

## **AUSTRALIA**

The Australian construction industry is showing no signs of slowing, with the Q3 2016 RLB Crane Index® registering a record 663 tower cranes across Australia. The number of cranes have increased in Adelaide, Canberra, Gold Coast, Perth and Sydney with both Brisbane and Newcastle steady. Falls in the number of cranes were recorded in Darwin and Melbourne. Since our last RLB Crane Index®, 335 cranes have been installed on new projects across Australia and 325 removed.

This remains consistent in the volumes of building work done across Australia. For the financial year 2016, in excess of \$100b of building work was completed, up from \$95b in 2015. The rise of 5% of work done is reflected in the nine additional cranes identified. The RLB Crane Index® now includes the first count of cranes within Hobart, which for the first time represents all Australian Capital Cities.

The residential sector continues to be the driving force in activity with more than 81% of all cranes sighted on new apartment developments around the country. Increases have been seen in the Residential, Health and Hotel sectors with falls in Commercial and Retail and Civic projects.

The RLB Crane Index® for Q3 2016, represents 663 cranes spread across the country, with 90% on eastern seaboard projects.

Sydney continues to be the driver of crane activity within the country with 46% of all cranes (up from 44%). Melbourne and Brisbane saw small losses in crane numbers as projects get close to completion.

Adelaide's increase of six cranes is reflected in the commencement of the \$185m upgrade and expansion of Flinders Medical Centre (3 cranes) and new residential projects.

Brisbane's residential sector remains strong with 87 cranes counted. This represented a loss of four cranes from our last Index.

## **AUSTRALIAN CRANE HOTSPOTS**



## Q3 2016 RLB CRANE INDEX® SUMMARY

CITIES	KEY SECTORS	
ADELAIDE	COMMERCIAL	CIVIC
BRISBANE	RESIDENTIAL [	RECREATION [
CANBERRA	HEALTH 🔯	HOTEL
DARWIN	EDUCATION [	CIVIL
GOLD COAST	RETAIL	OTHER
MELBOURNE TA		
NEWCASTLE <b>[</b>	LEGEND  INCREASE	DECREASE CRANE
PERTH		IN NUMBER OF CRANES STEADY
SYDNEY		

## RLB CRANE INDEX® COMPARATIVE DATA

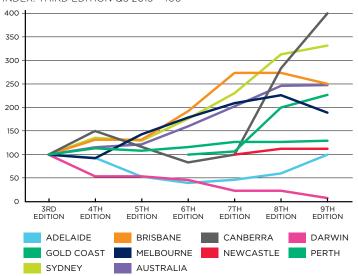
INDEX: THIRD EDITION Q3 2013 = 100

	3RD EDITION 9/2013	4TH EDITION 3/2014	5TH EDITION 9/2014	6TH EDITION 3/2015	7TH EDITION 9/2015	8TH EDITION 3/2016	9TH EDITION 9/2016	% INDEX MOVEMENT
ADELAIDE	100	93	53	40	47	60	100	67%
BRISBANE	100	132	132	192	274	274	250	-9%
CANBERRA	100	150	117	83	100	283	400	41%
DARWIN	100	54	54	46	23	23	8	-67%
GOLD COAST	-	-	-	100	107	200	227	13%
HOBART	-	-	-	-	-	-	100	-
MELBOURNE	100	92	143	178	209	226	197	-13%
NEWCASTLE	=	-	-	-	100	113	113	0%
PERTH	100	114	108	116	127	127	130	2%
SYDNEY	100	136	129	176	230	313	332	6%
AUSTRALIA	100	115	122	160	203	246	249	1%

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 RLB Crane Index.

### GRAPHICAL REPRESENTATION OF COMPARATIVE DATA

INDEX: THIRD EDITION Q3 2013 = 100





The strength of the sector is reflected in the 59 cranes that were erected on new projects. 300 George Street, The Yards in Bowen Hills and Coorparoo Square are the largest projects with cranes erected in Brisbane with 10 cranes collectively, more than 10% of all cranes. The crane heat map highlights the spread of projects north of the CBD from the previous RLB Crane Index®.

Canberra's increase of seven cranes reflects a 41% increase since our last RLB Crane Index. New projects commencing in the health and civic sectors (University of Canberra Hospital, Calvary Hospital and ACT Supreme Court) added three new cranes with the remainder on residential projects in Campbell, Griffith, Tuggeranong and Barton.

Darwin's construction work is slowing down highlighted by the 40% fall in building work done in 2016 compared to 2014. The single crane is situated in Wood Street.

The Gold Coast continues its rise in building work with a further increase in cranes. A total of seventeen cranes were erected since the last RLB Crane Index, with 13 removals. Residential projects account for 29 cranes on the Gold Coast out of 34. The Commonwealth Games Village has seven cranes (down from nine). The spread of cranes is seen from Tweed Heads in the south, to Biggara Waters to the north

Hobart's first entry in the RLB Crane Index® has resulted in four cranes sighted at Parliament Square, Melville Street and Macquarie Street.

Melbourne's building activity is reflected in the 108 cranes removed from projects nearing completion, and 88 new cranes erected. Large projects nearing completion include the office tower and extension at Chadstone Shopping Centre, Caulfield Village and a number of residential towers in the CBD, Docklands, Southbank and South Yarra. New starts include Monash University's new Learning and Teaching Centre at Clayton, Whitehorse Tower, Aspire in Maribyrnong, Avant in A'Beckett Street and Collins

Cranes have been sighted in Geelong to the west, Essendon Airport to the north, Ringwood to the east and Cape Schanck to the south. Long term crawler cranes were sighted at the Viva Energy Refinery in Geelong, but have not been included in the physical count. Residential cranes represent 85% of all cranes in Melbourne. Builders with the most cranes include Multiplex (14), Probuild (14), Lend Lease (10), Hacer (6) and Mirvac (5).

