

AUSTRALIA

Q3 2019 RLB CRANE INDEX® HIGHLIGHTS:

- Wollongong makes an RLB Crane Index® debut with 18 cranes across the city
- RLB Crane Index® maintains upward momentum to reach 178 (including Wollongong) or remaining steady at 173 on a like for like basis
- Melbourne sees a fall of nine cranes for the first time in three years
- Sydney crane numbers increase by nine cranes.
- 757 cranes are now assisting construction work across the country
- Residential crane numbers fell by 19 cranes to 516
- Both commercial and mixed use sectors saw strong crane number increases

Q3 2019 RLB CRANE INDEX® SUMMARY:

CITIES	KEY SECTORS
ADELAIDE	CIVIC
BRISBANE	CIVIL
CANBERRA	COMMERCIAL
CENTRAL COAST	EDUCATION
DARWIN	HEALTH
GOLD COAST	HOTEL
HOBART	MIXED USE
MELBOURNE	RECREATION
NEWCASTLE	RESIDENTIAL
PERTH	RETAIL
SUNSHINE COAST	
SYDNEY	

LEGEND

- INCREASE IN NUMBER OF CRANES
- DECREASE IN NUMBER OF CRANES
- CRANE NUMBERS STEADY

AUSTRALIA

The RLB Crane Index® has maintained its level of 173 (excluding Wollongong's inclusion) for the past three editions which is in line with the FY 2019 lift of 4.9% in building work done across the country. Both residential and non-residential work done rose by 1.3% and 12.2% respectively on a chain volume measure.

There were no cities within the index that recorded crane falls in the double digits, a sign that the industry has not yet entered into the economic cycle of falling demand as predicted by some.

During the past six months 416 cranes were erected on sites around Australia, representing 54% of all cranes in the current count. One hundred percent of cranes removed from completed developments were placed back into the industry on new developments.

The residential sector suffered the most number of removals with a loss of nineteen cranes, but offsetting these losses were new cranes erected within the commercial and mixed use sectors.

Melbourne suffered its first fall in crane numbers (nine) for six editions of the index over the last three years. Sydney offset these losses by increasing by a similar number.

The index now welcomes a new region into the count, Wollongong. The index reflects the addition of Wollongong by highlighting the impact Wollongong crane numbers has on the index as a whole.

This edition highlights a movement of crane numbers from the outer suburbs of the three largest index cities, Sydney, Melbourne and Brisbane. Inner city crane numbers over the past six months have risen from 44% to 48% currently.

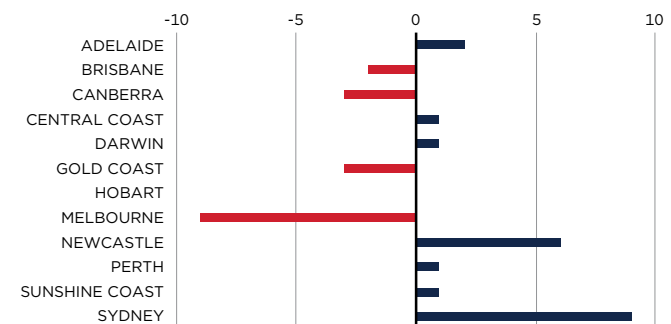
The ongoing changes in government's infrastructure spending and planning schemes is evident as the location of cranes gravitate along key city transportation corridors and activity centres. This is most evident in Sydney along the Pacific Highway and the Dandenong rail corridor in Melbourne.

CRANE ACTIVITY - AUSTRALIA BY KEY CITIES

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
ADELAIDE	17	2.3%	8	-6	2	19	2.5%
BRISBANE	59	8.0%	32	-34	-2	57	7.5%
CANBERRA	28	3.8%	9	-12	-3	25	3.3%
CENTRAL COAST	13	1.8%	8	-7	1	14	1.8%
DARWIN	0	0.0%	1	0	1	1	0.1%
GOLD COAST	32	4.4%	16	-19	-3	29	3.8%
HOBART	5	0.7%	2	-2	0	5	0.7%
MELBOURNE	222	30.2%	94	-103	-9	213	28.1%
NEWCASTLE	6	0.8%	9	-3	6	12	1.6%
PERTH	33	4.5%	25	-24	1	34	4.5%
SUNSHINE COAST	10	1.4%	5	-4	1	11	1.5%
SYDNEY	310	42.2%	189	-180	9	319	42.1%
WOOLONGONG	0	0.0%	18	0	18	18	2.4%
TOTAL	735	100.0%	416	-394	22	757	100.0%

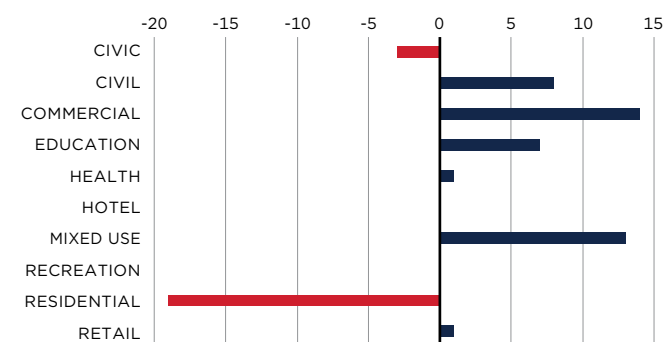
AUSTRALIA NET CRANE MOVEMENT BY CITY

NUMBER OF CRANES REMOVED / ADDED



AUSTRALIA NET CRANE MOVEMENT BY SECTOR

NUMBER OF CRANES REMOVED / ADDED



CRANE ACTIVITY - AUSTRALIA BY SECTOR

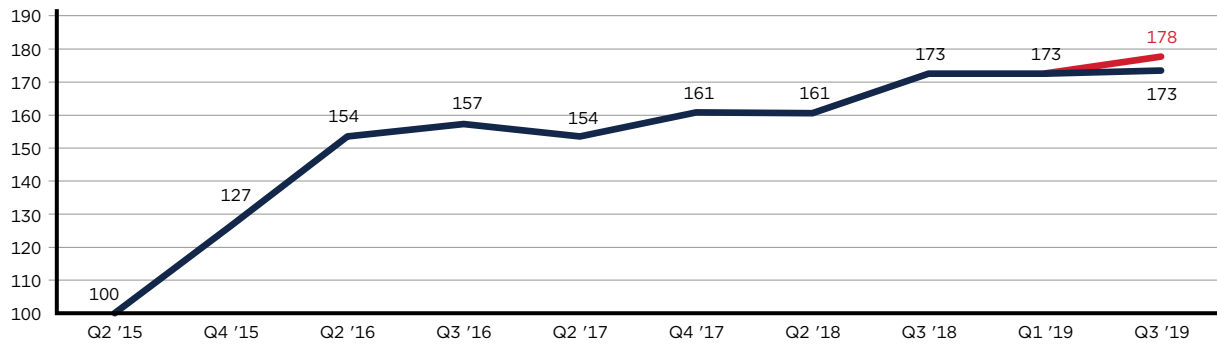
	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	7	1.0%	0	-3	-3	4	0.5%
CIVIL	29	3.9%	20	-12	8	37	4.9%
COMMERCIAL	71	9.7%	41	-27	14	85	11.2%
EDUCATION	17	2.3%	18	-11	7	24	3.2%
HEALTH	16	2.2%	8	-7	1	17	2.2%
HOTEL	17	2.3%	9	-9	0	17	2.2%
MIXED USE	30	4.1%	24	-11	13	43	5.7%
RECREATION	2	0.3%	2	-2	0	2	0.3%
RESIDENTIAL	535	72.8%	286	-305	-19	516	68.2%
RETAIL	11	1.5%	8	-7	1	12	1.6%
TOTAL	735	100.0%	416	-394	22	757	100.0%

AUSTRALIA

The RLB Crane Index® has maintained its level at 173 for the past three editions. With the addition of Wollongong for this publication, their cranes have caused the index to rise to 178 (shown in red).

RLB CRANE INDEX®

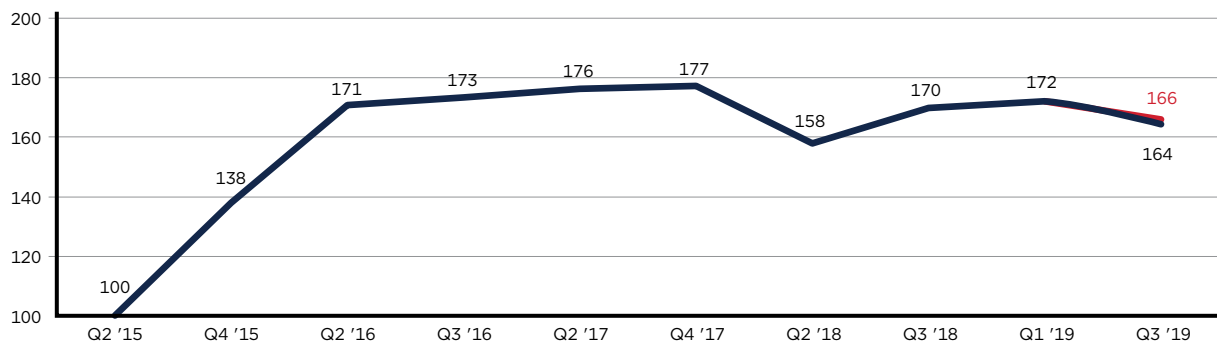
BASE = Q2 2015 = 100



The residential index across the country has also maintained its level above the 160 mark. Wollongong residential cranes (in red) have made an impact with the full index falling to 166 in lieu of 164 on a like for like basis to the previous edition.

