



# Economic Significance of the Property Industry to the

# WAIKATO Economy

PREPARED FOR PROPERTY COUNCIL NEW ZEALAND

BY URBAN ECONOMICS

2016



## ABOUT PROPERTY COUNCIL NEW ZEALAND



Property Council New Zealand is a member-led, not-for-profit organisation offering a collective voice for the commercial property industry. Working closely with local and central government, Property Council advocates for quality urban growth that supports strong national and local economies.

Our 730 member companies have an estimated \$50 billion investment in commercial property, ranging from leading institutional investors, property trusts and financial organisations to private investors and developers.

Through extensive research, policy development, advocacy, education, and networking event programmes nationally and regionally, Property Council is enabling a vibrant commercial property market and wealth for all New Zealanders. www.propertynz.co.nz.

### **ABOUT URBAN ECONOMICS**



#### AREAS OF EXPERTISE

#### **Economic Analysis**

Our work aims to bridge the gap between land-use planning and urban economics. Our focus is on the interaction between land markets, land-use regulations and urban development. We have developed a range of methodologies using a quantitative approach to analyse urban spatial structure and audit land-use regulations.

#### **Property Research**

We provide property and retail market research to assist with planning and marketing of new projects. This includes identification of new sites and market areas, assessments of market potential and positioning, and the evaluation of market-feasibility of specific projects.

#### **Development Advisory**

We provide development planning and costing advisory services to support small and large scale developments.

www.ue.nz



Additional data provided by



# **CONTENTS**

ı.	KEYPOINTS	5
2.	ECONOMICCONTRIBUTION	6
3.	RELATIVESIZEOFTHEPROPERTYINDUSTRY	
	3.1 ContributiontotheWaikatoEconomy	
4.	WAIKATO PROPERTY ASSETS	10
	4.1 Commercial Building Floorspace	11
5.	EMPLOYMENT AND INCOME IN THE PROPERTY INDUSTRY	12
	5.1 Employment by Territorial Authority	13
6.	APPENDIX 1: MAP OF WAIKATO REGION	15
7.	APPENDIX 2: DEFINITION OF THE PROPERTY INDUSTRY	16
	7.1 Definition for Economic Contribution	16
	7.2 Definition for Employment and Income in the Property Industry	16
8.	APPENDIX 3: MULTIPLIER ANALYSIS ASSUMPTIONS	17

#### Copyright

All rights reserved by Property Council New Zealand Inc. No part of the report may be transmitted or reproduced in any form in any way, including but not limited to photocopy, photograph, magnetic or by other means, without prior written consent from Property Council New Zealand. Published October 2017.

### 1. KEY POINTS

# **Economic Contribution**

The Property Industry had a 'direct impact' of \$2.6 Billion

on the Waikato Economy in 2016



It also had 'flow-on impacts' of

\$3.2 Billion

from increased supplier activity and employee spending

# Share of Local and National Economy

The property industry is the Second largest industry in the Waikato and makes up 13% of economic activity in the Region

The Waikato Property Industry makes up 9% of the National Property Industry

# Value of Waikato's Buildings



Waikato's stock of residential buildings is valued at

\$35.7 Billion



The stock of commercia buildings is valued at

\$7.5 Billion

# Income and Employment

The Property Industry employs 13,980



The average income in the Property Industry is \$54,800 p.a.

### 2. ECONOMIC CONTRIBUTION

Urban Economics has used a multiplier analysis to examine the economic contribution of the Property Industry to the Waikato Economy.

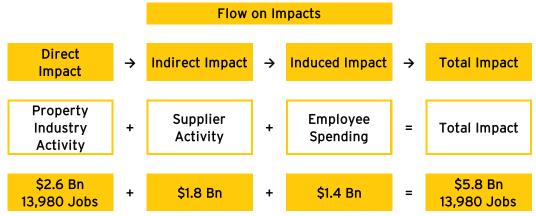
This analysis first examines the 'direct impact' of the industry's various sub-sectors (outlined in Appendix 1) to the Waikato Regional Gross Domestic Product (GDP)<sup>1</sup>.