39% of all cranes are located within the CBD, 31% to the east, 13% to the south and 12% to the north. Only 7% of projects with cranes are in Melbourne's west.

### **CRANE ACTIVITY - AUSTRALIA BY KEY CITIES**

	OPENING Q2 2016	COUNT %	M( +	OVEME -	NT NET	CLOSING Q3 2016	G COUNT %
ADELAIDE	9	1.4%	10	-4	6	15	2.3%
BRISBANE	104	15.9%	60	-69	-9	95	14.3%
CANBERRA	17	2.6%	10	-3	7	24	3.6%
DARWIN	3	0.5%	0	-2	-2	1	0.2%
GOLD COAST	30	4.6%	17	-13	4	34	5.1%
HOBART	0	0.0%	4	0	4	4	0.6%
MELBOURNE	148	22.7%	88	-108	-20	128	19.3%
NEWCASTLE	9	1.4%	6	-6	0	9	1.4%
PERTH	45	6.9%	19	-16	3	48	7.2%
SYDNEY	288	44.1%	121	-104	17	305	46.0%
TOTAL	653	100.0%	355	-325	10	663	100.0%

### **CRANE ACTIVITY - AUSTRALIA BY SECTORS**

	OPENING Q2 2016	G COUNT %	M( +	OVEME -	NT <i>NET</i>	CLOSING Q3 2016	COUNT %
COMMERCIAL	45	6.9%	11	-21	-10	35	5.3%
RESIDENTIAL	528	80.9%	275	-264	11	539	81.3%
HEALTH	6	0.9%	12	-5	7	13	2.0%
EDUCATION	12	1.8%	7	-7	0	12	1.8%
RETAIL	12	1.8%	1	-8	-7	5	0.8%
CIVIC	17	2.6%	2	-8	-6	11	1.7%
RECREATION	10	1.5%	2	-2	0	10	1.5%
HOTEL	9	1.4%	9	-4	5	14	2.1%
CIVIL	3	0.5%	3	-3	0	3	0.5%
OTHER	11	1.7%	13	-3	10	21	3.2%
TOTAL	653	100.0%	335	-325	10	663	100.0%

Building work in Perth is seeing a lift with three cranes increasing the overall count. 19 cranes were erected and 16 removed since our last count. Residential activity only accounted for 48% of total cranes, well under the national average of 81%. Seven cranes are still on the Perth Stadium project, the second highest number of cranes on one site in Australia, the same number on the Athletes Village project on The Gold Coast. The seven cranes on commercial developments represent 20% of all commercial cranes nationally. Sydney continues to erect more cranes on the skyline with 46% of all cranes nationally. The residential sector dominates the industry with 85% of all cranes in Sydney, helping to deliver new accommodation around Sydney. The spread of projects, highlighted on the heat maps, show the proliferation of residential developments in all parts of Sydney.

Crane hotspots within Sydney include Darling Harbour (13), Wolli Creek (11), Parramatta (10) Surry Hills (9) Homebush (9) Meadowbank (8) and Wentworth Point (7). A total of 104 cranes were removed from sites, with 121 new cranes erected. A total of 305 cranes were seen around Sydney, with nine in Newcastle.



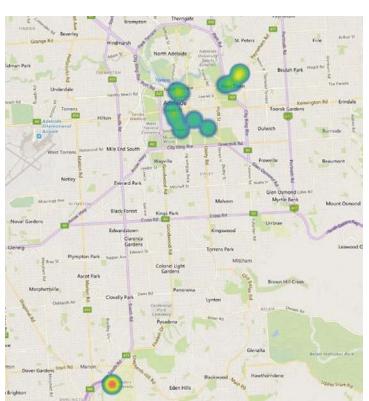
## **ADELAIDE**

Adelaide has seen increases in the number of cranes operating within the residential and health sectors since our last RLB Crane Index. The residential, health and education sectors now account for the all cranes in Adelaide. The total count for Adelaide has risen 67%, from 9 cranes in the previous RLB Crane Index® to 15 cranes.

The strongest performer was the residential sector with the removal of two cranes and the addition of six, a net increase of four cranes. The completion of VUE Apartments in King William Street saw one crane removed, while there were continuations at Storey Apartments and Citi Terrace Apartments. New cranes were seen at 111-113 South Terrace, 62-68 Hindley Street, 152-160 Grote Street, 150 Wright Street, 262 South Terrace, 8-60 King William Street and 3 Dequetteville Terrace.

The health sector has added four cranes since the last count with three cranes at Flinders Medical Centre in Bedford Park and one crane at Woodville BUPA Aged Care. The education sector has seen a decrease from four cranes to three with the removal of one crane at the University of Adelaide

The completion of 115KWS at 115 King William Street saw the removal of one crane for the commercial sector leaving no cranes currently observed for the sector. Despite the rise in the number of cranes the latest ABS figures for Construction Work Done show a decrease in the number residential and non-residential projects completed for the financial year ending June 30 2016. Residential has retracted around 3% and nonresidential has retracted around 14% from 2015 numbers.



