

## AUSTRALIA

Now in its 11th edition, the Q4 2017 RLB Crane Index®, 'index', highlights the continuing strength of the construction sector within Australia's economy. The index has risen 5% since our last publication to 161.

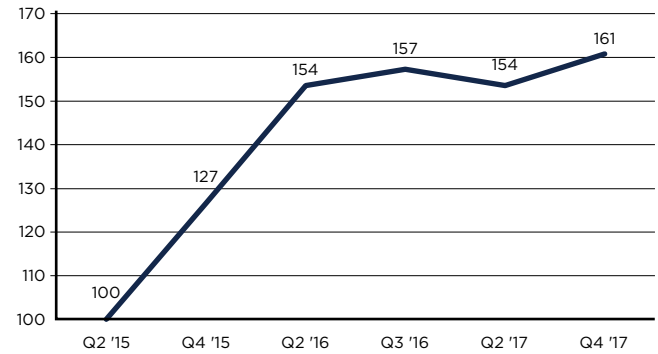
The index, represented in the graph below, is a lineal representation of the number of fixed cranes in Australia, over time, using the number of cranes observed in Q2 2015 (6th edition) as the base of 100. This edition sees the introduction of a separate residential and non-residential crane index to highlight the ongoing relativities.

### Highlights

- Index value of 161 is the highest since commencement of the Index in 2012
- A total of 685 cranes are on projects across Australia (350 in Sydney, 151 in Melbourne and 116 in Brisbane and the Gold Coast combined)
- 109 Sydney suburbs have residential cranes, 54 suburbs in Melbourne
- All key cities have increased crane numbers in the past six months (except Canberra & Darwin)
- Residential index value is now 177, up from 138 two years ago (+28%)
- Non Residential index value is now 117, up from 92 six months ago (+27%)
- 339 cranes added since last index, 308 removed from completed projects

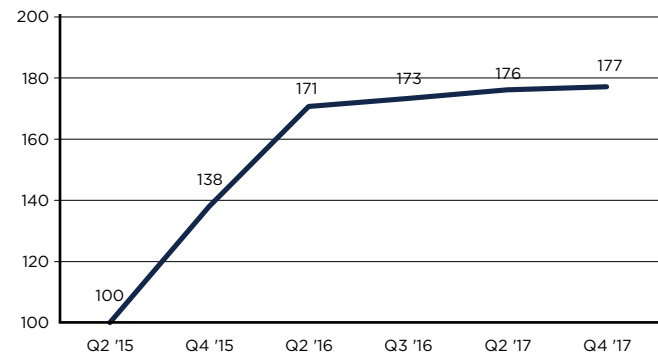
### RLB CRANE INDEX®

BASE = Q2 2015 = 100



### AUSTRALIA RESIDENTIAL CRANE INDEX

BASE = Q2 2015 = 100



### RLB CRANE INDEX® COMPARATIVE DATA

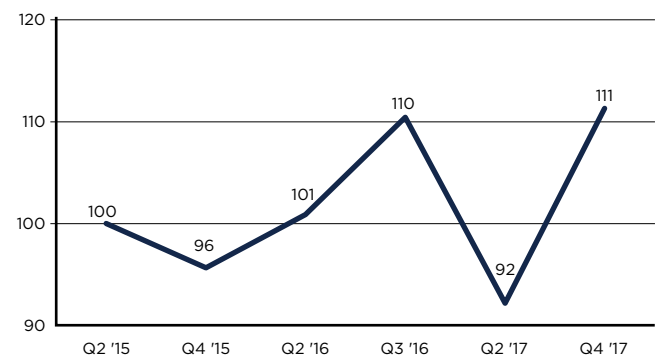
INDEX: SIXTH EDITION Q2 2015 = 100

	6TH EDITION Q2 '15	7TH EDITION Q4 '15	8TH EDITION Q2 '16	9TH EDITION Q3 '16	10TH EDITION Q2 '17	11TH EDITION Q4 '17	Q2 '17 vs. Q4 '17
ADELAIDE	100	117	150	250	250	283	13%
BRISBANE	100	142	142	130	111	116	5%
CANBERRA	100	120	340	480	380	360	-5%
DARWIN	100	50	50	17	-	-	
GOLD COAST	100	107	200	227	200	207	3%
HOBART				100	25	75	200%
MELBOURNE	100	117	127	116	126	130	3%
NEWCASTLE		100	113	113	50	63	25%
PERTH	100	109	109	112	56	58	4%
SYDNEY	100	131	178	188	206	216	5%
<b>AUSTRALIA</b>	<b>100</b>	<b>127</b>	<b>154</b>	<b>157</b>	<b>154</b>	<b>161</b>	<b>5%</b>

Note: This table does not represent crane numbers but rather the RLB Crane Index®. Refer to last page for more details of the calculation of the index.

### AUSTRALIA NON-RESIDENTIAL CRANE INDEX

BASE = Q2 2015 = 100



## AUSTRALIA

The Q4 2017 index reflects the continuing strength of the sector with all capital cities showing an increase in crane numbers, with the exceptions of Canberra and Darwin.

Recalibrating the index from a base at Q3 2013 to Q2 2015, the latest index value for Australia has now risen to an index value of 161, up from 154 at our previous index.

Across Australia, 685 cranes have been sighted on working developments up from 654 in Q2 2017. The residential sector continues to dominate the skylines across Australia 551 cranes representing 80% of all cranes commissioned on future residential dwellings. The sector saw a net gain in crane numbers of seven since the last index.

Sydney still commands the sky with more than 50% of all cranes erected on construction sites around Australia. Melbourne at 22% and Brisbane's 12% are the only other capital cities with more than 10% of the nation's cranes.

Since our last index, 308 cranes were removed from projects completed or nearing completion across Australia.

Projects commencing accounted for 339 new cranes being erected. This augers well for a strong pipeline of construction work over the next six to twelve months across the country.

Residential construction activity across the country continues to be a major driver of economic growth. Development activity across both Sydney and Melbourne are driving much of this growth, as highlighted by the Australian Bureau of Statistics 'ABS' published construction work done results which are summarised on the graphs within this publication. Residential work done has seen steady growth over the past 5 years and is reflected in the index growth over a similar timeline. General economic activity within the states has turned in recent years, with both New South Wales and Victoria leading the charge as Western Australia, Queensland and Northern Territory are feeling the effects of the post construction phase of the mining boom.

The residential, hotel, civil, education and other/mixed use sectors are all showing strong growth in crane numbers with the remaining sectors all showing small losses of cranes since the last index.

Commercial projects saw a small gain of one crane with 31 cranes on projects across Australia. This sector currently accounts for 5% of all cranes in Australia.

The residential index continues to show resilience increasing in Q4 2017 to 177, up from 176 in Q2 2017 and 100 in Q2 2015. The non-residential index showed a strong increase in Q4 2017 to reach 111, up from 92 in Q2 2017.

### CITIES

ADELAIDE	↑	HOBART	↑
BRISBANE	↑	MELBOURNE	↑
CANBERRA	↑	NEWCASTLE	↑
DARWIN	↓	PERTH	↑
GOLD COAST	↑	SYDNEY	↑

### KEY SECTORS

COMMERCIAL	↓	CIVIC	↑
RESIDENTIAL	↑	RECREATION	↑
HEALTH	↓	HOTEL	↑
EDUCATION	↑	CIVIL	↑
RETAIL	↑	OTHER/MIXED	↑

### LEGEND

↑	INCREASE IN NUMBER OF CRANES	↓	DECREASE IN NUMBER OF CRANES	±	CRANE NUMBERS STEADY
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### OVERALL STATUS



### CRANE ACTIVITY - AUSTRALIA BY KEY CITIES

	OPENING COUNT Q2 2017		MOVEMENT			CLOSING COUNT Q4 2017	
		%	+	-	NET		%
ADELAIDE	15	2.3%	8	-6	2	17	2.5%
BRISBANE	81	12.4%	54	-50	4	85	12.4%
CANBERRA	19	2.9%	10	-11	-1	18	2.6%
DARWIN	0	0.0%	0	0	0	0	0.0%
GOLD COAST	30	4.6%	10	-9	1	31	4.5%
HOBART	1	0.2%	2	0	2	3	0.4%
MELBOURNE	146	22.3%	88	-83	5	151	22.0%
NEWCASTLE	4	0.6%	5	-4	1	5	0.7%
PERTH	24	3.7%	19	-18	1	25	3.6%
SYDNEY	334	51.1%	143	-127	16	350	51.1%
<b>TOTAL</b>	<b>654</b>	<b>100.0%</b>	<b>339</b>	<b>-308</b>	<b>31</b>	<b>685</b>	<b>100.0%</b>

### CRANE ACTIVITY - AUSTRALIA BY SECTOR

	OPENING COUNT Q3 2016		MOVEMENT			CLOSING COUNT Q2 2017	
		%	+	-	NET		%
COMMERCIAL	30	4.6%	14	-13	1	31	4.5%
RESIDENTIAL	548	83.8%	263	-259	4	551	80.4%
HEALTH	17	2.6%	8	-8	0	17	2.5%
EDUCATION	8	1.2%	6	-4	2	10	1.5%
RETAIL	6	0.9%	1	-4	-3	3	0.4%
CIVIC	3	0.5%	1	-2	-1	2	0.3%
RECREATION	1	0.2%	0	-1	-1	0	0.0%
HOTEL	11	1.7%	18	-7	11	22	3.2%
CIVIL	7	1.1%	9	-3	6	13	1.9%
OTHER	23	3.5%	19	-7	12	36	5.3%
<b>TOTAL</b>	<b>654</b>	<b>100.0%</b>	<b>339</b>	<b>-308</b>	<b>31</b>	<b>685</b>	<b>100.0%</b>

## AUSTRALIA

Sydney has seen the greatest increase in crane numbers since our last index with 16. Melbourne and Brisbane increased numbers by five and four respectively. Adelaide and Hobart saw cranes increase by two and Gold Coast, Newcastle and Perth increased by a single crane.

Darwin does not currently have any cranes across the skyline and Canberra decreased its numbers by one.