The operation of the Property Industry also has a wider economic impact through two types of 'flow-on impacts'. The first type are 'indirect impacts' which result from the Property Industry purchasing goods and services from other industries (e.g. building materials suppliers). The second type are 'induced impacts' which result from employees of the Property Industry and supplier industries spending their wages or salaries on goods and services.

Based on Urban Economics' multiplier analysis, a \$1.00 contribution by the Property Industry to the Waikato Regional GDP results in an additional \$1.25 of flow-on economic impacts.

In the year to March 2016, the Property Industry contributed \$5.8 billion to the Waikato Economy. This includes a direct impact of \$2.6 billion and flow-on (indirect and induced) impacts of \$3.2 billion. It is important to note that this does not include capital gains from the appreciation of land and property values. In addition, 13,980 employees were directly employed in the Property Industry in March 2016, accounting for 8% of total employment in the Waikato.

Figure 1: Total Economic Contribution of the Property Industry Year Ended March 2016

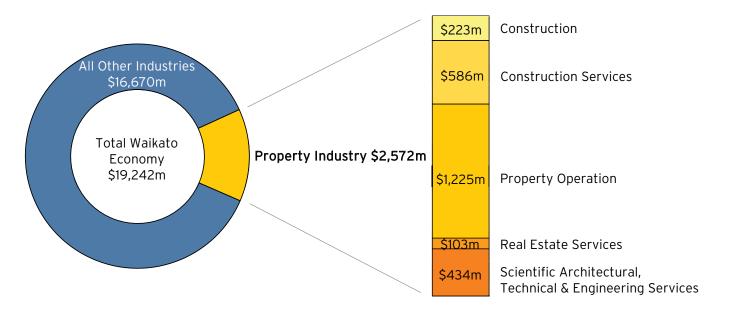


Source: Urban Economics

<sup>&</sup>lt;sup>1</sup> For the purposes of this report GDP is measured in 'basic prices' which is price minus taxes but including subsidies.

The following figure shows the direct economic contribution of the Property Industry to the Waikato economy. This is the difference between the value of inputs (labour, materials, etc.) and the value of outputs (dwellings, real estate services, etc.). In other words, it is the value added to the economy by the Property Industry.

Figure 2: Property Industry Economic Contribution (2016 \$m)<sup>2</sup>



<sup>&</sup>lt;sup>2</sup> An explanation of the Property Industry Sub-Sectors is included in Appendix 1.

## 3. RELATIVE SIZE OF THE PROPERTY INDUSTRY

#### 3.1. Contribution to the Waikato Economy

The following table shows the direct contribution to GDP by industry for the year to March 2016. The Property Industry is the second largest industry in the Waikato after Manufacturing and has a direct contribution to GDP of \$2,572 million or 13% of total GDP<sup>3</sup>.

In comparison, the Property Industry's share of National GDP is 12%, which indicates the Property Industry makes up a slightly larger share of the Waikato economy.

Table 1: Direct Contribution of the Property Industry to GDP (Year to March 2016)

Industry	\$Million	%
Manufacturing	\$2,636	14%
Property Industry	\$2,572	13%
Agriculture	\$1,717	9%
Owner-Occupied Property Operation	\$1,402	7%
Health Care and Social Assistance	\$1,362	7%
Electricity, Gas, Water, and Waste services	\$1,360	7%
Forestry, Fishing, and Mining	\$1,099	6%
Education and Training	\$1,079	6%
Information Media, Telecommunications and Other Services	\$938	5%
Retail Trade	\$866	4%
Wholesale Trade	\$764	4%
Public Administration and Safety	\$634	3%
Transport, Postal and Warehousing	\$546	3%
Financial and Insurance Services	\$457	2%
Accommodation and Food Services	\$339	2%
Administrative and Support Services	\$284	1%
Other	\$1,188	6%
Total	\$19,242	100%

<sup>&</sup>lt;sup>3</sup> The proportion of GDP contribution of each industry in 2016 is derived from the Statistics New Zealand National Accounts Input-Output Tables 2013.

