

# Performance of Sectors and Markets in the Tauranga Economy



**Oranga Taiao Oranga Tāngata**

Oranga Taiao Oranga Tāngata: Knowledge and Toolsets  
to Support Co-management of Estuaries

OTOT Report No.1  
June 2017

**Oranga Taiao Oranga Tāngata**

**Report No. 1**

**2017**

# **Performance of Sectors and Markets in the Tauranga Economy**



# Performance of Sectors and Markets in the Tauranga Economy

Murray Patterson<sup>1</sup>

Lorena Gledhill <sup>1</sup>

Derrylea Hardy <sup>1</sup>

Alecia Love<sup>1</sup>

Joon-Hwan Kim <sup>2</sup>

Garry McDonald <sup>2</sup>

Aaron McCallion <sup>3</sup>

<sup>1</sup> School of People Environment and Planning, Massey University, Palmerston North, New Zealand

<sup>2</sup> Market Economics Ltd., Auckland, New Zealand

<sup>3</sup>Waka Digital Ltd, Tauranga, New Zealand

Published by the Oranga Taiao Oranga Tāngata (OTOT) Research Team  
Funded by the Ministry for Business, Innovation and Employment  
Contracts MAUX0907 and MAUX1502  
Contract Holder: Massey University  
[www.mtm.ac.nz](http://www.mtm.ac.nz)

Reviewed by:



Nicola Smith

Approved for  
release by:



OTOT Science Leader  
Professor Murray Patterson

Recommended citation:

Patterson, M.G., Gledhill, L., Hardy, D.J., Love, A., Kim, J-H., McDonald, G.W., McCallion, A.C (2017). Performance of Sectors and Markets in the Tauranga Economy. OTOT Research Report No. 1. Massey University, Palmerston North.

© OTOT Research Team 2017

Published by the Oranga Taiao Oranga Tāngata (OTOT) Research Team  
MAUX 0907 and MAUX 1502  
Contract Holder: Massey University  
Private Bag 11052  
Palmerston North  
New Zealand

ISBN 978-0-9951033-1-3 (Print)  
ISBN 978-0-9951033-0-6 (Online)

### **Disclaimer**

While the author(s), the OTOT research team and their respective organisations have exercised all reasonable skill and care in researching and reporting this information, and in having it appropriately reviewed, neither the author(s), the research team, nor the institutions involved shall be liable for the opinions expressed, or the accuracy or completeness of the contents of this document. The author will not be liable in contract, tort, or otherwise howsoever, for any loss, damage or expense (whether direct, indirect or consequential) arising out of the provision for the information contained in the report or its use.

# Executive Summary

---

## Scope of the Report

This report aims to undertake a stocktake of the Tauranga Catchment Economy ending at the year 2012, and when possible updating the data to 2016. Part I (Chapters 2 to 5) of this report provides an overview of the population, labour market, structure of, and performance indicators of the Tauranga Catchment Economy as well as the broader Bay of Plenty region. Part II (Chapters 6 to 54) provides a detailed description and analysis of 49 sectors that make up the Tauranga Catchment Economy. The Tauranga Catchment Economy (which approximately covers the area of Tauranga City and most of the Western Bay of Plenty District) is used as the primary spatial unit in this report, as this study is part of a broader analysis and modelling project of the economy's impact on the catchment's and the harbour's ecological systems.

## Demographic Trends

(Chapter 2)

Population increase has arguably been the most significant driver of economic growth in the Tauranga Catchment Economy over the last decade. As at June 2016, the combined population of Tauranga City and the Western Bay of Plenty District was 178,016 people. Over the period 2012 to 2016, this is an increase of 7.36%, which is above the national population growth rate of 6.46%. Inward migration is a significant factor in this above-average population growth. Future population growth is projected to be concentrated in Tauranga City, with an estimated population of 154,800 in 2031 and 284,000 in 2051, from a baseline of 128,200 in 2016. Specifically, the population of over 64 year olds is projected to increase significantly, and the population of people in Tauranga City over 80 is projected to increase from 2,616 in 2006 to 35,000 in 2051.

## Labour Market Trends

(Chapter 3)

In spite of the rural character of the Tauranga catchment area, most (80.9% in 2016) of the employment in the Tauranga Catchment Economy is in the service sectors. Specifically, as of June 2016, the highest employment in full-time equivalent employees are in the following sectors: Healthcare and Social Assistance (9,064); Professional, Scientific, Technical, Administrative and Support Services (9,543); Retail Trade (7,551); Construction (7,381); Education and Training (4,565); Accommodation and Food Services (4,081); Wholesale Trade (2,950); and Agriculture, Forestry and Fishing Support Services (2,697). The Tauranga Catchment Economy labour market is characterised by relatively low market participation rates (in part due to higher numbers of residents being retirees), as well as average employee income being below the national average. At the time of the 2013 Census, the Tauranga City unemployment rate was 7.6% and the Western Bay of Plenty District unemployment rate was 7.3%, compared with the New Zealand unemployment rate of 7.1%.

## Structure of the Tauranga Economy

(Chapter 4)

A network diagram of the Tauranga economy (largest 26 sectors, 66 largest inter-sector flows goods and services) was constructed to provide a visual picture of how the Tauranga Catchment Economy operates in terms of the flows of goods and services between sectors. 'Clusters' of interdependent sectors become evident when examining this network diagram. For example, there is a strong cluster in the 'construction' and 'real estate' sectors, which drives much of the

growth in the Tauranga economy through backward linkages that are evident in the diagram and, to a lesser extent, forward linkages. Another strong ‘cluster’ of related sectors focuses on healthcare and retirement in Tauranga, which is also a very strong driver in the Tauranga economy, perhaps more than it is often given credit for. Further examination of this network diagram (and the underpinning input-output matrix) shows exactly how backward and forward linkages play an important role in the Tauranga Catchment Economy, and it also identifies other ‘clusters’ of inter-dependent sectors that are important.

## **GDP Contribution of Sectors in the Tauranga Economy (Chapter 5)**

Gross Domestic Product (GDP) is the total monetary value of the goods and services produced in the economy over a yearly period. Although this measurement is usually applied to national economies, it can be applied to sub-national/regional economies. In this study, the GDP of 49 sectors in the Tauranga Catchment Economy were measured using the Australian New Zealand Standard Industrial Classification 2006 – the data for March 2016 appears on the figure (**Figure ES1**), on the next page. The top 10 sectors in terms of their contribution to the GDP of the Tauranga Catchment Economy, measured nominal terms, are:

1. Professional, Scientific, Technical and Administrative (\$743 million)
2. Healthcare And Social Assistance (\$547 million)
3. Rental, Hiring And Real Estate Services (\$501 million)
4. Construction (\$499 million)
5. Retail Trade (\$432 million)
6. Wholesale Trade (\$268 million)
7. Other Transport, Postal, Courier ... (\$261 million)
8. Finance (\$182 million)
9. Education And Training (\$165 million)
10. Central Government (\$160 million)

It is important to note:

1. The activity of the Port of Tauranga is part of the sector, “Other Transport, Postal Courier...”. Based on data taken from their 2016 Annual Report, the Port of Tauranga directly contributed \$159 million to the Tauranga Catchment Economy. Therefore, if the Port of Tauranga was considered to be a sector in its own right, then it would be ranked 10<sup>th</sup> in terms of its contribution to the GDP of the Tauranga Catchment Economy;
2. Tourism, unfortunately, is often not considered to be a ‘standard’ sector and often therefore falls outside the scope of some official data. However, in the study, it was possible to robustly estimate the GDP contribution of the Tourism Sector to the Tauranga Catchment Economy to be \$321 million.

## **Performance of Sectors in the Tauranga Economy (Chapter 5)**

The rest of Chapter 5 compared the performance of the 49 sectors in the Tauranga economy, over the period of 2011 to 2016, using key indicators that are available for all sectors in the Tauranga economy.

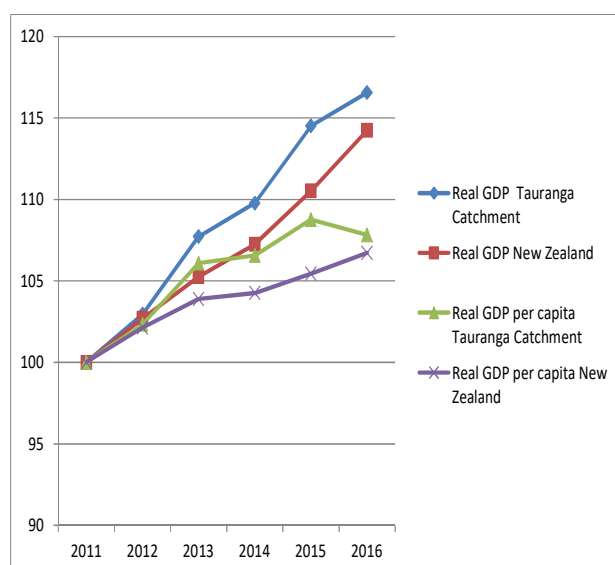
**Figure ES1: Contribution to GDP of Sectors in the Tauranga Catchment Economy, Year Ending March 2016**



**Recent GDP Growth** The Tauranga economy rebounded strongly after the 2007-2008 global financial crisis (as did the New Zealand economy as a whole). From 2011 to 2016, the Tauranga Catchment Economy grew by 16.55% in terms of real GDP, compared with growth of 14.24% in the New Zealand economy. The sectors in the Tauranga economy that had the highest real GDP growth were:

1. Construction sector (\$<sub>2016</sub> 144 million)
2. Professional, Scientific, Technical and Administrative (\$<sub>2016</sub> 126 million)
3. Real Estate, Rental and Hiring (\$<sub>2016</sub> 113 million)
4. Retail Trade \$62 million increase (\$<sub>2016</sub> 105 million)
5. Healthcare and Social Assistance (\$<sub>2016</sub> 94 million )
6. Horticultural and Fruit Growing (\$<sub>2016</sub> 81 million)
7. Tourism (\$<sub>2016</sub> 76 million)
8. Wholesale Trade (\$<sub>2016</sub> 67 million)
9. Finance (\$<sub>2016</sub> 56 million )
10. Central Government (\$<sub>2016</sub> 49 million)

The vast majority (34 out of 49) of sectors in the Tauranga economy recorded positive GDP growth during this period. Some sectors (6) recorded zero GDP growth. Even for those sectors (8) that recorded negative growth in their contribution to GDP, the numbers are so small that they could be considered to be mainly within the error bounds of the estimation technique used.



It is important to recognise that much (53%) of the GDP growth in Tauranga from 2011 to 2016 can be attributed solely to population increase. When GDP per capita is calculated, then the GDP growth does not look as dramatic (refer to the chart to the left). From 2011 to 2015, the Tauranga Catchment Economy's GDP grew by 16.55%, growing at an average compounded rate of 3.11% per year, whilst the population in the Tauranga Catchment increased by an average compound rate of 1.57%.

This trend was reversed for the Year Ending March 2016 (as can be seen in the chart above), when there was negative growth in real GDP per capita with the 1.79% GDP growth rate not enough to make up for the 2.86% increase in population in the Tauranga Catchment.

**Specialisation and Competitive Advantage** It is important to measure the performance of sectors in the Tauranga Catchment Economy, in terms of their relative specialisation, as this often indicates where sectors of the economy may have a long-term 'competitive advantage'. In

the study, we measured the specialisation by using location quotients (LQ)<sup>1</sup>. On this basis, the five most specialised sectors in the Tauranga Catchment Economy are<sup>2</sup>:

1. *Services to Agriculture, Hunting and Trapping* (LQ=2.72), which is mainly due to agricultural services businesses being located in the Tauranga Catchment Economy serving the wider Bay of Plenty region.
2. *Petroleum and Industrial Chemical Manufacturing* (LQ=2.66), which is mainly due to the activities of Balance Agri-Nutrients in manufacturing fertilisers.
3. *Water and Rail Transport* (LQ=2.07), which is mainly due to the activities of the Port of Tauranga, which is arguably New Zealand's largest port.
4. *Horticultural and Fruit Growing* (LQ=1.82). The Tauranga climate and physical landscape provide very good conditions for growing kiwifruit, mandarins, oranges, avocado and a variety of other commercial horticultural crops.
5. *Electricity Generation and Supply*. (LQ=1.80). This is almost entirely the activity of Trustpower, which has its Head Office located in Tauranga. Trustpower is New Zealand's fourth largest retailer of electricity and the fifth largest generator of electricity.

It is interesting to note that, although Tauranga has measurable specialisation above the national average in these 5 sectors listed above, none of these specialist sectors are in the 'top 5' in terms of their GDP contribution to the Tauranga economy – the best being the 'Electricity Generation and Supply' sector, which is ranked 9<sup>th</sup> in terms of GDP. Furthermore, all of these 'specialist' or 'niche' sectors (except 'Horticultural and Fruit Growing', which recorded high growth) only grew at a moderate to slow rate from 2011-2016, in terms of real GDP. So, it can therefore be concluded that these high levels of 'specialisation' have not, in general terms, guaranteed a high level of performance in terms of GDP size or GDP growth rates.

**What Sectors in the Tauranga Economy are Performing the Best?** The overall performance of sectors in the Tauranga Catchment Economy was evaluated using a number of quantitative indicators, as well as being informed by the data and information collected in the individual chapters on each sector (Part II, Chapters 6 to 54). One of the difficulties was identifying a suite of quantitative indicators that is available for all of the sectors. In the end, we selected 3 key indicators available for all the ANZSIC sectors that we considered to be the most efficacious and had the most explanatory power in evaluating the performance of these ANZSIC sectors: (1) 'Size' of each of the sectors in the economy in terms of its contribution to GDP; (2) 'Growth' of each of the sectors in the Tauranga economy, in terms of (real) GDP growth from 2011 to 2016; and (3) 'Specialisation' of each sector in the Tauranga economy using location quotients.

The most informative way to summarise the comparative performance of the sectors was to undertake a simple plot: 'Size' (measured in terms of GDP contribution in 2016) versus 'Growth'

---

<sup>1</sup> Location Quotients greater than 1 means the sector is more specialised in the Tauranga Catchment Economy compared with the New Zealand economy. Location Quotients less than 1, means the sector is less specialised in Tauranga Catchment Economy compared with the New Zealand economy.

<sup>2</sup> These are Location Quotients for the Year 2010. We report Location Quotients for 2010 because they identify important sectors for Tauranga (e.g., Water and Rail Transport), that are not revealed by 2016 data that uses a different classification system. In this regard, it should be noted, for those sectors that are comparable between 2010 and 2016, the Location Quotients are of very similar magnitude and have not changed much.

(measured in terms of the % increase real GDP from 2011 to 2016)<sup>3</sup>. This '*Size-Growth*' plot (which is presented on the next page, Figure ES2) generates four quadrants which are depicted on

**(I) 'Horses' (Large GDP, Fast Growth).** These sectors, by definition, are larger than the average in terms of GDP and over the last five years have grown faster than the average. These 9 sectors alone generate most (63%) of the GDP in the Tauranga Catchment Economy as well as indirectly creating demand for other sector's products in Tauranga. Sectors in this 'high performing' quadrant, in order of decreasing GDP contribution are: Professional, Scientific, Technical, Administrative and Support Services; Healthcare and Social Assistance; Real Estate Services; Construction; Retail Trade; Tourism; Wholesale Trade; Central Government; and Finance and Horticulture.

**(II) 'Elephants' (Large GDP, Slow or No Growth).** Although having larger than average GDP, even the largest of the sectors in this quadrant, 'Other Transport, Postal, Courier, Transport Support and Warehousing Services' (\$220 million), which notably includes the activities of the Port of Tauranga, only ranks 7<sup>th</sup> overall in terms of GDP. Collectively in 2016, sectors in quadrant II (Elephants) made up 18% of the GDP in the Tauranga Catchment Economy, which makes them somewhat dwarfed by the 63% of GDP produced in the Tauranga Catchment Economy by the Quadrant I (Horses) sectors. Given this considerable already existing gap between these Quadrant II sectors (Elephants) and the 6 largest Quadrant I sectors (Horses), combined with slow growth rate of these quadrant II sectors (Elephants), there is little prospect in the foreseeable future of this gap in GDPs between the two quadrants being reduced.

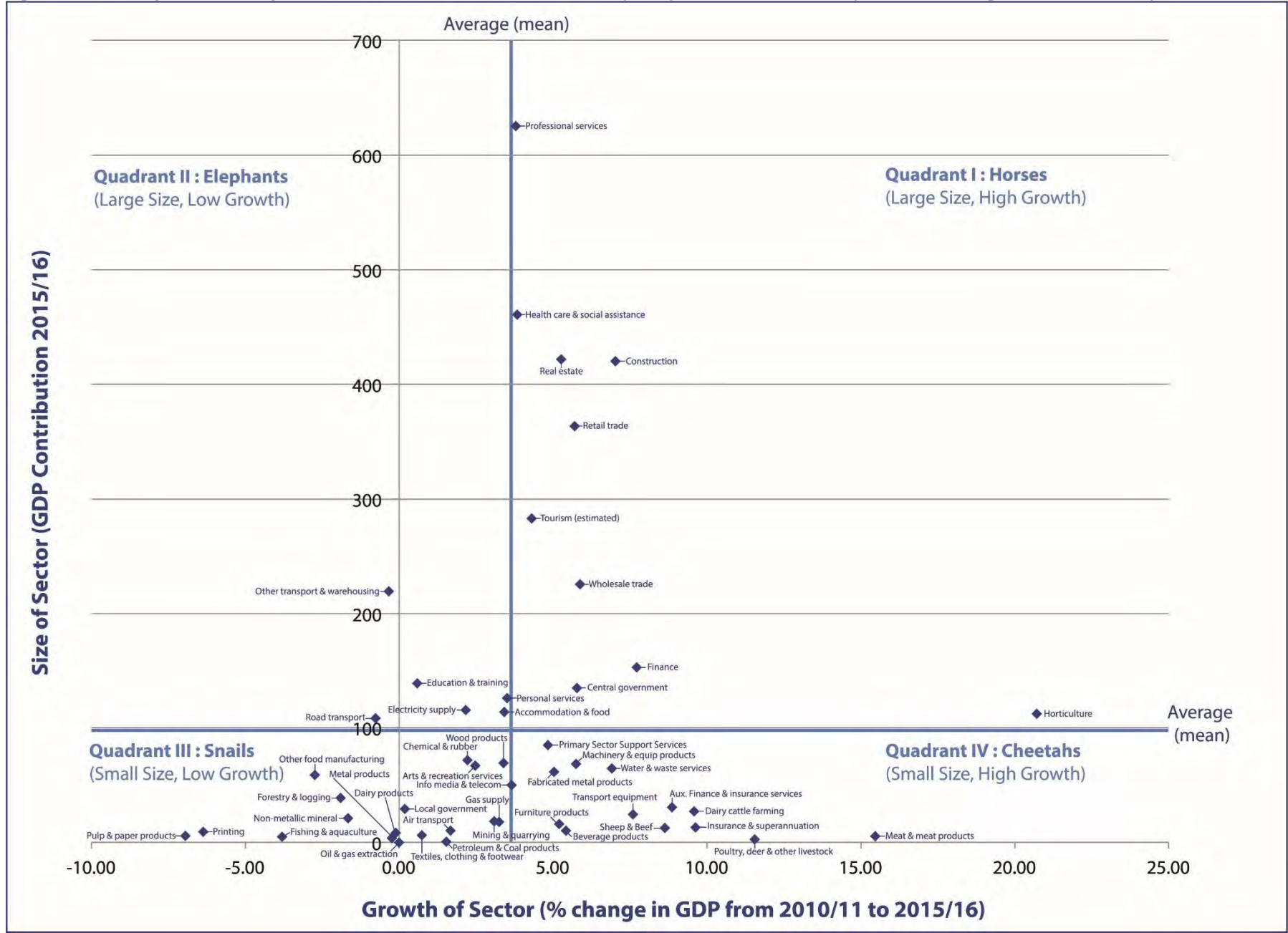
**(III) 'Snails' (Small GDP, Slow or No Growth).** These Quadrant III sectors are not performing as well as other sectors in the Tauranga Catchment Economy. These small GDP and low/negative growth sectors collectively make up 10% of the Tauranga economy. Most sectors in this quadrant are growing, however it is comparatively slow growth – these sectors include Information Media and Telecommunications; Wood Product Manufacturing; Arts and Recreation Services; Chemical, Polymer and Rubber Product Manufacturing; and Local Government Administration. Of more concern are those sectors that have recorded negative annual growth rates over the period 2011 to 2016, including: Non-Metallic Mineral Product Manufacturing (-1.7%); Forestry and Logging (-1.9%); and other Food Manufacturing (-2.7%).

**(IV) 'Cheetahs' (Small GDP, Fast Growth).** These sectors in the Tauranga Catchment Economy, although small and collectively only representing 9% of the Tauranga Catchment Economy's GDP, are by definition growing faster than average and some of them much faster than average; therefore, they represent significant prospects for accelerated growth in the Tauranga economy. Most notably, these fast growth rates are recorded in Dairy Cattle Farming (9.6%); Auxiliary Finance and Insurance Services (8.9%); Transport Equipment Manufacturing (7.6%); Water, Sewerage, Drainage and Waste Services (6.9%); Machinery and Equipment Manufacturing (5.8%); Fabricated Metal Product Manufacturing (5.0%); and Agriculture, Forestry and Fishing Support Services (4.8%).

---

<sup>3</sup> It is important to note that some of the sectors in Quadrant IV record misleadingly high annual GDP growth rates – this is because they have relatively small 'base year' GDP, which can produce high percentage changes with only a very small shift in the absolute amount of GDP. Therefore, these sectors have been excluded from the commentary.

Figure ES2: Performance of Sectors in the TCE: 'Size' in 2016 (GDP) versus 'Growth' (% GDP Change 2011 to 2016)



## Detailed Sector-by-Sector Analysis

(Chapters 6-54)

The bulk of this publication provides an ‘inventory’ or ‘stocktake’ of each of the 48 ANZSIC sectors, as well as the Tourism sector, which together make up the Tauranga Catchment Economy. One chapter covers each sector. For each ANZSIC sector, the following information is systematically collated and interpreted:

1. List of ANZSIC 96 economic activities covered by each sector;
2. List of main commodities produced by each sector;
3. Economic overview of the sector’s structure, drivers, markets and spatial distribution from the viewpoint of 2013;
4. Sector trends from the year 2000 to 2012;
5. Future trends in each sector from the viewpoint of 2013; and
6. 2016 update of the ‘key economic indicators’.

A significant amount of the information in these chapters (Part II) is qualitative and interpretative in nature and as such complements and informs the quantitative analysis undertaken in Part I of the report. Part II also collates a range of quantitative information and indicators, much of which are sector specific and therefore could not be used in comparative evaluation across all of the sectors in Part I (Chapters 2 to 5). There were delays in writing Part II for the most part due to the unavailability of Census data when the 2011 Census was postponed after the Canterbury earthquakes. Part II (Chapters 6 to 54), although quite lengthy, it is likely that this section may not cover all issues or every business in each sector; or it may include interpretive or factual shortcomings. In this regard, we encourage readers and stakeholders to provide us with any updated information or data to make further editions of this publication more complete and accurate.

## Concluding Remarks

The purpose of this report was not to identify ‘strategies’ for the growth and development of the Tauranga economy, or to ‘pick winners’, which is often the propensity in regional economic reports. Nor is the purpose of this report to provide a theoretical interpretation of the Tauranga economy in terms of geopolitical theory, economic theory, regional science theory or some other theoretical construct. The purpose of this report is essentially to provide a better and more detailed understanding of the Tauranga economy, as a backdrop for the development of the Integrated Spatial Planning Tool (ISPT)<sup>4</sup> as a way of more realistically understanding the spatial planning options for the future of Tauranga Harbour and the economy of its catchments. We also hope this report will be useful to individuals, companies, agencies, iwi/hapū and others who have an interest in the Tauranga economy and its future.

---

<sup>4</sup> Developing this ‘Integrated Spatial Planning Tool’ is part of a \$5 million, four-year (2015-2019) research programme being funded by the Ministry of Business Innovation and Employment – Oranga Taiao Oranga Tāngata. This research programme aims to produce knowledge and decision support tools to assist in the co-management of estuaries throughout New Zealand. The Tauranga Harbour and its catchment are being used as the test-bed for developing such knowledge and decision support tools. The ‘Integrated Spatial Planning Tool’ itself is a spatially explicit computer-based tool that enables the decision-maker to consider and weigh up economic, social, environmental and cultural values in deciding how to best manage an estuary and its catchment (e.g., the Tauranga Harbour and its catchment).

# Preface

---

This report is a building block of a large research programme that aims to *integrate* ecological, economic, cultural and social data on the Tauranga harbour and its catchment, so that more robust and evidence-based plans can be formulated to better manage the catchment ‘from the mountains to the seas’ including the Harbour. This ‘research-led’ ‘integrative’ approach to ‘whole-of-catchment’ planning was begun in the government-funded ‘Manaaki Taha Moana’ (\$6.6 million + GST) research programme from 2009-2015, and is being continued in ‘Oranga Taiao, Oranga Tāngata’ (\$4.4 million + GST) from 2015 to the end of 2019.

The focus of this report is on furthering our understanding of the Tauranga Catchment Economy (TCE) so that we have as much information about it as we do for the ecology of the Harbour and its catchment. Furthermore, this research will ‘connect-up’ this economic data and information, with the ecological and cultural data, as well as land use and demographic data. This is because it is important to know the economic implications of plans and policies that might be put in place to improve the ecological health of the Harbour. Ultimately, the ‘Oranga Taiao, Oranga Tāngata’ (OTOT) research programme will produce a spatial planning tool (or model) that will enable us to not only evaluate the inter-connections between the ecological, economic, social and cultural values, but also to project forward changes (over 10-20 year time periods) in these values, and spatially pinpoint (on a map) activities that impinge on these values.

The bulk of this economic research was undertaken in 2013 and 2014, using the latest statistical data available at the time. This work represents a quantitative picture of the Tauranga economy at a level of detail, and for a number of economic sectors (49), that far surpasses that of previous studies, which have typically tended to focus on construction required to meet Smart Growth projections. Although there have been changes in the Tauranga economy since 2014 (e.g., in the real estate market), we don’t consider these to be significant structural changes and, with a few rare exceptions, none of the changes that have taken place since then were unexpected.

We aim to update this report by the end of OTOT, so that we have a complete, up-to-date picture of the TCE, at the point in our research when we will be evaluating future growth scenarios for Tauranga using the ‘Integrated Spatial Planning Tool’ referred to above. We welcome feedback from readers, and will address any inevitable omissions regarding economic activity in the TCE by including additional information in future updates of this report.

Care needs to be exhibited whilst reading this report – it explicitly covers economic activity in the ‘Tauranga Harbour Catchment’, as we are concerned with the impact of economic activity on the ecology of the Harbour. This Catchment is larger than, and includes almost all of the Tauranga City Council area, extending to the Kaimai ranges in the westerly direction and as far as Waihi Beach in a northerly direction. For the sake of comparison, the Tauranga Harbour Catchment area is 1,299 km<sup>2</sup> and the Tauranga City Council area that falls within the Catchment is 135 km<sup>2</sup>. To our knowledge, no other economic report has specifically covered the ‘Tauranga Catchment Economy’, so readers should be cautious in comparing the results of previous economic reports with this report.

**Professor Murray Patterson**  
**Science Leader of Oranga Taiao, Oranga Tāngata**



# Table of Contents

---

<b>Executive Summary .....</b>	<b>v</b>
<b>Preface .....</b>	<b>xiii</b>
<b>List of Acronyms .....</b>	<b>xxii</b>
<b>Glossary .....</b>	<b>xxiii</b>
<b>1. Introduction .....</b>	<b>1</b>
Scope of the Report .....	1
Parent Research Programmes .....	1
Spatial Boundaries Used in the Analysis .....	3
<b>PART I: OVERVIEW OF THE TAURANGA ECONOMY</b>	
<b>2. Population Trends in Tauranga and the Bay of Plenty .....</b>	<b>7</b>
Trends in Population Change .....	7
History .....	8
Demographics .....	9
Future Trends .....	10
Update to 2016.....	11
<b>3. Labour Market Trends in Tauranga .....</b>	<b>14</b>
Work Status and Labour Market Participation .....	14
Personal Income .....	15
Main Employment Sectors in the Tauranga Catchment Economy .....	16
Update to 2016.....	17
<b>4. Structure of the Tauranga Economy .....</b>	<b>19</b>
Background on Input-Output Analysis .....	19
Network Diagram Interpretation – Most Significant Sectors and Flows .....	19
<b>5. Performance of Sectors in the Tauranga Economy .....</b>	<b>22</b>
Size (GDP Contribution) of 48 Sectors in the Tauranga Economy.....	22
Growth and Decline of the 48 Sectors in the Tauranga Economy.....	26
Specialisation of the 48 Sectors in the Tauranga Economy .....	29
Summary of the Performance of Sectors in the Tauranga Economy .....	32
<b>PART II: DETAILED SECTOR-BY-SECTOR ANALYSIS</b>	
Analytical and Indicators Template .....	39
<b>6. Horticulture and fruit growing<sup>5</sup> .....</b>	<b>41</b>
<b>7. Livestock and cropping farming .....</b>	<b>45</b>
<b>8. Dairy cattle farming .....</b>	<b>48</b>
<b>9. Other farming .....</b>	<b>50</b>
<b>10. Agriculture, fishing, hunting and trapping services .....</b>	<b>53</b>
<b>11. Forestry and logging .....</b>	<b>56</b>

---

<sup>5</sup> In PART II, each Chapter covers one sector of the economy. The following sub-sections are covered for each chapter/sector: Description, Economic Overview, Sector Trends, Update to 2016, References

12.	Fishing .....	59
13.	Mining and quarrying .....	63
14.	Oil and gas exploration and extraction .....	66
15.	Meat and meat product manufacturing .....	67
16.	Dairy product manufacturing .....	69
17.	Other food manufacturing .....	71
18.	Beverage, malt and tobacco manufacturing .....	75
19.	Textile and apparel manufacturing .....	78
20.	Wood product manufacturing .....	81
21.	Paper and paper products manufacturing .....	82
22.	Printing, publishing and recorded media .....	86
23.	Petroleum and industrial chemical manufacturing .....	89
24.	Rubber, plastic and other chemical product manufacturing .....	92
25.	Non-metallic mineral product manufacturing .....	95
26.	Basic metal manufacturing .....	98
27.	Structural, sheet and fabricated metal product manufacturing .....	100
28.	Transport equipment manufacturing .....	103
29.	Machinery and equipment manufacturing .....	107
30.	Furniture and other manufacturing .....	110
31.	Electricity generation and supply .....	113
32.	Gas supply .....	116
33.	Water supply .....	118
34.	Construction .....	119
35.	Wholesale trade .....	123
36.	Retail trade .....	127
37.	Accommodation, restaurants and bars .....	131
38.	Road transport .....	134
39.	Water and rail transport .....	137
40.	Air transport, services to transport and storage .....	141
41.	Communication services .....	144
42.	Finance .....	147
43.	Insurance .....	149
44.	Services to finance and investment .....	151
45.	Real estate .....	154
46.	Ownership of owner-occupied dwellings .....	158
47.	Business services .....	159
48.	Central government administration and defence.....	164
49.	Local government administration services and civil defence .....	167
50.	Education .....	170
51.	Health and community services .....	173
52.	Cultural and recreational services .....	177
53.	Personal and other community services .....	180
54.	Tourism.....	183

#### **Appendices:**

Appendix A:	Summary of Regional Economic Strategies .....	190
Appendix B:	Relationship between Sector Employment and Sector GDP .....	194
Appendix C:	Tauranga Housing Market as at 2012, with a Brief Update to Q3, 2016.....	196
Appendix D:	Full Definition of Tabulated Key Economic Indicators .....	200
Appendix E:	Full Definition of Tabulated Key Economic Indicators, Updated to 2016 .....	202
Appendix F:	Value Added Multiplier Type 2 .....	203
Appendix G:	Methodology for the Calculation of Economic Data for the Tauranga Catchment Economy .....	204

# List of Acronyms

---

ANZSIC96 = Australian and New Zealand Standard Industrial Classification 1996

ANZSIC06 = Australian and New Zealand Standard Industrial Classification 2006

BERL = Business and Economic Research Limited

BOP = Bay of Plenty

CCHI = Coastal Cultural Health Index

EBOP = Environment Bay of Plenty

FTE = Full Time Equivalent

GDP = Gross Domestic Production

GFC = Global Financial Crisis

GIS = Geographic Information Systems

ISPT = Integrative Spatial Planning Tool

LQ = Location Quotient

MEC = Modified Employment Count

MTM = Manaaki Taha Moana

N.D = No date

OTOT = Oranga Taiao, Oranga Tāngata

REINZ = Real Estate Institute of New Zealand

SNZ = Statistics New Zealand

TCC = Tauranga City Council

TCE = Tauranga Catchment Economy

WBOPDC = Western Bay of Plenty District Council



# Glossary

---

**Gross Domestic Product:** The total market value of goods and services produced in New Zealand after deducting the cost of goods and services used in the process of production, but before deducting allowances for the consumption of fixed capital.

**Input-Output Analysis:** A quantitative economic technique that represents the interdependencies between different branches (industries or sectors) of a national economy or different regional economies. The technique depends on a matrix of raw economic data collected by companies and governments to study the relationship between suppliers and producers within an economy. Of particular interest is the extent that the outputs of one industry become the inputs to another.

**Location Quotients (LQ):** The location quotient of each sector is calculated using MECs (refer to the definition below). A location quotient measures the degree of *specialisation* of a given sector in a given region, relative to the national situation. If the location quotient is greater than one, then that particular sector is more specialised (over-represented) in the given region relative to the national situation. Conversely, if the location quotient is less than one, then that particular sector is less specialised in the given region relative to the national situation. A location quotient of 1 means that the degree of specialisation in the given sector is the same in the given region as it is nationally.

**Modified Employment Counts (MECs):** Statistics New Zealand typically reports employment data according to the Employee Count (EC) measure. ECs measure the total number of salary and wage earners for a reference period. This includes most employees but does not capture all working proprietors – individuals who pay themselves a salary or wage. The Modified Employment Counts (MECs) used in this study and developed by Market Economics Ltd., adds the number of working proprietors to the number of employees that are counted by the MEC measure.

**Real Prices and Real GDP:** Real prices are prices of goods and services that have been adjusted to take account of the effects of inflation. Oppositely, ‘nominal prices’, which are often reported particularly in the news media, do not take account of the effects of inflation. When the goods and services that make up GDP are measured in terms of real prices, then the resulting metric is termed ‘real GDP’. When using real prices, the year that is used as the baseline (or numeraire) should be specified – in this report this is achieved by subscripting the year after the dollar sign – e.g., \$<sub>2007</sub>.

**Regional GDP:** This is the contribution of a region to the GDP (Gross Domestic Product), which by definition applies to the nation state. In this report ‘region’ applies to any sub-national area, not necessarily a ‘regional council’ area. Some analysts prefer the term ‘Gross Regional Product’ as it can be argued the term Regional Gross Domestic Product is a contradiction in terms.

**Tauranga Catchment Economy:** This is the economic activity that is associated with the ‘Tauranga Harbour Catchment’. The Tauranga Harbour Catchment is fully defined under the next entry in this Glossary, as well as being spatially defined by the map contained in Figure 1.1. For brevity's sake, the term ‘Tauranga Economy’ is used to mean ‘Tauranga Catchment Economy’. The Tauranga Catchment Economy is also sometimes abbreviated to TCE.

**Tauranga Harbour Catchment:** This is the primary spatial area used in this publication. It is defined as the area that collects and stores water that eventually is transferred to the Tauranga Harbour, via rivers, streams, groundwater or wetlands. The Tauranga Harbour Catchment covers 86% of the Tauranga City Council's (TCC) area – not included is most of the Pāpāmoa Beach settlement. The Tauranga Harbour Catchment also covers 59% of the Western Bay of Plenty District Council's (WBOPDC) area. Whilst the northern and western boundaries of the Tauranga Harbour Catchment and the Western Bay of Plenty District Council closely approximate each other, the southern boundary doesn't, most notably meaning that the town of Te Puke is excluded from the Tauranga Harbour Catchment area. Readers are advised to refer to Figure 1.1 for further details concerning the boundaries of the Tauranga Harbour Catchment.

# 1. Introduction

---

## Scope of the Report

This report aims to undertake a stocktake of the Tauranga Catchment Economy (TCE) ending at the year 2012, and when possible updating the data to the 2016. This stocktake is part of a broader research programme that aims to integrate ecological, economic, social and cultural information, in order to derive evidence-based policies and plans for better managing estuaries, with a case study of the Tauranga Harbour. The research programme thus far has generated significant information on the ecological and cultural dimensions of the management of the Harbour, and the purpose of this report is to provide economic information on the Harbour and the surrounding economy, in order to provide a more complete picture.

Specifically the data and information contained in this report will inform the development of an 'Integrated Spatial Planning Tool', which will enable end users to test out realistic, spatially-defined management options for the Tauranga Harbour. Part of this modelling tool will be an 'economic module' (Computable General Equilibrium model), which will draw on the findings of this report.

This report is divided into two parts:

*Part I* provides an overview of the Tauranga Catchment Economy covering: population trends (Chapter 2), labour market trends (Chapter 3), structure of the economy and interdependencies between in the Tauranga Catchment Economy (Chapter 4), and finally an assessment of the performances of the 49 sectors of the Tauranga Catchment Economy (Chapter 5).

*Part II* (Chapters 6-54) provides a detailed analysis of each of the 49 sectors in the Tauranga Catchment Economy, providing commentary on the economic activity and performance of each sector. This detailed analysis covers 48 sectors as defined by the Australia New Zealand Standard Industrial Classification (ANZSIC), as well as an additional composite 'Tourism' sector, as defined by the New Zealand Satellite Accounts of the Tourism sector.

## Parent Research Programmes

**Manaaki Taha Moana.** This report is one in a series of reports and other outputs from the research programme, "Enhancing Coastal Ecosystems for Iwi: Manaaki Taha Moana" (MAUX0907), funded by MBIE and its predecessors. Manaaki Taha Moana (MTM) was a six-year programme (\$6.6 million + GST), which ran from October 2009 to September 2015, with case study research being conducted primarily in two areas: Tauranga moana and the Horowhenua coast (from the Hokio Stream to Waitohu Stream).

The central research question of MTM was:

"How can we best enhance and restore the value and resilience of coastal ecosystems and their services, so that this makes a positive contribution to iwi identity, survival and welfare in the case study regions?"

Thus, our research aimed to restore and enhance coastal ecosystems and their services of importance to iwi/hapū, through a better knowledge of these ecosystems and the degradation

processes that affect them. The key features of the research were that it was: cross-cultural; interdisciplinary; applied/problem solving; and integrated the ecological, environmental, cultural and social factors associated with coastal restoration.

**Oranga Taiao, Oranga Tāngata.** This report also provides an important cornerstone to the project, “Oranga Taiao, Oranga Tāngata: Knowledge and Toolsets to Support Co-Management of Estuaries” (MAUX1502), also funded by MBIE. This research programme (\$4.4 million + GST) will have a case study that focuses on the Tauranga Harbour and its Catchment. It is a four-year research programme (October 2015 to September 2019) that has three phases:

*Phase 1* focuses on gathering Mātauranga Māori (a body of knowledge of Māori experience in the area) from local iwi/hapū. From this information, an Estuarine Cultural Health Index (ECHI), or other similar tool(s), will be constructed so that iwi/hapū can assess the state of local estuarine habitats, record changes over time and help judge the effectiveness of factors such as local fishing rules and management strategies.

*Phase 2* will consolidate the ecological knowledge of the Tauranga harbour and begin to provide some modelling and indicators of estuarine ecosystem health, resilience and functioning.

*Phase 3* will see the creation of an Integrative Spatial Planning Tool (ISPT). This tool is a hybrid GIS – modelling system that will use information from the estuarine ecology, land use, economic and cultural areas, where appropriate. It will enable users to evaluate future planning options for Tauranga harbour. This integrative (ecological, economic, land use, cultural, demographic) planning tool should be at the leading edge of developments worldwide, although such tools have been developed for the terrestrial environment, few if any spatial-modelling tools have been developed for the-whole-of catchment including both land and coastal-marine ecosystems.

In all phases, the knowledge, frameworks and toolsets developed will be developed in such a way to foster transference and uptake to other iwi and regions throughout New Zealand, where possible, to enhance the health of estuaries nation-wide, and indeed internationally.

## Spatial Boundaries Used in the Analysis

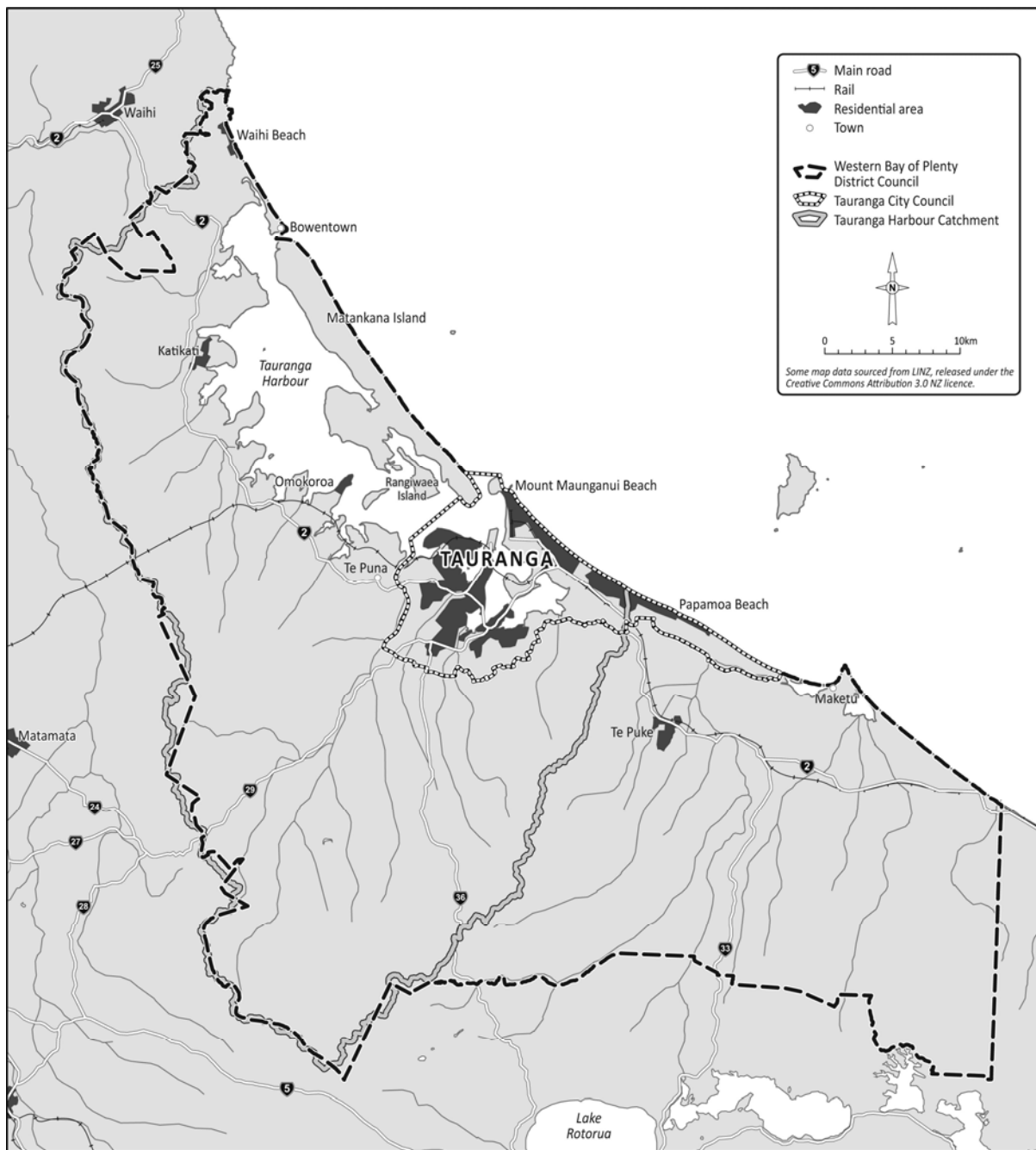
It should be noted that the spatial area most often used in this publication is the 'Tauranga Harbour Catchment'. This is because the primary focus of our broader research programme is to ascertain how economic activities in our case study area, the Tauranga Harbour Catchment, directly and indirectly affect the ecological health of the Harbour itself. The Tauranga Harbour Catchment area and other areas referred to in this report are defined below and outlined by Figure 1.1.

**Bay of Plenty.** The 'Bay of Plenty', for the purposes of this publication, is the area under the jurisdiction of the Bay of Plenty Regional Council. The Bay of Plenty Region covers an area of 21,740 square kilometres, consisting of 12,231 square kilometres of land and 9,509 square kilometres of coastal marine area. The region is further split into seven territorial authorities including: Tauranga City Council, Western Bay of Plenty District Council, Whakatane District Council, Opotiki District Council, Kawerau District Council, part of the territory of the Rotorua District Council and part of the territory of the Taupo District Council.

**Western Bay of Plenty District.** The 'Western Bay of Plenty District', for the purposes of this publication, is the area under the jurisdiction of the Western Bay of Plenty District Council. This district is one of seven territorial authorities within the Bay of Plenty region. The District covers 212,000 hectares of coastal, rural and urban areas. The main townships of the Western Bay of Plenty District include Waihi Beach, Katikati, Ōmokoroa, Te Puna, Te Puke and Maketu.

**Tauranga City.** The 'Tauranga City', for the purposes of this publication, is the area under the jurisdiction of the Tauranga City Council. Geographically, Tauranga City is located at the head of the Tauranga harbour, which is protected by Matakana Island. Tauranga City's boundary extends to Pāpāmoa to the east, Pyes Pa to the south, Bethlehem to the west and Mount Maunganui to the North, all of which covers an area of approximately 13,440 hectares.

**Tauranga Harbour Catchment.** For the purposes of this publication, the Tauranga Harbour Catchment is defined as the area that collects and stores water that eventually is transferred to the Tauranga Harbour, via rivers, streams, groundwater or wetlands. This area includes 86% of the land area of Tauranga City, and 59% of the land area of the Western Bay of Plenty District, most notably including Katikati and Ōmokoroa. The economic activity that is associated with this catchment is termed the **Tauranga Catchment Economy**. For brevity's sake, the term 'Tauranga Economy' is used to mean the 'Tauranga Catchment Economy'. The 'Tauranga Catchment Economy' is also sometimes abbreviated to TCE.



**Figure 1.1** Coverage of the Tauranga Harbour Catchment, Western Bay of Plenty Council and Tauranga City Council

*N.B.: Tauranga Harbour Catchment = Tauranga Catchment Economy*

# Part I

## Overview of the Tauranga Economy

For brevity's sake, the term 'Tauranga Economy' is used to mean 'Tauranga Catchment Economy'. The 'Tauranga Catchment Economy' is also sometimes abbreviated to TCE.

---

---

---

## 2. Population Trends in Tauranga and the Bay of Plenty

### Trends in Population Change

The Bay of Plenty region had an estimated population of 277, 200<sup>6</sup> as at June 2012 and ranked as the 5<sup>th</sup> most populated region in New Zealand with over 6% of the national population. The Tauranga Catchment Economy (TCE) covers Tauranga City and the majority of the Western Bay of Plenty District<sup>7</sup>, together accounting for 167,200 people, or 58.5% of the total Bay of Plenty population as at June 2012 (Statistics NZ, 2012). A report from Environment Bay of Plenty (2009) on the socio-economic profile of the Bay of Plenty region noted that between 1996 and 2006 the Bay of Plenty region was the second fastest growing region in the country after Auckland, with the biggest increases in Tauranga City and Western Bay of Plenty District, increasing 33% and 20%, respectively. Over the last 20 years, the TCE area had been growing at a rate twice as fast as the national average, and almost doubled its population during the period. An economic profile report for the region released by BERL Economics (Leung-Wai et al, 2011) reported that the average annual population increase between 1995 and 2010 was 2.6%, compared to the national average of 1.3%. As seen in Table 2.1, the share of the population in the Western Bay of Plenty District and Tauranga City areas<sup>8</sup> to the total population of New Zealand has continuously increased since 1976.

*Table 2.1 Tauranga City Council and Western Bay of Plenty District Council Population Changes, 1976 to 2012, as a Percentage of the National Population*

	1976	1991	1996	2006	2012
Western Bay of Plenty and Tauranga City	73,000	96,609	117,057	145,710	167,200 <sup>9</sup>
New Zealand	3,110,500	3,495,100	3,732,000	4,184,600	4,433,000
% NZ	2.3%	2.8%	3.1%	3.5%	3.8%

*Source: Statistics New Zealand (2012)*

<sup>6</sup> The 2013 Census of Population and Dwellings found that 267,741 lived in the Bay of Plenty region, and that the Bay of Plenty region remains the 5<sup>th</sup> most populated out of the 16 regions in New Zealand (Statistics New Zealand, 2017).

<sup>7</sup> The boundary lines of the Tauranga Catchment Economy (TCE) are illustrated at the beginning of the report, and in the map contained in Figure 1.1.

<sup>8</sup> Although the TCE doesn't include the entire area of the Tauranga City Council and Western Bay of Plenty District Council, it can be assumed that these official population figures provide a good indication of the relative growth of the population in the TCE area.

<sup>9</sup> This is the Statistics New Zealand's estimated population (167,200) for the combined Tauranga City Council and Western Bay of Plenty District Council areas. More up-to date (and arguably more accurate) data from the Census for 2013, however, indicates that Western Bay of Plenty District and Tauranga City Councils areas had a combined population of 158,481 in 2013, which equals 3.74% of the national population (Statistics New Zealand, 2017).

According to the subnational population estimates released by Statistics New Zealand (2012), the population in the whole Bay of Plenty region from June 2011 to June 2012 increased by 700 people. The population growth over the five years ended June 2011 was 0.9% compared to the national average of 1%. In the year ended June 2012, Tauranga City's population increased by 0.6%, while the Western Bay of Plenty District decreased by -0.2%, while the national average population increase was 0.6%.

## History

The earliest known settlers were Māori who arrived in Tauranga from the Takitimu and the Mataatua waka in circa 12th century. Europeans arrived in the 19<sup>th</sup> century, proclaiming Tauranga a borough in 1882 until it was officially constituted as a city in 2004 when the population reached 100,000 (Tauranga City Council, 2008). The completion of a harbour bridge between Mount Manganui and Tauranga in 1988 led to the amalgamation of the two previously separate districts in 1989 and promoted growth in both parts of the enlarged city. The development of the Port of Tauranga opened the area up to increased immigration and job opportunities, helping to spur the growth of the population.

In 2006, the city had a population density of 616.9 people per km<sup>2</sup>, making it one of the most densely populated areas in the country. As illustrated in Figure 2.1, the Western Bay of Plenty district and Tauranga City experienced large positive increases in population between 1996 and 2006, while the other districts in the Bay of Plenty region experienced little or negative growth. According to a report released by Priority One (2007), the combined area of Western Bay of Plenty and Tauranga has a high rate of population turnover. In 2007, the report states that the region had an average inflow of 100 people per week and an outflow of 52 people per week.

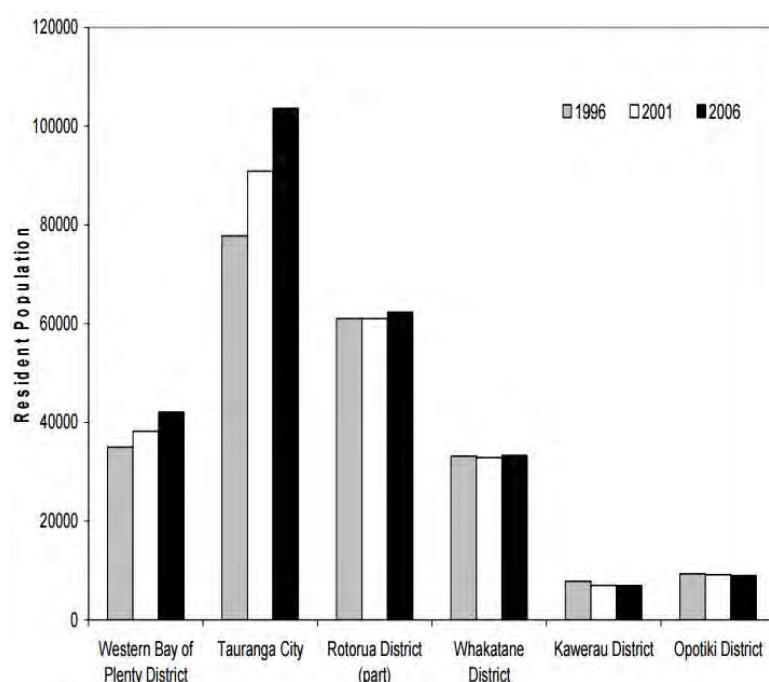


Figure 2.1 Population Change, Bay of Plenty Districts, 1996-2006  
Source: Environment Bay of Plenty (2009)

Interregional migration was also a key factor behind the steady population growth in the Bay of Plenty region. According to Statistics New Zealand (2008), the Bay of Plenty region had the highest net inflow of interregional migration at 48,700 people over the period from 1981 to 2006. This is illustrated in Figure 2.2, where the Bay of Plenty region shows a positive net migration every year, while net migration fluctuates across the years in other seven North Island regions.

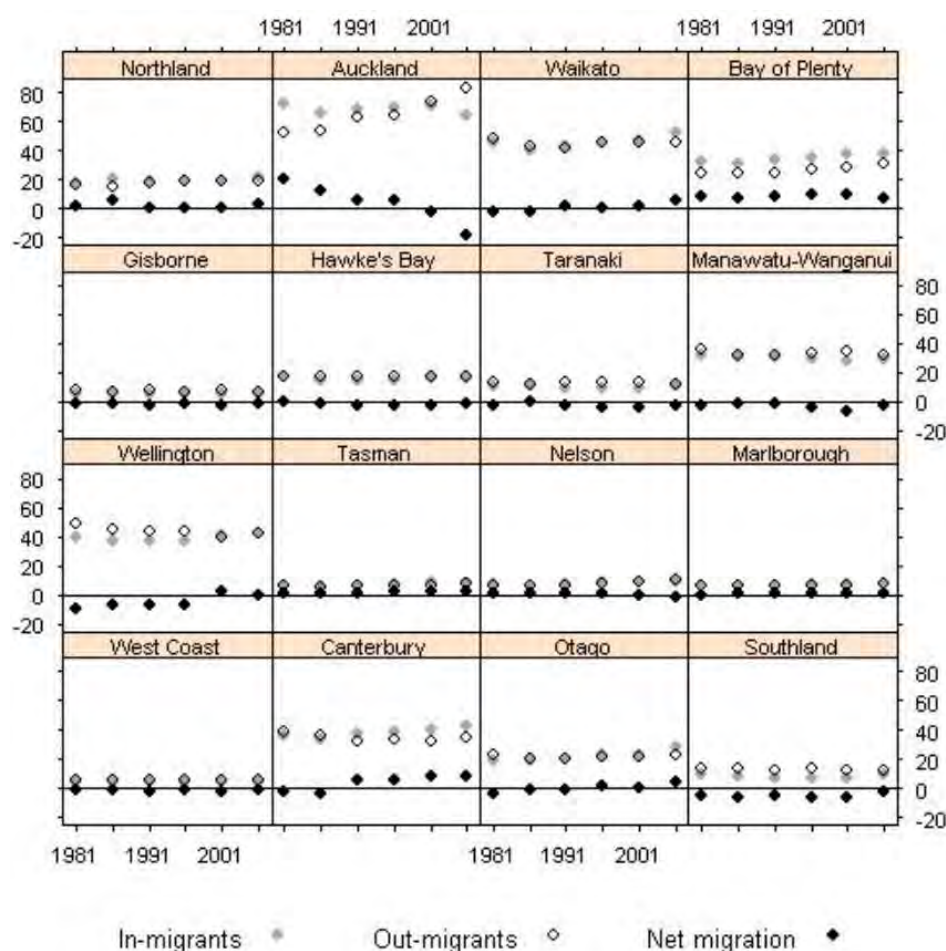


Figure 2.2 Numbers of Internal Immigrants (000s) by Region 1981-2006  
Source: Statistics New Zealand (2008)

## Demographics

Generally, the Tauranga City Council and Western Bay of Plenty Council areas combined had a relatively older population composition compared to the rest of New Zealand. In 2006, over 17.5% of the population in these two Councils was over 64 years of age, while New Zealand as a whole had 12.3% of population over 64 years of age (Environment Bay of Plenty, 2009). In Tauranga City, approximately 60% of the population increase between 1996 and 2006 consisted of people over 40 years old (Baird, 2011). In contrast, 15-34 year olds had been decreasing. In a report to the Bay of Plenty Health Board, the Population Ageing Technical Advisory Group estimated the number of people aged over 79 years old in Tauranga city is projected to grow from less than 3,000 in 2006 to over 35,000 by 2050. Similarly, the population of people over 64 years of age in the Western Bay of Plenty district is projected to reach 27,600 people by 2031 (Whitaker, 2011).

As seen in Figure 2.3, in 2006 about three quarters of residents in Tauranga City identified themselves as the European ethnicity, which is greater than the national average of 65%. Similarly, in Tauranga City and the Western Bay of Plenty District, 16% of residents identified themselves as Māori in 2006, which is higher than the national average of 14%. There is a lower representation of other minority groups in the area, such as Asian (3.4%), Pacific (1.9%), and Middle Eastern, Latin American and African (<1%) (Statistics New Zealand, 2006).

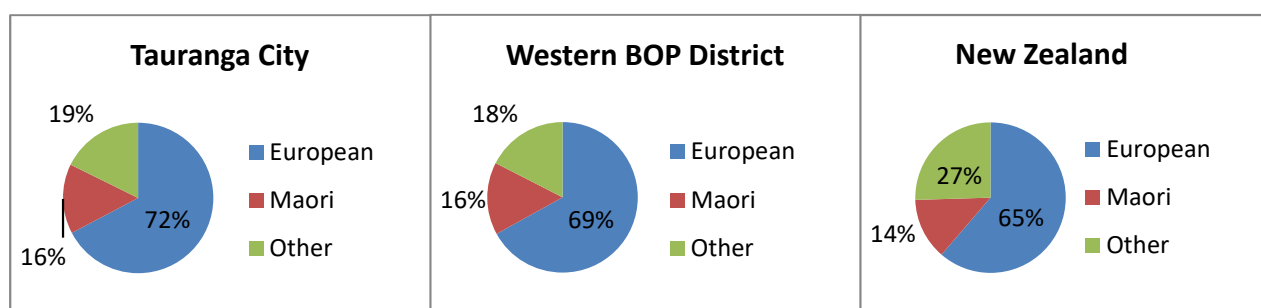


Figure 2.3 Ethnic Compositions of Tauranga City Council, Western Bay of Plenty Council and New Zealand Populations<sup>10</sup>

Source: Environment Bay of Plenty (2009)

## Future Trends

According to a report from Environment Bay of Plenty (2009), the Bay of Plenty region is one of the fastest growing regions in New Zealand, with a projected population increase of 23% for the period 2006 to 2031. Population growth is however projected to be concentrated in Tauranga City. As evident in Figure 2.4, a projected growth rate of 45% in the Tauranga City area over this time period accounts for much of the region's projected growth, with an estimated population of 154,800 by 2031 (Environment Bay of Plenty, 2009). Similarly, The Smart Economy Strategy (2007) projected a population of 284,000 by the year 2051 (see Table 2.2).

Table 2.2 Future Population Estimates for Tauranga City Council and Western Bay of Plenty District Council

	2012	2021	2051
Western Bay of Plenty and Tauranga City	167,200	198,000	284,000

Source: Smart Economy Strategy (2007)

Specifically, people aged over 64 years are projected to increase significantly within the TCE in the future (Environment Bay of Plenty, 2009). In Tauranga City alone, there is a projected seven-fold increase in people aged over 80 years from 2,616 in 2006 to 35,000 by 2051. These patterns reflect an ageing population in general as the baby boomers begin to retire, but also it is projected that there will be significant interregional immigration of older population into the region. This has significant implications for the local economy as the proportion of the

<sup>10</sup> The over-representational proportion of people in the 'Other' category reflects the fact that residents were allowed to identify with more than one nationality, i.e., Pacific and Māori.

workforce compared to the total population in the region will become increasingly lower in the future. Of particular concern is that an older population increases significantly the need within the region for access to health care and other community services.