Within the major construction sectors, continuing strong growth in crane numbers has been seen in the residential sector with seven more cranes across Australia. The Hotel sector has commenced an upward trend with significant investment across the country with 11 new cranes being observed. The other/mixed use sector has emerged over the last year with significant developments commencing in Brisbane, Melbourne, Perth and Sydney. Mixed use projects include Queens Wharf in Brisbane, both Collins Arch and West Side Place in Melbourne and Elizabeth Quay in Perth.

The residential sector has seen four cranes added slightly more than both education and commercial with two and one cranes added respectively. The retail, civic and recreation sectors all fell slightly.

### RLB CRANE INDEX® SECTOR COMPARATIVE DATA

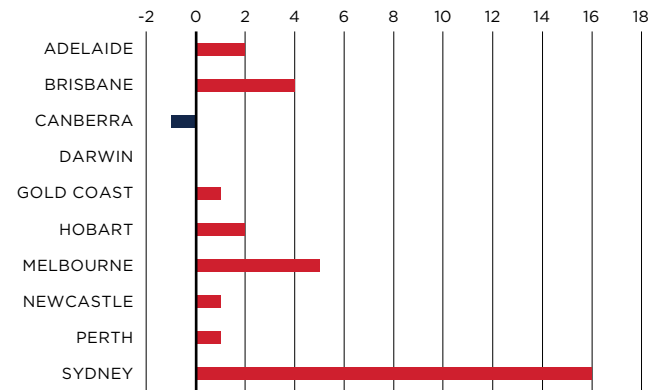
INDEX: SIXTH EDITION Q2 2015 = 100

	6TH EDITION Q2 '15	7TH EDITION Q4 '15	8TH EDITION Q2 '16	9TH EDITION Q3 '16	10TH EDITION Q2 '17	11TH EDITION Q4 '17
COMMERCIAL	100	82	79	61	53	54
RESIDENTIAL	100	138	171	173	176	177
HEALTH	100	61	33	83	94	94
EDUCATION	100	200	300	300	200	250
RETAIL	100	71	86	36	43	21
CIVIC	100	800	850	600	450	100
RECREATION	100	73	91	91	9	0
HOTEL	100	150	150	350	275	550
CIVIL	100	0	150	150	350	650
OTHER/MIXED	100	133	367	700	567	1,200
<b>TOTAL</b>	<b>100</b>	<b>127</b>	<b>153</b>	<b>156</b>	<b>154</b>	<b>161</b>

Note: This table does not represent crane numbers but rather the RLB Crane Index®. Refer to last page for more details of the calculation of the index.

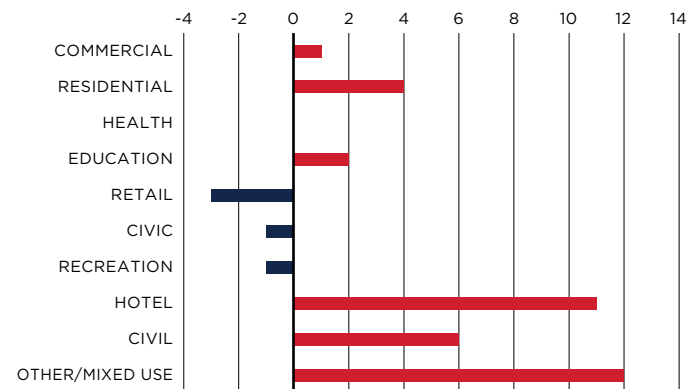
### AUSTRALIA NET CRANE MOVEMENT BY CITY

NUMBER OF CRANES REMOVED / ADDED



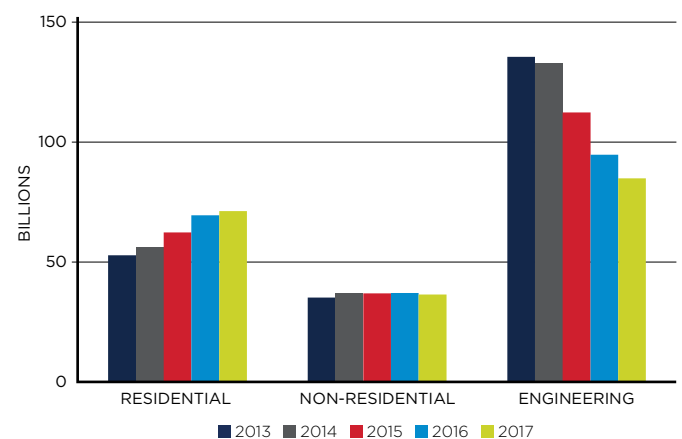
### AUSTRALIA NET CRANE MOVEMENT BY SECTOR

NUMBER OF CRANES REMOVED / ADDED



### CONSTRUCTION WORK DONE - AUSTRALIA

FINANCIAL YEAR - SOURCE: ABS



## ADELAIDE

Adelaide has again seen an increase in the total number of cranes operating since our last RLB Crane Index®.Crane numbers have been steadily increasing throughout Adelaide since the recorded low in Q2 2015. The index for Adelaide has reached its highest point of 283, up from 250 at our last index. This reflects a 13% increase.

Residential construction work done in South Australia for the financial year 2016/17 'FY 17' was up 4%, with non- residential work down by 4%. This increase in residential work done is reflected in the number of residential cranes erected since our last index, with ten cranes now erected on projects within Adelaide.

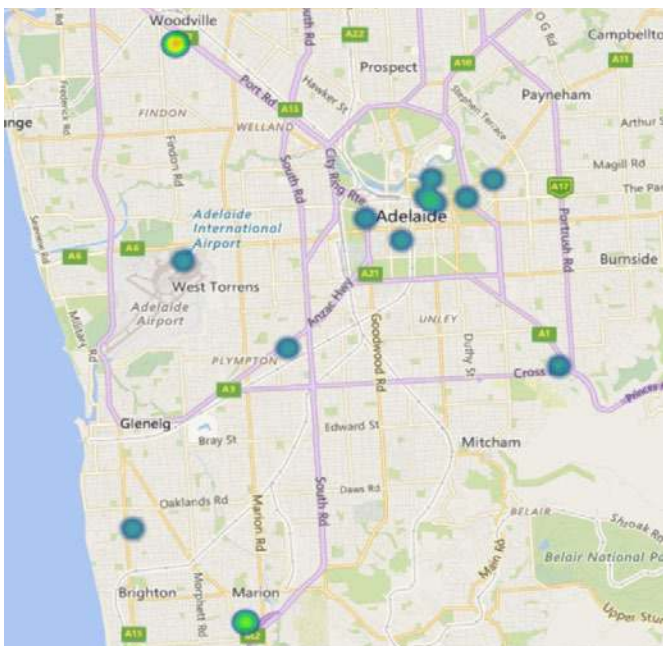
Across Adelaide, 17 cranes were observed, an increase of two. Eight cranes commenced and six were removed from projects.

Within the health sector, three cranes were moved from the Flinders Medical Centre project with a crane commencing on Minda Inc.'s assisted living site in North Brighton. Cranes supporting the Carmelite Retirement Living and St Andrews Hospital projects remain. The health sector has a total of five cranes representing 30% of the cities total cranes.

The strongest sector within Adelaide remains the residential sector with ten cranes, up from seven in our last index. Five cranes were added and two removed.

Additions included cranes at the West Franklin apartments, Kodo in Angus Street, Synagogue Place Student Housing, United Communities in Franklin Street and U2 in Waymouth Street. Deletions include Holiday Inn Express Hotel and 262 South Terrace.

The education sector has seen one crane commence at Adelaide Botanic High School and one crane removed from the University of SA health building. The Airport Hotel project in Sir Richard Williams Drive has seen a crane erected within the hotel sector.



### KEY SECTORS

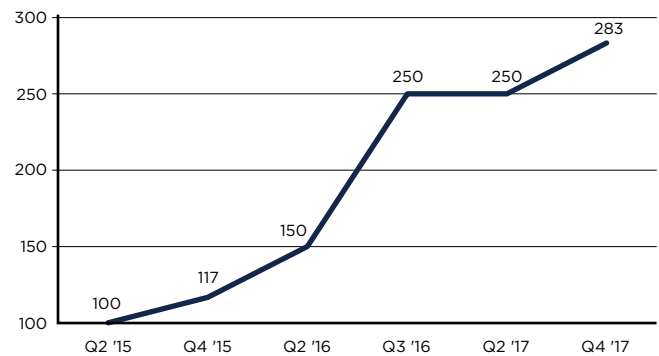
RESIDENTIAL	↑	EDUCATION	↓
HEALTH	↑	HOTEL	↓

### OVERALL STATUS



### RLB CRANE INDEX® - ADELAIDE

BASE = Q2 2015 = 100

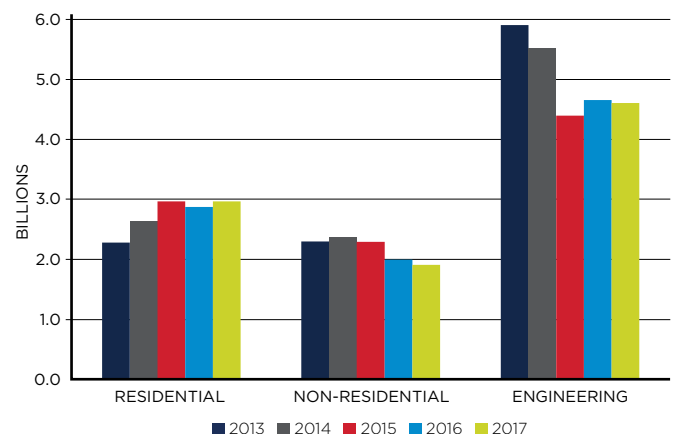


### CRANE ACTIVITY - ADELAIDE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q2 2017	%	+	-	NET	Q4 2017	%
COMMERCIAL	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	7	46.7%	5	-2	3	10	58.8%
HEALTH	7	46.7%	1	-3	-2	5	29.4%
EDUCATION	1	6.7%	1	-1	0	1	5.9%
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%	1	0	1	1	5.9%
CIVIL	0	0.0%	0	0	0	0	0.0%
OTHER	0	0.0%	0	0	0	0	0.0%
<b>TOTAL</b>	<b>15</b>	<b>100.0%</b>	<b>8</b>	<b>-6</b>	<b>2</b>	<b>17</b>	<b>100.0%</b>

