



Economic Significance of the Property Industry to the

WELLINGTON Economy

PREPARED FOR PROPERTY COUNCIL NEW ZEALAND

BY URBAN ECONOMICS

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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.

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1. KEY POINTS

Economic Contribution

The Property Industry had a 'direct impact' of \$3.3 Billion

on the Wellington Economy in 2016



It also had 'flow-on impacts' of \$5.3 Billion

from increased supplier activity and employee spending

Share of Local and National Economy

The property industry is the Second largest industry in Wellington and makes up 11% of economic activity in the Region

The Wellington Property Industry makes up
11% of the National
Property Industry

Value of Wellington's Buildings



Wellington's stock of residential buildings is valued at \$46.7 Billion



The stock of commercia buildings is valued at

\$9.8 Billion

Income and Employment

The Property Industry employs 17,260



The average income in the Property Industry is \$63,600 p.a.

2. ECONOMIC CONTRIBUTION

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

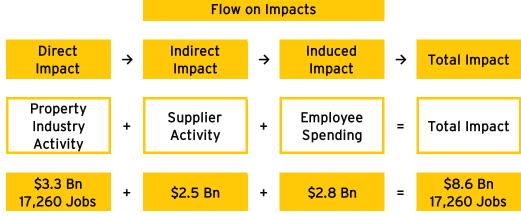
This analysis first examines the 'direct impact' of the industry's various sub-sectors (outlined in Appendix 1) to the Wellington Regional Gross Domestic Product (GDP)¹.

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 Wellington Regional GDP results in an additional \$1.60 of flow-on economic impacts.

In the year to March 2016, the Property Industry contributed \$8.6 billion to the Wellington Economy. This includes a direct impact of \$3.3 billion and flow-on (indirect and induced) impacts of \$5.3 billion. It is important to note that this does not include capital gains from the appreciation of land and property values. In addition, 17,260 employees were directly employed in the Property Industry in March 2016, accounting for 8% of total employment in Wellington.

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

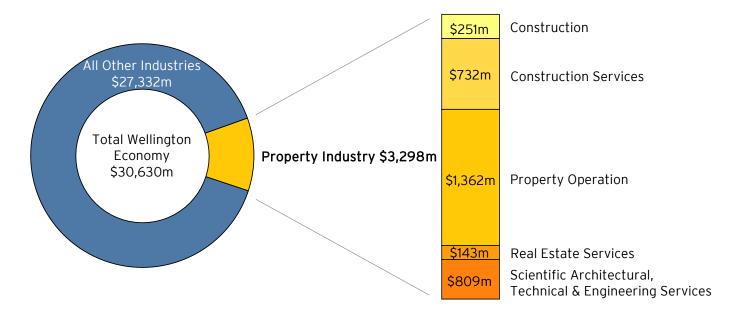


Source: Urban Economics

¹ 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 Wellington 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)²



² 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 Wellington 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 Wellington after Public Administration and Safety and has a direct contribution to GDP of \$3,298 million or 11% of total GDP³.

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

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

Industry	\$Million	%
Public Administration and Safety	\$3,966	13%
Property Industry	\$3,298	11%
Information Media, Telecommunications and Other Services	\$2,880	9%
Financial and Insurance Services	\$2,812	9%
Manufacturing	\$2,424	8%
Health Care and Social Assistance	\$1,956	6%
Owner-Occupied Property Operation	\$1,944	6%
Electricity, Gas, Water, and Waste services	\$1,429	5%
Education and Training	\$1,428	5%
Transport, Postal and Warehousing	\$1,354	4%
Wholesale Trade	\$1,083	4%
Retail Trade	\$1,032	3%
Administrative and Support Services	\$596	2%
Accommodation and Food Services	\$557	2%
Agriculture	\$217	1%
Forestry, Fishing, and Mining	\$157	1%
Other	\$3,499	11%
Total	\$30,630	100%

³ 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 Wellington's seventh largest employer. In March 2016, 17,260 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	%
Public Administration and Safety	31,000	13%
Health Care and Social Assistance	25,310	11%
Scientific and Professional Services	24,710	11%
Education and Training	19,580	9%
Retail Trade	19,460	8%
Information Media, Telecommunications and Other Services	19,410	8%
Property Industry	17,260	8%
Accommodation and Food Services	15,560	7%
Financial and Insurance Services	12,210	5%
Manufacturing	11,990	5%
Administrative and Support Services	10,010	4%
Wholesale Trade	7,640	3%
Transport, Postal and Warehousing	7,470	3%
Agriculture, Forestry, Fishing, and Mining	3,150	1%
Heavy and Civil Engineering Construction	2,170	1%
Electricity, Gas, Water, and Waste services	1,930	1%
Rental & Hiring Services	780	0%
Total	229,640	100%

4. WELLINGTON PROPERTY ASSETS

Wellington's building stock is currently worth \$56.6 billion. Commercial buildings make up \$9.8 billion or 17% of the total building stock and residential buildings make up \$46.7 billion or 83%.

