotiki	White Island	Annual Opotiki Rodeo
		Opotiki A&P Show and Community Fair
		Motu Challenge Multisport Event
		Hunters Blue Mountain Blast
		Fun Unplugged
		Easter Rodeo
Whakatane	White Island	
Kawerau	White Island	Recycled Fashion Show
		Tarawera 100
		National Woodskills Festival (September)
		Kawerau Art Exhibition (September)
		Kawerau Craft Festival (September)
		Norske Skog, Tasman Cultural Day/Mountain Race
		Eastern Bay of Plenty Kennel Association Annual Dog Show
		Christmas Showjumping Festival (December)
South Waikato	Okoroire Hot Springs Hotel	Spring into Summer Festival
	Corrugated iron art and antiques in Tirau	Trans-Tasman Supercross
	Blue Springs and Te Waihou Walkway	Golden Axe Tournament
	Talking Poles of Tokoroa	Logger Sports
		Turn NZ – New Zealand's national woodturning exhibition
		Tatou tatou Touch Tournament – New Zealand's largest touch tournament
		International Supercross
		Putaruru Water Festival

Events Venues

This data has been sourced mainly from the individual district council and district tourism websites.

Table 78. Significant events venues in the Bay of Plenty Region

Area	Events venues
Bay of Plenty RTO	BayPark Speedway and Stadium
Whakatane District	
Opotiki District	
Kawerau District	Ron Hardie Recreation Centre (360) Concert Chamber (250) Town Hall (520)
Rotorua RTO	International Stadium Hydraulink Paradise Valley Raceway; Energy Events Centre Government Gardens Rotorua Convention Centre Civic Theatre Te Runanga Teahouse Soundshell
Taupo RTO	Race track
South Waikato District	

The BayPark Speedway and Stadium has a capacity of 19,800 seats and provides 5,700 car parks, with a 470 metre speedway track. The attached club room provides dining seating for 650 people. It is the base for the Bay of Plenty Steamers.

Table 79. Museums and galleries in the Bay of Plenty Region

Territorial Authority	Museums
Tauranga City	Tauranga Museum Tauranga Art Gallery Classic Flyers Museum
Western Bay of Plenty District	Katikati Heritage Museum
Whakatane District	Whakatane Museum
Opotiki District	Opotiki Museum
Kawerau District	
Rotorua District	Rotorua Museum of Art and History
Taupo District	Lake Taupo Museum and Art Gallery
South Waikato District	Putaruru Timber Museum

The Tauranga Museum has been approved by Tauranga City Council, is estimated to cost $21 million, and opening is planned for 2011.

10.2.1 Key tourism activities

It is possible to track domestic and international visitors' key activities while they are in the various TAs. This gives an idea of the major attractions in the Region.

Activities are taken from the International Visitors Survey and the Domestic Visitors Survey. Table 80 to Table 84 show the top ten activities[20] by international and domestic visitors in the Bay of Plenty Region broken down by RTO.

Table 80. Key activities – Bay of Plenty RTO

Domestic		International	
Activity	**%**	**Activity**	**%**
Shopping	20.7	Sightseeing (Land)	35.3
Visiting Friends and Relatives	19.1	Other Scenic/Natural Attractions	32.0
None/Nothing	17.2	Visiting Friends And Relatives	28.4
Dining	16.8	Dining	24.9
Other Scenic/Natural Attractions	16.0	Walking And Trekking	22.5
Walking and Trekking	10.0	Shopping	17.4
Sightseeing (Land)	7.1	Entertainment	9.5
Swimming	5.5	None/Nothing	5.8
Business	4.5	Swimming	5.7
Gardens	4.5	Business	4.9

Source: Tourism Research Council (Sep 2006)

Table 81. Key activities – Rotorua RTO

Domestic		International	
Activity	**%**	**Activity**	**%**
Sightseeing (Land)	19.4	Volcanic/Geothermal Attractions	68.5
Dining	17.9	Cultural Attractions	54.6
Visiting Friends and Relatives	13.8	Sightseeing (Land)	45.2
Volcanic and Geothermal Attractions	13.7	Dining	21.8
None/Nothing	12.7	Farms	20.7
Shopping	11.1	Shopping	16.5
Other Land Activities	10.9	Walking And Trekking	15.5
Other Sports	9.6	Other Scenic/Natural Attractions	6.5
Business	7.4	Museums And Galleries	6.5
Other Activities	6.4	Other Land Activities	5.8

Source: Tourism Research Council (Sep 2006)

Table 82. Key activities – Lake Taupo RTO

Domestic		International	
Activity	**%**	**Activity**	**%**
Dining	26.7	Sightseeing (Land)	45.5
Shopping	19.4	Walking And Trekking	25.8
Visiting Friends and Relatives	15.0	Dining	18.6
None/Nothing	14.2	Other Scenic/Natural Attractions	17.1
Sightseeing (Land)	12.2	Volcanic/Geothermal Attractions	13.9
Walking and Trekking	7.9	Boating	10.7
Business	6.3	Shopping	10.1
Other Sports	5.8	Sky Diving/Parachuting	7.7
Volcanic and Geothermal Attractis	5.5	Fishing	7.7
Other Scenic/Natural Attractions	4.3	Entertainment	7.3

Source: Tourism Research Council (Sep 2006)

[20] The survey form provides a list of activities the visitor can choose from. None/nothing suggests that the visitor did not undertake any major activity as listed in the survey options.

Table 83. Key activities – Waikato RTO

Domestic		International	
Activity	**%**	**Activity**	**%**
Visiting Friends and Relatives	21.0	Sightseeing (Land)	29.8
None/Nothing	20.3	Other Scenic/Natural Attractions	24.1
Dining	20.0	Visiting Friends And Relatives	22.2
Shopping	13.9	Dining	19.2
Business	8.9	Walking And Trekking	19.2
Sightseeing (Land)	5.5	Shopping	15.3
Other Business/Edctnl Activities	5.3	Caving	9.9
Other Sports	4.7	None/Nothing	8.9
Other Activities	3.4	Entertainment	7.1
Other Scenic/Natural Attractions	2.8	Canoeing, Kayaking, Rafting	6.4

Source: Tourism Research Council (Sep 2006)

Table 84. Key activities - Eastland RTO

Domestic		International	
Activity	**%**	**Activity**	**%**
Dining	21.2	Sightseeing (Land)	41.1
Visiting Friends and Relatives	17.6	Walking And Trekking	25.6
Shopping	16.5	Other Scenic/Natural Attractions	23.5
None/Nothing	16.5	Visiting Friends And Relatives	22.1
Sightseeing (Land)	9.5	Dining	18.5
Business	7.7	Shopping	11.2
Walking and Trekking	6.5	None/Nothing	8.7
Other Scenic/Natural Attractions	5.4	Entertainment	6.1
Other Activities	3.7	Fishing	5.8
Other Sports	3.6	Swimming	5.2

Source: Tourism Research Council (Sep 2006)

The constant activity across all RTOs for international activity is sightseeing (land) and other scenic/natural attractions. Rotorua RTO has the most developed tourism products, with almost 70 percent of international visitors experiencing volcanic/geothermal attractions and over 50 percent experiencing cultural attractions.