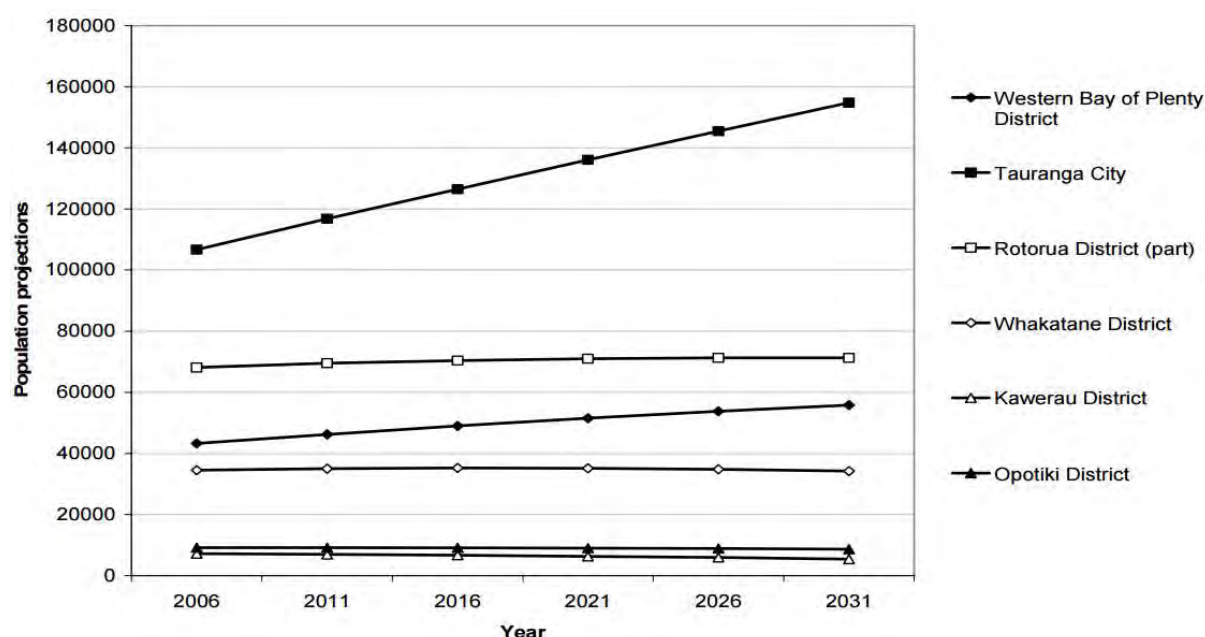


Figure 2.4 Projected Populations, Bay of Plenty Districts, 2006-2031

Source: Environment Bay of Plenty (2009)

## Update to 2016

Table 2.3 summarises the population changes from 2012 to 2016 (years to 30 June) in the Tauranga City Council (TCC) and Western Bay of Plenty District Council's (WBOPDC) areas. Over the period 2012 to 2016, the TCC and WBOPDC combined population increased by 7.36%, which is above the national population growth rate of 6.46% for the same period. Although this represents continued strong growth of population in the TCC and WBOPDC areas, it is not as spectacular as growth in areas such as Selwyn District or Queenstown-Lakes District.

Table 2.3 Population of Tauranga City Council and Western Bay of Plenty District Council

	2012	2013	2014	2015	2016
Western Bay of Plenty District	45,500	45,500	45,900	46,800	47,800
Tauranga City	118,300	119,800	121,800	124,600	128,200
Total	165,812	167,313	169,714	173,415	178,016

Source: Infoshare, Statistics New Zealand (2017)

According to the 2013 Census (Statistics New Zealand, 2017), the increase in Tauranga City's population from 2006 to 2013 was 10,908 people, compared to an increase of 12,738

people from 2001 to 2006. The growth rate in percentage terms was 10.5%, (or 1.5% per annum), the sixth highest in New Zealand. The Western Bay of Plenty district experienced population growth between 2006 and 2013 of 4.5%, taking the district to 43,692 people in 2013 (Environment Bay of Plenty, 2016). According to the 2013 Census, 19.3% of the Tauranga City population were 65 or more years of age, and 8,445 (19.3%<sup>11</sup>) were 65 years of age or older in the Western Bay of Plenty District, both being higher than the national average of 14.3%<sup>12</sup>.

## References

- Baird, S. (2011). *Managing Local Economic Development - A Case Study of Tauranga* (Thesis, Master of Planning). *University of Otago, Dunedin*. Retrieved 10/12/12 from <http://hdl.handle.net/10523/1676>
- Leung-Wai, J., Dixon, H., Sanderson, K., & Nana, G. (2011). *Bay of Plenty Economic Profile, Bay of Connections* (pp. 2 & 17). Retrieved from [http://www.bayofconnections.com/downloads/BERL\\_Bay\\_of\\_Plenty\\_Industry\\_Profile.pdf](http://www.bayofconnections.com/downloads/BERL_Bay_of_Plenty_Industry_Profile.pdf)
- Environment Bay of Plenty. (2009). *A Socio-Economic Profile of the People of the Bay of Plenty Region*. Retrieved from <https://www.boprc.govt.nz/media/33481/Report-090723-Profile2009.pdf>
- Ministry for the Environment. (n.d). *Bay of Plenty's Ecological Footprint*. Retrieved 23/11/2012 from <http://www.mfe.govt.nz/publications/ser/eco-footprint-sep03/html/page10.html>
- New Zealand Transport Agency. (2011). *Tauranga Eastern Link*. Retrieved 14/12/12 from: <http://www.nzta.govt.nz/projects/tel/overview.html>
- Priority One. (2007). *Smart Economy Strategy*. Retrieved from <http://www.priorityone.co.nz/>
- Statistics New Zealand. (2017). *2013 Census Quick Stats: Tauranga City, Western Bay of Plenty District and Bay of Plenty Region*. Retrieved 6/02/2017 from: [http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request\\_value=13878&tabname=](http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=13878&tabname=)
- Statistics New Zealand. (2017). *2013 Census Quick Stats: Tauranga City*. Retrieved 30/05/17 from: [http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request\\_value=13878&tabname=Ageandsex](http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=13878&tabname=Ageandsex)
- Statistics New Zealand. (2017). *2013 Census tables about a place: Western Bay of Plenty District*. Retrieved from 30/05/17 from [http://www.stats.govt.nz/Census/2013-census/data-tables/tables-about-a-place.aspx?request\\_value=24432 &reportid=14&tabname=Ageandsex](http://www.stats.govt.nz/Census/2013-census/data-tables/tables-about-a-place.aspx?request_value=24432 &reportid=14&tabname=Ageandsex)
- Statistics New Zealand. (2012). *Subnational Population Estimate Tables at June 2012*. Retrieved from [http://www.stats.govt.nz/browse\\_for\\_stats/population/estimates\\_and\\_projections/SubnationalPopulationEstimates\\_HOTPYe30Jun12.aspx](http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/SubnationalPopulationEstimates_HOTPYe30Jun12.aspx)
- Statistics New Zealand. (2008). *Trends in Migration between Regions*. Retrieved 5/12/12 from <http://www.stats.govt.nz/~media/Statistics/browse-categories/population/migration/trends-in-migration/trends-in-migration-between-regions.pdf>
- Tauranga City Council. (2008). *Local Government 1860-Present*. Retrieved from <http://www.tauranga.govt.nz/about-tauranga-city/history.aspx>

<sup>11</sup> See: [http://www.stats.govt.nz/Census/2013-census/data-tables/tables-about-a-place.aspx?request\\_value=24432 &reportid=14&tabname=Ageandsex](http://www.stats.govt.nz/Census/2013-census/data-tables/tables-about-a-place.aspx?request_value=24432 &reportid=14&tabname=Ageandsex)

<sup>12</sup> See: [http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request\\_value=13878&tabname=Ageandsex](http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx?request_value=13878&tabname=Ageandsex)

Tauranga City Council. (2016). Statistical Information Report: Tauranga City. Retrieved from [http://econtent.tauranga.govt.nz/data/documents/reports/stats/statistical\\_information\\_report.pdf](http://econtent.tauranga.govt.nz/data/documents/reports/stats/statistical_information_report.pdf)

The Port of Tauranga Limited. (2010). *Community History of the Port of Tauranga*. Retrieved from <http://www.port-tauranga.co.nz/Community/History/>

Whitaker, S. (2011, Feb 7). Wave of Change- Tauranga in 2050. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/wave-of-change-tauranga-in-2050/1043249/>

### 3. Labour Market Trends in Tauranga

---

From 2012 to 2016, employment in the Tauranga Catchment Economy grew from 64,870 jobs to 68,146 jobs, as measured in terms of Modified Employment Counts (MECs). This 5.05% increase, although significant, did fall behind the employment growth (in terms of MECs) of 8.58% for the New Zealand economy overall.

#### **Work Status and Labour Market Participation**

Census data for 2013 on the work status of employees in both in Tauranga City and Western Bay of Plenty District areas (which approximates the Tauranga Catchment Economy area) are summarised by Tables 3.1 and 3.2.

According to the 2013 Census, the labour force participation rate is 67.1% for the Western Bay of Plenty District, and 64.6% for Tauranga City, which are both lower than the labour force participation rate for New Zealand at 68.7% – refer to Table 3.2. These slightly lower labour force participation rates are related to its older (retired) population profile and slightly lower than average proportions of people aged 17-25 years in the TCE. According to the 2013 Census, 19.3% of the population in Tauranga City and Western Bay of Plenty District is 65 or more years of age, higher than the national average of 14.3%.

Unemployment as a percentage of the total population in the TCE is slightly higher than the national situation; this is also the case when it is measured as a percentage of the total number of people in the workforce [unemployed / (total employed plus unemployed)], which is the conventional measure of unemployment. The number of “Registered Unemployed” fluctuates due to seasonal work variations (e.g., lower during kiwifruit season) but is typically in the 4,000 to 5,500 range. At the time of the 2013 Census, 4,200 people (4.61%) of people identified themselves as unemployed in Tauranga City, and 1,593 (4.56%) in Western Bay of Plenty, compared with the New Zealand unemployment rate of 4.54% (see Table 3.2). The Māori unemployment rate was 11.06% for Tauranga City and 11.48% for Western Bay of Plenty District, both being slightly higher than the national unemployment rate of 10.42% for Māori. Of concern is the observation that all unemployment rates (for all ethnicities, and Māori) had increased from 2006 census to the 2013 Census, in both Tauranga City and Western Bay of Plenty District.

#### **Personal Income**

The 2013 Census found that the average personal income in Tauranga City was \$26,300 and in Western Bay of Plenty District was \$27,000, compared with the New Zealand average of \$28,000. Although ‘personal income’ covers a number of categories such as ‘self-employment’, ‘investments’ and ‘government transfers’ (e.g., family support, student loans and superannuation), it is considered to be indicative of labour market remuneration rates in the TCE, which mainly consists of wages and salaries<sup>13</sup>. This is lower than the New Zealand average

---

<sup>13</sup> The 2013 Census revealed that the most common source of income was from “wages, salaries, commissions, bonuses etc”. Although this is the case, it is difficult to calculate exactly what \$ percentage

**Table 3.1** *Labour Force Status for Tauranga City and Western Bay of Plenty District Council Areas, Numbers of People Aged 15 Years and Older, Census 2013*

Work and Labour Force Status	All Ethnicities			Māori		
	Tauranga City	Western Bay of Plenty District	New Zealand	Tauranga City	Western Bay of Plenty District	New Zealand
Employed Full time	38,094	14,970	1,541,061	5,076	2,028	172,113
Employed Part time	12,810	5,364	459,945	1,713	669	51,810
Total Employed	50,901	20,337	2,001,006	6,789	2,697	223,923
Unemployed	4,200	1,593	153,210	1,329	576	41,292
Not in Labour Force	32,310	11,508	1,058,100	3,894	1,743	131,067
Status Unidentifiable	3,747	1,518	164,100			
Total Population	91,161	34,943	3,376,419	12,012	5,019	396,288

Notes:

1. Total Employed = Employed Full time + Employed Part Time

2. Total population = Total Employed + Unemployed + Not in Labour Force + Status Unidentifiable)

3. The totals in Notes 2 and 3 don't always add up exactly correctly. This how the data was supplied by SNZ

**Table 3.2** *Labour Force Status for Tauranga City and Western Bay of Plenty District Council Areas, Percentage of Total Population, People Aged 15 Years and Older, Census 2013*

Work and Labour Force Status	All Ethnicities			Māori		
	Tauranga City	Western Bay of Plenty District	New Zealand	Tauranga City	Western Bay of Plenty District	New Zealand
Employed Full time	41.79	42.84	45.64	42.26	40.41	43.43
Employed Part time	14.05	15.35	13.62	14.26	13.33	13.07
Total Employed	55.84	58.20	59.26	56.52	53.74	56.51
Unemployed	4.61	4.56	4.54	11.06	11.48	10.42
Not in Labour Force	35.44	32.93	31.34	32.42	34.73	33.07
Status Unidentifiable	4.11	4.34	4.86	0.00	0.00	0.00
Total Population	100.00	100.00	100.00	100.00	100.00	100.00

income is consistent with other available data such as per capita GDP data for the Tauranga Catchment Economy. This lower than average income could explained by more than average number of retirees who tend to have a lower level or personal income, and higher than average unemployment rates in Tauranga possibly exerting some downward pressure on wages and salaries, as well is the structural characteristics of the Tauranga Catchment Economy towards lower paying jobs particularly those of the service sector which dominates the economy.

of income is "wages, salaries, commissions, bonuses etc "due to people having multiple sources of income, and with the data being measured in terms of "incidences of people receiving an income from a particular source" rather than a monetary value of that income from a particular source.

## Main Employment Sectors in the Tauranga Catchment Economy

Among the various sectors in the Tauranga Catchment Economy, the *Retail* sector was the largest employer in 2010, accounting for 14.2% of total employment. The *Retail* sector is associated with shops that on sell wholesale goods, which is an important part of the TCE as it acts as a channel for a large component of household consumption and spending by international visitors (Kite, 2005). The *Retail* sector in the TCE is, relatively speaking, larger than the New Zealand average, with a Location Quotient<sup>14</sup> of 1.20.

The *Health and Community Services* sector was the 2<sup>nd</sup> biggest employer in 2010 with 13.4% of total employment, higher than the New Zealand average of 10.3% (Infometrics, 2012). The sector is predominantly served by the Bay of Plenty District Health Board, whose services in the TCE are mainly located in Tauranga City.

The *Business Services* sector was the 3<sup>rd</sup> highest employer in the TCE with 6,588 MECs and accounting for 10.5% of the sector's employment. This sector includes services such as accounting, computing, surveying, advertising and a number of others regularly utilised by both rural and urban businesses (Kite, 2005).

This was followed by the *Construction* sector, which was ranked 4<sup>th</sup> in the number of MECs 2010, accounting for around 8.4% of total employment in the TCE, which is higher than the New Zealand average of 7.6% (Infometrics, 2012). The *Construction* sector is mainly engaged in the construction of buildings and other structures, additions, alterations, reconstruction, installation and maintenance and repairs of buildings and other structures. Between 2001 and 2008, the sector rapidly increased its employment activity due to the strong demand for its services and the growing population and economy.

The *Education* sector is the next largest employer, accounting for 6.9% of total employment in the TCE, which is lower than the New Zealand average of 8.0% (Infometrics, 2012). Although Tauranga does not have its own university, the University of Waikato has a campus in Tauranga with approximately 500 people enrolled. The Bay of Plenty Polytechnic and a Wananga located in Tauranga, as well as 65 primary and secondary schools (39 of which are located in Tauranga City), and 159 early childhood centres (Kite, 2005).

The *Accommodation and Food Services* sector is the 6<sup>th</sup> biggest employer in the TCE, with 5.3% of total employment, which is slightly higher than the New Zealand average of 5.2% (Infometrics, all 2012). This sector is mainly involved in providing short-term accommodation for visitors as well as those engaged in providing food and beverage services, such as the preparation and serving of meals and the serving of alcoholic beverages for consumption by customers, both on and off-site.

The *Wholesale Trade* sector was the next largest employer in 2010, accounting for 5.1% of total employment in the TCE (Infometrics, 2012). The *Wholesale* industry involves buying, selling, storing and distributing goods for the businesses and shops in the region. While the sector in the TCE ranks the 7<sup>th</sup> largest in terms of employment, the number employed in the sector is slightly less than the New Zealand average, with a LQ of 0.92.

---

<sup>14</sup> Refer to the glossary section for information on the Location Quotient. Location quotients throughout this report are for 2010. These location quotients tend to be reasonably stable over the short-medium term (1-5 years) time horizon, especially for the largest sectors in the TCE.

Other larger sectors employing people in the TEC included *Agriculture, Hunting and Trapping*, at 4% of total, *Transport* at 2.8% and *Horticultural and Fruit Growing* at 2.7%. The high location quotient of 2.35 for *Agriculture, Hunting and Trapping* illustrates that the industry is very strong in the region relative to the national situation. This is largely due to the high importance of kiwifruit and avocado production in the TCE, and consequently the necessity of the services provided by this sector. With a LQ of 1.46, the *Road Transport* sector in the TCE is very important relative to the national situation. The high LQ is mostly due to the activity of road freight transportation, which is a big activity in the TCE due to the Port of Tauranga. And finally, the area's sunny climate and fertile soils lend the ideal niche for growing sunshine-loving fruits, especially kiwifruit. Employment in this sector is considerably higher than the average of the overall NZ economy, with a high overall LQ of 1.82.

## Update to 2016

In some cases, it is difficult to directly compare the employment data prior to 2012 with the latest data in 2016, due to a change from the 1996 ANZSIC to 2006 ANZSIC for reporting employment data. That said, however, it be concluded that the main labour market patterns and indicators have not shifted much from 2010 to 2012 to 2016; for example, the eight sectors with the highest employment in 2010 (outlined in the last sub-section), are still the eight highest sectors in terms of employment in 2016, although some of the rankings have changed. In 2016, these highest employing sectors are (from first to eighth)<sup>15</sup>:

Healthcare and Social Assistance (9,064 MECs);  
Professional, Scientific, Technical, Administrative and Support Services (9,543 MECs),  
Retail Trade (7,551 MECs);  
Construction (7,381 MECs);  
Education and Training (4,565 MECs);  
Accommodation and Food Services (4,081 MECs);  
Wholesale Trade (2,950 MECs); and  
Agriculture, Forestry and Fishing Support Services (2,697 MECs).

## References

- Infometrics. (2012). *Labour Market and Economic Profile: Bay of Plenty*. Retrieved from <http://www.infometrics.co.nz/reports/regional/TEC/Bay-of-Plenty-Revised-Jun2012.pdf>.
- Kite, H. (2005). Overview of the New Zealand Retail Sector. Reserve Bank of New Zealand: *Bulletin*, 68(2), 32-41.
- Ministry for Social Development. (2008). *Leading Social Development in Bay of Plenty: Regional Plan 2007/2008*. Retrieved from <http://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/corporate/regional-plans/2007-08/bop-2007-08.pdf>
- Statistics New Zealand. (2012). *Census 2006 Data* Retrieved from <http://www.stats.govt.nz/Census/2006CensusHomePage/Tables/AboutAPlace/SnapShot.aspx?type=ta&ParentID=1000004&ss=y&tab=Work&id=2000023>

---

<sup>15</sup> Due to the change from 1996 ANZSIC to 2006 ANZSIC, some minor assumptions are made in comparing the employment in 2010 of the eight highest employing sectors with the comparable sectors in 2016. For example, most notably it is assumed that, in 2016, *Professional, Scientific, Technical, Administrative and Support Services* covers the same activities as *Business Services* did in 2010.

Statistics New Zealand. (2017). Census 2013 Data Retrieved from  
<https://figure.nz/chart/a4PrC5hmWX2IMuA7-qLYNe6R9Ifm4fbFW?ref=bf>

Statistics New Zealand. (2017). *Census 2013 Data* Retrieved from  
[http://www.stats.govt.nz/browse\\_for\\_stats/income-and-work.aspx](http://www.stats.govt.nz/browse_for_stats/income-and-work.aspx)

Tauranga City Council. (2011). *Statistical Information Report: Tauranga City*. Retrieved from  
[http://econtent.tauranga.govt.nz/data/documents/reports/stats/statistical\\_information\\_report2011.pdf](http://econtent.tauranga.govt.nz/data/documents/reports/stats/statistical_information_report2011.pdf)

Tauranga City Council. (2016). *Statistical Information Report: Tauranga City*. Retrieved from  
[http://econtent.tauranga.govt.nz/data/documents/reports/stats/statistical\\_information\\_report.pdf](http://econtent.tauranga.govt.nz/data/documents/reports/stats/statistical_information_report.pdf)

## 4. Structure of the Tauranga Economy

---

### Background on Input-Output Analysis

One of the most commonly used tools for analyses of inter-relationships between sectors of an economic system is Input-Output (IO) Analysis. The main component of an IO analysis is information on the flows of goods and services within an economy. These flows are arranged in a matrix format (known as an IO Table<sup>16</sup>), where each component of the matrix represents the consumption of each sector (inputs, recorded down the columns) and the production of each sector (outputs, recorded across the rows) from, and to, all other sectors within an economy. By using the information contained within such a matrix, IO practitioners may calculate numerical estimates of the inter-sectoral relationships that exist within an economy. In particular, these relationships describe the way in which each sector's inputs to the production are sourced from outputs of other sectors in an economy.

Another major use for the IO analysis is as an estimation of the economic impacts associated with exogenous shocks to an economy. As the IO table describes interdependencies between sectors of the economy, IO analysis may be used to show the direct and higher order (indirect and induced) impacts associated with an exogenous shock to an economic system. For example, if one of the changes anticipated for the TCE were to be a loss in the amount of kiwifruit cropping, the IO analysis would calculate all of the losses in output that would also occur in sectors supporting kiwifruit cropping (e.g., fertiliser production, beekeeping service, farm machinery suppliers), as well as the sectors that, in turn, support these sectors.

The IO matrix of the TCE used in this report is for 2010, and shows the main structural interdependencies in the Tauranga economy. Although this matrix is not up-to-date, it is unlikely that these main structural interdependencies will have significantly changed since then. In further editions of this publication, when more up-to-date data becomes available to input-output data becomes available, the IO matrix of the TCE can be updated, accordingly.

### Network Diagram Interpretation – Most Significant Sectors and Flows

A network diagram of the TCE was constructed using data from the 48 sector input-output matrix of that economy (refer to Figure 4.1). For simplicity sake, only the 26 largest sectors in the economy in terms of their contribution to GDP, and the 66 largest flows between the sectors, were depicted in the Figure 4.1 network diagram<sup>17</sup>. Using the three largest sectors in the economy, it can be demonstrated how each sector can be interpreted in terms of its interdependencies with other sectors, by the flow of goods and services between these sectors:

---

<sup>16</sup> The IO table used in this report is based on Statistics New Zealand's Inter-Industry Study of New Zealand Economy, updated and then regionalised for the Tauranga Catchment area for the year 2010.

<sup>17</sup> Even though the Figure 4.1 diagram may appear to be quite complicated, the real economy is a great more complex and complicated than this diagram indicates, and so complicated that it cannot be drawn –hence the restriction to the 26 largest sectors (in terms of GDP contribution) and 66 largest flows, as opposed to the 48 ANZSIC sectors and 682 flows between these sectors in the IO matrix, which attempts to cover all of the sectors and flows in the TCE.

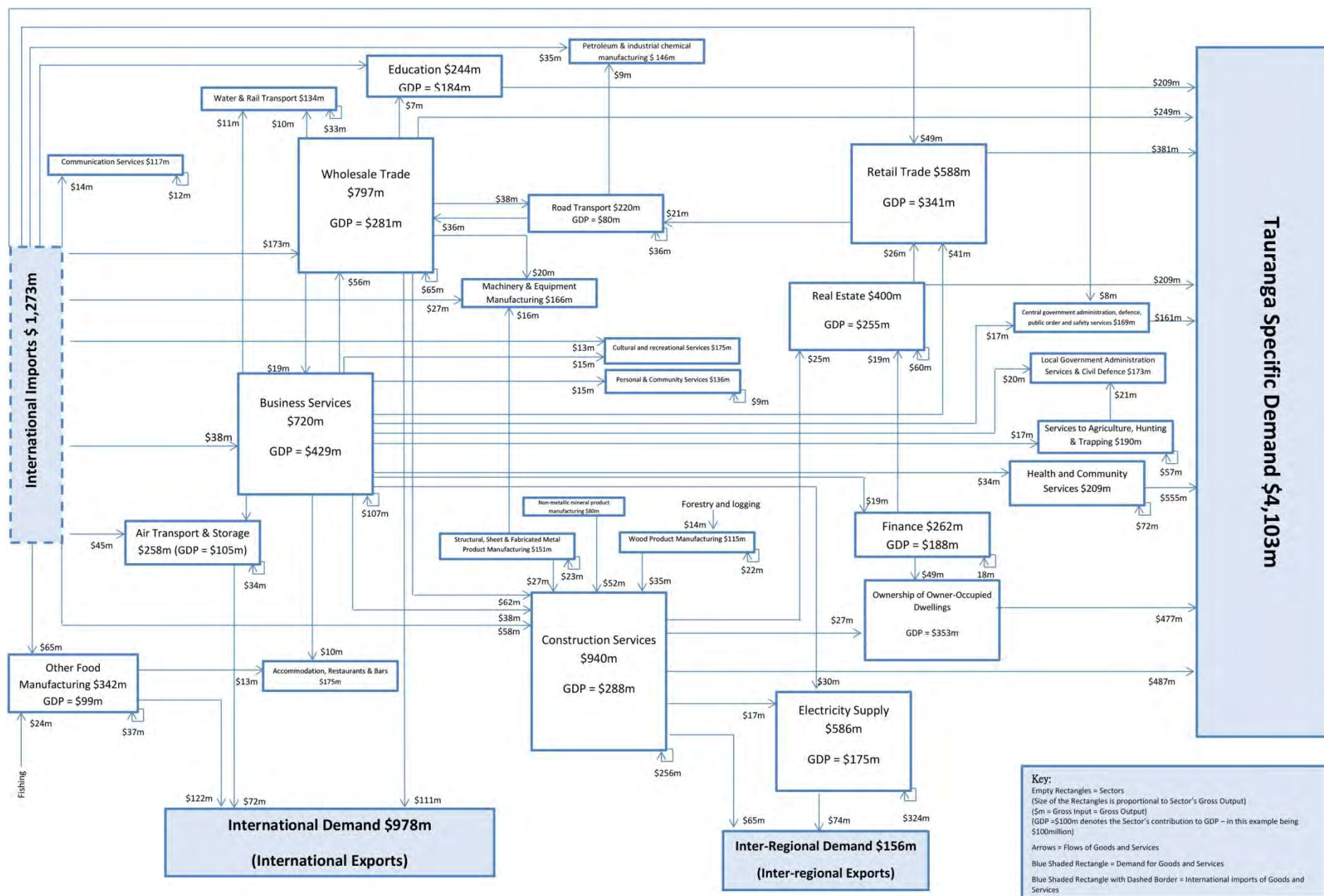


Figure 4.1 Structure of the Tauranga Catchment Economy, for the Year Ending 2010 (26 Largest Sectors, 66 Largest Inter-Sector Flows)

- *Construction Services.* This sector is the biggest producer of outputs (\$940 million) in the TCE, which is not surprising given the population growth in the economy. Accordingly, nearly half (\$487 million) of the sector's output is from the construction of residential dwellings. The sector's major input is \$62 million from the Wholesale Trade sector, including products such as building supplies, machineries, electrical equipment and vehicles. The Construction sector also uses \$52 million worth of products from the Non-Metallic Mineral Manufacturing sector, including products such as glass, clay, cement, plaster and concrete. The remaining significant inputs are from the Wood Product Manufacturing sector (\$35 million), followed by the Structural, Sheet and Fabricated Metal Product Manufacturing sector (\$27 million) and 'International Imports' (\$58 million).
- *Wholesale Trade.* This sector is the second largest producer in the TCE in terms of gross output<sup>18</sup>, providing a wide variety of products to other sectors in the economy – \$249 million to 'Final Demand' (mainly households), \$111 million to the 'International Demand', \$62 million to Construction, and \$38 million to the Road Transport sector. 'International Imports' (\$173 million) are the main input into the Wholesale sector, reflecting the sector's role as an intermediary or distributor of imported commodities.
- *Business Services.* The third largest sector in terms of gross output is Business Services. The sector has a total gross output of \$720 million and provides a wide range of services such as accounting, legal, computer services, security, and cleaning to quite a wide variety of sectors in the economy including: Retail Trade (\$41 million), Construction Services (\$38 million), Health and Community Services (\$34 million) and Electricity Supply (\$30 million), as well as to many other sectors in the TCE. The main inputs into the Business Services sector are payments for labour (\$223 million) and payment of primarily profits as reflected in the 'operating surplus' (\$121 million), both of which are not depicted on the Figure 4.1 network diagram but are recorded on the IO matrix for the TCE.

---

<sup>18</sup> An accounting requirement of the IO matrix of the economy is that the 'gross outputs' equals the 'gross inputs' for all sectors of the economy. So, when it is stated that the Business Service sector has a gross output of \$720 million, it can necessarily be implied that it must also have a gross input of \$720 million. This accounting requirement applies to all sectors that are recorded on the IO matrix of the economy.

## 5. Performance of Sectors in the Tauranga Economy

---

This chapter serves two functions:

Firstly and most importantly, it compares the performance of each of the ANZSIC sectors<sup>19,20</sup> in the TCE, using three main indicators:

1. 'Size' of each of the sectors in the TCE in terms of its contribution to GDP;
2. 'Growth' of each sector in the TCE, in terms of (real) GDP growth from 2011 to 2016;
3. 'Specialisation' of each sector in the TCE using location quotients.

Secondly, this chapter updates, as best as possible, the indicators used in the detailed sector-by-sector analysis reported in Part II (Chapters 6 to 54) of this report with the latest available data.

### Size (GDP Contribution) of 48 Sectors in the Tauranga Economy

The contribution of each sector to the TCE's GDP for 2010 is summarised by Figure 5.1, and for 2016 by Figure 5.2. Caution needs to be displayed in comparing the data contained in these two Figures (contribution to GDP for 2010, contribution to GDP in 2016) – this is because the classification system used by Statistics New Zealand was changed from using ANZSIC 1996 for the 2010 data to using ANZSIC 2006 for the 2016 data.

Notwithstanding the difficulties in comparing the 2010 and 2016 GDP data, the relative size of the GDP contributions of each sector in the TCE, did not significantly change over this period. For example, the six largest sectors in the TCE were recorded for both 2010 and 2016 as follows:

1. *Business Services* was the largest sector in 2010 with a GDP contribution of \$<sub>2007</sub> 625 million, with the equivalent *Professional, Scientific, Technical and Administrative and Support Services* sector also remaining the largest sector in 2016.
2. *Health and Community Services* was the 2<sup>nd</sup> largest sector in 2010 with a GDP contribution of \$<sub>2007</sub> 461 million; the equivalent *Health Care and Social Assistance* sector also remained the 2<sup>nd</sup> largest sector in 2016.
3. *Real Estate* was the 3<sup>rd</sup> largest sector in 2010 with a GDP contribution of \$<sub>2007</sub> 422 million; the equivalent *Rental, Hiring and Real Estate Services* sector also remained the 3<sup>rd</sup> largest sector in 2016.
4. *Construction* was the 4<sup>th</sup> largest in 2010 with a GDP contribution of \$<sub>2007</sub> 364 million; it also remained the 4<sup>th</sup> largest sector in 2016.

---

<sup>19</sup> The *Owner Occupied Buildings* sector (Chapter 46) is not usually included in this performance analysis. This is because this sector is not a production sector, but an accounting place-holder composed of economic benefits received by private dwellings occupied by owners.

<sup>20</sup> The *Tourism* sector (Chapter 54), which is a composite of the other sectors, is also not included in this performance analysis because there is insufficient data available to do this – other than an approximate estimate (in Chapter 54) of the *Tourism* sector's contribution to GDP in the TCE being \$<sub>2016</sub> 321 million (\$<sub>2007</sub> 270 million) in the March year for 2016. This estimate places the *Tourism* sector as the 6<sup>th</sup> largest in the TCE in terms of its GDP contribution.

5. *Retail Trade* with a GDP contribution of \$<sub>2007</sub> 364 million, and *Wholesale Trade* with a GDP contribution of \$<sub>2007</sub> 226 million, were the 5<sup>th</sup> and 6<sup>th</sup> largest sectors in 2010, although this rank order was reversed in 2016.

Other sectors in the TCE with a GDP contribution more than \$<sub>2007</sub> 100 million in 2010 include:

Finance (\$<sub>2007</sub> 188 million);

Education (\$<sub>2007</sub> 184 million);

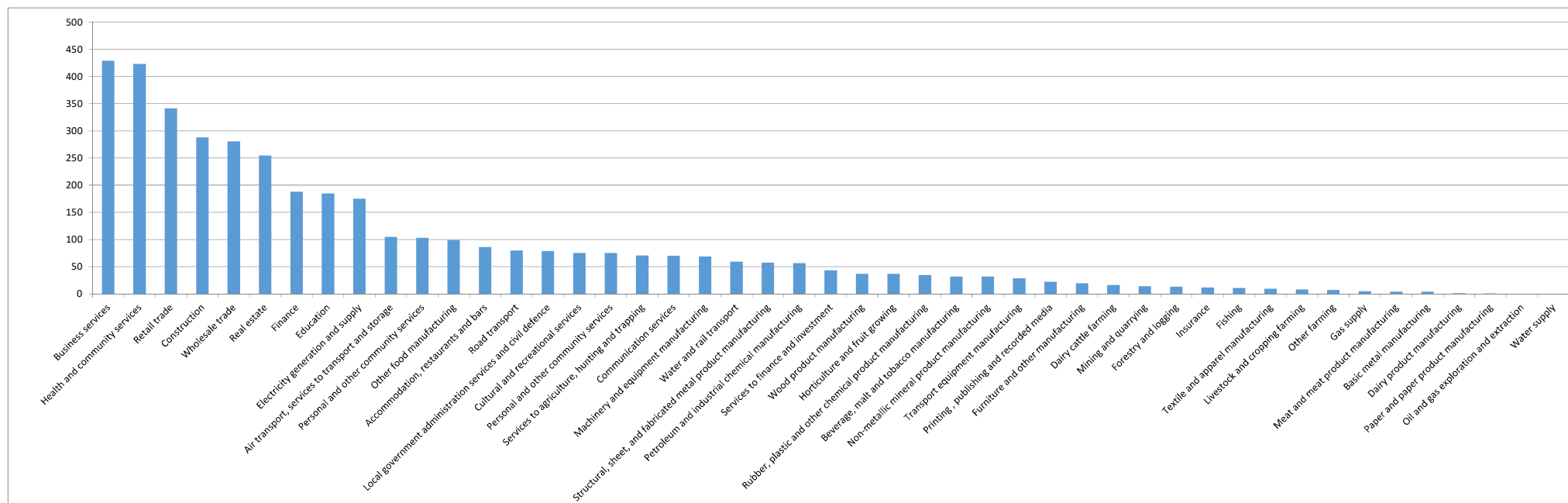
Electricity Generation and Supply<sup>21</sup> (\$<sub>2007</sub> 175 million);

Air Transport, Services to Transport and Storage (\$<sub>2007</sub> 105 million); and

Central Government Administration and Defence (\$<sub>2007</sub> 103 million).

---

<sup>21</sup> The sector mainly includes the activities of the Trustpower Head Office – the 4<sup>th</sup> largest electricity retailer (in terms of customer numbers) in New Zealand and the 5<sup>th</sup> largest electricity generator (in terms of revenue and generating capacity) in New Zealand. There is only a very small amount of electricity actually generated in the TCE.



**Figure 5.1** Sectors' Contribution to GDP in the Tauranga Catchment Economy, Year Ending 31 March 2010  
Units: \$<sub>2007</sub>

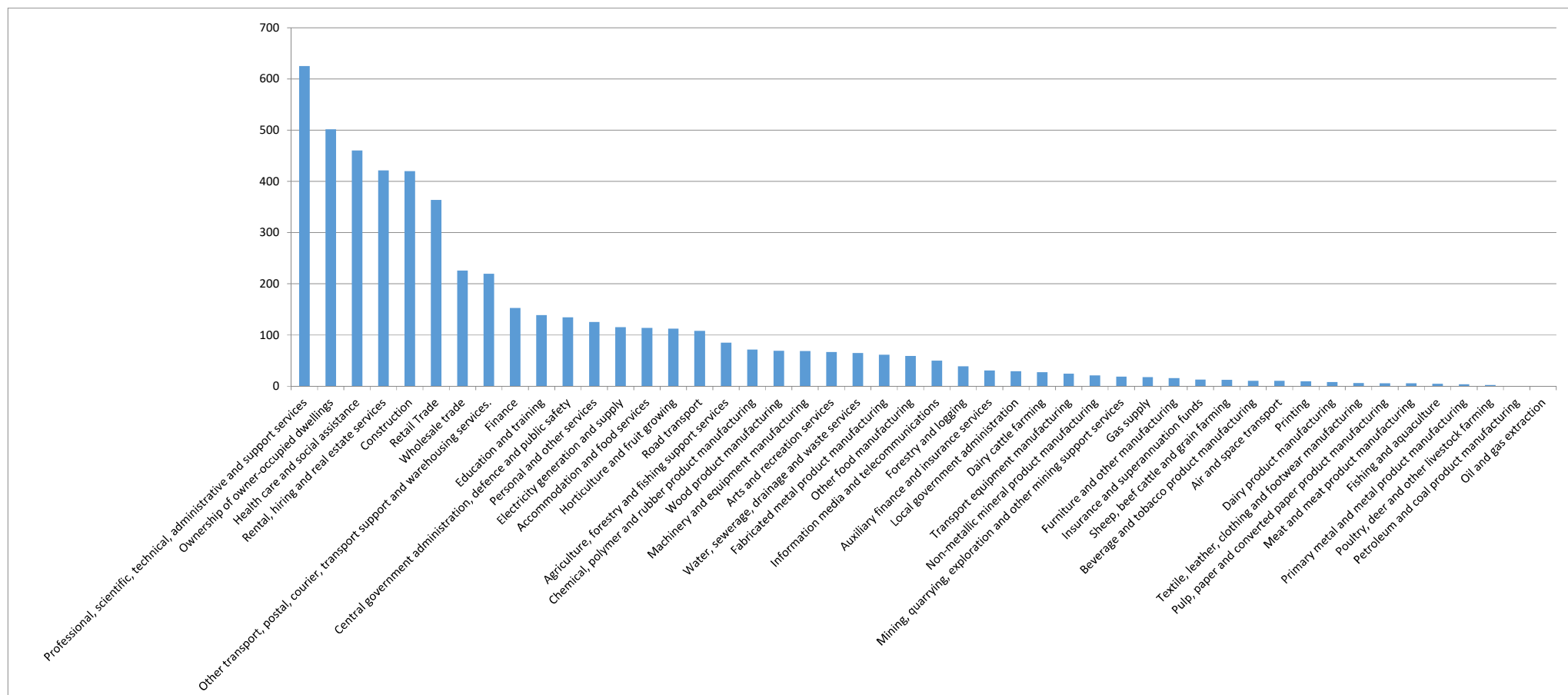


Figure 5.2 Sectors' Contribution to GDP in the Tauranga Catchment Economy, Year Ending 31 March 2016  
Units: \$<sub>2007</sub>

## Growth and Decline of the 48 Sectors in the Tauranga Economy

**Changes from 2000 to 2011.** It is difficult to measure the growth and decline of various sectors in the TCE from 2000 to 2011 due to the unavailability of a GDP time series, which is the preferred metric for measuring economic growth. That said, Part II (Chapters 6-54) provides a detailed overview of each of the sectors in the TCE and provides a variety of qualitative and quantitative information on each of these sectors, including using various metrics and indicators that measure the growth or decline of each sector over this 2000 and 2011 period. However, the only indicator that is available for all of the sectors is the 'average annual employment growth rate' – this indicator fortunately provides some indication of the growth and decline in the sectors (and can be used as a GDP proxy with appropriate caution)<sup>22 23</sup>.

**Changes from 2011 to 2016.** Over the 2011 to 2016 period, the TCE has grown by 16.55% in terms of real GDP, which is at an average compounded annual rate of 3.11% (this is significantly higher than the 14.24% growth in the New Zealand economy for the same period, at an average compounded annual rate of 2.69%). Figure 5.3 breaks down this GDP growth in the TCE into its 48 constituent sectors. Those sectors that have recorded the largest increases in real (inflation-adjusted) GDP are:

1. Construction (\$<sub>2007</sub> 121 million),
2. Professional, Scientific, Technical and Administrative (\$<sub>2007</sub> 106 million),
3. Real Estate, Rental and Hiring (\$<sub>2007</sub> 95 million),
4. Retail Trade \$62 million (\$<sub>2007</sub> 88 million),
5. Healthcare and Social Assistance (\$<sub>2007</sub> 79 million),
6. Horticultural and Fruit Growing (\$<sub>2007</sub> 69 million),
7. Wholesale Trade (\$<sub>2007</sub> 56 million),
8. Finance (\$<sub>2007</sub> 47 million),
9. Ownership of Owner-Occupied Dwellings (\$<sub>2007</sub> 41million), and
10. Central Government Administration, Defence and Public Safety (\$<sub>2007</sub> 33 million).

---

<sup>22</sup> Regression/correlation analysis (refer to Appendix C) shows that the 'employment numbers' of each sector are highly correlated ( $r=0.88$ ) with the 'GDP contributions' of each sector (refer to Appendix C for further details).

<sup>23</sup> The most important assumption with using 'employment change' as a proxy for 'GDP change' is that labour productivity remains constant or at the very least does not change much. Whilst this may be a reasonable assumption for many industries/sectors in the short-run, caution needs to be exhibited in using this proxy, particularly in industries/sectors where there has been known technological change, automation and labour shedding.

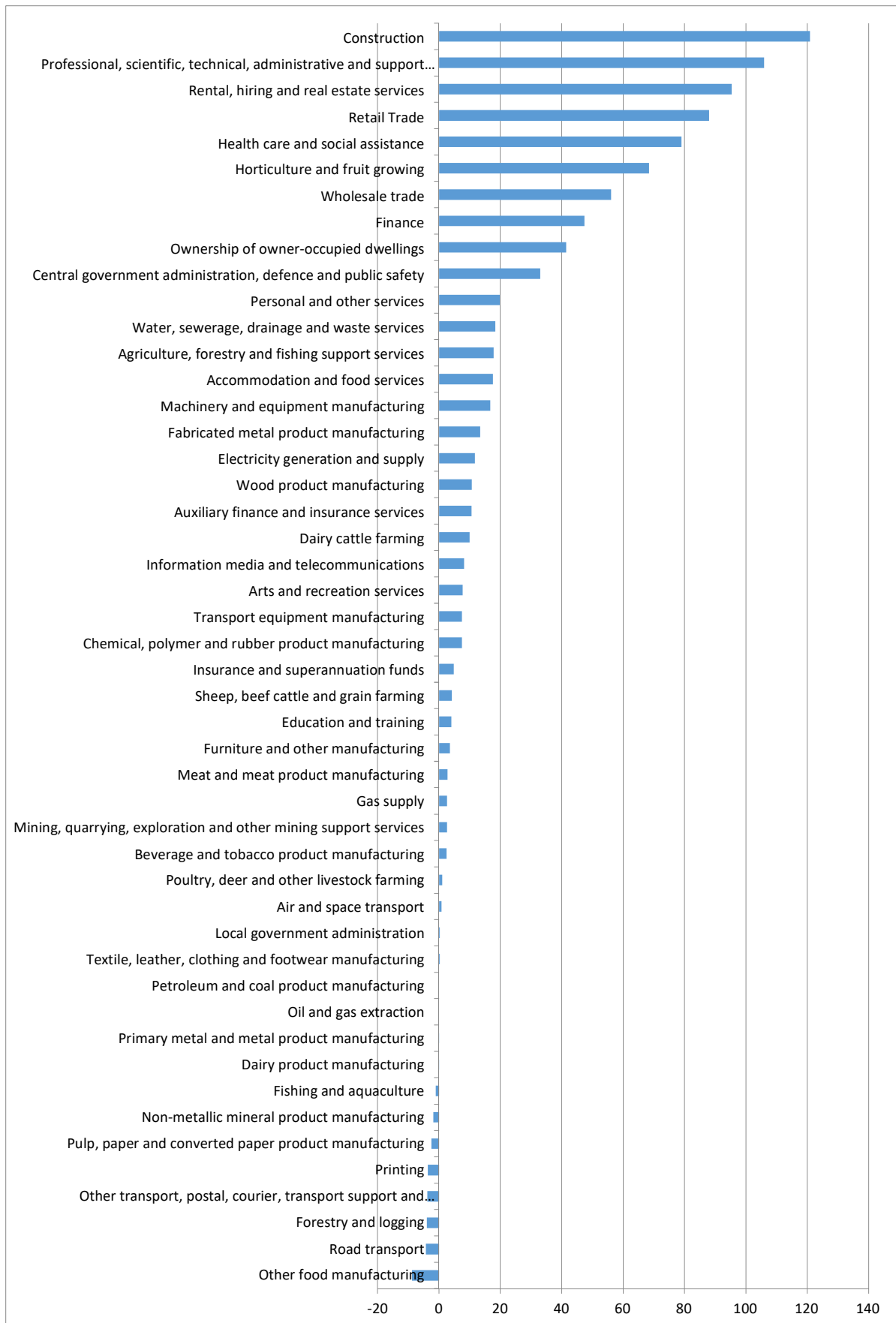


Figure 5.3 Sector's GDP Change in the Tauranga Catchment Economy, 2011 to 2016 (March Years)  
(Percentage, annual average compounded)

It is concluded from these GDP figures that much of the growth in the TCE from 2011 to 2016 is due to the ‘population increase-induced’ construction boom in the Tauranga economy and, particularly over the last 2 years, the overheated property market. This has not only directly led to an increase in the real GDP output of the Construction sector, but also in related sectors such as Real Estate, Wholesale trade, Finance and Ownership of Owner Occupied Dwellings. The significant increase in the Healthcare and Social Assistance sector is no doubt due to the growing demand for such services with an increasing proportion of retirees in Tauranga. It should also be noted that Horticulture and Fruit growing, which is traditionally a strong sector in Tauranga, also showed significant GDP growth during this period. The significant GDP increase in the Retail Trade sector is attributed to the general buoyancy in the New Zealand economy over this period, as well as perhaps some increase in the Tourism spend in this sector due to increased Tourism activity in Tauranga.

Importantly it can be reported, *the vast majority (34 out of 48) sectors in the Tauranga economy recorded positive GDP growth during this period.* Some sectors (6) recorded zero GDP growth. Even those sectors (8) that recorded negative growth, in almost all cases it was small negative GDP growth in percentage terms (because it was a large sector); or was so small negative GDP growth that it would be indistinguishable from the error associated with making these GDP estimates.

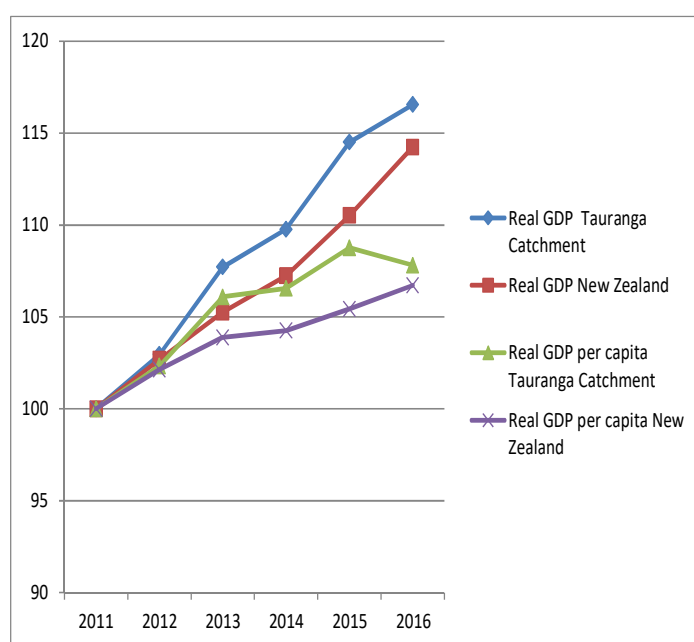


Figure 5.4 Real GDP Growth for Tauranga Economy and New Zealand (Index 100 for 2011 March Year)

From an overall perspective, it is important to recognise that much (53%) of the GDP growth in Tauranga from 2011 to 2016, and for that matter in New Zealand as a whole, can be attributed solely to population increase. When GDP per capita is calculated, then the GDP growth does not look as dramatic (refer to figure 5.4). From 2011 to 2015 the TCE’s GDP grew by 16.55%, growing at an average compounded rate of 3.11% per year, whilst the population in the Tauranga Catchment increased by an average compound rate of 1.57%.

For every year in this 2011 to 2015 period, the Tauranga Catchment Economy’s GDP growth outstripped population growth and hence GDP per capita increased. This trend was only reversed from 2015 to 2016 where the 1.79% GDP growth was not enough to make up for the 2.86% increase in population.

## Specialisation of the 48 Sectors in the Tauranga Economy

It is important to measure the performance of sectors in the TCE in terms of their relative specialisation, as this often indicates where sectors of the economy may have a long-term 'comparative' or 'competitive' advantage. In this publication, we measure the specialisation by using location quotients (LQs greater than 1 mean the sector is more specialised in Tauranga than the national situation; LQs less than 1 mean the sector is less specialised than nationally).

**Location Quotients 2010.** For consistency sake, the location quotients as reported in Part II (Chapters 6 to 54) for the year 2010 are summarised by Figure 5.5. These location quotients in Figure 5.5 show the most specialised sectors in the TCE to be:

1. *Services to Agriculture, Hunting and Trapping* (LQ=2.72), which is mainly due to agricultural services businesses being located in the TCE serving the wider Bay of plenty region.
2. *Petroleum and Industrial Chemical Manufacturing* (LQ=2.66), which is mainly due to the activities of Balance Agri-Nutrients in manufacturing fertilisers.
3. *Water and Rail Transport* (LQ=2.07), which is mainly due to the activities of the Port of Tauranga, which is arguably New Zealand's largest port.
4. *Horticultural and Fruit Growing* (LQ=1.82). Tauranga's climate and geography provide very good conditions for growing kiwifruit, mandarins, oranges, avocado and a variety of other commercial horticultural crops.
5. *Electricity Generation and Supply* (LQ=1.80). This is almost the entirely the activity of Trustpower, which has its Head Office located in Tauranga. Trustpower is New Zealand's fourth largest retailer of electricity and the fifth largest generator of electricity.

It is also worthwhile to note that some of the other sectors that have location quotients greater than 1 (specialisation above the national average) include sectors related to activities of the Port of Tauranga (Road Transport, Fishing), and sectors related to above-average demand for residential dwellings (Real Estate, Construction).

**Location Quotients 2016.** Direct comparison of the location quotients between 2010 and 2016 are not possible due to the different version of ANZSIC used by Statistics New Zealand between the time periods. Furthermore, the use of a new ANZSIC classification system used in 2016, in some cases, leads to a loss of resolution in the data – for example, the specialisation in water transport (due Port of Tauranga activity) is no longer evident in the 2016 data because the *Water and Rail Transport* sector has been aggregated into a broader sector. Nevertheless, the overall pattern of specialisation of particular sectors remains similar in 2016, compared with 2010, as does the ranking of the most specialised sectors (Refer to Figure 5.6), as follows:

1. *Agriculture, Forestry and Fishing Support Services* (LQ=2.87), as with its equivalent sector in 2010, remains the most specialised sector in Tauranga.
2. *Electricity Generation and Supply* (LQ=2.85) moves to the 2<sup>nd</sup> most specialised, up from 3<sup>rd</sup> in 2010.
3. *Horticultural and Fruit Growing* (LQ=1.57) also has a high specialisation in Tauranga with its relative ranking increasing from 4<sup>th</sup> to 2<sup>nd</sup> in 2016.
4. *Petroleum and Coal Manufacturing*, as with its equivalent sector in 2010, has a high specialisation in Tauranga (LQ=1.46), although its ranking drops from 2<sup>nd</sup> to 4<sup>th</sup>.

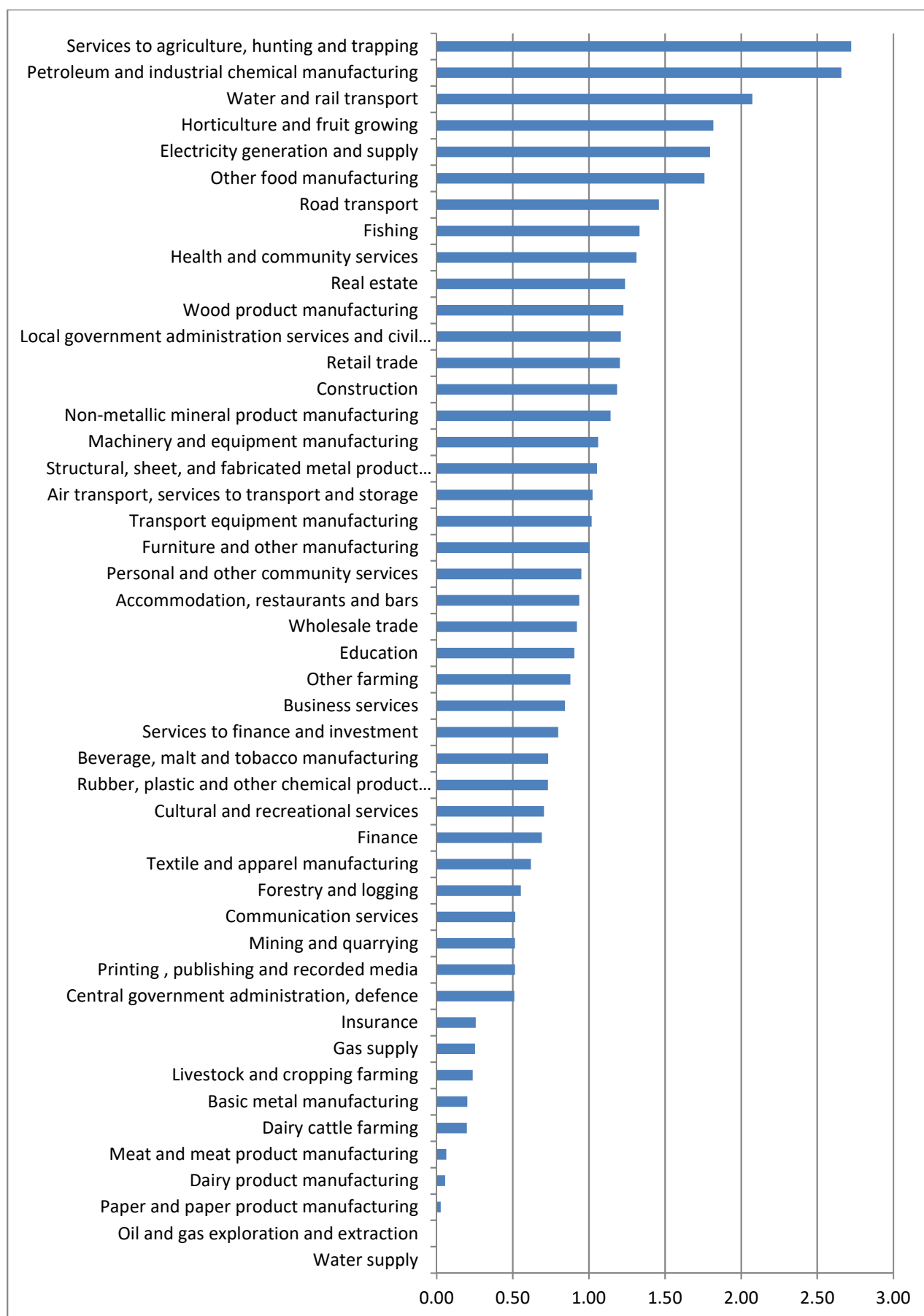


Figure 5.5 Location Quotients (Degree of Specialisation) of Sectors in Tauranga Catchment Economy, 2010

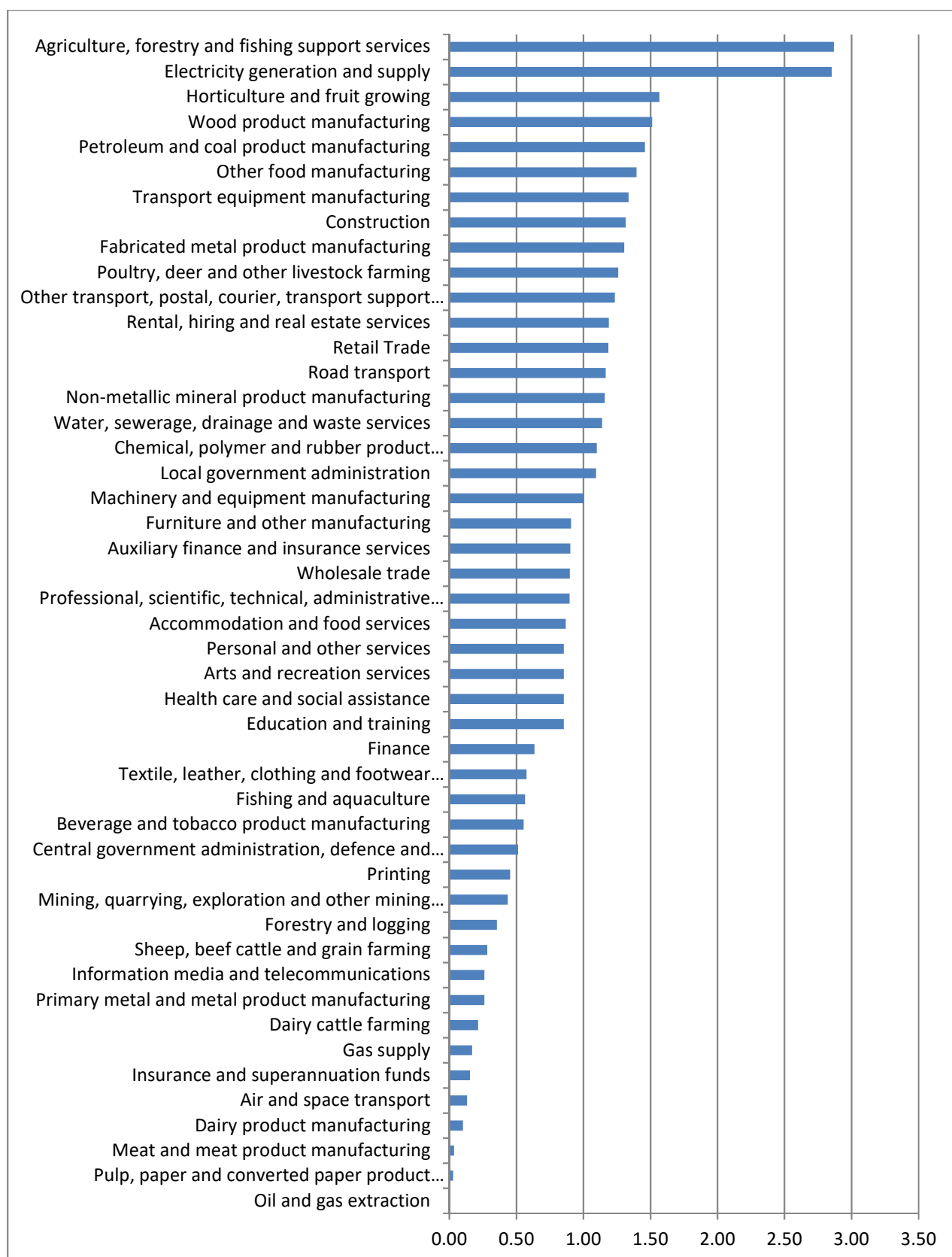


Figure 5.6 Location Quotients (Degree of Specialisation) of Sectors in the Tauranga Catchment Economy, 2016

## Summary of the Performance of Sectors in the Tauranga Economy

Over the 2011 to 2016 (March-years) period, the TCE's real GDP has grown by 16.55%<sup>24</sup>. This is significantly higher than the growth rate of the real GDP of New Zealand over the same period, of 14.24%. Much of this growth in the Tauranga economy was driven by population growth stimulated by inward migration into the region. The resulting demand for new dwellings has led to particularly strong growth in sectors such as construction, real estate and finance.

The overall performance of sectors in the Tauranga Catchment Economy<sup>25, 26</sup> can be evaluated by plotting four quadrants (refer to Figure 5.7):

1. Quadrant I is referred to as 'Horses' (large GDP, fast growth sectors)
2. Quadrant II is referred to as 'Elephants' (large GDP, slow or no growth sectors)
3. Quadrant III is referred to as 'Snails' (small GDP, slow or no growth sectors)
4. Quadrant IV is referred to as 'Cheetahs' (small GDP, fast growth sectors)

**Horses (Large GDP, Fast Growth).** These sectors, by definition, are larger than the average in terms of GDP and over the last five years have grown faster than the average. These nine sectors alone generate most (63%) of the GDP of the Tauranga economy as well as indirectly creating demand for other sector products in Tauranga. Specifically, these sectors include (with the GDP<sup>27</sup> in parentheses): *Professional, Scientific, Technical, Administrative and Support Services* (\$<sub>2007</sub> 625 million); *Health Care and Social Assistance* (\$<sub>2007</sub> 461 million); *Rental, Hiring and Real Estate Services* (\$<sub>2007</sub> 422 million); *Construction* (\$<sub>2007</sub> 420 million); *Retail Trade* (\$<sub>2007</sub> 364 million); *Wholesale Trade* (\$<sub>2007</sub> 226 million); *Central Government* (\$<sub>2007</sub> 135 million); *Finance* (\$<sub>2007</sub> 153 million); and *Horticulture* (\$<sub>2007</sub> 112 million).

The *Tourism* sector could arguably also be included in this 'large GDP, Fast Growth' quadrant, with an estimated GDP of \$<sub>2007</sub> 270 million (refer to Chapter 54), and by employing the assumption that the growth rate (2011 to 2016) of tourism nationally 4.62% pa<sup>28</sup> applies also to the TCE.