### CONSTRUCTION WORK DONE - SOUTH AUSTRALIA

FINANCIAL YEAR



SOURCE: ABS

## BRISBANE

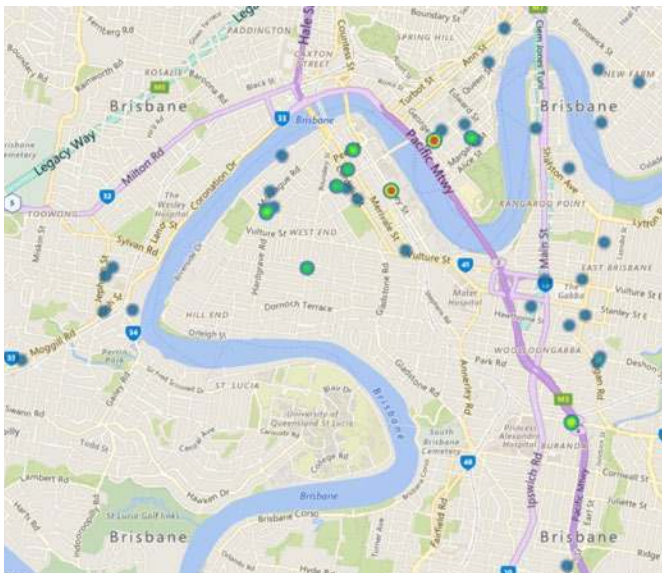
Brisbane's RLB Crane Index® has increased 5% since our previous index. The current index value of 116 is up from 111 at Q2 2017.

The amount of construction work currently being undertaken in Queensland remains positive with residential work still growing although non-residential fell for the year. Engineering work has steadied the significant falls seen in FY 15 and FY 16.

Eighty-five cranes can be seen around Brisbane, up from 81 in our previous index. Sixty-two cranes, or 72% of all Brisbane cranes, were within the residential sector, which is down from 89% in our previous index. Strong additions have been seen in the hotel, civil and other/mixed sectors during the current index.

The residential sector has seen 47 cranes removed from projects and 36 commencing. New projects include three cranes at Buranda Stage 1, single installations at: View Street in Annerley; Ascot Green; Mary Lane in Mary Street, Ann Street, both in the CBD; The Wellington in East Brisbane; FV No.1, Church Street & Brookes Street in Fortitude Valley; Remora Rd and Allen Street, both in Hamilton; projects in Scott Street, O'Connell Street and Linton Street in Kangaroo Point; Victoria Street in Kelvin Grove; developments in Barker Street, Maxwell Street and Brunswick Street in New Farm; Gasworks Stage 2 - Tower E in Newstead; Skyneedle Apartments in Manning Street, Riverside Dr, Lucid in Hope Street and Atlas South Brisbane, all in South Brisbane; projects at High Street, Augustus Street and Glen Rd in Toowong; West Village, Bohemia Apartments and projects in Jane Street at West End; and The Drapery, The Foundry and Eden Landin Woolloongabba.

No commercial cranes have commenced since our last index, with two cranes from Multiplex's site on St Pauls Terrace being removed.



### KEY SECTORS

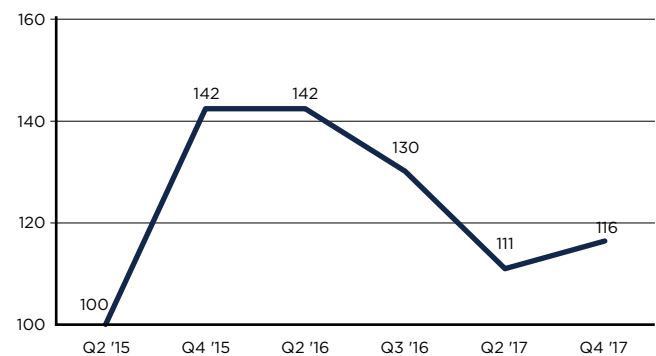
COMMERCIAL	HOTEL
RESIDENTIAL	CIVIL
HEALTH	OTHER/MIXED
RETAIL	

### OVERALL STATUS



### RLB CRANE INDEX® - BRISBANE

BASE = Q2 2015 = 100

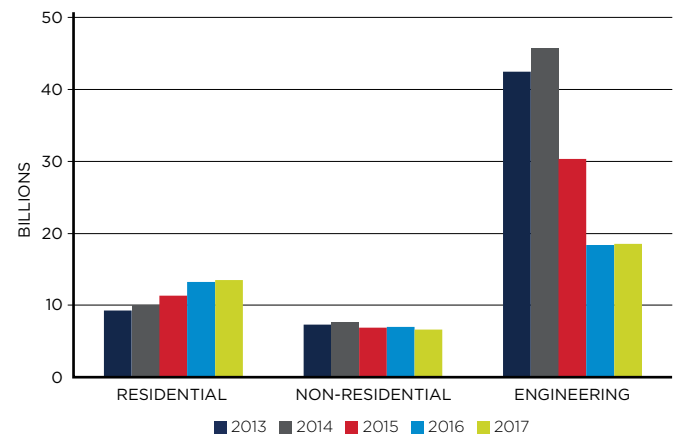


### CRANE ACTIVITY - BRISBANE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q2 2017	%	+	-	NET	Q4 2017	%
COMMERCIAL	3	3.7%	0	-2	-2	1	1.2%
RESIDENTIAL	72	88.9%	36	-47	-11	61	71.8%
HEALTH	1	1.2%	1	-1	0	1	1.2%
EDUCATION	0	0.0%	0	0	0	0	0.0%
RETAIL	0	0.0%	1	0	1	1	1.2%
CIVIC	0	0.0%	0	0	0	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	2	2.5%	3	0	3	5	5.9%
CIVIL	0	0.0%	4	0	4	4	4.7%
OTHER	3	3.7%	9	0	9	12	14.1%
<b>TOTAL</b>	<b>81</b>	<b>100.0%</b>	<b>54</b>	<b>-50</b>	<b>4</b>	<b>85</b>	<b>100.0%</b>

### CONSTRUCTION WORK DONE - QUEENSLAND

FINANCIAL YEAR



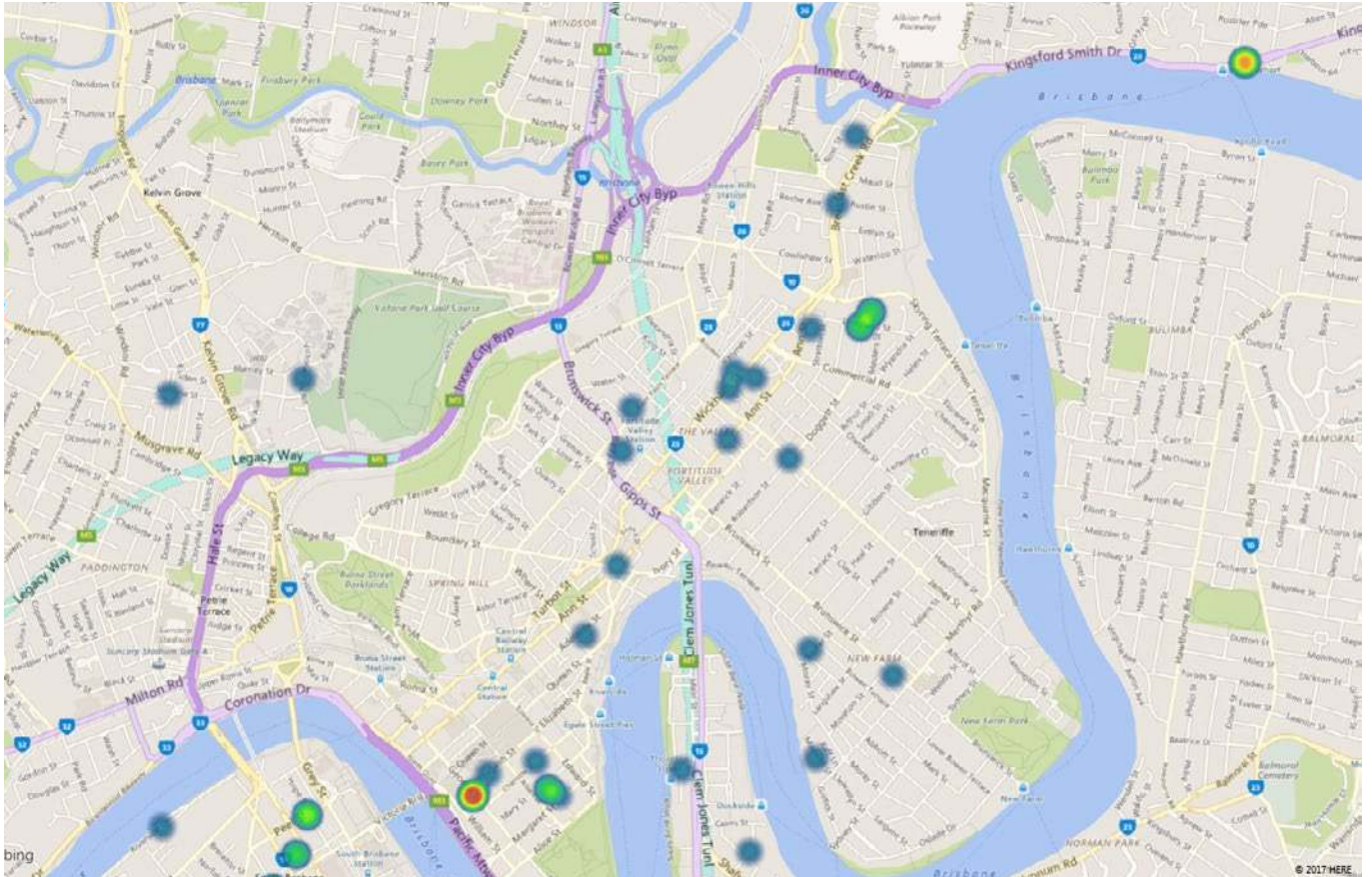
SOURCE: ABS

## BRISBANE

Within the other/mixed use sector, nine cranes have commenced including projects at Queens Wharf, Bunnings Warehouse in Newstead, South City Square, and projects within CBD (3), Kelvin Grove (1) and Woolloongabba (2).