AUSTRALIA RESIDENTIAL CRANE INDEX

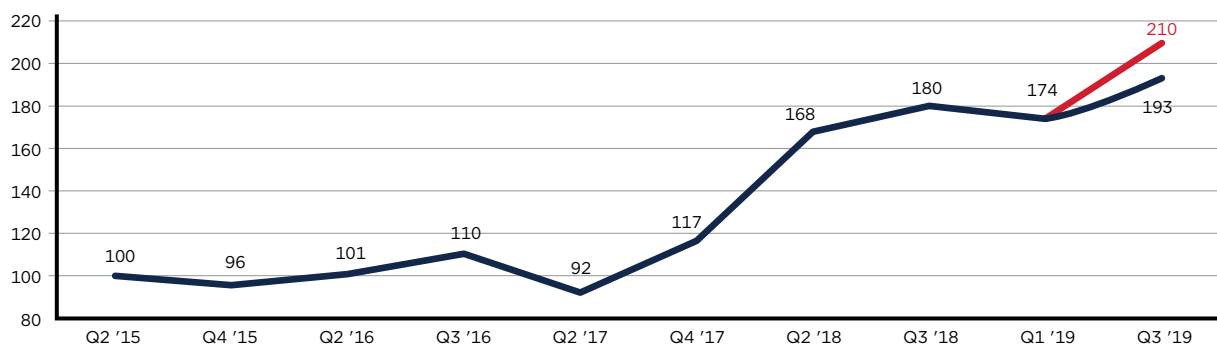
BASE = Q2 2015 = 100



Strong growth in non-residential sectors has seen the index rise to its highest level since commencement. The rise of 11% on a like for like basis has resulted from commercial, mixed use and civil crane commencements across the country.

AUSTRALIA NON-RESIDENTIAL CRANE INDEX

BASE = Q2 2015 = 100



ADELAIDE

Adelaide's RLB Crane Index® continues its upward trajectory increasing to 317, the highest value recorded. The increase was a result of eight new cranes starting on projects with six removed.

Stable construction volume for FY 2019 saw a minimal 0.24% drop to \$5.9B in chain volume terms, matching the decade high. The significant increase in building work seen in FY 2018 of 16.0% was matched by a rise of 1.3% for the current year. Engineering work was down 1.7% from the large jump in 2018 but still above the \$6B level.

Across Adelaide, cranes now number a record nineteen. The residential sector fell for this count by two cranes but continues to dominate the skyline, accounting for 10 or 53% of all cranes in Adelaide.

Cranes remain on Realm, East End Apartments, Adalaidian, One on the Park, Ei8ht, East Terrace Apartments and 354 Bowden. New projects commencing include Spence on Light, Wingfold Apartments and 252 South Terrace.

Work continues on the Her Majestie's Theatre redevelopment, with one civic crane.

Within the commercial sector, the GPO Exchange development saw the crane removed but new cranes were installed at 102 Wakefield Street and at Lot 14 in North Terrace.

As the hospitality industry continues to grow across the country, three new cranes commenced for The Hotel Indigo, the Majestic Hotel and for student accommodation at 124 Waymouth Street. The hotel count increased to four, with the crane continuing at the Sofitel Luminesque Hotel on Currie Street.

KEY SECTORS

CIVIC	
COMMERCIAL	
HOTEL	
MIXED USE	
RESIDENTIAL	

OVERALL STATUS

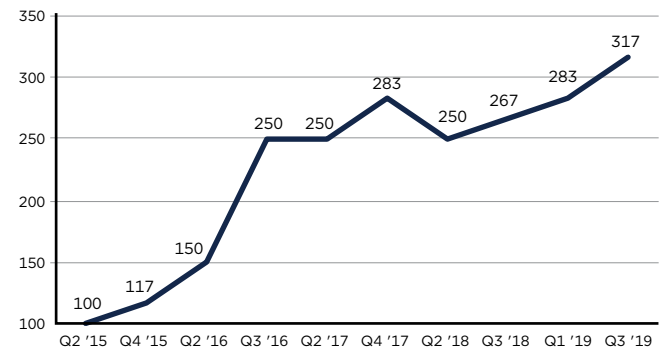


LEGEND

	INCREASE IN NUMBER OF CRANES		DECREASE IN NUMBER OF CRANES		CRANE NUMBERS STEADY
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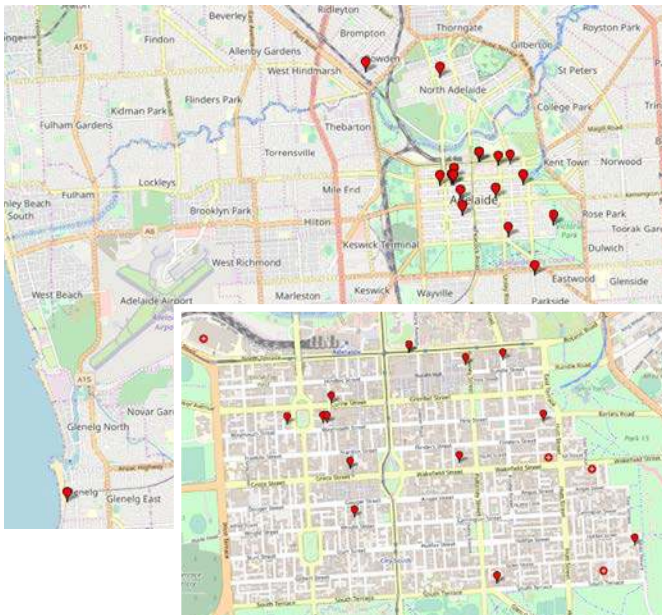
RLB CRANE INDEX® - ADELAIDE

BASE = Q2 2015 = 100



CRANE ACTIVITY - ADELAIDE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	1	5.9%	0	0	0	1	5.3%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	1	5.9%	2	-1	1	2	10.5%
EDUCATION	0	0.0%	0	0	0	0	0.0%
HEALTH	0	0.0%	0	0	0	0	0.0%
HOTEL	1	5.9%	3	0	3	4	21.1%
MIXED USE	2	11.8%	0	0	0	2	10.5%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	12	70.6%	3	-5	-2	10	52.6%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	17	100.0%	8	-6	2	19	100.0%



BRISBANE

Since the high in Q4 2015, Brisbane's RLB Crane Index® has gradually declined, reaching a level of 78 for this edition. Across Brisbane 32 cranes were added and 34 were removed, resulting in a total of 57 cranes, a decrease of two.

This decline is reflective of the fall in work done for FY 2019. Queensland's construction volumes fell by 10% in chain volume terms. The residential sector fell by 6.6%, and the non-residential sector fell by 1.5%.

The multi-level residential market saw significant projects nearing completion during the past six months with total cranes falling by 15 cranes due to a reduction in new projects commencing. Residential cranes accounted for 71% of all Brisbane cranes in our last edition but now only commands 47% of total installations.

The civil, commercial, education and mixed use sectors each recorded increases of four cranes partly offsetting the fall in residential numbers.

With the completion of the Mercedes Benz Autohaus all cranes have now been removed from retail projects and the recreation crane at Festival Hall was removed.

Twenty-six residential cranes were removed from projects with 23 added, lowering the residential count to 42. Residential projects nearing completion include; Skyneedle Apartments, with all three cranes removed and two cranes removed from Student One's 97.

KEY SECTORS

CIVIL	↑
COMMERCIAL	↑
EDUCATION	↑
HEALTH	↑
HOTEL	↑
MIXED USE	↑
RECREATION	↑
RESIDENTIAL	↓
RETAIL	↑

OVERALL STATUS

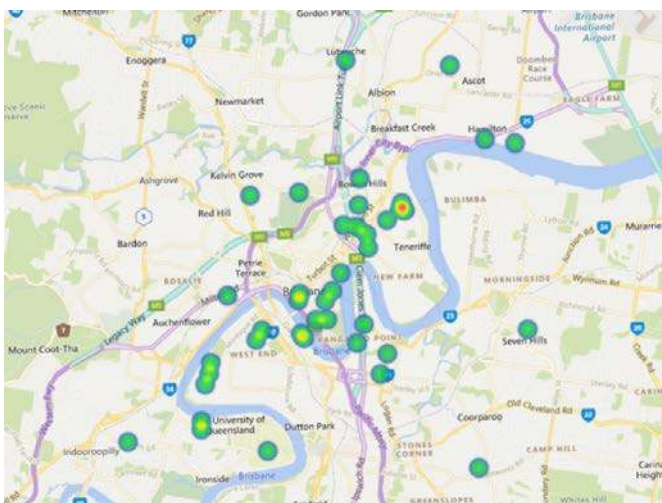
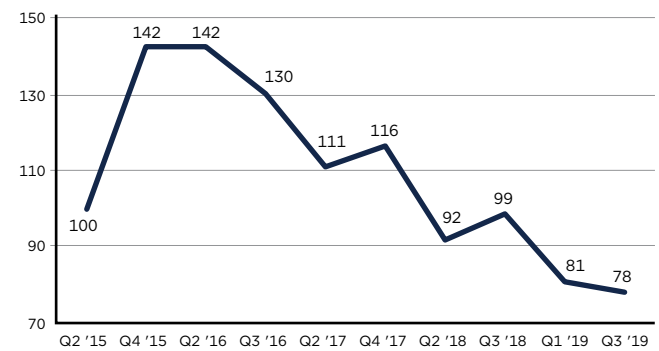


LEGEND

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

BASE = Q2 2015 = 100



CRANE ACTIVITY - BRISBANE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	1	1.7%	5	-1	4	5	8.8%
COMMERCIAL	4	6.8%	5	-1	4	8	14.0%
EDUCATION	1	1.7%	4	0	4	5	8.8%
HEALTH	2	3.4%	0	0	0	2	3.5%
HOTEL	0	0.0%	1	0	1	1	1.8%
MIXED USE	5	8.5%	6	-2	4	9	15.8%
RECREATION	1	1.7%	0	-1	-1	0	0.0%
RESIDENTIAL	42	71.2%	11	-26	-15	27	47.4%
RETAIL	3	5.1%	0	-3	-3	0	0.0%
TOTAL	59	100.0%	32	-34	-2	57	100.0%

BRISBANE

Across Brisbane, declines in crane numbers were seen in the north and south with increases in inner Brisbane, West and East.

