

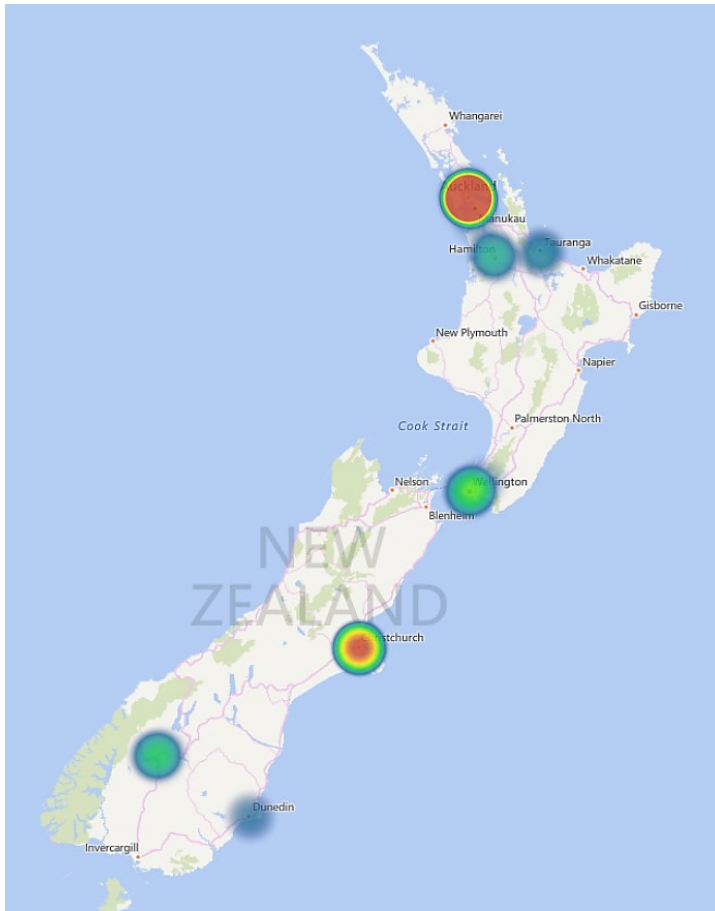
## NEW ZEALAND

The Seventh edition of the RLB Crane Index® at Q2 2017, highlights the continuing strong growth in building work put in place in New Zealand over the past twelve months. Across the country, work put in place grew by 20%, almost \$3.4 billion, in the past calendar year, to reach just short of \$20 billion. 2016 was the fifth year of continuous construction growth since 2011.

Although the RLB Crane Index® commenced in 2014, the Index has shown similar rises. From a base of 100 at Q2 2014, the Index for New Zealand has now risen to an index value of 186, a 13% increase since our last edition. The overall New Zealand Index has increased in every edition since the third edition in Q2 2015. There are currently 132 long-term cranes in place in seven key centres nationally.

Auckland continues to dominate New Zealand skies with 72 long-term cranes, 55% of all cranes observed across the seven centres. The current RLB Crane Index® highlights a 13% increase in the number of cranes within the Auckland region since our last count in Q4 2016. Twenty three new cranes have been erected and 15 have been removed from projects that are nearing completion.

Thirteen cranes have been removed from sites in Christchurch since our last RLB Crane Index® with 13 being added on new projects. Queenstown is continuing its surge with five additional long-term cranes since our last observations and two being removed. Both Queenstown and Wellington have 10 cranes in place.



### OVERALL STATUS



### Q2 2017 RLB CRANE INDEX® SUMMARY

#### CITIES

AUCKLAND	↑
CHRISTCHURCH	↑
DUNEDIN	↑
HAMILTON	↑
QUEENSTOWN	↑
TAURANGA	↑
WELLINGTON	↑

#### KEY SECTORS

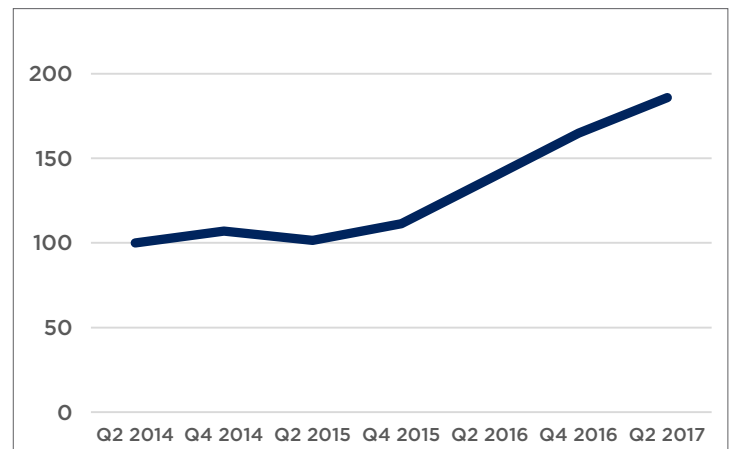
COMMERCIAL	↑	CIVIC	↑
RESIDENTIAL	↑	HOTEL	↑
HEALTH	↑	CIVIL	↑
EDUCATION	↑	OTHER	↑
RETAIL	↑		

#### LEGEND

↑	INCREASE IN NUMBER OF CRANES	↓	DECREASE IN NUMBER OF CRANES	↔	CRANE NUMBERS STEADY
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### RLB CRANE INDEX®

BASE = Q2 2014 = 100



### CRANE ACTIVITY - NEW ZEALAND

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q4 2016	%	+	-	NET	Q2 2017	%
AUCKLAND	64	54.7%	23	-15	8	72	54.5%
CHRISTCHURCH	25	21.4%	13	-13	0	25	18.9%
DUNEDIN	0	0.0%	3	0	3	3	2.3%
HAMILTON	6	5.1%	2	0	2	8	6.1%
QUEENSTOWN	7	6.0%	5	-2	3	10	7.6%
TAURANGA	4	3.4%	2	-2	0	4	3.0%
WELLINGTON	11	9.4%	2	-3	-1	10	7.6%
<b>TOTAL</b>	<b>117</b>	<b>100.0%</b>	<b>50</b>	<b>-35</b>	<b>15</b>	<b>132</b>	<b>100.0%</b>

## NEW ZEALAND

Hamilton increased their numbers again with eight cranes providing logistical support to projects underway up from six at our last index. Tauranga remains at four cranes.

Dunedin has seen the addition of three long term cranes from a zero count at our last Index.

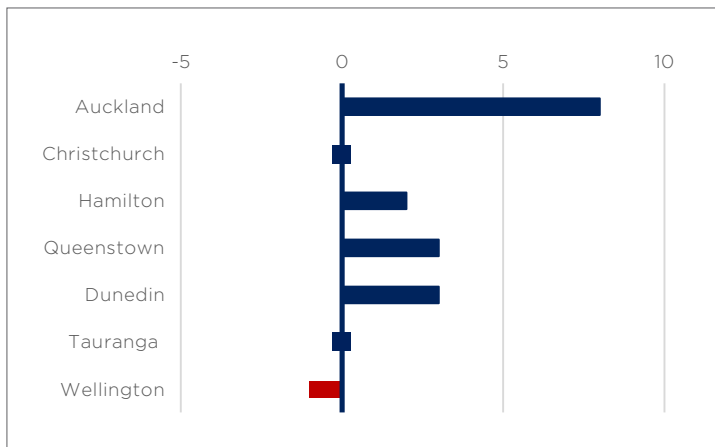
Across New Zealand, residential is still the dominant sector with 49 cranes representing 37% of all cranes commissioned on residential and aged care housing projects. The sector saw a net gain in crane numbers of six. Commercial projects underway account for 35 cranes, up from 33 at the last count. This sector accounts for 27% of all cranes in New Zealand. Both the health and hotel sectors saw net gains across the country of five and three cranes respectively. Education projects nearing completion saw the sector fall by two cranes.