For Domestic visitors, the key activities are dining, shopping and visiting friends and relatives.

10.2.2 Purpose of visit

Purpose of visit is taken from the Domestic Travel Survey and the International Visitors Survey. The main results are presented in Table 85.

Table 85. Purpose of visit (domestic)

Regional Tourism Organisation (RTO)	Domestic Visitors by Purpose of Visit				
	Holiday	Visiting Friends And Relatives	Business	Education	Other
Bay of Plenty RTO	44.6%	33.9%	15.9%	1.5%	4.1%
Rotorua RTO	47.0%	27.3%	20.3%	2.4%	2.9%
Lake Taupo RTO	52.5%	26.8%	16.3%	0.3%	4.0%
Bay of Plenty Region	47.4%	30.2%	17.2%	1.4%	3.8%
Eastland RTO	47.0%	32.4%	16.8%	0.0%	3.7%
Waikato RTO	28.5%	32.4%	28.8%	1.2%	9.1%
Total, New Zealand	39.6%	29.9%	23.2%	1.2%	6.0%

Source: Tourism Research Council (Sep 2006)

- A relatively higher proportion of visitors to the Region visit for holiday purposes. Taupo has the highest proportion of holiday visitors (12% higher than nationally).
- Education plays a relatively significant role in the Rotorua RTO.
- Bay of Plenty RTO has a relatively high proportion of VFR visitors.

Table 86. Purpose of visit (international)

Regional Tourism Organisation (RTO)	International Visitors by Purpose of Visit				
	Holiday	Visiting Friends And Relatives	Business	Education	Other
Bay of Plenty RTO	49.0%	38.1%	5.1%	2.6%	5.2%
Rotorua RTO	73.3%	15.2%	6.7%	3.0%	1.7%
Lake Taupo RTO	69.8%	17.7%	6.8%	2.9%	2.8%
Bay of Plenty Region	68.8%	19.3%	6.5%	2.9%	2.5%
Eastland RTO	57.7%	21.3%	15.6%	0.7%	4.8%
Waikato RTO	65.7%	21.4%	8.3%	2.4%	2.2%
Total, New Zealand	48.6%	28.0%	17.3%	2.9%	3.2%

Source: Tourism Research Council (Dec 2006)

- The Region has a significantly higher proportion of international visitors visiting for holiday – in particular Rotorua and Taupo RTOs.
- Bay of Plenty RTO has a high proportion of international VFR visitors.

10.2.3 Accommodation

Accommodation infrastructure plays a key role in attracting tourists to a Region. Rotorua has a well developed accommodation sector, with most of the major hotel chains operating in the District. Tauranga District's first hotel/dining complex recently opened and plans are underway for another significant chain to build a hotel complex.

These hotel complexes are an important factor in attracting the major wholesale tour operators to add the Region to their portfolio.

This section looks at the accommodation infrastructure in the Bay of Plenty Region. Table 87 breaks establishments down by accommodation type at the RTO level.

Table 87. Accommodation establishments by type

Regional Tourism Organisation (RTO)	Establishments				
	Backpackers	Caravans	Hosted	Hotels	Motels
Bay of Plenty RTO	14	26	14	11	82
Lake Taupo RTO	15	9	15	9	73
Rotorua RTO	12	14	27	19	79
Bay of Plenty Region	41	49	56	39	234
Eastland RTO	7	16	9	13	33
Waikato RTO	16	21	17	27	82
Total, New Zealand	443	419	663	570	1,757
Bay of Plenty RTO	9.5%	17.7%	9.5%	7.5%	55.8%
Lake Taupo RTO	12.4%	7.4%	12.4%	7.4%	60.3%
Rotorua RTO	7.9%	9.3%	17.9%	12.6%	52.3%
Bay of Plenty Region	9.8%	11.7%	13.4%	9.3%	55.8%
Eastland RTO	9.0%	20.5%	11.5%	16.7%	42.3%
Waikato RTO	9.8%	12.9%	10.4%	16.6%	50.3%
Total, New Zealand	11.5%	10.9%	17.2%	14.8%	45.6%

Source: Tourism Research Council (Dec 2006)

- There is a significantly higher proportion of motel accommodation in the Bay of Plenty Region than in New Zealand.

- Consequently there is a lower proportion of hotel accommodation, apart from in Rotorua, which is only slightly below the national average.

- Bay of Plenty RTO has a very high proportion of caravan accommodation compared to the other RTOs in the Region. This brings the Region's caravan accommodation proportion above the national average even though the proportion of caravan accommodation in the other two RTOs is lower than nationally.

10.3 Tourism performance

Tourism statistics can be collected to show the trends in tourist flows, types, activities and accommodation.

10.3.1 Number of visitors and yield

Table 88 present the number of visits, the number of visitor nights, and the amount spent by visitors for each of the Region's RTOs compared to New Zealand. The information is broken down by domestic and international visitors.

Table 88. Visits, nights and spend by RTO

	visitor summary 2005								
	Domestic			International			Total		
Regional Tourism Organisation (RTO)	*Visits (000s)*	*Nights (000s)*	*Spend ($m)*	*Visits (000s)*	*Nights (000s)*	*Spend ($m)*	*Visits (000s)*	*Nights (000s)*	*Spend ($m)*
Bay of Plenty RTO	3,140.7	2,654.9	308	258.2	997.4	64	3,398.9	3,652.3	372
Rotorua RTO	1,838.9	1,403.5	194	893.8	1,341.0	237	2,732.7	2,744.5	431
Lake Taupo RTO	1,994.0	2,487.2	219	529.8	877.5	141	2,523.8	3,364.7	360
Bay of Plenty Region	**6,973.6**	**6,545.6**	**721**	**1,681.8**	**3,215.9**	**442**	**8,655.4**	**9,761.5**	**1,163**
Eastland RTO	753.7	929.5	97	85.3	353.9	20	839.0	1,283.4	116
Waikato RTO	7,382.3	2,933.0	542	748.5	1,696.1	177	8,130.8	4,629.1	719
Total, New Zealand	**65,670**	**51,799**	**6,815**	**15,682**	**44,822**	**6,504**	**81,353**	**96,621**	**13,319**

source: NZ Regional Tourism Forecasts 2006-2012

Domestic visitors are relatively more important to the Bay of Plenty Region than nationally, apart from the Rotorua RTO, where international visitors account for around 54 percent of all visitor expenditure.