CRANE ACTIVITY - BRISBANE REGIONS

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
INNER	35	59.3%	21	-18	3	38	66.7%
EAST	0	0.0%	1	0	1	1	1.8%
NORTH	17	28.8%	4	-10	-6	11	19.3%
SOUTH	2	3.4%	1	-2	-1	1	1.8%
WEST	5	8.5%	5	-4	1	6	10.5%
TOTAL	59	100.0%	32	-34	-2	57	100.0%

Inner Brisbane still has the majority of cranes around Brisbane increasing to 67% from 59% this edition. With 21 cranes erected and 18 removed, an increase of three cranes was observed.

West Village still has three cranes erected but the mixed use 300 George Street site has had one crane removed.

Significant projects within inner Brisbane that had cranes removed included Brisbane 1 Towers, PARC - West End and Transport House (Valley Metro).

Continuing projects include Cbus's Queen Street residential development, Lume Apartments (Kangaroo Point), Coterie (New Farm), Eminance (Fortitude Valley), St Rita's College (Clayfield), Linton Apartments (Kangaroo Point).

New developments include Montague Markets, Midtown Centre, Botanic Garden Riverwalk and the Suncorp HQ, each with two cranes.

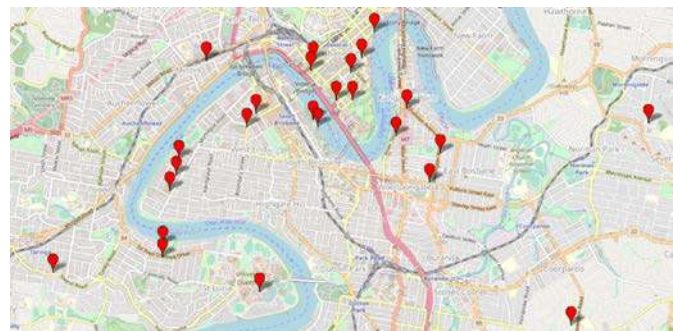
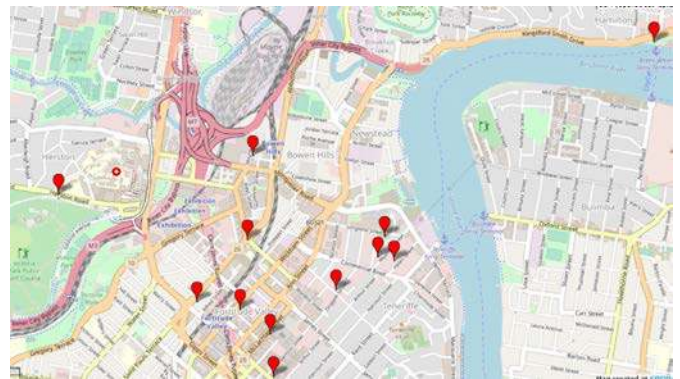
In the east, one crane was erected at the Clearview Urban Village in Seven Hills.

In the north, total crane numbers fell by six to eleven. MB Autohaus in Newstead saw three cranes removed with others in Bulimba, at Windsor and at the Cavcorp Dual Tower project. New cranes have been observed at Bretts Wharf, LeBain Apartments in Newstead, The Atrium retirement village in Lutwyche and at the Queensland Ballet Academy in Kelvin Grove.

Cranes were removed from Hanlon Park Residences in Greenslopes and Renovare Yeronga developments with a single new crane installed at Boutique Living Terrace in Cooparoo in the south.

The west saw an increase to six cranes with four removed and five new cranes. Cranes have been erected at Liveris Academy at UQ (2), Railway Terrace in Milton, civil access works in Hiron Street in Toowong and Swann Road in Taringa.

Cranes were removed from White Dawn in Toowong, Icon Apartments in Milton, Vista in Indooroopilly and in Priory Street, Indooroopilly.



CANBERRA

Canberra's RLB Crane Index® has fallen to 500, from the high of 560 in our last edition.

Nine cranes were erected and twelve removed from projects over the past six months. Twenty-five cranes can now be seen on the skyline in Canberra, down from a previous high of 28.

Construction work done in the Australian Capital Territory reflects the current strength of the industry, with FY 2019 recording a rise of 2.3% to \$3.8 billion over 2018 results in chain volume terms.

Non-residential work jumped 24.6%, while residential work decreased 4.0%. Total building work done rose 6.7%. Engineering work done fell 22.1% to \$735.3 million.

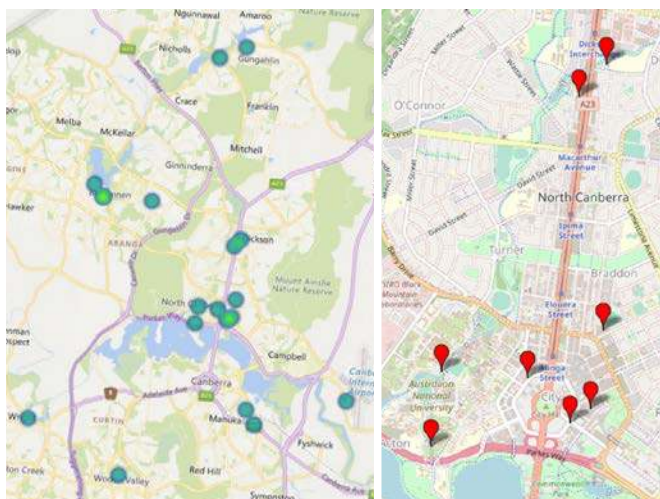
The rise in non-residential work done for the financial year is reflected in the reduction of cranes within the residential sector however still a strong representation at 72% of all cranes in Canberra. Thirteen cranes were added and eight were removed from projects.

Eighteen cranes now are erected on residential sites across the nation's capital with four cranes still on the High Society development in Belconnen, two each at Constitution Place, Atria in Kingston and an additional crane on Cirrus in Belconnen. New cranes were erected at Curzon Apartments in Wright, Grand Central Towers in Woden, The Grounds in Braddon and Wish in Bruce.

Eleven residential cranes were removed from sites including Founders Lane, Midnight, Yamaroshi, Iskia, Ruby, Banskii, Ivy, Polo and Tarlo developments.

The mixed use sector saw an additional three cranes erected at One City Hill, Mercure Hotel and at ANU Research School of Physics and Engineering.

The commercial crane at Civic Quarter in Braddon has been removed. The crane at the ANU Research School of Social Sciences remains.



KEY SECTORS

COMMERCIAL	
EDUCATION	
MIXED USE	
RESIDENTIAL	

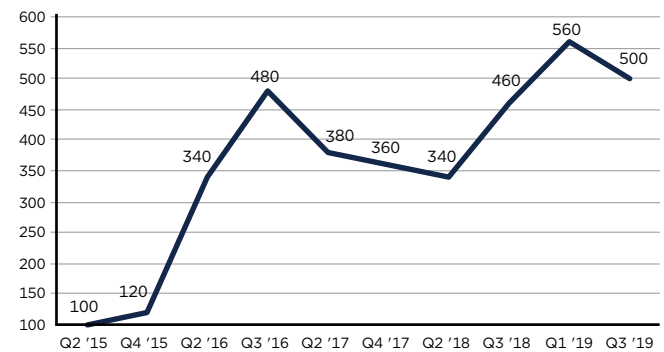


LEGEND

	INCREASE IN NUMBER OF CRANES		DECREASE IN NUMBER OF CRANES		CRANE NUMBERS STEADY
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RLB CRANE INDEX® - CANBERRA

BASE = Q2 2015 = 100



CRANE ACTIVITY - CANBERRA

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	1	3.6%	1	-1	0	1	4.0%
EDUCATION	1	3.6%	0	0	0	1	4.0%
HEALTH	0	0.0%	0	0	0	0	0.0%
HOTEL	0	0.0%	0	0	0	0	0.0%
MIXED USE	2	7.1%	3	0	3	5	20.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	24	85.7%	5	-11	-6	18	72.0%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	28	100.0%	9	-12	-3	25	100.0%

CENTRAL COAST

The RLB Crane Index® for the Central Coast has risen by 8% to 78 for this edition. This is the Central Coast's third appearance as a separate region for the index

Eight cranes commenced with seven removals during the past six months. Cranes now number 14 across the region.

The residential sector still accounts for 92% of all cranes, the same as the previous edition.

Six residential cranes were removed from developments at Terrigal Drive, Campbell Crescent, 8 Kendall Street, Donnison Street and Faunce Street West.

New projects include 281 Mann Street, 21 Range Road, 25 Mann Street, 46 Frederick Street, 55 Holden Street and 10-16 Hargraves Street.

Two residential cranes remained at 154 Terrigal Drive in Terrigal, with single cranes remaining on projects in Gosford at Faunce Street, 8 Kendall Street, Donnison Street West, George Street, 10 Fielders Lane, Beane Street and 5 Ormond Street.

The one health crane was removed from the Railway Parade development.