### CRANE ACTIVITY BY SECTOR - NEW ZEALAND

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q4 2016	%	+	-	NET	Q2 2017	%
COMMERCIAL	33	28.2%	12	-10	2	35	26.5%
RESIDENTIAL	43	36.8%	18	-12	6	49	37.1%
HEALTH	4	3.4%	5	0	5	9	6.8%
EDUCATION	9	7.7%	3	-5	-2	7	5.3%
RETAIL	4	3.4%	0	-2	-2	2	1.5%
CIVIC	6	5.1%	4	-2	2	8	6.1%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	3	2.6%	4	-1	3	6	4.5%
CIVIL	12	10.3%	4	-3	1	13	9.8%
OTHER	3	2.6%	0	0	0	3	2.3%
<b>TOTAL N.Z.</b>	<b>117</b>	<b>100.0%</b>	<b>50</b>	<b>-35</b>	<b>15</b>	<b>132</b>	<b>100.0%</b>

### NEW ZEALAND NET CRANE MOVEMENT BY CITY

NUMBER OF CRANES REMOVED / ADDED



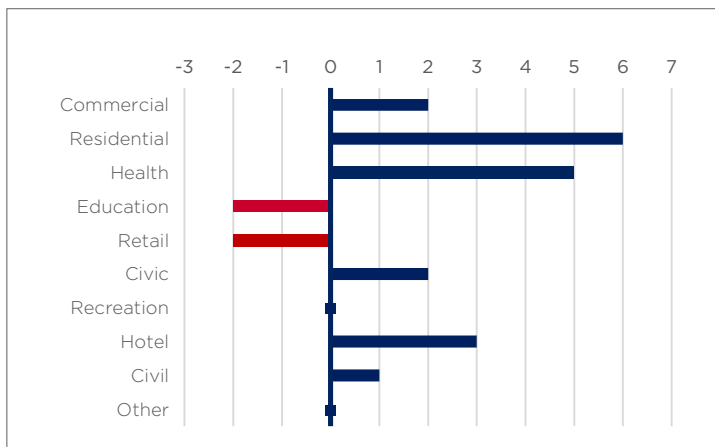
### RLB CRANE INDEX® COMPARATIVE DATA

INDEX: THIRD EDITION Q2 2014 = 100

	1ST EDITION Q2 2014	2ND EDITION Q4 2014	3RD EDITION Q2 2015	4TH EDITION Q4 2015	5TH EDITION Q2 2016	6TH EDITION Q4 2016	7TH EDITION Q2 2017	% INDEX MOVEMENT
AUCKLAND	100	104	116	132	188	256	288	13%
CHRISTCHURCH	100	141	105	141	136	114	114	0%
DUNEDIN		100	100	100	100	-	-	
HAMILTON	100	78	22	22	56	67	89	33%
QUEENSTOWN	100	400	500	300	400	700	1,000	43%
TAURANGA	100	13	38	-	25	50	50	0%
WELLINGTON	100	100	150	150	150	183	167	-9%
<b>TOTAL</b>	<b>100</b>	<b>107</b>	<b>101</b>	<b>111</b>	<b>138</b>	<b>165</b>	<b>186</b>	<b>13%</b>

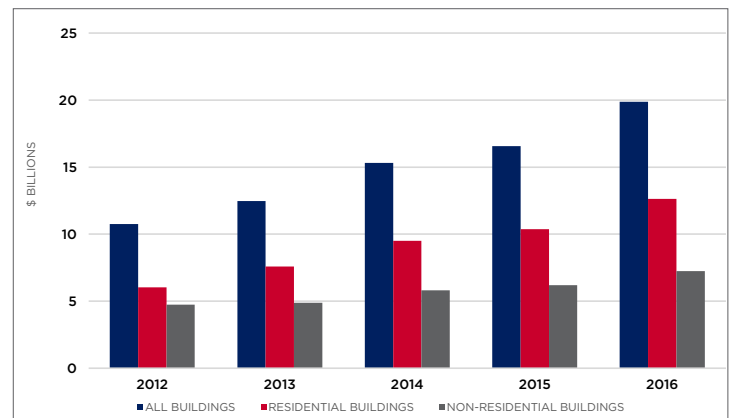
### NEW ZEALAND NET CRANE MOVEMENT BY SECTOR

NUMBER OF CRANES REMOVED / ADDED



### BUILDING WORK PUT IN PLACE - NEW ZEALAND

CALENDAR YEAR - SOURCE: STATS NZ



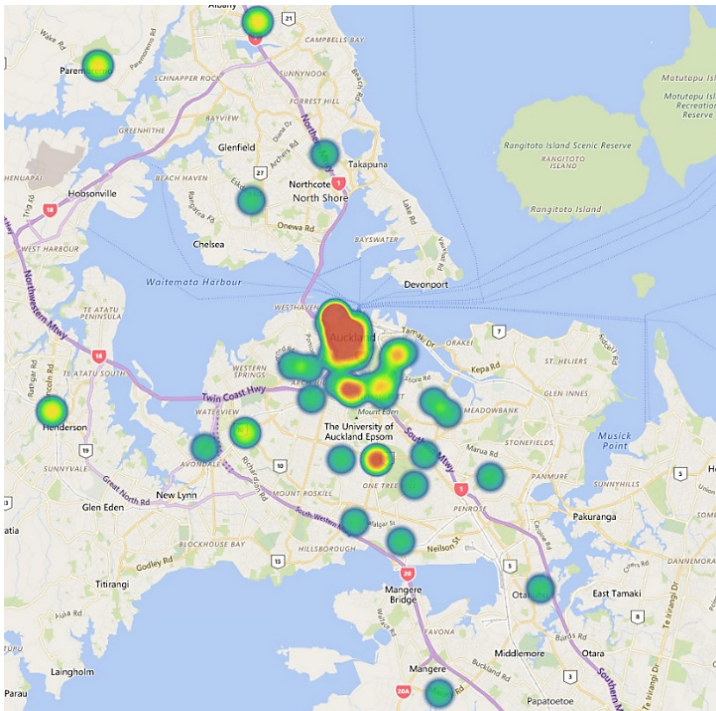
## AUCKLAND

The RLB Crane Index® reflects Auckland's continuing growth in building work put in place. Building activity for the 2016 calendar year has increased 33% over 2015 levels. The Residential sector increased 30% and the Non-residential sectors increased 37%, both significant increases in a busy market. The value of building work put in place for Auckland has seen a 100% rise in work from \$3.6 billion to \$7.2 billion in 2016. Residential has increased 140% and non-residential work is up by 51%.

Auckland's crane index value has risen from 100 in Q2 2014 (1st edition) to 280 currently. The current RLB Crane Index® showcases a 13% increase in the number of cranes within the Auckland region since our last count in Q4 2016. 23 new cranes have been put in place on projects with 15 removed from projects nearing completion, resulting in a growth of eight cranes in total.

The residential sector continues to soar with a net increase of five cranes after nine were removed and 15 new cranes have commenced on new residential and aged care projects. Projects where cranes were removed include Herne Bay, Rose Gardens in Albany, Rothersey Bay Apartments, Stonefield's Bellus Apartments, Student Residential in Symonds Street, Queens Residences, Unsworth Heights and Wakefield Street, Auckland.