### **KEY SECTOR STATUS**



### **OVERALL STATUS**



#### LEGEND







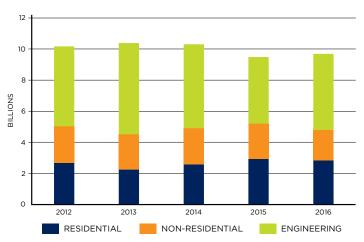
CRANE NUMBER

## CRANE ACTIVITY - ADELAIDE

	OPENING Q2 2016	G COUNT %	MC +	VEME -	NT NET	CLOSING Q3 2016	G COUNT %
COMMERCIAL	1	11.1%	0	-1	-1	0	0.0%
RESIDENTIAL	4	44.4%	6	-2	4	8	53.3%
HEALTH	0	0.0%	4	0	4	4	26.7%
EDUCATION	4	44.4%	0	-1	-1	3	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%	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%
TOTAL	9	100.0%	10	-4	6	15	100.0%

## SOUTH AUSTRALIA - CONSTRUCTION WORK DONE

YEAR ENDING 30 JUNE





## **BRISBANE**

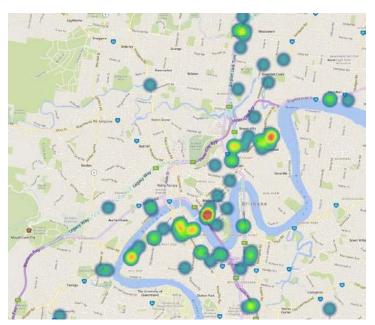
Brisbane has seen a 9% decrease in the total number of cranes for Q3 2016 since the previous count. The total count is now distributed across three sectors - commercial, residential and other.

Brisbane's residential sector remains strong with 87 cranes counted. This represented a loss of four cranes from our previous RLB Crane Index®. The strength of the sector is reflected in the 59 cranes that were erected on new projects. 300 George Street, The Yards in Bowen Hills and Coorparoo Square are the largest projects with cranes erected in Brisbane, with 10 cranes collectively, more than 10% of all cranes. The crane heatmap highlights the spread of projects north of the CBD from the previous RLB Crane Index.

Two projects in Newstead, one in Brisbane and one in Woolloongabba all had three cranes removed and four were removed from a site in Fortitude Valley – a total of 16 cranes across only five sites. Despite the net decrease of four, the current count of fewer cranes is actually spread across two more projects than observed in the previous count.

The commercial sector has seen a reduction of one crane, down from four to three in the current observation. Health, education and civil have had one crane removed from each of their projects, leaving all three sectors with no cranes for September 2016.

There was 69 cranes removed from the previous count and the addition of 60 cranes. A significant number of projects have been completed but offset by new projects commencing. The amount of construction work currently being undertaken in Brisbane remains strong. This is supported by the ABS figures for Construction Work Done, showing a 17% increase for residential work and a 2% increase in non-residential work.



## **KEY SECTOR STATUS**



### **OVERALL STATUS**



LEGEND





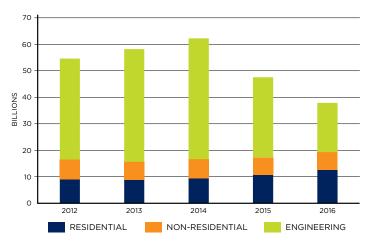


## **CRANE ACTIVITY - BRISBANE**

	OPENING Q2 2016	G COUNT %	MC +	VEME -	NT NET	CLOSING Q3 2016	COUNT %
COMMERCIAL	4	3.8%	1	-2	-1	3	3.2%
RESIDENTIAL	91	87.5%	59	-63	-4	87	91.6%
HEALTH	1	1.0%	0	-1	-1	0	0.0%
EDUCATION	1	1.0%	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	1	1.0%	0	-1	-1	0	0.0%
OTHER	6	5.8%	0	-1	-1	5	5.3%
TOTAL	104	100.0%	60	-69	-9	95	100.0%

## QUEENSLAND - CONSTRUCTION WORK DONE

YEAR ENDING 30 JUNE





## **CANBERRA**

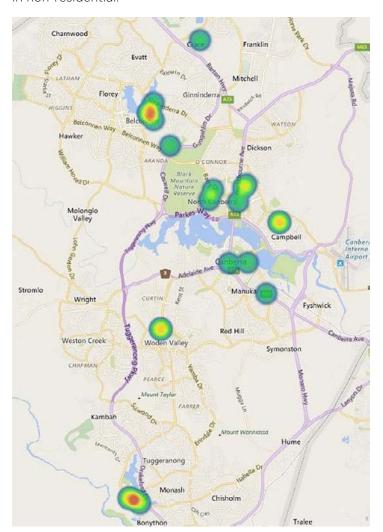
Canberra has seen another significant increase in the total number of cranes for the current count. There were three cranes removed and ten cranes added for a net increase of seven cranes. Four of these were residential, two were in health and one was in other.

The residential sector stands out as the largest increase in the number of cranes, as well as most cranes for the region. The addition of seven new cranes to the sector and the continuation of ten cranes brings the total to 17 for residential in September.

The new residential projects observed include Governor Place, stage 2 of The Central, Southport, Evoque, St Germain and Axiom.

Despite the significant increase in the number of residential cranes, percentage spread changes of cranes across the total is due to the two new cranes in health at Calvary Hospital and University of Canberra Hospital, as well as the five continuations in commercial, retail and other.

Construction Work Done to June 30 reported by the ABS shows a 7% fall in residential work done and zero change in non-residential.