KEY SECTORS

EDUCATION	
HEALTH	
RESIDENTIAL	

OVERALL STATUS

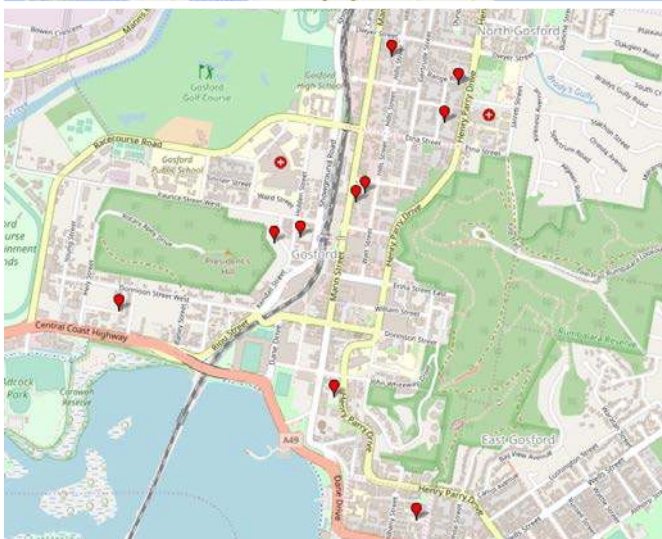
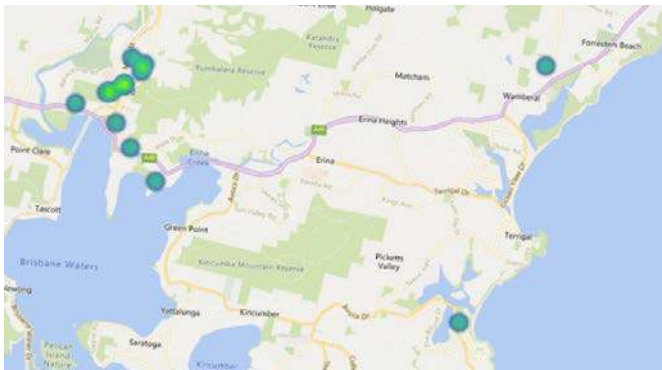
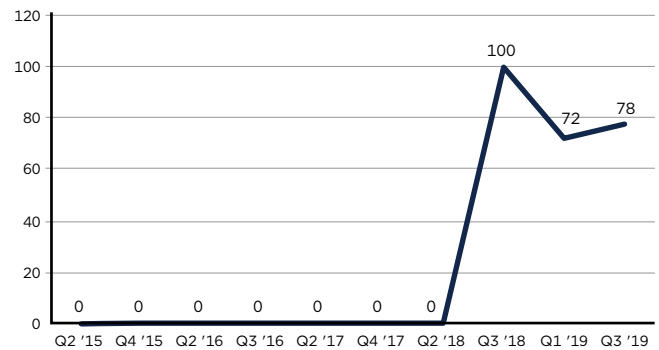


LEGEND

	INCREASE IN NUMBER OF CRANES		DECREASE IN NUMBER OF CRANES		CRANE NUMBERS STEADY
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RLB CRANE INDEX® - CENTRAL COAST

BASE = Q2 2018 = 100

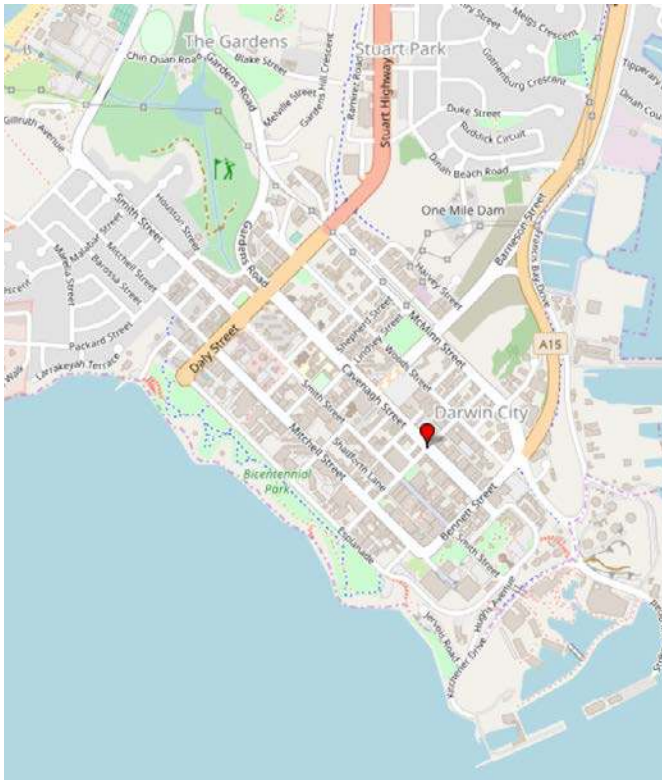


CRANE ACTIVITY - CENTRAL COAST

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	0	0.0%	0	0	0	0	0.0%
EDUCATION	0	0.0%	1	0	1	1	7.1%
HEALTH	1	7.7%	0	-1	-1	0	0.0%
HOTEL	0	0.0%	0	0	0	0	0.0%
MIXED USE	0	0.0%	0	0	0	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	12	92.3%	7	-6	1	13	92.9%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	13	100.0%	8	-7	1	14	100.0%

DARWIN

Darwin has seen the installation of a tower crane at the CBD's newest commercial precinct, Mandunda Place, a nine-storey addition to the commercial office sector in the Territory which will be fully leased to the NT Government.



KEY SECTORS

COMMERCIAL 

OVERALL STATUS



LEGEND



INCREASE IN NUMBER OF CRANES



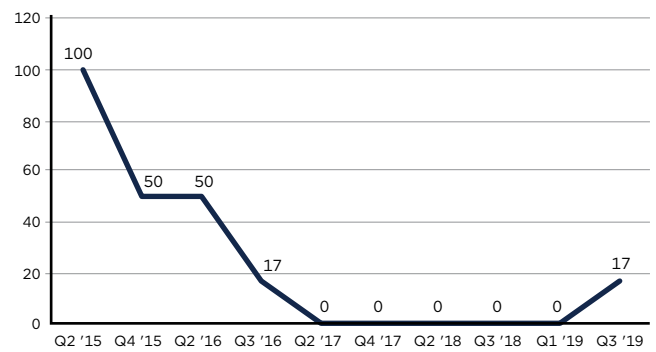
DECREASE IN NUMBER OF CRANES



CRANE NUMBERS STEADY

RLB CRANE INDEX® - DARWIN

BASE = Q2 2015 = 100



CRANE ACTIVITY - DARWIN

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	0	0	0	0	0	0	0.0%
CIVIL	0	0	0	0	0	0	0.0%
COMMERCIAL	0	0	1	0	1	1	100.0%
EDUCATION	0	0	0	0	0	0	0.0%
HEALTH	0	0	0	0	0	0	0.0%
HOTEL	0	0	0	0	0	0	0.0%
MIXED USE	0	0	0	0	0	0	0.0%
RECREATION	0	0	0	0	0	0	0.0%
RESIDENTIAL	0	0	0	0	0	0	0.0%
RETAIL	0	0	0	0	0	0	0.0%
TOTAL	0	0.0%	1	0	1	1	100.0%

GOLD COAST

The Gold Coast RLB Crane Index® recorded a fall from 213 to 193, a fall of 10%. Sixteen cranes were added and 19 were removed bringing the coast's total to 29.

The residential sector accounts for 86% of all Gold Coast cranes, falling slightly from the previous edition.

The residential sector saw 13 new cranes placed on sites and 18 removed, bringing the sector count to 25.

New residential cranes were seen at Serenity in Surfers Paradise, 31 Broadbeach, Boheme Apartments in Robina, Adore in Southport, KOKO in Broadbeach, Hedges Avenue in Mermaid Beach, Southbreak in Bilinga, Gold Coast Airport Hotel, Vantage Building in Benowa, Summit in Labrador and Waterpoint in Biggera Waters.

The Home of the Arts (HOTA) Gallery at 135 Bundal Road, Surfers Paradise saw the erection of a new tower crane in the mixed use /other sector.

Cranes were removed from Bluewater at Bilinga, Zinc at Coolangatta, Anchorage Apartments at Hope Island, Marine Parade at Labrador, Otto and Ocean at Mermaid, the Canopy, the Jefferson and 17 Jefferson Lane at Palm Beach, South Lakes Stage Three at Reedy Creek, 6 Meron Street and 23 Railway Street at Southport, Northcliffe, La Riviere on Cannes, Peninsular at Surfers and Bay Grand Apartments at Tweed Heads.

Both One16 in Surfers Paradise and Magnoli in Palm Beach added an additional crane to the existing crane on site.

One crane remained on the Gold Coast North Medical Hub within the health sector.

Two new retail cranes were placed on the new Lanes Retail Village in Mermaid Waters.

KEY SECTORS

HEALTH	
MIXED USE	
RESIDENTIAL	
RETAIL	

OVERALL STATUS

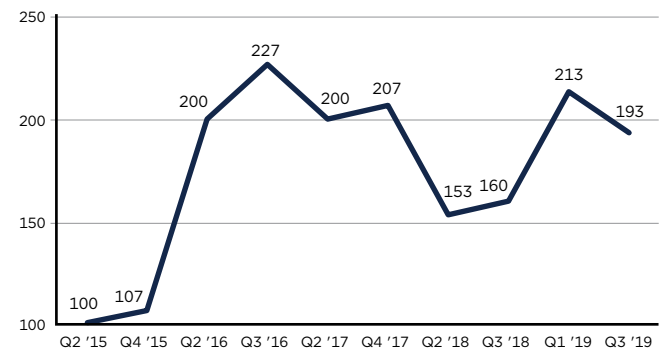


LEGEND

	INCREASE IN NUMBER OF CRANES		DECREASE IN NUMBER OF CRANES		CRANE NUMBERS STEADY
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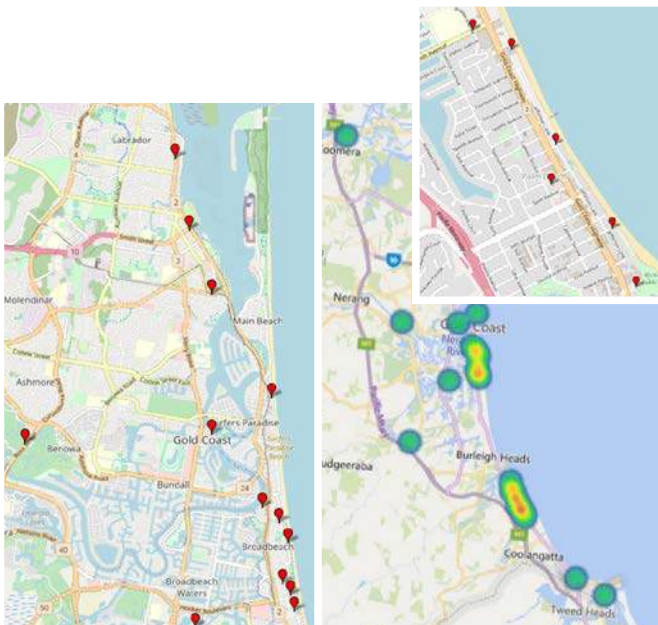
RLB CRANE INDEX® - GOLD COAST