# 3.2. Number of Employees

The Property Industry is currently the sixth largest employer in the Waikato. In March 2016, 13,980 people were directly employed in the Property Industry, which is 8% of all employees.

This is the same percentage of employees as the National Property Industry.

Table 2: Employment by Industry March 2016

Industry	Employment	%
Manufacturing	21,550	13%
Health Care and Social Assistance	19,670	12%
Retail Trade	16,950	10%
Agriculture, Forestry, Fishing, and Mining	15,280	9%
Education and Training	14,620	9%
Property Industry	13,980	8%
Accommodation and Food Services	11,000	7%
Information Media, Telecommunications and Other Services	10,860	7%
Public Administration and Safety	8,000	5%
Scientific and Professional Services	7,840	5%
Wholesale Trade	6,210	4%
Administrative and Support Services	5,590	3%
Transport, Postal and Warehousing	5,540	3%
Heavy and Civil Engineering Construction	3,160	2%
Financial and Insurance Services	2,400	1%
Electricity, Gas, Water, and Waste services	1,870	1%
Rental & Hiring Services	700	0%
Total	165,220	100%

### 4. WAIKATO PROPERTY ASSETS

The Waikato Region's building stock is currently worth \$43.2 billion. Commercial buildings make up \$7.5 billion or 17% of the total building stock and residential buildings make up \$35.7 billion or 83%.

Residential buildings in the Waikato make up a larger share of the total value of buildings than the National building stock, with commercial buildings making up 20% of the total value of buildings Nationally, and residential buildings making up 80%.

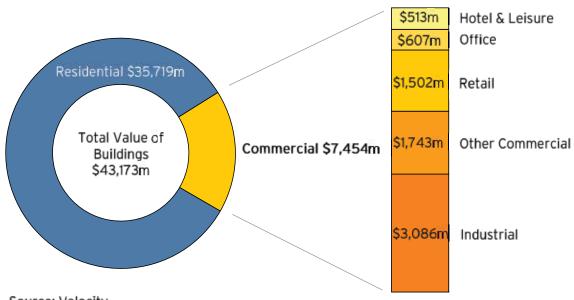


Figure 3: Value of Residential and Commercial Buildings (\$m)

Source: Valocity

The value of buildings by type is shown in the following table for the sub-areas of the Waikato Region. Hamilton City makes up 36% of the total value of buildings in the Waikato Region with \$15.5 billion of buildings. Waipa and Waikato District make up a further 26% with each area having \$5.7 billion of buildings. The remaining 7 sub-areas make up 38% of all building value.

Table 3: Value of Buildings by Territorial Authority (\$ million)

	Hamilton City	Waipa	Waikato District	Thames- Coromandel	Taupo	Matamata- Piako	Hauraki	South Waikato	Otorohanga	Waitomo	Waikato Region
Residential	\$11,968	\$4,803	\$5,289	\$4,433	\$4,060	\$2,195	\$1,170	\$916	\$514	\$371	\$35,719
Office	\$418	\$52	\$19	\$15	\$36	\$29	\$14	\$9	\$5	\$10	\$607
Retail	\$732	\$172	\$50	\$117	\$221	\$91	\$33	\$54	\$13	\$19	\$1,502
Hotel & Leisure	\$152	\$52	\$23	\$75	\$157	\$8	\$10	\$8	\$5	\$23	\$515
Other Commercial	\$1,031	\$179	\$87	\$87	\$150	\$79	\$38	\$58	\$13	\$21	\$1,743
Industrial	\$1,232	\$447	\$201	\$89	\$220	\$402	\$57	\$367	\$28	\$42	\$3,086
Sub-Total Commercial	\$3,565	\$902	\$380	\$384	\$783	\$610	\$153	\$497	\$64	\$115	\$7,454
Total Value	\$15,533	\$5,705	\$5,670	\$4,817	\$4,843	\$2,805	\$1,324	\$1,412	\$578	\$486	\$43,173
Percentage	36%	13%	13%	11%	11%	6%	3%	3%	1%	1%	100%

Source: Valocity

## 4.1. Commercial Building Floorspace

The following table and figure show commercial building floorspace in the Waikato Region by subarea and type. Within the Waikato Region there is currently 8.4 million m² of commercial building floorspace. Hamilton City has slightly less than half of the floorspace in the Region (44%). All subareas in the Region have a high proportion of Industrial floorspace, as shown in Figure 4 by the dark red bars.