### **KEY SECTOR STATUS**



### **OVERALL STATUS**



LEGEND





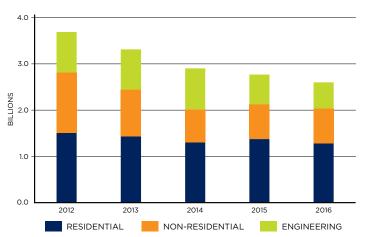


## **CRANE ACTIVITY - CANBERRA**

	OPENING Q2 2016	G COUNT %	MC <i>+</i>	VEME -	NT NET	CLOSING Q3 2016	COUNT %
COMMERCIAL	3	17.6%	0	0	0	3	12.5%
RESIDENTIAL	13	76.5%	7	-3	4	17	70.8%
HEALTH	0	0.0%	2	0	2	2	8.3%
EDUCATION	0	0.0%	0	0	0	0	0.0%
RETAIL	1	5.9%	0	0	0	1	4.2%
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%	1	0	1	1	4.2%
TOTAL	17	100.0%	10	-3	7	24	100.0%

## AUSTRALIAN CAPITAL TERRITORY - CONSTRUCTION WORK DONE

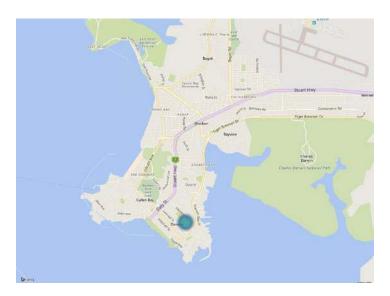
YEAR ENDING 30 JUNE





## **DARWIN**

Darwin's construction work is slowing, highlighted by the 40% fall in building work done in 2016 compared to 2014. The single crane is situated in Wood Street.



### **KEY SECTOR STATUS**



## **OVERALL STATUS**



## LEGEND





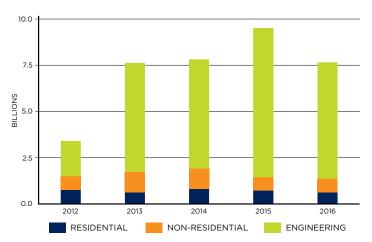


## **CRANE ACTIVITY - DARWIN**

	OPENING Q2 2016	COUNT %	MC +	VEME -	NT NET	CLOSING Q3 2016	G COUNT %
COMMERCIAL	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	3	100.0%	0	-2	-2	1	100.0%
HEALTH	0	0.0%	0	0	0	0	0.0%
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	0	0.0%	0	0	0	0	0.0%
OTHER	0	0.0%	0	0	0	0	0.0%
TOTAL	3	100.0%	0	-2	-2	1	100.0%

## NORTHERN TERRITORY - CONSTRUCTION WORK DONE

YEAR ENDING 30 JUNE





## **GOLD COAST**

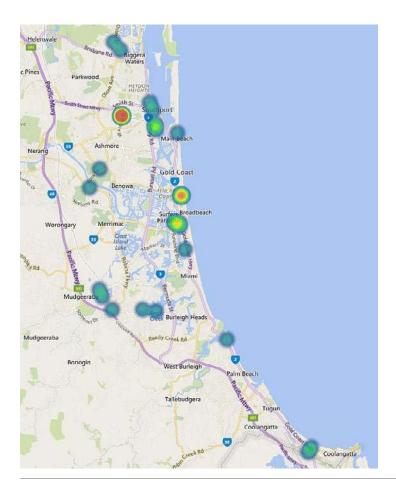
The Gold Coast has shown an increase across the residential, health, education and hotel sectors. There have been 17 additional cranes erected and 13 cranes removed as projects near completion. 50% of the current count are new cranes as they assist in the establishment of new projects. The Gold Coast has seen a steady increase of cranes since March 2015.

The geographical spread of cranes on the Gold Coast is seen from Tweed Heads in the south to Biggara Waters to the north.

Residential is still the strongest performer, with 85% of all cranes sighted. New cranes have been observed at Surfers Paradise (5), Southport (3), Varsity Lakes (2), Robina (1), Mermaid Beach (1) and Balinga (1).

The Health sector has seen the commencement of Robina Private Hospital. Within the Hotel sector, Jupiter's has installed two cranes as part of their hotel refurbishment and expansion project. Southern Cross University has observed the rise of their crane to give the education sector one crane.

The Athlete's Village continues to progress with seven cranes on site, a reduction of two cranes since our previous count for the residential sector, while one crane has been removed from Carrara Stadium leaving one crane for the recreation sector.



### **KEY SECTOR STATUS**



### **OVERALL STATUS**



LEGEND







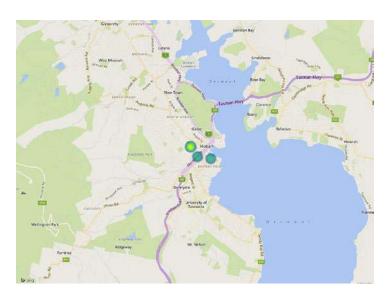
### **CRANE ACTIVITY - GOLD COAST**

	OPENING	COUNT	МС	OVEME	NT	CLOSING	COUNT
	Q2 2016	%	+		NET	Q3 2016	%
COMMERCIAL	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	28	93.3%	13	-12	1	29	85.3%
HEALTH	0	0.0%	1	0	1	1	2.9%
EDUCATION	0	0.0%	1	0	1	1	2.9%
RETAIL	0	0.0%	0	0	0	0	0.0%
CIVIC	0	0.0%	0	0	0	0	0.0%
RECREATION	2	6.7%	0	-1	-1	1	2.9%
HOTEL	0	0.0%	2	0	2	2	5.9%
CIVIL	0	0.0%	0	0	0	0	0.0%
OTHER	0	0.0%	0	0	0	0	0.0%
TOTAL	30	100.0%	17	-13	4	34	100.0%

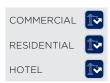


## **HOBART**

Hobart is welcomed to the RLB Crane Index® with a total of four cranes represented in three sectors. The commercial sector has one crane at Parliament Square together with one crane at 173 Macquarie Street in the hotel sector. The University of Tasmania Student Accommodation building in Melville Street sees the two cranes within the residential sector.