It should also be noted that within this quadrant, the *Construction* sector (LQ=1.32)<sup>29</sup>, *Healthcare and Social Assistance* sector (LQ=1.30), and *Rental, Hiring and Real Estate Services* sector (LQ=1.19) have relatively high location quotients, which can be partly attributed to the high population growth and inward migration, particularly of more elderly people manifesting in the relatively high location quotient for the healthcare industry. The *Horticulture and Fruit Growing* sector not only records the highest (real) GDP rate of growth (20.72%) over the 2011-2016 period, but also has the highest location quotient (LQ=1.57) in this quadrant.

---

<sup>24</sup> This is GDP growth in 'real' terms – that is, in inflation-adjusted terms.

<sup>25</sup> Sectors above the average sector GDP of \$99 million are considered to have a 'large' GDP, and those below the average are considered to have a 'small' GDP.

<sup>26</sup> Sectors above the average (mean) sector GDP growth rate of 3.77% pa (from 2011 to 2016) are considered to be 'fast' growing, and those below this average are considered to be 'slow' growing. The 2011 to 2016 growth/decline percentage for each individual sector is calculated on the basis of an average compounded growth rate of that sector.

<sup>27</sup> The GDP data is measured in \$<sub>2007</sub>.

<sup>28</sup> The % increase in New Zealand's Tourism GDP contribution was calculated using 'direct value added' data for 2011 and 2016 (Table 1) from the Tourism Satellite Accounts, and these data were adjusted for inflation.

<sup>29</sup> The location quotients referred to in this subsection (Summary of the Performance of Sectors in the Tauranga Economy) are for the March ending year 2016, based on MECs.

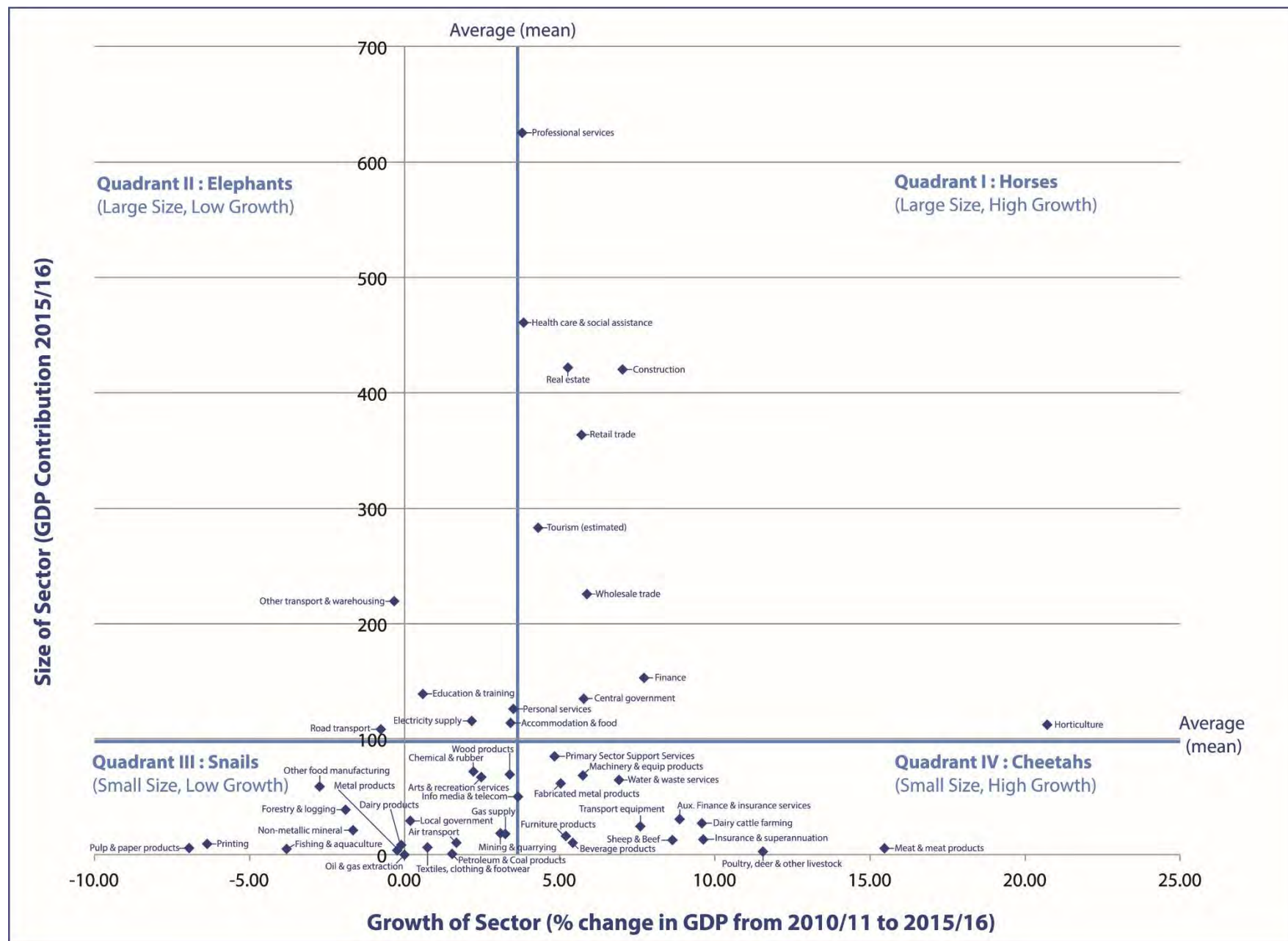


Figure 5.7 Performance of Sectors in the Tauranga Catchment Economy: Size in 2016 (GDP) versus Growth (% GDP Change 2011 to 2016)

**Elephants (Large GDP, Slow or No Growth).** The sectors in this quadrant, although having larger than average GDP, even their largest sector – *Other Transport, Postal, Courier, Transport Support and Warehousing Services* (\$220 million) – only ranks 7<sup>th</sup> overall, with six other sectors in quadrant I ('Horses') having higher sector GDPs. All of the others sectors in this quadrant have GDP contributions between a narrow band of \$<sub>2007</sub> 108 million to \$<sub>2007</sub> 139 million: *Education and Training* (\$<sub>2007</sub> 139 million); *Personal and Other Services* (\$<sub>2007</sub> 126 million); *Electricity Generation and Supply* (\$<sub>2007</sub> 115 million); *Accommodation and Food Services* (\$<sub>2007</sub> 114 million); and *Road Transport* (\$<sub>2007</sub> 108 million). Given this considerable already existing gap between these Quadrant II sectors (Elephants) and the six largest Quadrant I sectors (Horses), combined with slow growth rate of these Quadrant II sectors (Elephants), there is little prospect in the foreseeable future of this gap in GDPs between the two quadrants being reduced. Collectively in 2016, sectors in Quadrant II (Elephants) made up 18% of the GDP in the TCE, dwarfed by 63% of the GDP produced by in the TCE in Quadrant I sectors (Horses) sectors.

The location quotients for the sectors indicate some areas of specialisation (and competitive advantage) in the TCE that may provide better prospects for future growth. First, two sectors that have a high level of association with the Port of Tauranga have above average location quotients: *Other Transport, Postal, Courier, Transport Support and Warehousing Services* (LQ=1.24) and *Road Transport* (LQ=1.17) for 2016. Furthermore, it should be noted that in the older ANZSIC96 classification, the *Water and Rail Transport* sector revealed an even higher location quotient (LQ=2.07). Second, the *Electricity Generation and Supply* sector (LQ=2.85), has an even higher location quotient (and 2<sup>nd</sup> highest of the ANZSIC sectors) due to the presence of Trustpower's Head Office in Tauranga.

**Snails (Small GDP, Slow Growth).** These Quadrant III sectors are not performing as well as other sectors in the TCE. These small GDP and low/negative growth sectors collectively make up 10% of the Tauranga economy. Most sectors in this quadrant, however, exhibit steady but slow growth relative to other sectors in the Tauranga economy. These sectors include *Information Media and Telecommunications* (3.65%); *Wood Product Manufacturing* (3.39%); *Arts and Recreation Services* (2.28%); *Chemical, Polymer and Rubber Product Manufacturing* (2.21%); and *Local Government Administration* (0.19%). Of more concern are those sectors that have recorded negative (average annual) growth rates over the period 2011 to 2016: *Non-Metallic Mineral Product Manufacturing* (-1.66%); *Forestry and Logging* (-1.91%); and *Other Food Manufacturing* (-2.74%)<sup>30</sup>.

Two sectors that show good prospects for growth and in the foreseeable future could move into Quadrant II or Quadrant 1 are: *Wood Product Manufacturing* (LQ=1.51) and *Chemical, Polymer and Rubber Product Manufacturing* (LQ=1.51). The former sector consists of a range of wood product manufacturers serving both export and domestic markets with strong linkages to the construction sector; and the latter sector mainly represents the activities of Balance-Agri

---

<sup>30</sup> It is difficult to robustly interpret % (increase/decrease) of GDP in sectors that have small base year GDP. For this reason, the following sectors have not been included in the commentary of Quadrant III (Snails) because of their small size: *Gas Supply; Mining, Quarrying, Exploration and Other Mining Support Services; Textile, Leather, Clothing and Footwear Manufacturing; Meat and Meat Product Manufacturing; Air and Space Transport; Primary Metal and Metal Product Manufacturing; Fishing and Aquaculture; Printing, Pulp, Paper and Converted Paper Product Manufacturing.*

Chemicals as well as Fulton Hogan, both of which have significant manufacturing plants in the TCE.

**Cheetahs (Small GDP, Fast Growth).** These sectors in the TCE, although small collectively only representing 9% of the TCE's GDP, are by definition growing faster than average and some of them much faster than average; therefore, they represent significant prospects for accelerated growth in the Tauranga economy. Most notably<sup>31</sup> sectors that fall into this category are: *Dairy Cattle Farming* (9.58% average annual growth); *Auxiliary Finance and Insurance Services* (8.86%); *Transport Equipment Manufacturing* (7.59%); *Water, Sewerage, Drainage and Waste Services* (6.91%); *Machinery and Equipment Manufacturing* (5.75%); *Fabricated Metal Product Manufacturing* (5.03%); and *Agriculture, Forestry and Fishing Support Services* (4.83%).

There are a cluster of sectors in this quadrant related to light engineering and construction activities, such as fabricated metal products and customised boatbuilding, that represent emerging niche markets for Tauranga businesses. These activities are reflected in the relatively high location quotients for the following sectors: *Fabricated Metal Product Manufacturing* (LQ=1.31) and *Transport Equipment Manufacturing* (LQ=1.34), with *Machinery and Equipment Manufacturing* (LQ=1.00) being at the national average.

---

<sup>31</sup> It is important to note that some of the sectors in Quadrant IV (Cheetahs) record misleadingly high annual GDP growth rates – this is because they have relatively small 'base year' GDP, which can produce high percentage changes with a shift of only, say, \$1 million. For this reason, the following sectors have been excluded from the commentary: *Meat and Meat Product Manufacturing*; *Poultry, Deer and Other Livestock Farming*; *Insurance*; *Sheep and Beef Farming*; and *Beverage and Tobacco Product Manufacturing*.



# Part II

## Detailed Sector-by-Sector Analysis



## Analytical and Indicators Template

Part II of the report provides a detailed descriptive and analytical overview of the 49 individual sectors of the Tauranga Catchment Economy (TCE). The first 48 chapters focus on sectors in the TCE based on the ANZSIC96 classification, followed by a final chapter focussing on the *Tourism* sector.

For each sector<sup>32</sup>, the following information is systematically collated:

1. List of ANZSIC 96 *Economic Activities* covered by each sector;
2. List of *Main Commodities Produced* by each sector;
3. *Economic Overview* of the sector's structure, drivers, markets and spatial distribution;
4. *Sector Trends* from the year 2000 to 2012;
5. *Future Trends* in each sector, from the viewpoint of 2012;
6. *2016 Update* of the 'Key Economic Indicators'.

Key economic indicators for each sector are tabulated in a blue-bordered box at the top right corner at the start of each chapter. These economic indicators<sup>33</sup> are reported for the year 2010, except for 'Average Growth Rate (%)', which covers the covers the period 2000 to 2011:

1. *Employment*: Number of people employed in each sector, measured in terms of Modified Employment Counts (MECs). Refer to the Glossary for a full definition of MECs.
2. *Employment Rank*: Rank of each sector from the largest (1<sup>st</sup>) employment sector to the smallest employment sector (46<sup>th</sup>).
3. *Average Growth Rate*: Percentage (%) growth in a sector's employment from 2000 to 2011. This indicator can be used as a proxy for GDP growth.<sup>34</sup>
4. *GDP*: Gross Domestic Product of the sector, for the year ending March 2010, measured in \$<sub>2010</sub> million.
5. *GDP Rank*: Rank of each sector in terms of its contribution to Gross Domestic Product of the Tauranga Catchment Economy, for the year ending March 2010, from the highest contribution (1<sup>st</sup>) through to the lowest contribution (47<sup>th</sup>).
6. *Interregional Exports*: Exports from this sector *to other regions* in New Zealand, for the year ending March 2010, measured in \$<sub>2010</sub> million.
7. *International Exports*: Exports from this sector *to other countries*, for the year ending March 2010, measured in \$<sub>2010</sub> million.
8. *Location Quotient*: A location quotient is an indicator of the degree of specialisation of a given sector in a given region. A location quotient greater than one (LQ>1) indicates that the region has a specialisation in that sector. A location quotient less than one (LQ<1)

---

<sup>32</sup> Notes:

No data is captured for the "Oil and Gas Exploration and Extraction" sector (Chapter 14) and it is therefore excluded from all rankings.

The only data captured for the "Ownership of Owner-Occupied Dwellings" sector (Chapter 46) is its contribution to GDP, GDP Rank and Value-Added Multiplier.

Thus, only 46 of the 48 ANZSIC sectors are ranked for employment, exports, location quotients and labour productivity, (this excludes the aforementioned two sectors); and 47 of the 48 of the ANZSIC sectors are ranked for GDP (this includes the "Ownership of Owner-Occupied Dwellings" sector).

<sup>33</sup> Appendix D defines these economic indicators more rigorously and specifies their measurement units.

<sup>34</sup> Appendix C provides a discussion of the use of the 'employment growth' indicator as a proxy for 'GDP growth', including cautions that should be employed when doing so.

indicates that a region does not have a comparative strength or specialisation in that particular sector.

9. *Labour Productivity*: This is a measure of how productive labour is in a given sector. It measures the 'value added' (\$<sub>2010</sub> 000) produced per employee.
10. *Value Added Multiplier*: When a sector increases its production, it not only generates 'value added' in its own sector, but it can also indirectly stimulate production in other sectors by requiring their inputs, thereby generating 'value added' in these other sectors. The higher the 'value added multiplier', the greater the amount of 'value added' created in other sectors in the Tauranga Catchment Economy. In this publication, we use a *Type 2 Value Added Multiplier* that, as well as taking account of the 'flow-on' effects of purchasing inputs from other sectors (indirect effects), also takes account of the stimulation from spending wages and salaries (induced effects) in the Tauranga Catchment Economy. Value Added Multipliers and other Multipliers can be important in regional economic analysis, as they show which sectors have a broader impact on the regional economy than just their direct impact – refer to Appendix F for a summary of Type 2 Value Added Multipliers of sectors in the Tauranga Economy.

Most of these economic indicators (but not all) are updated to the year 2016, using the latest available data at the time of this publication being written. These 2016 updated economic indicators for each of the sectors appear in a blue-bordered box at the end of each chapter. The reporting dates that apply to this '2016 update' are detailed in Appendix E.

## 6. Horticulture and Fruit Growing

### Description

ANZSIC96 Codes covered:

- A0111-Plant Nurseries
- A0112-Cut Flower and Flower Seed Growing
- A0113-Vegetable Growing
- A0114-Grape Growing
- A0115-Apple and Pear Growing
- A0116-Stone Fruit Growing
- A0117-Kiwi Fruit Growing
- A0119-Berry Fruit Growing
- A0119-Citrus Growing
- A0119-Other Fruit Growing

Employment: 1,707  
Employment Rank: 10<sup>th</sup>  
Average Growth Rate: -4.07%

GDP: \$36.7m  
GDP Rank: 27<sup>th</sup>  
Interregional Exports: \$1.8m  
International Exports: \$56m

Location Quotient: 1.82  
Labour Productivity: 21.02  
Value-Added Multiplier: 4.34

*Main Commodities Supplied in TCE:*

- Kiwifruit, avocados and citrus fruits
- Cut flowers and flower seed
- Seedlings, turf, bulbs

### Economic Overview

Horticulture and Fruit Growing is an important sector for the TCE as well as for the Bay of Plenty region. Both areas have climate and geographical characteristics suitable for horticulture and fruit growing. According to the Western Bay of Plenty District Council (2011), the combined Western Bay of Plenty District and Tauranga City area is three times more reliant on horticulture and agriculture for its economic output than New Zealand as a whole. As such, the sector has a higher than the New Zealand average sector concentration with a LQ of 1.82. In the TCE, the sector has a total gross output of \$113 million and contributed \$37 million towards GDP in 2010. The sector provides 1,707 jobs to the area but has a relatively low labour productivity at \$21,020 per worker. Nearly half of the sector's outputs, mainly avocado, kiwifruit, mandarins and oranges, are exported where \$56 million and \$1.8 million worth of outputs were exported overseas and to other regions in New Zealand, respectively.

A large share of New Zealand's horticultural production is located in the Western Bay of Plenty area. In particular, kiwifruit is the most important horticultural crop produced in the TCE with a large number of kiwifruit orchards situated in Katikati, and scattered around the catchment. A high proportion of the TCE is concentrated on kiwifruit production with a LQ of 9.68.

Similarly, avocado is also an important crop produced in the TCE with the majority of the total national crop being produced in the combined Western Bay of Plenty District and Tauranga City area (Smart Economy Strategy, 2007), with avocado production having a LQ of 6.77. For example, Motuhua Island is predominantly avocado orchards and is expected to be an

increasing source of the fruit (Kuiper, The Orchardist, March 2010). Another predominant fruit produced in the TCE is citrus, with a relatively high LQ of 2.54.

## Sector Trends

As seen in Table 6.1, hectares of land used for kiwifruit and avocado production in the Bay of Plenty region has increased substantially from 2002 to 2009. Especially, land used for kiwifruit production has increased by 1,730 hectares over the period. This accounts for 84% of the increased land area in total New Zealand kiwifruit production. In 2009, the Bay of Plenty region accounted for 77% of total kiwifruit production land area in New Zealand and 52% of total avocado production land area.

Table 6.1 Major Crops Planted in the BOP and NZ as at 2002 and 2009

Crop Type (ha)	Bay of Plenty 2002	Bay of Plenty 2009	BOP % Change	New Zealand 2002	New Zealand 2009	NZ % Change
Kiwifruit	8,490	10,220	20.4%	11,840	13,290	12.2%
Avocados	1,610	2,160	34.2%	3,110	4,120	32.5%

Source: Statistics New Zealand (2010)

Land used for kiwifruit production has fluctuated over the past 20 years. In 2009, the Bay of Plenty region had 8,130 hectares of green kiwifruit production land and 1,900 hectares of gold kiwifruit production land (Agricultural Production Survey, 2011). In 2011, land area used for green kiwifruit production decreased to 7,910 hectares while land area used for the gold kiwifruit production increased to 2,170 hectares.

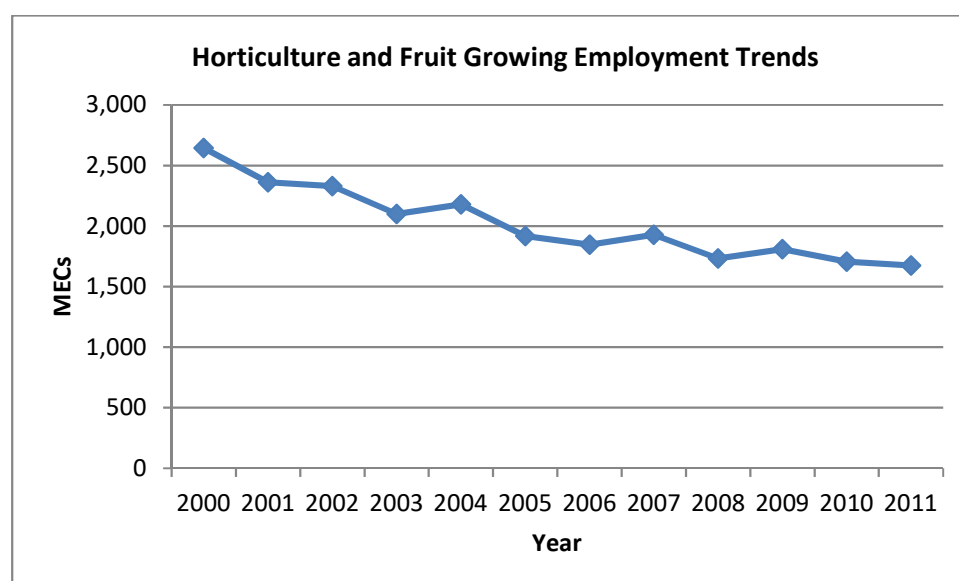


Figure 6.1 Horticulture and Fruit Growing Employment Trends  
Source: Market Economics Ltd. (2012)

Employment in the sector has been declining steadily since 2000. By 2011, the employment dropped 36.7% from the 2000 level to 1,675 MECs (see Figure 6.1). Kiwifruit, citrus and cut flower orchards have all undergone decreases in employment over the last 15 years. However, a significant portion of the trend is attributed to increases in productivity, where automation of processes reduces labour requirements. In contrast, avocado orchards and plant nurseries have shown a steady level of employment; largely due to increases in production significant enough to offset any negative employment effects of increases in productivity. However, employment in Other Horticulture and Fruit Growing decreased significantly. By 2011, the vegetable growing sector had 60 MECs, while the stone fruit, apple, pear and grape growing sector had nearly zero employment.

An important event for the sector was the outbreak of the PSA<sup>35</sup> bacterial disease in November 2010. The outbreak caused serious damage to the industry, particularly to gold kiwifruit growers in the combined Western Bay of Plenty District and Tauranga City area. Of the infected orchards, 66 were in this area – 33 in Katikati, 31 in Tauranga and two in Te Puke (Proverbs, 2012). Subsequently, there was a sharp decrease in sales and the Horticultural sector as a whole experienced a significant drop in orchard value. Especially in Katikati, by 2011 the value of gold kiwifruit orchards had declined by around 35% compared to 2008, while orchard values in the combined Western Bay of Plenty District and Tauranga City area declined by an average of 25% (Western Bay of Plenty District Council, 2011).

### Future Trends

As at 2016, there are no definite cures for the PSA bacterial disease. According to Zespri, making a PSA-resistant kiwifruit is central to the future of the industry. Also, kiwifruit growers in Katikati have been grafting new varieties of kiwifruit to combat PSA disease (Tahau, 2012). Moreover, government assistance packages have been made available to kiwifruit growers affected by the bacteria.

In a positive side, Free Trade Agreements (FTA) between New Zealand and export destination countries will benefit horticulture and fruit producers in the TCE. According to the report by the Horticulture Export Authority (2012), tariffs imposed on 5,400 commercial growers in New Zealand by other countries cost each grower NZ\$44,000 on average. The report also found horticultural product exporters paid an estimated total of NZ\$241 million in tariffs to importing countries, an increase of 2.5% from the 2010 value of NZ\$235 million, while export earnings increased by 6% at the same time. With FTAs, horticultural profit and output are likely to grow in the future.

---

<sup>35</sup> *Pseudomonas syringae* pv. *actinidiae*

## Update to 2016

This statistical update applies for the “Horticulture and Fruit Growing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 1,539  
Employment Rank: 11<sup>th</sup>

GDP: \$112m  
GDP Rank: 14<sup>th</sup>

% GDP Growth (2011-2016): 20.72% pa  
% GDP Growth Rank: 1<sup>st</sup>

Location Quotient: 1.57

## References

Department of Conservation. (2009). Ecosystem Services of Protected areas and Ecological Corridors within the Kaimai-Tauranga Catchments. *Technical Report Series 2*. Rotorua, New Zealand.

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

New Zealand Horticulture Export Authority. (2012). *Horticulture Pays More Tariffs in Global Markets*. [Media release]. Retrieved from [http://www.hortnz.co.nz/users/Image/Downloads/Media%20Releases/Horticulture%20Pays%20More%20Tariffs%20in%20Global%20Markets\\_copy\\_2.pdf](http://www.hortnz.co.nz/users/Image/Downloads/Media%20Releases/Horticulture%20Pays%20More%20Tariffs%20in%20Global%20Markets_copy_2.pdf)

Priority One. (2007). *Smart Economy Strategy* (pp. 16). Retrieved from [www.priorityone.co.nz](http://www.priorityone.co.nz)

Proverbs, J. (2012, Nov 24). PSA disease hits 108 more orchards. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/psa-disease-hits-108-more-orchards/1634942/>

Statistics New Zealand. (2010). *Agricultural Production Statistics: June 2009*. Wellington, New Zealand. Retrieved from [http://www.stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/agriculture-horticulture-forestry/agriculturalproduction\\_hotpjun09prov.aspx](http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry/agriculturalproduction_hotpjun09prov.aspx)

Tahau, A. (2012, Sept 16). Kiwifruit orchardists vow to battle PSA. *New Zealand Herald*. Retrieved from [http://www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=10834421](http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10834421)

Western Bay of Plenty District Council. (2011). *Property Values Fall Across Bay of Plenty*. Retrieved from <http://www.westernbay.govt.nz/Council/News/Media/Property-values-fall-across-Western-Bay/>

## 7. Livestock and Cropping Farming

### Description

ANZSIC Codes covered:

- A0121-Grain Growing
- A0122-Grain-Sheep and Grain-Beef Cattle Farming
- A0123-Sheep-Beef Cattle Farming
- A0124-Sheep Farming
- A0125-Beef Cattle Farming
- A0159-Mixed Livestock

Main Commodity Supplied in TCE:

- Beef Cattle Farming

Employment: 283  
Employment Rank: 30<sup>th</sup>  
Average Growth Rate: -3.78%

GDP: \$8.1m  
GDP Rank: 40<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$9.4m

Location Quotient: 0.24  
Labour Productivity: 27.86  
Value-Added Multiplier: 5.23

### Economic Overview

Horticulture The Livestock and Cropping Farming sector occupies a small part of the TCE where the share of the sector is small compared to the national economy with a LQ of 0.24. In 2010, the sector employed 283 MECs, produced \$32 million of total gross output, and contributed \$8.1 million towards GDP. The main activities within Livestock and Cropping Farming are Beef Cattle Farming (56.5% of the sector employment), Sheep-Beef Cattle Farming (17.7% of the sector employment), and Sheep Farming (16.3% of the sector employment). The sector is comprised of small privately-owned farms and no major companies.

### Sector Trends

From 2000, employment in the Livestock and Cropping Farming sector remained relatively steady until 2006 where average annual employment was around 450 MECs. From 2006 to 2009, the employment in the sector decreased around 35%. From 2009 to 2011, employment remained steady around an average annual employment of 300 MECs (see Figure 7.1).

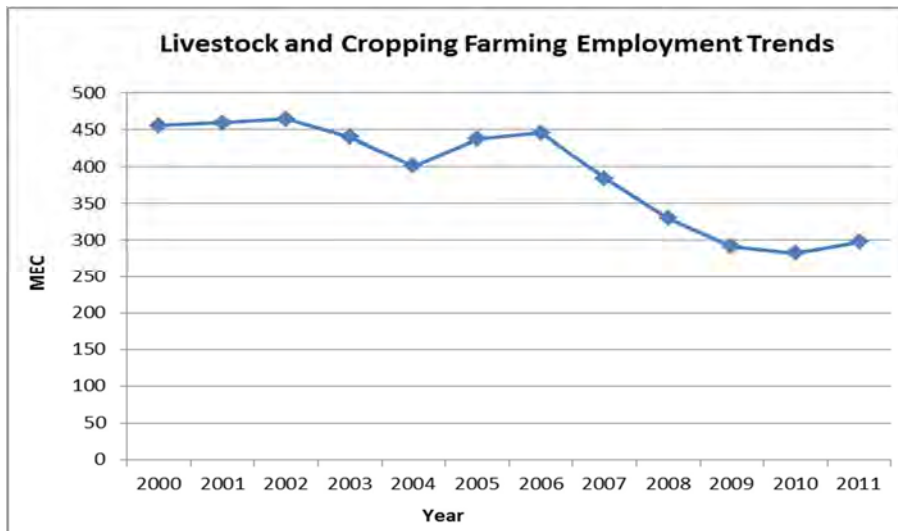


Figure 7.1 Livestock and Cropping Farming Employment Trends  
Source: Market Economics Ltd. (2012)

### Future Trends

Employment in the Livestock and Cropping Farming sector is unlikely to recover from the decrease in employment. In a recent quarterly Rabobank rural confidence survey (2012), sheep and beef farmers were mostly pessimistic about future conditions of the sector with more than half expecting their farm business performance to worsen and only 10% expecting an improvement in 2013. In line with the survey, the sector lost around 60 additional employment in MECs from 2012 to 2014. As at 2016, continued low global commodities prices puts pressure on profitability of the sector and is unlikely to improve anytime soon.

### Update to 2016

This statistical update applies for the “Sheep, Beef Cattle and Fruit Growing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 348  
Employment Rank: 26<sup>th</sup>

GDP: \$12m  
GDP Rank: 35<sup>th</sup>

% GDP Growth (2011-2016): 8.62% pa  
% GDP Growth Rank: 7<sup>th</sup>

Location Quotient: 0.28

## References

Dairy NZ. (2008). *New Zealand Dairy Statistics 2007-08*. Hamilton, New Zealand. Retrieved from [http://www.lic.co.nz/pdf/dairy\\_stats/DAIRY\\_STATISTICS\\_08-09.pdf](http://www.lic.co.nz/pdf/dairy_stats/DAIRY_STATISTICS_08-09.pdf)

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Rabobank. (2012, Dec 14). *NZ Farmer Confidence Stages Mild Recovery Yet Remains in Negative Territory [Press Release]*. Retrieved from <http://www.rabobank.co.nz/news-and-events/media-releases/2012-news-archive/pages/media-release-20121214.aspx>

## 8. Dairy Cattle Farming

### Description

ANZSIC Codes Covered:

- A0130-Dairy Cattle Farming

Main Commodity Supplied in TCE:

- Raw milk

Employment: 221  
Employment Rank: 35<sup>th</sup>  
Average Growth Rate: -5.63%

GDP: \$16.4m  
GDP Rank: 34<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$6.4m

Location Quotient: 0.2  
Labour Productivity: 72.17  
Value-Added Multiplier: 3.21

### Economic Overview

With a LQ of 0.2, the Dairy Cattle Farming sector is a smaller part of the TCE, compared to the New Zealand economy. In 2010, the sector employed 221 MECs and contributed \$16.4 million towards GDP. In Table 8.1, it is shown that the majority of the sector's activity occurs in the rural Western Bay of Plenty District with 67,512 cows compare to 4,039 cows in the Tauranga City District in 2010. The number of cows in the two districts accounts for only 1.6% of the total for New Zealand.

Table 8.1 Dairy Cattle Statistics by District

2010 Figures	Total Herds	No. of owner- operators	No. of share- milkers	Total Cows	Total effective ha	Av. herd size	Av. effective per ha	Av. cows per ha
WBOP	200	136	64	67,512	23,693	338	118	2.85
Tauranga	14	9	5	4,039	2,060	289	147	1.96
NZ	11,735	7,677	4,058	4,528,736	1,638,706	386	140	2.76

Source: Dairy NZ (2011)

### Sector Trends

Historical Dairy Cattle Farming employment from 2000 to 2011 is illustrated in Figure 8.1. The number of people employed in the sector fell dramatically in the eight year period from 2000, dropping 50.9% from 434 people to just 213 in 2008. Following high dairy prices from 2008 to 2011, the employment stabilised around 230 MECs.

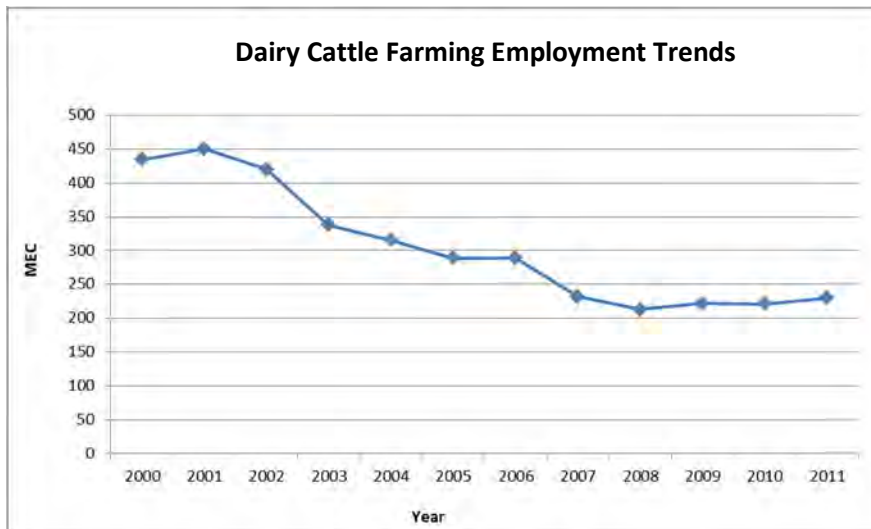


Figure 8.1 Dairy Cattle Farming Employment Trends  
Source: Market Economics Ltd. (2012)

### Future Trends

As at 2016, the dairy industry faced a major headwind in terms of low dairy product prices. Historically, high dairy product prices over recent prior years had caused a strong global supply increase, which subsequently caused an imbalance in demand and supply. It is uncertain how long the dairy price will remain depressed. However, even if the prices recover in the future the sector is likely to diminish as the long run trend of the TCE is moving away from sheep, beef and dairy farming to horticulture and fruit farming.

### Update to 2016

This statistical update applies for “Dairy Cattle Farming” (ANZSIC 2006), which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above analysis.

Employment: 259  
Employment Rank: 30<sup>th</sup>

GDP: \$27m  
GDP Rank: 28<sup>th</sup>

% GDP Growth (2011-2016): 9.58% pa  
% GDP Growth Rank: 5<sup>th</sup>

Location Quotient: 0.22

### References

Dairy NZ and LIC. (2011). *New Zealand Dairy Statistics 2010-2011*. Retrieved from <http://www.lic.co.nz/pdf/DAIRY%20STATISTICS%2010-11-WEB.pdf>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

## 9. Other Farming

### Description

*ANZSIC Codes covered:*

- A0141-Poultry Farming (Meat)
- A0142-Poultry Farming (Eggs)
- A0151-Pig Farming
- A0152-Horse Farming
- A0153-Deer Farming
- A0159-Beekeeping
- A0159-Livestock Farming
- A0169-Crop and Plant Growing
- A0169-Cultivated Mushroom Growing
- A0169-Tobacco and Hops Growing

Employment: 245  
Employment Rank: 33<sup>rd</sup>  
Average Growth Rate: -2.44%

GDP: \$7.2m  
GDP Rank: 41<sup>st</sup>  
Interregional Exports: \$0m  
International Exports: \$9.6m

Location Quotient: 0.88  
Labour Productivity: 28.21  
Value-Added Multiplier: 5.06

*Main Commodities Supplied in TCE:*

- Beekeeping
- Deer Farming

### Economic Overview

Similar to the previous two primary sectors, other farming activities are underrepresented when compared nationally, with a lower proportion of people employed in this sector than the New Zealand average as shown with a LQ of 0.88. In 2010, the sector employed 245 MECs in the TCE, had a total gross output of \$30 million, contributed \$7.2 million towards GDP, and exported nearly one-third of the total output overseas, at a value of \$9.6 million.

The main activity within the sector is Beekeeping, where the activity has a proportionally higher than average presence compared to New Zealand with an LQ of 3.56. The activity also provides pollination services to the local horticulture sector through the hiring of bee hives. The activity makes up nearly half the sector's employment, with 120 MECs, and mainly consists of a number of small companies. Some of the companies include: Giles Beekeeping in Tauranga, Ross Apiaries 2009 Ltd. in Oropi, and Kiwifruit and Avocado Pollination Services also in Oropi.

The second significant activity is deer farming with 51 MECs and an LQ of 1.18. A major farm within the TCE is Aratoa.

### Major Employers in the TCE

Main employers in the TCE include Kiwifruit & Avocado Pollination Services, Ross Apiaries 2009 Limited, The National Beekeepers' Association of New Zealand, Bay of Plenty Ward Executive Council, Mossops's and Aratoa Deer farm. Aratoa Deer Farm is a 400 acre commercial deer farm situated in the Kaimai ranges. The farm operates tours as an insight into the deer industry in New Zealand.

## Sector Trends

Over recent years, the sector had a gradual decline in employment numbers with an annual average rate of change at -2.44% from 2000 to 2011 (see Figure 9.1). Within the sector, Beekeeping activity had significant growth, going from employment of 53 MECs in 2000 to 120 MECs in 2011. In contrast, remaining activities within the sector had a significant decrease in employment from 2000 to 2005, but stabilised from 2005 onwards. Between 2008 and 2009, the sector had a significant increase employment, where Beekeeping activity added 41 MECs.

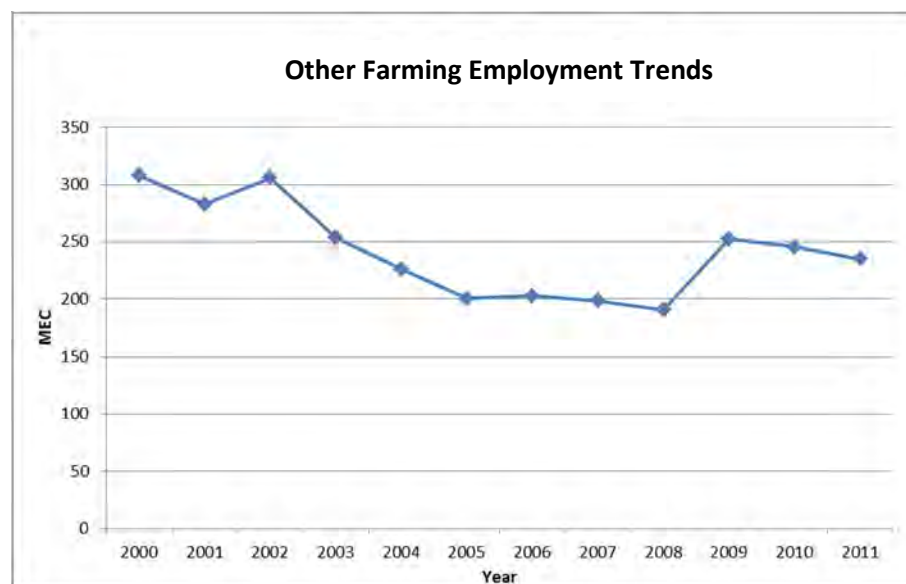


Figure 9.1 Other Farming Employment Trends

Source: Market Economics Ltd. (2012)

## Future Trends

As at 2016, the sector benefited from high overseas demand for honey produced in New Zealand. The main driver is increased demand for manuka honey indigenous to New Zealand and Australia. Manuka honey occupies a high value in the honey market, with the biggest markets being Australia, the United Kingdom, China and Hong Kong. As there are a limited number of substitutes for manuka honey, beekeeping activity is likely to grow in the future where both the price of honey and demand for locally produced honey is projected to increase.

The future prospects for other activities within the sector are grim as the TCE primary sector is undergoing a structural change. However, as the other activities are already underrepresented, it is unlikely these activities will decline much further. Consequently, the sector is likely to experience growth, mainly from an increase in Beekeeping activities.

## Update to 2016

This statistical update applies for the “Poultry, Deer and Other Livestock Farming” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 292  
Employment Rank: 28<sup>th</sup>  
  
GDP: \$3m  
GDP Rank: 45<sup>th</sup>  
  
% GDP Growth (2011-2016): 11.56% pa  
% GDP Growth Rank: 3<sup>rd</sup>  
  
Location Quotient: 1.26

## References

Fisher, E. (2011, Aug 24). Beekeepers’ Fears Over Vine Disease Spray. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/beekeepers-fears-over-vine-disease-spray/1078646/>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Martin, A. (2013, Jan 9). Bees Thriving Despite Challengers for Keepers. *The New Zealand Herald*. Retrieved from [http://www.nzherald.co.nz/opinion/news/article.cfm?c\\_id=466&objectid=10858164](http://www.nzherald.co.nz/opinion/news/article.cfm?c_id=466&objectid=10858164)

# 10. Agriculture, Fishing, Hunting and Trapping Services

---

## Description

*ANZSIC Codes Covered:*

- A0212-Shearing Services
- A0213-Aerial Agricultural Services
- A0219-Services to Agriculture
- A0220-Hunting and Trapping

Employment: 2,482  
Employment Rank: 8<sup>th</sup>  
Average Growth Rate: 8.79%

GDP: 70.6xm  
GDP Rank: 19<sup>th</sup>  
Interregional Exports: \$15.4m  
International Exports: \$3.2m

Location Quotient: 2.72  
Labour Productivity: 27.32  
Value-Added Multiplier: 3.78

## Economic Overview

The Agriculture, Fishing, Hunting and Trapping Services sector is highly represented in the TCE when compared nationally, with LQ of 2.72. This is largely due to the high number of businesses providing the services to the rest of the Bay of Plenty region that are located in Tauranga City. In 2010, the sector employed 2,482 MECs, produced \$190 million total gross output, and contributed \$70.6 million towards GDP. Within the sector, Shearing and Aerial Agricultural Services are highly underrepresented, with respective individual LQs of 0.02 and 0.33. Hunting and Trapping Activities are very small, with only 8 MECs in 2010. Consequently, almost all of the employment in this sector comes from Services to Agriculture Activities. In particular, the sector exported \$15.4 million to other regions in New Zealand and \$3.2 million to overseas. The considerable export figure highlights that the TCE has a comparative advantage in Services to Agriculture Activities.

## Major Employers in the TCE

Companies such as Aldridge Agriculture in Pahoia, Bay Big Bales, Bill Webb Feed Solutions and D'emden Contracting Ltd. provide silage, weed control, and cultivation services. Firms such as Edgumbe Spreaders Ltd., Muller & Associates Ltd., Fruition Horticulture Ltd., Bay of Plenty Weed Control Ltd., and Spray-Tec Consultants Ltd. offer services to the horticulture industry such as spraying, fertiliser spreading and horticultural consulting. The majority of employment in this sector comes from fruit pickers, vine trimmers and packers for the kiwifruit and avocado industries, employed for orchard owners by companies like Satara who have offices in Tauranga and Katikati. North Island Mussel Processors has a factory in Tauranga which employs 200 seasonal staff. Seasonal employment figures for this sector are likely even higher, as an estimated 12,000 people are employed in the kiwifruit sector during harvest season.

## Sector Trends

Employment increased slowly between 2000 and 2003, rising 19% (see Figure 10.1). In the next three years, however, employment growth was much quicker, jumping 38.3% to 1,785 in 2005, before dropping slightly to 1,675 and then continuing a steady 63.6% increase to 2,741 in 2011. The steady growth seen in this sector can be attributed to the increasing incidence of orchard owners and farmers hiring independent contractors rather than sourcing the necessary services internally. In addition, favourable regional primary industry activities helped a sustained historical growth in the sector.

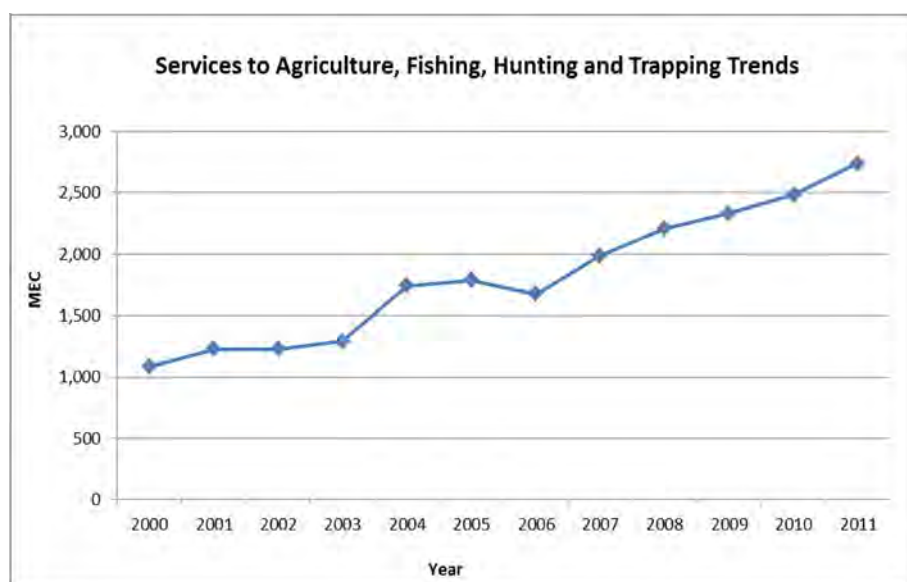


Figure 10.1 Services to Agriculture, Fishing and Trapping Employment Trends  
Source: Market Economics Ltd. (2012)

## Future Trends

As at 2016, the sector suffered a major decrease in employment following the outbreak of PSA disease on 5th November 2010. The disease has since spread throughout the Bay of Plenty region, costing the industry an estimated \$900 million. Around 1,250 orchards were identified as having the virus, with just under half of New Zealand's kiwifruit hectares on an orchard identified with PSA. The effects of the outbreak had a substantial impact on both the Horticultural and Agricultural Services sector. However, the Horticulture sector is projected to recover in the future with increase in overseas demand for kiwifruit. As the Agricultural Services sector is highly correlated with the Horticultural sector, the sector is projected to recover in the future.

## Update to 2016

This statistical update applies for the “Agriculture, Forestry and Fishing Support Services” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 2,697  
Employment Rank: 8<sup>th</sup>  
  
GDP: \$85m  
GDP Rank: 16<sup>th</sup>  
  
% GDP Growth (2011-2016): 4.83% pa  
% GDP Growth Rank: 20<sup>th</sup>  
  
Location Quotient: 2.87

## References

- Barback, J. (2012, Oct 2). Saving our billion-dollar kiwifruit industry. *The New Zealand Education Review*. Retrieved from:  
<http://www.educationreview.co.nz/pages/section/article.php?s=Postgrad+%26+Research&idArticle=24503>
- Best of Tauranga. (n.d). *Tauranga Jobs and Employment*. Retrieved 15/01/2012 from  
<http://www.bestoftauranga.com/tauranga-employment.html>
- Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.
- Satara Kiwifruit and Avocados. (n.d). *Job Vacancies*. Retrieved 10/01/2013 from  
<https://www.satara.co.nz/employmentopportunities/>

# 11. Forestry and Logging

## Description

*ANZSIC Codes covered:*

- A0301-Forestry
- A0302-Logging
- A0303-Services to Forestry

*Main Commodities Supplied in TCE:*

- Rough-sawn timber
- Services of growing, maintaining and harvesting forests, as well as gathering forest products

Employment: 134  
Employment Rank: 38<sup>th</sup>  
Average Growth Rate: 0.55%

GDP: 13.2m  
GDP Rank: 36<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$12.3m

Location Quotient: 0.55  
Labour Productivity: 93.10  
Value-Added Multiplier: 3.76

## Economic Overview

Although the Forestry and Logging sector is significant in the Bay of Plenty region as a whole, the sector is relatively small in the TCE with an LQ of 0.55. The main activities within the sector are Logging (56.6% of total sector employment), Forestry (38.3% of total sector employment), and Services to Forestry (25.8% of total sector employment). In 2009, Tauranga City contained 212Ha of plantation forest, with the Western Bay of Plenty District containing 21,780Ha of plantation forest<sup>36</sup>. Overall in the TCE, in 2010 the sector provided 134 MECs, produced \$42 million gross outputs, contributed \$13.2 million towards GDP and exported \$12.3 million to overseas.

Figure 11.1 illustrates location of major plantation forests in the TCE. The only major plantation forest in the TCE is located on Matakana Island, where an American company, Blackly Pacific, owns and forests around 4,000Ha of the 6,000Ha. According to the Western Bay of Plenty District Council Policy and Planning Team (2012), in 2008 the company planned on subdividing and selling residential lots on the island as closure of a mill within the island deteriorated profitability of maintaining a plantation forest. Although the resource consent was granted in 2009, the proposed subdivision area remains forested as the matter was taken to the environment court in 2011 and the court overruled the subdivision (Campbell, 2011).

<sup>36</sup> Note: The TCE includes the Tauranga City area, but does not include the Western Bay of Plenty District's entire boundary (see Chapter 1.1 for boundary map).

## Major Employers in the TCE

Main employers in the TCE include Able Tasman Forestry Services Ltd.; Rayonier Ltd. (Matariki Forests) (located at No. 42 in Figure 11.1); Bax Contractors; Blakely Pacific Ltd. (located at No. 3 in Figure 11.1); OTPP New Zealand Forest Investments Limited (located at No. 473 in Figure 11.1); and Honikiwi Forestry (located at No. 284 in Figure 11.1).



Figure 11.1 Location of Forestry and Logging Industries  
Source: Ministry for Primary Industries (2008)

## Sector Trends

Although the sector's employment fluctuated over the period from 2000 to 2011, employment remained relatively steady (see Figure 11.2). Looking at annual fluctuations in detail, employment in the Forestry and Logging sector increased 42% from 152 MECs in 2000 to 216 MECs in 2002, amidst strong demand from the overseas export market. However, over the next four years (2002 to 2006), employment in the Forestry and Logging sector fell by 45.7%. Between 2007 and 2009, the employment in the sector remained relatively steady until it began increasing again from 2009; by 2011, 162 MECs were employed in the sector.

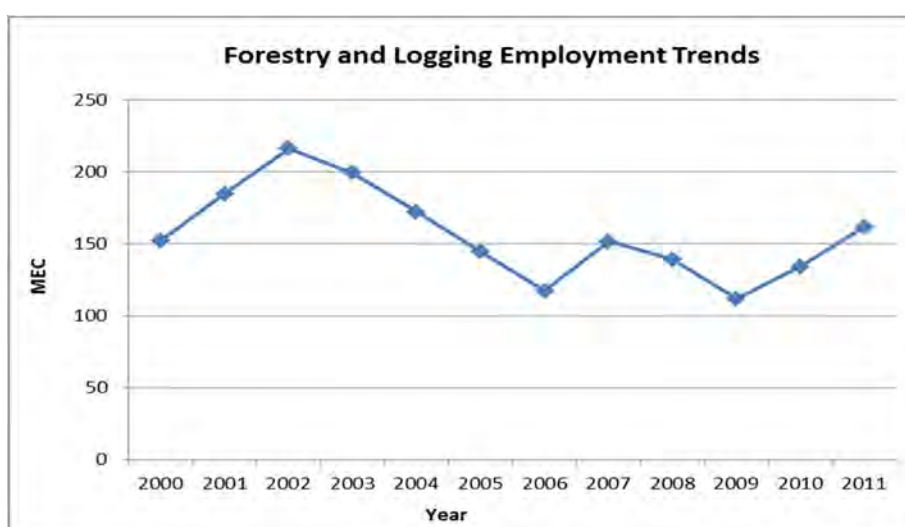


Figure 11.2 Forestry and Logging Employment Trends  
Source: Market Economics Ltd. (2012)

## Future Trends

The sector is likely to decline in the future as the TCE as a whole is undergoing an economic structural change away from the sector. As such, the land occupied by the sector will be reallocated for a more productive use. More importantly, Tauarnaga Catchment economy is experiencing a growth in population and some of the land previously occupied by forestry and logging sector could be used for future residential developments.

## Update to 2016

This statistical update applies for the “Forestry and Logging” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 55  
Employment Rank: 37<sup>th</sup>

GDP: \$39m  
GDP Rank: 25<sup>th</sup>

% GDP Growth (2011-2016): -1.91% pa  
% GDP Growth Rank: 43<sup>rd</sup>

Location Quotient: 0.36

## References

Campbell, A. (2011, Nov 17). Court Stops Matakana Subdivision. *Sunlive: The Bay's News First*. Retrieved from <http://www.sunlive.co.nz/news/18711-court-stops-matakana-subdivision.html>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Ministry for Primary Industries. (2008). *Central North Island Wood Supply Region*. Retrieved from <http://www.mpi.govt.nz/portals/0/documents/forestry/forestry-nz/forest-mapping/forest-owner-central-north-island.pdf>

Western Bay of Plenty District Council Policy and Planning Team. (2012). *Perspectives of Matakana Island: 'The Jewel of the Bay'* (Report Doc no. A573812). Retrieved from <http://www.westernbay.govt.nz/Documents/Projects/MatakanaIsland/MatakanaIslandPerspectivesPDF.pdf>

# 12. Fishing

## Description

*ANZSIC Codes Covered:*

- A0411-Rock Lobster Fishing
- A0412-Prawn Fishing
- A0413-Finfish Trawling
- A0414-Squid Jigging
- A0415-Line Fishing
- A0419-Marine Fishing
- A0420-Aquaculture

*Main Commodity Supplied in TCE:*

- Finfish trawling and line fishing

Employment: 151  
Employment Rank: 36<sup>th</sup>  
Average Growth Rate: -6.6%

GDP: \$11m  
GDP Rank: 38<sup>th</sup>  
Interregional Exports: \$1.4m  
International Exports: \$4.3m

Location Quotient: 1.33  
Labour Productivity: 65.74  
Value-Added Multiplier: 4.00

## Economic Overview

The TCE has a comparative advantage in the Aquaculture and Fishing sector, where the region benefits from the Port of Tauranga as well as the region's proximity to the harbour. As such, the sector has a relatively high labour productivity with \$65,740 per worker. The majority of the sector is concentrated in three activities: of the 151 MECs employed in the sector in 2010, 41% were in Finfish Trawling, 35.8% in Line Fishing and 19.2% in Aquaculture. Both Finfish Trawling and Line Fishing in the TCE have proportionally high representations with LQs of 1.34 and 2.76, respectively. Consequently, although the sector occupied only a small part of the TCE in 2010, in terms of contributions to GDP (\$11m) and employment (151 MECs), the sector was proportionally bigger in the TCE than for New Zealand as a whole.

However, a key issue surrounding the sector is a co-management of Tauranga Moana. In 2008, a mataitai reserve was established over waters surrounding Mt Maunganui and part of Tauranga Harbour. Mataitai reserves are authorised under the Kaimoana Customary Fishing Regulations and recognise traditional Māori fishing grounds that are important for customary food gathering. This allows the local Tauranga Moana iwi – Ngaiterangi, Ngāti Ranginui and Ngāti Pukenga – to advise the Minister of Fisheries directly on how best to manage fishing in the local area (Ministry for Primary Industries, 2008). Co-governance arrangements are also included in the proposed Treaty of Waitangi settlement for iwi in the region.

## Major Employers in the TCE

Sanford Ltd. operates out of Tauranga, and being one of the biggest fishing companies in the country holds the largest number of the necessary quotas required to fish in New Zealand waters. The company is responsible for the majority of the \$4 million generated in export earnings, and over the past seven years have adopted a Sustainable Seafood programme which looks for innovative harvesting methods and the economically sustainable protection of natural resources. Purse seine fishing and processing is the main focus of

the Tauranga plant and fishing base. As such, purse seine varieties of Jack and Blue Mackerel, Kahawai, and Skipjack Tuna comprise the largest volume species processed in Tauranga. The plant also carries out vessel servicing and net repairing operations for the purse seine fleet of five vessels and two inshore trawlers (Priority One, n.d.2). In 2012, Sanford and Sealord struck a deal to jointly buy out a new mussel processing company, North Island Mussel Processors (NIMP), which was set to go into receivership. The deal saved 20 full time and 200 seasonal jobs (Stuff News, Oct 2012). The processing plant in Tauranga was the first in the world to operate an automated mussel-opening machine as part of a \$23 million investment to expand the facility in 2009 (New Zealand Herald, Oct 2012).

## Sector Trends

Employment in the sector experienced a long steady decline, dropping from 279 MECs in 2000 to a mere 132 MECs by 2011 (see Figure 12.1). Specifically, Rock Lobster Fishing, Line Fishing and Finfish Trawling activities have seen large decreases in employment over the time period. In line with nation-wide growth in the aquaculture industry, employment in aquaculture increased from 1 MEC in 2000 to 29 MECs by 2011.

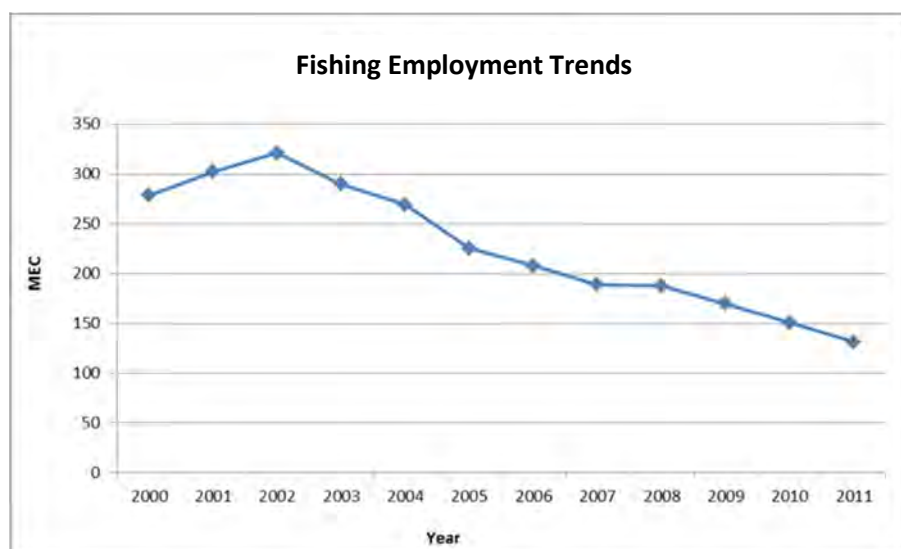


Figure 12.1 Fishing Employment Trends

Source: Market Economics Ltd. (2012)

## Future Trends

An important trend occurring within the sector is the increase in labour productivity. Subsequently, the sector's value added remained stable as labour productivity offset the decrease in employment. However, employment is likely to flatten in the future as the growth in productivity reaches diminishing returns and continued expansion of the aquaculture industry requires more labour. According to research by Environment Bay of Plenty, the Bay of Plenty region has particularly suitable conditions for the aquaculture industry. The report estimated that the aquaculture industry in the region had the potential to reach \$250 million in export sales by 2025. In response, Environment Bay of Plenty (now known as the Bay of Plenty Regional Council) developed a regional strategy for the aquaculture industry. The strategy focuses on determining the best species to grow in the Bay, the most effective technologies to

use, collaborative opportunities throughout the region, and priority areas for development (Priority One, n.d.1).

In 2009, a resource consent was granted to enlarge the Opotiki harbour entrance. The consent allowed the development of a 3800 hectare mussel farm located 8.5km off the Opotiki coast. While much of the industry is expected to be based in the Eastern Bay of Plenty, processing and logistics opportunities will also provide significant economic benefits for the wider region.

At a national level, the industry is investing in research infrastructure specifically focused on the discerning high-quality market with value-added products and more sustainable methods of harvesting and processing. Recognition of the health benefits and therapeutic qualities of seafood is also creating growth in this industry. The strategy of the fisheries industry in general has been to capitalise on New Zealand's international reputation of having clean unpolluted waters by catering to high value, premium markets. Although the amount of seafood harvested in New Zealand waters is not expected to grow significantly over the next few years, employment opportunities and growth are still expected to be strong as companies diversify and aquaculture production grows (Careers New Zealand, n.d). Export growth is likely to remain stagnant as heavy competition from overseas markets continues to dictate price.