- The Bay of Plenty Region (excluding South Waikato) accounts for 8.7 percent of the total visitor spend in New Zealand. It accounts for 10.6 percent of domestic visitor spend and 6.7 percent of international visitor spend.

- Domestic visitors account for over 60 percent of visitor expenditure in the Bay of Plenty Region. Nationally, the proportion is 51 percent.

Guest nights are also available by TA. These are shown in Table 89.

Table 89. Guest nights by TA

	Guest Nights		
Area	Nov-04	Nov-05	Nov-06
Total, New Zealand	**30,906,884**	**31,614,552**	**31,565,295**
Bay of Plenty Region	**4,233,024**	**4,298,425**	**4,203,917**
Western Bay Of Plenty	**840,574**	**915,537**	**928,074**
Tauranga District	697,092	737,059	746,397
Western Bay Of Plenty District	143,482	178,478	181,677
Eastern Bay of Plenty	**316,824**	**340,958**	**330,362**
Opotiki District	75,093	81,774	81,882
Whakatane & Kawerau Districts	241,731	259,184	248,480
Southern Bay of Plenty	**3,075,626**	**3,041,930**	**2,945,481**
South Waikato District	42,791	41,449	46,106
Taupo District	1,094,059	1,086,962	1,051,944
Rotorua District	1,938,776	1,913,519	1,847,431

Source: Tourism Research Council (Nov 2006)

- The Bay of Plenty Region accounts for around 13 percent of all guest nights in New Zealand.

- Rotorua District has by far the most guest nights in the Bay of Plenty Region followed by Taupo District, both of which are in the southern Bay of Plenty Sub-Region.
- The South Waikato District has the fewest guest nights of all TAs in the Region.

10.3.2 Occupancy rates

Occupancy rates[21] show the capacity utilisation of accommodation. Net occupancy rates are available by TA. Table 90 shows occupancy rates back to 1998 for the November years for each of the TAs[22], the TA sub-groupings, the Region and New Zealand.

Table 90. Occupancy rate by TA

	Occupancy Rate		
Area	Nov-04	Nov-05	Nov-06
Total, New Zealand	**38**	**37**	**37**
Bay of Plenty Region	**36**	**35**	**35**
Western Bay Of Plenty	**27**	**28**	**29**
Tauranga District	34	34	36
Western Bay Of Plenty District	13	16	15
Eastern Bay of Plenty	**17**	**17**	**17**
Opotiki District	8	9	9
Whakatane & Kawerau Districts	25	23	23
Southern Bay of Plenty	**44**	**42**	**42**
South Waikato District	37	34	26
Taupo District	38	37	38
Rotorua District	49	46	45

Source: Tourism Research Council (Nov 2006)

Occupancy rates in the Bay of Plenty Region are only slightly lower than in New Zealand. However, occupancy rates are skewed by the high occupancy rate in Rotorua District, which is significantly higher than nationally.

Occupancy rates are available broken down into accommodation type. This information is only available by RTO. Therefore, it is important to note again that the Waikato RTO includes several TAs, and not just South Waikato, while the Eastland RTO includes Opotiki and Gisborne.

[21] Occupancy rates can be though of as how

[22] Note that Whakatane and Kawerau rates are not available separately.

Table 91. Occupancy rates

Regional Tourism Organisation (RTO)	% Occupancy Rate				
	Backpackers	Caravans	Hosted	Hotels	Motels
Bay of Plenty RTO	53	16	18	42	54
Lake Taupo RTO	40	21	28	43	55
Rotorua RTO	52	19	27	62	52
Eastland RTO	33	10	9	24	54
Waikato RTO	38	13	23	41	58
Total, New Zealand	44	14	26	55	55

Source: Tourism Research Council (Nov 2006)

- Rotorua hotel occupancy rates are significantly higher than other RTOs in the Region and nationally. Conversely, hotels in the Bay of Plenty and Lake Taupo RTOs have a low occupancy rate compared to nationally.

- Hosted occupancy rates in the Bay of Plenty RTO are significantly lower than the national average and the other two RTOs in the Region.

- All RTOs have a higher caravan occupancy rate than the national average

- Backpacker occupancy rates in Rotorua and Bay of Plenty RTOs are higher than the national average. The occupancy rate for backpackers in Taupo RTO is lower than the national average.

- Motel occupancy rates are similar to national averages.

10.3.3 Significant businesses

Note that these businesses only cover the Rotorua and Bay of Plenty RTO areas.

Table 92. Significant businesses in the tourism sector

Tourism Sector			
Agrodome Expo Promotions	Tourism - farm tours and entertainment	tourism	Rotorua
Hells Gate Volcanic Park	Tourism - thermal pools	tourism	Rotorua
Polynesian Spa	Tourism	tourism	Rotorua
Skyline Skyrides	Tourism	tourism	Rotorua
Te Puia	Tourism - tourist park	tourism	Rotorua
Mount Maunganui Hot Pools	Tourism - thermal pools	tourism	BoP RTO
Kiwifruit360	Tourism - farm tours and entertainment	tourism	BoP RTO
Comvita Visitor Centre	tourism - agriculture based activities	tourism	BoP RTO

10.3.4 RTO visitor forecasts

Table 93 presents forecasts out to 2012 for New Zealand and the three RTOs in the Bay of Plenty Region broken down by domestic and international visitors.