New cranes have been observed on projects at Alexandra Park, Browns Bay, Grey Lynn, MT Wellington, Normanby Road, One Tree Hill, Ponsonby, Rawhiti Aged Care, Remeura, Mt Albert Rd, Royal Oak, Parnell Road, Sale Street and Victoria Street West.



### KEY SECTOR STATUS

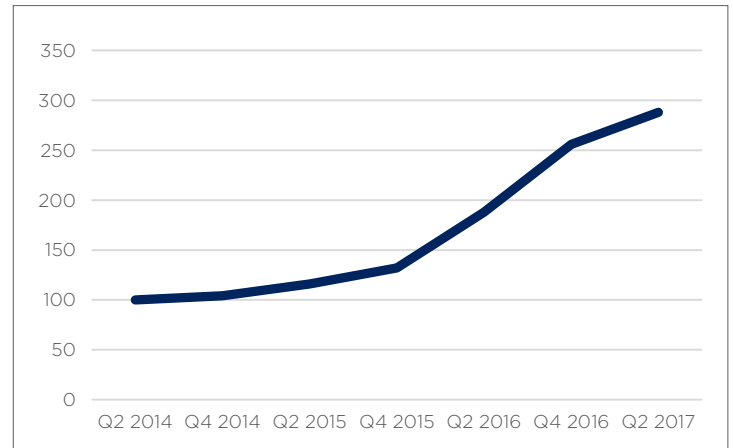
COMMERCIAL	↑	CIVIC	↑
RESIDENTIAL	↑	HOTEL	↑
EDUCATION	↑	CIVIL	↑
RETAIL	↑	OTHER	↑

### OVERALL STATUS



### RLB CRANE INDEX®

BASE = Q2 2014 = 100

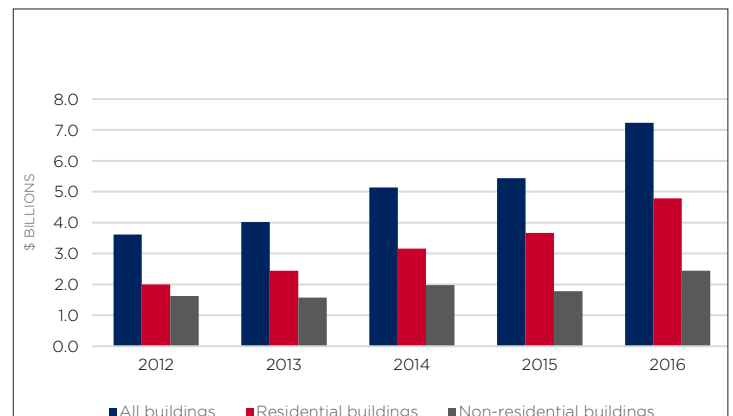


### CRANE ACTIVITY - AUCKLAND

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q4 2017	%	+	-	NET	Q2 2017	%
COMMERCIAL	8	12.5%	5	0	5	13	18.1%
RESIDENTIAL	38	59.4%	14	-9	5	43	59.7%
HEALTH	0	0.0%	0	0	0	0	0.0%
EDUCATION	5	7.8%	0	-1	-1	4	5.6%
RETAIL	1	1.6%	0	-1	-1	0	0.0%
CIVIC	3	4.7%	0	-1	-1	2	2.8%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	1	1.6%	4	-1	3	4	5.6%
CIVIL	6	9.4%	0	-2	-2	4	5.6%
OTHER	2	3.1%	0	0	0	2	2.8%
<b>TOTAL</b>	<b>64</b>	<b>100.0%</b>	<b>23</b>	<b>-15</b>	<b>8</b>	<b>72</b>	<b>100.0%</b>

### BUILDING WORK PUT IN PLACE - AUCKLAND

CALENDAR YEAR - SOURCE: STATS NZ



## AUCKLAND

Auckland's residential sector cranes account for 88% of all residential cranes in New Zealand and 33% of all cranes nationally.

The commercial sector saw the addition of five cranes while eight cranes continued on projects bringing the total count within the sector to 13. Commencements saw cranes being installed at two Mansons commercial developments at 96 St Georges Bay Road, Parnell, Sale Street and 1 Broadway, Newmarket together with two additional cranes at Precinct Properties' Commercial Bay. The tower crane installed there will eventually be 225m tall.

Continuing projects include sites at Building 5A at Wynyard Quarter, Great North Road, Smales Farm new office building and at Great South Road, Greenlane.

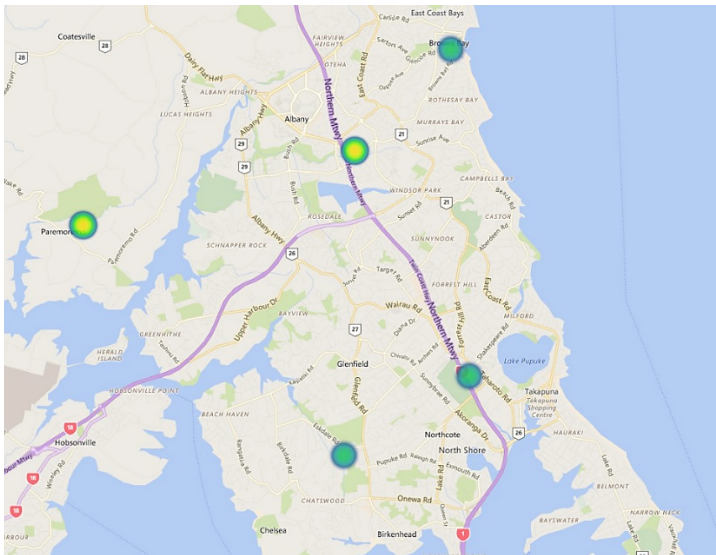
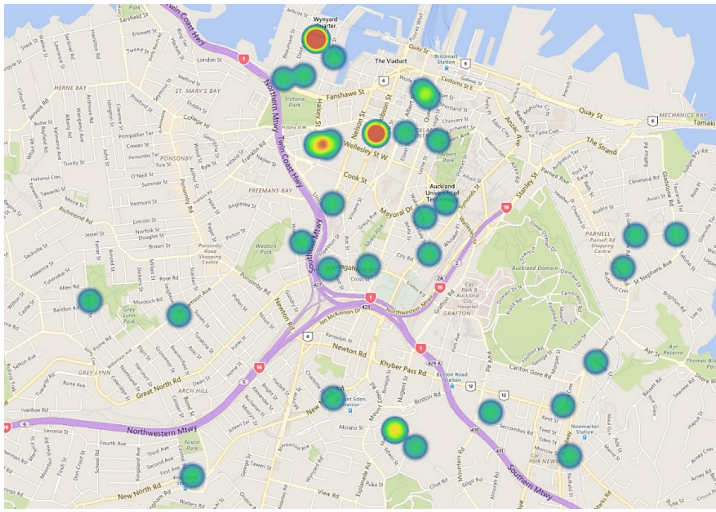
Within Education, one crane was removed at AUT's South M1 project leaving four cranes within the sector.

The only retail crane at our last count was removed at the Bunnings site at Great North Road.

The Hotel sector has seen a spike with a total of four new cranes at the new Sky City hotel and the Park Hyatt at the Wynyard Quarter site. A crane has been removed from the Accor Hotel conversion project in Custom St.

Within the civic sector, two fixed cranes are working on the Convention Centre site (four in total including the hotel project) with one crane removed from the Tennis Stadium in Albany.