### Update to 2016

This statistical update applies for the "Fishing and Aquaculture" (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 68  
Employment Rank: 36<sup>th</sup>  
  
GDP: \$5m  
GDP Rank: 43<sup>rd</sup>  
  
% GDP Growth (2011-2016): -3.80% pa  
% GDP Growth Rank: 45<sup>th</sup>  
  
Location Quotient: 0.56

### References

Careers New Zealand. (n.d). *Seafood and Aquaculture- About this Industry*. Retrieved 31/01/2013 from <http://www.careers.govt.nz/default.aspx?id0=10104&id1=99F7D046-6D34-4261-99F4-198F7146994C>

Gray, J. (2012, Oct 1). Seafood giants' purchase saves over 200 jobs. *New Zealand Herald* Retrieved from: [http://www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=10837686](http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10837686)

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Ministry for Primary Industries. (2008). *Mt Maunganui and Tauranga Harbour Mataitai*[Press Release]. Retrieved from <http://www.fish.govt.nz/en-nz/Press/Press+Releases+2008/August08/Mt+Maunganui+and+Tauranga+Harbour+mataitai.htm?&MS>

HiC=65001&L=10&W=tauranga%20&Pre=%3Cspan%20class%3d'SearchHighlight'%3E&Post=%3C/span%3E

Priority One. (n.d.1). *Food and Beverage Summary*. Retrieved 25/01/2013 from [http://www.priorityone.co.nz/food\\_and\\_beverage](http://www.priorityone.co.nz/food_and_beverage)

Priority One (n.d.2), *Sanford Company Profile*. Retrieved 29/01/2013 from: [http://www.priorityone.co.nz/directory\\_detail/m/244](http://www.priorityone.co.nz/directory_detail/m/244)

Rogers, C. (2012, Oct 1). *Sealord, Sanford save Tauranga Mussel Firm*. Retrieved from: <http://www.stuff.co.nz/business/industries/7752087/Sealord-Sanford-save-Tauranga-mussel-firm>

Sanford Limited. (n.d). *Sustainable Seafood*. Retrieved 20/01/2012 from <http://www.sanford.co.nz/sanfordfisheries/sustainability/en/sustainable-seafood.cfm>

# 13. Mining and Quarrying

## Description

*ANZSIC Codes covered:*

- B1101-Black Coal Mining
- B1102-Brown Coal Mining
- B1311-Iron Ore Mining
- B1312-Bauxite Mining
- B1313-Copper Ore Mining
- B1314-Gold Ore Mining
- B1315-Mineral Sand Mining
- B1316-Nickel Ore Mining
- B1317-Silver-Lead-Zinc Ore Mining
- B1319-Metal Ore Mining
- B1411-Gravel and Sand Quarrying
- B1419-Construction Material Mining
- B1420-Mining
- B1514-Mineral Exploration Services
- B1520-Other Mining Services

Employment: 79  
Employment Rank: 39<sup>th</sup>  
Average Growth Rate: 3.18%

GDP: \$14.1m  
GDP Rank: 35<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$11.5m

Location Quotient: 0.52  
Labour Productivity: 168.65  
Value-Added Multiplier: 2.94

*Main Commodities Supplied in TCE:*

- Gravel and Sand Quarrying

## Economic Overview

The Bay of Plenty region has an abundant reserve of low-grade aggregates and high-grade aggregate situated around Katikati. There are also deposits of perlite and diatomite near McLaren Falls, just south of Tauranga. However, the sector is relatively small in the TCE with a LQ of 0.52. In 2010, it employed 79 MECs producing \$33 million in total gross output, and contributed \$14.1 million towards GDP. The sector ranks 39<sup>th</sup> and 35<sup>th</sup> in employment and GDP contribution in the TCE, respectively. The main activity within this sector is Gravel and Sand Quarrying, which employed 87.7% of the sector's employment in 2010.

## Major Employers in the TCE

The major employers in the TCE include: RPL Ltd. - Rock Quarry (located at No. 24 in Figure 13.1, over); Te Puke Stone Enterprises - Rock Quarry (located at No. 29 in Figure 13.1); Katikati Quarries (2001) Ltd. - Hard Rock Quarry (located at No. 19 in Figure 13.1); Tauranga Quarries Ltd. - Hard Rock Quarry (located at No. 28 in Figure 13.1); Clothier Quarries Ltd. - Small Pumice Sand Quarry (located at No. 11 in Figure 13.1); and Fulton Hogan Ltd. - Large Hard Rock Quarry (located at No. 17 in Figure 13.1). In addition, Hard Core Mining Ltd. holds a 202Ha exploration permit for Gold, Silver, and Rare Earths.



Figure 13.1 Locations of TCE Quarry Sites

### Sector Trends

The Mining and Quarrying sector had significant growth from 2000, with 22 MECs employed in Gravel and Sand Quarrying activities. The sector remained steady until 2004, when it took on an additional 50 MECs. Construction Material Mining activity also took off in the same period, with employment increasing from six MECs in 2003 to 16 MECs in 2004. Employment in Gravel and Sand Quarrying Activity increased again in 2007, totalling 126 MECs. However, from 2008 to 2011, employment in the sector dropped to 85 MECs (see Figure 13.2).

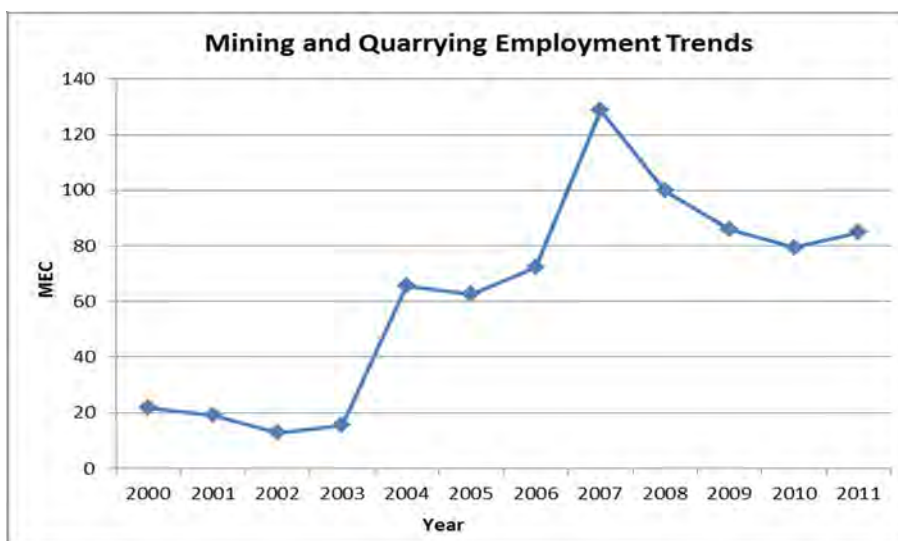


Figure 13.2 Mining and Quarrying Employment Trends

Source: Market Economics Ltd. (2012)

### Future Trends

Mining and Quarrying is a small but important sector for the TCE as the majority of companies in the area source aggregate from quarries. As the aggregate is high in bulk and low in value, ensuring that sources of supply are located in proximity to demand (generally the main population centres) is important because the large share of the aggregate price is transport related costs (Walrond, 2012). Consequently, the sector is likely to sustain the current level of employment in the future.

However, according to a mineral resource assessment in the TCE by the Priority One, a major problem the sector may face in the future is the depletion of adequate supplies of high grade

aggregate in the TCE. This problem may be compounded by the fact that Priority One expected Tauranga and its satellites to keep growing strongly which may exacerbate this situation by generating additional demand, while simultaneously locking up potential extraction sites due to the outward growth of the city.

### Update to 2016

This statistical update applies for the “Mining, Quarrying, Exploration and Other Mining Support Services” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 54  
Employment Rank: 38<sup>th</sup>

GDP: \$18m  
GDP Rank: 31<sup>st</sup>

% GDP Growth (2011-2016): 3.08% pa  
% GDP Growth Rank: 28<sup>th</sup>

Location Quotient: 0.44

### References

Healy, R. (2005). *Minerals in the Bay of Plenty Region* [Environment Bay of Plenty Resource Policy Publication 2005/01]. Whakatane, New Zealand: Environment Bay of Plenty.

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Walrond, C. (2012). *Rock, limestone and clay – Aggregate*. Retrieved from <http://www.TeAra.govt.nz/en/rock-limestone-and-clay/page-2>

# 14. Oil and Gas Exploration and Extraction

---

## Description

ANZSIC Codes Covered:

- B1200-Oil and Gas Extraction
- B1511-Petroleum Exploration
- B1512-Petroleum Exploration Services

## Economic Overview

There are no known Oil and Gas Exploration and Extraction sector economic activities within the TCE.

Employment: 0  
Employment Rank: N/A  
Average Growth Rate: N/A

GDP: 0  
GDP Rank: N/A  
Interregional Exports: \$0  
International Exports: \$0

Location Quotient: N/A  
Labour Productivity: N/A  
Value-Added Multiplier: N/A

# 15. Meat and Meat Product Manufacturing

---

## Description

*ANZSIC Codes covered:*

- C2111-Meat Processing
- C2112-Poultry Processing
- C2113-Bacon, Ham and Small Good Manufacturing

*Main Commodities Supplied in TCE:*

- Meat (Lamb, Beef, Venison etc.)
- Poultry (Chicken)
- Cured Meat and Small Goods (Ham, Salami, luncheon etc.)

Employment: 55  
Employment Rank: 41<sup>st</sup>  
Average Growth Rate: -14.67%

GDP: \$4.3m  
GDP Rank: 43<sup>rd</sup>  
Interregional Exports: \$0m  
International Exports: \$14.5m

Location Quotient: 0.06  
Labour Productivity: 76.53  
Value-Added Multiplier: 5.81

## Economic Overview

The Meat and Meat Product Manufacturing sector is extremely underrepresented in the TCE, employing 55 MECs and having a LQ of 0.06 in 2010. In 2010, the sector produced \$22 million in gross output, exported \$14.5 million to overseas, and contributed \$4.3 million towards GDP. Within the sector, the Poultry Processing activity employed 73.5% of total sector employment in 2010. Subsequently, the Meat Processing activity employed 11.4% of total sector employment, and Bacon, Ham and Small Good Manufacturing employed remaining 15.1% of total sector employment.

## Major Employers in the TCE

Within the TCE, there are three major companies operating in the Meat and Meat Product Manufacturing sector: Lowe Products New Zealand Limited, Farmers Sustainable Meats, and ZiwiPeak.

## Sector Trends

The Meat and Meat Product Manufacturing sector underwent a sharp reduction in employment, with an annual average growth rate of -14.62% over the 2000 to 2011 period (see Figure 15.1). Employment in the sector started off with an increase of 35.66% between 2001 and 2003. The increase was primarily originated from the Meat and Poultry Processing activities. However, in 2004, employment dropped significantly in Meat Processing activities, from 147 MECs to 39 MECs. Employment in the sector then stabilised until 2009, when it subsequently dropped from 161 MECs in 2008 to 29 MECs in 2011. The drop in employment was caused by a major layoff in the Meat Processing activities in 2009 (from 71 MECs in 2008 to 4 MECs in 2009), as well as a major decline in Poultry Processing activities (from 84 MECs in 2008 to 15 MECs in 2011).



Figure 15.1 Meat and Meat Product Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

### Future Trends

As at 2016, small businesses make up the majority of the sector in the TCE, and this is unlikely to change in the future.

### Update to 2016

This statistical update applies for the “Meat and Meat Product Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 33  
Employment Rank: 43<sup>rd</sup>

GDP: \$6m  
GDP Rank: 42<sup>nd</sup>

% GDP Growth (2011-2016): 15.46% pa  
% GDP Growth Rank: 2<sup>nd</sup>

Location Quotient: 0.04

### References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.  
ZiwiPeak. (n.d). *About ZiwiPeak*. Retrieved 11/02/2013, from <http://www.ziwipeak.com/about-ziwipeak/>

# 16. Dairy Product Manufacturing

## Description

*ANZSIC Code covered:*

- C2121-Milk and Cream Processing
- C2122-Ice Cream Manufacturing
- C2129-Dairy Product Manufacturing

*Main Commodities Produced in TCE:*

- Milk powder, Ultra-high treated (UHT) milk, cheese

Employment: 17  
Employment Rank: 43<sup>rd</sup>  
Average Growth Rate: -7.7%  
  
GDP: \$1.1m  
GDP Rank: 45<sup>h</sup>  
Interregional Exports: \$0m  
International Exports: \$60.6m  
  
Location Quotient: 0.06  
Labour Productivity: 64.76  
Value-Added Multiplier: 33.27

## Economic Overview

In 2010, Dairy Product Manufacturing remained a small sector in the TCE. In 2010, the sector employed 17 MECs, contributed \$1.1 million towards GDP, and produced \$75 million total gross output where \$60.6 million worth of outputs was exported overseas.

## Major Employers in the TCE

In 2011, New Zealand Dairy Processing Limited established an UHT milk processing factory in Tauranga. After only months of operating, the factory laid off its entire staff and closed down. The factory was capable of producing up to 560,000 litres of Ultra-high treated (UHT) milk a week, in 250ml packets. However the plant closure later in 2011 was caused by a lack of demand for UHT milk (Skellern, 2012).

## Sector Trends

Employment in the sector remained historically stagnant (see Figure 16.1). In 2011, there was a sharp increase in employment resulting from the opening of a new milk processing factory. However, the employment level reverted back to the pre-2011 level after the factory closed down the following year (Skellern, 2012).



Figure 16.1 Dairy Product Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

### Future Trends

As at 2016, the Dairy Product Manufacturing sector is likely to remain at the pre-2011 level.

### Update to 2016

This statistical update applies for the “Dairy Product Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 36  
Employment Rank: 42<sup>nd</sup>

GDP: \$8m  
GDP Rank: 39<sup>th</sup>

% GDP Growth (2011-2016): -0.11% pa  
% GDP Growth Rank: 38<sup>th</sup>

Location Quotient: 0.10

### References

Dairy Companies Association of New Zealand. (n.d). *About DCANZ*. Retrieved 10/02/2013 from <http://www.dcanz.com/>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Skellern, G. (2012, Oct 31). Factory shuts down due to lack of markets. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/38-more-plant-workers-laid-off/1155825/>

# 17. Other Food Manufacturing

---

## Description

*ANZSIC Codes covered:*

- C2130-Fruit and Vegetable Processing
- C2140-Oil and Fat Manufacturing
- C2151-Flour Mill Product Manufacturing
- C2152-Cereal Food and Baking Mix Manufacturing
- C2161-Bread Manufacturing
- C2162-Cake and Pastry Manufacturing
- C2163-Biscuit Manufacturing
- C2171-Sugar Manufacturing
- C2172-Confectionery Manufacturing
- C2173-Seafood Processing
- C2174-Prepared Animal and Bird Feed Manufacturing
- C2179-Food Manufacturing

Employment: 1,314  
Employment Rank: 13<sup>th</sup>  
Average Growth Rate: -3.18%

GDP: \$99m  
GDP Rank: 13<sup>th</sup>  
Interregional Exports: \$7.7m  
International Exports: \$122m

Location Quotient: 1.76  
Labour Productivity: 73.53  
Value-Added Multiplier: 3.43

*Main Commodities Supplied in TCE:*

- Processed fruit and vegetables
- Oil and Fat used in food preparation
- Processed seafood products
- Flour and salt
- Frozen desserts

## Economic Overview

Tauranga has an ideal location for many businesses with an import or export focus, due to the close proximity to a port and major arterial transport routes. The main activities within this sector are Seafood Processing (43% of total sector employment), Other Food Manufacturing (17.6% of total sector employment), Cake and Pastry Manufacturing (10.6% of total sector employment), and Oil and Fat Manufacturing (8.3% of total sector Employment). In 2010, the sector employed 1,314 MECs, produced \$342 million total gross outputs, contributed \$99 million towards GDP and exported \$122 million to overseas.

## Major Employers in the TCE

Some of the major employers in the TCE include:

- North Island Mussel Processing Ltd. (NIMPL), Bakels Edible Oils Ltd., Taura Natural Ingredients (NZ) Ltd., Melba Foods Ltd., and Champion Flour Ltd.
- North Island Mussel processing Limited (NIMPL) is located in Tauranga. The plant employs approximately 220 staff (35 permanent, and 185 seasonal). In 2010, the company opened a new plant in Tauranga which is home to the first automated mussel

opening machines; it is expected to employ a further 200 staff and increase export manufacturing capacity nearly three-fold (Harris, 2010).

- The high LQ of Oil and Fat Product Manufacturing activity is the result of a large company called Bakels Edible Oils (NZ) Ltd. (2010) which is located in the industrial zone of Mount Maunganui, and employs around 120 MEC staff. The plant operates 24/7 and is the leading supplier of refined and processed fats and food oils in NZ.
- Taura Natural Ingredients employs around 62 staff at the Tauranga plant. The Factory creates concentrated dried fruit pieces, flakes and pastes, and exports to the world's major food manufacturers in 40 countries around the world as ingredients in fruit and snack bars, baking, chocolate, sweets and breakfast cereals (Skellern, 2011b).
- Melba Foods Ltd. (2007) is a frozen desert manufacturer located in Tauranga. The company was originally established in 1984 as New Zealand's first frozen dessert manufacturer, but was purchased in 2006 by the Australian owned Priestly Gourmet Delights. They supply their products to a world-wide market, and currently export to such locations as the South Pacific, Japan, Russia, Macau and Hong Kong.
- Champion Flour Mill (2008) employs around 55 MECs in Mount Maunganui, who along with the other milling site in Christchurch, produce 60% of New Zealand's flour.

## Sector Trends

Employment in the Other Food Manufacturing sector has generally been increasing at a rate of 3.18% per annum over the 11 year period (2000-2011), with fluctuations between some years (see Figure 17.1). Employment in the sector plummeted by 187 MECs in 2004, attributable to the loss of 165 MEC workers from Seafood Processing. The cause of the most recent drop in employment in the sector was caused by the closure of Allberry House, which was the sole supplier of the fruit flavoured toppings for McDonald's desserts sold in New Zealand and Australia. The production of the toppings was transferred to a Heinz Factory in China, resulting in the loss of 73 MECs (Skellern, 2011a).

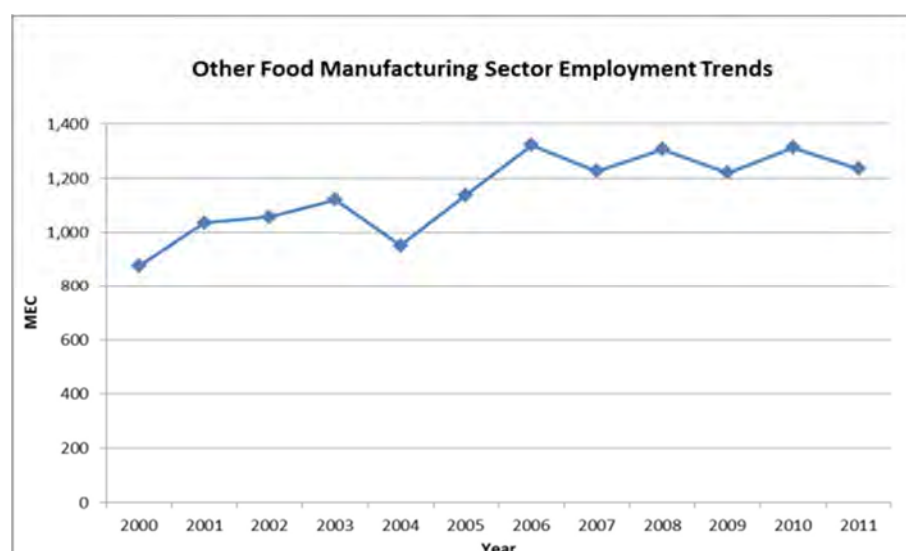


Figure 17.1 Dairy Product Manufacturing Employment Trends

Source: Market Economics Ltd. (2012)

## Future Trends

The Other Food Product Manufacturing sector remained resilient to the effects of global economic woes. The sector is expected to continue a long-run growth trajectory into the future. As such, the agglomeration of the sector will increase comparative advantage of Tauranga in food manufacturing. Consequently, agglomeration increases research and development opportunities with local food production businesses and research organisations, as well as the location of the TCE and its proximity to a port making it an ideal spot for both importers and exporters. In addition, there is a horticultural innovation cluster in Te Puna, with businesses joining forces to work on R&D projects and strategies to maximise export potential of their food products (The Tauranga Business Case, n.d).

## Update to 2016

This statistical update applies for the “Other Food Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 1,369 Employment Rank: 15 <sup>th</sup>
GDP: \$59m GDP Rank: 23 <sup>rd</sup>
% GDP Growth (2011-2016): -2.74% pa % GDP Growth Rank: 44 <sup>th</sup>
Location Quotient: 1.40

## References

- Bakels Edible Oils (NZ) Ltd. (2010). *Background*. Retrieved from <http://www.beobakels.co.nz/company-information.cfm>
- Champion Flour Mills. (2008). *About Champion Flour Mills*. Retrieved from <http://www.championflour.co.nz/net/about-champion.aspx>
- Harris, C. (2010, June 18). *Processor Uses Kiwi Ingenuity to Open Mussels*. Retrieved from <http://www.stuff.co.nz/business/3825582/Processor-uses-Kiwi-ingenuity-to-open-mussels>
- Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.
- Melba Foods Ltd. (2007). *About Us*. Retrieved from <http://www.melbafoods.co.nz/about/>
- Ministry of Economic Development. (n.d). *New Zealand Food and Beverage Directory*. Retrieved 14/02/2013 from <http://directory.foodandbeverage.govt.nz/search?region=Tauranga+%2F+Rotorua+%2F+Bay+of+Plenty>

Skellern, G. (2011a, May 14). Ageing Plant Shuts its Doors for the Last Time. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/ageing-plant-shuts-its-doors-for-the-last-time/1055207/>

Skellern, G. (2011b, December 2). Tauranga Firm Revolutionising Cereal Industry. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/ancient-grains-and-future-gains/1193884/>

The Tauranga Business Case. (n.d). *Horticulture, Value-added Food Production, Aquaculture and Bioactivities*. Retrieved 12/02/2013, from [http://www.taurangabusinesscase.co.nz/key\\_industries](http://www.taurangabusinesscase.co.nz/key_industries)

# 18. Beverage, Malt and Tobacco Manufacturing

---

## Description

*ANZSIC Codes covered:*

- C2181-Soft Drink, Cordial and Syrup Manufacturing
- C2182-Beer and Malt Manufacturing
- C2183-Wine Manufacturing
- C2184-Spirit Manufacturing
- C2190-Tobacco Product Manufacturing

*Main Commodities Supplied in TCE:*

- Wine
- Soft drinks, bottled water and energy drinks

Employment: 142  
Employment Rank: 37<sup>th</sup>  
Average Growth Rate: -1.06%

GDP: \$32m  
GDP Rank: 29<sup>th</sup>  
Interregional Exports: \$0.3m  
International Exports: \$21m

Location Quotient: 0.73  
Labour Productivity: 219.51  
Value-Added Multiplier: 2.81

## Economic Overview

The Beverage, Malt and Tobacco Manufacturing sector employed 142 MECs in the TCE in 2010, with relatively high labour productivity at \$219,510 per worker. In 2010, the sector produced \$81 million in output where most of the outputs were from Wine Manufacturing (88.7% of total output) and Soft Drink, Cordial and Syrup Manufacturing (10.6% of total output) activities. The sector exported approximately \$21 million worth of goods, where most of the exports were bottled wine, and contributed \$32 million towards GDP.

## Major Employers in the TCE

There are five main businesses in the TCE in this sector, as listed in the New Zealand Food and Beverage Directory. Mills Reef Winery Ltd. (2012) is based in Bethlehem, Tauranga, employs between 21-50 people and exports to Australia, Canada, Cook Islands, Hong Kong, Germany, Italy, Japan, Norway, Singapore, Sweden, Switzerland, Taiwan, United Kingdom and the United States. Aqua Plus Bottled Water Ltd. is based in Mt Maunganui, has between 1-5 employees and services brands such as Corporate Water Brands, Eternal Water and Holy Water. Distillerie Deinlein is based in Tauranga and manufactures fruit liquors and fruit spirits, employing 1-5 people and exporting to Germany and Japan. Steve Bird Winery and Vineyards Ltd. is based in Mt Maunganui and exports to Australia, China, Canada, Brazil, Japan and the United States. Emeny Road Vineyard and Winery is based in Tauranga, producing a single-vineyard Reserve Chardonnay (NZ Food and Beverage Directory, 2012).

## Sector Trends

As can be seen in Figure 18.1 below, initially MECs were declining, falling 22.4% from 165 in 2000 to 128 in 2002. After this, there was a period of strong growth, increasing 77.3% in just three years to 227 in 2005. Employment was stable for the next two years, but when the recession hit employment fell by a dramatic 37.4% to end the period at 147 MECs in 2011. The apparent volatility of the employment trend can be attributed to the low number of people employed in this sector, but also the responsiveness of the manufacturing sector in general to the economic climate at the time.

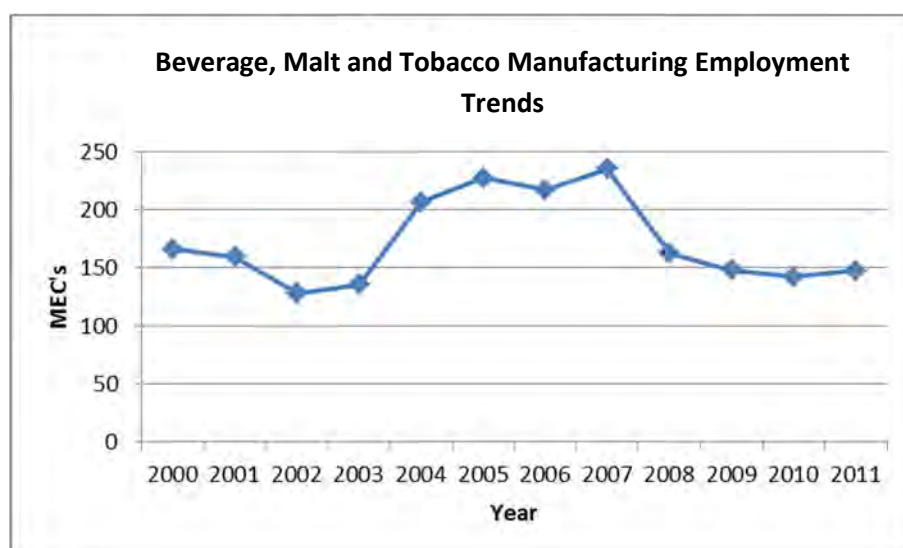


Figure 18.1 Beverage, Malt and Tobacco Manufacturing Employment Trends

Source: Market Economics Ltd. (2012)

Soft drink, cordial and syrup manufacturing employment fluctuated greatly over the time period, increasing in 2006 and 2007 but declining overall, while wine manufacturing employment increased 90.9% over the time period.

## Future Trends

The demand for the commodities produced by the sector is expected to grow in the future. As such, the sector is likely to maintain a steady growth in terms of both production and employment counts. Specifically, increase in overseas demand for New Zealand wines will have a positive effect on wine manufacturing within the sector.

## Update to 2016

This statistical update applies for the “Beverage and Tobacco Product Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 116  
Employment Rank: 35<sup>th</sup>  
  
GDP: \$10m  
GDP Rank: 36<sup>th</sup>  
  
% GDP Growth (2011-2016): 5.42% pa  
% GDP Growth Rank: 16<sup>th</sup>  
  
Location Quotient: 0.56

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Mills Reef Winery Ltd. (2012). *About Us*. Retrieved from <http://www.millsreef.co.nz/index.shtml>

Ministry of Economic Development. (n.d). *New Zealand Food and Beverage Directory*. Retrieved 15/01/2013, from <http://directory.foodandbeverage.govt.nz/search?anzsic=Beverage+Manufacturing&region=Tauranga+%2F+Rotorua+%2F+Bay+of+Plenty>

# 19. Textile and Apparel Manufacturing

## Description

*ANZSIC Codes covered:*

- C2211-Wool Scouring
- C2212-Synthetic Fibre Textile Manufacturing
- C2213-Cotton Textile Manufacturing
- C2214-Wool Textile Manufacturing
- C2215-Textile Finishing
- C2221-Made-Up Textile Product Manufacturing
- C2222-Textile Floor Covering Manufacturing
- C2223-Rope, Cordage and Twine Manufacturing
- C2229-Textile Product Manufacturing
- C2231-Hosiery Manufacturing
- C2232-Cardigan and Pullover Manufacturing
- C2239-Knitting Mill Product Manufacturing
- C2240-Clothing Manufacturing
- C2250-Footwear Manufacturing
- C2261-Fellmongery
- C2261-Leather Tanning and Fur Dressing excluding Fellmongery
- C2262-Leather and Leather Substitute Product Manufacturing

Employment: 237  
Employment Rank: 34<sup>th</sup>  
Average Growth Rate: -3.95%

GDP: \$9.4m  
GDP Rank: 39<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$9.4m

Location Quotient: 0.62  
Labour Productivity: 39.15  
Value-Added Multiplier: 3.22

*Main Commodities Produced in TCE:*

- Made-up textile products
- Clothing

## Economic Overview

The Textile and Manufacturing sector has a relatively low presence in the TCE with a LQ of 0.62. The sector employed 237 MECs in 2010, which produced \$25m in gross output. Within the sector two major activities comprise over 80% of total employment – Made-up Textile Product Manufacturing activity employs 42% of the sector employment, and Clothing Manufacturing activity is responsible for 38% of sector employment.

## Main Employers in the TCE

The main employers in the TCE are Beverly Productions Ltd., Baytex Ltd., RPM Apparel Company and Tauranga Canvas Ltd. Beverly Productions Ltd. was established in 1962 to produce New Zealand-made knitwear (Beverly Productions Ltd., n.d).

CoverCorp Tauranga is a textile company located in Mount Maunganui. They specialise in the manufacture and installation of shade sails, outdoor blinds, and awnings (CoverCorp Tauranga). Baytex Ltd. employs approximately 40 FTEs. The company is located in Mount Maunganui in a

purpose-built 2,500m<sup>2</sup> factory, which is equipped to handle a wide range of technical fabrics, from light polyesters to heavy PVC and canvases. Baytex Ltd. mainly produces products such as marquees, tents and shade canopies and awnings, which they sell in New Zealand and export around the world (Baytex, 2012).

RPM Apparel Company is a well-known New Zealand brand of clothing, which is manufactured in Mount Maunganui. The Clothing is also exported to Australia and Japan (RPM Apparel Company, 2012).

Tauranga Canvas Ltd. was first established in 1953. In 2006, the company moved into a 1900m<sup>2</sup> purpose built manufacturing facility in Mount Maunganui. They specialise in truck curtain sides, roll up tarpaulins for truck bodies, general tarpaulins and insulated tanker covers.

## Sector Trends

Employment in the Textile and Apparel Manufacturing sector generally trended downward, falling an annual average of -3.95% over the 11 year period from 2000 to 2011 (see Figure 19.1). Between 2000 and 2002, employment in the sector fell by -14.6%; this was mostly caused by a -23.8% fall in employment in Clothing Manufacturing, from 231 MECs to 176 MECs. Employment in the Textile and Apparel sector then increased in 2003 due to a 28.1% rise in employment in Made-up Textile Product Manufacturing (from 103 MECs to 132 MECs), and 7.8% increase in Clothing Manufacturing from 176 to 190 MECs. Employment was buoyant between 2003 and 2008, but remained relatively stable (317 MECs in 2003 and 326 MECs in 2008). Since 2008, employment in the sector fell by 27.3%. Over the 11 year period, the biggest fall in employment within the sector was in Clothing Manufacturing activity, which fell from 231 to 92 MECs, a decline of -60.3%.

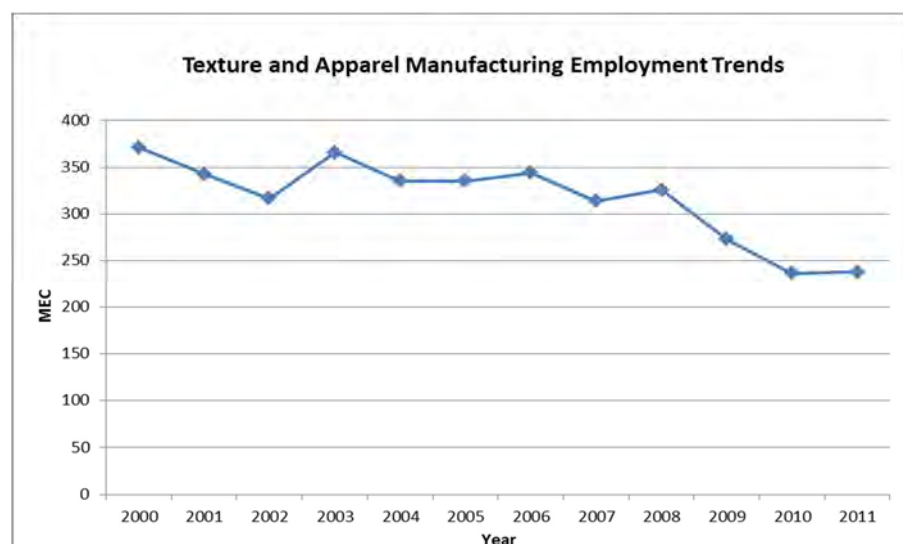


Figure 19.1 Texture and Apparel Manufacturing Employment Trends

Source: Market Economics Ltd. (2012)

## Future Trends

Many of the textile and apparel manufacturers in the TCE cater mainly to local demand, with some niche markets exporting products inter-regionally and overseas. With increasing pressure from the competitive overseas imports, the decrease in employment demand by clothing manufacturers is likely to continue.

## Update to 2016

This statistical update applies for the “Textile, Leather, Clothing and Footwear Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 182  
Employment Rank: 33<sup>rd</sup>  
  
GDP: \$6m  
GDP Rank: 40<sup>th</sup>  
  
% GDP Growth (2011-2016): 0.75% pa  
% GDP Growth Rank: 34<sup>th</sup>  
  
Location Quotient: 0.58

## References

- Baytex. (2012). *Company Profile*. Retrieved from [http://www.baytex.co.nz/about\\_us](http://www.baytex.co.nz/about_us)
- Beverly Productions Ltd. (n.d.). *About*. Retrieved 7/02/2013, from <http://www.beverley.co.nz/>
- CoverCorp Tauranga. (2012). *About CoverCorp Tauranga*. Retrieved from <http://www.covercorptauranga.co.nz/>
- Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.
- RPM Apparel Company. (2012). *Dealers*. Retrieved from <http://www.rpm.co.nz/dealers.php>
- Tauranga Canvas Ltd. (2013). *About Us*. Retrieved from [http://www.tarps.co.nz/online/about\\_us.csn](http://www.tarps.co.nz/online/about_us.csn)
- Textiles NZ. (n.d). *Future of the New Zealand Wool Industry*. Retrieved 7/02/1013, from <http://www.textilesnz.org.nz/news-events/future-of-the-new-zealand-wool-industry>

## 20. Wood Product Manufacturing

### Description

*ANZSIC Codes covered:*

- C2311-Log Sawmilling
- C2312-Wood Chipping
- C2313-Timber Resawing and Dressing
- C2321-Plywood and Veneer Manufacturing
- C2322-Fabricated Wood Manufacturing
- C2323-Wooden Structural Component Manufacturing
- C2329-Wood Product Manufacturing

*Main commodities supplied in the TCE:*

- Wooden fittings, flooring, beams, dressed timber

Employment: 613  
Employment Rank: 21<sup>st</sup>  
Average Growth Rate: -2.92%

GDP: \$36.9m  
GDP Rank: 26<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$39.2m

Location Quotient: 1.23  
Labour Productivity: 58.84  
Value-Added Multiplier: 4.30

### Economic Overview

With an overall LQ of 1.23, the Wood Product Manufacturing sector in the TCE is overrepresented when compared against New Zealand as a whole. In 2010, the sector employed 613 MECs, ranking it 21<sup>st</sup> amongst the 46 ANZSIC sectors ranked for employment. Almost 48.5% of total employment was in Wooden Structural Component Manufacturing activity, while Log Sawmilling activities provided the second highest employment within the sector, at 22%. In the same year, the sector produced \$118 million outputs, ranking 26<sup>th</sup> among of the ranked ANZSIC sectors in the TCE. Most of activities within the sector were relatively more concentrated in the TCE than New Zealand as a whole, where Timber Resawing and Dressing activity had a LQ of 1.39, and Wooden Structural Component Manufacturing had a LQ of 1.84.

### Major Employers in the TCE

The following is a list of the main employers in the TCE:

Arbor Resources Ltd. (n.d.) has its manufacturing plant in Mount Maunganui and main offices in Tauranga. The company manufactures, processes and exports New Zealand radiata pine timber to the USA and Asia.

Ray Carter Sawmills Ltd. (n.d.) was established in 1949 and specialises in timber machining, bandsaw, resawing and custom sawing, producing timber flooring and beams.

Tauriko Sawmills was established in 1980 and provides processing, milling, docking, logging, cutting, sawing, and machining services of native and exotic woods producing cabins, firewood and wooden garden products.

Total Fascia Ltd. manufactures a Bildon 2000 solid timber fascia system, which is a stainless steel bracket fixing system designed to be used with the Bildon 2000 solid timber fascia board.

Matangi Sawmills Ltd. is a boutique sawmill specialising in 5/4 clear ribs and cut to length slicing material for the US market. The closure of a sawmilling plant on Matakana Island led to a large drop in employment.

Timpack Industries Ltd. provides products and services in the timber based packaging industry, supplying timber-based packaging to the dairy, horticulture, meat and manufacturing industries.

Laminated Beams Ltd. manufactures glulam beams and posts for structural purposes, predominantly from Radiata Pine and Douglas Fir from their base in Tauranga.

Timfin Ltd. is based in Mt Maunganui and specialises in timber finishing and timber crafted products. It is just a few hundred metres from the Port of Tauranga where it regularly exports products to Brisbane, Sydney, Melbourne and Adelaide as well as to the USA and other countries.

Emilios Timber Ltd., Bay Timbers, Century Timber Products Ltd. and Timber Creations Ltd. are other wood manufacturers in the TCE; and Complete Home Innovations is a plywood and veneer manufacturer in Greerton.

## Sector Trends

From 2001 to 2002, employment dropped slightly from 823 to 779, before increasing 35% to reach a peak of 1,052 MECs in 2005 (see Figure 20.1). Following the initial increase, employment in the sector dropped slightly, falling 11.1% to 935 MECs by 2007. From 2007 to 2009, the sector experienced a substantial drop in employment, and by 2009 the sector employed 570 MECs. The level of employment in the subsequent periods remained stagnant and the sector employed 594 MECs by 2011.

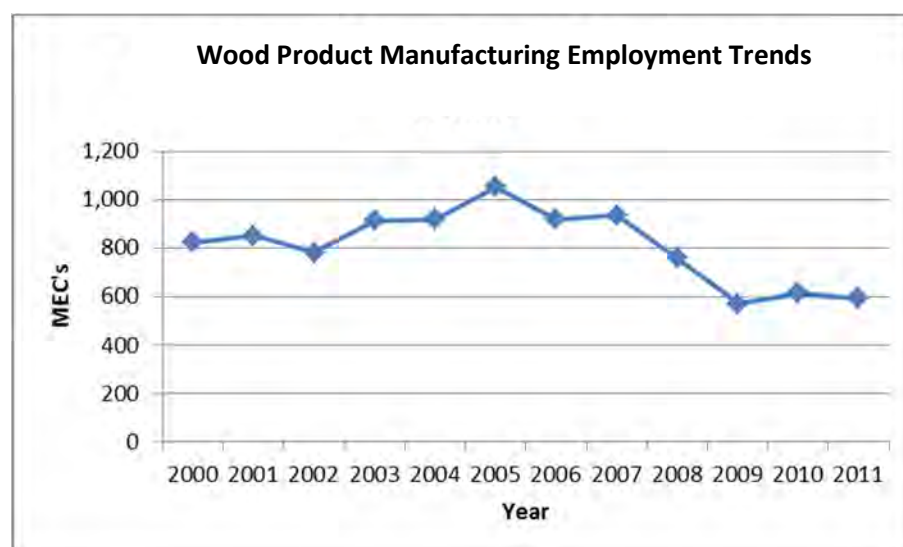


Figure 20.1 Wood Product Manufacturing Employment Trends

Source: Market Economics Ltd. (2012)

## Future Trends

The sector faces increasingly competitive cost pressures from manufacturing plants in South America, Asia and Russia. Large scale automation in the manufacturing sector will be required to compete with cheap labour from these countries, requiring up-skilling and restructuring. Economic conditions in the construction industries in Australia and the US will have a direct impact on performance in this sector as they are crucial export markets. As at 2016, a drop in world demand and price for sawn timber is likely to slow growth in the industry, meaning continued innovation will be necessary to keep pace with these changes. High freight costs and an appreciating exchange rate also need to be contended with. Locally, it can be expected that the drop in employment observed in 2007 will slow, and employment numbers will start to increase albeit at a slow pace.

## Update to 2016

This statistical update applies for the “Wood Product Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 810
Employment Rank: 19 <sup>th</sup>
GDP: \$69m
GDP Rank: 18 <sup>th</sup>
% GDP Growth (2011-2016): 3.39% pa
% GDP Growth Rank: 26 <sup>th</sup>
Location Quotient: 1.51

## References

Arbor Resources Ltd. (n.d). About. Retrieved 19/02/2012, from <http://newzealandtimbersupplies.com/>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

New Zealand Pine Manufacturers (n.d). *Members List*. Retrieved 15/02/2013 from:  
<http://www.pine.net.nz/members-topmenu-21>

# 21. Paper and Paper Products Manufacturing

---

## Description

*ANZSIC Codes covered:*

- C2331-Pulp, Paper and Paperboard Manufacturing
- C2332-Solid Paperboard Container Manufacturing
- C2333-Corrugated Paperboard Container Manufacturing
- C2334-Paper Bag and Sack Manufacturing
- C2339-Paper Product Manufacturing

*Main Commodities Supplied in the TCE:*

- Pulp, Paper and Paper Board  
(100% of sector employment)

Employment: 4  
Employment Rank: 44<sup>th</sup>  
Average Growth Rate: -23.55%

GDP: \$0.6m  
GDP Rank: 46<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$0.8m

Location Quotient: 0.03  
Labour Productivity: 167.66  
Value-Added Multiplier: 6.98

## Economic Overview

The Paper and Paper Products Manufacturing sector employs well below the national average with only 4 MECs and a LQ of 0.03. The only types of products produced in the TCE are pulp, paper and paperboard, employing 100% of workers with an overall LQ of 0.07, still well below the national average. The sector suffered a major decline over the period between 2000 and 2009 where the annual average employment growth rate was -23.55%.

## Sector Trends

Employment in the Paper and Paper Products Manufacturing sector initially increased 14.68% from 2000 to 2003 (see Figure 21.1). However employment began falling from 2003, until 2006. The Sector improved slightly between 2006 and 2007, however this did not last and employment in the sector continued falling until 2011. The biggest decline in this sector was between 2008 and 2009, when the number of MECs fell from 31 to 6, a large drop of -79.4%.

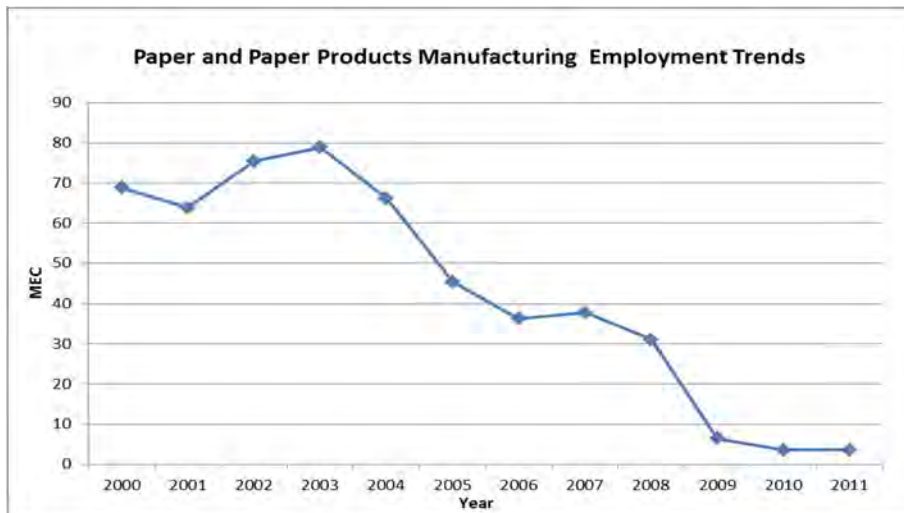


Figure 21.1 Paper and Paper Products Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

## Future Trends

The Paper and Paper products sector is not expected to recover in the future.

## Update to 2016

This statistical update applies for the “Pulp, Paper and Converted Paper Product Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 4  
Employment Rank: 45<sup>th</sup>

GDP: \$6m  
GDP Rank: 41<sup>st</sup>

% GDP Growth (2011-2016): -6.95% pa  
% GDP Growth Rank: 47<sup>th</sup>

Location Quotient: 0.03

## Reference

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

## 22. Printing, Publishing and Recorded Media Manufacturing

---

### Description

*ANZSIC Codes covered:*

- C2411-Paper Stationery Manufacturing
- C2412-Printing
- C2413-Services to Printing
- C2421-Newspaper Printing or Publishing
- C2422-Other Periodical Publishing
- C2423-Book and other Publishing
- C2430-Recorded Media Manufacturing and Publishing

*Main Commodities Supplied in TCE:*

- Books and newspapers
- Printing services

Employment: 353  
Employment Rank: 26<sup>th</sup>  
Average Growth Rate: -6.67%

GDP: \$22.4m  
GDP Rank: 32<sup>nd</sup>  
Interregional Exports: \$0m  
International Exports: \$5.2m

Location Quotient: 0.51  
Labour Productivity: 61.17  
Value-Added Multiplier: 2.46

### Economic Overview

This sector is underrepresented when compared nationally, with a low LQ of 0.51. Due to the necessity of the services provided, the sector is still relatively important to the TCE, ranking 26<sup>th</sup> in employment and 32<sup>nd</sup> for contribution to GDP in 2010. Within the sector, Printing activity occupies the largest share, accounting for 64.9% of total employment and with a LQ of 0.96. Newspaper Printing and Publishing activity accounts for 26.9% of total employment in the sector.

### Major Employers in the TCE

Printing giant Fuji Xerox has a branch located in Tauranga. Snap Printing has an office located in Tauranga. Discount Printing offers high speed black & white digital print, colour digital printing, offset printing, laminating, and a range of finishing services. Printing.com offers business card printing, flyer printing, leaflet printing, stationery printing, letterhead printing, brochure printing and poster printing in Tauranga. Printex is a screenprinting and promotional products company in Tauranga supplying personalised corporate apparel and promotional products. There are numerous other small printing companies located in Tauranga, meaning employment is not highly concentrated.

The Bay of Plenty Times and Sun Live News are both based in Tauranga City. The BOP Times employs 11 full time workers. B and F Papers is a large national printing company with offices in Judea.

## Sector Trends

Employment in the sector increased 15.5% from 788 MECs in 2000 to 910 MECs in 2004. In 2005, employment plunged 37.9% to 565 MECs as a result of sharp drop in employment in Newspaper Printing or Publishing and Other Periodical Publishing activities (see Figure 22.1). Both sectors combined accounted for a loss of 345 MECs in the sector. In subsequent years, employment continuously declined resulting in a combined decrease of -34.7% from 2005 to 2011.

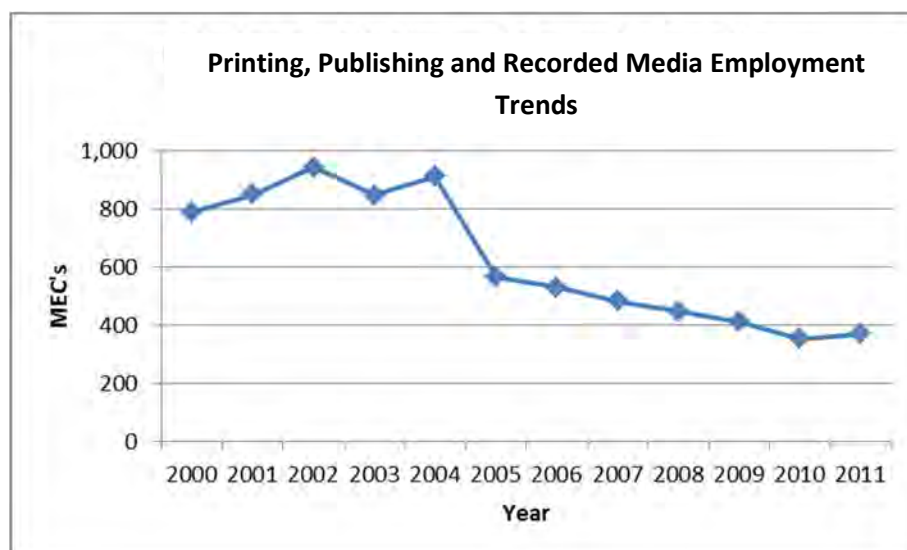


Figure 21.1 Printing, Publishing and Recorded Media Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

In contrast, Printing activity within the sector remained resilient, with employment numbers peaking in 2005, and job losses in 2007 being much less than for other activities in the sector. Book and Other Publishing activity saw modest increases in employment numbers, while employment in Services to Printing activity has been falling. However labour productivity of the sector remained relatively high, ranking 31<sup>st</sup> out of the 46 ANZSIC sectors ranked for labour productivity. This illustrates that, although employment numbers are dropping, gross output may not necessarily be following the downward trend due to productivity increases.

## Future Trends

In the TCE, the only growth area in this sector is in Book and Other Publishing activity, which will not be strong enough to offset the declines in employment seen by other activities within the sector. The changes that have characterised the sector over the last 20 years are highly apparent. Wireless internet, digital printing and publishing technology have led to the automation of many jobs in the sector. Additionally, the increased accessibility to media through copying software reduces the demand for hard copies of music and recorded media. Consequently there has been a decline in the necessity of services provided by the industry as individuals are increasingly able to access information independently, such as online newspapers and journals whose publications must now compete with comparable information accessible over the internet. APN New Zealand closed its printing site in Tauranga in 2013, which resulted in the loss of 27 jobs (Aldridge, 2012). The closure meant that the Bay of Plenty Times was then printed in Auckland.

## Update to 2016

This statistical update applies for the “Printing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 117  
Employment Rank: 34<sup>th</sup>  
  
GDP: \$9m  
GDP Rank: 38<sup>th</sup>  
  
% GDP Growth (2011-2016): -6.37% pa  
% GDP Growth Rank: 46<sup>th</sup>  
  
Location Quotient: 0.45

## Reference

Aldridge, J. (2012, Dec 14). *30 jobs axed in Tauranga council cost cutting plan*. Bay of Plenty Times. Retrieved from [http://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=10854094](http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10854094)

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

## 23. Petroleum and Industrial Chemical Manufacturing

### Description

*ANZSIC Codes covered:*

- C2510-Petroleum Refining
- C2520-Petroleum and Coal Product Manufacturing
- C2531-Fertiliser Manufacturing
- C2532-Industrial Gas Manufacturing
- C2533-Synthetic Resin Manufacturing
- C2534-Organic Industrial Chemical Manufacturing
- C2535-Inorganic Industrial Chemical Manufacturing

*Main Commodities Supplied in TCE:*

- Fertiliser
- Petroleum and Coal Product (Asphalt & Bitumen)
- Synthetic Resin Products

Employment: 255  
Employment Rank: 31<sup>st</sup>  
Average Growth Rate: -0.36%

GDP: \$56.5m  
GDP Rank: 24<sup>th</sup>  
Interregional Exports: \$3.3m  
International Exports: \$38.3m

Location Quotient: 2.66  
Labour Productivity: 213.25  
Value-Added Multiplier: 2.36

### Economic Overview

A large concentration of employment in New Zealand's Industrial Chemical Manufacturing sector occurs in the TCE, with a high LQ of 2.66. The sector is an important part of the local economy, employing 255 MECs in 2010 and generating \$146m in gross output. In particular, the proximity to major transport routes, accessibility to the port, and availability of industrial land were major drivers of the sector's growth in the TCE. In 2010, the sector contributed \$56.5 million towards GDP, exported \$38.3 million to overseas, and exported \$3.3 million to the rest of New Zealand. Main activities within the Petroleum and Industrial Chemical Manufacturing sector include Fertiliser Manufacturing (67.9% of total sector employment), Petroleum and Coal Product Manufacturing (18.78%), and Synthetic Resin Manufacturing (11.85%) activities.

### Major Local Companies

Balance Agri-Nutrients is a 100% farmer owned co-operative which is the product of the amalgamation of several smaller fertiliser manufacturers. Mount Maunganui is the hub for the company, housing the head office and the largest of the company's fertiliser processing factories, which employed 173 MECs in 2010. The factory mainly manufactures phosphate fertilisers and sulphuric acid. Around 150 people are employed at the plant which injects around \$80 million a year into the Bay economy (McPherson, 2007).

Fulton Hogan Ltd., a major contracting company in New Zealand, has two manufacturing plants in Mount Maunganui. One of the plants produces Asphalt and the other Bitumen. Fulton Hogan Ltd. was awarded the contract to build the Tauranga Eastern Link Highway, the biggest roading project in the Bay of Plenty. Fulton Hogan has upgraded the bitumen plant to ensure a reliable

supply for the region. The plant is now capable of storing 20% of the bitumen required annually for asphalt manufacturing in New Zealand. The upgrades are to essentially 'future-proof' the company's bitumen supply and guarantee customers the delivery of asphalt on time and to the highest quality (Fulton Hogan, 2010).

## Sector Trends

Employment in the Petroleum and Industrial Chemical Manufacturing sector slowly increased from 281 MECs in 2000 to the sector's 11-year high point of 384 MECs in 2004 (see Figure 23.1). In 2005, employment in the sector began falling, with losses primarily focused in Fertiliser Manufacturing and Synthetic Resin Manufacturing activities, which fell by -37.7% and -41.4%, respectively, between 2004 and 2008. As the economy began to pick up again in 2009, employment in the Petroleum and Industrial Chemical sector began to slowly recover, where most of the recovery is attributable to Fertiliser Manufacturing activity, which increased 24.5% from 2009 to 2011 (161 MECs to 200 MECs).

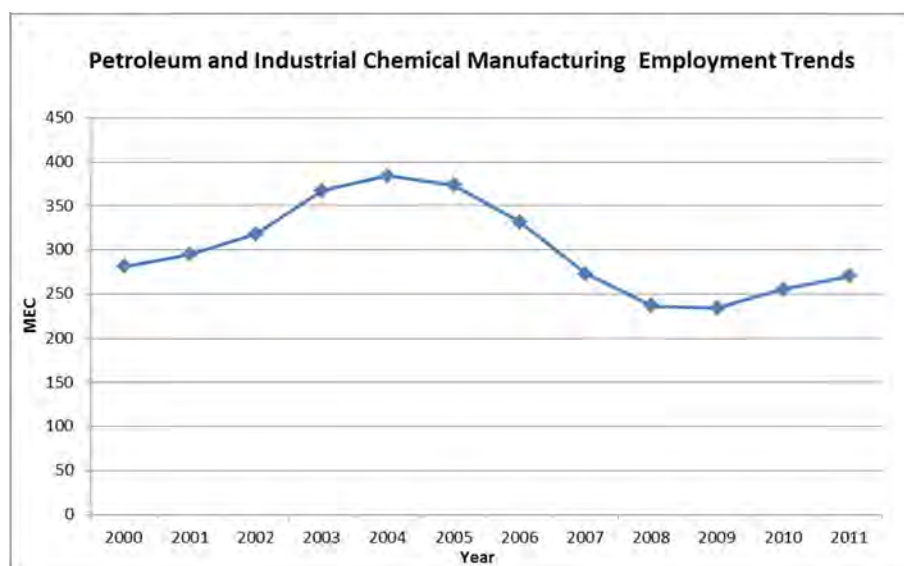


Figure 23.1 Petroleum and Industrial Chemical Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

## Future Trends

Almost 60% of New Zealand's primary production activities rely on the continued use of fertiliser to support the growth and intensification of farm systems. As many district plans require fertiliser budgets from farmers now through the use of technology such as Overseer, there is potential for a reduction in demand from New Zealand customers, as the budget makes sure farmers are only seeding what is needed onto land to reduce the risk of leeching of nutrient that contributes to water degradation. However, the reduction in domestic demand is likely to be offset by an increase in international demand. As at 2012, increase in demand from BRICs nations (Brazil, Russia, India and China) imposed an upward pressure on prices (Balance Agri-Nutrients Limited, 2012).

## Update to 2016

This statistical update applies for the “Petroleum and Coal Product Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 46  
Employment Rank: 40<sup>th</sup>

GDP: \$1m  
GDP Rank: 46<sup>th</sup>

% GDP Growth (2011-2016): 1.54% pa  
% GDP Growth Rank: 33<sup>rd</sup>

Location Quotient: 1.46

## References

Balance Agri-Nutrients Limited. (2012). *Annual Report 2012*. Retrieved from <http://www.ballance.co.nz/uploads/publications/FINAL%20Ballance%20AR2012%20REPORT%20Web.pdf>

Fulton Hogan. (2010). Plant Upgrade Guarantees Asphalt Supply. *People + Places*, 5, 30.

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

McPherson, M. (2007, December 29). Fertiliser Plant Faces Pollution Probe. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/fertiliser-plant-faces-pollution-probe/987561/>

## 24. Rubber, Plastic and Other Chemical Product Manufacturing

---

### Description

*ANZSIC codes covered:*

- C2541-Explosive Manufacturing
- C2542-Paint Manufacturing
- C2543-Medicinal and Pharmaceutical Product Manufacturing
- C2544-Pesticide Manufacturing
- C2545-Soap and Other Detergent Manufacturing
- C2546-Cosmetic and Toiletry Preparation Manufacturing
- C2547-Ink Manufacturing
- C2549-Chemical Product Manufacturing
- C2551-Rubber Tyre Manufacturing
- C2559-Rubber Product Manufacturing
- C2561-Plastic Blow Moulded Product Manufacturing
- C2562-Plastic Extruded Product Manufacturing
- C2563-Plastic Bag and Film Manufacturing
- C2564-Plastic Product Rigid Fibre Reinforced Manufacturing
- C2565-Plastic Foam Product Manufacturing
- C2566-Plastic Injection Moulded Product Manufacturing

Employment: 309  
Employment Rank: 28<sup>th</sup>  
Average Growth Rate: 3.57%

GDP: \$34.5m  
GDP Rank: 28<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$18.6m

Location Quotient: 0.73  
Labour Productivity: 108.84  
Value-Added Multiplier: 2.67

*Main Commodities Supplied in TCE:*

- Explosives, paint and pharmaceutical products
- Soap and detergent
- Plastic bags and plastic injection moulded products
- Water tanks

### Economic Overview

The Rubber, Plastic and Other Chemical Product Manufacturing sector is underrepresented in terms of employment when compared to New Zealand as a whole. However, the sector is still a significant contributor to the local economy, producing \$93 million total output in 2010, and contributing \$34.5 million towards GDP. The largest activity within the sector is Plastic Injection Moulded Product Manufacturing activity (25.9% of total sector employment), Plastic Product Rigid Fibre Reinforced Manufacturing activity (16.5%) and Paint Manufacturing activity (16.5%). Also, activities that are overrepresented in the TCE when compared to the national employment levels are Explosive Manufacturing activity (with a LQ of 10.56), Soap and Other Detergent Manufacturing activity (with a LQ of 1.5) and Chemical Product Manufacturing activity (with a LQ of 2.64). The sector has a high labour productivity of \$108,840 per worker.

## Major Employers in the TCE

There are a number of employers in this sector in the TCE. Prime Explosives is the largest supplier of explosives in the North Island, located in Greerton and employing around 20 people. The inclusion of this company in the TCE accounts for the very high location quotient shown above.

Altex Coatings Ltd. specialises in the formulation, manufacture, and specification of industrial and marine protective coatings throughout Australasia and Southern Pacific regions and has its New Zealand headquarters located in Greerton.

Gemco Ltd. makes a range of coatings, toppings, adhesives, resins, putties, anti-fouling, paint removers, adhesive removers and speciality cleaners and is located in Pāpāmoa Beach.

Freemont Plastic Products Ltd. is located in Greerton and has been involved with the design, development and production of a wide range of injection moulded products for the last 15 years. Devan Plastics Ltd. are manufacturers of large polyethylene water storage tanks, water pumps and accessories.

Fencetastic in Pāpāmoa Beach is New Zealand's leading vinyl fencing company. Fencetastic has over 14 years in the PVC industry and has the technical expertise to produce high quality vinyl products.

Bay Plastic Fabrication specialise in cut to size plastic sheeting service, plastic fabrication of items and machining of engineering plastics. Plastec Formers Ltd. specialise in customised manufacturing solutions using a variety of plastic materials using vacuum forming techniques.

## Sector Trends

As depicted in Figure 24.1, employment in the sector has fluctuated over the period between 2000 and 2011. Employment increased 47.5% between 2000 and 2004, from 242 MECs to 357 MECs. This is due to the strong economic climate in New Zealand in the early 2000's, resulting in high commodity prices and strong international demand. A decline in the next two years saw employment counts drop to 313 MECs, before increasing 20.8% to peak at 378 MECs in 2008. Although the sector remained resilient to the global slowdown in 2008, the employment declined 18.3% to 309 MECs, followed by a modest increase to 355 MECs in 2011.

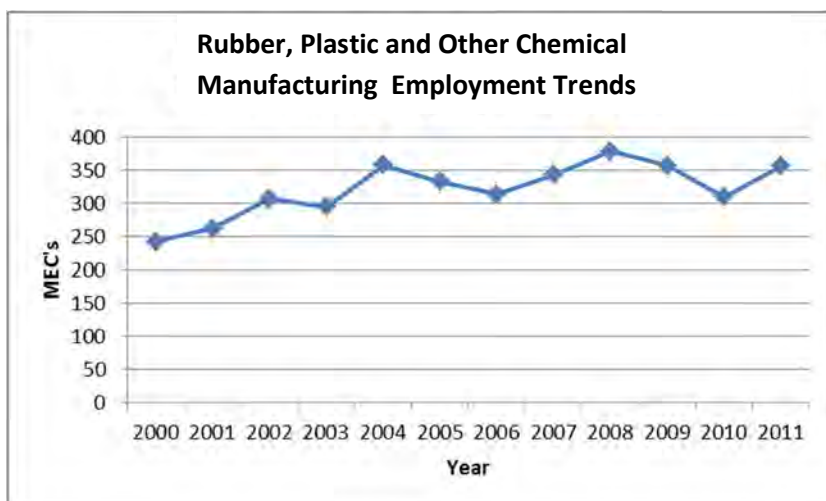


Figure 24.1 Rubber, Plastic and Other Chemical Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

### Fishing Employment Trends

Manufacturing activities in the Explosive, Medicinal and Pharmaceutical, Soap and Detergent and Chemical Products sector experienced a substantial increase in employment over the period. Employments in Paint, Plastic Products, Rigid Fibre, and Plastic Injection Moulded Product Manufacturing activities had a minor increase, while employment in Rubber Tyre, Rubber Product, and Cosmetic and Toiletry Products Manufacturing activities had significant decreases.