Table 93. RTO visitor night forecasts

	Forecast Visitor Nights (000s)						
Area	2006	2007	2008	2009	2010	2011	2012
International							
Bay of Plenty RTO	1,032	1,077	1,119	1,163	1,206	1,262	1,295
Rotorua RTO	1,364	1,442	1,516	1,595	1,676	1,793	1,842
Lake Taupo RTO	899	943	983	1,024	1,066	1,130	1,153
Bay of Plenty Region	**3,295**	**3,462**	**3,617**	**3,782**	**3,948**	**4,186**	**4,291**
Eastland RTO	363	376	388	401	414	431	442
Waikato RTO	1,752	1,835	1,913	1,995	2,077	2,183	2,244
New Zealand	**46,149**	**48,281**	**50,381**	**52,651**	**54,972**	**58,122**	**59,766**
Domestic							
Bay of Plenty RTO	2,649	2,695	2,755	2,780	2,804	2,828	2,852
Rotorua RTO	1,401	1,426	1,459	1,472	1,485	1,498	1,512
Lake Taupo RTO	2,481	2,521	2,576	2,596	2,616	2,636	2,655
Bay of Plenty Region	**6,531**	**6,642**	**6,790**	**6,847**	**6,905**	**6,963**	**7,019**
Eastland RTO	928	942	962	969	977	984	991
Waikato RTO	2,926	2,975	3,040	3,066	3,091	3,116	3,141
New Zealand	**51,629**	**52,418**	**53,499**	**53,885**	**54,271**	**54,658**	**55,019**

source: NZ Tourism Forecasts 2006-2012

Table 94. RTO visitor expenditure forecasts

	Forecast Expenditure ($NZm)						
Area	2006	2007	2008	2009	2010	2011	2012
International							
Bay of Plenty RTO	66	72	77	82	86	92	96
Rotorua RTO	240	267	291	313	336	367	387
Lake Taupo RTO	142	156	168	178	189	205	213
Bay of Plenty Region	**448**	**495**	**536**	**573**	**612**	**664**	**696**
Eastland RTO	20	21	23	24	25	27	28
Waikato RTO	180	197	211	224	238	256	267
New Zealand	**6,646**	**7,283**	**7,858**	**8,375**	**8,921**	**9,645**	**10,103**
Domestic							
Bay of Plenty RTO	314	324	338	347	356	366	376
Rotorua RTO	198	204	213	219	225	231	237
Lake Taupo RTO	223	230	240	246	253	259	266
Bay of Plenty Region	**734**	**759**	**790**	**812**	**834**	**856**	**878**
Eastland RTO	98	101	105	108	111	113	116
Waikato RTO	552	570	593	609	626	643	661
New Zealand	**6,926**	**7,149**	**7,428**	**7,623**	**7,820**	**8,019**	**8,215**

source: NZ Tourism Forecasts 2006-2012

10.4 Tourism analysis summary

There is significant potential for growth in the Bay of Plenty Region if there is a consistent, collective approach to growing the tourism market. There are specific strengths in the Region, Rotorua with a strong international tourism base and Taupo and Tauranga with strong domestic tourism.

There are synergies in terms of the type of activities that can be marketed such as cultural tourism, sustainable tourism, sightseeing and natural attractions. The Region is a part of the Great New Zealand Travel Route and the Thermal Explorer and Pacific Coast Highways.

Currently the international tourist route in the North Island follows the golden triangle of Auckland, Waitomo (Waikato), Rotorua. It is rare for tourists to continue on to the rest of the Bay of Plenty Region. There are opportunities to capture the Rotorua tourists and to encourage them to stay longer and explore the rest of the Region. A mechanism for this may be direct international air-links into Rotorua, or package deals across the Region, where Rotorua then becomes the epicentre of travel plans, rather than the corner of the golden triangle beyond which tourists don't venture.

The Bay of Plenty Region has significant natural tourism resources, which include the already well known thermal activities, lakes, rivers and forests, and Māori cultural experiences. White Island and Mt Maunganui are significant attractions in their own right. The Region has the largest Hector dolphin population in New Zealand, with dolphin-viewing tours recording a 95 percent sighting success rate.

Issues to overcome include quality tourism infrastructure outside of Rotorua District. Tauranga City recently opened its first chain hotel complex (providing accommodation and dining), which has allowed it to provide package tours that can appeal to wholesale operators. It is likely that other hotel chains may follow, increasing the potential to market the Region to international wholesalers.

Further, many of the operators in the tourism industry (outside of Rotorua) are lifestylers, many of whom do not have a professional approach to the industry. Therefore, while they may offer a quality experience, they may not open regularly, or provide a variation of service. This lack of professionalism impacts on the attractiveness of the Region as a tourist destination.

Finally, the role of RTOs in encouraging tourism in the Region is huge. Varying levels of resourcing, non-compatible or competing strategies, and boundary issues, affect the Regional outcomes from this investment. Further, economies of scale could (and in some instances already are) improve the outcomes from these organisations.

11 Population and industry projections

This section looks at population and industry projections in the Bay of Plenty Region over the next 15 years.

Population projections are based on Statistics New Zealand Sub-national population projections. We show both the medium and high projections.[23]

We use CGE modelling to provide projections of industry employment over a 5 and 15-year period. This is a business as usual projection where, in general, we assume that growth for the next 15 years will be the same as growth for the last 12 years.[24] Scenarios can be provided in the next stage.

11.1 Population projections

The national economic projections and the consequent employment projections for the Bay of Plenty Region drive from numerous assumptions. In particular, a *high* population scenario is assumed. This corresponds to the national population growth of 1.0 percent per annum over the 2006 to 2021 period, with noticeably faster growth across the Bay of Plenty Region.

The projected national economic picture results in the population projections in Table 95. While we have included medium and high projections, we consider the high estimates to be the most likely and are what we have used in our CGE model.

BERL has also recalculated the projections to be consistent with 2006 census counts for population and so they are different from the official sub-national population projections put out by Statistics New Zealand.

[23] However, in our national industry projections we use the Statistics New Zealand high projections, as we have found these to be the more likely outcomes in the past and are more consistent with BERL's position on future population growth.

[24] Parameter assumptions and industry projections for the national projections are included in the appendix.