Most sectors in Auckland remain very strong whilst the education and civil sectors have seen a recent reduction in crane activity, the forward pipeline of work remains significant.



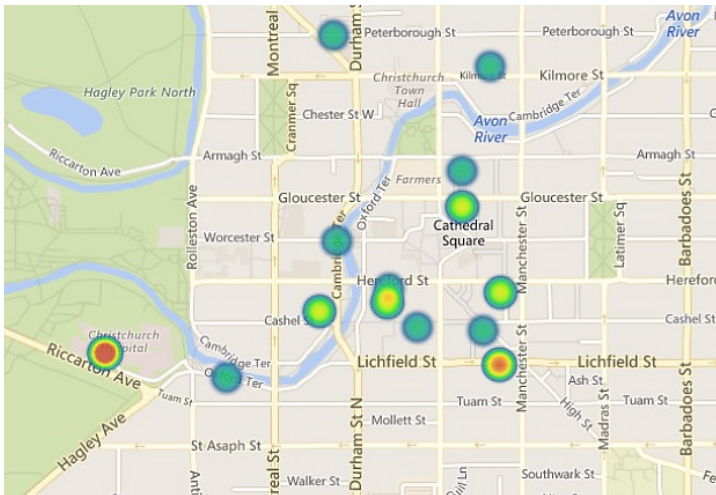


## CHRISTCHURCH

Building activity increased slightly during 2016 with a 2% increase over 2015 numbers. The Residential sector fell 3% and the Non-residential sectors increased 9%. Seeing a stability in construction work put in place within Christchurch, has seen 13 cranes removed from sites with an additional 13 being commissioned on new sites since our last RLB Crane Index®.

Cranes were removed from key rebuild projects nearing completion including: the Christchurch Justice and Emergency Services Precinct, Gloucester Street Bridge Repair Works, Ara Institute of Canterbury - Kahukura, together with The ANZ Centre, The Crossing, Grand Central Christchurch, 73 Manchester Street, Atlas Quarter, Otautahi House and 246 High Street

Activity on the new Christchurch Hospital has seen two new cranes commence on the Outpatients Building and an additional crane at the Acute Services Building taking the total count to four. The Health sector is now the equal largest sector within Christchurch with eight cranes. Additional projects that have added cranes since our last Index include the Forte Health expansion in Peterborough Street and the Health Research Education Facility in Oxford Terrace.



The commercial sector has also eight cranes involved in projects within Christchurch. Four new cranes have been observed at projects at 123 Victoria Street, The Terrace (2) and 76 Hereford Street. Five cranes have been removed at the ANZ Centre, Grand Central (2), 73 Manchester Street, and at 246 High Street.

One crane has been removed from The Crossing within the retail sector, resulting in two cranes remaining on retail projects at The Crossing and 112 Cashel Street.

The civic sector sees a doubling of cranes on projects within Christchurch with four cranes added and one removal. Two cranes have commenced at each of the Lichfield Street Carpark project and at the Christchurch Central Library. One crane was removed from the Justice and Emergency Services Precinct. The sector now has six cranes installed.

One crane remains on the Crowne Plaza site within the Hotel sector and one crane has been removed from Gloucester Street Bridge within the civil sector.

### KEY SECTOR STATUS

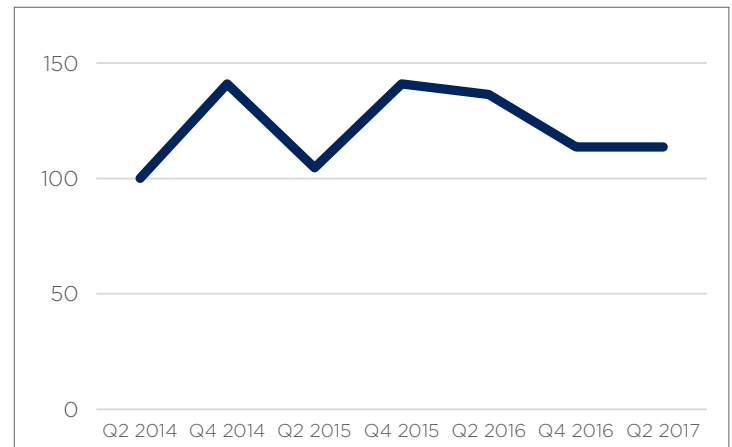


### OVERALL STATUS



### RLB CRANE INDEX®

BASE = Q2 2014 = 100

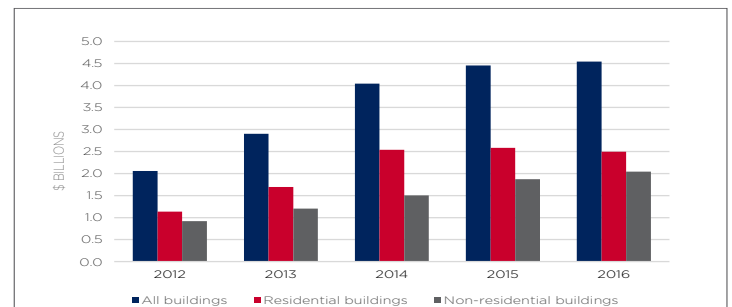


### CRANE ACTIVITY - CHRISTCHURCH

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q4 2016	%	+	-	NET	Q2 2017	%
COMMERCIAL	9	36.0%	4	-5	-1	8	32.0%
RESIDENTIAL	3	12.0%	0	-3	-3	0	0.0%
HEALTH	3	12.0%	5	0	5	8	32.0%
EDUCATION	2	8.0%	0	-2	-2	0	0.0%
RETAIL	3	12.0%	0	-1	-1	2	8.0%
CIVIC	3	12.0%	4	-1	3	6	24.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	1	4.0%	0	0	0	1	4.0%
CIVIL	1	4.0%	0	-1	-1	0	0.0%
OTHER	0	0.0%	0	0	0	0	0.0%
<b>TOTAL</b>	<b>25</b>	<b>100.0%</b>	<b>13</b>	<b>-13</b>	<b>0</b>	<b>25</b>	<b>100.0%</b>

### WORK PUT IN PLACE - CANTERBURY

CALENDAR YEAR - SOURCE: STATS NZ

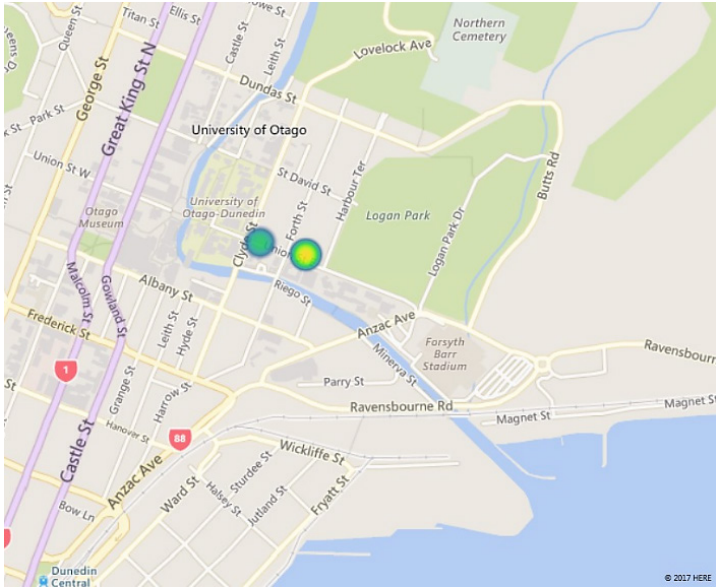


While the Canterbury rebuild is still well underway, total work put in place was up 4.6% for the 12 months ending 30th June 2016, residential work was down 3.6% and non-residential work was up 19.4% across Canterbury.