### **KEY SECTOR STATUS**



### **OVERALL STATUS**



### LEGEND





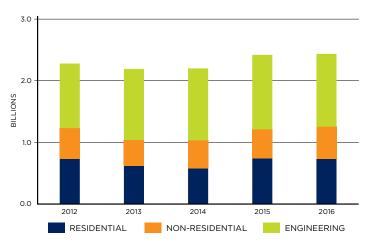


## **CRANE ACTIVITY - HOBART**

	OPENING	COUNT	МС	VEME	ENT	CLOSING COUNT	
	Q2 2016	%	+	-	NET	Q3 2016	%
COMMERCIAL	0	0.0%	1	0	1	1	25.0%
RESIDENTIAL	0	0.0%	2	0	2	2	50.0%
HEALTH	0	0.0%	0	0	0	0	0.0%
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%	1	0	1	1	25.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
OTHER	0	0.0%	0	0	0	0	0.0%
TOTAL	0	100.0%	4	0	4	4	100.0%

## TASMANIA - CONSTRUCTIONWORK DONE

YEAR ENDING 30 JUNE



## RLB CRANE INDEX® Q3 - 2016 9TH FDITION



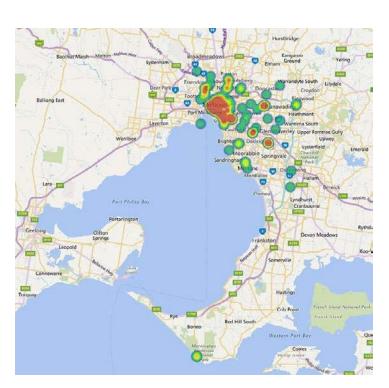
## **MELBOURNE**

Melbourne has recorded its first decline in total crane numbers since March 2014 and has retracted 14% since the last RLB Crane Index®. The RLB Crane Index® highlights a net decrease of 23 cranes across the commercial, residential, retail and civic sectors. Some of the decline was offset by increases in crane numbers in the health. education, hotel and other sectors.

Melbourne's building activity is reflected in the 108 cranes removed from projects nearing completion and 88 new cranes erected. Large projects nearing completion include the office tower and extension at Chadstone Shopping Centre. Caulfield Village and a number of residential towers in the CBD, Docklands, Southbank and South Yarra. New starts include Monash University's new Learning and Teaching Centre at Clayton, Whitehorse Tower, Aspire in Maribyrnong, Avant in A'Beckett Street and Collins Quarter.

Cranes have been sighted in Geelong to the west, Essendon Airport to the north, Ringwood to the east and Cape Schanck to the south. Long-term crawler cranes were sighted at the Viva Energy Refinery in Geelong, but have not been included in the physical count. Residential cranes represent 85% of all cranes in Melbourne Builders with the most cranes erected on projects include Multiplex (14), Probuild (14), Lend Lease (10), Hacer (6) and Mirvac (5).

39% of all cranes are located within the CBD. 31% to the east, 13% to the south and 12% to the north. Only 7% of projects with cranes are in Melbourne's west.