New cranes have been erected at the Westside Private Hospital (health), Mercedes Benz Autohaus in Newstead (retail), two cranes at the Emporium Hotel and one at the Waterloo Hotel in Ann St (hotel).

The upgrade to the Kingsford Smith Drive in Hamilton has seen four cranes commence work.



## CANBERRA

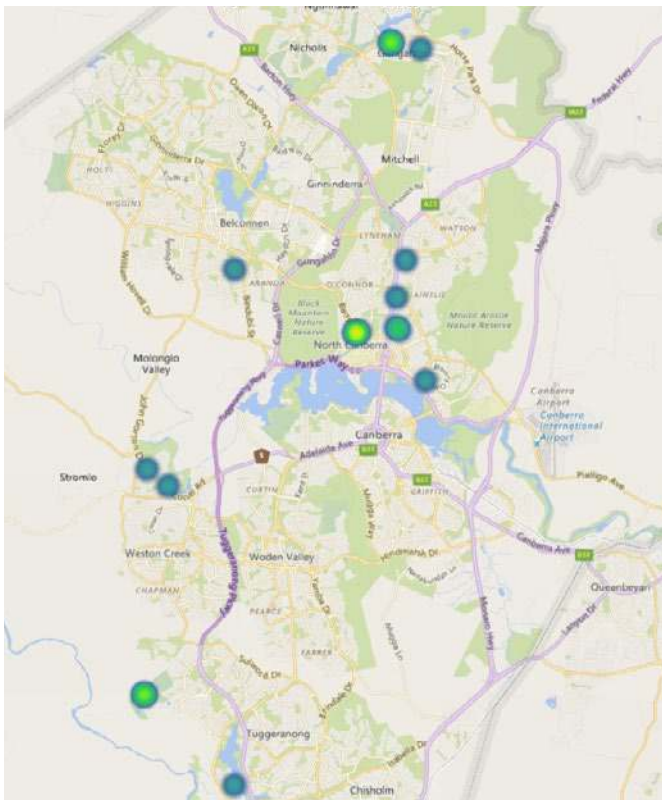
Canberra's construction work done for FY 17 rose 16% over FY 16 levels. Residential work was up 22%, non-residential work was down 2% and engineering work done was up by 25%. This rise in activity for the construction industry cannot be seen in the RLB Crane Index® values over the past three editions. Eighteen months ago the index was 340, with the index now at 360, a slight increase. Even though the number of cranes was down slightly since our last publication, the rise in residential work within the ACT has seen it dominate the industry. Canberra now has 18 cranes in the sky, down by one since the last index.

Ten cranes commenced on projects and 11 cranes were removed from sites since our last count.

The residential sector dominates the activity with 83% of all cranes on residential projects. Within the sector, 8 cranes were removed and 9 cranes added, for a net decrease of one crane.

Residential commencements include: ANU Student Accommodation 6 (2 cranes) in Acton, Highgate in Civic, Halston in Braddon, Deco in Braddon, Apartments in Hinder Street, Gungahlin, Odin and Luna projects in Coombs and Macquarie Park.

One new crane has been erected at the Australian National University's CECS/MSI building.



### KEY SECTORS

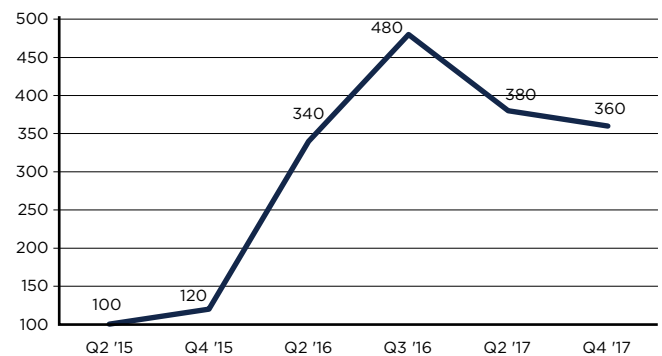
COMMERCIAL	↑	EDUCATION	↓
RESIDENTIAL	↑	RETAIL	↑
OTHER/MIXED	↓		

### OVERALL STATUS



### RLB CRANE INDEX® - CANBERRA

BASE = Q2 2015 = 100

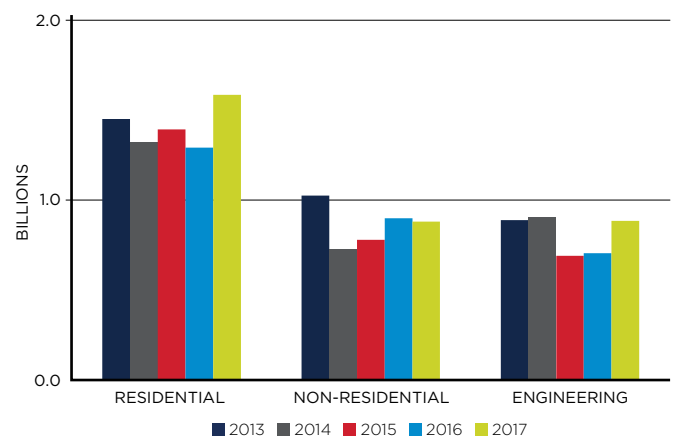


### CRANE ACTIVITY - CANBERRA

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q2 2017	%	+	-	NET	Q4 2017	%
COMMERCIAL	1	5.3%	0	-1	-1	0	0.0%
RESIDENTIAL	14	73.7%	9	-8	1	15	83.3%
HEALTH	0	0.0%	0	0	0	0	0.0%
EDUCATION	1	5.3%	1	-1	0	1	5.6%
RETAIL	1	5.3%	0	-1	-1	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	2	10.5%	0	0	0	2	11.1%
<b>TOTAL</b>	<b>19</b>	<b>100.0%</b>	<b>10</b>	<b>-11</b>	<b>-1</b>	<b>18</b>	<b>100.0%</b>

### CONSTRUCTION WORK DONE - ACT

FINANCIAL YEAR



SOURCE: ABS

## DARWIN

Darwin's construction work continues to slow with a fall of 21% in 2016. Residential work fell by 21%, non-residential by 5% and Engineering work by 24%.

There are no cranes installed on developments within Darwin at the moment.

### KEY SECTORS

COMMERCIAL



RETAIL

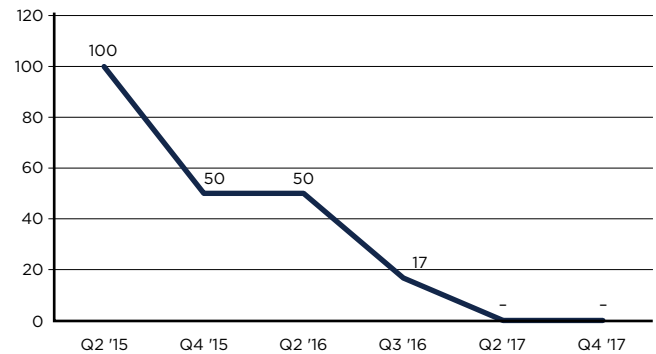


### OVERALL STATUS



### RLB CRANE INDEX® - DARWIN

BASE = Q2 2015 = 100

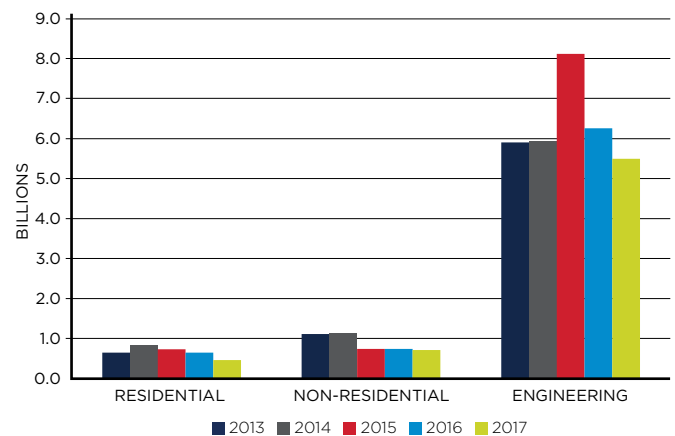


### CRANE ACTIVITY - DARWIN

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

### CONSTRUCTION WORK DONE - NORTHERN TERRITORY

FINANCIAL YEAR



SOURCE: ABS



## GOLD COAST

The Gold Coast is still showing signs of strong growth during 2017. The RLB Crane Index® rose to 207 for Q4 2017, up from 200 in Q2 2017, a rise of 4%.

Although a small rise, total cranes now number 31, up from 30 in the previous index. Since our last publication 9 cranes have been removed and 10 have been erected.

The residential sector accounts for 84% of all Gold Coast cranes, down from 93% last index. A total of 26 cranes can be seen on residential projects. New residential cranes include projects at: One Burleigh Headland, Miami One, North Apartments, South Lakes Stage Three (precast yard), Northcliffe Residences and Iconic at Kirra.

Major residential projects continuing include: Jewel residences in Surfers and Marina Concourse in Carrara.

New cranes have been erected at Westfield Coomera, Gold Coast Private Hospital, Gold Cost Cultural Centre and Southport Sharks Mantra Hotel.