## DUNEDIN

Dunedin has re-joined the growth in crane numbers across New Zealand with addition of three cranes since our last Index. Two long term cranes are assisting in the development of Student residences for the Otago Polytechnic and one long-term crane has been installed at the University of Otago's Commerce Building refurbishment.

Next month a large tower crane is to be installed at the University of Otago Dental School in Great King Street.



### KEY SECTOR STATUS

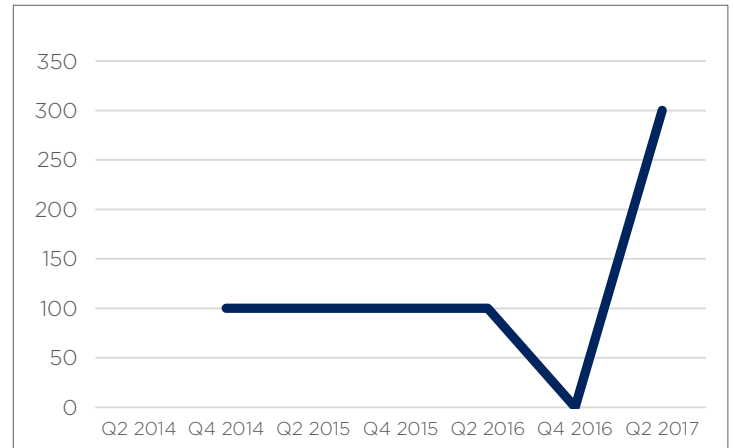
RESIDENTIAL EDUCATION

### OVERALL STATUS



### RLB CRANE INDEX®

BASE = Q2 2014 = 100

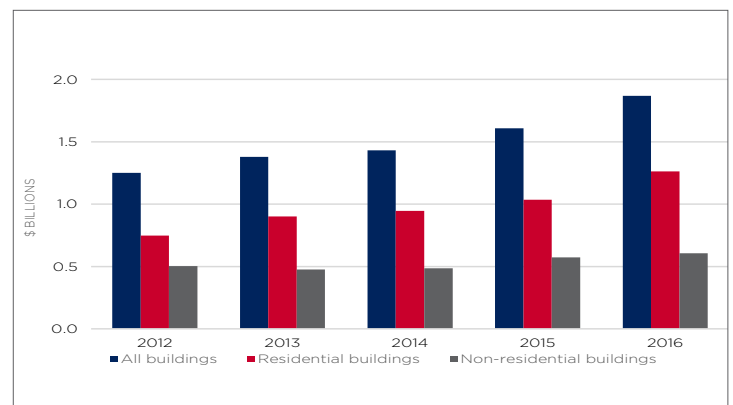


### CRANE ACTIVITY - DUNEDIN

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q4 2016	%	+	-	NET	Q2 2017	%
COMMERCIAL	0	0	0	0	0	0	0.0%
RESIDENTIAL	0	0	2	0	2	2	66.7%
HEALTH	0	0	0	0	0	0	0.0%
EDUCATION	0	0	1	0	1	1	33.3%
RETAIL	0	0	0	0	0	0	0.0%
CIVIC	0	0	0	0	0	0	0.0%
RECREATION	0	0	0	0	0	0	0.0%
HOTEL	0	0	0	0	0	0	0.0%
CIVIL	0	0	0	0	0	0	0.0%
OTHER	0	0	0	0	0	0	0.0%
<b>TOTAL</b>	<b>0</b>	<b>0.0%</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>100.0%</b>

### WORK PUT IN PLACE - SOUTH ISLAND EXCLUDING CANTERBURY

CALENDAR YEAR - SOURCE: STATS NZ

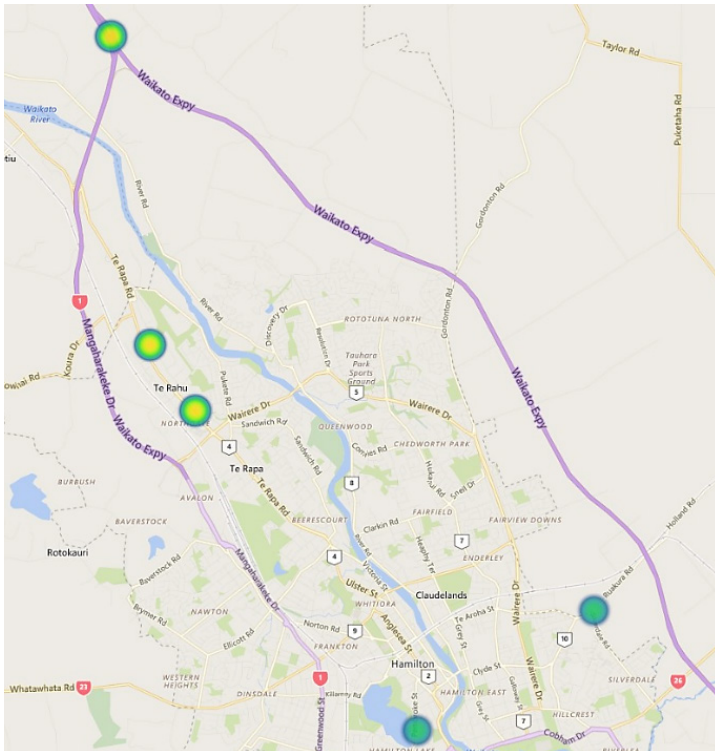


## HAMILTON

Strong building growth within the Waikato region of 30% in 2016 has seen the cranes within the region grow from five to eight in the last twelve months. Since our last RLB Crane Index® there have been two additional cranes commence within Hamilton.

Two cranes have been installed at the Hamilton Express lanes extension project within the civil sector.

Six cranes remain on projects at the Hilda Ross Hospital, Ruakura Bridge, Porters at Te Rapa (2) and at the Laminex project (2).