Commercial buildings in Wellington make up a smaller proportion 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%.

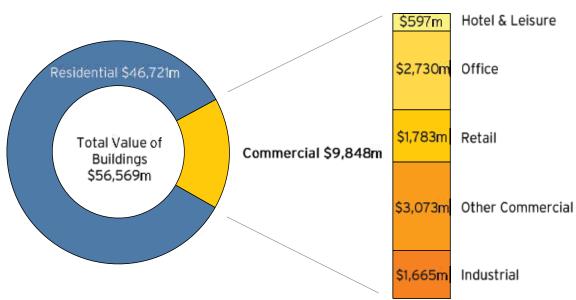


Figure 3: Value of Residential and Commercial Buildings (\$m)

Source: Valocity

The value of buildings by type is shown in the following table for the sub-areas of the Wellington Region. Wellington City makes up slightly less than half of the total value of buildings in the Wellington Region with \$27.9 billion of buildings. Lower Hutt and Upper Hutt make up a further 25% with \$10.0 billion and \$3.8 billion respectively. Carterton, Masterton and South Wairarapa collectively make up only 6% of the total value of buildings in the Wellington Region.

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

	Wellington City	Lower Hutt	Kapiti Coast	Porirua	Upper Hutt	Masterton	South Wairarapa	Carterton	Wellington Region
Residential	\$21,598	\$8,535	\$4,793	\$5,075	\$3,431	\$1,578	\$987	\$724	\$46,721
Office	\$2,409	\$140	\$61	\$65	\$18	\$33	\$4	\$1	\$2,730
Retail	\$648	\$503	\$180	\$262	\$65	\$77	\$31	\$17	\$1,783
Hotel & Leisure	\$501	\$27	\$10	\$14	\$7	\$24	\$12	\$1	\$597
Other Commercial	\$2,252	\$177	\$375	\$79	\$61	\$95	\$21	\$13	\$3,073
Industrial	\$465	\$665	\$100	\$218	\$96	\$66	\$16	\$39	\$1,665
Sub-Total Commercial	\$6,276	\$1,511	\$726	\$638	\$247	\$294	\$85	\$70	\$9,848
Total Value	\$27,874	\$10,046	\$5,519	\$5,714	\$3,678	\$1,873	\$1,072	\$794	\$56,569
Percentage	49%	18%	10%	10%	7%	3%	2%	1%	100%

Source: Valocity

4.1. Commercial Building Floorspace

The following table and image show commercial building floorspace in the Wellington Region by subarea and type. Within the Wellington Region there is currently 10.2 million m² of commercial building floorspace. Slightly less than half of the commercial floorspace in the Region is located in Wellington City, while a further 23% is located in Lower Hutt. Wellington City has a much higher proportion of Office and Other Commercial Buildings, while the other sub-areas tend to have relatively more Retail and Industrial floorspace.

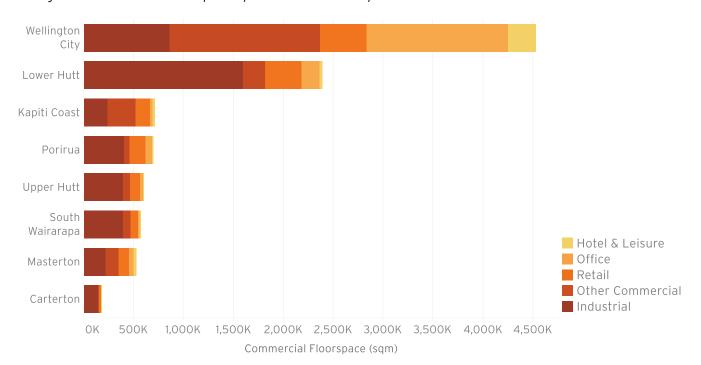
There is 95.5 million m² of commercial building floorspace Nationally. Wellington Region therefore has approximately 11% of all commercial building floorspace.

Table 4: Commercial Building Floorspace by Type (m²)

	Wellington City	Lower Hutt	Kapiti Coast	Porirua	Upper Hutt	South Wairarapa	Masterton	Carterton	Wellington Region
Office	1,419,100	173,300	25,300	60,100	26,700	19,300	37,800	1,900	1,763,500
Retail	464,700	371,200	147,900	166,800	103,200	72,000	108,500	21,600	1,455,900
Hotel & Leisure	280,500	26,500	17,000	13,400	7,600	13,200	26,700	500	385,400
Other Commercial	1,508,500	217,600	283,400	57,700	68,100	77,300	134,100	16,500	2,363,200
Industrial	860,600	1,598,800	235,800	399,700	393,000	393,800	216,700	140,200	4,238,600
Total	4,533,400	2,387,400	709,400	697,700	598,600	575,600	523,800	180,700	10,206,600
Percentage	44%	23%	7%	7%	6%	6%	5%	2%	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 Wellington with 7,420 employees or 43% of all Property Industry employment. The second largest sub-sector is Architectural, Engineering and Technical Services with 5,620 employees (33%), followed by Residential Building Construction with 1,630 employees (9%).