Table 95. Subnational population estimates

Area	2006 Census	Total Residents Projections Medium 2011	Medium 2021	High 2011	High 2021	%pa Change Medium Projection 2006-2011	2006-2021	%pa change High Projection 2006-2011	2006-2021
Total, New Zealand	**4,027,797**	**4,189,139**	**4,484,006**	**4,365,903**	**4,858,519**	**0.79**	**0.72**	**1.63**	**1.26**
Bay of Plenty Region	**315,873**	**329,666**	**354,177**	**346,355**	**389,700**	**0.87**	**0.79**	**1.86**	**1.41**
Western Bay Of Plenty	**145,713**	**158,423**	**182,367**	**167,292**	**201,384**	**1.74**	**1.61**	**2.80**	**2.18**
Tauranga City	103,635	112,741	129,964	119,175	143,624	1.70	1.52	2.83	2.20
Western Bay Of Plenty District	42,078	45,682	52,403	48,117	57,760	1.66	1.47	2.72	2.13
Eastern Bay of Plenty	**49,197**	**49,068**	**48,341**	**51,391**	**53,084**	**-0.05**	**-0.12**	**0.85**	**0.51**
Opotiki District	8,976	9,163	9,444	9,724	10,566	0.41	0.34	1.61	1.09
Whakatane District	33,300	33,397	33,010	34,849	36,010	0.06	-0.06	0.91	0.52
Kawerau District	6,921	6,508	5,888	6,818	6,508	-1.22	-1.07	-0.30	-0.41
Southern Bay of Plenty	**120,963**	**122,175**	**123,469**	**127,672**	**135,232**	**0.20**	**0.14**	**1.05**	**0.75**
South Waikato District	22,641	21,460	19,688	22,739	22,444	-1.07	-0.93	0.09	-0.06
Taupo District	32,421	33,369	34,412	34,696	37,445	0.58	0.40	1.37	0.97
Rotorua District	65,901	67,346	69,369	70,237	75,343	0.43	0.34	1.28	0.90

Source: SNZ Subnational Projections to 2026, Census 2006, BERL workings

The New Zealand population is expected to increase by 830,700 from Census night 2006 to 4.86 million in 2021. The Bay of Plenty Region is expected to increase by around 55,700 between 2006 and 2021 to reach a population of 389,700. Growth in the Bay of Plenty Region is expected to be higher than the national growth rate. This growth rate slows between 2011 and 2021 but remains higher than the national growth rate.

- Of the three sub-regions within the Bay of Plenty Region, western Bay of Plenty Sub-region is expected to grow the fastest (2.18%pa), followed by southern Bay of Plenty Sub-region (0.75%pa) and then eastern Bay of Plenty Sub-region (0.51%pa). There is a similar pattern in terms of absolute resident growth.

- Tauranga City and Western Bay of Plenty District are the key drivers of population increase, each growing by more than 2.0%pa over the forecast period.

- All other TAs experience growth rates lower than the national average.

- Kawerau and South Waikato Districts both experience declines in population between 2006 and 2021.

11.2 Employment projections

Employment is determined by comparing the historical (1994-2006) pattern of employment growth in the Region relative to that for New Zealand. The relativities between the Region and the New Zealand employment performance are maintained to provide estimates of employment in 2011 and 2021. Note that these relativities are calculated at the industry level.

Table 96 shows the employment projections to 2011 and 2021 in the Bay of Plenty Region broken down by industry (at the ANZSIC 1-digit level)[25].

Table 96. Bay of Plenty Region FTE employment projections

ANZSIC Industry	2006	*2006 to 2011 %pa*	2011	*2011 to 2021 %pa*	2021	*2006 to 2021 %pa*
Employment FTEs						
Agriculture and Fishing	14,141	*1.7*	15,377	*1.9*	18,601	*1.8*
Forestry	2,105	*1.8*	2,299	*1.2*	2,597	*1.4*
Mining	298	*2.1*	330	*1.5*	385	*1.7*
Manufacturing	17,490	*3.6*	20,890	*2.9*	27,922	*3.2*
Electricity, Gas and Water Supply	547	*2.8*	627	*2.1*	775	*2.3*
Construction	12,191	*4.3*	15,020	*2.2*	18,730	*2.9*
Wholesale Trade	6,293	*3.9*	7,602	*2.9*	10,072	*3.2*
Retail Trade	15,948	*2.7*	18,228	*2.0*	22,196	*2.2*
Accommodation, Cafes and Restaurants	7,306	*2.0*	8,050	*2.1*	9,884	*2.0*
Transport and Storage	4,928	*3.6*	5,895	*3.2*	8,060	*3.3*
Communication Services	1,166	*1.4*	1,248	*1.1*	1,389	*1.2*
Finance and Insurance	1,907	*1.3*	2,034	*0.5*	2,144	*0.8*
Property and Business Services	12,474	*2.8*	14,313	*2.1*	17,546	*2.3*
Government Administration and Defence	2,773	*2.6*	3,155	*2.1*	3,883	*2.3*
Education	7,532	*3.1*	8,784	*2.5*	11,280	*2.7*
Health and Community Services	10,240	*3.1*	11,934	*2.4*	15,114	*2.6*
Cultural and Recreational Services	3,131	*2.6*	3,559	*2.1*	4,369	*2.2*
Personal and Other Services	4,342	*2.7*	4,961	*2.1*	6,119	*2.3*
TOTAL FTEs BoP	**124,813**	***2.9***	**144,307**	***2.3***	**181,064**	***2.5***

Source: BERL CGE Model

Employment in the Bay of Plenty Region increases from 125,000 in 2006 to 181,000 in 2021, an increase of 56,000 over 15 years. This is equivalent to employment growth of 2.5 percent each year.

The fastest employment growth occurs in transport and storage (3.3%pa), which increases by 3,130 FTEs between 2006 and 2021. Manufacturing (3.2%) and wholesale trade (3.2%) also grow significantly over the 15-year period.

The most significant employment growth comes from the manufacturing sector, which is expected to grow from 17,490 in 2006, to 27,920 in 2021. That is an extra 10,430 FTEs over 15 years, or close to 700 new FTEs each year. Over the 15 years to 2021, construction can be expected to add a further 6,540 FTEs, retail trade - 6,250 FTEs and property and business services - 5,070.

11.3 GDP projections

Table 97 shows projected GDP growth for the Bay of Plenty Region broken down by industry (at the 1-digit ANZSIC level) to 2011 and 2021.

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[25] Although forestry has been separated out from agriculture and fishing.