BASE = Q2 2015 = 100



CRANE ACTIVITY - GOLD COAST

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	0	0.0%	0	0	0	0	0.0%
EDUCATION	0	0.0%	0	0	0	0	0.0%
HEALTH	1	3.1%	0	0	0	1	3.4%
HOTEL	0	0.0%	0	0	0	0	0.0%
MIXED USE	1	3.1%	1	-1	0	1	3.4%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	30	93.8%	13	-18	-5	25	86.2%
RETAIL	0	0.0%	2	0	2	2	6.9%
TOTAL	32	100.0%	16	-19	-3	29	100.0%



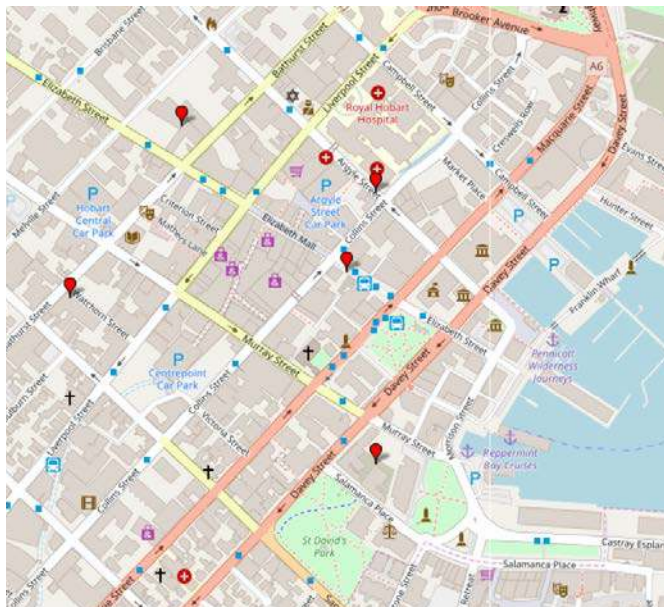
HOBART

Hobart's RLB Crane Index® has remained at 125 for this edition. Two new cranes were observed with two removals, keeping the crane total across Hobart to five.

One crane was removed from the Hobart Hospital, the other from the Hobart Academy of Performing Arts.

Cranes remain at Parliament Square, and at the Vibe Hotel and Hyatt developments.

New cranes were installed on The Commons project in Bathurst Street and for the UTAS student accommodation project in Melville St.



KEY SECTORS

- CIVIC
- HEALTH
- HOTEL
- MIXED USE
- RESIDENTIAL

OVERALL STATUS

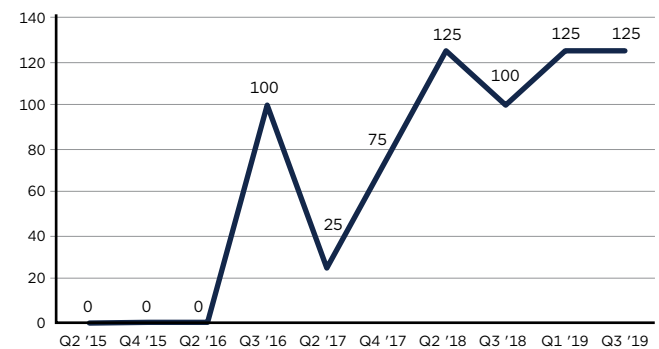


LEGEND

- INCREASE IN NUMBER OF CRANES
- DECREASE IN NUMBER OF CRANES
- CRANE NUMBERS STEADY

RLB CRANE INDEX® - HOBART

BASE = Q3 2016 = 100



CRANE ACTIVITY - HOBART

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	1	20.0%	0	-1	-1	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	0	0.0%	0	0	0	0	0.0%
EDUCATION	0	0.0%	0	0	0	0	0.0%
HEALTH	1	20.0%	0	-1	-1	0	0.0%
HOTEL	2	40.0%	0	0	0	2	40.0%
MIXED USE	1	20.0%	0	0	0	1	20.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	0	0.0%	2	0	2	2	40.0%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	5	100.0%	2	-2	0	5	100.0%

MELBOURNE

Melbourne recorded its first fall in six editions of the RLB Crane Index®. The index fell by 3.6% to 184. It was the first fall since Q3 2016.

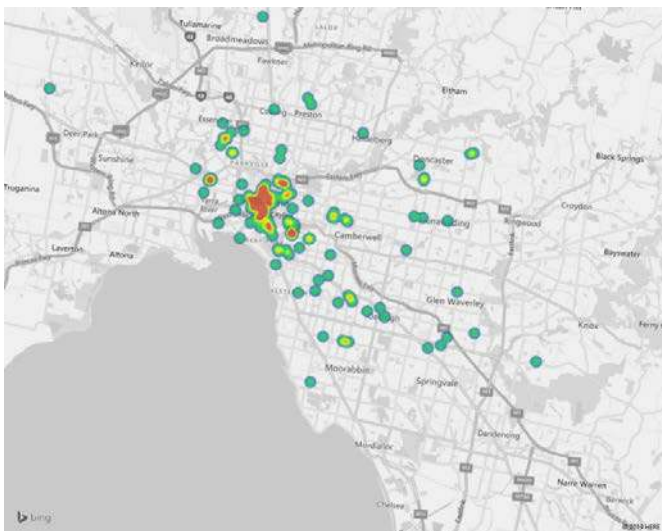
Across Melbourne 94 cranes were added to projects and 103 were removed, bringing current crane numbers to 213 down from the record 222 cranes achieved six months ago.

Solidifying the current strength of Victoria's construction industry, construction work done rose 4.4% in chain volume terms for FY 2019, with increases recorded for all sectors. Engineering work done rose 3.3% as activity ramps up on a number of key infrastructure projects. The building sector increased 4.9%.

Relatively stable crane numbers saw the sector mix remain the same as six months ago with residential and commercial cranes representing almost 80% of all cranes around Melbourne.

The residential sector continues to dominate the Melbourne skyline with 145 cranes across 43 suburbs in Melbourne which is down from 69 suburbs six months ago. A movement towards the CBD has taken place this period with 60% of all cranes centred on inner Melbourne.

The civil sector continues to grow with two additional cranes added. Thirteen cranes are now assisting in the delivery of works for both the Metro Tunnel and Western Distributor projects including associated infrastructure and in ground services diversions.



KEY SECTORS

CIVIC	↑
CIVIL	↑
COMMERCIAL	↑
EDUCATION	↑
HEALTH	↑
HOTEL	↑
MIXED USE	↑
RESIDENTIAL	↓
RETAIL	↓

OVERALL STATUS

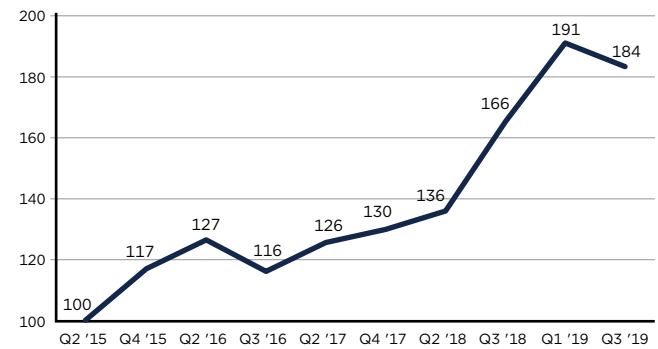


LEGEND

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

BASE = Q2 2015 = 100



CRANE ACTIVITY - MELBOURNE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	3	1.4%	0	0	0	3	1.4%
CIVIL	11	5.0%	2	0	2	13	6.1%
COMMERCIAL	27	12.2%	8	-11	-3	24	11.3%
EDUCATION	3	1.4%	1	-2	-1	2	0.9%
HEALTH	3	1.4%	4	-2	2	5	2.3%
HOTEL	4	1.8%	2	-3	-1	3	1.4%
MIXED USE	18	8.1%	2	-7	-5	13	6.1%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	148	66.7%	72	-75	-3	145	68.1%
RETAIL	5	2.3%	3	-3	0	5	2.3%
TOTAL	222	100.0%	94	-103	-9	213	100.0%

MELBOURNE

The commercial sector fell by three cranes with eight additions and 11 removals. New cranes were sighted at Seek Headquarters in Cremorne, Nexus Corporate Park, 555 Collins Street, 254-294 Wellington Road and Park Street in South Melbourne. Melbourne Square saw an additional commercial crane installed.

Commercial cranes were removed from Botanica 3, 218-228 Hoddle Street, Cobild HQ, Collins House, East Edge Botanica, 12-18 Albert Street and Sugar Hill Business Park.

The key existing projects within the mixed use/other sector saw a total of five cranes removed from projects including M-City in Clayton, Collins Arch and West Side Place. A total of nine cranes now remain on these sites.

All education cranes are erected on Deakin University projects at Burwood and Waurnd Ponds.

Significant crane additions were seen in the health sector at Royal Victorian Ear and Eye Hospital, mecwacare in Malvern, Goulburn Valley Health in Shepparton and Northern Hospital in Epping.

CRANE ACTIVITY - MELBOURNE REGIONS

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
INNER	123	55.4%	46	-41	5	128	60.1%
EAST	18	8.1%	10	-12	-2	16	7.5%
GEELONG	4	1.8%	1	-1	0	4	1.9%
NORTH	22	9.9%	12	-15	-3	19	8.9%
SOUTH	45	20.3%	21	-30	-9	36	16.9%
WEST	10	4.5%	4	-4	0	10	4.7%
TOTAL	222	100.0%	94	-103	-9	213	100.0%

Across the city, crane increases were only seen within inner Melbourne (5), all other regions saw crane reductions.

The rise in cranes within inner Melbourne was driven by a strong increase in the residential sector of nine cranes. This was a result of 36 new cranes on projects and 27 removals. Residential developments now account for 64% of all cranes across inner Melbourne. Commercial projects saw a total fall of four cranes with five new additions and nine removed. The hotel sector recorded a rise of one, bringing the count to three.