### KEY SECTORS

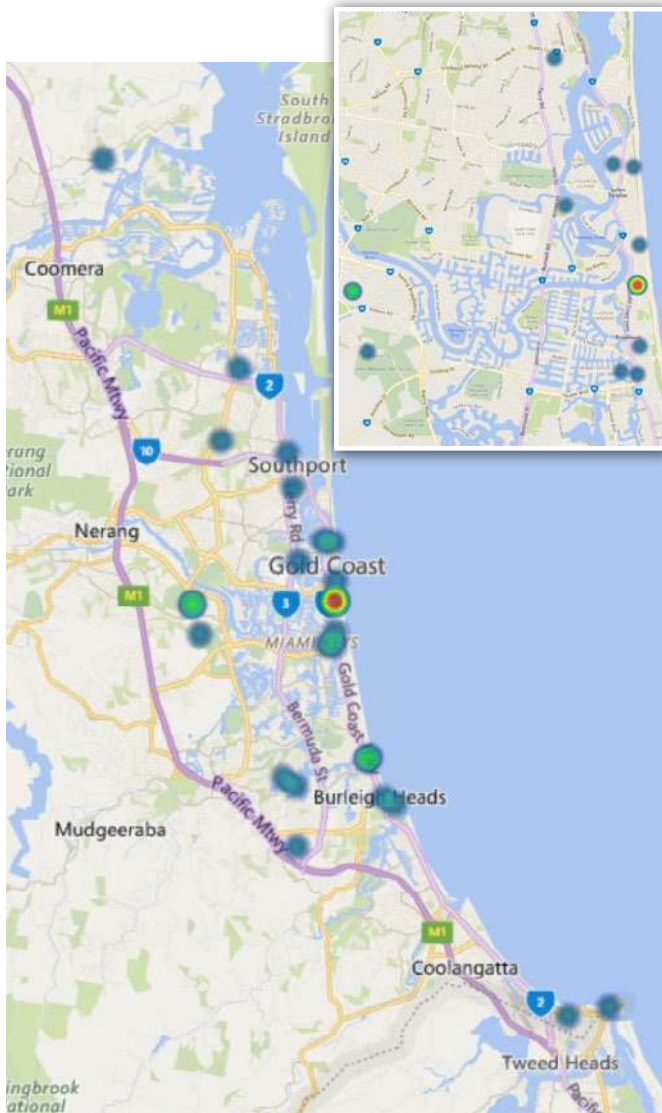
RESIDENTIAL	↑	RECREATION	↑
HEALTH	↑	HOTEL	↓
CIVIC	↑	COMMERCIAL	↓

### OVERALL STATUS



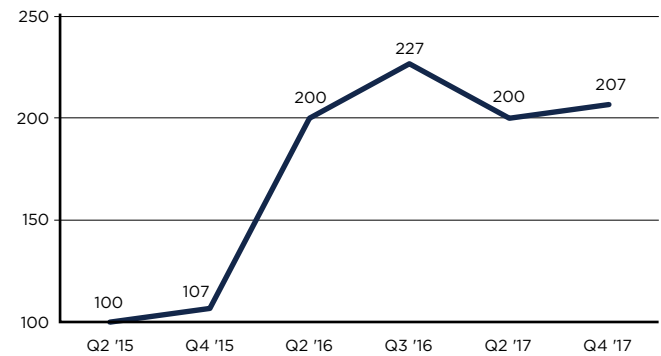
### CRANE ACTIVITY - GOLD COAST

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q2 2017	%	+	-	NET	Q4 2017	%
COMMERCIAL	0	0.0%	1	0	1	1	3.2%
RESIDENTIAL	28	93.3%	6	-8	-2	26	83.9%
HEALTH	0	0.0%	1	0	1	1	3.2%
EDUCATION	0	0.0%	0	0	0	0	0.0%
RETAIL	0	0.0%	0	0	0	0	0.0%
CIVIC	0	0.0%	1	0	1	1	3.2%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	2	6.7%	1	-1	0	2	6.5%
CIVIL	0	0.0%	0	0	0	0	0.0%
OTHER	0	0.0%	0	0	0	0	0.0%
<b>TOTAL</b>	<b>30</b>	<b>100.0%</b>	<b>10</b>	<b>-9</b>	<b>1</b>	<b>31</b>	<b>100.0%</b>



### RLB CRANE INDEX® - GOLD COAST

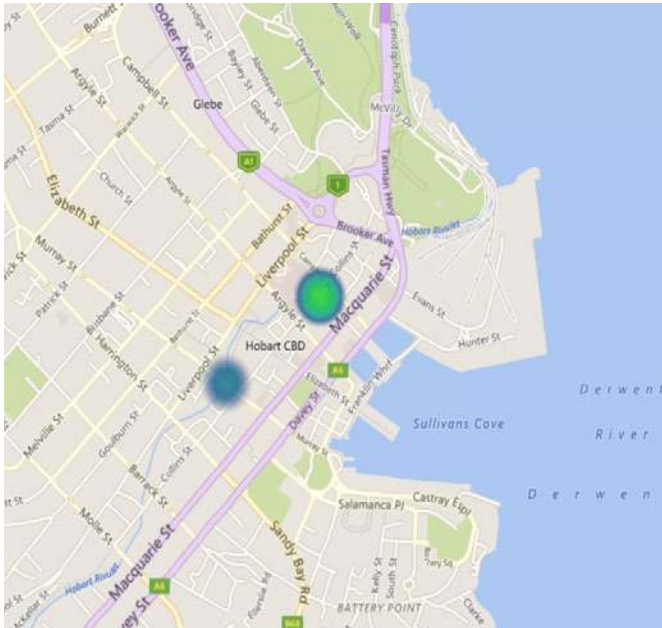
BASE = Q2 2015 = 100



## HOBART

Hobart's third RLB Crane Index® presence, sees the index rise to 75, up from 25 at Q2 2017.

Two cranes have been installed at the redevelopment of the Hobart Hospital site with one crane remaining at the Myer redevelopment on Murray Street.



### KEY SECTORS

HEALTH



RETAIL

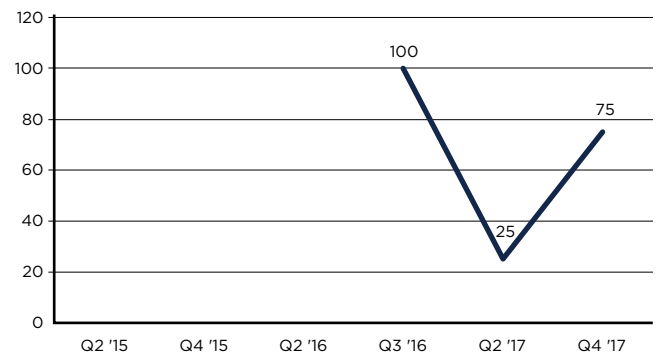


### OVERALL STATUS



### RLB CRANE INDEX® - HOBART

BASE = Q2 2015 = 100

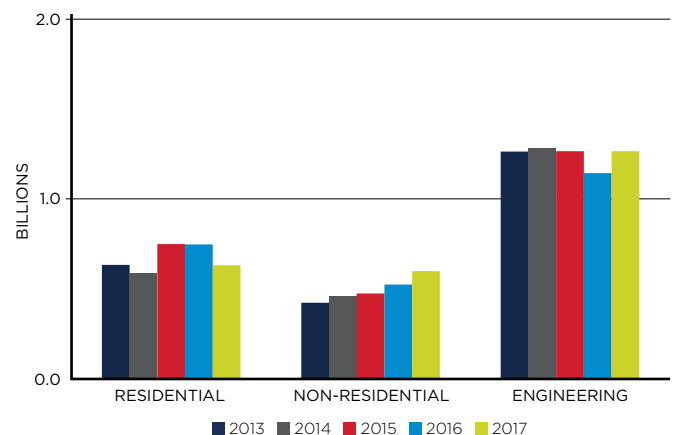


### CRANE ACTIVITY - HOBART

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

### CONSTRUCTION WORK DONE - TASMANIA

FINANCIAL YEAR



SOURCE: ABS

## MELBOURNE

Melbourne's RLB Crane Index® has recorded a 3% increase in this edition. The index has risen to a record high of 130 up from the previous high of 127 in the 8th edition.

Construction work done in Victoria was up 6% in FY 17. Residential work is still strong, recording a 5% lift while non-residential work was also up 5%. Engineering work done was up 7% over FY 16.

Cranes across Melbourne now number 151, a new high, up from 146 in the previous edition, a net gain of 5 cranes. 88 cranes were added and 83 removed from sites.

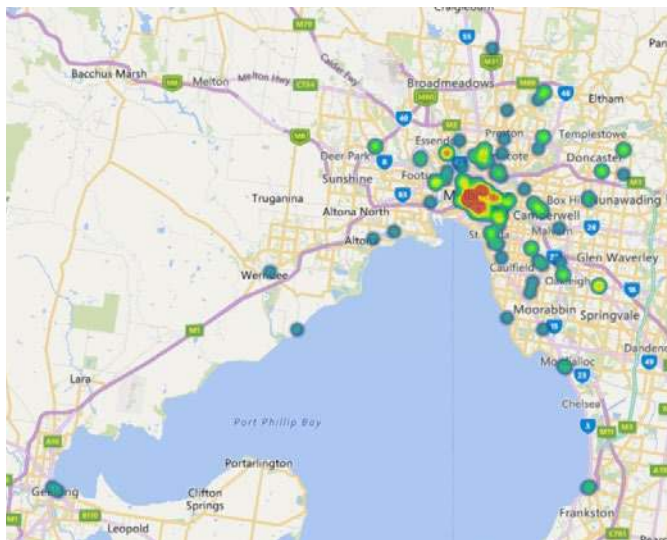
Across Melbourne, the CBD and surrounding suburbs have 47 (31%) cranes installed, The eastern suburbs have 32 (21%), the north have 35 (23%), the south have 22 (15%) and the west have 15 (10%) cranes installed.

### CRANE ACTIVITY - MELBOURNE REGIONS

	OPENING COUNT		MOVEMENT		CLOSING COUNT	
	Q2 2017	%	+	-	Q4 2017	%
CBD & SURROUNDS	44	30%	26	-23	47	31%
EAST	32	22%	20	-20	32	21%
NORTH	29	20%	19	-13	35	23%
SOUTH	31	21%	14	-23	22	15%
WEST	10	7%	9	-4	15	10%
<b>TOTAL</b>	<b>146</b>	<b>100%</b>	<b>88</b>	<b>-83</b>	<b>151</b>	<b>100%</b>

Since our last index there has been a move of cranes from the south to the east and west, highlighting the growth of higher density residential projects within these regions.