### **KEY SECTOR STATUS**



### **OVERALL STATUS**



LEGEND





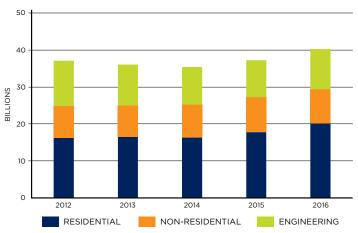


## **CRANE ACTIVITY - MELBOURNE**

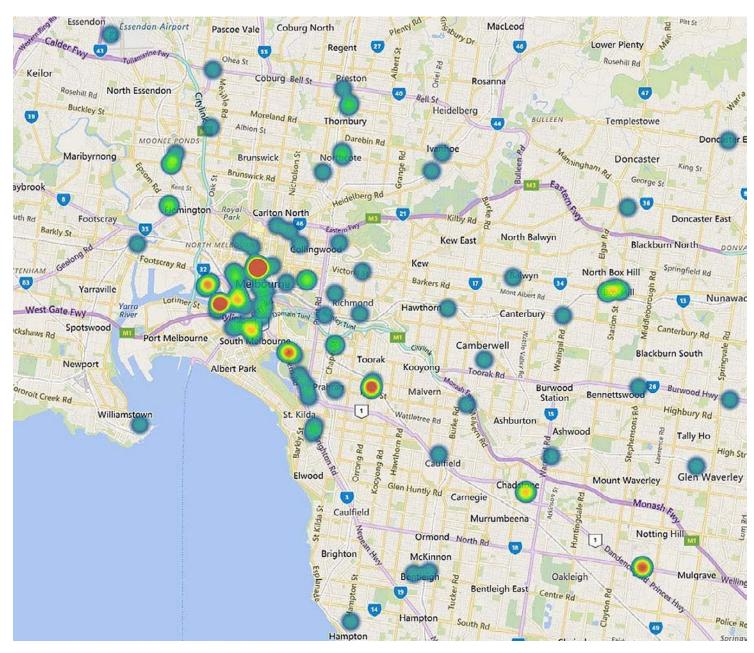
	OPENING Q2 2016	G COUNT %	M( +	OVEME -	NT <i>NET</i>	CLOSING Q3 2016	G COUNT %
COMMERCIAL	10	6.8%	4	-8	-4	6	4.7%
RESIDENTIAL	124	83.8%	74	-89	-15	109	85.2%
HEALTH	1	0.7%	0	-1	-1	0	0.0%
EDUCATION	3	2.0%	6	-3	3	6	4.7%
RETAIL	8	5.4%	0	-5	-5	3	2.3%
CIVIC	1	0.7%	0	-1	-1	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
HOTEL	1	0.7%	3	-1	2	3	2.3%
CIVIL	0	0.0%	0	0	0	0	0.0%
OTHER	0	0.0%	1	0	1	1	0.8%
TOTAL	148	100.0%	88	-108	-20	128	100.0%

## VICTORIA - CONSTRUCTIONWORK DONE

YFAR ENDING 30 JUNE







The hotel and education sectors have both increased the number of cranes by two and three cranes respectively, offset by greater declines in the commercial and retail sectors.

Regionally, there has been the addition of a crane at 1 Malop street Geelong for the new Worksafe building within the commercial sector, and a worthy mention of four crawler cranes at the Shell Refinery site. Mobile cranes are not included in the numbers within our RLB Crane Index®, however the four are from the industrial sector. Within Melbourne, commercial cranes can be observed at 13 Cremorne Street at Cremorne, Tower 5 Collins Square and Collins Quarter in the Docklands, 96-98 Maroondah Highway, Ringwood and at 2 Riverside Quay, Southbank.

Education developments include Monash University at Clayton, RMIT in the CBD and South Melbourne Primary School. Hotel developments include the RACV at Cape Schanck and the Sage Hotel in Ringwood. Residential developments within Melbourne still dominate the city sky with projects in: Abbotsford, Balwyn, Bentleigh, Box Hill, Brunswick West, Burwood, Carlton, Carlton, CBD, Chadstone, Cheltenham, Dandenong, Docklands, Doncaster East, Doncaster, Essendon Fields, Fitzroy, Flemington, Footscray, Glen Iris, Glen Waverly, Hampton, Hawthorn East, Ivanhoe, Malvern East, Maribyrnong, Moonee Ponds, North Melbourne, Northcote, Pascoe Vale, Preston, Richmond, South Melbourne, South Yarra, Southbank, St Kilda, Surrey Hills, Thornbury, Toorak, Wantirna South, West Melbourne, Williamstown and Windsor.

ABS data reflects that Construction Work Done in Victoria for the year to June 2016 has increased overall through 2016, up 14% for residential and down 3% for non-residential work. Observations made whilst moving between site visits highlighted a number of new sites with hoardings erected and excavation occurring signalling that in the next RLB Crane Index®, we may see an increase in work.



## **NEWCASTLE**

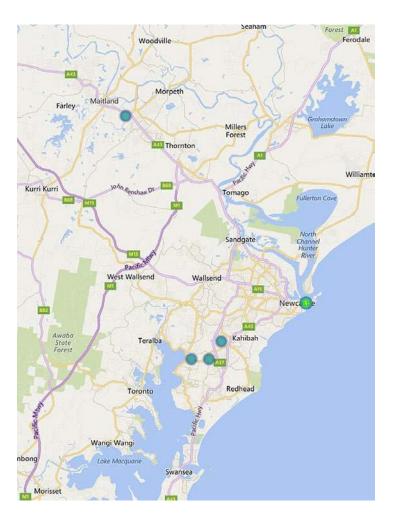
Newcastle has remained steady since the last RLB Crane Index. The residential and health sectors saw increases, while the education, retail and other sectors saw a decrease of one crane each.

Cranes within the residential sector now represent 56% of the total count in Newcastle. New projects include Spire Apartments, Eastside Apartments, Stockland and Shearwater Apartments.

The health sector saw the installation of two cranes at the Gosford Hospital, leaving the total count for the health sector at two.

The CSQ B&L Mall upgrade recently removed two cranes, reducing the cranes from the retail sector to one with the installation of one crane for Stockland's Greenhillsdevelopment at East Maitland.

The completion of the Agricultural Education Building at the University of New England saw the removal of one crane, leaving one crane within the education sector at the University of Newcastle's New Space Building.



### **KEY SECTOR STATUS**



### **OVERALL STATUS**



LEGEND







### **CRANE ACTIVITY - NEWCASTLE**

	OPENING	COUNT	МС	OVEME	ENT	CLOSING	COUNT
	Q2 2016	%	+		NET	Q3 2016	%
COMMERCIAL	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	4	44.4%	3	-2	1	5	55.6%
HEALTH	0	0.0%	2	0	2	2	22.2%
EDUCATION	2	22.2%	0	-1	-1	1	11.1%
RETAIL	2	22.2%	1	-2	-1	1	11.1%
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	11.1%	0	-1	-1	0	0.0%
TOTAL	9	100.0%	6	-6	0	9	100.0%



## **PERTH**

Building work in Perth is seeing a lift, with three cranes increasing the overall count. 19 cranes were erected and 16 removed since our last count. Residential activity only accounted for 48% of total cranes, well under the national average of 81%. Seven cranes are still on the Perth Stadium project, the second highest number of cranes on one site in Australia, the same number as on the Athletes Village project on The Gold Coast. The seven cranes on commercial developments represent 20% of all commercial cranes nationally.