Table 97. Bay of Plenty Region GDP projections

ANZSIC Industry	*2006 to 2011 %pa*	*2011 to 2021 %pa*	*2006 to 2021 %pa*
Real GDP			
Agriculture and Fishing	*4.0*	*3.8*	*3.8*
Forestry	*3.1*	*2.8*	*2.9*
Mining	*3.7*	*3.1*	*3.3*
Manufacturing	*4.4*	*3.7*	*4.0*
Electricity, Gas and Water Supply	*3.9*	*3.1*	*3.4*
Construction	*4.6*	*3.0*	*3.5*
Wholesale Trade	*4.7*	*3.7*	*4.0*
Retail Trade	*3.6*	*2.8*	*3.1*
Accommodation, Cafes and Restaurants	*2.8*	*2.9*	*2.9*
Transport and Storage	*4.6*	*4.1*	*4.3*
Communication Services	*3.3*	*2.6*	*2.8*
Finance and Insurance	*1.7*	*1.1*	*1.3*
Property and Business Services	*3.0*	*2.4*	*2.6*
Government Administration and Defence	*3.4*	*2.7*	*3.0*
Education	*3.9*	*3.2*	*3.4*
Health and Community Services	*3.8*	*3.0*	*3.3*
Cultural and Recreational Services	*3.4*	*2.9*	*3.1*
Personal and Other Services	*3.6*	*2.9*	*3.1*
TOTAL GDP BoP	***3.8***	***3.2***	***3.4***

Source: BERL CGE Model

GDP in the Bay of Plenty Region is expected to increase by 3.4 percent each year between 2006 and 2021. It will be faster in the first five years at 3.8%pa, slowing between 2011 and 2021 to 3.2%pa.

Over the 2006 to 2021 period, GDP growth will be fastest in the transport and storage sector (4.3%pa) followed by wholesale trade and manufacturing (both 4.0%pa) then agriculture and fishing (3.8%pa)

Finance and insurance is the slowest growing sector, averaging 1.3%pa between 2006 and 2021.

11.4 Bay of Plenty Region parameter assumptions

Projections are based on historical industry growth rates in the Bay of Plenty Region relative to the New Zealand growth rate in that industry. Industry growth rates at a national level are determined using the CGE model with various assumptions and parameters.[26]

However, we have made some changes to the regional projections based on our understanding of industry patterns in the Bay of Plenty Region.

[26] Which are shown in the Appendix.

Both the mining and government administration and defence sectors have been constrained at the national growth rate. This provides a more likely projection, given the abnormally high regional growth rates in these sectors over the last few years.

There is a case to consider changes in forestry and agriculture output due to the considerable forests to dairy pasture conversions that have taken place in the recent past and that may continue into the forecast period. However, we have decided not to impose a separate parameter in this instance. Rather we would consider that factor in future scenarios as required.

11.5 Population and projections summary

The major implication is that population growth will not sustain historical employment growth rates to 2021. This is likely even with improved labour market performance (i.e. labour force, participation rate, unemployment,).

- The Bay of Plenty Region will require a further 56,000 FTEs by 2021 to maintain historical growth rates. This is a growth rate of 2.5 percent each year, or around 3,730 FTEs a year.
- Bay of Plenty Region's population is expected to increase by 57,000 residents by 2021 a growth rate of 1.4 percent per annum (3,800 people each year).

The manufacturing industry and the building and construction industry will require the most employees in the Region.

The transport and storage industry, manufacturing industry and wholesale trade industry will experience the highest employment growth.

12 Initial Findings

12.1 Trends

The preceding sections and annexes give an in-depth situation analysis of the Bay of Plenty Region. The critical thing moving forward is to interpret and consider the implications of this wealth of data and based on this to develop an action plan. The key trends that BERL would draw attention to that need to be taken account of in the next phase of the strategy process are:

12.1.1 Variation in population growth

The Region's population is growing. However, this growth is not consistent. The western Bay of Plenty is growing very fast, while population trends in parts of the southern and the eastern Sub-regions are negative. This disparity needs to be considered. However, any intervention needs to be part of longer term policy activity as it is very difficult to address the reasons people are leaving an area in the short to medium term.

On the basis of the economic analysis we have undertaken, we conclude that a significant reason for these population trends is the lack of economic opportunities in the more rural parts of the Region along with adverse trends with the Region's mills.

Beyond the high level lack of opportunities are issues around the rates of unemployment, labour participation rates and rates of pay in comparison to competitor areas within the Bay of Plenty and other regions. These need to be addressed if the population trends are to be reversed. This will require the development of new activities in the affected parts of the Region that can retain population and ultimately draw in new economically active populations. This will not necessarily be found within existing employment structure within these areas and may need to come from the development of new activities or growth of activities that are currently contribute only a small amount to the overall economy.

For example, tourism activity could be increased in the Opotiki and Whakatane Districts given the strong tourism brand and activity in Rotorua and Taupo Districts. Strategies should seek to encourage more people to stay longer in the Region, alongside and linked to the development of Maori tourism infrastructure.

12.1.2 Insufficient workforce to maintain current growth rates

Looking at the Region's population trends and future employment levels a fundamental problem is evident – there will not be enough workers in the Region to meet expected employment growth. Both sets of figures are estimates and could vary, but the gap is large enough to be a significant future barrier to increasing the Region's wealth base. Part of the issue is the continued trend towards reducing population in parts of the Region (as noted above) but it is also a reflection of the need to increase the value added from the existing employment base to create sustainable and higher paying jobs. Higher value added employment will tend to reduce population losses where this occurs through more attractive employment packages and, at the same time, add to the attractiveness of the Region as a place to live and work.

To achieve this, the Region has to work towards improving its position in value chains so that it can offer enhanced career prospects and higher paying jobs. This is again a long term policy as can be seen in the growth of Tauranga where the foundations for the current increased population were set over the last 20 years.

12.1.3 Importance of commodity based industries

Location quotient analysis suggests a reliance of the Region on commodity based industries, namely Forestry and Agriculture – Kiwi-fruit in particular. This reliance is significantly higher in the smaller, rural areas.

Having these resources is a positive situation for the Region. It is a competitive advantage that it needs to exploit. The means to do this is, as discussed above, to add as much value as possible and to ensure that the Region stays at the forefront of these industries through developing, maintaining and retaining intellectual and physical capital. This includes people as well as institutions and technology.

Increasingly the forestry sector is driven by global decisions. More of the planted trees and mill operations are owned off shore than ever before. This is a challenge to transform and develop the Region given that it is one of the most significant economic and manufacturing activities in the Region. The decisions of these global players are harder to influence than locally owned plants, while at the same time they are less inclined to participate in local initiatives unless they fit with wider corporate strategies. Often the most that can be done is to ensure that the labour force has the right qualifications needed to maintain and develop the industry in the Region.