The residential sector accounts for 82% of all cranes installed in Melbourne. 124 residential cranes in 54 suburbs across Melbourne were counted this edition, up from 122 in Q2 2017. New projects commencing accounted for 72 cranes being installed and 70 cranes from projects completed or nearing completion around Melbourne.



### KEY SECTORS

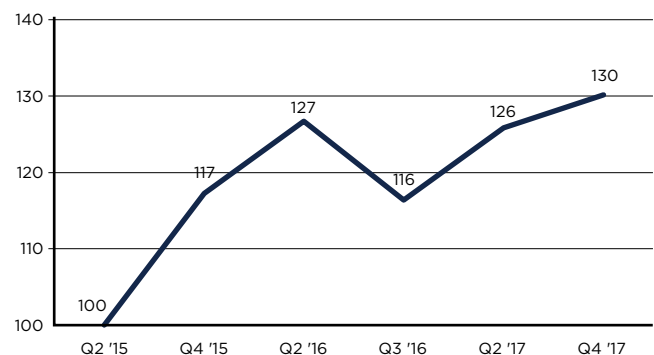
COMMERCIAL	↓	CIVIC	↑
RESIDENTIAL	↑	HOTEL	↑
HEALTH	↑	CIVIL	↓
EDUCATION	↑	OTHER/MIXED	↓
RETAIL	↑		

### OVERALL STATUS



### RLB CRANE INDEX® - MELBOURNE

BASE = Q4 2015 = 100

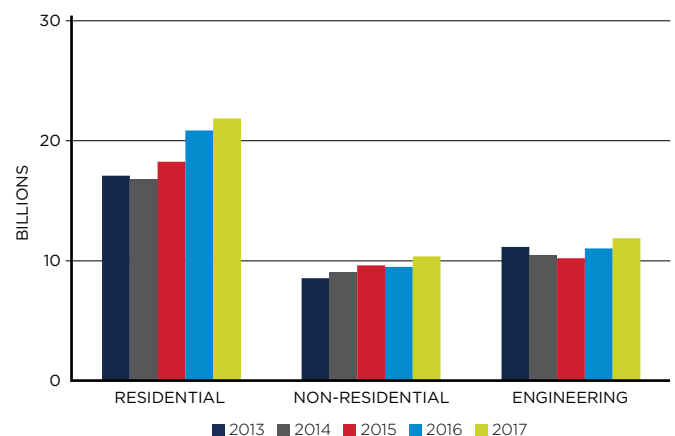


### CRANE ACTIVITY - MELBOURNE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q2 2017	%	+	-	NET	Q4 2017	%
COMMERCIAL	9	6.2%	6	-5	1	10	6.6%
RESIDENTIAL	122	83.6%	72	-70	2	124	82.1%
HEALTH	4	2.7%	2	-2	0	4	2.6%
EDUCATION	4	2.7%	0	-1	-1	3	2.0%
RETAIL	2	1.4%	0	-1	-1	1	0.7%
CIVIC	2	1.4%	0	-1	-1	1	0.7%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	3	2.1%	2	-3	-1	2	1.3%
CIVIL	0	0.0%	1	0	1	1	0.7%
OTHER	0	0.0%	5	0	5	5	3.3%
<b>TOTAL</b>	<b>146</b>	<b>100.0%</b>	<b>88</b>	<b>-83</b>	<b>5</b>	<b>151</b>	<b>100.0%</b>

### CONSTRUCTION WORK DONE - VICTORIA

FINANCIAL YEAR



SOURCE: ABS

## MELBOURNE

New residential projects include:

### CBD AND SURROUNDS

Melbourne Quarter, Collins Wharf and the Elm & Stone in the Docklands; 178 Wellington Parade and Dallas Brookes Hall redevelopment in East Melbourne; Aurora, Scape Swanston, Union Tower, 839-889 Collins Street, The Fifth, Victoria One, 388 Lonsdale, Conservatory in the CBD; New Charsfield, 194 and 198 St Kilda Road, Saint and Opera in St Kilda Road and Australia 108, Southbank Place, Kings Domain and The International in Southbank.

### EAST

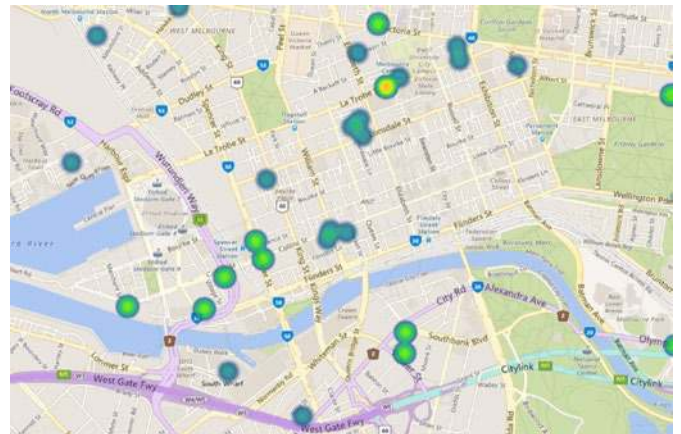
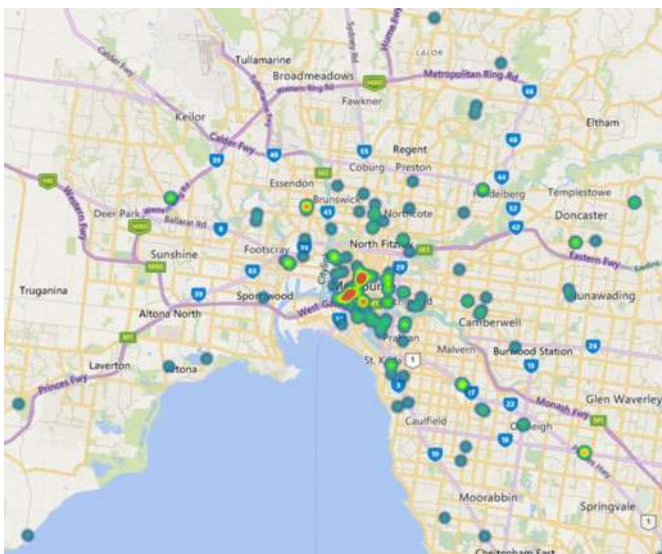
Chloe and Sky One in Box Hill; Nest at the Hill, Primrose 9, Courtyard Apartments and Apadana Apartments in Doncaster; Trentwood in Glen Iris; Hawthorn Bond, Queens Avenue, CV Apartments, Avenir Apartments and 402 Riversdale Rd in Hawthorn; Ivanhoe Apartments and Punton's Apartments in Ivanhoe; Derby Place in Kew; Vanguard and Harvard Apartments in Malvern; Isla, Dux Richmond Hill, United, Claudia and Olor in Richmond and 661 Chapel St, Millswyn, Capitol Grand and Royal Como in South Yarra.

### SOUTH

Luxe Residences in Balaclava; 79-83 Mitchell St in Bentleigh; Cooper and Maison in Carnegie; The Village in Cheltenham; Elk Apartments in Elsternwick; Ormond Road in Elwood; Clyde St and Sol De Mar in Frankston; Warrigal Road and Hue Apartments in Hughesdale; Jasper and McKinnon Road; Parkvue Apartments and Nepean Highway in Mornington; Carlton Apartments in Prahran; Gardenside in Sandringham; Dorcas St, Lakehouse, The Record, Albert Road and Domain Road in South Melbourne.

### WEST

Riverina and Treeline in Footscray; Deakin Student Accommodation in Geelong; Summus and Marque in Maribyrnong; the Mill in Newport; the Lighthouse in Werribee and Frankie in Yarraville.



The Commercial sector has ten cranes erected; other/mixed use sector has five; health four; education three; hotel two and a single crane on both the retail and civic sectors.

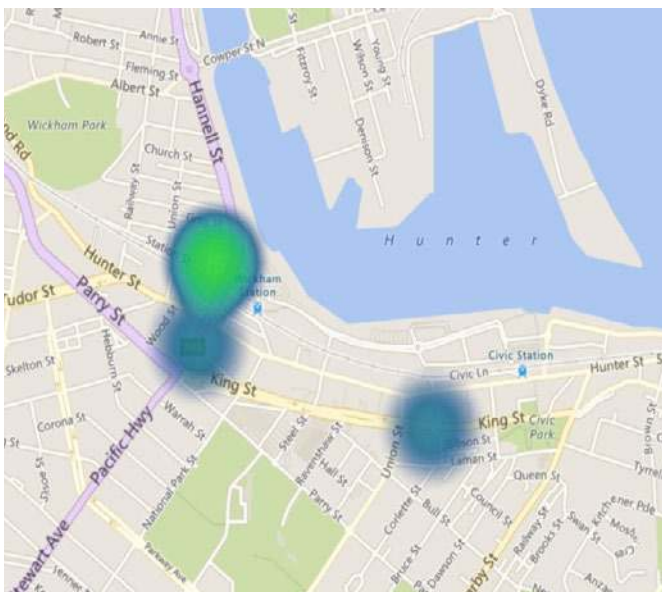
### NORTH

288 Albert St, 808-818 Sydney Road, The Burgin Residence, Lygon Place, Rima, Iseo, 8 Lygon St and The Moreland in Brunswick; Botanic and Laureate at Parc Vue in Bundoora; Swanston Central and 205-223 Pelham St in Carlton; 122-138 Roseneath St and 217-241 Queens Parade in Clifton Hill; Little Oxford in Collingwood; Fitz & Co in Fitzroy; River Walk Kensington; 36 Margaret St and Moore in Moonee Ponds; 488 Queens Parade in North Carlton; Arden Gardens, Reflections and Flemington Road in North Melbourne; Pace of Northcote; Prosper Parkside in Parkville, High St in Preston and Hawke & King in West Melbourne.