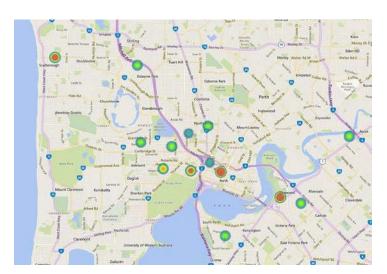
The commercial sector saw a 40% increase on the previous count with the addition of two new cranes, one on Stirling Cross in Osborne Park and one on Fringe on William Street.

The hotel sector is busy with three cranes removed but offset with three cranes installed, with the total count standing at seven. The newly erected cranes were observed at the Tribe Hotel in Walker Street, East Perth and at the Old Melbourne Hotel in Perth.

The recreation sector has seen a reduction of one crane at the new Perth Stadium, with the continuation of seven cranes remaining at the stadium.

With the removal of the crane at the QEH II - Sarich Neuroscience Medical Building, health no longer has any cranes in this sector.

Despite Construction Work Done decreasing in Perth for the past financial year, with the ABS reporting a 9% decrease in non-residential work and a 2% increase in residential work done.



## **KEY SECTOR STATUS**



OTHER

### **OVERALL STATUS**



### LEGEND





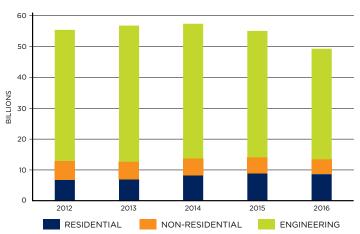


## **CRANE ACTIVITY - PERTH**

	OPENING Q2 2016	G COUNT	M( +	OVEME -	NT NET	CLOSING Q3 2016	G COUNT %
COMMERCIAL	5	11.1%	3	-1	2	7	14.6%
RESIDENTIAL	22	48.9%	9	-8	1	23	47.9%
HEALTH	1	2.2%	0	-1	-1	0	0.0%
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	2.1%
RECREATION	8	17.8%	0	-1	-1	7	14.6%
HOTEL	7	15.6%	3	-3	0	7	14.6%
CIVIL	2	4.4%	0	-2	-2	0	0.0%
OTHER	0	0.0%	3	0	3	3	6.3%
TOTAL	45	100.0%	19	-16	3	48	100.0%

## WESTERN AUSTRALIA - CONSTRUCTIONWORK DONE

YEAR ENDING 30 JUNE





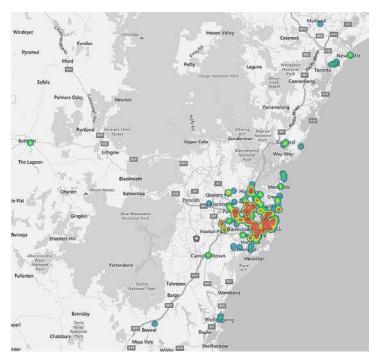
## **SYDNEY**

Sydney continues to erect more cranes on the skyline, with 46% of all cranes nationally. The residential sector dominates the industry, with 85% of all cranes in Sydney helping to deliver new accommodation around Sydney. The spread of projects, highlighted on the heat maps, show the proliferation of residential developments in all parts of Sydney.

Crane hotspots within Sydney include Darling Harbour (13), Wolli Creek (11), Parramatta (10), Surry Hills (9), Homebush (9), Meadowbank (8), and Wentworth Point (7). A total of 104 cranes were removed from sites, with 121 new cranes erected. A total of 305 cranes were seen around Sydney, with nine in Newcastle.

Sydney's cranes continue to rise, highlighted by the fourth consecutive increase in crane numbers according to our past RLB Crane Indexes®. The current number of cranes observed is 305 cranes, with cranes in every sector recorded. Residential is again a standout for the industry count.

The residential sector has seen 83 cranes removed and 102 erected for a net increase of 19 cranes. Projects such as Centrale Apartments have recently installed six cranes on the one site, showing no signs of decreasing the pace or capacity to bring further residences to the market.