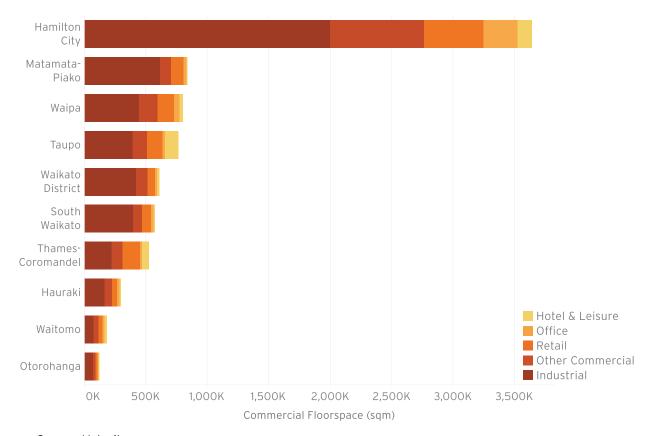
There is 95.5 million m<sup>2</sup> of commercial building floorspace Nationally. The Waikato Region therefore has approximately 9% of all commercial building floorspace.

Table 4: Commercial Building Floorspace by Type (m²)

	Hamilton City	Matamata- Piako	Waipa	Taupo	Waikato District	South Waikato	Thames- Coromandel	Hauraki	Waitomo	Otorohanga	Waikato Region
Office	280,200	26,600	45,300	23,400	16,500	19,300	18,000	19,200	17,300	6,700	472,500
Retail	484,000	97,200	131,900	125,800	62,300	72,000	139,300	41,300	34,100	17,500	1,205,400
Hotel & Leisure	112,000	8,400	26,300	113,400	17,500	13,200	57,600	8,400	15,300	4,700	376,800
Other Commercial	765,200	95,400	154,800	112,900	93,100	77,300	95,500	59,400	35,700	19,300	1,508,600
Industrial	1,999,400	613,300	443,500	395,000	421,500	393,800	217,800	166,700	78,900	72,700	4,802,600
Total	3,640,800	840,900	801,800	770,500	610,900	575,600	528,200	295,000	181,300	120,900	8,365,900
Percentage	44%	10%	10%	9%	7%	7%	6%	4%	2%	1%	100%

Source: Valocity

Figure 4: Commercial Floorspace by Territorial Authority



Source: Valocity

## 5. EMPLOYMENT AND INCOME IN THE PROPERTY INDUSTRY

Construction Services is the largest sub-sector of the Property Industry in the Waikato with 6,590 employees or 47% of all Property Industry employment. The second largest sub-sector is Architectural, Engineering and Technical Services with 3,340 employees (24%), followed by Residential Building Construction with 2,070 employees (15%).

The average earnings in the Property Industry are \$54,800 per annum. Within the Property Industry the Architectural, Engineering and Technical Services sub-sector has the highest earnings, at \$69,800 per annum.

The Waikato Region has a very similar proportion of each sub-sector as the National Property Industry. The average income of the Property Industry in the Waikato is lower than the National average of \$60,200. The average earnings of all sub-sectors in the Waikato are lower than the National averages.

Table 5: Earnings and Employment by Property Industry Sub-Sector (March 2016)

	Employment	Employment %	Average Earnings
Residential Building Construction	2,070	15%	\$50,700
Commercial Building Construction	560	4%	\$57,900
Construction Services	6,590	47%	\$52,200
Property Operators	620	4%	\$43,100
Real Estate Services	800	6%	\$43,100
Architectural, Engineering and Technical Services	3,340	24%	\$69,800
Total Property Industry	13,980	100%	\$54,800

Table 6 shows average earnings and employment by age. The Waikato Property Industry has lower average earnings across all age brackets as the New Zealand average. Earnings in the Waikato peak at 45-49 years which is the same as the National average. The age profile of Property Industry workers in the Waikato is similar to the National average, however the Waikato has a slightly higher proportion of workers in the 15-24 age bracket.