In the east, crane numbers fell by two to 16. Fifteen cranes are on residential projects with a single education crane at Deakin University. Ten new cranes were erected with twelve removed from sites.

The number of cranes in the north remained strong after the significant lift in our last edition. Crane numbers fell to 19, down 16%. Residential cranes now number 15, down from 21 six months ago. This reduction was offset by increases in the health sector and new cranes in Craigieburn and Campbellfield.

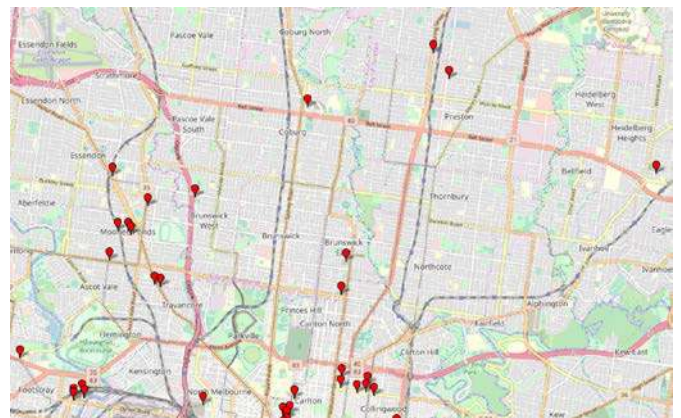
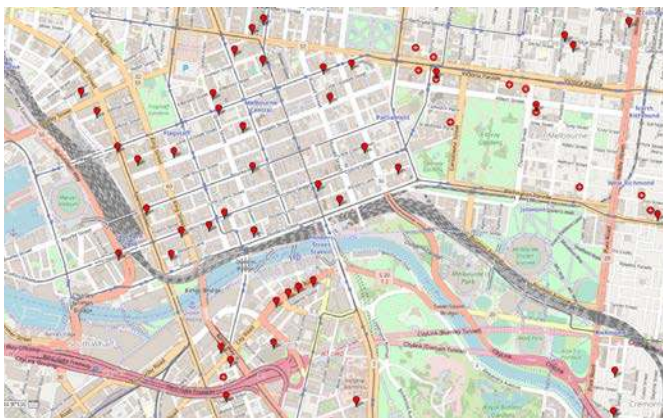
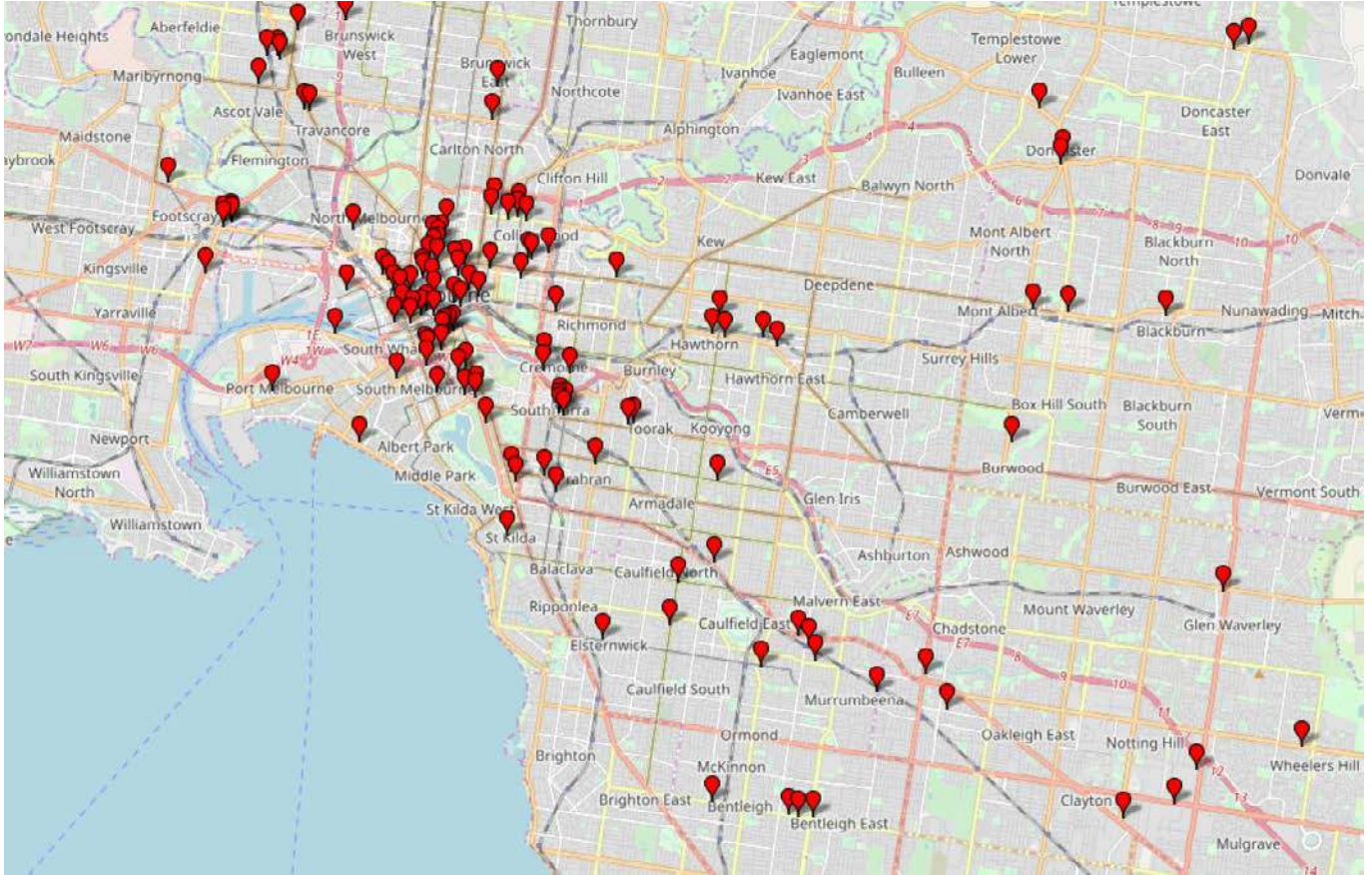
Cranes in the south dropped by 20% to now total 36. A total of 21 cranes commenced on site with 30 cranes removed during the past six months.

Twenty-two residential cranes were removed but only 14 added within the region causing a drop in numbers. Strong activity is still being seen along the Caulfield - Dandenong train corridor. M-City still commands four cranes equal with four cranes at the Glen redevelopment.

Numbers in the west remain at ten, the same number as our last count. Footscray dominates the numbers within the west with nine cranes. Outside of Footscray and Geelong, the only other crane spotted was at Caroline Springs.

Geelong saw the removal of one crane at The Mercer Development and one added at Deakin in Waurnd Ponds, leaving the region's count at four.

MELBOURNE



NEWCASTLE

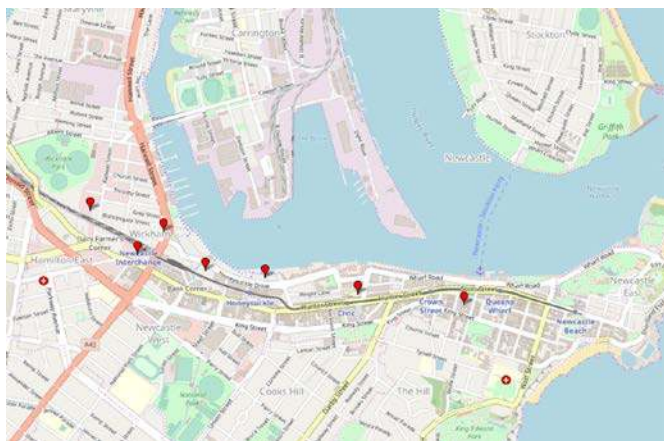
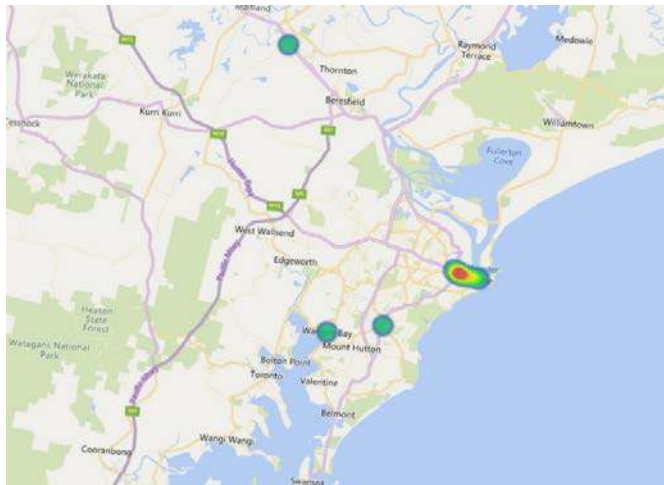
Newcastle's RLB Crane Index® has doubled from six months ago to reach 150. Nine cranes were added with three removals bringing the total count to twelve, up from six previously.

Crane numbers rose in the residential (three), mixed (two) and commercial (one) sectors, while the hotel sector remained constant with one crane.

There are now eight residential cranes across Newcastle, up from five in our last edition.

New residential developments commencing include the East End apartments, Darby Plaza, Neufort Wickham and Stella on Hannell. Hotel commencements included the Halcyon on Honeysuckle Drive. The commencement of the Doma interchange and carpark saw two new cranes.

Crane removals were seen at Verve apartments and in the health sector at Long Tan Village.