### KEY SECTOR STATUS

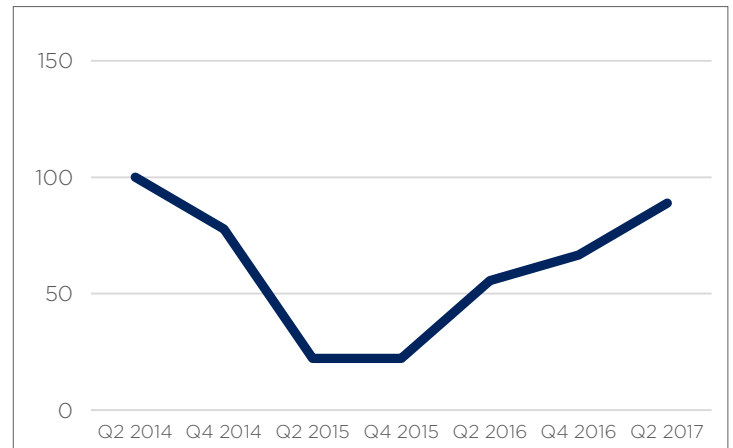
COMMERCIAL	
HEALTH	
CIVIL	

### OVERALL STATUS



### RLB CRANE INDEX®

BASE = Q2 2014 = 100

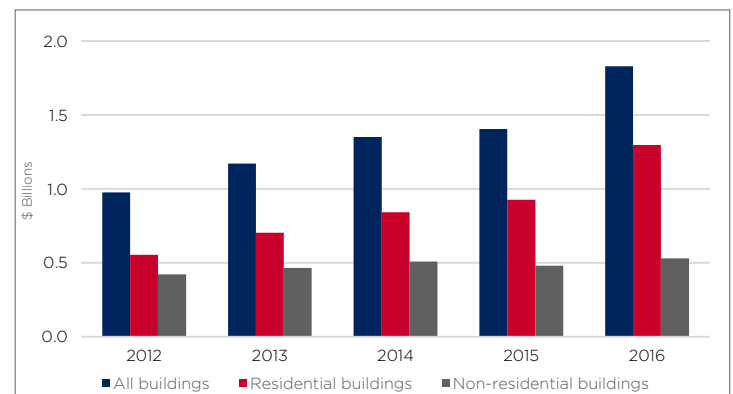


### CRANE ACTIVITY - HAMILTON

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q4 2016	%	+	-	NET	Q2 2017	%
COMMERCIAL	4	66.7%	0	0	0	4	50.0%
RESIDENTIAL	0	0.0%	0	0	0	0	0.0%
HEALTH	1	16.7%	0	0	0	1	12.5%
EDUCATION	0	0.0%	0	0	0	0	0.0%
RETAIL	0	0.0%	0	0	0	0	0.0%
CIVIC	0	0.0%	0	0	0	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	0	0.0%	0	0	0	0	0.0%
CIVIL	1	16.7%	2	0	2	3	37.5%
OTHER	0	0.0%	0	0	0	0	0.0%
<b>TOTAL</b>	<b>6</b>	<b>100.0%</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>100.0%</b>

### WORK PUT IN PLACE - WAIKATO

CALENDAR YEAR - SOURCE: STATS NZ



## QUEENSTOWN

Queenstown's crane numbers have increased again with crane numbers hitting double figures in this edition of the RLB Crane Index®. Ten cranes can now be seen in and around Queenstown across seven sites. This coincides with the growth in building work put in place in the South Island. Building activity for 2016 was up by 17% over 2015 mainly fuelled by residential work which was up by 26%.

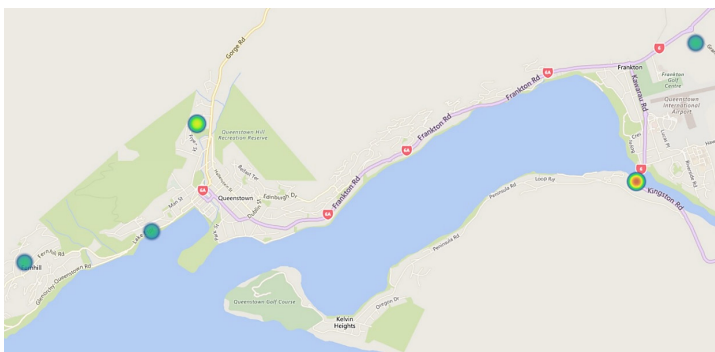
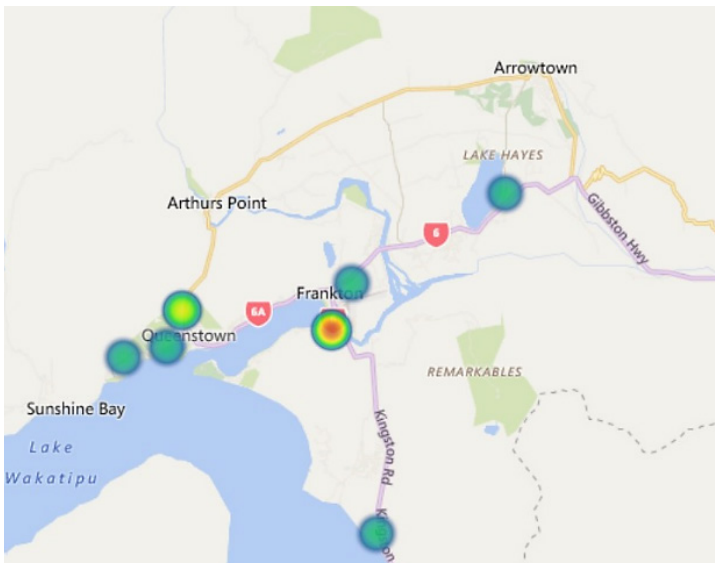
The civil and residential sectors both have three long-term cranes on projects, two are in the education sector, and one each at Rydges on the Esplanade within the hotel sector and at the Five Mile project within the commercial sector.

Cranes were removed from projects at Beach St and Remarkables Park, both within the commercial sector.

New projects seen with cranes include Waikatipu High School (2) within education, an additional crane at Kawarau Bridge and a crane each at residential developments at Fernhill and Lakeside estate.

The residential, civil and education workload remains strong and is reflected in these crane numbers.

An upturn in the pipeline of hotel projects is likely to see future growth in crane numbers within this sector.



### KEY SECTOR STATUS

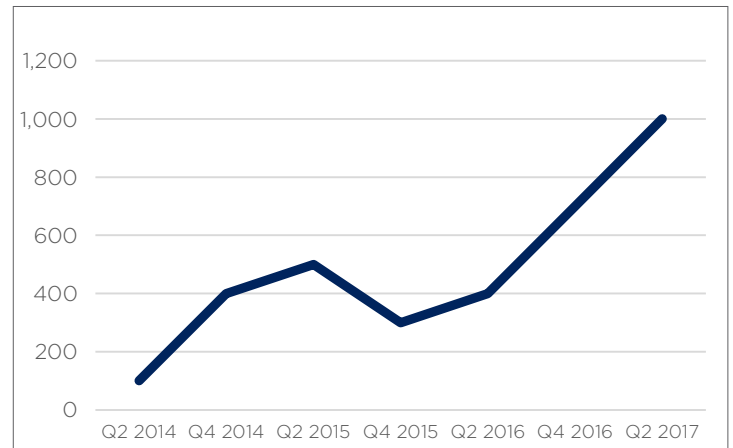
COMMERCIAL		HOTEL	
RESIDENTIAL		CIVIL	
EDUCATION			

### OVERALL STATUS



### RLB CRANE INDEX®

BASE = Q2 2014 = 100

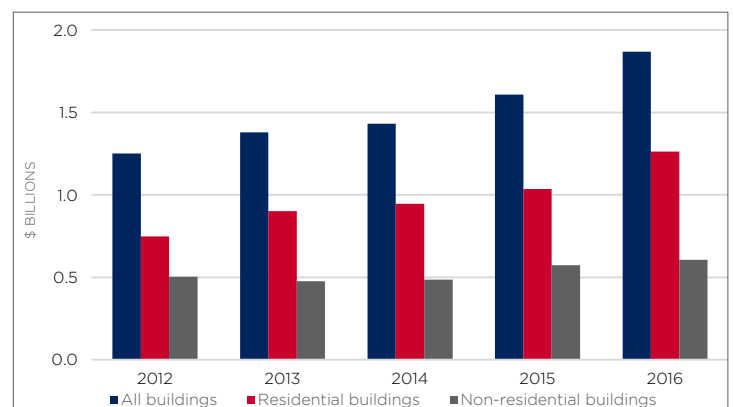


### CRANE ACTIVITY - QUEENSTOWN

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q4 2016	%	+	-	NET	Q2 2017	%
COMMERCIAL	3	42.9%	0	-2	-2	1	10.0%
RESIDENTIAL	1	14.3%	2	0	2	3	30.0%
HEALTH	0	0.0%	0	0	0	0	0.0%
EDUCATION	0	0.0%	2	0	2	2	20.0%
RETAIL	0	0.0%	0	0	0	0	0.0%
CIVIC	0	0.0%	0	0	0	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	1	14.3%	0	0	0	1	10.0%
CIVIL	2	28.6%	1	0	1	3	30.0%
OTHER	0	0.0%	0	0	0	0	0.0%
<b>TOTAL</b>	<b>7</b>	<b>100.0%</b>	<b>5</b>	<b>-2</b>	<b>3</b>	<b>10</b>	<b>100.0%</b>