Table 6: Earnings and Employment by Age (March 2016)

	Wai	ikato	New Z	Zealand
Age	Average	Percentage	Average	Percentage
	Earnings	of Jobs	Earnings	of Jobs
15-24	\$36,600	20%	\$37,600	18%
25-29	\$46,800	14%	\$53,800	14%
30-34	\$52,000	11%	\$61,400	12%
35-39	\$56,200	10%	\$67,600	10%
40-44	\$56,200	10%	\$71,400	11%
45-49	\$59,500	10%	\$72,100	10%
50-54	\$58,100	8%	\$71,600	9%
55-59	\$56,600	7%	\$70,600	7%
60+	\$48,900	9%	\$60,700	9%

Source: Statistics NZ, Urban Economics

Table 7 shows earnings and employment by gender. In the order of 24% of employees in the Property Industry are female which is the same as the National average. Earnings for females and males are below the National average.

Table 7: Earnings and Employment by Gender (March 2016)

	Wa	ikato	New 2	Zealand
Gender	Average Earnings	Percentage of Jobs	Average Earnings	Percentage of Jobs
Female	\$40,800	24%	\$45,800	24%
Male	\$59,900	76%	\$69,200	76%

Source: Statistics NZ, Urban Economics

# 5.1. Employment by Territorial Authority

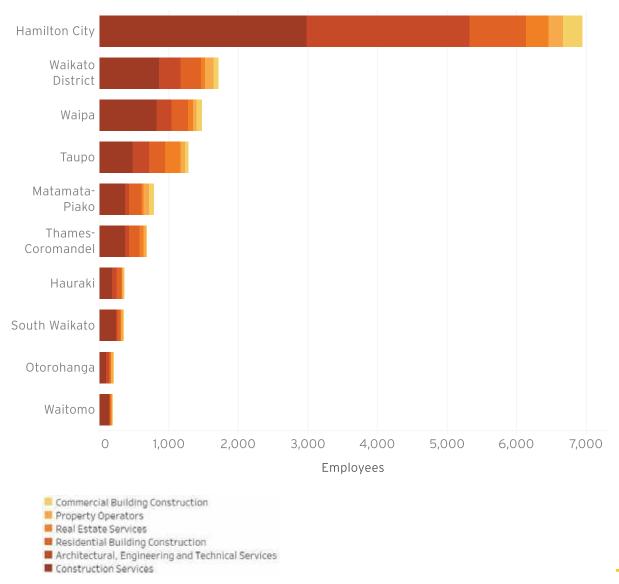
The following table and figure show employment in the Property Industry in the Waikato by sub-area and sub-sector. 6,950 employees or 50% are based in Hamilton City, while the remaining 50% of employees are spread across the remaining 9 sub-areas. As shown in Figure 5, Construction Services is the largest sub-sector in all areas.

Table 8: Employment by Territorial Authority

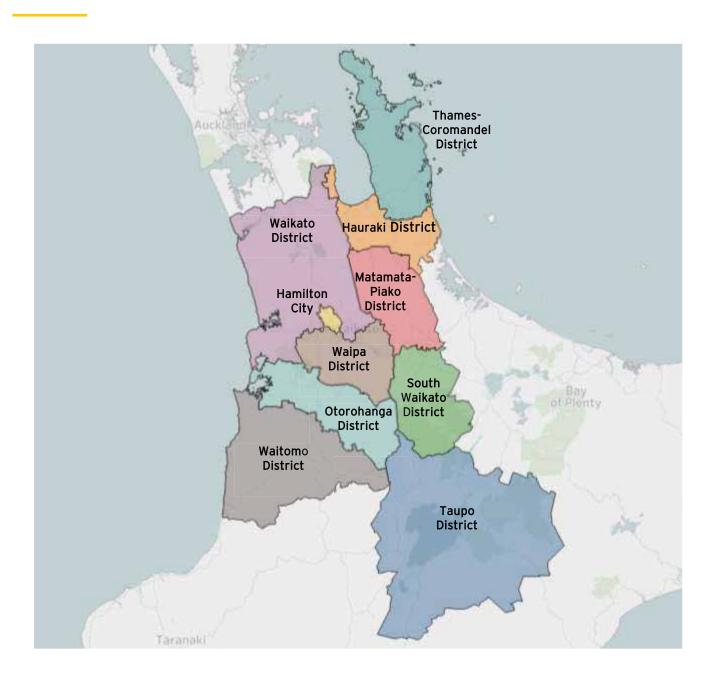
	Employment	Percentage
Hamilton City	6,950	50%
Waikato District	1,710	12%
Waipa	1,480	11%
Taupo	1,270	9%
Matamata-Piako	780	6%
Thames-Coromandel	690	5%
Hauraki	360	3%
South Waikato	340	2%
Otorohanga	200	1%
Waitomo	190	1%
Waikato Total	13,980	100%