KEY SECTORS

- COMMERCIAL
- HEALTH
- HOTEL
- MIXED USE
- RESIDENTIAL

OVERALL STATUS

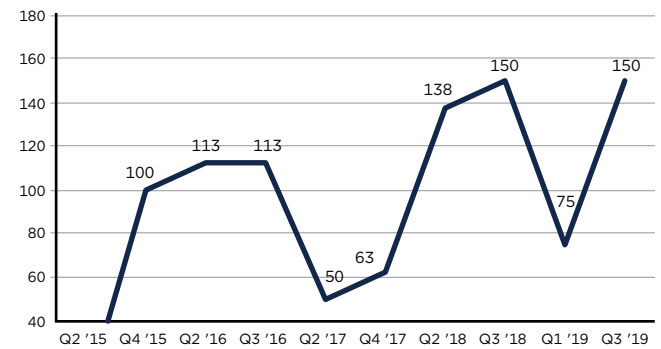


LEGEND

- INCREASE IN NUMBER OF CRANES
- DECREASE IN NUMBER OF CRANES
- CRANE NUMBERS STEADY

RLB CRANE INDEX® - NEWCASTLE

BASE = Q4 2015 = 100



CRANE ACTIVITY - NEWCASTLE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	0	0.0%	1	0	1	1	8.3%
EDUCATION	0	0.0%	0	0	0	0	0.0%
HEALTH	1	16.7%	0	-1	-1	0	0.0%
HOTEL	0	0.0%	1	0	1	1	8.3%
MIXED USE	0	0.0%	2	0	2	2	16.7%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	5	83.3%	5	-2	3	8	66.7%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	6	100.0%	9	-3	6	12	100.0%

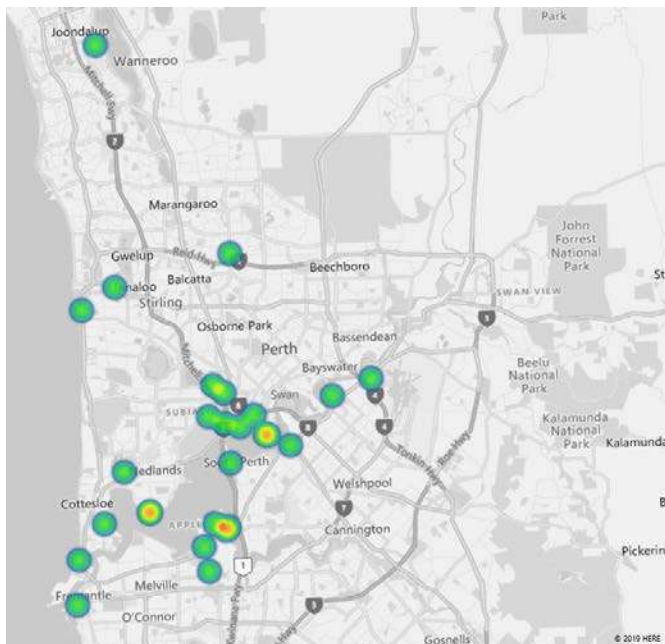
PERTH

Perth saw a rise in the RLB Crane Index® of 9% with the index now at 79. A significant 24 cranes were added in the past six months signifying strength in new commencements. Twenty-three cranes were removed from mostly residential projects. Thirty-four cranes can now be seen across Perth.

Construction work done has fallen within Western Australia during FY 2019 with activity down by 51% in the engineering sector, 7% in the residential and 19% in the non-residential sector. The rise in crane numbers, albeit small, may indicate some sectors commencing an upward trend.

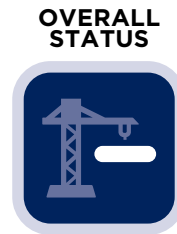
Residential cranes still saw a fall of one crane, falling from 20 to 19. While still remaining the most dominant sector, residential cranes fell from 60% of all cranes to 56% in this edition.

Fifteen residential cranes were removed from sites in Ascot, Swan Care's Ningana Aged Care Facility in Bentley, Claremont on the Park and Essence in Claremont, Henley on Park in Como, 9Tully and Skye One Seven in East Perth, Skypark in Leederville, Cirque in Mount Pleasant, both Camilla Residences and NV Apartments in Perth, The Residences Tribeca North in Rivervale, Echelon in South Perth and Victoria Quarter in Victoria Park.



KEY SECTORS

CIVIC	↑
CIVIL	↓
COMMERCIAL	↓
EDUCATION	↑
HEALTH	↓
HOTEL	↑
MIXED USE	↓
RESIDENTIAL	↓
RETAIL	↓

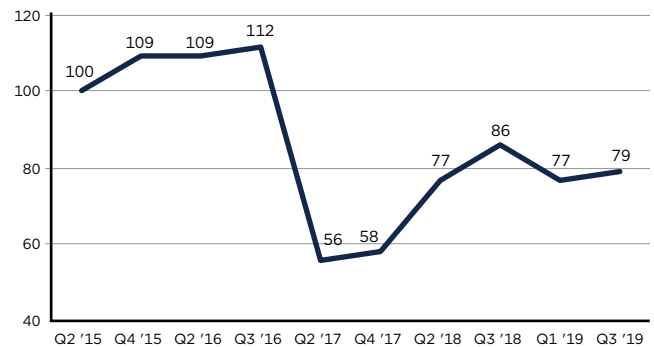


LEGEND

- ↑ INCREASE IN NUMBER OF CRANES
- ↓ DECREASE IN NUMBER OF CRANES
- ↔ CRANE NUMBERS STEADY

RLB CRANE INDEX® - PERTH

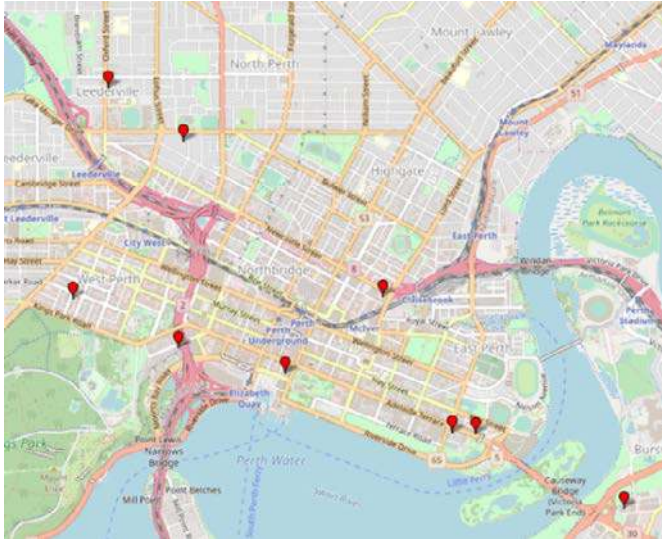
BASE = Q2 2015 = 100



CRANE ACTIVITY - PERTH

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	2	6.1%	0	-2	-2	0	0.0%
CIVIL	0	0.0%	1	0	1	1	2.9%
COMMERCIAL	0	0.0%	2	0	2	2	5.9%
EDUCATION	1	3.0%	1	-1	0	1	2.9%
HEALTH	2	6.1%	1	0	1	3	8.8%
HOTEL	4	12.1%	0	-3	-3	1	2.9%
MIXED USE	1	3.0%	2	-1	1	2	5.9%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	20	60.6%	15	-16	-1	19	55.9%
RETAIL	3	9.1%	3	-1	2	5	14.7%
TOTAL	33	100.0%	25	-24	1	34	100.0%

PERTH



New residential projects sighted include Kintail Rd Apartments in Applecross, Atura Apartments in Ardross, Marina East Apartments in Ascot, Booragoon, Parallel Apartments in Burswood, The Queenslea Precinct in Claremont, two houses in Dalkeith along Jutland Parade, Arthouse in Joondalup, Aston Apartments in Leederville, Compass Apartments in North Fremantle, Beach Shack Apartments in Scarborough, Pinnacle Apartments in South Perth and Camilla in West Perth.

Three cranes were added to the Karrinyup Shopping Centre increasing their crane count to five, the largest number of retail cranes across the country on a single site.

The hotel sector saw the completion of works with three cranes removed from the Ibis Styles, Mantra and Quest sites.

The commencement of the Forrestfield Airport Link saw the addition of a crane within the civil sector.

SUNSHINE COAST

After falling significantly in the last edition, the Sunshine Coast RLB Crane Index® rose to 110 from 100 for this edition. Five new cranes have been erected with four removed, increasing the count to 11.

Only residential cranes spread from Noosa in the north and Birtinya in the south of the coast can be seen within the region.

Cranes were removed from the Cosmopolitan in Cotton Tree (2), Lang Court in Coolum and The Hedge in Kawana

New cranes were erected for the Parkridge at Noosa Springs Golf Resort, both Lumina and on Allambi Rise in Noosa and Forest Edge in Sippy Downs.