### Future Trends

Both domestic and international demands for the products manufactured within the sector are likely to remain strong in the future. However, growth is unlikely to be rapid in the near future.

### Update to 2016

This statistical update applies for “Chemical, Polymer and Rubber Product Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 600  
 Employment Rank: 22<sup>nd</sup>

GDP: \$72m  
 GDP Rank: 17<sup>th</sup>

% GDP Growth (2011-2016): 2.21% pa  
 % GDP Growth Rank: 30<sup>th</sup>

Location Quotient: 1.40

### References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

# 25. Non-Metallic Mineral Product Manufacturing

---

## Description

*ANZSIC Codes covered:*

- C2610-Glass and Glass Product Manufacturing
- C2621-Clay Brick Manufacturing
- C2622-Ceramic Product Manufacturing
- C2623-Ceramic Tile and Pipe Manufacturing
- C2629-Ceramic Product Manufacturing
- C2631-Cement and Lime Manufacturing
- C2632-Plaster Product Manufacturing
- C2633-Concrete Slurry Manufacturing
- C2634-Concrete Pipe and Box Culvert Manufacturing
- C2635-Concrete Product Manufacturing
- C2640-Non-Metallic Mineral Product Manufacturing

Employment: 247  
Employment Rank: 32<sup>nd</sup>  
Average Growth Rate: -1.53%

GDP: \$31.7m  
GDP Rank: 30<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$2.3m

Location Quotient: 1.14  
Labour Productivity: 123.79  
Value-Added Multiplier: 2.80

*Main Commodities Supplied in TCE:*

- Glass and Glass Product Manufacturing
- Ceramic Product Manufacturing
- Concrete Manufacturing
- Non-Mineral Product Manufacturing

## Economic Overview

The Non-Metallic Mineral Product Manufacturing sector is proportionally highly represented in the TCE with a LQ of 1.14. In particular, Glass and Glass Product Manufacturing activity has a LQ of 1.45, Concrete Slurry Manufacturing activity has a LQ of 1.43, and Ceramic Product Manufacturing activity has a LQ of 1.38.

Overall, the Non-Metallic Mineral Product Manufacturing sector is a small employer in the TCE, with 247 MECs and ranking 32<sup>nd</sup> out of the 46 ranked ANZSIC sectors. In 2010, the sector produced \$80 million in gross output, contributed \$31.7 million towards GDP, and had a high labour productivity of \$123,790 per worker.

## Major Employers in the TCE

Major employers in the TCE include: GlassKote Ltd., located in Tauranga, is a manufacturer of coloured glass for use in kitchens, bathrooms, and commercial exteriors for decorative purposes. Supacrete Concrete Ltd. is a locally owned and operated concrete slurry manufacturer with branches in Greerton and Katikati.

Cabana Outdoor Design manufactures outdoor concrete products to the New Zealand market and has been based in Tauranga since 1980. Pacific Stone Ltd. is a manufacturer of granite products for both commercial and residential uses, and has been based in Tauranga since 1985.

Other concrete manufacturers are Bridgeman Concrete Ltd. Tauranga and Allied Concrete Ltd. Tauranga.

## Sector Trends

Employment in the Non-Metallic Mineral Product Manufacturing sector experienced a substantial decrease in 2001, dropping by 46.1% from 290 MECs in 2000 to 156 MECs in 2001 (see Figure 25.1). Most of the loss in employment was a result of a 74.8% drop in Concrete Product Manufacturing activity, and a 29.6% drop in Concrete Slurry Manufacturing activity. However, the employment in the sector slowly recovered between 2001 and 2007. In 2008, the sector had a large increase in employment as a result of a massive 328.7% employment increase in Glass and Glass Product Manufacturing.

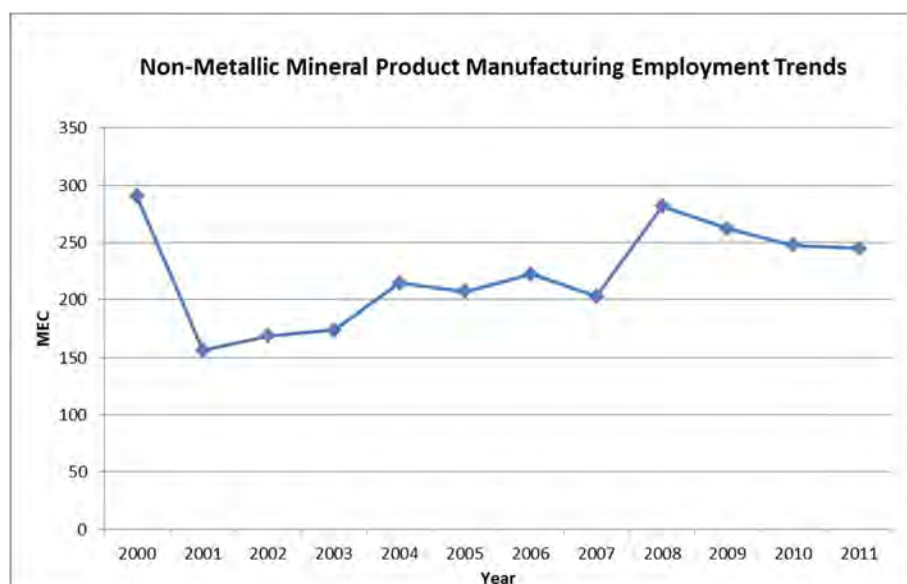


Figure 25.1 Non-Metallic Mineral Product Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

## Future Trends

As a result of peak in the construction sector demands for the manufactured commodities from the Non-Metallic Mineral Product Manufacturing sector, the employment in the sector has likely reached an upper boundary as at 2016 and projected to stagnate in the future.

## Update to 2016

This statistical update applies for the “Non-metallic Mineral Product Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 282  
Employment Rank: 29<sup>th</sup>  
  
GDP: \$21m  
GDP Rank: 30<sup>th</sup>  
  
% GDP Growth (2011-2016): -1.66% pa  
% GDP Growth Rank: 42<sup>nd</sup>  
  
Location Quotient: 1.16

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

## 26. Basic Metal Manufacturing

---

### Description

*ANZSIC Codes Covered:*

- C2711-Basic Iron and Steel Manufacturing
- C2712-Iron and Steel Casting and Forging
- C2713-Steel Pipe and Tube Manufacturing
- C2721-Alumina Production
- C2722-Aluminium Smelting
- C2723-Copper, Silver, Lead and Zinc Smelting, Refining
- C2729-Basic Non-Ferrous Metal Manufacturing
- C2731-Aluminium Rolling, Drawing, Extruding
- C2732-Non-Ferrous Metal Rolling, Drawing, Extruding
- C2733-Non-Ferrous Metal Casting

Employment: 28  
Employment Rank: 42<sup>nd</sup>  
Average Growth Rate: 5.14%

GDP: \$3.9m  
GDP Rank: 44<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$3.6m

Location Quotient: 0.20  
Labour Productivity: 134.10  
Value-Added Multiplier: 3.91

*Main Commodities Supplied in TCE:*

- Basic Iron and Steel

### Economic Overview

The Basic Metal Manufacturing sector is a small sector within the TCE. In 2010, the sector produced \$15 million in output, employed 28 MECs, and contributed \$3.9 million to GDP. The sector had a high labour productivity (ranked 12<sup>th</sup>) at \$134,100 per worker in 2010.

### Major Employers in the TCE

Major employers in the TCE include: Abbas, in Mt Maunganui, which specialises in metal gates, handrails and balustrades; Classic Iron Tauranga Ltd., which manufactures iron products; Iron Design, which is located in Tauranga; and Vulcan Steel Ltd., which is based in Mt Maunganui.

### Sector Trends

Basic Iron and Steel Forging activity has been the main driver of growth in this sector, with employment numbers increasing 130% over the time period. Employment in other activities within the sector has fluctuated (see Figure 26.1). Overall employment figures have stayed constant at around 30 MECs apart from increases from 16 MECs to 32 MECs in 2001 and 28 MECs to 39 MECs in 2005.

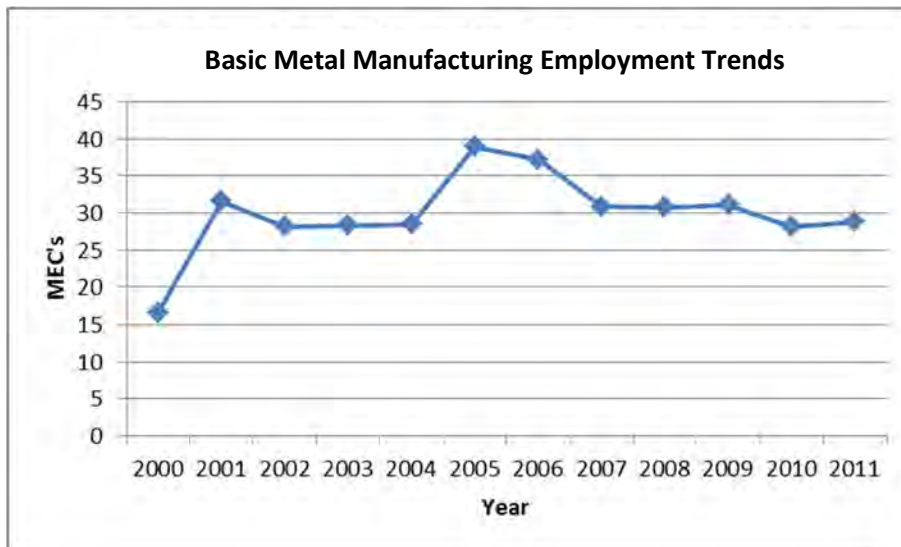


Figure 26.1 Basic Metal Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

## Future Trends

This sector is likely to be stagnant in the future.

## Update to 2016

This statistical update applies for the “Primary Metal and Metal Product Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 32  
Employment Rank: 44<sup>th</sup>

GDP: \$4m  
GDP Rank: 44<sup>th</sup>

% GDP Growth (2011-2016): -0.23% pa  
% GDP Growth Rank: 39<sup>th</sup>

Location Quotient: 0.26

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

# 27. Structural, Sheet and Fabricated Metal Product Manufacturing

---

## Description

*ANZSIC Codes covered:*

- C2741-Structural Steel Fabricating
- C2742-Architectural Aluminium Product Manufacturing
- C2749-Structural Metal Product Manufacturing
- C2751-Metal Container Manufacturing
- C2759-Sheet Metal Product Manufacturing
- C2761-Hand Tool and General Hardware Manufacturing
- C2762-Spring and Wire Product Manufacturing
- C2763-Nut, Bolt, Screw and Rivet Manufacturing
- C2764-Metal Coating and Finishing
- C2765-Non-Ferrous Pipe Fitting Manufacturing
- C2769-Fabricated Metal Product Manufacturing

Employment: 708  
Employment Rank: 18<sup>th</sup>  
Average Growth Rate: 0.32%

GDP: \$57.6m  
GDP Rank: 23<sup>rd</sup>  
Interregional Exports: \$1.6m  
International Exports: \$39m

Location Quotient: 1.05  
Labour Productivity: 79.85  
Value-Added Multiplier: 2.91

*Main Commodities Supplied in the TCE:*

- Structural Steel Fabricating
- Architectural Aluminium Product Manufacturing
- Sheet Metal Product Manufacturing

## Economic Overview

In 2010, the Structural, Sheet and Fabricated Metal Product Manufacturing sector contributed \$57.6 million towards GDP. Subsequently, the sector produced \$151million in output, exported \$39 million overseas and \$1.6 million to the rest of New Zealand. The sector employed 708 MECs and had a similar proportion of employment compared to New Zealand as a whole, with an LQ of 1.05.

The highest employing activities within this sector are Architectural Aluminium Product Manufacturing (25.6% of total sector employment), Structural Steel Fabricating (22.4% of total sector employment), and Sheet Metal Product Manufacturing (18.3% of total sector employment).

## Major Employers in the TCE

There are a number of major employers in the TCE. Steelworks NZ Ltd. (2013) is a structural steel fabricator with a factory and yard in Mount Maunganui. The team of 25 specifically fabricate and supply structural steel to the construction industry. Tata Steel, located in Mount Maunganui, is a branch of Tata Steel International (Australasia) Ltd., who are New Zealand's

leading suppliers of stainless steel and steel. Roofman is a privately owned manufacturer of roofing, cladding and rainwater systems designed for use on residential, industrial and commercial buildings; based in Tauranga, the company caters for contractors involved in the building industry supplying material in a variety of metals.

## Sector Trends

Employment growth in the Structural, Steel and Fabricated Metal Product Manufacturing sector had steady growth from 2000 to 2005, when employment growth levelled off (See Figure 27.1). Between 2006 and 2007 employment increased by 16.2%; then, between 2007 and 2011, employment fell by 29.0%. The greatest decrease was seen in the activity of Architectural Aluminium Product Manufacturing, which fell from 330 MECs in 2007, to 181 MECs in 2011. Some of the decline in MECs could be attributed to investment in new fabrication technology, which has increased both productivity and quality of the products produced (Steel Construction New Zealand, 2011).

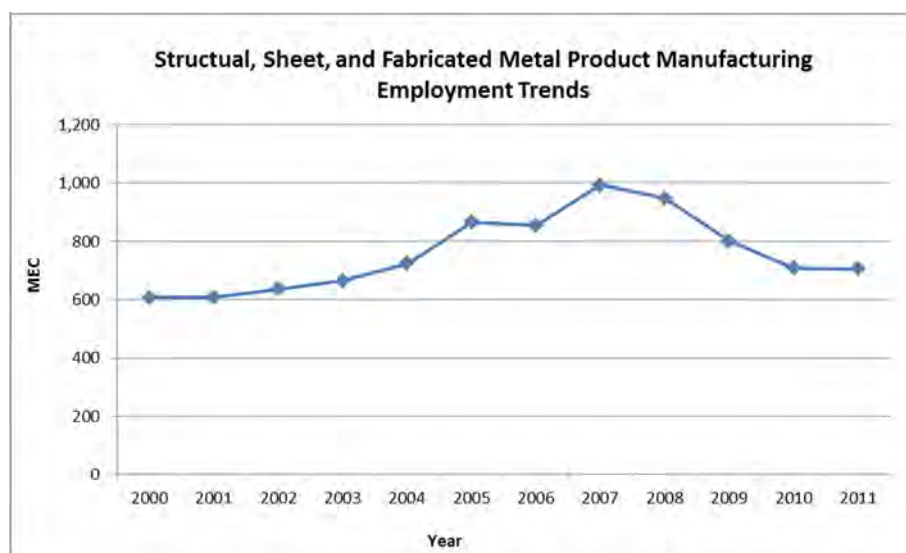


Figure 27.1 Structural, Sheet, and Fabricated Metal Product Manufacturing Employment Trends

Source: Market Economics Ltd. (2012)

## Future Trends

The decline in MECs from the Structural, Sheet and Fabricated Metal Product Manufacturing sector stopped almost completely between 2010 and 2011, along with New Zealand coming out of recession. There is no reason to believe that employment in this sector is going to decline further. With the devastation caused by the 2011 Christchurch and later Kaikoura earthquakes, the focus now will be on rebuild. Engineers have shown that steel buildings have proven seismic performance, such as the 12-storey HSBC Tower which suffered no structural damage during the earthquakes. Steel-framed buildings have an added advantage over other materials as they are much speedier to construct.

## Update to 2016

This statistical update applies for the “Fabricated Metal Product Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 955  
Employment Rank: 17<sup>th</sup>  
  
GDP: \$62m  
GDP Rank: 22<sup>nd</sup>  
  
% GDP Growth (2011-2016): 5.03% pa  
% GDP Growth Rank: 19<sup>th</sup>  
  
Location Quotient: 1.31

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Steel Construction New Zealand. (2011). *Steel: The Proven Performer for a New Christchurch*. Manakau City, New Zealand: Retrieved from: <http://www.scnz.org/content/events/docs/Steel%20-%20the%20proven%20performer%20for%20a%20new%20Christchurch.pdf>

Steelworks NZ Ltd. (2013). *Steel Work*. Retrieved 31/01/2013, from <http://steelworksnz.co.nz/projectsgallery/>

# 28. Transport Equipment Manufacturing

---

## Description

*ANZSIC Codes covered:*

- C2811-Motor Vehicle Manufacturing
- C2812-Motor Vehicle Body Manufacturing
- C2813-Automotive Electrical and Instrument Manufacturing
- C2819-Automotive Component Manufacturing
- C2821-Shipbuilding
- C2822-Boatbuilding
- C2823-Railway Equipment Manufacturing
- C2824-Aircraft Manufacturing
- C2829-Transport Equipment Manufacturing

Employment: 379  
Employment Rank: 24<sup>th</sup>  
Average Growth Rate: 0.32%

GDP: \$28.5m  
GDP Rank: 31<sup>st</sup>  
Interregional Exports: \$0m  
International Exports: \$11.1m

Location Quotient: 1.02  
Labour Productivity: 74.09  
Value-Added Multiplier: 2.28

*Main Commodities Supplied in TCE:*

- Buses
- Pleasure boats
- Boat repair services and yacht refits

## Economic Overview

With a LQ of 1.02, in 2010 the Transport Equipment Manufacturing sector was of equal importance to the TCE as to New Zealand as a whole, in terms of employment. Approximately 45.1% of employment in this sector was from Motor Vehicle Body Manufacturing activity, and 40.9% in Boatbuilding activity. Railway Equipment Manufacturing and Automotive Component Manufacturing activities, respectively, employed 5.3% and 4.5% of total employment in the sector. The sector had an average labour productivity of \$74,090 per worker, where it ranked 24<sup>th</sup> out of the 46 ranked ANZSIC sectors in the TCE. Two activities were identified as having overrepresented employment numbers, compared to nationally: Motor Vehicle Body Manufacturing (with a LQ of 3.21) and Boatbuilding (with a LQ of 1.26) activities.

## Major Employers in the TCE

The main employers in the TCE are as follows:

Kiwi Bus Builders supply buses globally and have their headquarters and manufacturing plant located in Tauranga. The firm boasted large growth in employment numbers over early 2000s, which accounts for the high location quotient for the Motor Vehicle Body Manufacturing subsector.

Hutcheson Boatbuilders Ltd. carry out a complete range of boat building work on both commercial and recreational vessels including new boat construction, general vessel repairs and maintenance, vessel refits, fibre glassing, interior cabinetry, general engineering, osmosis repairs, stainless steel work, repaints and painting repairs, antifouling, boat grooming and all manner of shipwright work. Boatbuilding and refitting is a strong industry in Tauranga, as an increasing number of super yachts come into the Port of Tauranga due to its convenient location and growing reputation for quality services offered. These factors lead to a relatively high LQ for boatbuilding.

Pachoud Yachts is a boat building company in Tauranga specialising in the construction of epoxy composite motor yachts 15 - 50 metres in length. After operating for more than 25 years they claim to be the most experienced builders of custom, luxury, composite catamarans in the world.

Southern Ocean is a company in Tauranga that makes custom-built, composite and timber sail and power boats. Alloy Cats NZ Ltd. is located in Mount Maunganui and specialises in the building of Kingfisher boats and Powercats and employ 15 people. There are numerous other boatbuilders located close to the harbour, meaning sector employment is spread over a number of smaller companies.

## Sector Trends

Employment rose steadily during the first four years, increasing 69.6% from 369 MECs in 2000 to peak at 626 MECs in 2004 (see Figure 28.1). This follows the trend of the strong Manufacturing sector in general between 2000 and 2005. Employment fell 23.2% to 481 MECs in 2007, and as the recession hit employment further declined, dropping another 21.2% to 379 MECs in 2010. This illustrates the responsiveness of the Manufacturing sector to economic conditions. The fall in employment in 2004 can be partly accounted for by the large boatbuilding company, Pachoud Yachts, going into liquidation and dropping most of their 120 employees (NZPA, 2005). However in 2006 the company was taken over by Channor NZ, causing employment numbers to pick up again (Skellern, 2006).

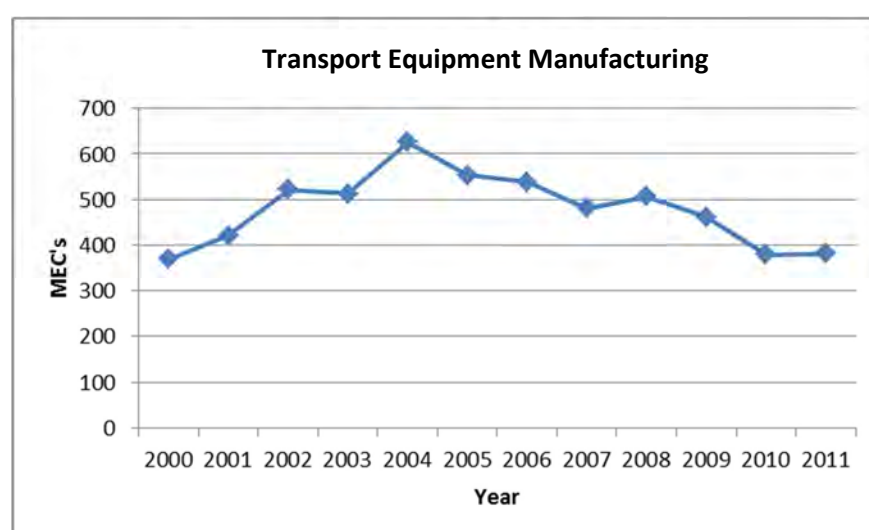


Figure 28.1 Transport Equipment Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

At an activity level, Motor Vehicle Body Manufacturing activity saw steady rises in employment over the time period, with 108 MECs in 2000 and 186 MECs in 2011. Employment in Boatbuilding activity has fluctuated, with a peak of 261 MECs in 2002 followed by a continuous decline of employment numbers to 138 MECs in 2011. Employment in the Automotive Component Manufacturing activity declined 67.7%, while Railway Equipment Manufacturing activity stayed constant at around 20 MECs. Motor Vehicle Body Manufacturing activity is the largest employer in this sector, mostly due to Kiwi Bus Builders being located in the TCE.

### Future Trends

Employment numbers should remain constant so long as Kiwi Bus Builders continues to operate within the TCE. Boatbuilding activity is expected to increase due to increasing overseas demand. Other activities in this sector are not expected to show any growth in the future.

As at 2016, the sector as a whole is undergoing a change where the market for specialised niche products, including international demand, is increasing. According to the NZ Marine Industry, the long term focus of the boatbuilding industry is on marketing to maintain a brand that sets a benchmark for high performance and advanced technology when it comes to super-yacht and launch boat building technology, especially around composites and design, refits, sails, spars, electronics, technology, and software (NZ Marine Industry, n.d). Due to the recreational or 'luxury' nature of the boatbuilding, demand for products has a high elasticity and is sensitive to changes in worldwide economic conditions and income fluctuations. Conversely, the TCE is well placed to take advantage of increasing demand for the services in this sector.

### Update to 2016

This statistical update applies for the "Transport Equipment Manufacturing" (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 494 Employment Rank: 24 <sup>th</sup>  GDP: \$24m GDP Rank: 29 <sup>th</sup>  % GDP Growth (2011-2016): 7.59% pa % GDP Growth Rank: 9 <sup>th</sup>  Location Quotient: 1.34
---

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

New Zealand Marine Industry. (n.d). *New Zealand Boat Building CPC Programme..* Retrieved from <http://www.nzmarine.com/Boating+in+NZ/New+Zealand+Boat+Building+Standard+CPC+Programme.html>

NZPA. (2005, Apr 19). Tauranga boat builder goes into liquidation owing nearly \$7m. *New Zealand Herald*. Retrieved from [http://www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=10121282](http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10121282)

Skellern, G. (2006, Mar 8). New boat stack refloated. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/new-boat-stack-refloated/958170/>

# 29. Machinery and Equipment Manufacturing

---

## Description

*ANZSIC Codes covered:*

- C2831-Photographic and Optical Good Manufacturing
- C2832-Medical and Surgical Equipment Manufacturing
- C2839-Professional and Scientific Equipment Manufacturing
- C2841-Computer and Business Machine Manufacturing
- C2842-Telecommunication, Broadcasting and Transceiving Equipment Manufacturing
- C2849-Electronic Equipment Manufacturing
- C2851-Household Appliance Manufacturing
- C2852-Electric Cable and Wire Manufacturing
- C2853-Battery Manufacturing
- C2854-Electric Light and Sign Manufacturing
- C2859-Electrical Equipment Manufacturing
- C2861-Agricultural Machinery Manufacturing
- C2862-Mining and Construction Machinery Manufacturing
- C2863-Food Processing Machinery Manufacturing
- C2864-Machine Tool and Part Manufacturing
- C2865-Lifting and Material Handling Equipment Manufacturing
- C2866-Pump and Compressor Manufacturing
- C2867-Commercial Space Heating and Cooling Equipment Manufacturing
- C2869-Industrial Machinery and Equipment Manufacturing

Employment: 964  
Employment Rank: 17<sup>th</sup>  
Average Growth Rate: 2.57%

GDP: \$68.6m  
GDP Rank: 21<sup>st</sup>  
Interregional Exports: \$0m  
International Exports: \$51.4m

Location Quotient: 1.06  
Labour Productivity: 69.95  
Value-Added Multiplier: 2.58

*Main Commodities Supplied in TCE:*

- Industrial Machinery and Equipment Manufacturing
- Medical and Surgical Equipment Manufacturing

## Economic Overview

Machinery and Equipment Manufacturing is a relatively large sector in the TCE in terms of both employment (964 MECs) and contribution to GDP (\$68.6 million) in 2010. The sector is of similar importance in the TCE as to the New Zealand economy overall in terms of employment numbers. Many companies in this sector may have chosen to locate in the area due to the presence of the port and efficient transport infrastructure, which makes sourcing inputs easier, and distributing finished products cheaper and faster.

The main activities within the Machinery and Equipment Manufacturing sector are Industrial Machinery and Equipment Manufacturing (60.8% of the total sector employment), Medical and Surgical Equipment Manufacturing (9% of the total sector employment), and Agricultural Machinery Manufacturing (7.1% of the total sector employment).

### Major Employers in the TCE

Major employers in the TCE include: Fruit Sorting Systems Ltd. (n.d) is a major Machinery manufacturer in the TCE, designing and manufacturing fruit sorting systems and related machinery for the fruit industry. Kiatronics Ltd. (2009) is a part of the Welton Holdings group and manufactures specialised electronic products for the aged care industry. Kiatronics manufacture over 50 different products for many commercial customers who distribute them both locally and internationally. FGE Ltd. (n.d) is a manufacturer of custom made packaging automation equipment, specializing in fruit and vegetable handling, with a factory located in Tauranga. Doherty Engineered Attachments (2010) designs, manufactures and distributes a wide range of earthmoving equipment attachments all over the world from their site in Mount Maunganui.

### Sector Trends

Employment in the Machinery and Equipment Manufacturing sector generally trended upwards between 2000 and 2011, with an annual average growth rate of 2.57% (see Figure 29.1). Most of the growth in employment in the sector over this period however was between 2000 and 2004, where the number of MECs increased from 750 to 972 respectively. Most of this growth was in the Industrial Machinery and Equipment Manufacturing activity, where employment increased from 408 MECs to 588 MECs. Employment in the sector declined in 2005 and remained relatively steady until 2008, where the number of workers employed in the sector increased to 979 MECs. Between 2008 and 2011, there was a slight increase in the number of workers employed in the TCE, rising from 979 MECs to 991 MECs.



Figure 29.1 Machinery and Equipment Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

## Future Trends

The sector remained resilient to exogenous factors affecting the TCE as well as the national economy (e.g., the Global Financial Crisis, high exchange rates). However, the sector did not experience any significant growth over the years. As such, the sector is expected to remain stable in the future.

## Update to 2016

This statistical update applies for the “Machinery and Equipment Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 858  
Employment Rank: 18<sup>th</sup>  
  
GDP: \$68m  
GDP Rank: 19<sup>th</sup>  
  
% GDP Growth (2011-2016): 5.75% pa  
% GDP Growth Rank: 14<sup>th</sup>  
  
Location Quotient: 1.00

## References

- Doherty Engineered Attachments. (2010). *About Us*. Retrieved from [http://www.dohertydirect.net/dohertys-engineered-attachment/about-us\\_idl=10\\_idt=940\\_id=4014\\_.html](http://www.dohertydirect.net/dohertys-engineered-attachment/about-us_idl=10_idt=940_id=4014_.html)
- FGE Ltd. (n.d). *FGE Ltd –Tauranga, New Zealand*. Retrieved 8/02/2013, from <http://www.fge.co.nz/index.html>
- Fruit Sorting Systems Ltd. (n.d). *Fruit Sorting Systems*. Retrieved 8/02/2013, from <http://www.fruitsorting.co.nz/>
- Kiatronics Ltd. (2009). *About Us*. Retrieved from <http://www.kiatronics.com/about-us>
- Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

## 30. Furniture and Other Manufacturing

### Description

*ANZSIC Codes Covered:*

- C2911-Prefabricated Metal Building Manufacturing
- C2919-Prefabricated Building Manufacturing
- C2921-Wooden Furniture and Upholstered Seat Manufacturing
- C2922-Sheet Metal Furniture Manufacturing
- C2923-Mattress Manufacturing (except Rubber)
- C2929-Furniture Manufacturing
- C2941-Jewellery and Silverware Manufacturing
- C2942-Toy and Sporting Good Manufacturing
- C2949-Manufacturing

Employment: 340  
Employment Rank: 27<sup>th</sup>  
Average Growth Rate: -3.24%

GDP: \$19.6m  
GDP Rank: 33<sup>rd</sup>  
Interregional Exports: \$0.1m  
International Exports: \$9.4m

Location Quotient: 1.01  
Labour Productivity: 55.94  
Value-Added Multiplier: 3.07

*Main commodities supplied in TCE:*

- Wooden furniture
- Jewellery and silverware
- Toy and sporting goods
- Prefabricated homes

### Economic Overview

With a LQ of 1.01, the proportion of employment within the Furniture and Other Manufacturing sector compared to total employment in the TCE was similar to New Zealand as a whole in 2010. The largest employers in the sector were Wooden Furniture and Upholstered Seat Manufacturing (48.2% of total employment), Manufacturing Not Elsewhere Classified (16.5%), Jewellery and Silverware Manufacturing (10.9%), and Toy and Sporting Good Manufacturing (9.4%). The sector had a relatively low labour productivity at \$55,940 per worker, ranking 33<sup>rd</sup> out of the 46 ranked ANZSIC sectors in the TCE. Overall, in 2010 the sector employed 340 MECs, produced \$50 million gross outputs, contributed \$19.6 million towards GDP and exported \$9.4 million overseas.

### Major Employers in the TCE

Major employers in this sector in the TCE include:

- Blackmore Design, Timber Creations Ltd., Everwood Custom Made Furniture and Leisure Wood Designs Ltd. are all wooden furniture manufacturers based in Mount Maunganui.
- Tauriko Sawmill manufacture furniture from douglas fir, macrocapa and rimu.
- Iron Design make furniture and other wrought iron products.
- Kitchens & Cupboards Tauranga manufacture a range of home goods including furniture, bookcases, storage and kitchen units.

- A-One Blinds are local manufacturers of quality custom made blinds, operating for over 10 years.
- Intalok Homes has built over 1600 homes in 11 countries over the past 30 years, specialising in wooden homes for NZ, Tahiti and USA.
- A1 Homes NZ, Edwards Garden and Greenhouse, Total Span Steel Buildings, KiwiSpan NZ, Portacom Building Solutions, Modcom Portable Buildings, Royal Wolf, Mount Timber Homes, Ezyline Prebuilt Homes, the Garden Shed Company, R & B Craw Ltd., Gear NZ Steel Buildings, Cabbage Tree Cottages, Factory Direct Kitset Homes and Cubular Container Buildings are all companies that supply prefabricated buildings, both metal and wooden materials.

## Sector Trends

Employment in the sector increased 31.3% from 467 MECs in 2000 to 613 MECs in 2003 on the back of strong demand (see Figure 30.1). Over the next four years employment fell 24.3% to 464 MECs, before rising slightly and then dropping steadily as the recession hit, falling 33.5% from 489 MECs in 2008 to 325 MECs in 2011.

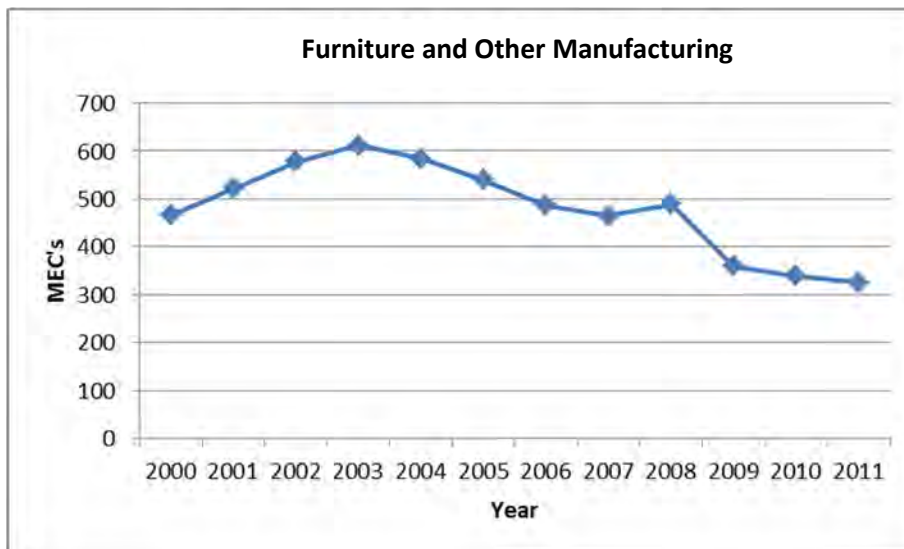


Figure 30.1 Furniture and Other Manufacturing Employment Trends  
Source: Market Economics Ltd. (2012)

Over the period of 2000 to 2011, Prefabricated Metal Building activity showed solid employment growth, increasing from 5 MECs to 22 MECs, with a LQ of 2.23. Other Prefabricated Building Employment activity showed a decreasing trend in employment, although the activity was still more important to the TCE than the national average (LQ of 3.35). Employment in Wooden Furniture and Upholstered Seating Manufacturing activity was particularly hard hit by the recession in 2008, accounting for most of the drop in employment as shown above. Employment in Jewellery and Silverware Manufacturing activity has been relatively constant, while Toy and Sporting Good Manufacturing activity has also shown a decline. Employment in other activities has been volatile, with a peak of 86 MECs in 2006 and a low of 56 MECs in 2010.

## Future Trends

Overall the decrease in employment since the recession is unlikely to recover as the sector faces increasing competition from overseas. Demand from the high-end domestic market is expected to grow at a more rapid rate than the export market; however, due to the nature of the products supplied by this sector, demand is highly elastic and thus the sector is likely to be greatly affected by the national business cycle.

## Update to 2016

This statistical update applies for the “Furniture and Other Manufacturing” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 255  
Employment Rank: 31<sup>st</sup>

GDP: \$16m  
GDP Rank: 33<sup>nd</sup>

% GDP Growth (2011-2016): 5.19% pa  
% GDP Growth Rank: 18<sup>th</sup>

Location Quotient: 0.91

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

# 31. Electricity Generation and Supply

## Description

*ANZSIC codes covered:*

- D3610-Electricity Supply

*Main Commodities Supplied in the TCE:*

- On-selling electricity and electricity market operation

Employment: 303  
Employment Rank: 29<sup>th</sup>  
Average Growth Rate: 2.39%

GDP: \$171m  
GDP Rank: 10<sup>th</sup>  
Interregional Exports: \$73.9m  
International Exports: \$0m

Location Quotient: 1.80  
Labour Productivity: 564.20  
Value-Added Multiplier: 3.82

## Economic Overview

Actual electricity generation in the TCE is very small, with 167 Gigawatt-hours (GWh) being produced on average per year from the Kaimai Power Scheme (4 operational power stations) – this amounts to only 0.0004% of New Zealand’s total electricity generation, or 0.0007% of New Zealand’s hydro-electricity generation.

The Electricity Generation and Supply sector’s output and employment is attributed to the head office of a major electricity company, Trustpower. The sector employed 303 MECs in 2010, with a LQ of 1.8. In the same year, the sector produced \$586million in gross output, the 6<sup>th</sup> highest in the TCE, of which \$73.9 million was exported to other regions in New Zealand; and contributed \$171 million towards GDP.

## Major Employers in the TCE

TrustPower is New Zealand’s fifth largest electricity generator in capacity and revenue. The company serves approximately 260,000 customers throughout the Country (see Figure 31.1). Although TrustPower only produces a very small amount of electricity within the TCE (from the Kaimai power scheme), its headquarters are located in Tauranga and its 36 owned and operated power stations are located in other regions, all generating 100% renewable energy from sources such as hydro and wind. Approximately 250 of TrustPower’s 450 staff are based at the Tauranga headquarters (Priority One, n.d).

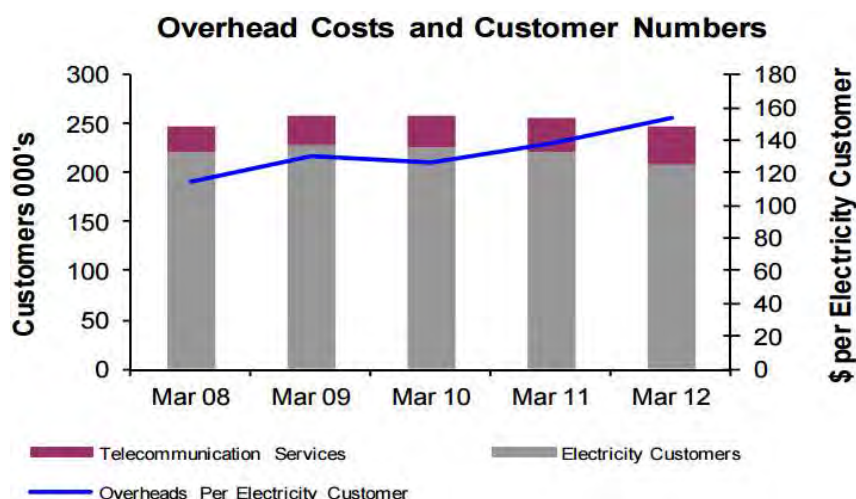


Figure 31.1 Overhead Costs and Customer Numbers for Trustpower  
Source: Trustpower (2012)

## Sector Trends

Employment in the Electricity Supply sector has generally remained stable over the 11 year period from 2000 to 2011 with an average employment of 275 MECs. Employment increased sharply between 2000 and 2002 with a 28.8% increase. Changes in employment are highly correlated to the number of customers served by Trustpower (refer to Figure 31.2).

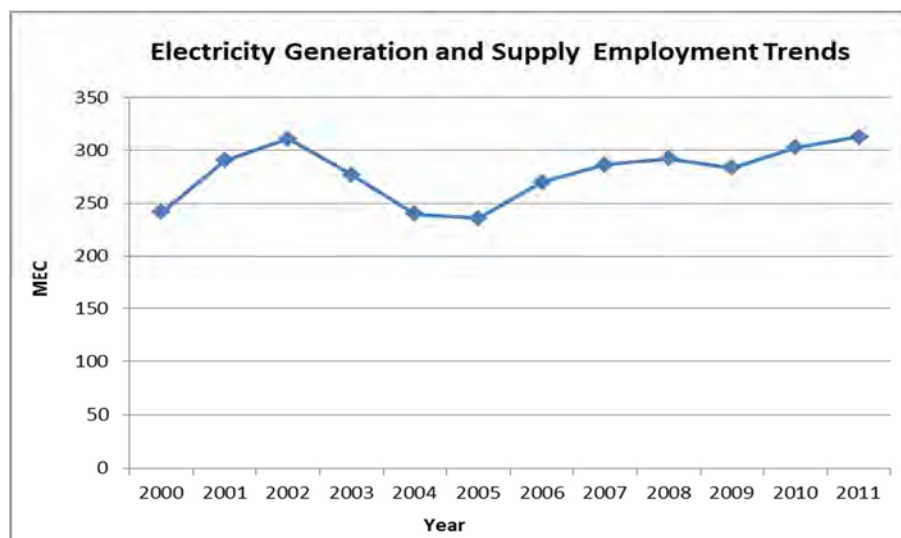


Figure 31.2 Electricity Generation and Supply Employment Trends  
Source: Market Economics Ltd. (2012)

## Future Trends

Since 2009, employment in the Electricity Generation and Supply sector has been increasing gradually. This growth is likely to continue into the near future as the population in the Bay of Plenty and surrounding regions increases over time.

## Update to 2016

This statistical update applies for the “Electricity Generation and Supply” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 591  
Employment Rank: 23<sup>rd</sup>

GDP: \$115m  
GDP Rank: 12<sup>th</sup>

% GDP Growth (2011-2016): 2.16% pa  
% GDP Growth Rank: 31<sup>st</sup>

Location Quotient: 0.22

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Priority One. (n.d). *Profile*. Retrieved from [http://www.priorityone.co.nz/directory\\_detail/m/260](http://www.priorityone.co.nz/directory_detail/m/260)

Trustpower. (2012, May 18). *Investor Briefing*. Retrieved from <http://www.trustpower.co.nz/index.php?module=resourcesmodule&action=view&id=788>

## 32. Gas Supply

### Description

ANZSIC Codes Covered:

- D3620-Gas Supply

Employment: 3  
Employment Rank: 45<sup>th</sup>  
Average Growth Rate: 6.50%

GDP: \$5.2m  
GDP Rank: 42<sup>nd</sup>  
Interregional Exports: \$0m  
International Exports: \$2.2m

Location Quotient: 0.25  
Labour Productivity: 1427.06  
Value-Added Multiplier: 2.36

### Economic Overview

The Gas Supply sector is proportionally very small in the TCE where most gas is supplied by Genesis Energy.

In 2010, the sector employed 3 MECs, produced \$12 million in output, contributed \$5.2 million towards GDP and exported \$2.2 million overseas.

### Sector Trends

The sector had a relatively volatile employment pattern in the past, with strong growth between 2002 and 2005, peaking at 12 MECs, at which point employment plummeted back to its original level of 3 MECs (see Figure 32.1).

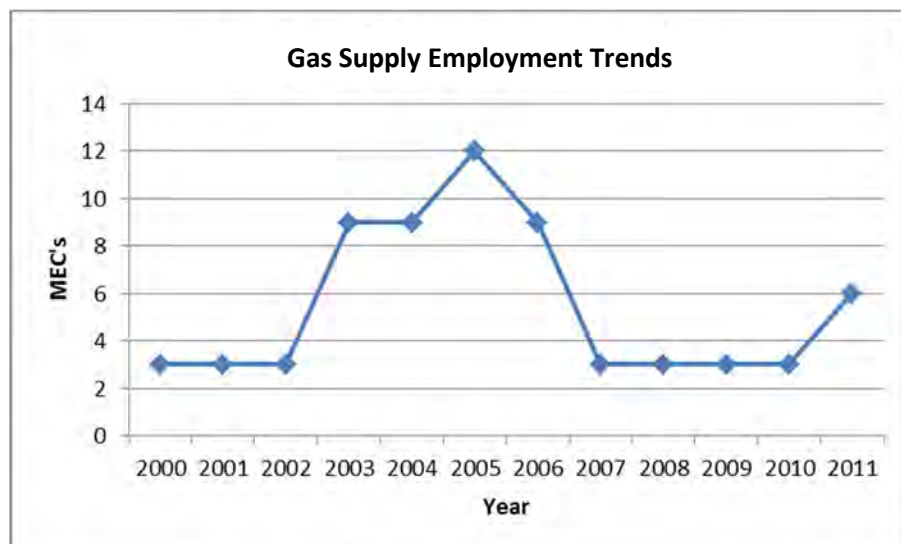


Figure 32.1 Gas Supply Employment Trends  
Source: Market Economics Ltd. (2012)

### Update to 2016

This statistical update applies for the “Gas Supply” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 3  
Employment Rank: 46<sup>th</sup>

GDP: \$18m  
GDP Rank: 32<sup>nd</sup>

% GDP Growth (2011-2016): 3.24% pa  
% GDP Growth Rank: 27<sup>th</sup>

Location Quotient: 0.17

### References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

## 33. Water Supply

---

### Description

ANZSIC Codes covered:

- D3701-Water Supply

Main Commodity Supplied:

- Water

### Economic Overview

There are no known Water Supply sector economic activities within the TCE.

Employment: 0  
Employment Rank: N/A  
Average Growth Rate: N/A

GDP: 0  
GDP Rank: N/A  
Interregional Exports: \$0  
International Exports: \$0

Location Quotient: N/A  
Labour Productivity: N/A  
Value-Added Multiplier: N/A

### Update to 2016

There is no equivalent sector to “Water Supply”, as used in the above data, which applies from 2000 to 2011. The closest sector in the 2016 update is “Water, Sewerage, Drainage and Waste Services” – all of these activities in the above data, other than Water Supply, were previously included in the Personal and Other Community Services sector.

Since the “Water Supply” sector recorded 0 to 3 jobs during the years from 2000 to 2011, it is reasonable to assume that this close-to-zero employment for Water Supply has continued to 2016, and therefore consequently almost all of the 237 jobs recorded for this sector for 2016 consist of jobs in the areas of sewerage, drainage and waste services.

Employment: 237  
Employment Rank: 32<sup>nd</sup>  
  
GDP: \$65m  
GDP Rank: 21<sup>st</sup>  
  
% GDP Growth (2011-2016): 6.91% pa  
% GDP Growth Rank: 11<sup>th</sup>  
  
Location Quotient: 1.14

### References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

# 34. Construction

## Description

ANZSIC Codes covered:

- E4111-House Construction
- E4112-Residential Building Construction
- E4113-Non-Residential Building Construction
- E4121-Road and Bridge Construction
- E4122-Non-Building Construction
- E4210-Site Preparation Services
- E4221-Concreting Services
- E4222-Bricklaying Services
- E4223-Roofing Services
- E4224-Structural Steel Erection Services
- E4231-Plumbing Services
- E4232-Electrical Services
- E4233-Air Conditioning and Heating Services
- E4234-Fire and Security System Services
- E4241-Plastering and Ceiling Services
- E4242-Carpentry Services
- E4243-Tiling and Carpeting Services
- E4244-Painting and Decorating Services
- E4245-Glazing Services
- E4251-Landscaping Services
- E4259-Construction Services

Employment: 5,247  
Employment Rank: 4<sup>th</sup>  
Average Growth Rate: 1.62%

GDP: \$287.7m  
GDP Rank: 5<sup>th</sup>  
Interregional Exports: \$49.2m  
International Exports: \$3.4m

Location Quotient: 1.19  
Labour Productivity: 52.40  
Value-Added Multiplier: 4.41

*Main Commodities Supplied in TCE:*

- Building construction; civil engineering; pre-erection work; other installation work
- Plumbing; electrical installation work; fencing; and land improvements.

## Economic Overview

In recent years the accelerating population growth and accompanying economic development in the TCE has fuelled strong construction demand and activity and consequent employment opportunities. Construction activity has included a significant emphasis on land development and residential construction, as well as growth in the retirement sector such as retirement villages. The Western Bay of Plenty Region as a whole continues to grow at an extraordinary rate; where on average 30 new houses are built every week (Western Bay of Plenty District Council, 2010). As Figure 34.1 below shows<sup>37</sup>, the number of new dwelling consents peaked in 2005, yet due to the economic recession that hit shortly afterward, the number of new consents

<sup>37</sup> Note this graph shows the combined Western Bay of Plenty District and Tauranga City Council totals, and therefore should be interpreted with caution. Almost all of the population of the Tauranga City Council is within the TCE, but this is not the case with the Western Bay of Plenty District – see Figure 1.1.

issued dropped from a very high level to a record low in 2011. Construction employment suffered from a cyclical pattern of skills shortages in times of peak demand, and surplus workers when demand is low.

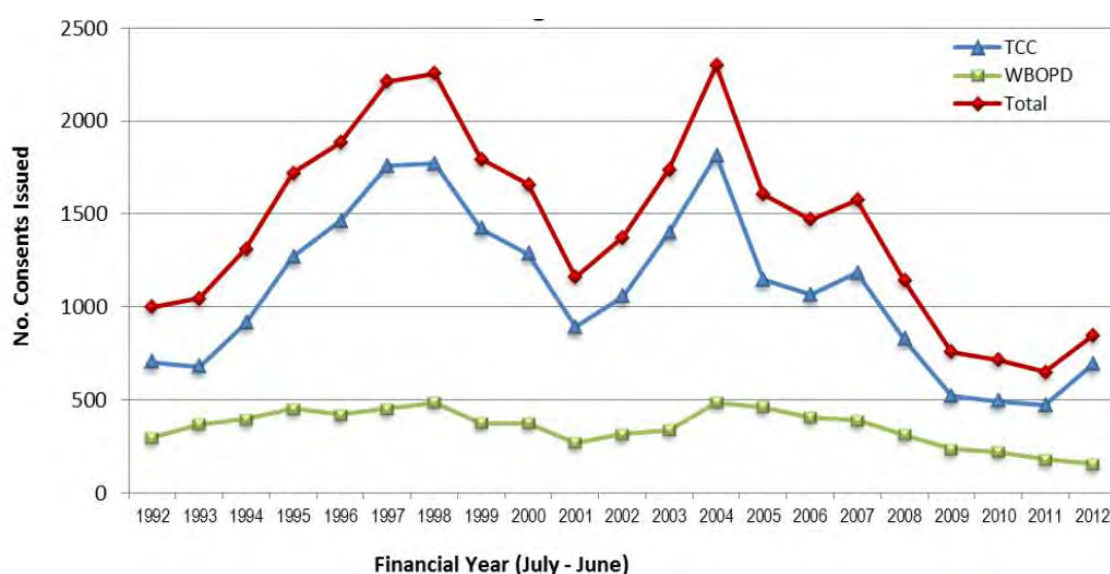


Figure 34.1 New Dwelling Consents Issues by Tauranga City Council and Western Bay of Plenty District Council

Source: Western Bay of Plenty District Council (2012)

In 2010, the sector contributed \$287.7 million towards GDP, ranking 5<sup>th</sup> of all sectors. In 2011, the Construction sector employed 5,316 MECs and contributed 8.3% of total employment to the TCE, which is a greater proportion than for New Zealand as a whole, giving a LQ of 1.20 (Everitt, 2009). This is largely driven by high population growth in the TCE, increasing demand for more housing, businesses and infrastructure.

A major construction project under development at the beginning of the decade in the Western Bay of Plenty was Tauranga's Eastern link project, part of which is located in the TCE. Fulton Hogan (2012) was awarded the contract and formed an alliance with a number of different construction companies in the area to undertake the challenging project.

## Sector Trends

The Construction sector had a significant 51% increase in employment from 2000 to 2005 (an annual average growth rate of 10.2%). The growth slowed down at an annual average growth rate of 1.7% from 2005 to 2008. However, employment had a sudden decrease of 30% over 2008 to 2010, reverting to 5,000 MECs by 2010. As depicted in Figure 34.2, the number of New Dwelling consents issued recovered in 2012, from the record low seen in 2011 for Tauranga City. In 2013, Brian Foster, the president of Master Builders Association in Tauranga, stated "things are looking brighter, it is definitely picking up" (Cousins & Helliwell, 2013, para.2). Foster believed that developments such as the Bob Owens Retirement Village at Bethlehem, the surge in building at The Lakes and work getting underway on the Wairakei block at Pāpāmoa were a main contributor for the increase in building work available in the area (Cousins & Helliwell, 2013).

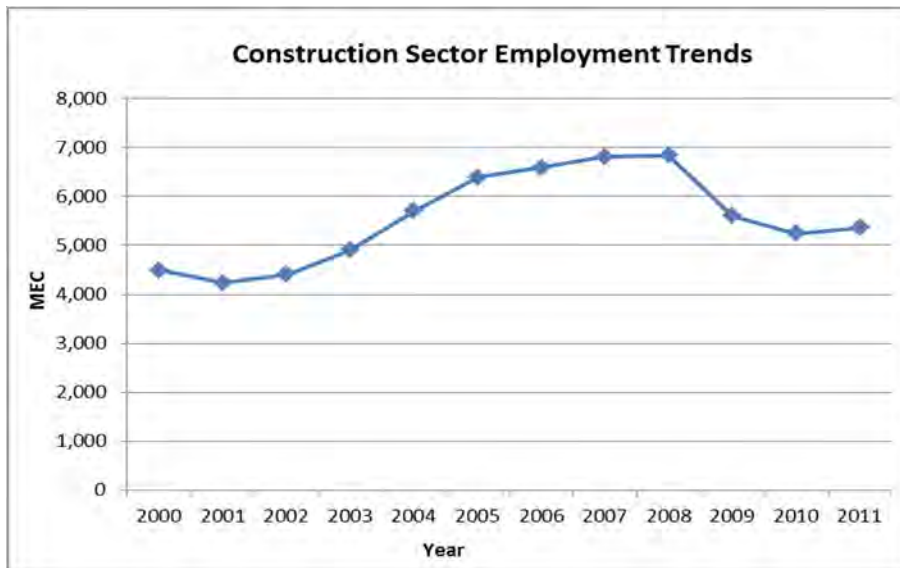


Figure 34.2 Construction Employment Trends  
Source: Market Economics Ltd. (2012)

### Future Trends

In the TCE, the predominant activity within the Construction sector is residential building. Consequently, the sector performance is highly correlated with the population changes in the TCE and surrounding areas within the Bay of Plenty region. As at 2016, employment in the Construction sector has picked up in the TCE region, with the sector employing over 7,200 MECs. However, the long-term prospect for the sector is unclear as the TCE area is undergoing a major demographic change (refer to Chapter 2.1).

### Update to 2016

This statistical update applies for the “Construction” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 7,381  
Employment Rank: 4<sup>th</sup>

GDP: \$420m  
GDP Rank: 4<sup>th</sup>

% GDP Growth (2011-2016): 7.02% pa  
% GDP Growth Rank: 10<sup>th</sup>

Location Quotient: 1.32

### References

Campbell, A. (2012, Nov 2). Bay Growth Stalls. *Bay of Plenty Times*. Retrieved from <http://www.sunlive.co.nz/news/34190-bay-growth-stalls.html>

Cousins, J., Halliwell, G. (2013, Jan 12). House Building Consents Double. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/tauranga-house-building-consents-double/1715137/>

Department of Labour. (2009). *Construction Sector Outlook*. Retrieved from <http://www.dol.govt.nz/publications/lmr/construction-sector/construction-sector-outlook-2009.pdf>

Fulton Hogan. (2012). Tauranga Eastern Link Project. *People + Projects*, 7, 10-11.

Infometrics. (2011). *Labour Market and Economic Profile: Bay of Plenty*. Retrieved from <http://www.infometrics.co.nz/reports/regional/TEC/Bay-of-Plenty-Revised-Jun2012.pdf>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Nick Everitt (Environment Bay of Plenty). (2009). *A Socioeconomic Profile of the People in the Bay of Plenty Region*. Retrieved from <http://www.boprc.govt.nz/media/33481/Report-090723-Profile2009.pdf>

Statistics New Zealand. (2012, June 30). *Subnational Population Estimates: At 30 June 2012*. Retrieved from <http://img.scoop.co.nz/media/pdfs/1210/SubnationalPopulationEstimatesYe30Jun12.pdf>

Western Bay of Plenty District Council. (n.d). *Population and Statistics*. Retrieved 5/12/2012, from <http://www.westernbay.govt.nz/Your-district/Population-and-Statistics/>

Western Bay of Plenty District Council. (2010). *Settling In: Tauranga City and the Western Bay of Plenty District Migrant Community – Social services report*. Retrieved from <http://www.westernbay.govt.nz/Download/?file=/Documents/Publications/Settling%20In%20Migrant%20Community%20Report.pdf>

Western Bay of Plenty District Council. (2012). *SmartGrowth – Development Trends Technical Report 2012*. Retrieved from [http://www.smartgrowthbop.org.nz/media/51002/2012\\_smartgrowth\\_development\\_trend\\_report\\_final\\_\\_pdf\\_.pdf](http://www.smartgrowthbop.org.nz/media/51002/2012_smartgrowth_development_trend_report_final__pdf_.pdf)

# 35. Wholesale Trade

---

## Description

*ANZSIC Codes Covered:*

- F4511-Wool Wholesaling
- F4512-Cereal Grain Wholesaling
- F4519-Farm Produce and Supplies Wholesaling
- F4521-Petroleum Product Wholesaling
- F4522-Metal and Mineral Wholesaling
- F4523-Chemical Wholesaling
- F4531-Timber Wholesaling
- F4539-Building Supplies Wholesaling
- F4611-Farm and Construction Machinery Wholesaling
- F4612-Professional Equipment Wholesaling
- F4613-Computer Wholesaling
- F4614-Business Machine Wholesaling
- F4615-Electrical and Electronic Equipment Wholesaling
- F4619-Machinery and Equipment Wholesaling
- F4621-Car Wholesaling
- F4622-Commercial Vehicle Wholesaling
- F4623-Motor Vehicle New Part Dealing
- F4624-Motor Vehicle Dismantling and Used Part Dealing
- F4711-Meat Wholesaling
- F4712-Poultry and Small Good Wholesaling
- F4713-Dairy Produce Wholesaling
- F4714-Fish Wholesaling
- F4715-Fruit and Vegetable Wholesaling
- F4716-Confectionery and Soft Drink Wholesaling
- F4717-Liquor Wholesaling
- F4718-Tobacco Product Wholesaling
- F4719-Grocery Wholesaling
- F4721-Textile Product Wholesaling
- F4722-Clothing Wholesaling
- F4723-Footwear Wholesaling
- F4731-Household Appliance Wholesaling
- F4732-Furniture Wholesaling
- F4733-Floor Covering Wholesaling
- F4739-Household Good Wholesaling
- F4791-Photographic Equipment Wholesaling
- F4792-Jewellery and Watch Wholesaling
- F4793-Toy and Sporting Good Wholesaling

Employment: 3,203  
Employment Rank: 7<sup>th</sup>  
Average Growth Rate: 2.72%

GDP: \$280.8m  
GDP Rank: 6<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$111m

Location Quotient: 0.92  
Labour Productivity: 84.18  
Value-Added Multiplier: 2.85

- F4794-Book and Magazine Wholesaling
- F4795-Paper Product Wholesaling
- F4796-Pharmaceutical and Toiletry Wholesaling
- F4799-Wholesaling

*Main Commodities Supplied in TCE (with percentages of total employment 2010):*

- Farm produce supplies (5.3%)
- Building supplies (19.1%)
- Electronic equipment (5.7%)
- Machinery and equipment (8.2%)
- Commercial vehicle (3.2%)  
Motor vehicle new part dealing (5.5%)
- Fruit and vegetable (8.1%)  
Grocery wholesaling (5.07%)
- Timber wholesaling (2.4%)  
Paper product wholesaling (3.3%)
- Chemical wholesaling (4.7%)
- Petroleum product wholesaling (3.1%)

## **Economic Overview**

The Wholesale Trade sector covers businesses that provide goods to other businesses for on-selling. This sector is highly important to the TCE, ranking 7<sup>th</sup> for employment and 2<sup>nd</sup> for total gross output production in 2010. Despite its great importance when compared to other sectors in the region, Wholesale Trade is slightly underrepresented in terms of employment to the TCE than to NZ as a whole, with an LQ of 0.92. Overall, in 2010 the sector employed 3,203 MECs, produced \$797 million in gross output, contributed \$280.8 million towards GDP and exported \$111 million to overseas.

## **Major Employers in the TCE**

Major employers in the TCE are outlined below.

Bidvest is a large foodservice and hospitality wholesaler with a distribution branch in Tauranga, which supplies restaurants, hotels, petrol stations, schools and other businesses. Waiwhetu Distributors Ltd. has been providing cleaning supplies, equipment and solutions to some of the largest companies in NZ since 1978. Cherrywood Butchery and Wholesale is a meat supplier located in Tauranga. Raukumara Red NZ Wild Venison are meat wholesalers and exporters. Omega Seafood has a distribution branch in Tauranga, as do Shellpack Food Distributors. Silwood Exports Ltd. is a fruit and vegetable wholesaler located in Katikati. C & G Distributors wholesale free-trade coffee in Greerton. Blackforest Gourmet Butchery is a German sausage supplier headquartered in Tauranga. Pats Pantry (2002) Ltd. is a baked goods supplier in Tauranga. Simply Sweet is a wholesaler of confectionary brands such as Mars and Whittakers in Greerton.

City Cars Direct is an imported used car sales yard in Tauranga. Pro Wholesale Ltd is a quality auto parts importer based in Tauranga. Total Lubricant and Wholesale Ltd. is an oil supplier

based in Mt Maunganui. Wholesale and Industrial Supplies Ltd. have a distribution centre and specialise in industrial equipment. Easy Gate Ltd. sells automatic gates and is located in Tauranga. GAIT Trading Co. Ltd. is a national hardware supplier with its head office located in Judea. Supply Services Ltd. supply NZ with engineering products and are located in Omanu. Overland Enterprises Ltd. is a timber flooring wholesaler.