Source: Statistics NZ, Urban Economics

Figure 5: Employment by Sub-Sector and Territorial Authority



# 6. MAP OF WAIKATO REGION



## 7. APPENDIX 2: DEFINITION OF THE PROPERTY INDUSTRY

#### 7.1. Definition for Economic Contribution

The Property Industry has been defined to include the following sub-sectors for the analysis economic contribution to GDP (Sections 2 & 3.1):

<u>Sub-Sector</u>	<u>Explanation</u>
Residential Building Construction	Residential dwelling construction.
Commercial Building Construction	Commercial building construction including retail, office, industrial and other commercial buildings.
Construction Services	Other activities relating to construction, including for example plumbing, electrical, tiling, glazing, roofing and bricklaying services.
Residential Property Operation	Renting or leasing of residential property.
Commercial Property Operation	Renting or leasing of commercial property.
Real Estate Services	Purchase, sale, valuation and management of real estate.
Scientific, Architectural, Engineering and Technical Services	Architectural, surveying, engineering, scientific testing and other design services.

The Scientific, Architectural, Engineering and Technical Services sub-sector includes a small number of activities which are not related to the Property Industry. Therefore, including this sub-sector in the definition of the Property Industry slightly overestimates the size of the industry.

### 7.2. Definition for Employment and Income in the Property Industry

The definition of the Property Industry for employment and income figures (Sections 3.2 and 5) is the same as the above however it excludes the Scientific sub-sector. This is because employment and income data are available for a more detailed breakdown of industry sub-sectors.

## 8. APPENDIX 3: MULTIPLIER ANALYSIS ASSUMPTIONS

The key assumptions and limitations of Input-Output Multiplier Analysis are as follows:

#### No Supply Side Constraints

• Extra output can be produced in one industry without taking resources away from other industries.

#### **Fixed Input Structure**

 Each industry has only one production process which uses one mix of inputs to produce each unit of output.

#### Constant Returns to Scale

• The same quantity of inputs is needed per unit of output, regardless of the level of production. I.e. if output increases by 10% input requirements will also increase by 10%;

#### **Fixed Output Production**

All products of an industry are identical or are made in fixed proportions to each other;

#### **Absence of Budget Constraints**

• Household and government consumption is not subject to budget constraints.

Despite these assumptions, Input-Output Multiplier Analysis provides a solid basis for examining the direct impact of an industry and the inter-relationships of industries (indicated by the flow-on effects). This analysis differs from an economic impact assessment, which considers an impact of a "stimulus" to an industry, for example from a new policy or project. Due the limiting assumptions outlined above, in particular the lack of supply-side constraints, Multiplier Analysis may overestimate the economic impact of a "stimulus".





#### PROPERTY COUNCIL NEW ZEALAND

Foyer Level 51 Shortland Street PO Box 1033 Auckland 1140

**P** +64 9 373 3086

**E** enquiries@propertynz.co.nz

propertynz.co.nz

#### **WAIKATO BRANCH**

PO Box 335 Waikato Mail Centre Hamilton 3240 **P** +64 21 951 150

**E** sarah@propertynz.co.nz propertynz.co.nz