### WORK PUT IN PLACE - SOUTH ISLAND EXCLUDING CANTERBURY

CALENDAR YEAR - SOURCE: STATS NZ





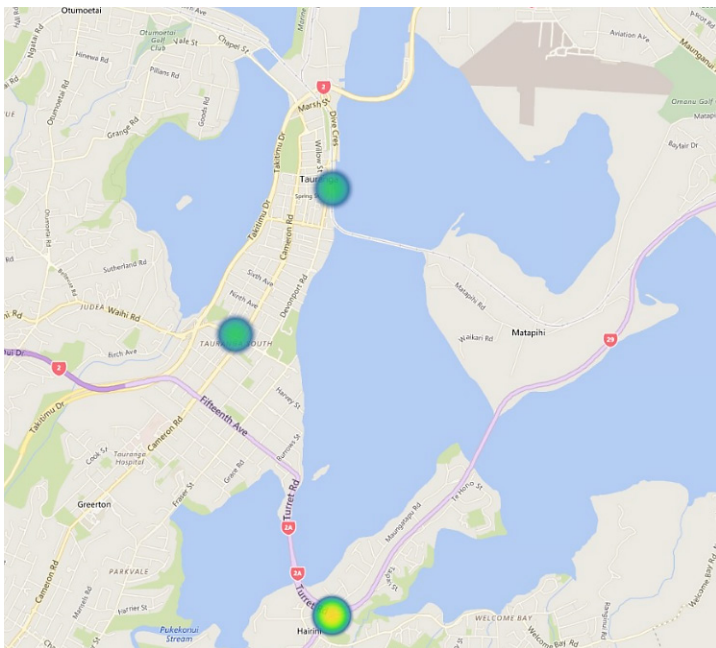
## TAURANGA

Four cranes were located in Tauranga, the same as the previous RLB Crane Index®. Two cranes were removed, two new cranes added and two remained on the Maungatapu tunnel underpass.

Cranes were removed from the Bay of Plenty Polytechnic, Windermere Campus and an office project on Cameron Road.

New cranes were installed on the Tauranga waterfront development and the ANZ car park extension.

North Island building activity (excluding major regions) grew by 22% during 2016 with residential activity surging 40% whilst non residential work fell by 7%.



### KEY SECTOR STATUS

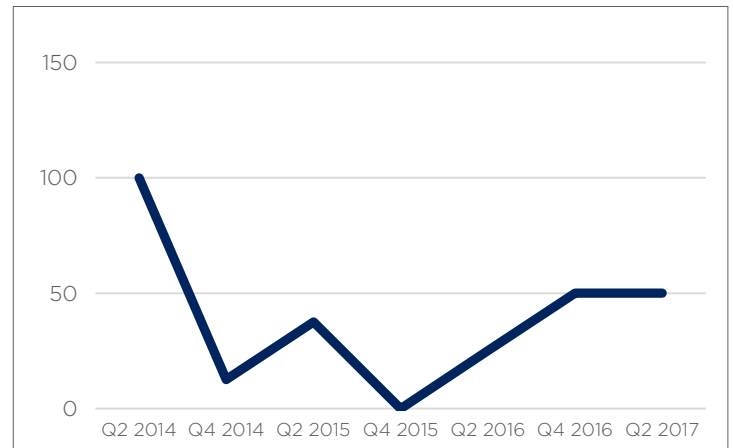
COMMERCIAL	
EDUCATION	
CIVIL	

### OVERALL STATUS



### RLB CRANE INDEX®

BASE = Q2 2014 = 100

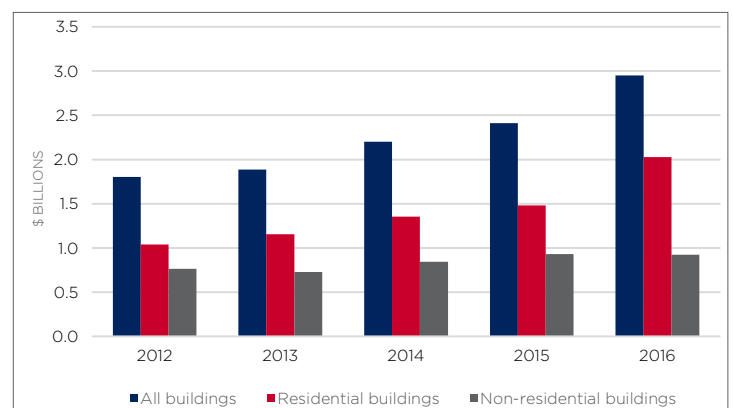


### CRANE ACTIVITY - TAURANGA

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q4 2016	%	+	-	NET	Q2 2017	%
COMMERCIAL	1	25.0%	1	-1	0	1	25.0%
RESIDENTIAL	0	0.0%	0	0	0	0	0.0%
HEALTH	0	0.0%	0	0	0	0	0.0%
EDUCATION	1	25.0%	0	-1	-1	0	0.0%
RETAIL	0	0.0%	0	0	0	0	0.0%
CIVIC	0	0.0%	0	0	0	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	0	0.0%	0	0	0	0	0.0%
CIVIL	2	50.0%	1	0	1	3	75.0%
OTHER	0	0.0%	0	0	0	0	0.0%
<b>TOTAL</b>	<b>4</b>	<b>100.0%</b>	<b>2</b>	<b>-2</b>	<b>0</b>	<b>4</b>	<b>100.0%</b>

### WORK PUT IN PLACE - NORTH ISLAND EXCLUDING AUCKLAND, WAIKATO, AND WELLINGTON

CALENDAR YEAR - SOURCE: STATS NZ



## WELLINGTON

Wellington's cranes overall crane count fell by one since the last RLB Crane Index®. Total cranes now number 10, down from 11. Three cranes have been removed from sites and two new cranes have commenced.

Building work put in place for Wellington has seen a 16% increase in 2016. Residential work increased by 13% and non-residential work was up 20% over 2015 results.

Cranes have been removed from The Terrace, Victoria University - Sciences Block and at the Press House refurbishment.

New cranes were installed at the Indian High Commission in Thorndon and the Bowen State Building Refurbishment.

Cranes remaining on sites include commercial projects at Wellington Airport Carpark Building, Taranaki Street, Cuba & Dixon St corner, Jervois Quay, Waterloo Quay, High Street & Waterloo Road corner in Lower Hutt. One crane remains on the Biosecurity Labs at Ward St, Upper Hutt and one crane within the other sectors, and at a residential development at Victoria and Ghuznee corner.

Commercial projects represent 80% of all cranes in Wellington with 8 cranes, with one each in the residential and other sectors.