Mount Cane and Shells Ltd. have been importing and wholesaling decorative products to retailers, gift shops, florists, and event planners from their Mount Maunganui base for around 20 years. Bamboo Progressive Importers Ltd. is located in Greerton and supply furniture, mirrors and lamps. Decorlicious Distributors specialise in kids decorative pieces and are located in Pāpāmoa. Concept 2 NZ Ltd. has been selling rowing equipment from their warehouse in Bethlehem since 1994. GAC Group Ltd. sell shower equipment from their warehouse in Omanu. REALCOLD Components have a branch in Tauranga and are wholesalers of refrigeration components. Selene Homeopathics Ltd. is an international supplier of alternative medicine and has been based out of Tauranga since 1994. Autosafe Brake Supplies Ltd. supply brake and clutch parts throughout the country. Discount Furniture Ltd. is located in Greerton.

PPS Industries is an industrial chemical supplier with a branch located in Tauranga. Marexim Ex-Im Ltd. is an international electrical supplier with a warehouse in Mt Maunganui. Pan Pacific Auto Electronics Ltd. is an electrical wholesaler with a distribution warehouse in Mt Maunganui. Capes Medical Supplies Ltd. is a wholesaler in Mt Maunganui supplying to the primary care and hospital markets in NZ. Guinness Appliances Ltd. was an electrical supplier closed in 2011 after 104 years in Tauranga due to falling sales after the recession and competition from bulk suppliers in Australia (Skellern, 2011).

## Sector Trends

Employment increased steadily from 2,509 MECs in 2000 to 3,535 MECs in 2003, an increase of 40.5% over this time period. The recession led to a slight decrease of 9.1%, falling to 3,203 MECs but then picking up again in 2011 to 3,372 MECs (see Figure 35.1).

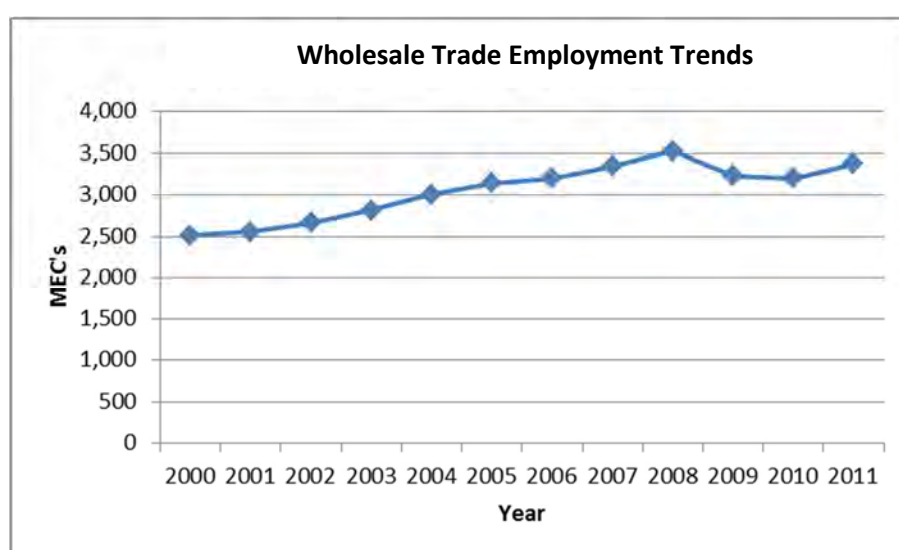


Figure 35.1 Wholesale Trade Employment Trends

Source: Market Economics Ltd. (2012)

## Future Trends

The Wholesale Trade sector will continue to be of great importance to the TCE. Economic performance in terms of employment is relatively resilient to fluctuations in economic conditions when compared to other sectors. It can be expected that employment numbers will show an upward trend in the coming years, led mainly by growth in building supplies, fruit and vegetable, motor vehicle and electrical equipment wholesaling.

## Update to 2016

This statistical update applies for the “Wholesale Trade” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 2,950  
Employment Rank: 7<sup>th</sup>

GDP: \$226m  
GDP Rank: 6<sup>th</sup>

% GDP Growth (2011-2016): 5.88% pa  
% GDP Growth Rank: 12<sup>th</sup>

Location Quotient: 0.90

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Skellern, G. (2011, March 17). Guinness Appliances shuts its doors. *Bay of Plenty Times*. Retrieved from: <http://www.bayofplentytimes.co.nz/news/guinness-appliances-shuts-its-doors/1048318/>

# 36. Retail Trade

---

## Description

*ANZSIC Codes Covered:*

- G5110-Groceries and Dairies
- G5110-Supermarkets
- G5121-Fresh Meat, Fish and Poultry Retailing
- G5122-Fruit and Vegetable Retailing
- G5123-Liquor Retailing
- G5124-Bread and Cake Retailing
- G5125-Chicken Takeaway Stores
- G5125-Fish and Chips, Hamburger and Ethnic Food, Takeaway Stores
- G5125-Ice-Cream Parlours and Mobile Ice-Cream Vendors
- G5125-Other Takeaway Food Stores (including sandwiches and savouries)
- G5125-Pizza Takeaway Stores
- G5126-Milk Vending
- G5129-Specialised Food Retailing
- G5210-Department Stores
- G5221-Clothing Retailing
- G5222-Footwear Retailing
- G5223-Fabrics and other Soft Good Retailing
- G5231-Furniture Retailing
- G5232-Floor Covering Retailing
- G5233-Domestic Hardware and Houseware Retailing
- G5234-Domestic Appliance Retailing
- G5235-Recorded Music Retailing
- G5241-Sport and Camping Equipment Retailing
- G5242-Toy and Game Retailing
- G5243-Newspaper, Book and Stationery Retailing
- G5244-Photographic Equipment Retailing
- G5245-Marine Equipment Retailing
- G5251-Pharmaceutical, Cosmetic and Toiletry Retailing
- G5252-Antique and Used Good Retailing
- G5253-Garden Supplies Retailing
- G5254-Flower Retailing
- G5255-Watch and Jewellery Retailing
- G5259-Retailing
- G5261-Household Equipment Repair Services (Electrical)
- G5269-Household Equipment Repair Services
- G5311-Car Retailing

Employment: 8,861  
Employment Rank: 1<sup>st</sup>  
Average Growth Rate: 2.34%

GDP: \$341.2m  
GDP Rank: 4<sup>th</sup>  
Interregional Exports: \$2.8m  
International Exports: \$46.8m

Location Quotient: 1.20  
Labour Productivity: 37.78  
Value-Added Multiplier: 2.27

- G5312-Motor Cycle Dealing
- G5313-Trailer and Caravan Dealing
- G5321-Automotive Fuel Retailing
- G5322-Automotive Electrical Services
- G5323-Smash Repairing
- G5324-Tyre Retailing
- G5329-Automotive Repair and Services

*Main Employers in TCE (Proportion of Total Employment 2010):*

- Supermarkets (19.4%)
- Clothing retailing (8.4%)
- Department stores (6.2%)
- Domestic appliance retailing (2.8%)
- Domestic hardware and houseware (3.2%)
- Bread and cake (2.4%)
- Fish and chips (2.2%)
- Other takeaway (3%)
- Newspaper, book and stationary (2.4%)
- Pharmaceutical and cosmetic (3.8%)
- Car retailing (4.4%)
- Automotive repair and services (6.4%)
- Retailing (4.6%)

## **Economic Overview**

Retail Trade is highly important to the TCE. In 2010, this sector employed the most people out of any other sector. It contributed \$341.2 million towards GDP, making it the 4<sup>th</sup> highest of the 47 ANZSIC sectors ranked for their contribution to GDP. The LQ of the sector is 1.49, indicating that Retail Trade hires more people on average than this sector elsewhere in NZ. In the 2006 census, 'Sales Assistant' was the most common occupation in New Zealand, with 89,124 people giving this as their employment. Disposable income levels, inflation, population growth and tourist spending are the main factors influencing Retail Trade sales. Thus, this sector was particularly hard hit during the 2008 recession as many of these factors respond negatively to economic uncertainty.

At the local level, supermarkets are the largest employer, followed by clothes and department stores. Employment is spread over a large number of occupations, leading to a low concentration of employment in areas aside from these main three. The majority of sub-sectors have a LQ greater than one, with the highest being fresh meat, fish and poultry (with a LQ of 1.77), ice-cream parlours (2.04), other takeaway food stores (1.59), floor cover (1.44), toy and game (1.87), marine equipment (1.62), household equipment repair service (1.76), and tyre retailing (1.46). The relative importance of this sector also highlights the pattern of a misrepresentation of low-skilled jobs and workers in the local labour force. Tourism and the arrivals of cruise ships, along with the relatively older population, help to fuel growth in this sector.

## Major Employers in the TCE

There are many clothes shops, auto villages and supermarkets in Tauranga, as well as a large shopping mall at Bayfair. The other shopping centers include Fraser Cove, Bethlehem Town Centre, Palm Beach Plaza, Fashion Island, Bayfair Shopping Centre, Bay Central and Greerton Village. Major department stores include Farmers, The Warehouse, Briscoes, Rebel Sport and K'mart. In 2008, Tauranga's CBD underwent renovations to attract more shoppers to the inner city.

## Sector Trends

The employment trend illustrated below is what can be expected into the future, based on the economic conditions for the retail trade sector nationally over the same time frame. Steadily increasing demand and disposable incomes caused employment to follow an upward trend, increasing 40.8% from 6,987 MECs in 2000 to 9,838 MECs in 2008. As the impacts of the Global Financial Crisis set in, employment in this sector in the TCE responded, and although the decrease in jobs was deceptively small (8.4%), this corresponded to a large loss of jobs (828 MECs) due to the high employment numbers in this sector (see Figure 36.1).

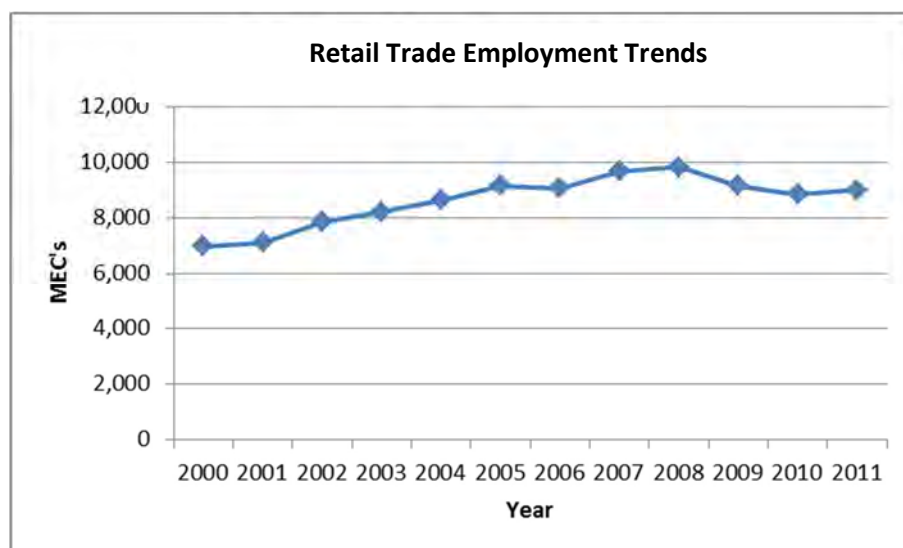


Figure 36.1 Retail Trade Employment Trends

Source: Market Economics Ltd. (2012)

Employment in supermarkets, department stores, fresh meat, fish and poultry, takeaway food stores, footwear, clothing, floor covering, pharmaceutical and cosmetic, watch and jewellery, domestic appliance and tyre retailing have all shown large increases in employment numbers since 2000. Furniture, fish and chip shops and smash repairing employment levels have stayed constant. Dairies, milk vending, fruit and vegetable, newspaper, books and stationary, marine equipment, automotive fuel and car retailing have all shown significant declines in employment.

## Future Trends

Growth in the Retail Trade sector is heavily dependent on domestic demand and consumption. In general, economic slowdowns have had a direct impact on the sector; however conditions have proved to bounce back when the economy as a whole begins recovering. With increasing technological advances in the Retail Trade industry the profitability of the sector will increase.

However small businesses may find it difficult to continue to compete with large supermarkets, department stores and bulk retailers, perhaps causing declines in employment in smaller markets while the majority of growth will be observed in the bigger stores. The City Centre Strategy is a project being led by Priority One in partnership with Tauranga City Council, Tauranga Chamber of Commerce, Tourism Bay of Plenty, Creative Tauranga, the Property Council, Tauranga Mainstreet and the tertiary partnership of University of Waikato and Bay of Plenty Polytechnic, to develop the waterfront into a thriving place to shop and dine.

### Update to 2016

This statistical update applies for the “Retail Trade” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 7,551  
Employment Rank: 3<sup>rd</sup>

GDP: \$364m  
GDP Rank: 5<sup>th</sup>

% GDP Growth (2011-2016): 5.69% pa  
% GDP Growth Rank: 15<sup>th</sup>

Location Quotient: 1.19

### References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

# 37. Accommodation, Restaurants and Bars

---

## Description

*ANZSIC Codes covered:*

- H5710-Accommodation
- H5710-Backpacker and Youth Hostels
- H5710-Caravan Parks and Camping Grounds
- H5710-Hosted Accommodation
- H5710-Hotels (Accommodation)
- H5710-Motels and Motor Inns
- H5720-Pubs, Taverns and Bars
- H5730-Cafes and Restaurants
- H5740-Clubs (Hospitality)

Employment: 3,320  
Employment Rank: 6<sup>th</sup>  
Average Growth Rate: 3.21%

GDP: \$86.1m  
GDP Rank: 14<sup>th</sup>  
Interregional Exports: \$0.4m  
International Exports: \$42m

Location Quotient: 0.94  
Labour Productivity: 24.07  
Value-Added Multiplier: 2.75

*Main Employers in TCE (Proportion of total employment 2010):*

- Cafes and restaurants (55.7%)
- Pubs, taverns and bars (16.3%)
- Motels and motor inns (11.1%)

## Economic Overview

Accommodation, Restaurants and Bars account for a large portion of the TCE's employment and gross output, ranking 6<sup>th</sup> and 15<sup>th</sup> out of the 46 ranked ANZSIC sectors, respectively. Even though the sector ranks highly in employment, the sector had a LQ of just 0.94 in 2010, meaning the sector is not very strong in the region relative to the national situation. It contributed \$86.1 million towards GDP in 2010.

Tourism has a major influence in this sector, with Tauranga and the wider region being a major tourist destination. Tauranga has traditionally been a summer mecca for New Zealanders, but in recent years its mild winters have drawn domestic tourists year round. Guest nights steadily increased in the region with 770,082 guest nights in Tauranga in 2009, and 217,856 guest nights for the rest of the Western Bay of Plenty (Quality Tourism Development, 2010).

The Port of Tauranga has been highly successful in attracting the cruise ship market during the New Zealand summer. In 2006, 27 Cruise ships docked at the port, with 31,815 passengers on board and crew adding another 14,592 potential tourists to the region. Approximately 2.8 million was spent by these tourists in the Restaurant and Bar sector alone (Hughes, 2006). The number of cruise ships has increased significantly, with 84 scheduled to visit the port during the 2012/13 season. These cruise ships arrive mainly from Australia, Europe, the Pacific Islands and North America (Port of Tauranga, 2012).

Thirty-six percent of Tauranga City's CBD (55sqms) contains food related activities, which shows that the area has a predominant lifestyle and entertainment focus. Tauranga's newly developed waterfront is home to a number of cafes, restaurants, bars and nightclubs.

### Major Employers in the TCE

The Accommodation, Restaurant and Bars sector is characterised by many different employers, ranging from small to large in size. Some of the larger employers in each activity include: Oceanside Resort and Twin Towers are an iconic Mount Maunganui 5-star apartment; the Sebal Trinity Warf is a 4.5 star Tauranga hotel, featuring 121 guestrooms located on and over the harbour; Bluebiyou, which seats 140; Zeytin on The Strand, which seats 150; and Flying Burrito Brothers, which opened in 2002, serving Mexican for up to 200 people.

### Sector Trends

As depicted in Figure 37.1, the Accommodation, Restaurant and Bars Sector showed rapid growth of 46% (an annual average growth rate of 9.2%) between 2000 and 2005. The Global Financial Crisis and eventual recession slowed growth of employment in the sector hit in 2007, where the effect of people cutting back on spending on such luxuries provided by the sector resulted in employment falling 10% between 2007 and 2009. One of these luxuries was demand generated by business conventions which fell during the recession. "Conventions are the easiest thing to cut off budgets, it's the first market that went in the recession", according to a manager in the tourism/hospitality sector (Human Rights Commission, 2009, p.5). The sector has shown signs of recovery, with employment slowly increasing in the sector.

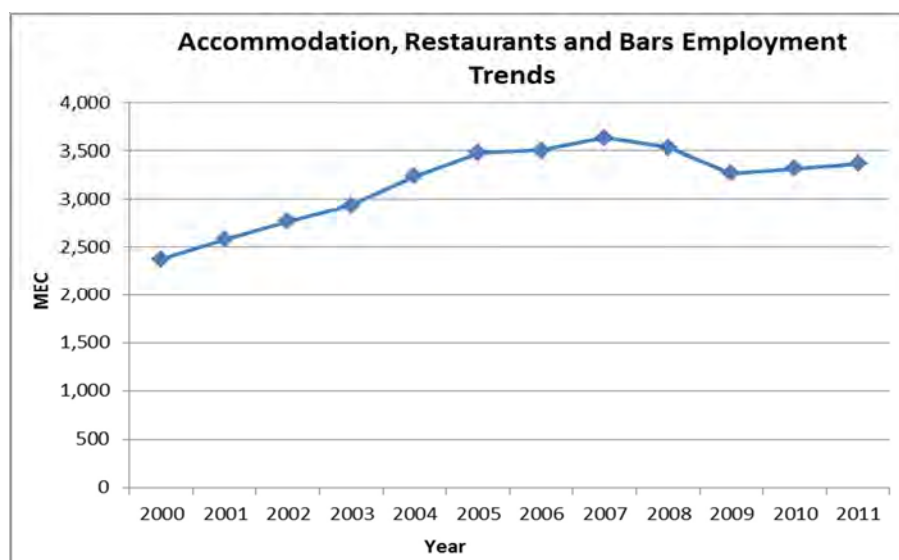


Figure 37.1 Accommodation, Restaurants and Bars Employment Trends

Source: Market Economics Ltd. (2012)

### Future Trends

Employment in the Accommodation, Restaurants and Bars sector is expected to continue growing with the population and relative demand of both the resident population of the TCE, as well as visitors to the area from New Zealand and overseas. However, elasticity of demand is high in this sector, as the commodities supplied are luxury goods, meaning that any downturn in

the economy is likely to be met with a large drop in people eating meals outside the home or going on holiday. Global economic growth, airfares, disposable incomes and the exchange rate are the main factors which will affect performance in this sector in the coming years. The opportunity currently exists to showcase Tauranga's city centre and surrounds to domestic and international guests and conference delegates with an international hotel in the heart of the city.

Five-star accommodation and event and conference facilities will provide quality facilities for Bay of Plenty residents and the business community and will attract inbound conference trade from domestic centres such as Auckland, Wellington and Christchurch. An internationally recognised conference and events centre will firmly position Tauranga on the international events and conference schedule and drive tourism and investment.

### Update to 2016

This statistical update applies for the "Accommodation and Food Services" (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 4,081 Employment Rank: 6 <sup>th</sup>  GDP: \$114m GDP Rank: 13 <sup>th</sup>  % GDP Growth (2011-2016): 3.41% pa % GDP Growth Rank: 25 <sup>th</sup>  Location Quotient: 0.87
--

### References

Hughes, W. R. (2006). *Port of Tauranga: Economic Impacts for 2006*. Retrieved from <http://www.port-tauranga.co.nz/images.php?oid=1388>

Human Rights Commission. (2009, September). *National Conversation about work: Bay of Plenty Regional Report*. Retrieved from: [http://www.neon.org.nz/publications/?subject\\_id=23&page=2&search=title](http://www.neon.org.nz/publications/?subject_id=23&page=2&search=title)

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Port of Tauranga. (2012). *Cruise Schedules*. Retrieved from <http://www.port-tauranga.co.nz/Shipping-Information/Cruise-Schedules/>

Quality Tourism Development. (2010, April). *Bay of Plenty Tourism Performance and Future Opportunities Report (Draft 3.0)*. Tauranga, New Zealand.

# 38. Road Transport

## Description

*ANZSIC Codes covered:*

- I6110-Road Freight Transport
- I6121-Long Distance Bus Transport
- I6122-Short Distance Bus Transport (including Tramway)
- I6123-Taxi and Other Road Passenger Transport
- I6611-Parking Services
- I6619-Services to Road Transport

*Main Commodities Supplied:*

- Road transport, other transport and storage services improvements.

Employment: 1,763  
Employment Rank: 9<sup>th</sup>  
Average Growth Rate: 3.56%

GDP: \$78.9m  
GDP Rank: 15<sup>th</sup>  
Interregional Exports: \$2.2m  
International Exports: \$5.4m

Location Quotient: 1.46  
Labour Productivity: 37.95  
Value-Added Multiplier: 3.79

## Economic Overview

The Road Transport sector, in 2010, the sector employed 1,763 MECs, produced \$220 million in gross output and contributed \$78.9 million towards GDP. With a LQ of 1.46, road transport in the TCE is very important relative to the national situation. The high LQ is due to the activity of road freight transportation; this is a big activity in the TCE due to the Port of Tauranga, which employed 1,163 MECs in 2010 (66% of the sector's employment). Eight-three percent of all freight traffic coming in, within and from the Bay of Plenty region is transported by road. The Bay of Plenty road network carries the third largest freight traffic in New Zealand with around double the weight intensity of the New Zealand average (New Zealand Transport Agency, 2012).

The second largest activity within the Road Transport sector is short distance bus transport, with 14.4% of the sector's share of employment. As Tauranga is the main residential and retail hub of the wider Bay of Plenty region, there are many buses that service the area. Although public transport uptake in the TCE overall is low, urban areas in Tauranga and Mount Maunganui have a higher use. The main bus service in the TCE is called Bus Hoppers and is run by the Bay of Plenty Regional Council.

## Major Employers in the TCE

Major employers in the TCE include: Mainstream Freight; Jennings Road Freight; Oceanbridge; Emmerson Transport Ltd.; Bus Hoppers; Roadstar; Jock Freight; NZL Group; Mainfreight Ltd.; and Bay Hiab Transport Ltd.

## Sector Trends

Employment in Road Transport has steadily increased since 2000 at a rate of 3.56% per year. A small decline in 2001 was overshadowed by continuous increases in employment in the Road Transport sector until 2010 (see Figure 38.1). The major sectors to contribute to this trend in actual terms are Road Freight Transport (304 MECs), Services to Road Transport (176 MECs),

and Urban Bus Transport (103 MECs). The major increase in percentage terms was seen by Services to Road Transport, which increased 1171.5% over the 9 year period and increased its share of road transport sector's employment from 1.4% in 2001 to 10.8% in 2010. In 2001, after 9 years of growth, employment in Road Transport declined by -5.3%, mostly due to a drop in workers in Road Freight Transport, of 84 MECs.

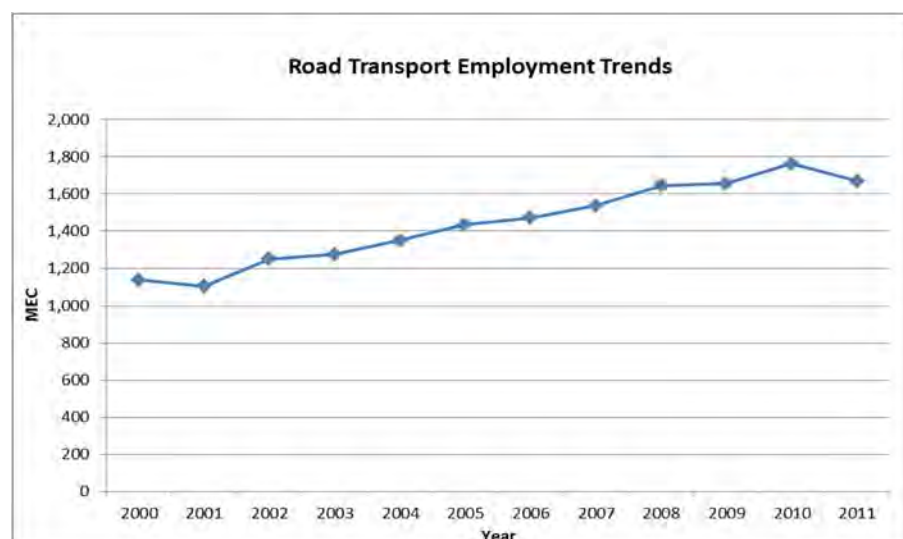


Figure 38.1 Road Transport Employment Trends

Source: Market Economics Ltd. (2012)

## Future Trends

With the expansion of the Port of Tauranga, the capacity of the port is going to increase, attracting larger ships with more cargo. Container volumes in the future should be impacted positively by a significant reorganisation of shipping services. That will see five new weekly vessel calls to Tauranga which include, Mediterranean Shipping Company, Pacific International Lines, and Maersk Line. Although the expansion is bringing in more cargo, there may be a future trend shift towards the use of rail rather than transport due to increasing amounts of investment planned for the rail network in and around the TCE, as well as a range of other factors including rising road user charges, environmental costs, and delays due to congestion.

## Update to 2016

This statistical update applies for the “Road Transport” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 1,535  
Employment Rank: 12<sup>th</sup>

GDP: \$108m  
GDP Rank: 15<sup>th</sup>

% GDP Growth (2011-2016): -0.77% pa  
% GDP Growth Rank: 41<sup>st</sup>

Location Quotient: 1.17

## References

Bay of Plenty Regional Council. (2012, Dec 19). *Bay Hopper Hits Record Numbers [Press Release]*. Retrieved from <http://www.sunlive.co.nz/news/36640-bay-hopper-hits-record-numbers.html>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

McPherson, M. (2011, Jul 29). Petrol Prices Push People onto Buses. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/petrol-prices-push-people-onto-buses/1064199/>

New Zealand Transport Agency. (2012). *National Land Transport Programme 2012-15: Bay of Plenty*. Retrieved from <http://www.nzta.govt.nz/planning/nltp-2012-2015/docs/factsheet-bay-of-plenty.pdf>

## 39. Water and Rail Transport

### Description

*ANZSIC Codes covered:*

- I6200-Rail Transport
- I6301-International Sea Transport
- I6302-Coastal Water Transport
- I6303-Inland Water Transport
- I6621-Stevedoring
- I6622-Water Transport Terminals
- I6623-Port Operators
- I6629-Services to Water Transport

*Main Commodities Supplied:*

- Water and Rail Transport

Employment: 588  
Employment Rank: 22<sup>nd</sup>  
Average Growth Rate: -2.15%

GDP: \$59.4m  
GDP Rank: 22<sup>nd</sup>  
Interregional Exports: \$0m  
International Exports: \$41.5m

Location Quotient: 2.07  
Labour Productivity: 96.41  
Value-Added Multiplier: 3.27

### Economic Overview

The Port of Tauranga plays a significant part in the Water and Rail sector in the TCE. It operates wharves at both Mount Maunganui and Sulphur Point in Tauranga as well as MetroPort, a rail linked inland port in South Auckland. Water Transport is the biggest employer in this sector compared to Rail with 90.6% (533 MECs) compared to 9.4% (55 MECs) share of the sector's total employment. The main activities within the Water and Rail Transport sector for the TCE are Port Operations and Stevedoring. There were 186 MECs employed in the activity of Port Operations in 2011, which gave a LQ of 2.41. Stevedoring employed 286 MECs in 2011, and gave a very high LQ of 8.77.

Water Transport tends to be a mixture of cargo ships and cruise ships, while Rail Transport mainly transports freight to and from the Port of Tauranga. The two sectors are intertwined and are relied upon by many different sectors such as primary goods, wholesalers and retailers in the TCE. Approximately 40% of freight going through the Port of Tauranga travels by rail. The main rail line that runs through the TCE is the East Coast Main Trunk Line, which connects to the North Island main trunk line at Hamilton. The route Auckland – Tauranga is New Zealand's busiest rail freight route (KiwiRail, n.d).

The Port of Tauranga is New Zealand's largest port, handling more than 15 million tonnes of imports and exports annually (78% more international cargo than the nearest competitor and more than three times the export volumes, according to Statistics NZ data). In 2012, the Port of Tauranga recorded increased profits, up 22% due to increased container traffic coming from its strike-bound rival, the Port of Auckland. The strikes have meant that the Port of Tauranga has gained major contracts with the shipping line Maersk and exporter Fonterra Co-Op.

## Major Employers in the TCE

Major employers in the TCE include: KiwiRail; Port of Tauranga; C3 Ltd.; ISO Ltd.; NZ Marshalling & Stevedoring Ltd.; and Independent Stevedoring Ltd.

## Sector Trends

Although the trend depicted in Figure 39.1 below for this sector shows employment in the Water and Rail Transport sector falling at an annual average growth rate of -2.15% for the period, this is not representative of GDP which has substantially increased during this period, contributing \$59.4 million in 2010. The trend line below shows labour productivity in this sector has increased, with fewer workers needed to do the same amount of work, which is possibly the result of better technology. The Australian Productivity Commission found that the Port of Tauranga remains the most productive port in Australasia (Street & Aldworth, 2012).

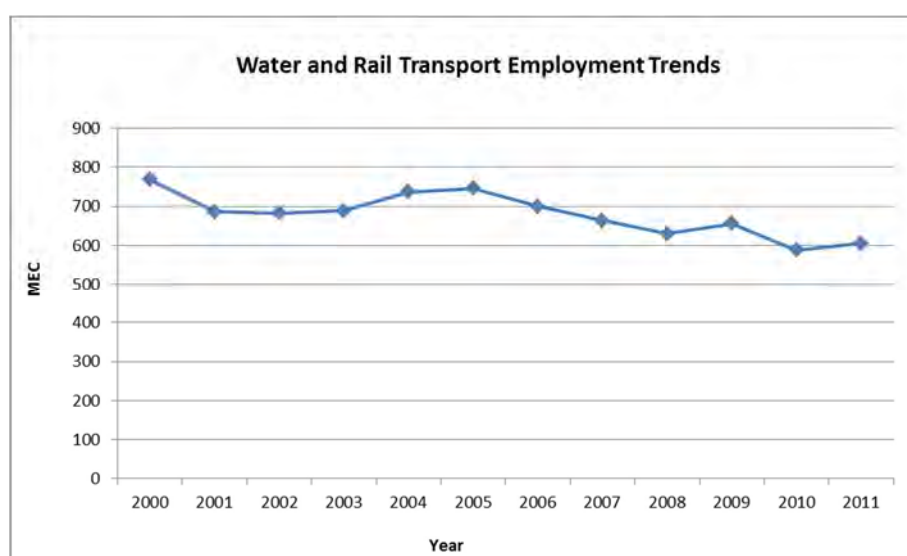


Figure 39.1 Water and Rail Transport Employment Trends

Source: Market Economics Ltd. (2012)

Port efficiencies in place at the Port of Tauranga largely stemmed from changes 20 years ago when the new port company bit the bullet and introduced competition into stevedoring operations by sub-contracting the container stevedoring work. Although this caused trouble for the port initially, it has paid off tremendously. Other reasons for such high productivity at the Port of Tauranga are that 45% of the Port's shares are traded on the stock exchange, and that the majority shareholder, the Bay of Plenty Regional Council, treats the Port as a financial asset rather than an asset to control (Cousins, 2012).

## Future Trends

In 2012, the Port of Tauranga planned expansion of capital works worth \$180 million, which includes a 170m wharf extension and the purchase of the seventh ship-to-shore gantry crane for its Sulphur Point fleet to handle to growing container volumes. The upgrades allow the Container Terminal to handle three large vessels simultaneously (Port of Tauranga Limited, 2013). The number of containers going through the Port is predicted to grow between 2.5% and

3.1% per annum over the next 30 years. Bulk good throughput is also expected to grow between 1.7% and 2.3% per annum (Pricewaterhouse Coopers, 2012).

Complementary to port growth is the growth of rail freight, which Kiwirail expects to grow by up to 75% in the next 20 years. Kiwirail is preparing for the projected increase in demand by increasing not only capacity of their rail line, but also reliability through upgraded tracks and new locomotives that are more powerful and fuel efficient (Port of Tauranga Limited, 2009). Even so, “KiwiRail expects that this line will reach capacity again 10 years after construction of the Morrinsville loop. It therefore seems that the current infrastructure on the rail line west of the Port of Tauranga, even with the consented additional passing loops, will not be able to cater for our projected growth in port traffic” (Pricewaterhouse Coopers, 2012). This could lead to additional pressure on road freight transport.

## Update to 2016

This statistical update applies for the “Other Transport, Postal, Courier, Transport Support and Warehousing Services” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 1,523 Employment Rank: 13 <sup>th</sup>
GDP: \$220m GDP Rank: 7 <sup>th</sup>
% GDP Growth (2011-2016): -0.34% pa % GDP Growth Rank: 40 <sup>th</sup>
Location Quotient: 1.24

## References

Cousins, J. (2012, March 11). Bay’s Port among the Best in the World. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/bays-port-among-best-in-world/1301170/>

KiwiRail. (n.d). *The Backbone of Integrated Transport Networks*. Retrieved 07/01/2013, from [www.kiwirail.co.nz/uploads/Publications/kiwirail-the-backbone.pdf](http://www.kiwirail.co.nz/uploads/Publications/kiwirail-the-backbone.pdf)

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Port of Tauranga Limited. (2013, January 24). Tauranga Container Terminal Expansion [Press Release]. *Scoop Independent News*. Retrieved from <http://www.scoop.co.nz/stories/BU1301/S00476/tauranga-container-terminal-expansion.htm>

Port of Tauranga Limited. (2009). *Take a Look at Our Future...* Retrieved from <http://www.port-tauranga.co.nz/images.php?oid=2791>

Pricewaterhouse Coopers. (2012). *How can we meet increasing demand for ports in the Upper North Island? A report for the Upper North Island Strategic Alliance*. Retrieved from [http://www.boprc.govt.nz/media/266287/councilagenda20121206-sd-uniportsstudyfinal\\_s\\_.pdf](http://www.boprc.govt.nz/media/266287/councilagenda20121206-sd-uniportsstudyfinal_s_.pdf)

Street, T., Aldworth, J. (2012, 29 November). *Full Steam Ahead for Port*. Retrieved from <http://www.nzica.com/News/Archive/2012/December/Full-steam-ahead-for-port.aspx?p=1>

# 40. Air Transport, Services to Transport and Storage

---

## Description

*ANZSIC Codes covered:*

- I6401-Scheduled International Air Transport
- I6402-Scheduled Domestic Air Transport
- I6403-Non-Scheduled Air and Space Transport
- I6501-Pipeline Transport
- I6509-Transport
- I6630-Services to Air Transport
- I6641-Travel Agency Services
- I6642-Road Freight Forwarding
- I6643-Freight Forwarding (except Road)
- I6644-Customs Agency Services
- I6649-Services to Transport
- I6701-Grain Storage
- I6709-Storage

Employment: 967  
Employment Rank: 16<sup>th</sup>  
Average Growth Rate: 0.71%

GDP: \$105.1m  
GDP Rank: 11<sup>th</sup>  
Interregional Exports: \$0.5m  
International Exports: \$71.9m

Location Quotient: 1.02  
Labour Productivity: 103.84  
Value-Added Multiplier: 2.67

*Main Employer in TCE in 2010:*

- Non-scheduled air and space (5.6%)
- Travel agency services (18.3%)
- Freight forwarding except road (13.2%)
- Services to transport (18%) and storage (30%)

## Economic Overview

This sector is relatively important to the local economy, ranking 16<sup>th</sup> for employment and 11<sup>th</sup> for contribution to GDP in 2010. It is neither over nor under-represented when compared nationally in terms of employment numbers. The Services to Transport sector comprises services such as Freight Forwarding Services and Container Terminal Operations, which are in high demand in Tauranga City. The volume of trade going through the Port of Tauranga means many storage companies are located in proximity to the port, utilised as storage for goods waiting to be exported or recently imported. At a more detailed level, activities which have a higher level of employment than the national average are non-scheduled air and space (LQ = 1.31), transport (LQ = 1.81), road freight forwarding (LQ = 1.14), services to transport (LQ = 4.78) and storage (LQ = 1.93). Labour productivity is very high, ranking 17<sup>th</sup> out of the 46 ANZSIC sectors ranked for labour productivity.

## Major Employers in the TCE

The main employers in the TCE are as outlined below.

Bulk Storage Terminals Limited takes care of storage of bulk liquids, either before or after shipping through the port. Cold Storage Tauranga Ltd., Export Cold Storage Ltd., Polarcold Stores Ltd., Satara Cooperative Group Ltd., Woodland Management Ltd. and Cold Storage Nelson Ltd. are all refrigerated storage companies servicing the TCE.

Kennards Self Storage, Stash It, Hewletts Rd Self Storage, Bay Store 'N' Lock and Guardian Self Storage are four of many storage companies located in and around Tauranga.

Scheduled Air Transport is the least significant contributor to this sector; although it still employs 47 MECs with New Zealand's fifth biggest airport, Tauranga Airport, located within the TCE.

## Sector Trends

Employment fell 19% from 955 MECs in 2001 to 774 MECs in 2005, before increasing 29.7% in just two years, peaking at 1,004 MECs in 2007 (see Figure 40.1). The recession caused a drop of 12.8% in 2008, although the sector recovered quickly, climbing 7.9% to end the period at 944 MECs in 2011.

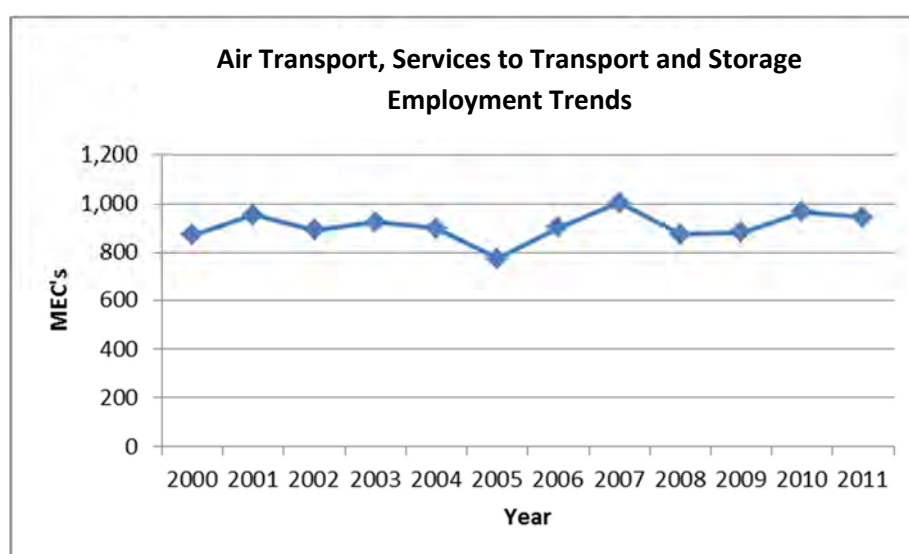


Figure 40.1 Air Transport, Services to Transport and Storage Employment Trends  
Source: Market Economics Ltd. (2012)

Areas of growth within the sector over the time period were Scheduled Domestic Air, Transport n.e.c., Travel Agency Services and Road Freight forwarding. Freight Forwarding (except road) employment levels remained constant while Services to Transport and Storage saw declines in employment, overall (15% and 23.2%, respectively).

## Future Trends

Future performance in this sector is largely reliant on domestic demand for the services provided. Demand is correlated with volume of trade going through the port, which in turn is determined by overseas demand. Travel Agency Services, Air Transport and Transport are expected to be growth areas, while employment numbers in Freight Forwarding, Services to Transport and Storage will likely remain stable, without any significant fluctuations, given economic conditions. Tauranga Airport may expand significantly in the coming years, especially due to the Western Bay of Plenty becoming an increasingly popular tourist destination for other New Zealanders.

## Update to 2016

This statistical update applies for the “Air and Space Transport” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 38  
Employment Rank: 41<sup>st</sup>  
  
GDP: \$10m  
GDP Rank: 37<sup>th</sup>  
  
% GDP Growth (2011-2016): 1.67% pa  
% GDP Growth Rank: 32<sup>nd</sup>  
  
Location Quotient: 0.13

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

# 41. Communication Services

---

## Description

*ANZSIC Codes covered:*

- J7111-Postal Services
- J7112-Courier Services
- J7120-Telecommunication Services

*Main Commodities Supplied in TCE:*

- Postal, courier and telecommunication services, including postal and courier services fixed line rental
- Fixed line international and domestic toll calls, mobile phone calls, and Internet usage

Employment: 408  
Employment Rank: 23<sup>rd</sup>  
Average Growth Rate: -2.40%

GDP: \$70.3m  
GDP Rank: 20<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$5.9m

Location Quotient: 0.52  
Labour Productivity: 169.49  
Value-Added Multiplier: 1.83

## Economic Overview

This sector is underrepresented in terms of employment when compared to the rest of New Zealand. Letter mail volumes have been falling since advances in technology, increased availability of internet for sending e-mails, and cell phones for texting and calling have generally made it cheaper, quicker and easier to communicate with people. Although letter volumes have been declining, courier services for immediate and parcel delivery have been increasing in volume, which could be caused by increasing popularity of online shopping on sites such as Amazon and Trademe.

With this situation in the Postal and Courier Services in the TCE, New Zealand Post and CourierPost decided to join forces in 2012 to provide an integrated service where posties deliver overnight CourierPost items to suburban areas of Tauranga, Mount Manganui and Pāpāmoa. These posties have new equipment that helps them in the delivery of this changed volume of mail. Tauranga was the first place in New Zealand to have the integrated system, and it was to be rolled out across the country if deemed successful (Edwards, 2012).

Telecommunications play a critical role in many areas of New Zealand life. Most industry sectors in the TCE rely on telecommunications in their day-to-day operations, whether through the use of high-speed internet connections or a simple telephone. Information and communication technology is a key enabler and driver of productivity in the TCE. Innovation has been the key to success for many of telecommunication businesses in the TCE.

A further breakdown reveals that 417 MECs are employed in Postal Services (LQ=1.44), 123 MECs are employed in Courier Services (LQ=0.74) and 80 MECs are employed in Telecommunication Services (LQ=0.24).

## Sector Trends

Generally, the trend of the Communication Services sector is downward sloping over the 11 year period from 2000 to 2011 (see Figure 41.1). The main activity influencing the trend of the graph is Postal Services, which employs the largest chunk of MECs (77.5% in 2000, and 67% in 2011). From 2000 to 2004, Communication Services employment increased, mostly because more people were being employed in Postal Services, which increased from 629 MECs to 777 MECs during this time. However, after 2004, Figure 41.1 shows a downward trend until 2010 as the number of people employed in the Postal Services sector rapidly declined from 777 MEC to 218 MEC, a 72% fall in employment.

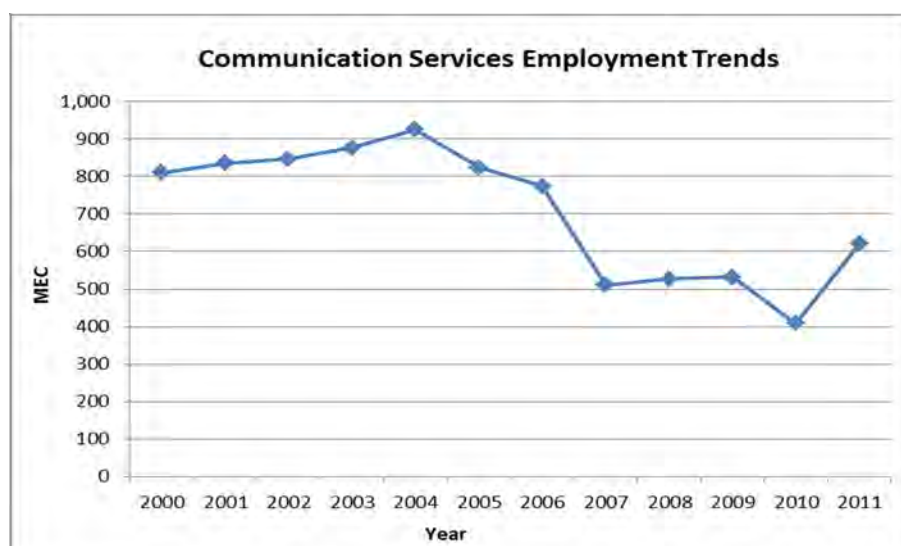


Figure 41.1 Communication Services Employment Trends

Source: Market Economics Ltd. (2012)

Telecommunications Services in the TCE were slow to develop, having a sector share of only in 8% of employment in the Communications sector in 2000, but growing to 13% in 2011. Employment in Telecommunications declined rapidly between 2000 and 2002, falling from 64 MECs to 18 MECs. Since the establishment of Priority One in 2001 with a goal to encourage economic development in the city, advances and wider availability of this technology, the number of people employed in the sector increased 344% from 18 MECs to 80 MECs (from 2002 to 2011).

The MEC for Courier Services remained relatively constant compared to the other activities throughout the 11 year period, but increased the Sector's share of MECs from 14.5% to 20%.

## Future Trends

The outlook for the Communication Services sector is relatively mixed. With employment in Postal Services declining 33.6% from 2000-2011, and the national downward trend in postal mail, future employment is not expected to rise. However although Telecommunication Services has a very low LQ, employment in the sector is expected to rise with more households using the services, and the fact that Tauranga was prioritised for roll out of ultra-fast broadband. An economic analysis undertaken by Priority One suggested a potential 7-9% increase in regional GDP if businesses and residents adopted the new fibre offerings. Ultrafast Fibre Ltd. was the local fibre company contracted to lay fibre in Tauranga under the Government's broadband

initiative. Construction began in August 2011 and was scheduled for completion in 2016. From 1 April 2012, it was expected that 590 local business premises could connect to the Ultrafast Fibre network through their preferred retail service provider, and an additional 3400 residential premises could connect from 1 July (Priority One, n.d).

### Update to 2016

This statistical update applies for the “Information Media and Telecommunications” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 306  
Employment Rank: 27<sup>th</sup>

GDP: \$50m  
GDP Rank: 24<sup>th</sup>

% GDP Growth (2011-2016): 3.65% pa  
% GDP Growth Rank: 23<sup>rd</sup>

Location Quotient: 0.26

### References

Edwards, E. (2012, July 20). Ebikes with trailers Enlisted for Mail Runs. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/ebikes-with-trailers-enlisted-for-mail-runs/1460609/>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Priority One. (n.d). *Broadband*. Retrieved 8/02/2013, from <http://www.priorityone.co.nz/broadband>

# 42. Finance

---

## Description

*ANZSIC Codes Covered:*

- K7310-Central Bank
- K7321-Banks
- K7322-Building Societies
- K7323-Credit Unions
- K7324-Money Market Dealers
- K7329-Deposit Taking Financiers
- K7330-Other Financiers
- K7340-Financial Asset Investors

*Main Employers in TCE:*

- Banks (72.6%)
- Financial Asset Investors (15.7%)
- Credit Unions (7.7%)

Employment: 636  
Employment Rank: 20<sup>th</sup>  
Average Growth Rate: 4.55%

GDP: \$188m  
GDP Rank: 8<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$4.5m

Location Quotient: 0.69  
Labour Productivity: 277.55  
Value-Added Multiplier: 1.64

## Economic Overview

Although the Finance sector still plays an important role in the local economy, it is apparent through the LQ that it is relatively less important in terms of employment than in the rest of the country. Due to the highly profitable nature of the industry, gross output is still high even though the sector is only the 20<sup>th</sup> biggest employer in the TCE. Banks are slightly underrepresented (LQ = 0.77), as are Financial Asset Investors (LQ = 0.94), while credit unions are largely overrepresented (LQ = 2.72). Labour productivity is very high and ranks 4<sup>th</sup>, demonstrating that, although employment counts are low, the industry is still highly profitable. The sector contributed \$188 million towards GDP in 2010.

## Major Employers in the TCE

Banks such as ANZ, BNZ, Westpac, Kiwibank and SBS Bank all have branches in Tauranga. The Credit Unions in the area are First Credit Union, Caxton Employees Credit Union and NZCU North. Financial asset investors include Accept Finance Brokers Ltd., Active Finance, Asset Finance Ltd., Aon Risk Services NZ Ltd., Bay Mortgage Brokers Ltd., Portfolio Professionals Ltd., Fraser Farm Finance and Consulting, Linsa Finance Ltd., Stan Jones Financial Services and Taupo Home Loans.

## Sector Trends

Employment and GDP have been steadily increasing in the Finance sector and are expected to continue to do so. Banks have recently been diversifying to attract and retain customers, by offering a greater array of services such as insurance. Employment increased 30% between 2000 and 2005, going from 452 MECs to 588 MECs. A period of slower growth followed, with a

17.7% increase to 692 MECs in 2009. The only decrease in jobs in this sector was in 2010, falling 8% to 636 MECs, corresponding to a loss of 56 MECs, before increasing again to 738 MECs in 2011 (see Figure 42.1). Employment in banks, credit unions and financial asset investors has been strong over the time period, while employment in building societies, deposit taking financiers & other financiers fell.

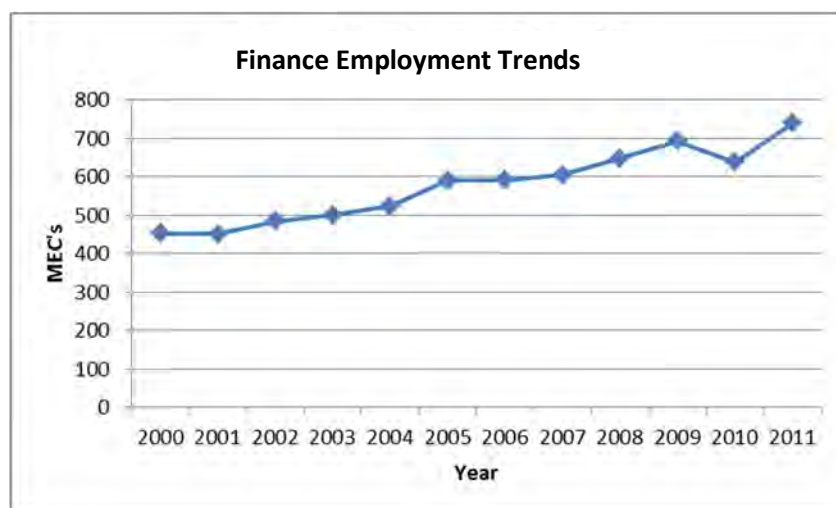


Figure 42.1 Finance Employment Trends

Source: Market Economics Ltd. (2012)

## Future Trends

As at 2016, current economic conditions point towards the sector stabilising and stagnating in the short term. However, the sector is expected to revert to the historical average growth rate in the long term.

## Update to 2016

This statistical update applies for “Finance” (ANZSIC 2006), which is closely equivalent to the ANZSIC 1996 original sector of the same name, used in the above sector analysis.

Employment: 608  
 Employment Rank: 21<sup>st</sup>

GDP: \$153m  
 GDP Rank: 8<sup>th</sup>

% GDP Growth (2011-2016): 7.72% pa  
 % GDP Growth Rank: 8<sup>th</sup>

Location Quotient: 0.64

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

# 43. Insurance

---

## Description

*ANSIC Codes Covered:*

- K7411-Life Insurance
- K7412-Superannuation Funds
- K7421-Health Insurance
- K7422-General Insurance

*Main Services Provided in TCE:*

- General and Life Insurance

Employment: 76  
Employment Rank: 40<sup>th</sup>  
Average Growth Rate: -5.34%

GDP: \$11.8m  
GDP Rank: 37<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$0.4m

Location Quotient: 0.26  
Labour Productivity: 146.33  
Value-Added Multiplier: 2.57

## Economic Overview

In 2010, 27.6% of employment in this sector was in Life Insurance, and 70% was in General Insurance. The sector is grossly underrepresented when compared to the national average. As a result of productivity increase from Information Technology and Online Services, employment declined in all areas of the sector between 2000 and 2011. Consequently, the labour productivity of the sector is high with \$146,330 per worker, ranking 11<sup>th</sup> out of the 46 ANZSIC sectors ranked for labour productivity.

## Major Employers in the TCE

Bay Insurance Brokers, AA Insurance, Crombie Lockwood, Rothbury Insurance Specialists, John Warren Insurances Ltd., BrokerWeb Risk Services Ltd. and AMI Insurance have branches in Tauranga. Life insurance companies include Bruce Puddle Insurance Broker and Brian W Brown Insurances.

## Sector Trends

Employment levels were initially high, with a large drop between 2002 and 2005 to 58 MECs, before picking up slightly and remaining relatively stable over the next 7 years, at around 75 MECs (see Figure 43.1).

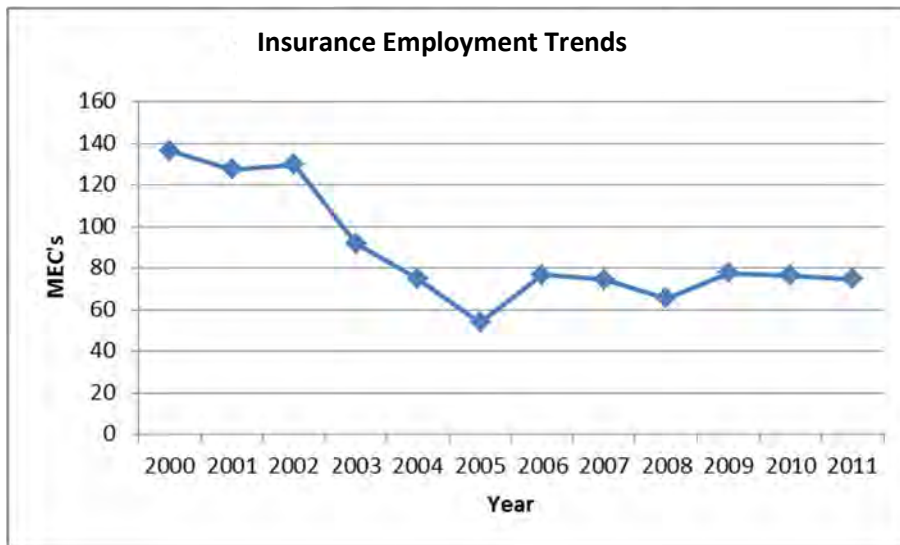


Figure 43.1 Insurance Employment Trends

Source: Market Economics Ltd. (2012)

### Future Trends

This sector is expected to stagnate and is unlikely to experience any growth in employment or value added in the future.

### Update to 2016

This statistical update applies for “Insurance and Superannuation Funds” (ANZSIC 2006), which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 50  
 Employment Rank: 39<sup>th</sup>

GDP: \$13m  
 GDP Rank: 34<sup>th</sup>

% GDP Growth (2011-2016): 9.63% pa  
 % GDP Growth Rank: 4<sup>th</sup>

Location Quotient: 0.15

### References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

## 44. Services to Finance and Investment

### Description

*ANZSIC Codes Covered:*

- K7511-Financial Asset Broking Services
- K7519-Services to Finance and Investment
- K7520-Services to Insurance

*Main Services Supplied in the TCE:*

- Other Auxiliary Finance and Investment Services
- Auxiliary Insurance Services
- Financial Asset Broking Services

Employment: 354  
Employment Rank: 25<sup>th</sup>  
Average Growth Rate: 1.29%

GDP: \$43.5m  
GDP Rank: 25<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$1.5m

Location Quotient: 0.80  
Labour Productivity: 110.48  
Value-Added Multiplier: 2.63

### Economic Overview

Services to Finance and Investment is not as concentrated in the TCE as compared to the New Zealand average, with an LQ of 0.80. Although an underrepresented sector, it ranks 25<sup>th</sup> in employment (at 354 MECs) and contribution to GDP (\$43.5 million) in 2010.

The main activity that Auxiliary Insurance Services are involved in is Insurance Broking, where the company finds clients a suitable insurance policy by comparing what different providers offer to give clients the appropriate level of cover at the best price. Auxillary Insurance Services are around the same concentration in the TCE as the New Zealand average, with an LQ of 1.05, employing 190 MECs in 2011. The Other Auxiliary Finance and Insurance Services sector offers advice about matters such as insurance policies, mortgages shares investments and superannuation. This activity is underrepresented in the TCE and as a result employment is much lower than the New Zealand economy overall, with an LQ of just 0.50.

Financial Asset Broking mainly involves trading in bonds, stocks, shares, or other financial assets or in underwriting financial asset issues. Although this service only employed 47 MECs in 2011, the activity is in higher concentration in the TCE rather than the NZ economy with an LQ of 1.31.

### Major Employers in the TCE

All of the major Services to Finance and Investment Service companies are located in Tauranga, as it is the business hub of the TCE. The main employers in the TCE include: Rothbury Insurance Broker; Majesty Mortgage Broker; Lloyds Insurance; Bay Insurance Brokers, with 12 Staff; Crombie Lockwood Brokers , with 27 Staff; and Preferred New Zealand Brokers, with 15 staff.

## Sector Trends

Employment in the Services to Finance and Investment sector increased steadily between 2000 and 2006 with an annual average growth rate of 7.7%, reaching a high of 470 MECs (see Figure 44.1). Growth in the sector stopped in 2007 when the sector was negatively affected by the effects of Global Financial Crisis, which put many businesses in the TCE under pressure, causing employment in this sector to fall to a low of 352 MECs in 2011. The recession hit hardest in Financial Asset Broking Services between 2006 and 2007, with the number of people employed in this activity then falling from 141 MECs to 32 MECs, respectively. The dramatic fall in this sector was likely due to people becoming more conservative with their investments after the economy's crash in mid-2007.

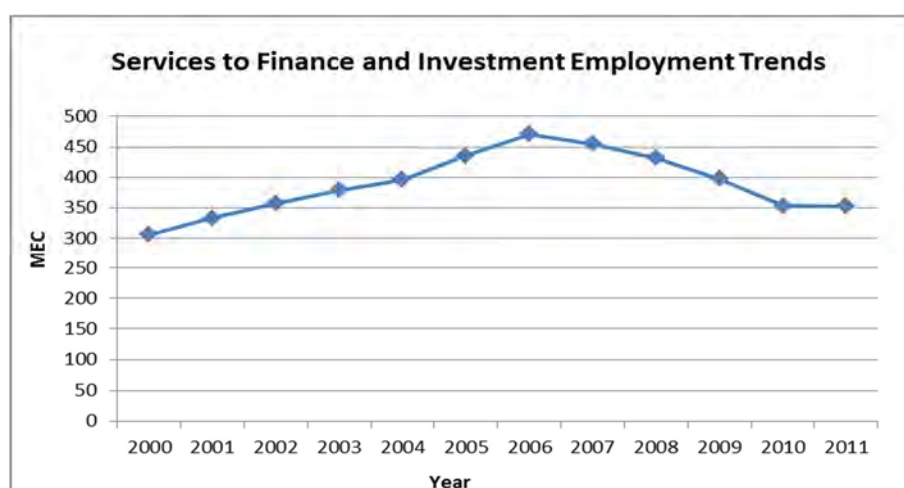


Figure 44.1 Services to Finance and Investment Employment Trends

Source: Market Economics Ltd. (2012)

Employment in Other Auxiliary Finance and Investment services increased sharply between 2006 and 2007, from 125 MECs to 203 MECs. This increase occurred just before and during the Global Financial Crisis, and could be attributed to people and businesses reviewing their insurance policies, mortgagees, and superannuation. Employment in this activity slowly declined from 2007 to only 115 MECs in 2011.

## Future Trends

The sector has a high correlation with the performance of the Finance sector. Therefore, the sector is likely to stagnate as the finance sector is unlikely to experience growth in the short term.

## Update to 2016

This statistical update applies for the “Auxiliary Finance and Insurance Services” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 417  
Employment Rank: 25<sup>th</sup>  
  
GDP: \$31m  
GDP Rank: 26<sup>th</sup>  
  
% GDP Growth (2011-2016): 8.86% pa  
% GDP Growth Rank: 6<sup>th</sup>  
  
Location Quotient: 0.90

## References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

# 45. Real Estate

---

## Description

*ANZSIC Codes covered:*

- L7711-Residential Property Body Corporates
- L7711-Residential Property Operators
- L7712-Commercial Property Body Corporates
- L7712-Commercial Property Operators and Developers
- L7720-Real Estate Agents

*Main Services Supplied in the TCE:*

- Services for renting or leasing residential and non-residential properties
- Services engaged in providing real estate services such as selling, renting and/or buying real estate for others, managing real estate for others and appraising real estate.

Employment: 1,265  
Employment Rank: 14<sup>th</sup>  
Average Growth Rate: 0.69%

GDP: \$254.6m  
GDP Rank: 7<sup>th</sup>  
Interregional Exports: \$5.8m  
International Exports: \$3.8m

Location Quotient: 1.24  
Labour Productivity: 194.65  
Value-Added Multiplier: 1.88

## Economic Overview

The Real Estate sector is a predominant and active industry in the TCE, ranking as the 14<sup>th</sup> highest employing sector with 1,265 MECs, the 8<sup>th</sup> highest in production with \$400 million in gross output, and the 7<sup>th</sup> highest in contribution to GDP at \$254.6 million in 2010. This is mostly due to high numbers of people moving into the area trying to find new housing, as well as the increase in supply of new land and housing. The main activities that make up the Real Estate sector are: Real Estate Agents (52.8% of sector employment), Commercial Property Operators and Developers (38.5% of sector employment), and Residential Property Operators (8.4% of sector employment).