## NEWCASTLE

Newcastle has seen a rise in the number of cranes observed since the last RLB Crane Index®. The index has risen from a low of 50 in Q2 2017 to 63 this index. Five cranes now dot the skyline around Newcastle, down from a high of nine in Q3 2016.

Three cranes within the Newcastle area are sited on residential projects. These include two cranes at 113 Charles Street and one at 783 Stewart Street. The new Holiday Inn Express in King Street and St Bede's College in Chisholm have a crane each.



### KEY SECTORS

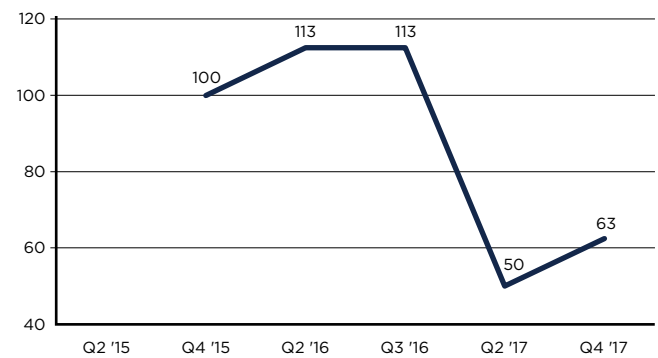
RESIDENTIAL  HOTEL 

### OVERALL STATUS



### RLB CRANE INDEX® - NEWCASTLE

BASE = Q4 2015 = 100



### CRANE ACTIVITY - NEWCASTLE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q2 2017	%	+	-	NET	Q4 2017	%
COMMERCIAL	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	4	100.0%	3	-4	-1	3	60.0%
HEALTH	0	0.0%	0	0	0	0	0.0%
EDUCATION	0	0.0%	1	0	1	1	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	0	0.0%	1	0	1	1	20.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
OTHER	0	0.0%	0	0	0	0	0.0%
<b>TOTAL</b>	<b>4</b>	<b>100.0%</b>	<b>5</b>	<b>-4</b>	<b>1</b>	<b>5</b>	<b>100.0%</b>

## PERTH

Perth's RLB Crane Index® rose for the current edition with the index rising 4%.

Even with a fall in residential work done of 24% and non-residential at 4.5% for FY 17 over FY 16, crane numbers increased during the past six months.

Total cranes in Perth now number 25, up from 24 in our previous index.

Cranes within the residential sector in Perth now number 14 or 56% of total cranes. Twelve cranes have been erected since the last index and six have been removed. The other/ mixed use sector now accounts for seven cranes, the hotel sector numbering three and commercial has one crane erected.

New residential projects include: the Cecil in Cannington; Cockburn in Cockburn; The Cove and Tasker Apartments in Fremantle; Charles Street in North Perth; Aurelia in South Perth; Park Avenue Apartments in Wembley and Aire Apartments in West Perth.

Projects within the other/mixed sector include the mixed use development at Elizabeth Quay (4 cranes), Subi XO and University of WA's Forrest Hall.

The Regent Gardens Hotel at Scarborough has one hotel crane installed as has the Stirling Cross development at Osbourne Park for the commercial sector.

### KEY SECTORS

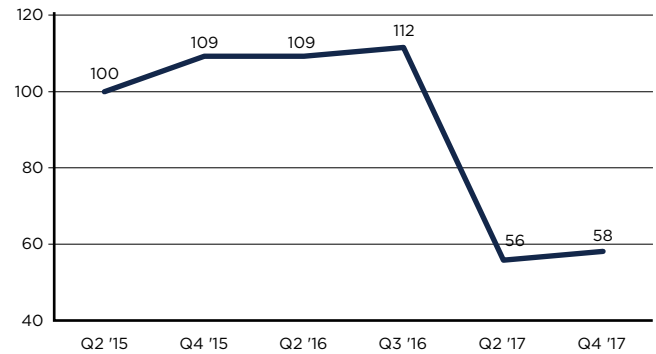
COMMERCIAL		CIVIC	
RESIDENTIAL		HOTEL	
RETAIL		OTHER/MIXED	

### OVERALL STATUS



### RLB CRANE INDEX® - PERTH

BASE = Q2 2015 = 100

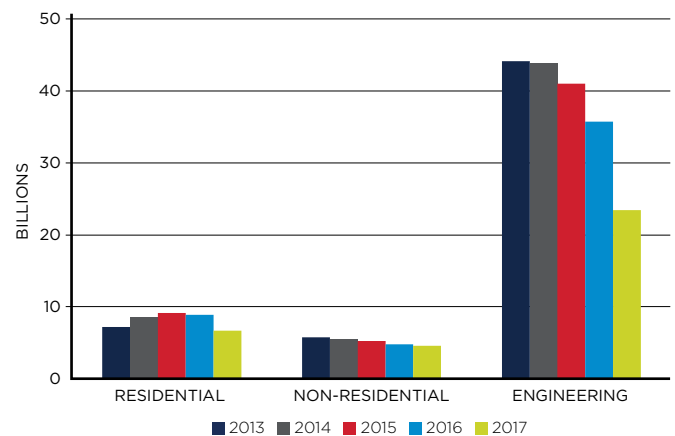


### CRANE ACTIVITY - PERTH

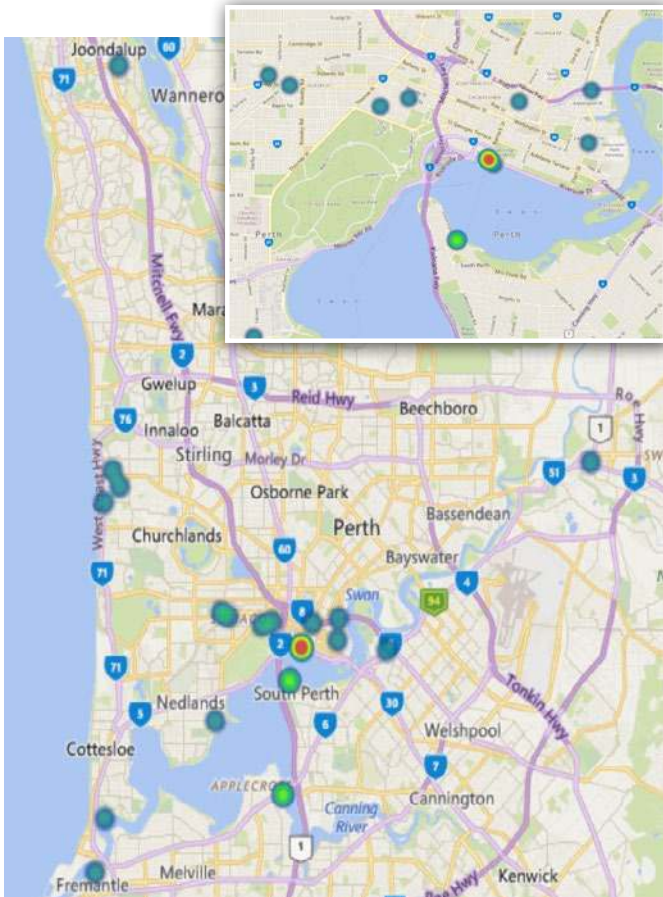
	OPENING COUNT Q2 2017	%	MOVEMENT + - NET	CLOSING COUNT Q4 2017	%
COMMERCIAL	4	16.7%	1 -4 -3	1	4.0%
RESIDENTIAL	9	37.5%	12 -6 6	14	56.0%
HEALTH	0	0.0%	0 0 0	0	0.0%
EDUCATION	0	0.0%	0 0 0	0	0.0%
RETAIL	2	8.3%	0 -2 -2	0	0.0%
CIVIC	1	4.2%	0 -1 -1	0	0.0%
RECREATION	0	0.0%	0 0 0	0	0.0%
HOTEL	4	16.7%	2 -3 -1	3	12.0%
CIVIL	0	0.0%	0 0 0	0	0.0%
OTHER	4	16.7%	4 -2 2	7	28.0%
<b>TOTAL</b>	<b>24</b>	<b>100.0%</b>	<b>19 -18 1</b>	<b>25</b>	<b>100.0%</b>

### CONSTRUCTION WORK DONE - WESTERN AUSTRALIA

FINANCIAL YEAR



SOURCE: ABS



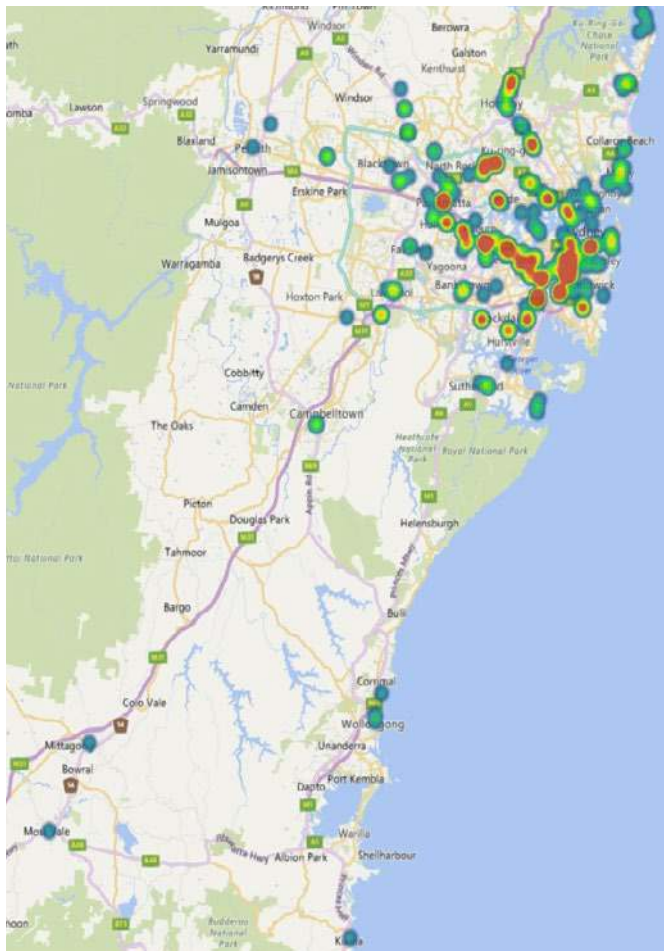
## SYDNEY

Sydney continues to dominate the RLB Crane Index® with another 5% increase in Q4 2017. From an index value of 178 in Q2 2016 (8th edition), the index has risen 21%.