### KEY SECTOR STATUS

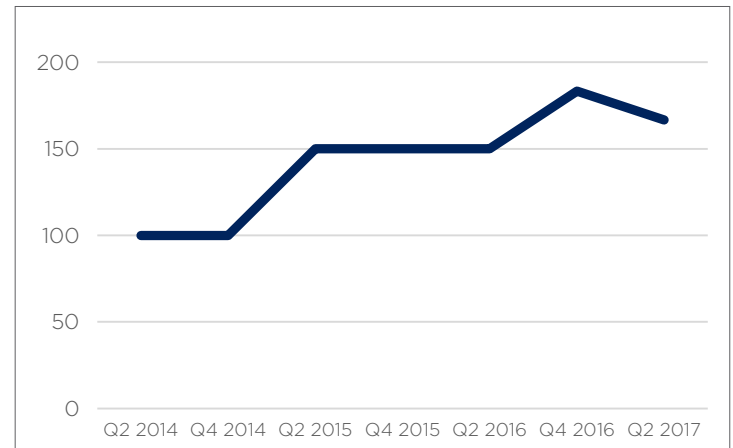


### OVERALL STATUS



### RLB CRANE INDEX®

BASE = Q2 2014 = 100

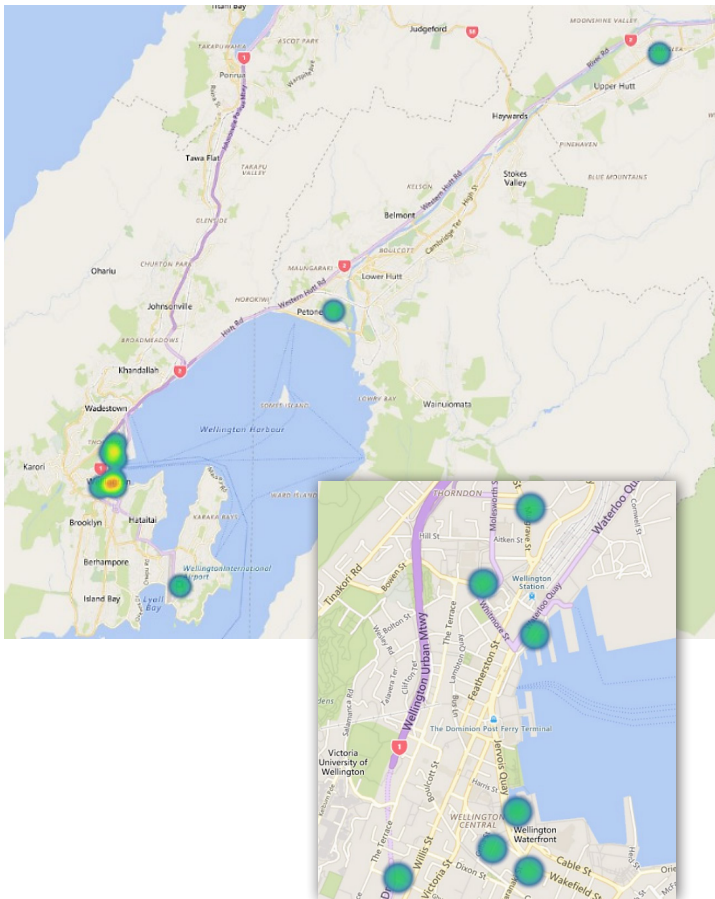
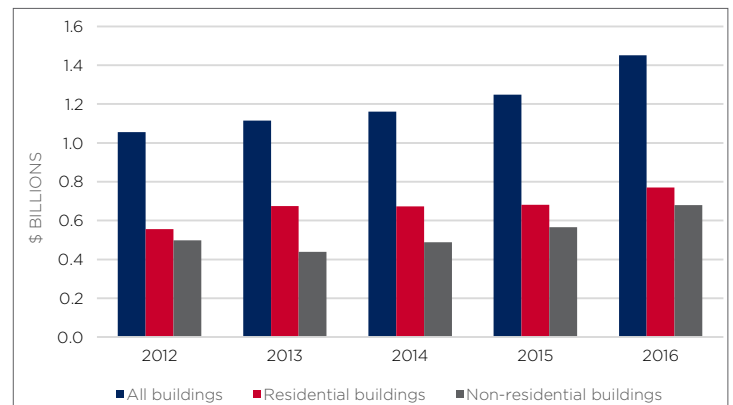


### CRANE ACTIVITY - WELLINGTON

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q4 2016	%	+	-	NET	Q2 2017	%
COMMERCIAL	8	72.7%	2	-2	0	8	80.0%
RESIDENTIAL	1	9.1%	0	0	0	1	10.0%
HEALTH	0	0.0%	0	0	0	0	0.0%
EDUCATION	1	9.1%	0	-1	-1	0	0.0%
RETAIL	0	0.0%	0	0	0	0	0.0%
CIVIC	0	0.0%	0	0	0	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	0	0.0%	0	0	0	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
OTHER	1	9.1%	0	0	0	1	10.0%
<b>TOTAL</b>	<b>11</b>	<b>100.0%</b>	<b>2</b>	<b>-3</b>	<b>-1</b>	<b>10</b>	<b>100.0%</b>

### WORK PUT IN PLACE - WELLINGTON

CALENDAR YEAR - SOURCE: STATS NZ



## ABOUT THE RLB CRANE INDEX®

The RLB Crane Index® is published by Rider Levett Bucknall biannually in Australia, New Zealand, USA, Gulf States and Southern Africa. The New Zealand index tracks the numbers of cranes in the key mainland cities within New Zealand .

The RLB Crane Index® gives a simplified measure of the current state of the construction industry's workload in each of these locations.

Each RLB office physically counts all fixed cranes on each city's skyline twice yearly which provides the base information for the index. This information is then applied to a base date (1st edition Q2 2014), which enables the RLB Crane Index® to be calculated highlighting the relative movement of crane data over time for each city.

The indexing of RLB Crane Index® data commenced in Q2 2014, when it was determined that the data collection and reporting methodology was mature and consistent between all offices. Crane counts for that release were indexed to 100 in each city. Subsequent movements in crane numbers were applied to the base RLB Crane Index® to highlight the crane movements in each city over time based on the relative count in Q2 2014.

Using the RLB Crane Index® table data makes for quick comparisons in determining city by city crane activity. For example, when comparing Sydney cranes for the base period of Q2 2014, against the count in Q4 2015, the following formula can be used to determine the percentage increase (or decrease).

$$\text{PERCENTAGE CHANGE} = \left[ \frac{\text{CRANE INDEX}_{\text{CP}} - \text{CRANE INDEX}_{\text{PP}}}{\text{CRANE INDEX}_{\text{PP}}} \right] \times 100$$

where Crane Index<sub>cp</sub> is the RLB Crane Index<sub>cp</sub> for the current period and Crane Index<sub>pp</sub> is the RLB Crane Index® for the previous period.

## HEATMAPS

The RLB Crane Index® hotspot maps offer a pictorial representation of the collected data for each city using a heatmap indicator to indicate the level of crane activity. The size of hotspot is relative to the scale of the map and is not an indication of the crane count in that position. The heatmap uses blue to indicate a lower crane activity, and the brighter red insert to indicate higher crane activity.

The location of the hotspots are indicative only and have been positioned to convey the general spread of cranes within a city.

The levels of intensity are calculated on a map by map basis and should not be compared between different cities.

## CONTACT DETAILS

For further comments, please contact:

Contact: Chris Haines  
Director

Email: [chris.haines@nz.rlb.com](mailto:chris.haines@nz.rlb.com)  
Tel: +64 9 309 1074

Contact: John Cross  
Oceania Research & Development Manager

Email: [john.cross@au.rlb.com](mailto:john.cross@au.rlb.com)  
Tel: +61 3 9690 6111