The average earnings in the Property Industry are \$63,600 per annum. Within the Property Industry the Architectural, Engineering and Technical Services sub-sector has the highest earnings, at \$81,100 per annum.

The Wellington Region has a higher percentage of employment in Architectural, Engineering and Technical Services and lower employment in Construction Services and Residential Building Construction than the National average. The average income of the Property Industry is higher than the National average of \$60,200. The average earnings of all sub-sectors in Wellington are higher than the National averages.

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

	Employment	Employment %	Average Earnings
Residential Building Construction	1,630	9%	\$48,900
Commercial Building Construction	990	6%	\$71,700
Construction Services	7,420	43%	\$56,200
Property Operators	600	3%	\$58,300
Real Estate Services	1,000	6%	\$58,300
Architectural, Engineering and Technical Services	5,620	33%	\$81,100
Total Property Industry	17,260	100%	\$63,600

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

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

	Welli	ngton	New 2	Zealand
Age	Average Earnings	Percentage of Jobs	Average Earnings	Percentage of Jobs
15-24	\$35,900	15%	\$37,600	18%
25-29	\$52,100	14%	\$53,800	14%
30-34	\$60,300	11%	\$61,400	12%
35-39	\$69,800	10%	\$67,600	10%
40-44	\$69,700	11%	\$71,400	11%
45-49	\$74,900	11%	\$72,100	10%
50-54	\$70,600	10%	\$71,600	9%
55-59	\$71,300	8%	\$70,600	7%
60+	\$64,600	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 slightly above the National average.

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

	Welli	ington	New Zealand		
Gender	Average Earnings	Percentage of Jobs	Average Earnings	Percentage of Jobs	
Female	\$46,400	24%	\$45,800	24%	
Male	\$70,900	76%	\$69,200	76%	

5.1. Employment by Territorial Authority

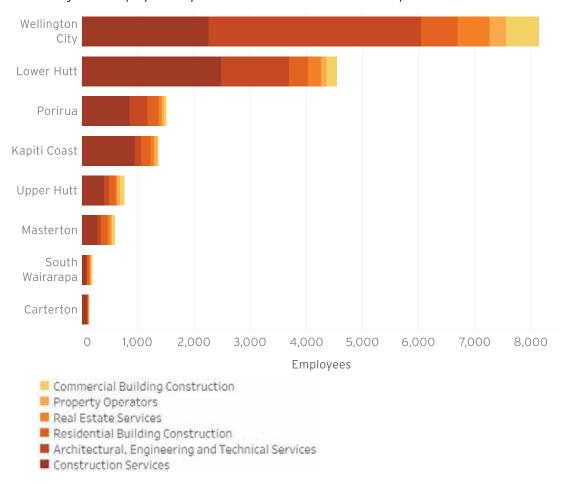
The following table and figure show employment in the Property Industry in Wellington by sub-area and sub-sector. 8,130 employees or 47% are based in Wellington City, while Lower Hutt has 4,550 employees or 26%. As shown in Figure 5, Architectural, Engineering and Technical Services is the largest sub-sector in Wellington City, while Construction Services is the largest sub-sector in the other areas.

Table 8: Employment by Territorial Authority

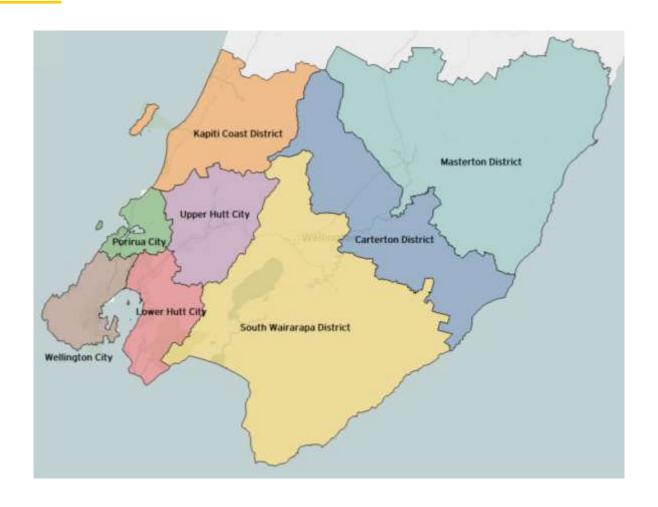
	Employment	Percentage
Wellington City	8,130	47%
Upper Hutt	770	4%
Lower Hutt	4,550	26%
Porirua	1,520	9%
Kapiti Coast	1,370	8%
Carterton	140	1%
Masterton	590	3%
South Wairarapa	190	1%
Wellington Total	17,260	100%

Source: Statistics NZ, Urban Economics

Figure 5: Employment by Sub-Sector and Territorial Authority



6. MAP OF WELLINGTON 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".





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