House prices in the TCE have been rising, yet they also vary greatly depending on location, size of house, and nearby facilities. In 2010, in Tauranga the number of houses owned or partially owned by usual residents (48%) was less than the New Zealand average (51%), mostly due to higher than average house prices, rendering owning a home out of reach for many people. This resulted in high demand for rentals in Tauranga, which in turn led to an average rent increase from \$368 in 2010 to \$375 in 2011 (McPherson, 2011), which was much higher than the New Zealand average rent of \$260 in 2011 (Landlords NZ, 2011). Towards the end of 2011-early 2012, demand was exceptionally high with rentals “being snapped up in as little as 24 hours” (Irvine, 2012, para.1).

## Major Employers in the TCE

There are many different real estate companies ranging from national franchises to owner-operator; these are primarily located in main towns where people live in the TCE such as Waihi Beach, Tauranga, Mount Maunganui, Pāpāmoa, Greerton, Otumoetai, Bethlehem, Ōmokoroa Beach and Katikati. The main employers in the TCE include: Eves Realty Ltd., which has 8 offices in the TCE from Katikati to Pāpāmoa; Ray White Ltd., which has 4 offices from Pāpāmoa to

Tauranga; The Professionals, which has 4 offices from Mount Manganui to Katikati; Harcourts, which has 5 offices from Pāpāmoa to Bethlehem; and LJ Hooker, which has 3 offices from Pāpāmoa to Pyes Pa.

## Sector Trends

Employment in the Real Estate sector was initially slow between 2000 and 2002, due to many factors that caused the New Zealand economy as a whole to slow. However employment in the Real Estate sector increased rapidly between 2002 and 2004 which was mostly driven by high rates of internal migration from other regions in New Zealand. The demand for housing outstripped the supply and caused house prices to surge. Between 2000 and 2005, the number of real estate agents in the TCE grew 51.1%, from 591 MECs to 893 MECs (see Figure 45.1).

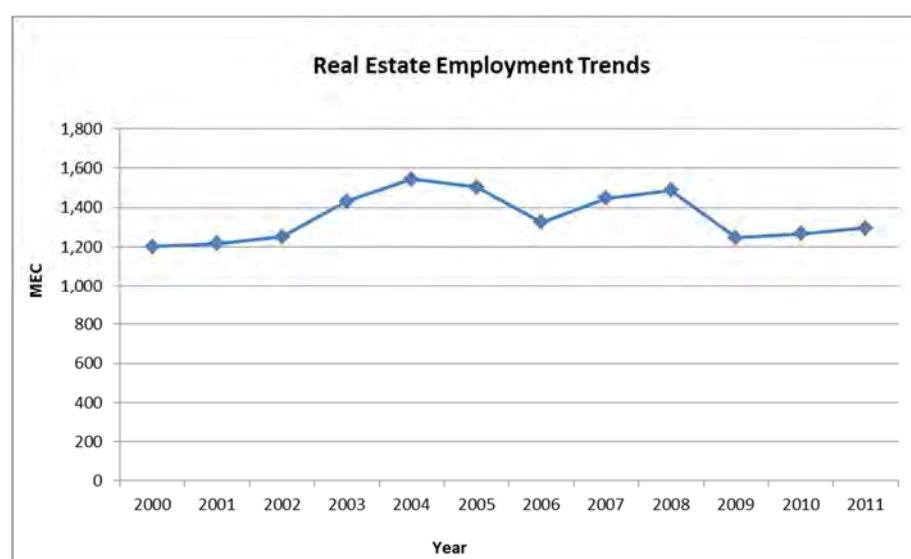


Figure 45.1 Real Estate Employment Trends

Source: Market Economics Ltd. (2012)

Since the global financial crisis hit in 2007, employment in commercial property operators and developers increased from 492 MECs to 565 MECs, after which employment began to decline as other activities within the sector had been since 2007. However as other activities within the TCE began to recover again by 2009, employment in Commercial Property Operators and Developers was still falling by 2011 (see Figure 45.2). This trend was likely caused by banks tightening access to loans, oversupply of houses in the market, higher interest rates, low business confidence, and an overall depressed economy.

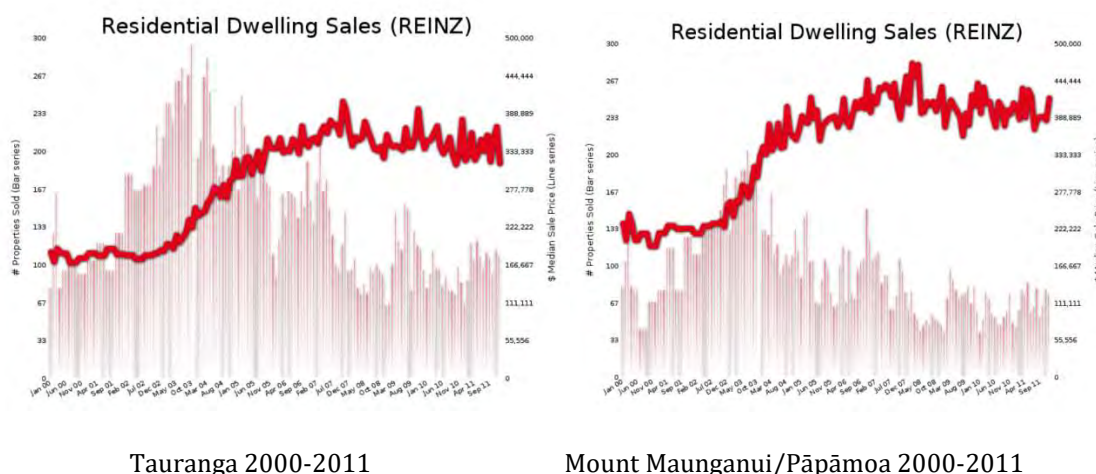


Figure 45.2 Employment Trends in Commercial Property  
Source: Landlords NZ (2012)

## Future Trends

As at 2016, the TCE area has experienced a significant increase in the house prices. However, the longer term future prospects of the sector is unclear as the TCE area is undergoing a major demographic change (refer to the Chapter 2.1).

## Housing Market Details with Update to 2016 (Quarter 3)

Appendix C provides housing details from May 2002 to May 2012 with a brief update to the third quarter of 2016. As can be seen from Figure 45.3, there has been accelerated growth in the Tauranga City and Western Bay of Plenty District since the beginning of 2015, following many years of flat growth, no growth or even negative growth for some quarters.

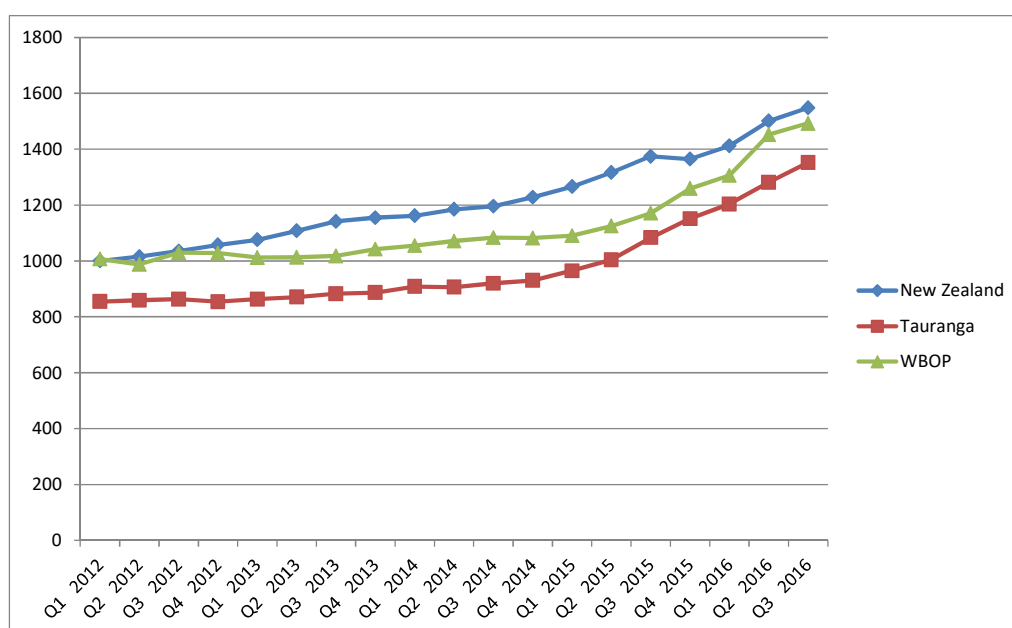


Figure 45.3 Tauranga City and Western Bay of Plenty District Council (Index 1000= New Zealand Average House Price for Quarter 1, 2012)

In the space of 18 months from first quarter of 2015 to the third quarter of 2016, Tauranga City house prices increased 40.15% and the Western Bay of Plenty District house prices increased by 36.94%. Industry commentators have explained this heated property market in Tauranga being due to (a) Auckland residents seeking to buy first homes or retirement homes in Tauranga due to greater affordability compared with Auckland, or cashed up Auckland buyers simply seeking a lifestyle change; (b) the Tauranga market 'catching up' with some other markets in New Zealand and in particular the Auckland market.

## Update to 2016

This statistical update applies for "Rental, Hiring and Real Estate Services" (ANZSIC 2006), which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 1,841  
Employment Rank: 10<sup>th</sup>

GDP: \$422m  
GDP Rank: 3<sup>rd</sup>

% GDP Growth (2011-2016): 5.26% pa  
% GDP Growth Rank: 17<sup>th</sup>

Location Quotient: 1.19

## References

- Ford, J. (2011, March 3). Lakes Fallout Tipped to Hit Market. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/lakes-fallout-tipped-to-hit-market/1046557/>
- Irvine, E. (2012, February 6). Rental Demand Exceeds Supply. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/rental-demand-exceeds-supply/1261038/>
- Landlords NZ. (2011, November 28). *Average Weekly Rent up 7.4% in year to June*. Retrieved from [http://www.landlords.co.nz/read-article.php?article\\_id=4094](http://www.landlords.co.nz/read-article.php?article_id=4094)
- Landlords NZ. (2012). Housing Statistics. Retrieved from <http://www.landlords.co.nz/housing-statistics/>
- Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.
- McPherson, M. (2011, March 7). Landlords v Renters. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/landlords-v-renters/1047035/>
- Tiriana, I. (2012, October 11). Tauranga Hot with Shrewd Buyers. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/tauranga-hot-with-shrewd-buyers/1578495/>
- Whitaker, S. (2012, October 10). First Home Buyers Boost Market. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/first-home-buyers-boost-market/1576687/>

## 46. Ownership of Owner-Occupied Dwellings

---

### Description

'Ownership of Owner-Occupied Dwellings' is included as one of the 'sectors' in the economy so that GDP can be calculated. The contribution to GDP of this sector is imputed, by calculating the sum total of all 'rents' that owner occupiers would notionally pay to live in their dwellings. As this is an 'imputed value' of a notional sector, and therefore is fundamentally different from all of the other sectors, the 'Ownership of Owner-Occupied Dwellings' sector is usually not included in rankings of sector performance that are reported in this publication.

Employment: 0  
Employment Rank: N/A  
Average Growth Rate: N/A

GDP: \$352.8m  
GDP Rank: 3<sup>rd</sup>  
Interregional Exports: N/A  
International Exports: N/A

Location Quotient: N/A  
Labour Productivity: N/A  
Value-Added Multiplier: 1.41

# 47. Business Services

---

## Description

*ANZSIC Codes Covered:*

- L7730-Holder Investor Farm Animals
- L7730-Non-Financial Asset Investors
- L7741-Motor Vehicle Hiring
- L7742-Other Transport Equipment Leasing
- L7743-Plant Hiring or Leasing
- L7810-Scientific Research
- L7821-Architectural Services
- L7822-Surveying Services
- L7823-Consultant Engineering Services
- L7829-Technical Services
- L7831-Data Processing Services
- L7832-Information Storage and Retrieval Services
- L7833-Computer Maintenance Services
- L7834-Computer Consultancy Services
- L7841-Legal Services
- L7842-Accounting Services
- L7851-Advertising Services
- L7852-Commercial Art and Display Services
- L7853-Market Research Services
- L7854-Business Administrative Services
- L7855-Business Management Services
- L7861-Employment Placement Services
- L7862-Contract Staff Services
- L7863-Secretarial Services
- L7864-Security and Investigative Services (except Police)
- L7865-Pest Control Services
- L7866-Cleaning Services
- L7867-Contract Packing Services
- L7869-Business Services

Employment: 6,588  
Employment Rank: 3<sup>rd</sup>  
Average Growth Rate: 5.28%

GDP: \$429.1m  
GDP Rank: 1<sup>st</sup>  
Interregional Exports: \$0.3m  
International Exports: \$34.9m

Location Quotient: 0.84  
Labour Productivity: 64.11  
Value-Added Multiplier: 2.22

*Main Employers in TCE (Proportion of total employment 2010):*

- Accounting services (11.4%), advertising services (2.7%) and legal services (7.4%);
- Business management (10.9%) and contract staff (15.7%) and business administration services (3.8%);
- Consultant engineering (9.4%) and architectural services (2.6%).

## Economic Overview

In 2010, the Business Services sector was the biggest contributor to the TCE in terms of contribution to GDP (\$49.1 million), but slightly below average in terms of employment when compared nationally. The sector is highly crucial to the TCE, ranking 3<sup>rd</sup> in both employment and gross output, with 6,588 MECs in 2010, making it one of the most important sectors to the local economy. In 2010, this sector accounted for 10.1% of total employment in the TCE, whereas nationally the sector accounted for 12.3% of employment. This is supported by the LQ, which is significantly under one. Similarly, Business Services accounted for 4.8% of GDP, contrasted with 9.4% in New Zealand (Leung-Wai et al, 2011). Labour productivity is relatively high, ranking 30<sup>th</sup> overall.

## Sector Trends

Growth in demand for the services provided by the sector, as well as a number of new companies opening up offices in the TCE, led to steady growth in the years before the recession (see Figure 47.1). Between 2000 and 2005 employment increased 38% from 3,897 MECs to 5,378 MECs. Over the next two years growth was even quicker, with a 25% increase to 6,720 MECs in 2007. The effects of the recession can be clearly seen below, as job growth in this sector was almost non apparent, with a 2% increase over the four years until 2011, with 6,861 MECs. However the sector fared much better than other sectors in terms of job losses after the Global Financial Crisis.

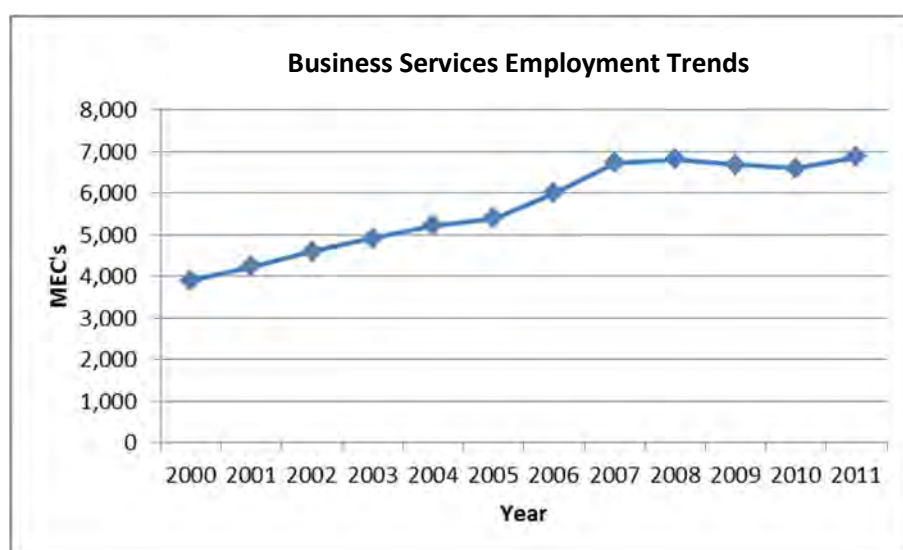


Figure 47.1 Business Services Employment Trends

Source: Market Economics Ltd. (2012)

Employment numbers in the sector have increased since 1995, and employment as a proportion of the labour force also increased, i.e. the sector has become relatively more crucial to the TCE (Leung-Wai et al, 2011). The pattern is replicated when focusing on GDP, as the proportion this sector has been contributing to the local economy in dollar values has increased since 1995. Most of this growth has been driven by increases in employment in plant hiring, architectural, consultant engineering, accounting, advertising, computer maintenance and consultancy, business administration and management, contract staff services and pest control services. Areas that have seen no growth or a decline in employment have been surveying services, employment placement, secretarial and cleaning services.

## Major Employers in the TCE

Most of the businesses that fall under this sector are located in Tauranga's Central Business District. The Chamber of Commerce in Tauranga employed 12 staff, catering for the interests of local businesses. Firms such as KPMG, Aurecon, APR Consultants, RHB Chartered Accountants, DFK Oswin Griffith's Chartered Accountants, AMP Centre, WHK and Fraser Consultants all have offices in the city. Law firms include Lyon O'Neale Arnold Lawyers Ltd/, Beach Legal, Keam Standen, Clive Gardner & Legal Team, Harris Tate, Holland Beckett, Burley Attwood Law, Sharp Tudhope, Cooney Lees Morgan and Kaimai Law. Advertising companies include Adcorp, Advertising House, King St Advertising Ltd/, Coredesign, Design Juice Ltd/, and Icon Advertising Ltd/.

The world's largest marketer of Kiwifruit, Zespri International, has its global headquarters in Mount Maunganui. The company sells kiwifruit into more than 60 countries and manages 30% of global volume. Locally they work with growers and post-harvest operators to source quality kiwifruit and supply it through distribution partners to wholesale markets and retail customers. Around 250 people work for Zespri globally, which has its headquarters in Tauranga. Zeafruit is another produce marketing company focusing on the New Zealand citrus and avocado industries. The company's head office is located in Katikati and services independent growers in the area, and it focuses on supplying lemons, navels and easy-peel mandarins to the export market (Zeafruit Katikati, n.d). The company claims to have a strong focus on sustainability and research and development. Apt Hort Ltd. is a Tauranga-based company providing orchard management support and services to clients in the Bay of Plenty, specialising in variety conversion, leader training, kiwifruit harvesting, fruit thinning and seasonal project management. Team Avocado is a marketing company located in Te Puna, which controls the exports of avocados for 350 growers. The New Zealand Passionfruit Growers Association (NAPGA) has its headquarters located in Katikati and it has 90 members.

The New Zealand Avocado Growers' Association (NZAGA) and Avocado Industry Council Ltd. (AIC) are located in Tauranga City. The NZAGA operates to promote avocado growers' interests through managing a research and development management programme. The AIC is a limited liability company operating to implement quality standards, export grade standards and rules and procedures for the industry. The avocado industry has developed to become New Zealand's 3<sup>rd</sup> largest fresh fruit export, with a high volume of trade going through the Port of Tauranga (New Zealand Avocado Company, n.d). Hass avocados are harvested for export from late August through to late March. About 80% of export grade fruit goes to the Australian market with the balance going to Japan, USA and South East Asian markets. New Zealand Kiwifruit Growers Inc. (NZKGI) is located in Mount Maunganui. They are a representative body designed to protect and enhance the commercial and political interests of NZ kiwifruit growers. NZKGI was formed in the early 1990s during a downturn in the industry, and today the grower forum consists of 25 regional and district representatives and 13 industry group representatives (New Zealand Kiwifruit Growers Inc, n.d).

## Future Trends

In the Smart Growth strategy released by the Western Bay's economic development organisation, Priority One, the main focus was to up-skill the labour force. This specifically will mean an attempt to move away from retail trade, manual labour and production chain jobs, and focus more on building industries such as finance and accounting. The agency would like to see

the Western Bay grow not only because of increases in population, but also because of productivity and value-added improvements. They proclaim to offer a 'business friendly' environment where investors and company owners will want to move their businesses. This focus includes an attempt to increase diversification in the TCE, and in effect move away from a reliance on primary industry such as horticulture, forestry and farming and toward business. One of the key areas of focus of Priority One when it was established was to increase the levels of industrial land in the Bay as the lack of business land was identified as a major impediment to business and economic growth. In partnership with the region's local authorities and development community, there are now over 650 hectares of land designated for business and industrial use coming on stream in a number of locations. The availability of commercial land will underpin the region's sustainable growth and maximise its economic competitive advantages (Priority One, n.d).

Business Services is a fast growing sector, both in terms of employment and GDP trends, with the pattern expected to continue in the next ten years. There is expected to be an increase in Consultancy Services following the national trend of businesses outsourcing the specialist services they require. Areas of growth are consultant engineering, architectural, computer maintenance, accounting, advertising, business administrative, business management, contract staff, and business services.

### Update to 2016

This statistical update applies for the "Professional, Scientific, Technical, Administrative and Support Services" (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 8,543 Employment Rank: 2 <sup>nd</sup>
GDP: \$625m GDP Rank: 1 <sup>st</sup>
% GDP Growth (2011-2016): 3.79% pa % GDP Growth Rank: 22 <sup>nd</sup>
Location Quotient: 0.95

### References

- Leung-Wai, J., Dixon, H., Sanderson, K., & Nana, G. (2011). *Bay of Plenty Economic Profile, Bay of Connections* (pp. 2 & 17). Retrieved from [http://www.bayofconnections.com/downloads/BERL\\_Bay\\_of\\_Plenty\\_Industry\\_Profile.pdf](http://www.bayofconnections.com/downloads/BERL_Bay_of_Plenty_Industry_Profile.pdf)
- Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.
- New Zealand Avocado Company. (n.d). *Company Profile*. Retrieved 17/01/2012, from [http://www.nzavocado.co.nz/online/about\\_nz\\_avocados.csn](http://www.nzavocado.co.nz/online/about_nz_avocados.csn)

New Zealand Kiwifruit Growers Inc .(n.d). *Company Profile*. Retrieved 17/01/2012, from <http://nzkgi.org.nz/about-kgi.html>

Priority One. (n.d). *Infrastructure Overview*. Retrieved 3/01/2012, from <http://www.priorityone.co.nz/infrastructure>

Zeafruit Katikati. (n.d). *Company Profile*. Retrieved 14/01/2012, from <http://www.zeafruit.co.nz/profile.html>

# 48. Central Government Administration and Defence

## Description

*ANZSIC Codes Covered:*

- M8111-Central Government Administration
- M8120-Justice
- M8130-Foreign Government Representation
- M8200-Defence
- Q9631-Police Services
- Q9632-Corrective Centres
- Q9633-Fire Brigade Services

*Main Employer in TCE (proportion of total in 2010):*

- Central government administration (51%)
- Justice (5.6%) and defence (22.4%)

Employment: 1,261  
Employment Rank: 15<sup>th</sup>  
Average Growth Rate: 3.73%

GDP: \$103.1m  
GDP Rank: 12<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$1.6m

Location Quotient: 0.51  
Labour Productivity: 81.39  
Value-Added Multiplier: 2.26

## Economic Overview

Although this sector hires considerably less people in the TCE than the national average (LQ=0.51), it still makes a large contribution to the local economy. With 1,261 MECs employed in 2010 and \$169 million gross output, the sector ranked 15<sup>th</sup> and 17<sup>th</sup>, respectively. It contributed \$103.1 million towards GDP in 2010, the 12<sup>th</sup> highest ranking of the 47 ANZSIC sectors ranked for their contribution to GDP. The majority of people employed in this sector are in Central Government and Administration, or Defence. Productivity is high, ranking at 21<sup>st</sup> place.

## Major Employers in the TCE

Two government agencies oversee defence in New Zealand, the Ministry of Defence and the New Zealand Defence Force (NZDF). The Ministry is a civilian organisation that advises the Government about defence policy and funds the purchase of new equipment, while the NZDF runs the three branches of the defence force: NZ Army, Royal NZ Navy and Royal NZ Air Force. The Ministry of Justice is the lead agency in the justice sector. A district court in Tauranga services the Bay of Plenty. Another major source of employment in this sector is the New Zealand Police. The police force has a community branch in Katikati, Greerton, Tauranga City, Mount Maunganui and Pāpāmoa.

Government departments with offices in Tauranga are the Inland Revenue Department, Work and Income NZ, Accident Compensation Corporation, Department of Corrections Greerton, Customs NZ, Ministry of Agriculture and Forestry, Labour Department of Health & Safety, Housing NZ Corporation, New Zealand Trade and Enterprise, NZ Transport Agency, Ministry of Social Development and Child, Youth and Family.

## Sector Trends

Employment in this sector stayed constant between 2000 and 2005, then rising from 914 MECs to 1,257 MECs, a 37.8% increase over the next two year period (see Figure 48.1). This rapid increase was followed by a period of slower growth of 8.7% to 1,366 MECs in 2011. The increase in employment between 2005 and 2007 was evenly spread throughout all three areas of this sector.

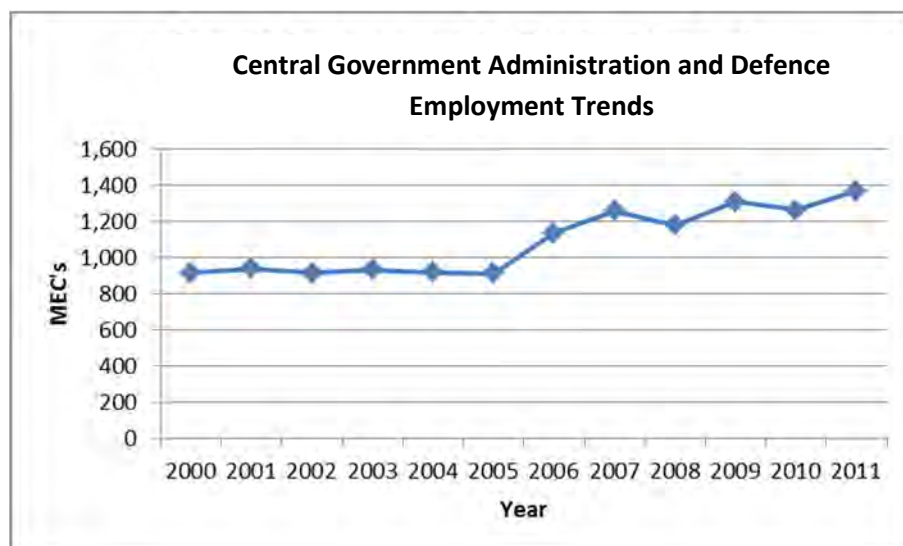


Figure 48.1 Central Government Administration and Defence Employment Trends  
Source: Market Economics Ltd. (2012)

## Future Trends

In the past 20 years, the numbers in the NZDF have halved, with the total number of serving personal at 8,871 in April 2006. As a part of the NZDF rebuilding plan, there is an aim to recruit up to 2,000 more people (Listener, 2006). In the TCE, however, growth in Defence has been strong, mainly due to continued population growth. The growth in employment is likely to stabilise as population growth stagnates.

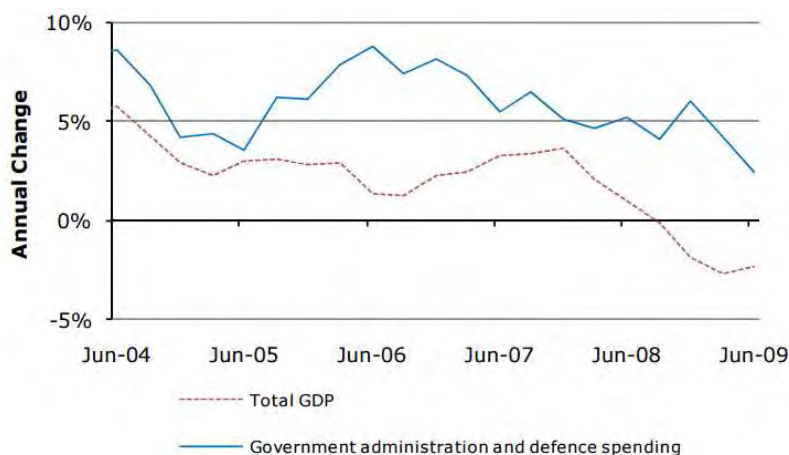


Figure 48.2 Annual Change in Total GDP and Government Administration and Defence contribution to GDP  
Source: Department of Labour (2009)

Over the last five years, Government Administration and Defence GDP growth has been consistently above total GDP growth. Figure 48.2 shows that spending in Government Administration and Defence has become a larger share of total spending over time. However, Government spending has followed a downward trend, consistent with the decline in total spending over time. Central Government Administration is an important sector for the management of New Zealand's economy. However, it can be expected that this sector will be rather sensitive to overall changes in the performance of the economy as a whole, as in times of recession the government cuts back on unnecessary spending. The national pattern shown above is followed in the TCE. This declining spending trend by central government is expected to continue in the following years, although at a slower rate.

### Update to 2016

This statistical update applies for the "Central Government Administration, Defence and Public Safety" (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 1,474 Employment Rank: 14 <sup>th</sup>
GDP: \$135m GDP Rank: 10 <sup>th</sup>
% GDP Growth (2011-2016): 5.78% pa % GDP Growth Rank: 13 <sup>th</sup>
Location Quotient: 0.51

### References

- Department of Labour. (2009). Employment and Skills Snapshot – Government Administration and Defence. Wellington, New Zealand. Retrieved from <http://www.dol.govt.nz/services/LMI/tools/skillsinsight/snapshots/government/government.pdf>
- Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.
- Welch, D. (2006, April 29). The Disarming of New Zealand. *New Zealand Listener*. Retrieved from <http://www.listener.co.nz/commentary/the-disarming-of-new-zealand/>

# 49. Local Government Administration Services and Civil Defence

---

## Description

### ANZSIC Codes Covered:

- M8113-Local Government Administration

### Main Services Supplied:

- Local Government Administration Services, including Civil Defence

Employment: 687  
Employment Rank: 19<sup>th</sup>  
Average Growth Rate: 6.77%

GDP: \$78.9m  
GDP Rank: 16<sup>th</sup>  
Interregional Exports: \$3.6m  
International Exports: \$4.0m

Location Quotient: 1.21  
Labour Productivity: 114.20  
Value-Added Multiplier: 2.84

## Economic Overview

In the TCE, Local Government Administration employed around 687 workers in 2010, the 19<sup>th</sup> biggest employing sector. The TCE is situated within the territory of the Bay of Plenty Regional Council (offices in Tauranga and Mount Maunganui), Western Bay of Plenty District Council and Tauranga City Council. The presence of so many council offices is the reason the Local Government Administration sector has a strong presence in the TCE, relative to the national situation, with a LQ of 1.21. The sector made a contribution of \$78.9 million towards GDP in 2010.

Local Government Administration is involved in providing many different services to residents of the TCE. The Bay of Plenty Regional Council's functions include managing the natural environment, such as the effects of using freshwater, land, air, and coastal waters by producing Regional Policy Statements and Plans to do this. The BOP Regional Council also manages land transport, the harbour, and regional emergency management and civil defence preparedness. The Tauranga City Council and Western Bay of Plenty District Council are responsible for the same tasks, but separately in their own jurisdictions. Their responsibilities include writing up plans and rules to manage local infrastructure such as water, sewage, storm water and roads; district emergency management and civil defence preparedness; controlling the effects of land-use, noise, and indigenous biodiversity.

The most recent BERL (2012) report ranks Western Bay of Plenty District Council and Tauranga City Council 6<sup>th</sup> and 8<sup>th</sup> respectively out of the 62 local authorities in New Zealand for encouraging the 'four wellbeings' of community: economic, social, cultural, and environmental.

## Sector Trends

Employment in the Local Government Administration sector has generally been increasing at a fast annual average growth rate of 6.77% over the 2000 to 2011 period (see Figure 49.1). However from 2000 to 2005 employment in the Local Government Administration sector was relatively flat, apart from a large increase between 2002 and 2003. From 2006 onwards, growth in the number of MECs increased strongly by 39% to reach a peak of 740 MECs in 2011.

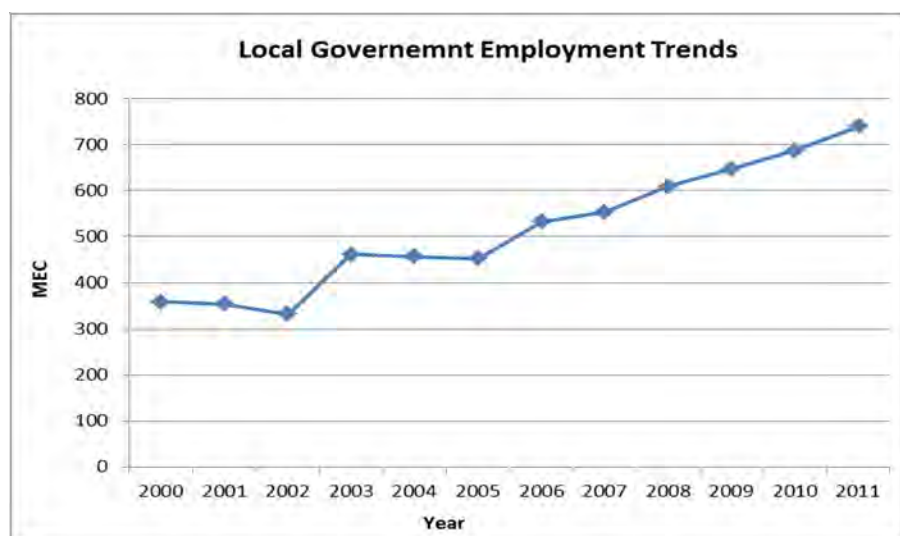


Figure 49.1 Local Government Employment Trends  
Source: Market Economics Ltd. (2012)

## Future Trends

Employment in the Local Government Administration sector looks set to continue to rise in line with the previous trend, which has shown that the sector is resilient during a depressed global economy.

## Update to 2016

This statistical update applies for the “Local Government Administration” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 706  
Employment Rank: 20<sup>th</sup>

GDP: \$29m  
GDP Rank: 27<sup>th</sup>

% GDP Growth (2011-2016): 0.19% pa  
% GDP Growth Rank: 36<sup>th</sup>

Location Quotient: 1.10

## References

BERL. (2012). *BERL Regional Rankings 2011*. Retrieved from <http://www.berl.co.nz/assets/Economic-Insights/Economic-Development/Regions/BERL-Regional-Rankings-Report-2011.pdf>

Cousins, J. (2012, February 29). Super City for Bay of Plenty a Possibility. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/bays-super-city/1289116/>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

One News. (2010, September 28). *More Than 1200 Workers to go from Super City*. Retrieved from <http://tvnz.co.nz/local-elections-2010/more-than-1200-workers-go-super-city-3804404>

Ottaway, G. (2012, December 18). *Pre-Christmas Job Cuts in Tauranga*. Retrieved from <http://www.newstalkzb.co.nz/auckland/news/nbbus/1688386119-pre-christmas-job-cuts-in-tauranga>

# 50. Education

---

## Description

*ANZSIC Codes Covered:*

- N8410-Preschool Education
- N8421-Primary Education
- N8422-Secondary Education
- N8423-Combined Primary and Secondary Education
- N8424-Special School Education
- N8431-Higher Education
- N8432-Technical and Further Education
- N8440-Other Education

*Main Commodity Supplied in TCE:*

- Education

Employment: 4,307  
Employment Rank: 5<sup>th</sup>  
Average Growth Rate: 4.3%

GDP: \$184.4m  
GDP Rank: 9<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$16.8m

Location Quotient: 0.91  
Labour Productivity: 42.72  
Value-Added Multiplier: 1.93

## Economic Overview

The Education sector employed approximately 6.6% of total employment in the Tauarnaga Catchment Economy in 2010, with 4,307 MECs. The largest education provider in the TCE is Bay of Plenty Polytechnic with 6,702 students enrolled. Other education providers are Te Wananga o Aotearoa, Bethlehem Tertiary Institute, The University of Waikato campus in Tauranga, and a number of High Schools, Intermediates, Primary and Early Childhood Centres. The sector contributed \$184.4 million towards GDP in the TCE in 2010, the 9<sup>th</sup> highest of the 47 ranked ANZSIC sectors.

At the time of the 2006 Census, the combined Tauranga City and the Western Bay of Plenty District population was relatively less educated than the New Zealand average, with 28.9% of people aged 15+ years had no formal qualifications, compared with 25.0% for New Zealand as a whole. Additionally, combining the data for both these council areas: 44.4% of Māori aged 15+ years had no formal qualifications, compared with 39.9% of New Zealand's Māori population (Statistics New Zealand, 2006).

Education investment is listed as a priority for the region in the Bay of Connections strategy, as a significant pool of human capital and knowledge in the TCE is a necessary condition for sustainable economic growth.

## Sector Trends

The Education Sector has been steadily increasing at an annual average growth rate of 4.3% over the 11 year period from 2000 to 2011 (see Figure 50.1). The rate of growth in employment in the Education sector also seems to trend upward in times of recession in the economy, with more people wanting to study to increase chance of employment and job security. From 2000 to

2001, employment in the Education sector increased by 9.21%, while between 2006 and 2008 employment increased 17.43% (an annual average of 8.7%).

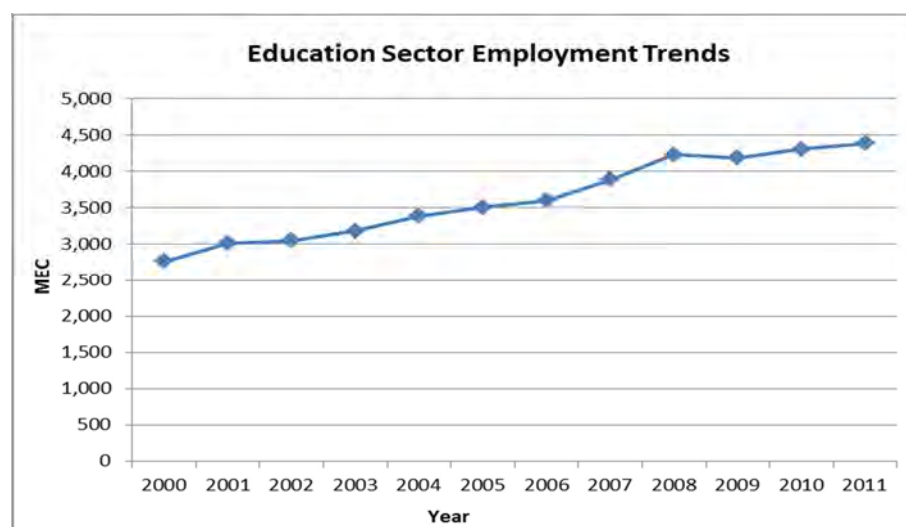


Figure 50.1 Education Employment Trends

Source: Market Economics Ltd. (2012)

## Future Trends

The demand for Education Services will continue growing with an expanding population. There are plans for a full university campus in Tauranga city, and this is a goal for Priority One to increase economic growth in Tauranga. If the University City-campus does go ahead, this will increase the number of people employed in the Education sector (Tauranga City Council, 2012).

## Update to 2016

This statistical update applies for the “Education and Training” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 4,565  
 Employment Rank: 5<sup>th</sup>

GDP: \$139m  
 GDP Rank: 9<sup>th</sup>

% GDP Growth (2011-2016): 0.59% pa  
 % GDP Growth Rank: 35<sup>th</sup>

Location Quotient: 0.85

## References

Leung-Wai, J., Sanderson, K., Norman, D., Nana, Dr G., Copsey, M. (2007, May). Bay of Plenty Region Economic Transformation: A Report to the Community Outcomes Bay of Plenty Economic Transformation Sub-group. BERL, Wellington, New Zealand.

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Statistics New Zealand. (2006). QuickStats About Western Bay of Plenty. Retrieved from <http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?type=ta&ParentID=1000004&tab=Education&id=2000022>

Tauranga City Council. (2012). Tertiary Campus Moves One Step Closer . Retrieved from [http://www.tauranga.govt.nz/news/tabid/667/aid/21108/tctl/1435\\_ViewAnnouncement/Default.aspx](http://www.tauranga.govt.nz/news/tabid/667/aid/21108/tctl/1435_ViewAnnouncement/Default.aspx)

# 51. Healthcare and Community Services

---

## Description

*ANZSIC codes covered:*

- 08611-Hospitals (except Psychiatric Hospitals)
- 08612-Psychiatric Hospitals
- 08613-Nursing Homes
- 08621-General Practice Medical Services
- 08622-Specialist Medical Services
- 08623-Dental Services
- 08631-Pathology Services
- 08632-Optometry and Optical Dispensing
- 08633-Ambulance Services
- 08635-Physiotherapy Services
- 08636-Chiropractic Services
- 08639-Health Services
- 08640-Veterinary Services
- 08710-Child Care Services
- 08721-Accommodation for the Aged
- 08722-Residential Care Services
- 08729-Non-Residential Care Services

Employment: 8,402  
Employment Rank: 2<sup>nd</sup>  
Average Growth Rate: 3.98%

GDP: \$422.8m  
GDP Rank: 2<sup>nd</sup>  
Interregional Exports: \$25.2m  
International Exports: \$4.1m

Location Quotient: 1.31  
Labour Productivity: 49.82  
Value-Added Multiplier: 2.15

*Main Employers in TCE (proportion of total employment 2010):*

- Hospitals (28.3%)
- Health services (17.8%)
- Accommodation for the aged (13.1%)
- Non-residential care services (10.8%)

## Economic Overview

Tauranga city appeals to older people, and attracts many people entering retirement. In 2006, 17.4% of the population in the Tauranga Economy were 65 or over (compared to 12.3% nationally) (Malcolm McKinnon, 2009), and humans in general are living longer on average. Both these factors have implications for the Health and Community Services sector as those aged over 65 cost the public health system about 5 times as much as the average person under 65 (Bryant, Teasdale, Tobias, Cheung & McHugh, 2004).

It is important to note the significant difference in demographic patterns shown in the regional Māori profiles compared to the total population. In Tauranga and the Western Bay of Plenty, there are fewer elderly and higher numbers of youth than average, reflecting a higher birth-rate and a high average premature death rate.

The Health and Community Services sector contributed \$422.8 million towards GDP in 2010, ranking 2<sup>nd</sup> of the 47 ranked ANZSIC sectors ranked for GDP contribution. It was also the 2<sup>nd</sup> largest employer in the TCE in 2010, hiring approximately 13.4% (8,402 MECs) of the labour force, which is higher than this sector in New Zealand as a percentage of the labour force at 10.3% of MECs. Since the TCE is the main hub for health and community services in the wider Bay of Plenty region, some of the services it provides are exported inter-regionally (\$25.2 million), with the rest (\$4.1 million) exported overseas.

### Main Employers in the TCE

The Bay of Plenty DHB is the principal provider of hospital and related services, including medical, surgical, women's health, child health, elderly, disability support, mental health, intellectual disability, public health and related support services for the region. The main hospital for the TCE is located in Tauranga and has 346 beds. Figure 51.1 below shows the locations of the hospitals and medical centres in the WBOP.

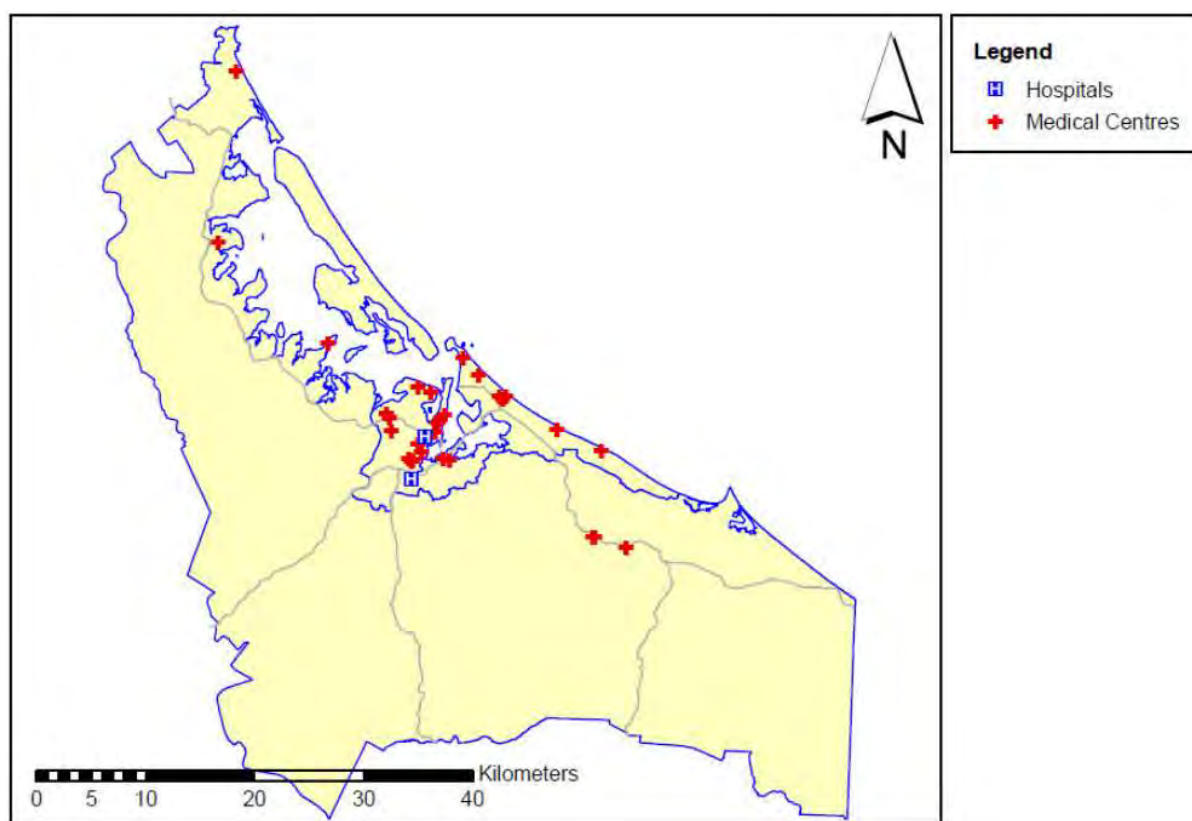


Figure 51.1 Hospitals and Medical Centres in Tauranga City and Western Bay of Plenty District  
Source: Priority One (2009)

### Sector Trends

Employment in the Healthcare and Community Service sector steadily rose from 2000 to 2011 at an annual average growth rate of 4% (see Figure 51.2); although the beginning of the recession in 2007 shows an almost complete slowdown in employment activities in the sector, with only a five MEC increase in the period. In 2007, employment in the sector increased with an additional 589 MECs employed in 2008. This trend is generally proportional by the growth of the population in the TCE, as well the growing interest in Tauranga as a retirement destination

and thus more development of rest homes, nursing homes and other health and community services to support the high proportion of aged residents.

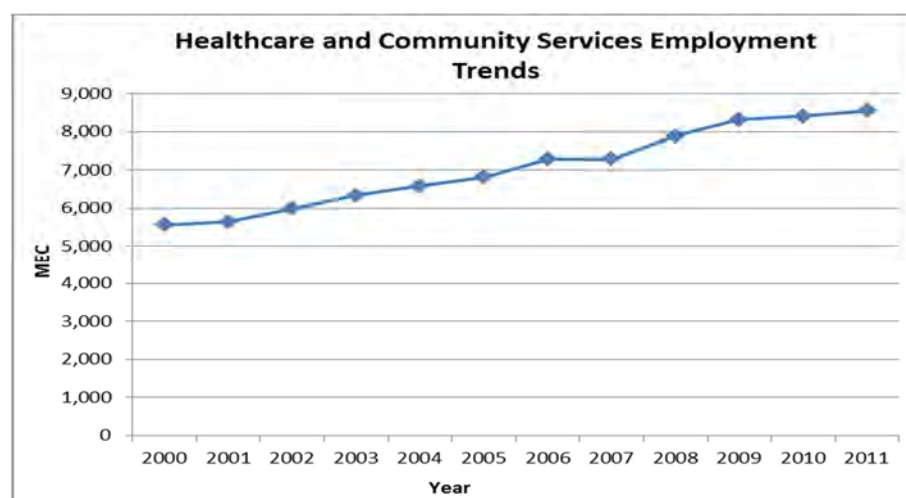


Figure 51.2 Healthcare and Community Services Employment Trends

Source: Market Economics Ltd. (2012)

### Future Trends

An aging population is an issue for all of New Zealand, but even more so for Tauranga and the wider TCE as it is a popular retirement destination, which is putting pressure on the TCE's Healthcare and Community Services sector. Along with increasing demand, there is currently a shortage of medical professionals, specialists, nurses, and other health professionals throughout the TCE and wider New Zealand, due to greater pay opportunities overseas. In the future, shortage of labour will force a much greater focus on growing the health workforce and improving the performance and productivity of the available workforce. The shortage of health professionals will need to be addressed to reduce the gap between workforce demand and supply (Ministry of Health, 2006). Overall the number of people employed in this sector is expected to increase due to an increasing population, which requires more staff employed in this sector to maintain the level of service to residents.

## Update to 2016

This statistical update applies for the “Health Care and Social Assistance” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 9,064  
Employment Rank: 1<sup>st</sup>

GDP: \$461m  
GDP Rank: 2<sup>nd</sup>

% GDP Growth (2011-2016): 3.84% pa  
% GDP Growth Rank: 21<sup>st</sup>

Location Quotient: 1.30

## References

Bryant, J., Teasdale, A., Tobias, M., Cheung, J., McHugh, M. (2004). *Population Aging and Government Health Expenditures in New Zealand, 1951-2051* (New Zealand Treasury Working Paper 04/14). Retrieved from <http://www.treasury.govt.nz/publications/research-policy/wp/2004/04-14/twp04-14.pdf>

Malcolm McKinnon. (2009). *Bay of Plenty places – Tauranga*. Retrieved from <http://www.TeAra.govt.nz/en/bay-of-plenty-places/5>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Ministry of Health. (2006). *Health Workforce Development: An Overview*. Wellington, New Zealand: Author.

Priority One. (2009). *Description and Stocktake of Social Infrastructure 2009*. Retrieved from <http://www.smartgrowthbop.org.nz/media/75888/wbop-district-social-infrastructure-stocktake.pdf>

# 52. Cultural and Recreational Services

---

## Description

ANZSIC Codes Covered:

- P9111-Film and Video Production
- P9112-Film and Video Distribution
- P9113-Motion Picture Exhibition
- P9121-Radio Services
- P9122-Television Services
- P9210-Libraries
- P9220-Museums
- P9231-Zoological and Botanic Gardens
- P9239-Recreational Parks and Gardens
- P9241-Music and Theatre Productions
- P9242-Creative Arts
- P9251-Sound Recording Studios
- P9252-Performing Arts Venues
- P9259-Services to the Arts
- P9311-Horse and Dog Training (excluding Racing and Ownership)
- P9311-Racing Clubs and Track Operation (excluding Training and Ownership)
- P9312-Sports Grounds and Facilities
- P9319-Sports and Services to Sports
- P9321-Lotteries
- P9322-Casinos
- P9329-Gambling Services
- P9330-Other Recreation Services

Employment: 1,374  
Employment Rank: 12<sup>th</sup>  
Average Growth Rate: 5.21%

GDP: \$75.5m  
GDP Rank: 17<sup>th</sup>  
Interregional Exports: \$0m  
International Exports: \$13.2m

Location Quotient: 0.71  
Labour Productivity: 53.54  
Value-Added Multiplier: 2.39

*Main Employers in TCE (proportion of total employment 2010):*

- Sports and Services to Sports (27%)
- Sports Grounds and facilities (24.4%)
- Other Recreational Services (11.6%)
- Libraries (7.5%)

## Economic Overview

Even though the TCE is a very popular lifestyle and tourism destination, the Cultural and Recreational Services sector is rather underrepresented, having a lower than average number of MECs employed in the sector and a LQ of just 0.71. Even so, the Cultural and Recreational Services sector is important to the TCE employing 1,374 MECs and producing \$149m in gross output.

## Major Employers in the TCE

The Tauranga City Council is one of the main providers of Sport and Recreational Services in the TCE. The Council owns and manages a number of parks, walkways, sports grounds and recreational facilities around the TCE. Parks and domains are extensively used for community based events and some larger events such as the popular Blues, Brews and Barbeques, National Jazz festival, and New Year's Eve celebrations. Some of the main recreational facilities include Baycourt (the TCE's primary arts venue), Tauranga Art Gallery (showcases local, national and international exhibitions in a range of media) (Tauranga City Council, 2006), BayPark (hosts Speedway events during summer and rugby matches in winter) (JVL Investments, n.d), Tauranga City Library, Historic Village on 17<sup>th</sup> and Baywave (The biggest wave pool in NZ).

## Sector Trends

Employment in Cultural and Recreational Services followed a generally increasing upward trend with an annual average growth rate of 5.21% for the period. From 2000 to 2005, employment in the sector rose from 822 MECs to 1,190 MECs (see Figure 52.1).

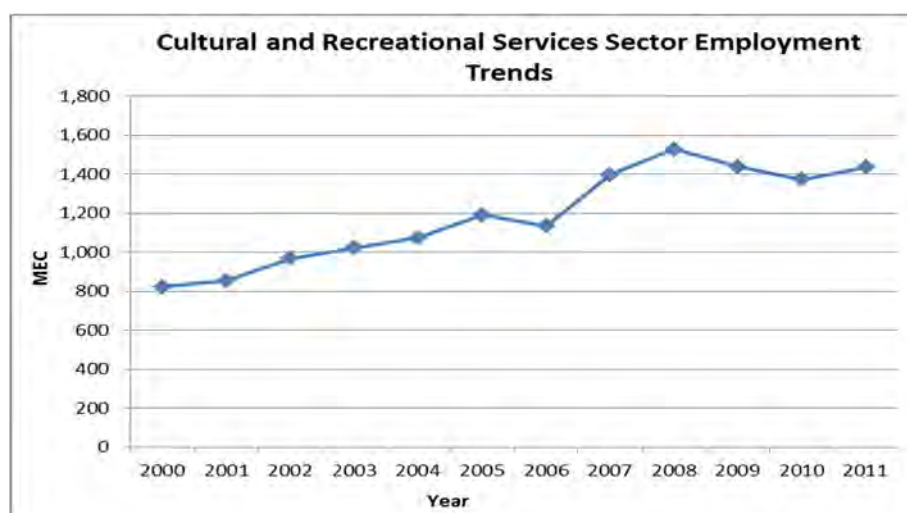


Figure 52.1 Cultural and Recreational Services Employment Trends

Source: Market Economics Ltd. (2012)

The main activities that contributed to this growth were Sports Grounds and Facilities (89.2% increase from 135 MECs to 255 MECs), and Services to Sports (46.4% increase from 238 MECs to 349 MECs). A minor decrease in employment occurred in 2005, but from 2006 to 2008 employment in the sector had a significant increase of 34.5%. The effect of the Global Financial Crisis hit the sector after 2008, with cost cutting reducing the number of people in this sector by 10% between 2008 and 2010. The sector saw the beginning of a recovery from the Global Financial Crisis in 2011 with employment increasing slightly.

## Future Trends

With increasing amounts of tourism and residential growth, the sector has seen huge growth in employment. Although employment in the sector slowed and declined slightly late in the global financial crisis and recession, the sector is recovering and should see an increase in the future. A consequence of the TCE's aging population is that there will need to be more investment in recreational and cultural services for the older age group. However the slowing of the population growth rate will most likely cause employment growth in this sector to stall also.

## Update to 2016

This statistical update applies for the "Arts and Recreation Services" (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 991 Employment Rank: 16 <sup>th</sup>  GDP: \$67m GDP Rank: 20 <sup>th</sup>  % GDP Growth (2011-2016): 2.48% pa % GDP Growth Rank: 29 <sup>th</sup>  Location Quotient: 0.79
--

## References

JWL Investments. (n.d.). *Tauranga*. Retrieved 11/12/2012, from <http://www.jwlinvestments.co.nz/tauranga.php>

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Tauranga City Council. (2006). *Smart Tourism: Bay of Plenty Tourism Strategy*. Retrieved from <http://ebookbrowse.com/smart-tourism-pdf-d190481401>

# 53. Personal and Other Community Services

---

## Description

ANZSIC Codes covered:

- D3702-Sewerage and Drainage Services
- Q9511-Video Hire Outlets
- Q9519-Personal and Household Goods Hiring
- Q9521-Laundries and Dry-Cleaners
- Q9522-Photographic Film Processing
- Q9523-Photographic Studios
- Q9524-Funeral Directors, Crematoria and Cemeteries
- Q9525-Gardening Services
- Q9526-Hairdressing and Beauty Salons
- Q9529-Personal Services
- Q9610-Religious Organisations
- Q9621-Business and Professional Associations
- Q9622-Labour Associations
- Q9629-Interest Groups
- Q9634-Waste Disposal Services
- Q9700-Private Households Employing Staff

Employment: 1,620  
Employment Rank: 11<sup>th</sup>  
Average Growth Rate: 1.93%

GDP: \$75.5m  
GDP: 18<sup>th</sup>  
Interregional Exports: \$0.2m  
International Exports: \$3.2m

Location Quotient: 0.95  
Labour Productivity: 45.70  
Value-Added Multiplier: 2.69

*Main Employers in TCE (proportion of total employment 2010):*

- Laundries and dry-cleaners (7.6%)
- Gardening services (10%)
- Hairdressing and beauty (26.4%)
- Religious organisations (12%)
- Waste disposal services (9.8%)
- Interest groups (17.5%)

## Economic Overview

The sector employs a large number of workers, ranking 11<sup>th</sup> for employment with 1,620 MECs. It is only slightly underrepresented when compared to the country as a whole. The activities within the sector that are overrepresented in terms of employment in the TCE are Gardening Services (1.14) and Hairdressing and Beauty (1.2), which may be due to the disproportionate representation of people in the 60+ age group. This sector is highly diversified with employment spread throughout many small companies.

## Major Employers in the TCE

Examples of local businesses who offer services in this sector are Garden Care Home or Business, Millhenge Garden Services, Rodney Wayne Hairdressers, Colour my World Hair Design, Abundant Life Community Church, City Life Church, Freedom Centre, Salvation Army, Envirowaste Services Ltd., Kiwi Waste Disposal Ltd., Transpacific Waste Management, Baywide Drycleaners, Mt Maunganui Dry Cleaners & Laundry and Tauranga Dry Cleaners.

BayTrust is the name of The Bay of Plenty Community Trust, one of twelve Community Trusts in New Zealand. They make grants and loans to community groups serving the Bay, in order to help achieve their mission to “effectively build, strengthen and enhance present and future BOP Communities”.

## Sector Trends

Overall, employment in Personal and Other Community Services has increased 23.4% from 1,346 MECs in 2000 to 1,661 MECs in 2011. There were two points in these years where employment fell, once in 2006 with a 4.7% decrease and again in 2009 with a 9.4% decrease (see Figure 53.1).

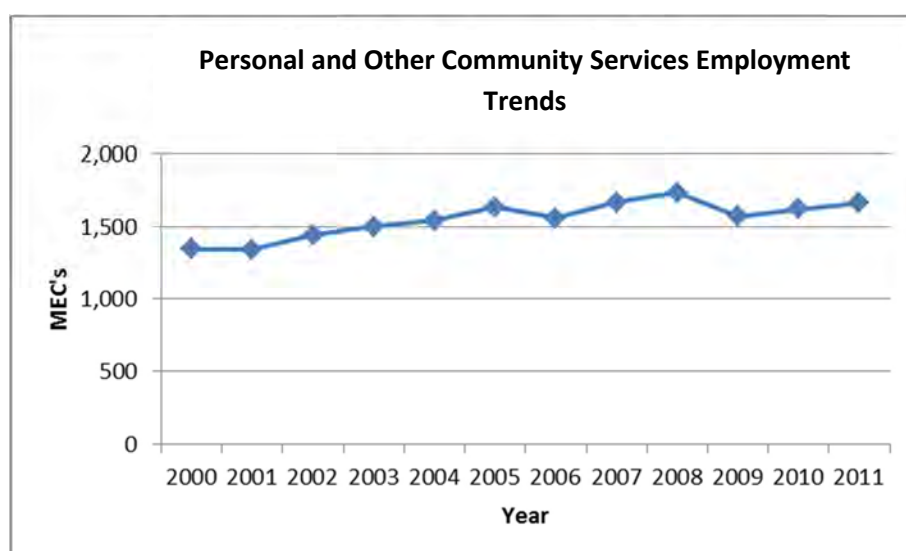


Figure 53.1 Personal and Other Community Services Employment Trends  
Source: Market Economics Ltd. (2012)

Employment growth has been observed in laundries and dry-cleaners, hairdressing and beauty, waste disposal services and religious organisations. Video hire outlets, photographic film processing and labour associations have seen falls in employment, mainly due to the changing technological climate.

## Future Trends

The performance of the sector is highly correlated with the population growth in the TCE. As the population in the TCE is projected to increase rapidly, the sector is likely to grow in the future.

### Update to 2016

This statistical update applies for the “Personal and Other Services” (ANZSIC 2006) sector, which is closely equivalent to the ANZSIC 1996 original sector, used in the above sector analysis.

Employment: 2,189  
Employment Rank: 9<sup>th</sup>

GDP: \$126m  
GDP Rank: 11<sup>th</sup>

% GDP Growth (2011-2016): 3.51% pa  
% GDP Growth Rank: 24<sup>th</sup>

Location Quotient: 1.10

### References

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

# 54. Tourism

---

## Description

Tourism activity is spread across many of the 48 'standard' ANZSIC sectors. As such, in the ANZSIC classification system, Tourism is not considered to be a sector in its own right. This problem is resolved at the national level by the establishment of so-called 'Tourism Satellite Accounts'. These Satellite Accounts for the NZ Tourism sector have been constructed since 1999 by Statistics New Zealand, by using the United Nations World Tourism Organization framework.