Sydney can now see 350 cranes on the skyline around Sydney, up from 334 in our previous edition. This represents more than 51% of all cranes erected in the key centres of Australia. Since our last edition Sydney has seen 143 cranes erected on new projects and 127 removed for projects completed or nearing completion.

Construction work done within New South Wales grew by another 7.5% during FY 17, with residential activity up by 12% and non-residential down by 6%. Engineering work done was up 11% over FY 16. This increase in work done is reflected in the growth of residential cranes seen around Sydney. The spread of cranes, highlighted in the heat maps within this edition, showcase the construction activity along the main northern, western and southern corridors of Sydney.

Residential cranes soared to 298 around Sydney which amounts to 43% of total cranes erected within Australia and 54% of all cranes supporting the residential sector in Australia. 109 suburbs in Sydney have residential cranes erected.

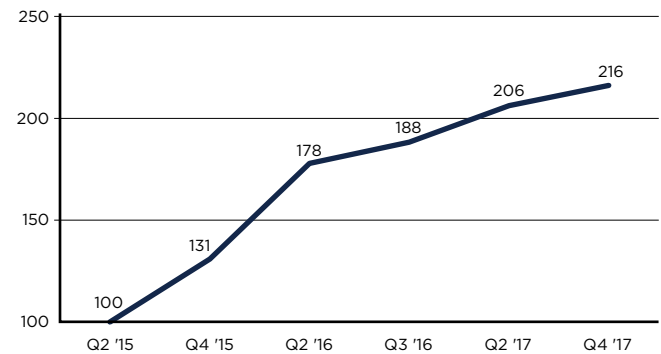


KEY SECTORS			
COMMERCIAL	RECREATION		
RESIDENTIAL	HOTEL		
HEALTH	CIVIL		
EDUCATION	OTHER/MIXED		



### RLB CRANE INDEX® - SYDNEY

BASE = Q2 2015 = 100

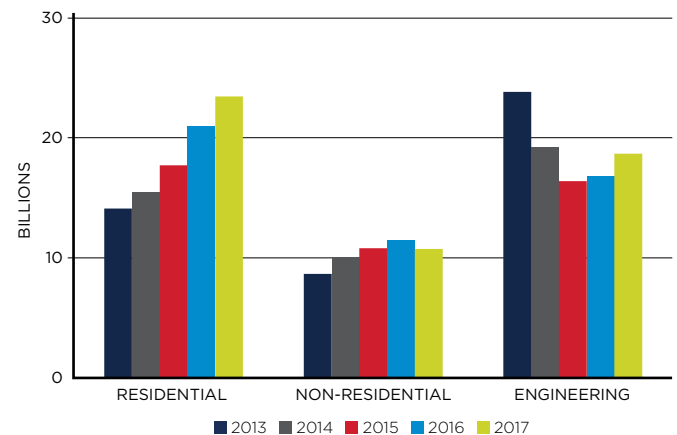


### CRANE ACTIVITY - SYDNEY

	OPENING COUNT Q2 2017	%	MOVEMENT + - NET	CLOSING COUNT Q4 2017	%
COMMERCIAL	13	3.9%	6 -1 5	18	5.1%
RESIDENTIAL	292	87.4%	120 -114 6	298	85.1%
HEALTH	5	1.5%	1 -2 -1	4	1.1%
EDUCATION	2	0.6%	3 -1 2	4	1.1%
RETAIL	0	0.0%	0 0 0	0	0.0%
CIVIC	0	0.0%	0 0 0	0	0.0%
RECREATION	1	0.3%	0 -1 -1	0	0.0%
HOTEL	0	0.0%	8 0 8	8	2.3%
CIVIL	7	2.1%	4 -3 1	8	2.3%
OTHER	14	4.2%	1 -5 -4	10	2.9%
<b>TOTAL</b>	<b>334</b>	<b>100.0%</b>	<b>143 -127 16</b>	<b>350</b>	<b>100.0%</b>

### CONSTRUCTION WORK DONE - NEW SOUTH WALES

FINANCIAL YEAR



SOURCE: ABS

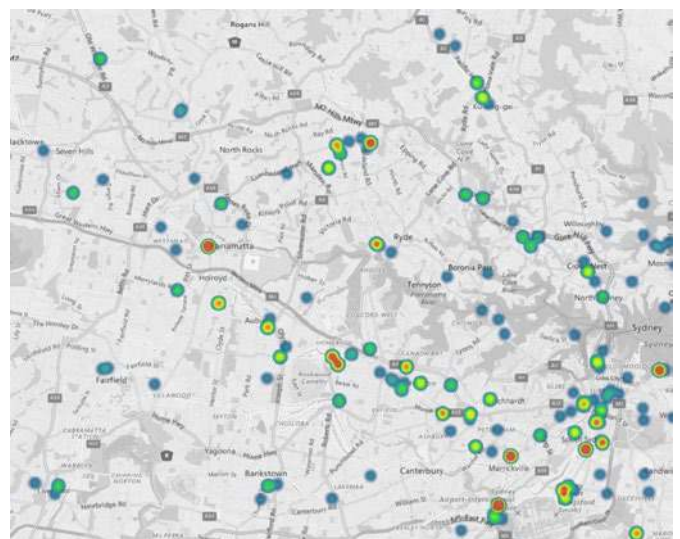
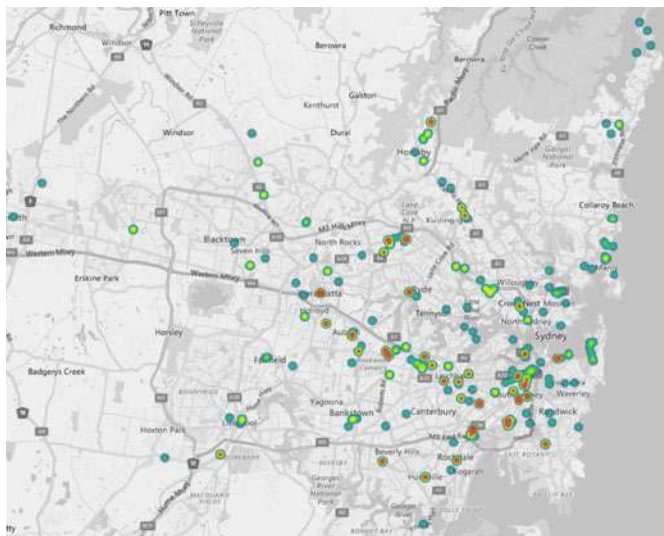
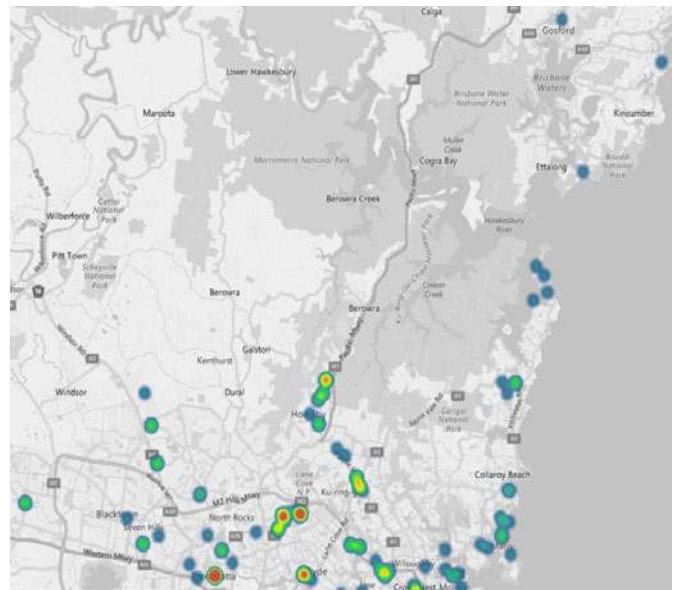
## SYDNEY

Currently there are 18 commercial cranes, ten other/ mixed use cranes, eight each on civil and hotel sites and four each on health and education developments.

Since our last report, Sydney has added 120 residential cranes and 114 have been removed. Cranes are positioned in most Sydney suburbs, unlike other Australian cities where the cranes are located closer to the city centre.

Suburbs currently with the most number of residential cranes include:

- Epping - 16
- Wollri Creek - 13
- Parramatta - 10
- Burwood - 9
- Mascot - 8
- Homebush, Lane Cove, Lewisham , Zetland - 7  
Leichhardt, Surry Hills - 6
- Ashfield, Auburn, Flemington, Meadowbank,  
Mosman, Ryde and Waterloo - 5



Eighteen commercial cranes can be seen on projects at: Flinders Centre in Bankstown; Mirvac Tech Park development at Eveleigh; Mount Street and 317 Pacific Highway in North Sydney; GCA building at Redfern; Pitt Street, York Street, Wynyard Place and Greenland Hotel development in the CBD.

Hotel developments can be seen at Pagewood, Mascot, Penrith and Rugby place at Circular Quay.

New education cranes include projects at Knox Grammar, Sydney University, University of Technology and at the University of NSW.

Health projects include Blacktown Hospital, Northern Beaches Hospital, and Pittwater Private.



## 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 Australian index tracks the numbers of cranes in the key cities within Australia.

In September 2012, the Rider Levett Bucknall (RLB) Oceania Research & Development and Communication teams created the RLB Crane Index® as a simple insight into the construction sector's health within Australia. It was based on the theory that cranes in the sky supported the construction industry which is a significant contributor to Australia's economic growth.

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 (6th edition Q2 2015), 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 Q3 2013, 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 2015.

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 2015, against the count in Q4 2017, the following formula can be used to determine the percentage increase (or decrease).

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

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.

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