Over the medium to longer term it is critical that the operations based in the Bay of Plenty Region have a high long term value to the corporate body. This will come from achieving the highest value add locally so that the plants and use of the wood grown locally has a value that cannot be replicated or replaced by trees grown over seas. This has been the key objective of the work that New Zealand Trade and Enterprise has undertaken in the timber industry where their aim is to improve the New Zealand value add and position in the global value chain and thus increasing the value attached to New Zealand timber as opposed to another timber. It is not clear at this stage what the long term success of this strategy will be or the results to date in terms of local value add.

There is evidence to suggest that there is a trend away from forestry and towards dairy in parts of the Region. This is partially a reflection of changing land ownership through settlement claims, planted forests reaching maturity and the perceived higher rates of long term profit from the dairy as opposed to the forestry sector. This is a concern given wider government policy that wants to plant more forests because of global environmental concerns and will increased the use of nitrates and fertiliser that are more common within the dairy sector that is already an issue in some of the Region's lakes. This conversion needs to be carefully considered in terms of the implications for other economic activity in the Region as lower forestry planting will knock on to reduced processing and mill employment thus questioning the viability of these plants.

12.1.4 Low skill levels

The Region as a whole and particularly the eastern Bay and South Waikato have workforce qualifications that are below the national average. This is a barrier to future growth and development as increasingly more jobs are in the knowledge based economy. In addition, such jobs are less prone to being moved off shore or to other regions because it is harder to replicate knowledge as opposed to a standard process. The percentage of the working population with no qualification has improved significantly over the period 1996-2006; however, the improvement is below that of the country as a whole and so, relatively, the Region is getting worse off. To develop and transform the economy, skill levels of its residents must improve. The qualifications of the workforce reflect significantly in the salaries that they can earn. Within the Region, a much higher proportion of the workforce have personal incomes of less than $25,000. Again, increasing the qualification base of residents is a long term process as taking students through from the age of 13 to receiving a degree can take 10 years. As a result, it is difficult to change quickly the long term skill levels, although short term up-skilling is possible.

12.2 Key drivers

Key drivers are those industries that attract employment and provide output for other industries. Generally they are reliant on a natural resource, endowment, or an institution/business, that is unique to (or well entrenched in) the Region. Often they result in a range of businesses that are reliant on or build on each other and or the resource.

12.2.1 Industry

The key drivers in Bay of Plenty Region have traditionally been forest production, agriculture, horticulture and tourism. These drivers are still important in the present economy of the Region and their relative importance is shown by the strong location quotients as follows.

For the Bay of Plenty Region as a whole, the industries with the highest location quotients are listed in Table 98.

Table 98. Highest location quotients for the Bay of Plenty Region

Industry	Location Quotient
Forestry and logging	4.2
Wood and paper processing and manufacturing	3.3
Services to agriculture, horticulture	2.2
Agriculture and horticulture	1.4
Accommodation, cafes and restaurants	1.3

This is a good reflection of the strengths of the Bay of Plenty Region in forestry and wood processing, agriculture – kiwi-fruit in particular but also avocado and mainstream pasture based agriculture; and also tourism – especially in Rotorua for international tourists but also Taupo and the western Bay of Plenty Sub-region for domestic tourism.

The impact of each of these, the traditional and more recent drivers, is different in the various sub-regions. This is again illustrated well by the location quotients.

The western Bay of Plenty Sub-region is strong in the traditional services to agriculture and horticulture (3.1), as well as the expanding commercial fishing (2.0). Population growth is driving construction (1.45); other mining (2.5) which is mainly quarrying construction materials; and construction trade services (1.3).

The eastern Bay of Plenty Sub-region is strong in the traditional forestry and logging (4.8) and wood and paper processing (6.4) with potential for growth in accommodation, cafes and restaurants.

The southern Bay of Plenty Sub-region is very strong in the traditional forestry and logging (8.0) and wood and paper processing (4.6). Tourism and a focus on sporting events are reflected in high location quotients for accommodation, cafes and restaurants (1.9), and sport and recreation (also 1.9).

These conclusions are supported by the five existing regional strategies.

Table 99. key industries identified in strategies

	Taupo	Rotorua	South Waikato	Western BoP	Eastern BoP
Key industries	Agriculture and horticulture	Farming	Farming	Horticulture	Forest products
	Education	Forestry and wood processing	Engineering	Food processing	Energy industry
	Energy	Tourism	Water	Marine recreation, technology and education	Education/training
	Forestry	Local energy generation	Renewable	Health	Food and beverage
	Tourism	Water	Transit hub	Transport logistics and distribution	Dairy
		Bio-materials	Forestry Tourism	Tourism	Aquaculture Tourism

12.2.2 Population

More recently a strong economic driver has been population growth. This is reflected in the fact that most of the increase in employment 1996 to 2006 was in construction, business and property services on the one hand, and social and personal services on the other. However, this growth has been mainly constrained to the western Bay of Plenty Sub-region.

Going forward, the place of the Bay of Plenty Region in the location of the population growth in New Zealand can be an opportunity to continue the expansion of this driver. So also can be its place in the increasing demand throughout the country for recreational and sporting pursuits, an area that the Region already has strength in.

The Bay of Plenty is often regarded as Auckland’s playground. This is related to its proximity, climate, natural and built environment. This attractiveness and proximity to Auckland are key factors in encouraging regional economic growth.

For example, Tauranga is one of the few ‘provincial’ cities that can attract urban professionals out of the main centres. This is likely a key factor in enabling significant businesses to set up in the area. As more businesses do set up in the area, specialisation and economies of scale enable the level of services to increase as well, moving the City into the realm of ‘main centre’ rather than ‘provincial city’. Evidence of this is already starting to emerge.

12.3 Potential strategic role of Bay of Plenty in New Zealand

If New Zealand continues to grow in its current pattern, this could imply the ‘Auckland function’, which is already spreading to Hamilton and Whangarei and somewhat to Tauranga would increase or even divest to other regions.

Auckland continues to receive a large share of migrants from overseas (131,000 between 1996 and 2001), and continues to see people migrating inwards from other regions (65,600 for 1996 to 2001). For the first time, however, domestically a larger number of people (68,000) moved from Auckland to other regions.[27] This trend has continued in 2006 and indicates that people from Auckland are looking to move out to other regions.

The Bay of Plenty Region is an obvious target, being so close that some professionals already co-locate in Tauranga and Auckland. The travel rate of residents of Bay of Plenty is higher than expected for a region without in-region access to international services, even trans-Tasman ones. This tends to indicate a higher-level of business activity (or possibly just more retirees).