In this report on the TCE, this Chapter on the Tourism sector is included as an 'extra' sector. This 'extra' sector is essentially an amalgam of those parts of the 'standard' 48 ANZSIC sectors (see Chapters 6-53) where Tourism activity takes place.

Tourism in the TCE is currently represented by 'Tourism Bay of Plenty' which encompasses the tourism sector interests in the Tauranga City and Western Bay of Plenty area. Some statistics may refer to the Coastal Bay of Plenty which is a combination of the territorial authority areas, Tauranga City, Western Bay of Plenty, Kawerau, and Whakatane.

### *ANZSIC 1996 Codes Covered:*<sup>38</sup>

- H44-Accommodation
- H45-Food and Beverage Services
- I46-Road Transport
- I47-Rail Transport
- I48-Water Transport
- I49-Air and Space Transport
- I50-Other Transport
- I52-Transport Support Services
- N722-Travel Agency and Tour Arrangement Services
- L661-Motor Vehicle and Transport Equipment Rental and Hiring
- R89-Heritage Activities
- R90-Creative and Performing Arts Activities
- R91-Sports and Recreation Activities
- R92-Gambling Activities

### *Main Commodities Supplied in TCE:*

- Hotel and other lodging services
- Meals and beverages
- Air transport
- Bus and taxi passenger transport

---

<sup>38</sup> For the TCE, it is not known what proportions of these sectors are considered to be part of the Tourism sector. However, such proportions are known at the national (New Zealand) level – for example, for the year 2012, 39% of the Food and Beverage Serving sector was considered to be part of the Tourism sector, according to the 'Tourism Satellite Accounts'.

- Passenger transport by rail
- Passenger transport by international and coastal sea-going vessels
- Booking services
- Ticket-selling
- Hiring of cars
- Trucks
- Buses and campervans
- Diesel and motor oils
- Travel insurance
- Zoos and nature reserves

## Definition of Tourism

The definition of what constitutes a ‘tourist’ and ‘tourism sector’ is not as straightforward as it first appears. Various definitions have been put forward by a number of experts.

Probably the most widely accepted definition and certainly the one used in official studies in New Zealand is the one used by the World Tourism Organisation (WTO 1999, 2000), which is accordingly adopted in this study: “A tourist is any person travelling to a place other than that of his/her usual environment for less than twelve months and whose main purpose of trip is other than the exercise of an activity remunerated within the place visited”. What is crucial in this definition is the concept of “usual environment”. Statistics New Zealand uses the following criteria to define travel outside the “usual environment” in the New Zealand case: (1) travel by a scheduled flight or inter-island ferry service; (2) travel more than 40 km from their residence (one way); (3) travel outside the area they commute to work in or visit daily; and (4) travel by an international tourist.

Tourists are further split broad categories: (1) Holiday: A tourist whose main purpose of travel is for a holiday or vacation’ (2) Visiting Friends or Relatives (VFR): A tourist whose main purpose of travel is to visit friends or relatives. (3) Business: A tourist whose main purpose of travel is the carrying out of some business activity<sup>39</sup>.

*The inclusion of business travellers is of course a broader definition of “a tourist” than would be widely accepted by the general public.* That said, in order to be consistent with the World Tourism Organisation definition and Statistics New Zealand criteria, we have included ‘business travellers’ in the definition of ‘tourists’ and hence the ‘Tourism’ sector used in this report.

## Economic Overview

The Tourism sector is an important source of income for the TCE as well as for the Bay of Plenty region. Total expenditure by visitors to the combined Tauranga City and Western Bay of Plenty areas in 2009 was \$435 million, \$95 million from international visitors, and \$340 million from domestic visitors (Ministry of Economic Development, 2010). It is estimated that 5% of the Western Bay of Plenty’s workforce were employed in tourism related jobs in 2012, accounting for 2,544 MECs (Priority One, 2006).

---

<sup>39</sup> In their definition of the Tourism sector, in their Tourism Satellite Accounts, Statistics New Zealand also include the activities of international students studying in New Zealand less than 12 months.

The TCE has a number of significant natural features, attractions and events that draw both domestic and international visitors. These include White Island, Mt Maunganui, the kiwifruit industry, salt water hot pools, aviation tourism, jazz festival, garden and art festival and various sporting events such as cycling, iron man and surf carnivals (Leung-Wai, Sanderson, Norman, Nana & Copsey, 2007). The Tauranga Harbour also allows international visitors to access the region by providing a port of call from cruise ships mainly during the summer season. Cruise ships come from as far afield as Australia, the Pacific Islands, North America and Europe. During the 2015/16 cruising season, a total of 76 cruise ships visited the Port of Tauranga

There is a significant event venue in the TCE, BayPark Speedway and Stadium in Mount Maunganui. BayPark Speedway and Stadium has a capacity of 19,800 seats. The stadium is the base for the Bay of Plenty Steamers regional rugby team, and hosts a number of rugby and speedway events during the year.

According to a report from BERL Economics (Leung-Wai et al, 2011), the Tourism industry is made up of the following key sectors: Retail (10%); Cafes & Restaurants (40%); Road Passenger, Rail & Water Transport (40%); Air Transport (84%); Other Transport, Storage & Transport Services (28%); Machinery & Equipment Hiring & Leasing (17%); Cultural & Recreational Services (13%) (Leung-Wai, Dixon, Sanderson & Nana, 2011).

A survey of visitors key activities during their stay in the Western Bay of Plenty (see Table 54.1) revealed that the main attraction to the region by domestic visitors was Shopping (20.7% of total visits) followed by Visiting Friends and Relatives (19.1%). This is compared to international visitors who were attracted to the area by Land Sightseeing (35.3%) followed by Visiting Other Scenic/Natural Attractions (32%).

*Table 54.1 Activities of Domestic and International Tourists for Tauranga City and the Western Bay of Plenty District*

Domestic		International	
Activity	%	Activity	%
Shopping	20.7	Sightseeing (Land)	35.3
Visiting Friends and Relatives	19.1	Other Scenic/Natural Attractions	32
None/Nothing	17.2	Visiting Friends and Relatives	28.4
Dining	16.8	Dining	24.9
Other Scenic/Natural Attractions	16	Walking & Trekking	22.5
Walking & Trekking	10	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 (2006)*

In June 2013, Tourism Bay of Plenty has reported a 16.8% increase in visitor numbers from the previous year to eight key attractions and activities in the region, including: Aerius Helicopters, Blokart International, Classic Flyers, Comvita Visitors Centre, Kiwi 360, Springloaded, Waimarino and White Island Tours. Visits to these attractions and activities by domestic visitors rose 17.3% in the same year. The large increase was attributable to the 40.9% increase in number of visits from Gisborne/Hawkes Bay region; 31.2% increase in number of visits from Auckland/Northland region; 30.5% increase in number of visits from Rotorua; and a 23.6% increase in number of visits from Tauranga residents themselves. In addition, numbers of international visits were up 5.8% in the same year (Aldridge, 2013).

### **Estimate of the GDP Contribution of the Tourism Sector, 2016**

It is difficult to calculate the contribution of the Tourism sector to the TCE. However, by taking the following data from the literature, and making some reasonable assumptions, an estimate of the contribution of the Tourism sector to the TCE can be obtained by applying some simple algebra: (1) Leung-Wai, Dixon, Sanderson and Nana (2011) estimate the location quotient of tourism in the combined area of Tauranga City and Western Bay of Plenty District to equal 0.90. It is assumed for the purposes of this calculation that the same location quotient (0.90) applies to the TCE for the March year ending 2016. (2) Data taken from the Tourism Satellite Accounts shows that the New Zealand Tourism sector's direct contribution to New Zealand GDP (in the year ending March 2016) was \$12.873 billion, which corresponds to a tourism ratio<sup>40</sup> of 0.056 for the entire economy. (3) Data from Market Economic Ltd.'s input-output matrix for the TCE estimates it to have a regional GDP of \$<sub>2007</sub> 5,358 million for the year ending March 2016. On this basis, it is therefore estimated, by applying simple algebra, that the contribution of the Tourism sector to the TCE is \$<sub>2007</sub> 270 million or \$<sub>2016</sub> 321 million.

Based on this estimate (\$<sub>2007</sub> 270 million), this would place the Tourism sector as the 6<sup>th</sup> largest in the TCE for the year ending March 2016<sup>41</sup>, behind the 5<sup>th</sup> placed Retail sector at \$<sub>2007</sub> 364 million, and ahead of the Wholesale sector at 7<sup>th</sup> place at \$<sub>2007</sub> 226 million. This means that the Tourism sector contributes an estimated 5.04% of the regional GDP of the TCE.

### **Visitors**

The Port of Tauranga is a major gateway into the TCE. The cruise ships come from around the world, including North America, Europe, and the Pacific Islands. Numbers of tourists arriving into the TCE from cruise ships has been increasing over the years, with estimated numbers of tourists in 2012/13 season at 218,000 passengers from 83 Ships (Bowker, 2012). This amount is approximately double the 42 cruise ships docked at the port during the 2009/10 season (Quality Tourism Development, 2010).

However, the main North Island land route followed by international tourists bypasses the TCE. The most popular route around New Zealand that is followed by international tourists starts from Auckland to Waikato (Waitomo District) and Rotorua.

---

<sup>40</sup> The 'tourism ratio' represents the proportion of total supply of an industry, attributable to tourism demand.

<sup>41</sup> It needs to be remembered that the Tourism sector overlaps with other sectors in the economy – e.g., Leung-Wai, Dixon, Sanderson and Nana (2011) report that 10% of the Retail Trade in the Bay of Plenty region is from tourists and therefore it is also counted as part of the Retail sector as well as the Tourism sector.

For the year ended May 2013, total guest nights in the Western Bay of Plenty decreased by 9.2% to 993,688 compared with the year ended May 2012 (refer to Figure 54.2), where the decrease was composed of 16.8% decrease in international guest nights (222,644 total guest nights for the year ended May 2013) and 6.7% decrease in domestic guest nights (771,045) (Statistics New Zealand, 2013).

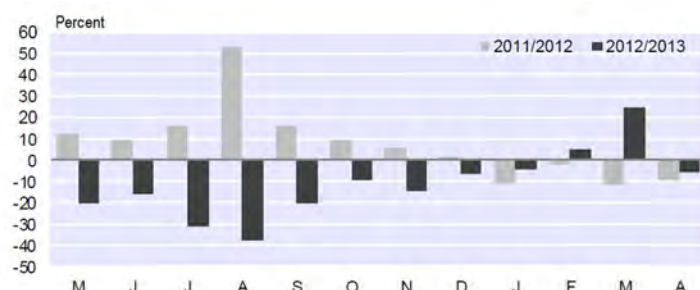


Figure 54.2 Tauranga City and Western Bay of Plenty: Monthly Guest Nights - % change from same month last year

Source: Statistics New Zealand (2013)

In May 2013, international visitors accounted for 29.7% of total guest nights in the Tauranga City and the Western Bay of Plenty District. Compared to May 2012, the percentage of international guest nights had increased 1.5% to 17,849 nights, while domestic guest nights had decreased 7.3% to 42,202 nights (see Figure 54.3). Subsequently, the average length of stay fell from 2.56 nights to 2.37 nights in May 2013 (Statistics New Zealand, 2013).

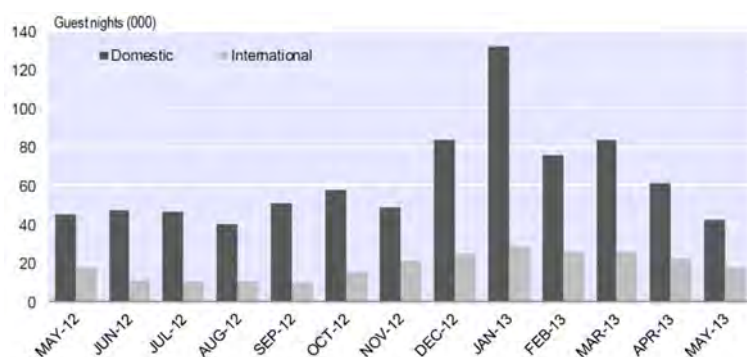


Figure 54.3 Tauranga City and Western Bay of Plenty: Monthly Guest Nights – By Origin of Guest

Source: Statistics New Zealand (2013)

Despite the decrease in guest nights and length of stay in the Western Bay of Plenty, the accommodation capacity excluding holiday parks rose 0.8%. The overall occupancy rate for the year ended May 2013 excluding holiday parks was 41.6% (Statistics New Zealand, 2013).

## Future Trends

The Tourism sector has space for continued growth in the TCE and could become a major sector. In the TCE, the Tourism sector in the TCE has key areas of strength on the popularity of the Tauranga as a cruise ship destination; the attractive coastal and harbour environment and associated with it, activities such as dolphin viewing, diving, kayaking, fishing, and White Island

tours; and Mauao as an icon for the area with recreational activities such as hiking. Overall, the Tourism sector in the TCE is likely to grow in the future.

However, there is a lack of tourism infrastructure in the TCE that might constrain the future growth tourism. The most notable limitations are the shortage of international standard accommodation and convention centres, limited cultural and arts facilities, limited air services to the area and difficulties in getting to the central city from the airport (Priority One, 2012).

## References

Aldridge, J. (2013, June 5). More Visitors to Tourist Attractions. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/more-visitors-tourist-attractions/1895789/>

Bowker, P. (2012). Chairman's Report – Western Bay of Plenty Tourism and Visitor Trust: Annual Report. Retrieved from <http://www.bayofplentynz.com/content/library/ANNUALREPORTFINAL.pdf>

Leung-Wai, J., Sanderson, K., Norman, D., Nana, G., Copsey, M. (2007). Bay of Plenty Region Economic Transformation: Stage 1: Situation Analysis. BERL, Wellington, New Zealand

Leung-Wai, J., Dixon, H., Sanderson, K., Nana, G. (2011). *Bay of Plenty Economic Profile - Bay of Connections*. BERL, Wellington, New Zealand

Market Economics Ltd. (2012). *Business Demography Database 2012*. Auckland, New Zealand.

Ministry of Economic Development (Tourism Strategy Group). (2010). New Zealand Regional Tourism Forecasts 2010-2016: Bay of Plenty RTO. Retrieved from <http://www.med.govt.nz/sectors-industries/tourism/pdf-docs-library/tourism-research-and-data/forecasts/regional-forecasts/regional-rto-forecasts-pdfs/Bay%20of%20Plenty%20RTO%20Forecast%20Report%202010-2016.pdf>

Priority One. (2006). Smart Tourism: Bay of Plenty Tourism Strategy. Retrieved from [http://econtent.tauranga.govt.nz/data/documents/joint\\_strategies\\_plans/files/smart\\_tourism.pdf](http://econtent.tauranga.govt.nz/data/documents/joint_strategies_plans/files/smart_tourism.pdf)

Priority One. (2012). Smart Economy: Western Bay of Plenty Economic Development Strategy. Retrieved from <http://www.priorityone.co.nz/vdb/document/224>

Quality Tourism Development. (2010, April). Bay of Plenty Tourism Performance and Future Opportunities Report. Tauranga, New Zealand.

Statistics New Zealand. (2006). *Boundary Map of Bay of Plenty Region*. Retrieved 09/07/2013, from <http://www.stats.govt.nz/Census/2006CensusHomePage/Boundary/BoundaryMap.aspx?id=1000004&type=region&ParentID>

Statistics New Zealand. (2013). Commercial accommodation Monitor: Bay of Plenty. Retrieved from [http://www.med.govt.nz/sectors-industries/tourism/pdf-docs-library/tourism-research-and-data/commercial-accommodation-monitor/cam-regional-reports/05\\_BAYO.pdf](http://www.med.govt.nz/sectors-industries/tourism/pdf-docs-library/tourism-research-and-data/commercial-accommodation-monitor/cam-regional-reports/05_BAYO.pdf)

Statistics New Zealand. (2016) Tourism Satellite Account:2015. The Contribution of Tourism to the New Zealand Economy. Retrieved from: [http://www.stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/Tourism/tourism-satellite-account-2015.aspx](http://www.stats.govt.nz/browse_for_stats/industry_sectors/Tourism/tourism-satellite-account-2015.aspx)

World Tourism Organisation (1999). *Tourism Satellite Accounts: The Conceptual Framework*. Madrid, World Tourism Organisation.

World Tourism Organisation (2000) *Tourism Satellite Accounts: Methodological References*. Madrid, World Tourism Organisation.

# Appendix A: Summary of Regional Economic Strategies

---

## SmartGrowth Strategy

The SmartGrowth Strategy is a collaborative effort between three councils (the Tauranga City Council, the Western Bay of Plenty District Council and the Bay of Plenty Regional Council) working in partnership with businesses, industry, education groups, Tāngata Whenua, central government, and community groups in the combined Western Bay of Plenty and Tauranga City area for a sustainable growth in the region. The SmartGrowth Strategy was initiated in 2000 as a result of public concerns on negative externalities arising from the regions rapid population growth. With an expectation of continued regional population growth in the future, the Strategy was proposed to facilitate a more co-ordinated management between multiple interest groups for sustainable growth in the region over the next 20-50 years (Priority One, 2007).

The main areas of interest identified by the SmartGrowth Strategy groups are:

- The supply of land for housing, business and open space;
- Servicing for water supply, sewer, roads and storm water; and
- The protection of natural and cultural heritage.

Although the principles, objectives, and actions identified in the SmartGrowth strategy are not in itself binding, Environment Bay of Plenty (2005) included them within their Regional Policy Statement, which the District and City plan developed by Western Bay of Plenty District Council and Tauranga City Council, respectively, have to give effect to.

According to the SmartGrowth Strategy the residential development should be based on:

- Keeping growth within the urban limits of Waihi Beach, Katikati, Ōmokoroa, Tauranga and Te Puke and, maintaining the rural amenity of small settlements throughout the subregions through limiting development.
- Re-developing existing urban locations through mixed use activity within business and community centres.
- Greenfield development at increased densities in specified growth locations at Waihi Beach, Katikati, Ōmokoroa, Bethlehem, Pyes Pa, Pāpāmoa, Pāpāmoa East and Te Puke.
- Provision for Papakainga housing development on multiple-owned Māori land for local iwi and hapū.

Due to the importance of the agricultural and horticultural industries to the combined Western Bay of Plenty and Tauranga City's economy, the Strategy places a strong interest in protecting the productive land from greenfield developments by encouraging higher density urban areas through brownfield developments.

## Smart Economy Strategy

As the SmartGrowth strategy focuses on population growth, the SmartEconomy strategy provides a guideline for sustainable economic development in the Western Bay of Plenty

District and Tauranga City area. Similar to the SmartGrowth strategy, the SmartEconomy strategy is a collaborative effort involving the region's three local authorities (Tauranga City Council, Western Bay of Plenty District Council, and Bay of Plenty Regional Council), central and local government agencies, Tāngata Whenua, businesses and business support groups, and community and education groups (Tauranga City Council, 2012).

The vision for SmartEconomy is to make the Western Bay of Plenty District and Tauranga City area *"the location of Choice based on sun, sea, soil, and skills, resulting in a highly productive, competitive, and export based economy"* (Priority One, 2007, p.21). To achieve this vision, the strategy lays out a plan to transform the existing strengths of the economy, such as its productive soils, a good growing climate, a range of lifestyle attractions, and an export-based manufacturing base and the largest export port in New Zealand.

Implementation of the SmartEconomy strategy commenced in 2004, and administration and monitoring is carried out by Priority One, an economic development organisation for the region. According to Priority One (2012), the strategy group identified a shortage of skilled labour as the main issue against continued economic growth in the region. To address the issue, the SmartEconomy strategy focuses primarily on sectors with low wage rates and low skills.

Priority One (n.d1) explains that the SmartEconomy strategy aims to improve the regional economy by increasing the value added to the primary products produced within the region, and thereby moving up the 'global-value-chain'. The strategy will increase export earnings, as well as diversifying the economy. Specifically, Priority One (2007) has identified that the Horticulture, Manufacturing, Agriculture, Dairying, Fishing, Health and Food Processing sectors have the most potential for further growth and the ability to contribute to a competitive, export-based economy.

The main areas that the SmartGrowth strategy focuses on are:

- Increased tertiary education and research provision;
- Sufficient availability of infrastructure and land to support business competitiveness;
- Attracting skilled labour and tourists to the region;
- Expanding of the export sector; and
- Safe supply of electricity and high speed broadband.

## **Agencies Involved in Economic Growth**

### **Bay of Plenty Regional Council**

The Bay of Plenty Regional Council manages economic growth for the region as a whole. The council is moving away from an environmental mandate that manages the region's land, air, fresh and coastal water, to a broader focus that also manages the region's economic, social, and cultural well-being. Along with some of the other economic development agencies in the Bay of Plenty region, the council created a regional strategy for regional economic development, the Bay of Connections (Priority One, n.d3). The Bay of Plenty Regional Council is also involved in the development of the SmartGrowth and SmartEconomy strategies.

## **Western Bay of Plenty District Council**

The Western Bay of Plenty District Council is the territorial authority for the Western Bay of Plenty excluding Tauranga City. The council supports the on-going growth of the main sectors, horticulture and other primary sectors. The council mainly works in collaboration with other councils in the Bay of Plenty Region and was a key contributor to the SmartGrowth and SmartEconomy strategies.

## **Tauranga City Council**

The Tauranga City Council is a governing body overseeing Tauranga City. It oversees economic development in the City through council plans (e.g. the annual plan and the 10-year plan), and is involved in the development of the SmartGrowth and the SmartEconomy strategies.

## **Priority One**

Priority One is the economic development agency for Tauranga City and the Western Bay of Plenty District. The agency was founded by the business community in partnership with local authorities in 2001 (Priority One, 2009). Priority One supports the region's economic competitiveness through facilitating acquisition of critical infrastructure as outlined by the SmartEconomy strategy (Priority One, 2012). Priority One is a key organisation responsible for developing, implementing and managing the SmartEconomy strategy.

## **Tauranga Chamber of Commerce**

The Tauranga Chamber of Commerce is a membership-based organisation to provide small to medium-sized businesses leadership, education, business support, networking and advocacy. The organisation has a membership of 850 local businesses in the city and administers central and local government programmes to foster development and growth of businesses. The organisation is a key stakeholder in regional economic development strategies, SmartGrowth and SmartEconomy (Tauranga Chamber of Commerce, 2007).

## **New Zealand Trade and Enterprise**

New Zealand Trade and Enterprise (NZTE) is a central government agency focused on supporting exporters, foreign importers and investors. The agency has a regional office in Tauranga and contributed to the development and implementation of the Bay of Plenty Regional Economic Development Strategy, the 'Bay of Connection'.

## **Export NZ**

Export NZ is a division of Business NZ, a business interest group, and has a regional office in Tauranga. Export NZ focuses on export led economic growth in the Bay of Plenty region, and is a key organisation in implementation of the SmartEconomy Strategy (Priority One, 2007).

## **Creative Tauranga**

Creative Tauranga is a charitable trust established to enhance Tauranga City through art, music, and culture and attract artists and performers to the city. Creative Tauranga is a major arts and cultural organisation and supporting the development and implementation of strategies in Tauranga.

## References

Environment Bay of Plenty. (2005, September 23). *SmartGrowth Put to Final Test [Media Release]*. Retrieved from <http://www.scoop.co.nz/stories/AK0509/S00158.htm>

Priority One. (n.d1). *Networks and Working Groups*. Retrieved 14/12/2012, from [http://www.priorityone.co.nz/networks\\_and\\_groups\\_groups](http://www.priorityone.co.nz/networks_and_groups_groups)

Priority One. (n.d2). *The Existing SmartGrowth Strategy*. Retrieved 13/12/2012, from <http://www.smartgrowthbop.org.nz/archive/the-existing-smartgrowth-strategy.aspx>

Priority One. (n.d3). *Profile*. Retrieved 18/12/2012, from [http://www.priorityone.co.nz/directory\\_detail/m/225](http://www.priorityone.co.nz/directory_detail/m/225)

Priority One. (2007). *50-Year Strategy and Implementation Plan*. Retrieved from <http://www.smartgrowthbop.org.nz/media/1358/SmartGrowth-Strategy-2051-Revised-May-2007-.pdf>

Priority One. (2009). *Why Set Up Business in Tauranga: Development of a Regional Attractiveness Indicator*. Retrieved from <http://www.priorityone.co.nz/vdb/document/31>

Priority One. (2012). *Shaping Our Future: Annual Report 11/12*. Retrieved from <http://www.priorityone.co.nz/vdb/document/203>

Tauranga Chamber of Commerce. (2007). *Submission to the Ministry for Economic Development on Review for Economic Development Provisions under the Commerce Act 1986 [Discussion Document]*. Retrieved from <http://www.med.govt.nz/business/competition-policy/pdf-docs-library/review-of-regulatory-control-provisions-of-the-commerce-act/submission-on-the-review-of-regulatory-control-provisions-under-the-commerce-act-1986/tauranga-chamber-com.pdf>

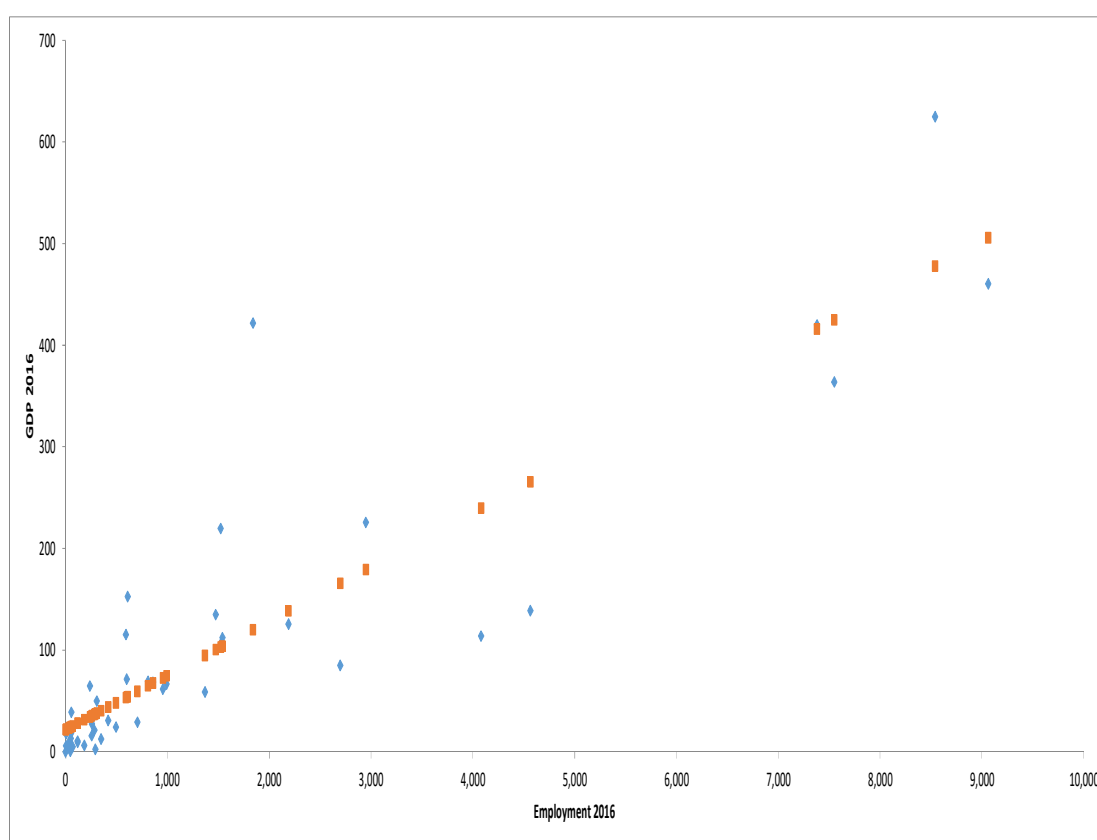
Tauranga City Council. (n.d). Council Documents and Reports. Retrieved 18/02/2013, from <http://www.tauranga.govt.nz/council-documents-reports.aspx>

Tauranga City Council. (2012). *SmartEconomy*. Retrieved from <http://www.tauranga.govt.nz/Default.aspx?TabID=1032&SkinSrc=%5BG%5DSkins/Council2010/PrintTemplate&ContainerSrc=%5BG%5DContainers/Council2010/Standard&dnnprintmode=true>

Western Bay of Plenty District Council. (n.d.). *Western Bay of Plenty's Economy*. Retrieved 18/02/2013, from <http://www.westernbay.govt.nz/Your-district/Economy/>

# Appendix B: Relationship between Sector Employment and Sector GDP

Figure B.1 below shows a strong linear relationship between sector employment (measured in MECs) and sector GDP (measured in \$million<sub>2010</sub>) for the year 2016. The nominal sector 'Ownership of Owner-Occupied Dwellings' has been removed from the plot as there is no employment data *per se* for this sector. Similar plots can be produced for other years covered in our analysis (2000 to 2015), and the same type of linear relationship is observed.



*Figure B.1 Plot of 'Employment Numbers' versus 'GDP contribution' of sectors in the Tauranga Catchment Economy*

*(Blue dots represents the 'actual data' for each sector; Orange-Brown dots represent the 'predicted values' for each sector, according to the linear trend line. If there was a perfect linear correlation between 'Employment Numbers' and 'GDP contribution' for each sector, then the blue and the orange dots would correspond to each other for every sector)*

The correlation coefficient ( $r$ ) is 0.88. The *largest outliers (with negative residuals)* include: Education and Training (\$mil -127 residual); Accommodation and Food Services (\$mil -126 residual); Retail Trade (\$mil -65 residual); and Health Care and Social Assistance (\$mil -45 residual). These sectors have relatively low labour productivity, meaning they produce less GDP than you would expect from their employment numbers

The *largest outliers (positive residuals)* include: Rental, Hiring and Real Estate Services (\$<sub>mil</sub> 302 residual); Professional, Scientific, Technical, Administrative and Support Services (\$<sub>mil</sub> 147 residual); Finance (\$<sub>mil</sub> 99 residual); Other Transport, Postal, Courier, Transport Support and Warehousing Services (residual 117 residual); Electricity Generation and Supply (\$<sub>mil</sub> 62); and Wholesale Trade (\$<sub>mil</sub> 47). All of these sectors produce more GDP than would be expected based on their employment numbers.

The slope of the fitted (predicted) line is 0.050671\$<sub>mil</sub> per MEC, which translates into \$50,671 per employee (MEC), which represents the average labour productivity in the Tauranga Catchment Economy.

# Appendix C: Tauranga Housing Market as at 2012, with a Brief Update to Quarter 3 of 2016

During the five year period from May 2007 to May 2012, house prices in the TCE area had a minor correction following the Global Financial Crisis (GFC) (refer to Table C.1). The median house price in May 2012 was \$10,000 lower than the price in May 2007. Among dwelling types, apartments had the greatest loss in value. During the period from Feb 2008 to Feb 2011, apartments in Mount Maunganui suffered a substantial drop in value, falling by an average of 15% over the period, compared with 7% for apartments in other parts of the city (Skellern, 2011). Housing demand was relatively flat from 2007 to 2012 and, similarly, supply was restrained as sellers were unwilling to lower asking prices during this period.

*Table C.1 Median house prices in Tauranga City*

	May 2007	May 2008	May 2009	May 2010	May 2011	May 2012
Tauranga	\$355,000	\$368,000	\$340,000	\$354,000	\$330,000	\$345,000

*Source: REINZ (2015)*

In 2008, Gareth Kiernan of Infometrics commented, “Land is still very plentiful, but residential development work has virtually stopped as credit conditions have tightened and buyer demand has dried up”. He added, “Overall, the region's property market is going through much the same as the rest of the country – a collapse in buyer demand, little pressure on most vendors to sell, and thus a Mexican stand-off of sorts” (Landlords for Kiwi Property Investors, 2008). From 2008 to 2011, many sellers were forced to decrease thousands of dollars off their listing prices to break a stand-off in the Tauranga housing market. Some homes sat unsold for a year or longer, as the market had stalled because of the big gap in price expectation between buyer and seller. In the top end, especially in downtown Mount Maunganui, sellers reduced their prices by more than \$100,000 to sell their houses (Skellern, 2011).

In Figure C.1, house prices in Tauranga City decreased from the peak price index in November 2007 to a low of 87% in early 2011. By the end of 2012, house prices were still 13% below the pre-recession values. In comparison, the housing market for New Zealand as a whole recovered to November 2007 pre-recession values by August 2012 and was higher by November 2012. In contrast to Auckland, 2012 house prices in Tauranga remained well below the 2007 market peak, by 10.3% (Kendon, 2012). Despite the lower house prices, housing affordability in the TCE was relatively low in 2012 as the house price to income multiplier remained at an elevated level. In 2012, the \$349,000 median house price in Tauranga and the Western Bay was nearly six times the area's median household income of \$59,600 (Cousins & Helliwell, 2013).

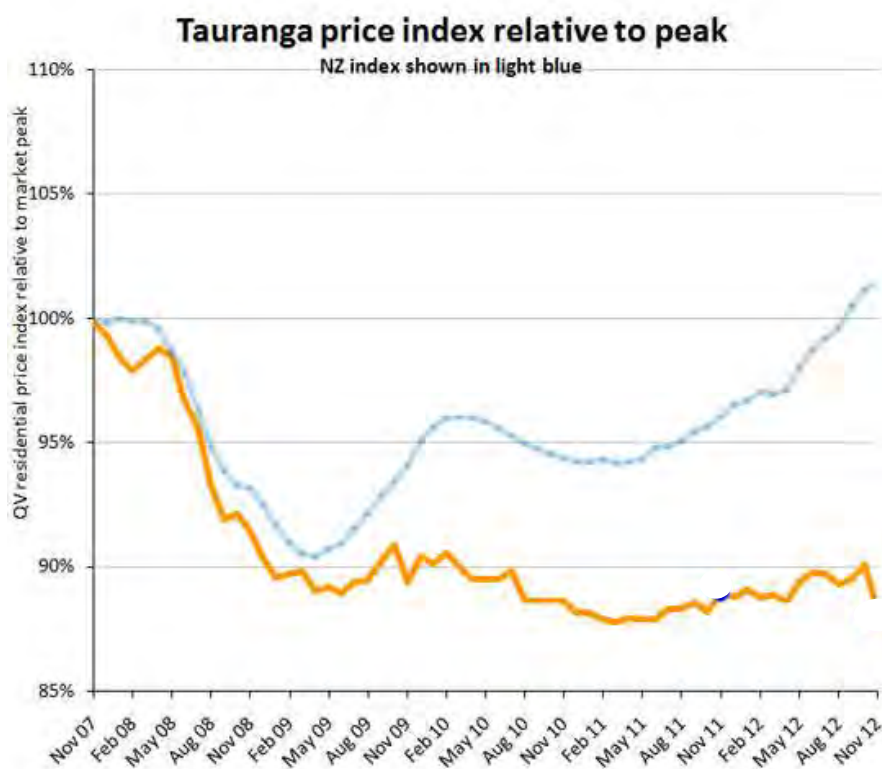


Figure C.1 Tauranga price index relative to peak  
Source: Quotable Value Online Reports and Statistics (2013)

The number of building consents issued in Tauranga during December 2012 increased by more than double when compared to consents issues a year earlier in December 2011 (45, up from 21, respectively). The 727 consents for the year ended 30 November 2012 contributed \$266 million to the Bay's economy in the 12 months (Cousins & Helliwell, 2013). Despite this improvement, prices fell sharply in the last two months of 2012. In December 2012, property valuer Paul Thomas from the Quotable Value commented, "A lot of buyers are sitting and watching the market at the moment. There's still an element of cautiousness around property in Tauranga. We are seeing many more new builds appearing, however this isn't expected to change the current activity level. Similarly, Managing Director of Harcourts Advantage Realty in Tauranga, Simon Martin, commented, "The fact is that in the last five months 70% of the property sales were under \$400,000, which means the bulk of the sales were lower-price sales" (Aldridge, 2012). The average Tauranga property value fell to \$423,865 in November 2012, 11.8% below the 2007 peak, while property values in the Western Bay rose to \$401,120, 11.9% below the 2007 peak, according to Quotable Value. Meanwhile, the national property market rose 5.7% to surpass the 2007 peak by 1.5%

## Update 2016

The above commentary and statistics provides information on the housing market in the TCE from 2007 to 2012 – this section provides an update on the trends in the TCEs housing market from 2012 (first quarter) to 2016 (third quarter), using the latest available data from Quotable Value New Zealand (2017). Accordingly, the latest available house prices for Tauranga City and Western Bay of Plenty District council (which is the closest data we can get to the TCEs area) are outlined in Figure C.2.

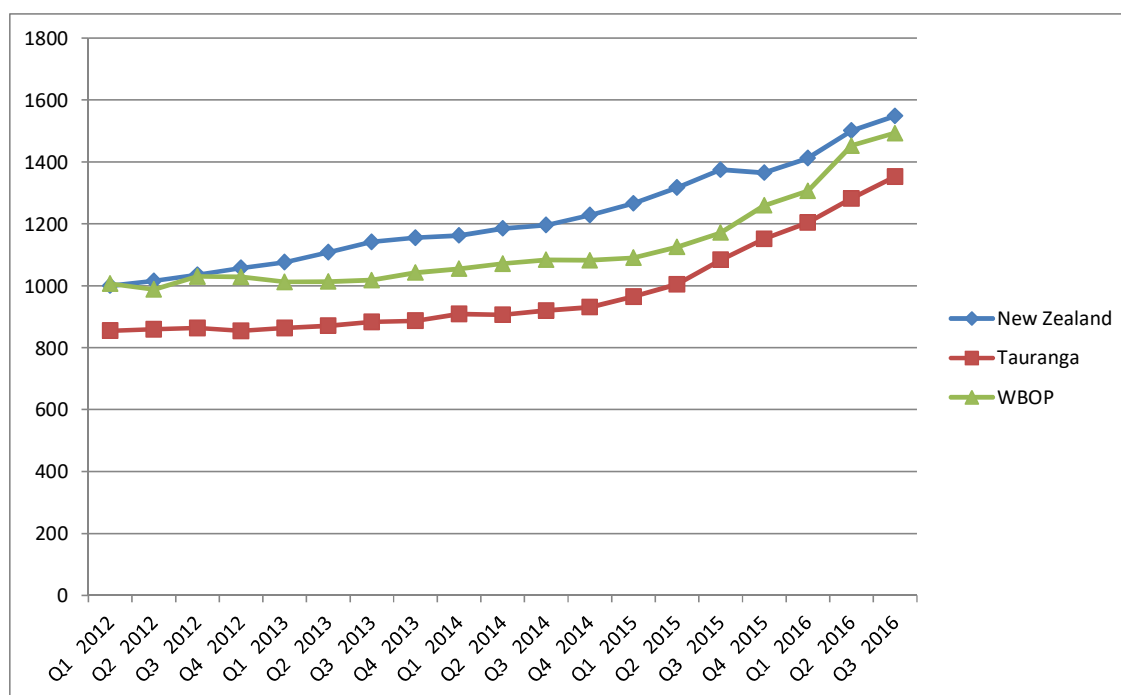


Figure C.2 Tauranga City and Western Bay of Plenty District Council (Index 1000= New Zealand Average House Price for Quarter 1 2012)

As can be ascertained from Figure C.2, since early 2015, there has been a period of very strong growth in house prices in Tauranga City and Western Bay of Plenty District (following many years of no or flat growth, and even negative growth in both markets). In the space of 18 months from first quarter of 2015 to the third quarter of 2016, Tauranga City house prices increased 40.15% and the Western Bay of Plenty District house prices increased by 36.94%. Industry commentators have explained this heated property market in Tauranga being due to a (a) Auckland residents seeking to buy first homes or retirement homes in Tauranga due to greater affordability compared with Auckland, or cashed up Auckland buyers simply seeking a lifestyle change; and (b) the Tauranga market is ‘catching up’ with some other markets in New Zealand and in particular the Auckland market. Commentators have questioned how long this boom can be sustained with the ‘affordability gap’ between Tauranga and other more expensive regions narrowing.

## References

- Aldridge, J. (2012, Dec 13). Tauranga Property Prices Tumble. *Bay of Plenty Times*. Retrieved from: <http://www.bayofplentytimes.co.nz/news/tauranga-house-prices-tumble/1655990/>
- Cousins, J. & Manning, B. (2013, Jan 23). Housing in Tauranga ‘Unaffordable’. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/housing-unaffordable/1728107/>
- Cousins, J. & Helliwell, G. (2013, Jan 14). House Building Consents Double. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/house-building-consents-double/1715804/>
- Housing New Zealand Corporation. (2006). *Housing Needs In Tauranga*. Retrieved from <http://www.hnzc.co.nz/about-us/research-and-policy/housing-research-and-evaluation/summaries-of-reports/housing-needs-2006/?searchterm=tauranga>

Kendon, P. (2012, Aug 10). Tauranga Property Prices Up. *SunLive News*. Retrieved from <http://www.sunlive.co.nz/news/29781-tauranga-property-prices-up.html>

Landlords for Kiwi Property Investors. (2008, December 16). *Tauranga: Bargains in the Bay*. Retrieved from [http://www.landlords.co.nz/read-article.php?article\\_id=3371](http://www.landlords.co.nz/read-article.php?article_id=3371)

Quotable Value. (2013). Quotable Value Online Reports and Statistics. Retrieved from <https://www.qv.co.nz/resources/news>

Quotable Value. (2017). Quotable Value Online Reports and Statistics. Retrieved from <https://www.qv.co.nz/property-trends/compare-district-growth>

REINZ. (2015). *REINZ Residential Regional Commentary – December 2015*. Retrieved from <https://www.reinz.co.nz/Media/Default/Statistic%20Documents/Press%20Releases/2015%20December/REINZ%20Residential%20Regional%20Commentary%20-%20December%202015.pdf>

Skellern, G. (2011, Feb 19). House Prices Slashed to Seal Deals. *Bay of Plenty Times*. Retrieved from <http://www.bayofplentytimes.co.nz/news/house note>

# Appendix D: Full Definition of Tabulated Key Economic Indicators

---

In Part II (Chapters 6 to 54), 'key economic indicators, for each sector, are tabulated in a *blue-bordered box at the top right corner the start of each chapter*. These indicators are fully defined as follows:

1. *Employment*: Number of people employed in each sector in the Tauranga Catchment Economy, measured in terms of modified employment counts (MECS), for the year ending March 2010 (Refer to the Glossary for a definition of MECS).
2. *Employment Rank*: Rank of each sector from the largest (1<sup>st</sup>) employment sector to the smallest employment sector (46<sup>th</sup>), for the year ending March 2010. "Employment" is measured in terms of definition 1.
3. *Average Growth Rate*: Average compounded percentage (%) growth in a sector's employment from March 2000 to March 2011 in the Tauranga Catchment Economy. "Employment" is defined as the number of full-time equivalent people employed in each sector, measured in terms of modified employment counts for the March 2000 and March 2011 (Refer to the Glossary for a definition of MECS). This indicator can be used as a proxy for GDP growth<sup>42</sup>.
4. *GDP*: A sector's contribution to Gross Domestic<sup>43</sup> Product of the Tauranga Catchment Economy, for the year ending March 2010, measured in \$<sub>2010</sub> million.
5. *GDP Rank*: Rank of each sector in term of its contribution to Gross Domestic Product of the Tauranga Catchment Economy, for the year ending March 2010, from the highest contribution (1<sup>st</sup>) through to the lowest contribution (47<sup>th</sup>).
6. *Interregional Exports*: Exports from this sector *to other regions* in New Zealand outside the Tauranga Catchment Economy, for the year ending March 2010, measured in \$<sub>2010</sub> million.
7. *International Exports*: Exports from this sector *to other countries* outside New Zealand, for the year ending March 2010, measured in \$<sub>2010</sub> million.
8. *Location Quotient*: A location quotient is an indicator of the degree of specialisation of a given sector in a given region. In our study the reference region is the Tauranga Catchment Economy. In the before-mentioned tabulated box, location quotients for the Tauranga Catchment Economy are calculated using modified employment counts (MECS), for the year ending March 2010. Mathematically these location quotients are calculated using the following formula:

$$LQ_i = (e_i/e) / (E_i/E)$$

Where:

$LQ_i$  = location quotient for sector  $i$  in the Tauranga Catchment Economy

$e_i$  = employment (in MECS) in sector  $i$  in the Tauranga Catchment Economy

$e$  = total employment (in MECS) in the Tauranga Catchment Economy

$E_i$  = employment (MECS) in sector  $i$  in the New Zealand Economy

$E$  = total employment (MECS) in the New Zealand Economy

A location quotient greater than one ( $LQ > 1$ ) indicates that the region has a specialisation in that sector. A location quotient less than one ( $LQ < 1$ ) indicates that the region does not have a comparative strength or specialisation in that particular sector.

---

<sup>42</sup> Appendix C provides a discussion of the use of the 'employment growth' indicator as a proxy for 'GDP growth', including cautions that should be employed when doing so.

<sup>43</sup> In strict terms, it could be argued that the correct metric is Gross Regional Product rather than Gross Domestic Product. We use the term Gross Domestic Product, as this seems to be the practice of New Zealand analysts and commentators.

9. *Labour Productivity*: This is a measure of how productive labour is in any given sector of the Tauranga Catchment Economy. In this study, it is measured in terms of 'value added' (\$<sub>2010</sub> 000) produced per Modified Employment Count. (Refer to the Glossary for a definition of MEC). The higher numerical value of this labour productivity indicator, the more productive labour is in that sector of the Tauranga Catchment Economy.
10. *Value Added Multiplier*: When a sector increases its production, it not only generates 'value added' in its own sector, but it can also indirectly stimulate production in other sectors by requiring their inputs, thereby generating 'value added' in these other sectors. The higher the 'value added multiplier', the greater the amount of 'value added' created in other sectors in the Tauranga Catchment Economy. In this publication, we use a *Type 2 Value Added Multiplier* which, as well as taking account of the 'flow-on' effects of purchasing inputs from other sectors (indirect effects), also takes account of the stimulation from spending wages and salaries (induced effects) in the Tauranga Catchment Economy. Value Added Multipliers and other Multipliers can be important in regional economic analysis, as they show which sectors have a broader impact on the regional economy than just their direct impact. The formula for the calculation of the *Type 2 Value Added Multiplier* of a specific sector is:

*Type 2 Value Added Multiplier = ('direct' value added of the sector + 'indirect' value added of the sector + 'induced' value added of the sector) / 'direct' value added of the sector*

# Appendix E: Full Definition of Tabulated Key Economic Indicators, Updated to 2016

In Part II (Chapters 6-54), 'key economic indicators' for each sector are updated to 2016 and tabulated in a *blue-bordered box appearing at the end of each chapter*. These indicators are fully defined as follows:

1. *Employment*: Number of people employed in each sector in the TCE, measured in terms of modified employment counts (MECS), for the year ending March 2016 (see Glossary for a definition of MECs).
2. *Employment Rank*: Rank of each sector from the largest (1<sup>st</sup>) employment sector through to the smallest employment sector (46<sup>th</sup>), for the year ending March 2016. "Employment" is measured in terms of definition 1.
3. *GDP*: A sector's contribution to Gross Domestic Product Tauranga Catchment Economy, for the year ending March 2016, measured in \$<sub>2007</sub> million
4. *GDP Rank*<sup>44</sup>: Rank of each sector in terms of its contribution to the Gross Domestic<sup>45</sup> Product of the Tauranga Catchment Economy, for the year ending March 2016. The sector with highest GDP contribution is ranked 1<sup>st</sup> through to the sector with the lowest GDP contribution, which is ranked 47<sup>th</sup>.
5. *% GDP Growth (2011-2016)*: Average compounded percentage GDP growth in a given sector in the Tauranga Catchment Economy from March 2010 to March 2016. GDP is defined in definition 4.
6. *% GDP Growth Rank*: Rank of % GDP Growth (refer to definition 5). The sector with the highest '% GDP Growth' in the TCE over the 2011-2016 period is ranked 1<sup>st</sup>. The sector with lowest '% GDP Growth' in the TCE over the 2011-2016 period is ranked 47<sup>th</sup>.
7. *Location Quotient*: A location quotient is an indicator of the degree of specialisation of given sector in a given region. In our study the reference region is the TCE. In a tabulated box appearing at the end of each chapter, location quotients are calculated for each sector in the Tauranga Catchment Economy using Modified Employment Counts (MECS), for the year ending March 2016. Mathematically, these location quotients for each sector in the TCE are calculated using the following formula:

$$LQ_i = (e_i/e) / (E_i/E)$$

Where:

$LQ_i$  = location quotient for sector  $i$  in the Tauranga Catchment Economy

$e_i$  = employment (in MECs) in sector  $i$  in the Tauranga Catchment Economy

$e$  = total employment (in MECs) in the Tauranga Catchment Economy

$E_i$  = employment (MECs) in sector  $i$  in the New Zealand Economy

$E$  = total employment (MECs) in the New Zealand Economy

A location quotient greater than one ( $LQ > 1$ ) indicates that the region has a specialisation in that sector. A location quotient less than one ( $LQ < 1$ ) indicate a region does not have a comparative strength or specialisation in that particular sector.

---

<sup>44</sup> Notes: No data is captured for the "Oil and Gas Exploration and Extraction" sector (Chapter 14) and it is therefore excluded from all rankings. The only data captured for the "Ownership of Owner-Occupied Dwellings" sector (Chapter 46) is its contribution to GDP, GDP rank and Value-Added Multiplier. Thus, only 46 of the 48 ANZSIC sectors are ranked for employment, exports, location quotients and labour productivity, (this excludes the aforementioned two sectors); and 47 of the 48 of the ANZSIC sectors are ranked for GDP.

<sup>45</sup> In strict terms, it could be argued that the correct metric is Gross Regional Product rather than Gross Domestic Product. We use the term Gross Domestic Product, as this seems to be the practice of New Zealand analysts and commentators.

# Appendix F: Value Added Multiplier Type 2

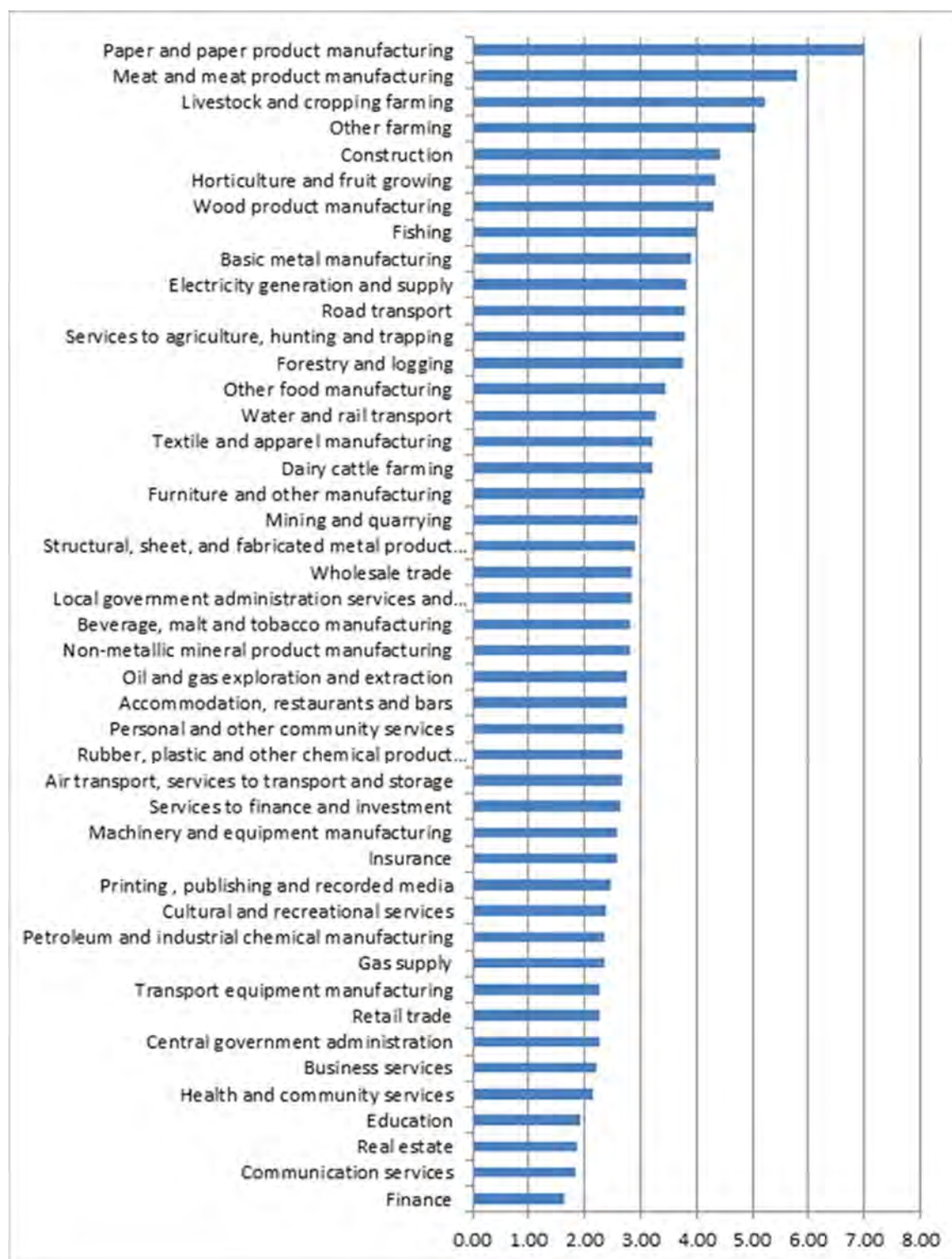


Figure F.1 Value Added Multiplier Type 2

\*\*\* (Backward Linkages) in the Tauranga Catchment Economy, 2010 (Example: A multiple of 3.00 means that a sector stimulates 3 times as much 'total value added' as the 'direct value added' by the sector itself).

\*\*\* Refer the definition in Appendix D.

# Appendix G: Methodology for the Calculation of Economic Data for the Tauranga Catchment Economy

---

The economic indicators listed in Appendices D and E were measured for the Tauranga Catchment Economy, for various years from 2000 to 2016. The data required for these economic indicators had to be estimated using the methodologies outlined below. This work was undertaken by Market Economics Ltd., based on methodologies that have been developed over the last 20 years and successfully applied to regional economic analysis throughout New Zealand.

**Modified Employment Counts (MECs).** MECs are used as the primary measure of ‘employment’ in this publication and were used as the basic unit to construct the following employment-related indicators, as outlined in Appendices D and E: *Employment Numbers, Employment Ranks, Average Employment Growth Rates and Location Quotients*. MECs are calculated using both Statistics New Zealand’s ‘Business Frame’<sup>46</sup> and ‘Linked Employer-Employee Data’ (LEED). Although Business Frame provides very detailed spatial information, its main drawback is that it does not provide information on Working Proprietors (WPs), underestimating overall employment. Unlike Business Frame, the LEED data lacks spatial details but does measure the number of Working Proprietors – this is useful as it enables the number of working proprietors to be calculated for the Business Frame data, by assuming that the ratio ‘number of working proprietors: number of geographic units’<sup>47</sup> is the same for the LEED data and the Business Frame data. The result of these calculations is an estimate of the number of Modified Employment Counts (MECs) across the 46 ANZSIC sectors in the TCE for which this data was captured, covering the years 2000 to 2016.

Besides being used to calculate the employment-related indicators outlined above, these MEC estimates are also used to calculate the denominator in the *labour productivity* indicator. The numerator (\$000 value added) is drawn from the macro-economic accounts data, which is derived from the methodology described in the next section.

**Macro-Economic Indicators and Data.** A number of indicators were derived for the Tauranga Catchment Economy and sectors spanning the years 2000 to 2016. In addition, a data rich input-output model of the interrelationships between the 48 ANZSIC sectors in the TCE was constructed for the 2010 financial year, which formed the basis of some of these indicators, as well as being a useful analytical tool in from the placement its own right.

The **first step** involved calculation of the real (inflation-adjusted) GDP contribution of the 48 ANZSIC sectors in the TCE for each year from 2010 to 2016. The method closely follows a method used by the Ministry of Business, Innovation and Employment (MBIE) to calculate the Modelled Territorial

---

<sup>46</sup> The Business Frame data is based on Inland Revenue Department (IRD) company records and provides number of employees and companies at a very detailed spatial and industry level. Business Frame data is available from 2000 to 2016 and for this report Geographic Units (GUs) and Employment Counts (ECs) are recorded for each of 48 distinct industries within the TCE.

<sup>47</sup> A ‘geographical unit’ is an operating unit engaged in New Zealand in one, or predominantly one, kind of economic activity from a single physical location or base.

Authority Gross Domestic Product<sup>48</sup> (MTAGDP). The MTAGDP method utilises the relationship between regional GDP and the regional compensation of employees to disaggregate the regional GDP (Bay of Plenty economy) into the territorial level GDP (Tauranga Catchment Economy). Unlike the MTAGDP, which has 19 sector classifications, we have further disaggregated the 19 regional GDP sectors into 48 sectors using the Statistics New Zealand's National Accounts input-output matrices. This involved 48 disaggregations utilising data from a number of Statistics New Zealand sources: Regional GDP data series, National Accounts, Annual Enterprise Surveys, Linked Employer-Employee Data, Agricultural Census (2012), as well as Modified Employment Counts (MECs) time series, as calculated by Market Economics Ltd. by using the methodology spelt out in the previous section.

The **second step** involved the construction a prototype or initial estimate of the values in a *input-output matrix* of the 'Tauranga Catchment Economy' and the 'Rest of New Zealand Economy'. Key variables were estimated for the Tauranga Catchment Economy and Rest of New Zealand – these included: GDP, Gross Output, Population, Exports and Gross Fixed Capital Formation. The GDP and Gross Output are estimated using the same approach as the first step (see above). Exports and Gross Fixed Capital Formation estimates were calculated using 'Tauranga Catchment Economy' and the 'Rest of New Zealand Economy' share of gross output to the national level economy. Population data is provided by Statistics New Zealand's Census Area Unit (CAU)<sup>49</sup> level sub-national population estimates. From these data an *initial* input-output matrix of the 'Tauranga Catchment Economy' and the 'Rest of New Zealand Economy' was constructed. The *internal transactions between sectors* within both the Tauranga Catchment Economy and Rest of New Zealand Economy were calculated based on 'regionalising' data from the New Zealand input-output matrix, by using gross output data both for each of these constituent economies. A gravity model was then utilised to calculate initial estimates of the *inter-regional transactions* between 'Tauranga Catchment Economy' and the 'Rest of New Zealand Economy'. In addition, the *final demands* from the national input-output matrix is regionalised using: i) population for households and government final demands; ii) GFKF and exports ratio estimated earlier for the respective final demands; and iii) changes in total household, government, GFKF and exports final demands for changes in inventories final demand. *Primary input* components are regionalised using the shares regional GDP (Tauranga Catchment Economy and Rest of NZ Economy) to the national level GDP. All of these components (internal transactions, interregional transactions, final demand categories, primary input categories) are then combined to form an initial matrix of the 'Tauranga Catchment Economy' and the 'Rest of New Zealand Economy'.

The **third step** addresses the problem that the 'initial matrix' generated in the second step will almost certainly 'not be balanced'. That is, for a given sector, the sum total of its inputs represented by a column, and the sum total of its outputs represented by a corresponding row, may be not balance as they don't add up to the same number. To ensure that total outputs *equals* total inputs for each sector<sup>50</sup>, an iterative bi-proportional balancing method (RAS) is used to adjust matrix elements to achieve this balance.

<sup>48</sup> Refer to "Estimates of GDP by detailed industry and Territorial Authority" report by MBIE October 2015. [http://www.mbie.govt.nz/info-services/sectors-industries/regions-cities/research/modelled-territorial-authority-gross-domestic-product/document-and-image-library/MTAGDP\\_methodology\\_document.pdf](http://www.mbie.govt.nz/info-services/sectors-industries/regions-cities/research/modelled-territorial-authority-gross-domestic-product/document-and-image-library/MTAGDP_methodology_document.pdf)

<sup>49</sup> A 'Census Area Unit' is a spatial definition used by Statistics New Zealand for census data collection purpose. It is constructed by taking into account the socio-economic profiles of spatial areas.

<sup>50</sup> The requirement that 'total inputs' of a sector must equal 'total outputs' of a sector, is one of the fundamental axioms of input output analysis.

Using this methodology described above (second and third steps), a 48 sector input-output matrix was constructed for the Tauranga Catchment Economy for the 2010 financial year<sup>51</sup>. Data from this input-output matrix also enabled the calculation of the following key performance indicators for the 48 ANZSIC sectors in the Tauranga Catchment Economy for 2010: *interregional exports* (i.e., exports to other regions in New Zealand), *international exports* and the *type II value added multiplier*. Further, combining Modified Employment Counts (MECs) as calculated using the methodology described above, with value-added (\$000) data from the 2010 input-output matrix, enabled the *labour productivity* to also be calculated.

---

<sup>51</sup> Due to data availability, the 2010 Tauranga Catchment Economy input-output model was derived from updating the 2003 input-output model of that economy. This updating was achieved by increasing the final demand categories using readily available data, and then mathematically determining what input-output structure would be required to meet these new levels of final demand.