## **KEY SECTOR STATUS**



### **OVERALL STATUS**



LEGEND



DECREASI IN NUMBE OF CRANE

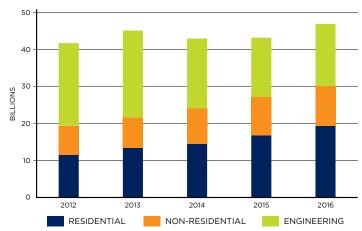


## **CRANE ACTIVITY - SYDNEY**

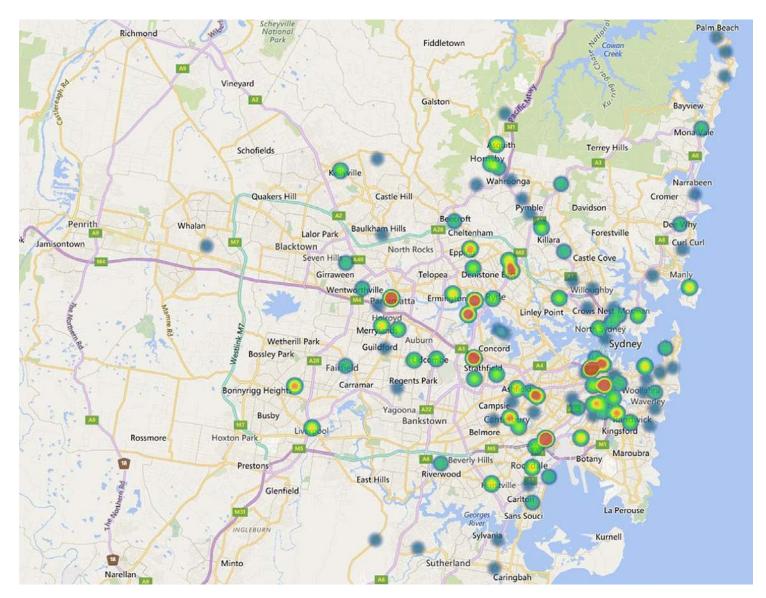
	OPENING Q2 2016	G COUNT %	М( +	OVEME -	NT NET	CLOSING Q3 2016	G COUNT %
COMMERCIAL	22	7.6%	2	-9	-7	15	4.9%
RESIDENTIAL	239	83.0%	102	-83	19	258	84.6%
HEALTH	3	1.0%	3	-2	1	4	1.3%
EDUCATION	2	0.7%	0	-1	-1	1	0.3%
RETAIL	1	0.3%	0	-1	-1	0	0.0%
CIVIC	16	5.6%	1	-7	-6	10	3.3%
RECREATION	0	0.0%	2	0	2	2	0.7%
HOTEL	1	0.3%	0	0	0	1	0.3%
CIVIL	0	0.0%	3	0	3	3	1.0%
OTHER	4	1.4%	8	-1	7	11	3.6%
TOTAL	288	100.0%	121	-104	17	305	100.0%

## NEW SOUTH WALES - CONSTRUCTIONWORK DONE

YEAR ENDING 30 JUNE







Residential development currently under construction includes projects within the following suburbs: Alexandria, Arncliffe, Ashbury, Ashfield, Asquith, Auburn, Avalon, Balgowlah, Baulkham Hills, Beaconsfield, Beecroft, Bellevue Hill, Blueys Beach, Bondi, Bondi Junction, Breakfast Point, Brighton Le Sands, Bronte, Burwood, Cammeray, Campbelltown, Campsie, Canterbury, Chatswood, Chippendale, Collaroy, Coogee, Cremorne, Dover heights, Dulwich hill, Earlwood, Eastwood, Epping, Ermington, Erskineville, Fairfield, Flemington, Freshwater, Gordon, Gosford/Point Clare, Granville, Guildford, Heathcote, Homebush, Hornsby, Hurstville, Kellyville, Kensington, Kogarah, Lane Cove, Lewisham, Lidcombe, Lindfield, Liverpool, Manly, Macquarie Park/Epping, Mascot, Mays Hill, Meadowbank, Merrylands, Milsons Point, Miranda, Mittagong, Mollymook, Mort Lake, Mosman, Mount Druitt, Mt Colah, Neutral Bay, Newcastle, Newtown, North Sydney, North Wollongong, Nth Ryde, Paddington, Palm Beach, Parramatta, Point Piper, Pymble, Pyrmont, Ramsgate, Randwick, Riverwood, Rockdale, Rose Bay, Ryde, Sefton, St Ives, St Leonards, Strathfield, Summer Hill, Surry Hills, Sylvania, Terrigal, Thornleigh, Toongabbie, Turramurra, Vaucluse, Wahroonga, Waitara, Waterloo, Wentworth

Park, Wentworth Point, Wentworthville, Whale Beach, Willoughby, Wolli Creek, Wollongong and Zetland.

Removals were most notably seen in the commercial and civic sectors, with 9 and 6 removed respectively. Commercial still has 15 cranes observed for the sector, with 13 of these being continuations. The civic sector currently has 10 cranes, including nine continuations from the previous count.

Within the skyline of Sydney, cranes on civic projects include the redevelopment of the convention centre. Civil cranes in Moore Park and Randwick are associated with the construction of the light rail project. Commercial projects include projects near Barangaroo, Mascot, Meadowbank, Pacific Highway in North Sydney, Pitt Street, Shelly Street, Sydney International Airport and in York Street. Education projects include the Biosciences Renewal Project at UNSW. Cranes Hare currently on health projects at St Vincent's, Northern Beaches Hospital and Prince of Wales Hospital in Randwick.

ABS data for Construction Work Done for the year to June 30 2016, shows a 16% increase in residential construction and a 3% increase in non-residential work done.



## **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 Crane Index tracks the numbers of cranes in the key mainland cities within Australia.

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 (3rd edition Q4 2013), 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 Q4 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 Q4 2013.

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 Q4 2013, against the count in Q4 2015, the following formula can be used to determine the percentage increase (or decrease).

PERCENTAGE CHANGE = 
$$\begin{bmatrix} \frac{\text{CRANE INDEX}_{CP} - \text{CRANE INDEX}_{PP}}{\text{CRANE INDEX}_{PP}} \end{bmatrix} \times 100$$

where Crane Indexcp is the RLB Crane Index $_{cp}$  for the current period and Crane Index $_{pp}$  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:

Director Research & Development

Contact: Stephen Ballesty Contact: John Cross

Oceania Research & Development Manager

Tel: (02) 9922 2277 Tel: (03) 9690 6111

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