The future strategic development of New Zealand could see quite specific moves for Auckland to concentrate higher up the chain, and more of the 'lower' functions be progressively divested back to the regions.

In any case, there is evidence that Tauranga in particular is moving up the value chain in terms of being able to provide high level business services, which can usually only be found in the main centres such as Auckland and Wellington. Zespri's move to Mt Maunganui and its eventual migration to using locally provided business services suggest that main centre services are starting to become viable in Tauranga City. There has been significant growth in a number of business and financial services companies in the area.

At the same time, businesses in the area encompassed by the Taupo-Rotorua-Tauranga Districts, Auckland and Hamilton are not constrained by lack of higher level goods and services. Their proximity and access to the higher level areas of Auckland and Hamilton (and increasingly Tauranga itself) means that operations and processes can continue effectively. For example, it is possible to be in Auckland for a 9am meeting and still be back in the office by the afternoon.

In manufacturing industries, there is often a high degree of specialisation in the parts that go into a final product. More specialised parts are often manufactured in larger centres such Auckland, Hamilton or even Christchurch. For industries based in the Taupo-Rotorua-Tauranga triumvirate there are no logistics issues in being able to seamlessly integrate these components into the final product.

Therefore, ensuring and improving access and transport links to Auckland and Hamilton should be a key part of any regional economic development strategy.

[27] Pool,I., S Baxendine and B Cochrane (2004) Components of regional Population Growth, 1986-2001, Paper44,

However, as you move further east, the tyranny of distance still holds. A meeting would be a day trip at least. Delivery of goods is likely to take significantly longer – either because of distance, or because of frequency of services. The barriers to business increase the further you move away from the triumvirate.

This suggests that the focus in these areas should be on industries that have a competitive advantage, or a resource that they are reliant on, for example, forestry and horticulture processing in the eastern Bay of Plenty Sub-region or bottled water in the South Waikato District. Tourism is also an industry that has significant potential – especially if it were possible to extend or capture the stay of visitors to Rotorua.

The strategy as you move further out from the triumvirate should be to increasingly add value in the traditional areas including possible further diversification of horticulture; further development of fisheries, aquaculture and processing; and extension of ecotourism and cultural tourism.

Moreover, ensuring that other barriers (such as communications, zoning, consenting etc.) are minimised, is important to improve their ability to compete with businesses within the triumvirate and further north.

12.4 Bay of Plenty SWOT

The following table provides an initial SWOT analysis based upon the data and issues contained in this report.

Note that these are preliminary and are presented as such as we do not wish to pre-empt the next stages of this strategy.

Table 100 SWOT Analysis of the Bay of Plenty Region

Strengths	Weaknesses
1. Proximity and accessibility to Auckland 2. Excellent infrastructure 3. Second largest port in NZ 4. Direct rail links to Auckland 5. Growing population and attraction of population to main City 6. Main NZ timber growing and processing area 7. Strong brand and recognition in fruit growing especially Kiwi-fruit 8. Attractive place to live 9. Internationally known tourist destination 10. Significant natural resources, particularly in relation to tourism	1. Population decline in a number of rural areas and smaller towns – successful regions don't have declining populations 2. Lower than national average participation rates 3. Pockets of high rural unemployment 4. Vulnerable economic structure due to high reliance on narrow sector base 5. Low waged economy 6. Poor number of career opportunities outside main centres 7. High level of dependence on welfare in rural areas 8. Lack of diversity in employment opportunities and careers in rural areas 9. Lacks centres of knowledge creation in main industries 10. Lack of provision for new employment land 11. Poor access to international airport 12. Pockets of low telecomm use and lower access to broadband and internet 13. Lack of complex manufacturing activity that is high value adding 14. Poor access between harbours and coastal marine areas

Opportunities	Threats
1. More higher qualified staff live locally 2. Opportunities to spread tourists out from other international attractions in the Region 3. Maori Treaty and land settlements 4. Use of geothermal resources for development of energy and other economic activities 5. Harnessing marine resources for future economic development 6. One of main domestic visitor centres and attractions 7. Development of University campus within Region tied to one of the other Universities in NZ 8. Development opportunities around energy generation (need to develop knowledge base here as well) 9. Enhanced local procurement for health services	1. Main industries are directly affected by decisions offshore or in the global economy where there is little that can be done locally to influence 2. High level of public sector employment vulnerable to change in government policies 3. Aging population and Region attracting in older retirees not economically active 4. High percentage of employment in companies located outside of the Region and where decisions are taken out of region and often out of country 5. Declining provision of health care, particularly in rural areas 6. increasing land prices threaten some primary industries

13 Next Steps

13.1 Datasets

It is the nature of information that - the more you look for, the more you find. Someone will always find a certain piece of data useful; and will want to include it in any analysis. Further, certain data may not show you exactly what you want and so more detailed or similar data is required. Moreover, in a search for certain data you find something that you did not even think of or know existed and want to include that. Finally, data on some issues is simply not available in a useful way.

All of the above have occurred in this report. The report contains a wealth of data, but there is also a lot more data that we have not included or have not been able to locate. Similarly, as we analyse the data further, we find that it does not always tell us exactly what we want to know and so further supporting data will be required.

In a regional analysis with self imposed boundaries, data does not always fit, or is not always available. In this case it was difficult to incorporate South Waikato and Taupo in several of the datasets. Going forward, it will be important to identify how to include the whole Region into the datasets, whether this is through making special requests to the data provider – Statistics NZ, Tourism Research Council, Police, Department of Labour etc. or finding ways to extract the Region from existing datasets.

In our view, we have provided the core data necessary to assist in making informed decisions in the next phase of the regional strategy development. Further data may be required to assist in refining that strategy.

13.2 Initial analysis

In a similar vein, we have focused on quantitative data. Analysis is limited to quantifying certain areas or issues. Analysis, in many cases, is limited to identifying trends.

We have applied our understanding of issues in the Region as well as general economic development theory to come up with our initial thoughts/findings. We have also talked to several stakeholders who have provided us with very useful qualitative information. Finally, we have reviewed existing analysis and strategies in the Region.

Hence we have been able to provide some qualitative assessment. However, this is only an initial analysis and needs to be properly tested and confirmed. There is a need, in many of the areas, to do further qualitative analysis to identify why the data is what it is and what, if anything, needs to be done about it.

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