KEY SECTORS

RESIDENTIAL



OVERALL STATUS



LEGEND



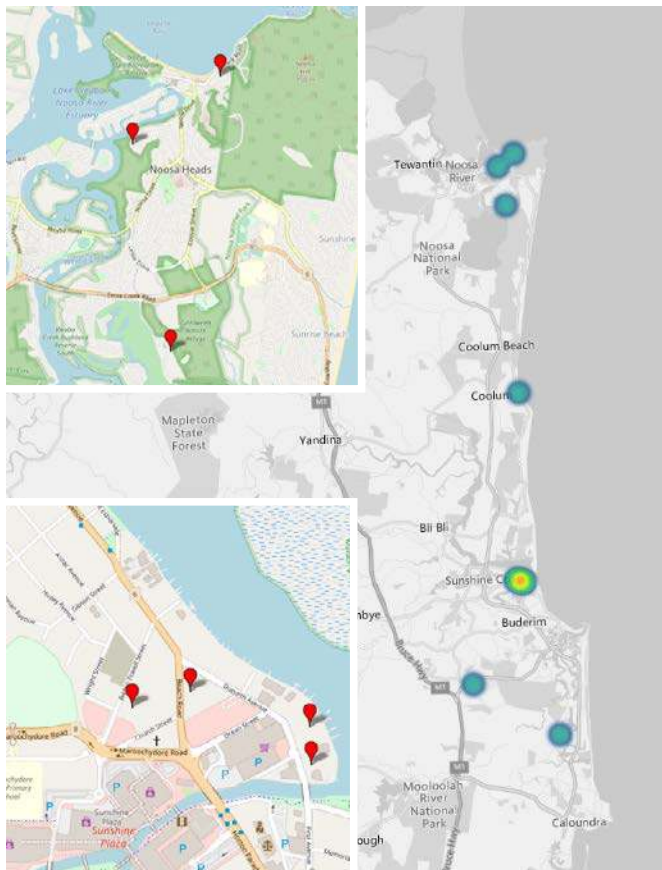
INCREASE IN NUMBER OF CRANES



DECREASE IN NUMBER OF CRANES

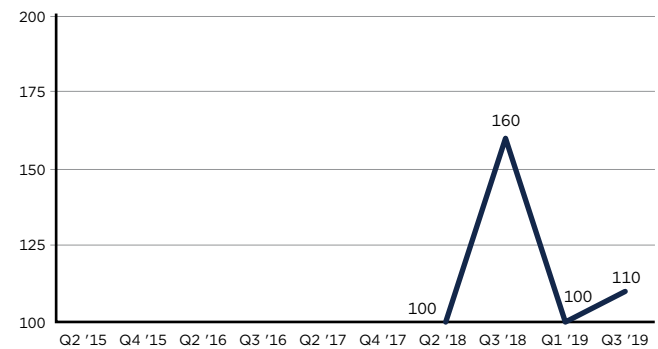


CRANE NUMBERS STEADY



RLB CRANE INDEX® - SUNSHINE COAST

BASE = Q2 2018 = 100



CRANE ACTIVITY - SUNSHINE COAST

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	0	0.0%	0	0	0	0	0.0%
EDUCATION	0	0.0%	0	0	0	0	0.0%
HEALTH	0	0.0%	0	0	0	0	0.0%
HOTEL	0	0.0%	0	0	0	0	0.0%
MIXED USE	0	0.0%	0	0	0	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	10	100.0%	5	-4	1	11	100.0%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	10	100.0%	5	-4	1	11	100.0%

SYDNEY

The Sydney RLB Crane Index® rebounded from its previous three falls to record a 3% rise for this edition. The index rose to 197, up from 191 six months ago.

Crane numbers in Sydney increased by nine to 319, up from 310 previously. What is key, is that 189 cranes were added to sites around Sydney indicating a strong forward workflow for the next twelve months. 180 cranes were removed from completed developments in the past six months.

Visually, cranes across Sydney appear to be following the significant spend on transport infrastructure in the past five years creating defined lines of activity. These are north along the Pacific Highway, west along Parramatta Road, northeast along the M2 and south along the Kingsway. The investment in infrastructure together with the inclusion of activity zones along major transport corridors is having a significant influence in the delivery of housing stock across Sydney.

The increase in crane numbers mirrors the strong performance of the construction sector for the past financial year. New South Wales' construction work done continued to grow, up 2% in chain volume terms for FY 2019. Engineering work was constant, while residential fell 2.5% and non-residential work increased by 15%.

KEY SECTORS

CIVIL	↑
COMMERCIAL	↑
EDUCATION	↑
HEALTH	↑
HOTEL	↑
RECREATION	↑
RESIDENTIAL	↑

OVERALL STATUS

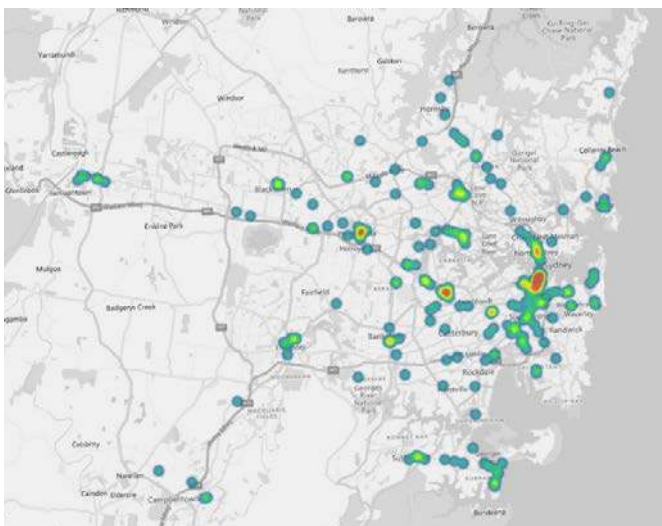
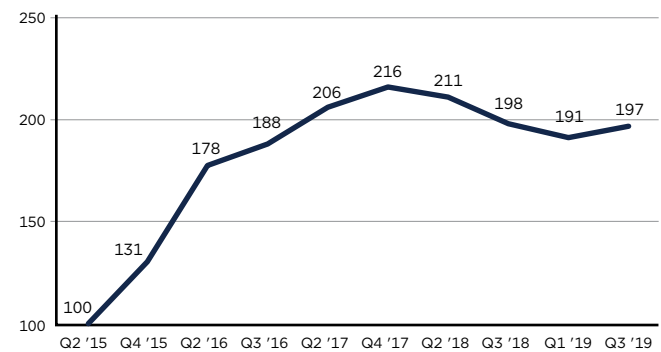


LEGEND

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

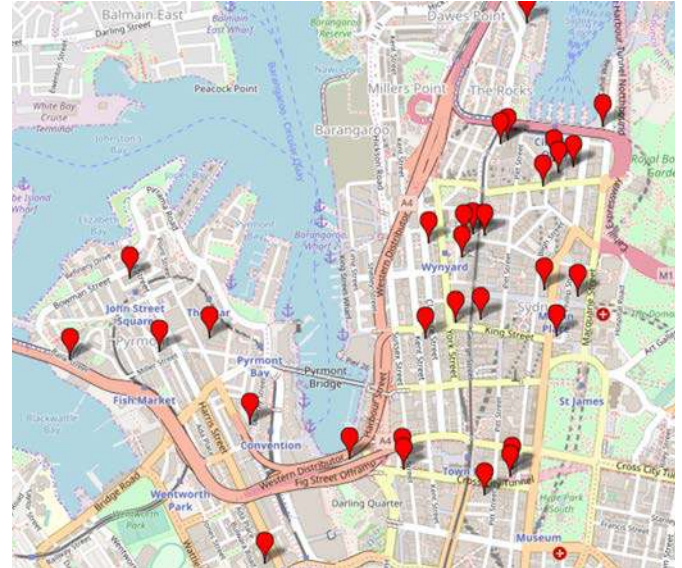
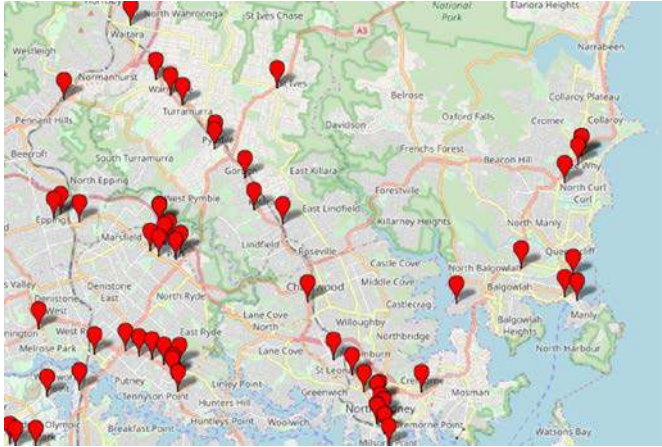
BASE = Q2 2015 = 100



CRANE ACTIVITY - SYDNEY

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	17	5.5%	12	-11	1	18	5.6%
COMMERCIAL	38	12.3%	19	-13	6	44	13.8%
EDUCATION	11	3.5%	9	-8	1	12	3.8%
HEALTH	5	1.6%	2	-2	0	5	1.6%
HOTEL	6	1.9%	2	-3	-1	5	1.6%
MIXED USE	0	0.0%	0	0	0	0	0.0%
RECREATION	1	0.3%	2	-1	1	2	0.6%
RESIDENTIAL	232	74.8%	143	-142	1	233	73.0%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	310	100.0%	189	-180	9	319	100.0%

SYDNEY



Across Sydney, all sectors recorded increases with the exception of hotels. Strong growth within the commercial sector saw an additional net six cranes. The residential sector remained strong with 233 cranes, up one from six months ago.

Residential cranes still dominate across the city with 73% of all cranes assisting in the construction of future dwellings. Commercial cranes is the only other sector to have a greater than 10% share of current cranes at 14%.

No retail, mixed use or civic cranes were recorded for this edition.

There has been a significant shift of cranes across Sydney this edition. Crane activity has moved from the north to the east and inner Sydney. The south and the west have remained steady.

Across the city, inner Sydney recorded a net crane gain of 12. This is a 10% increase for the six months.

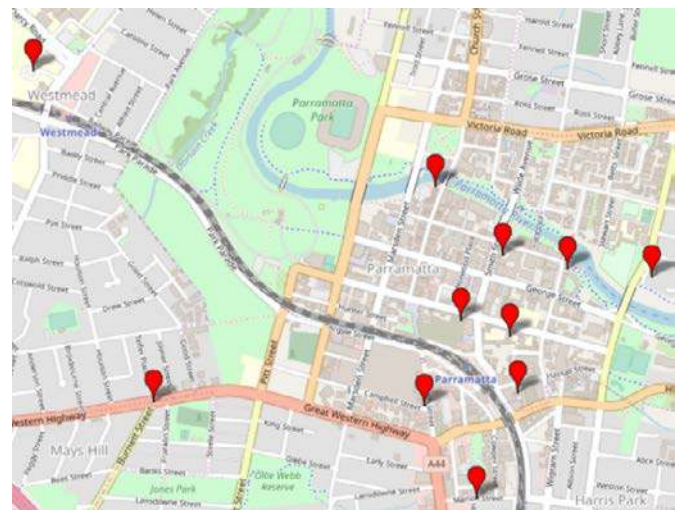
In our previous count, inner Sydney was the only region to record an increase in cranes, this trend has continued over the past six months. Sixty-six cranes were erected and 54 removed.

Crane numbers in inner Sydney now number 118. Crane increases were recorded in the residential (twelve), commercial (two) and education, health and hotel sectors with one each.

The civic and hotel sectors saw falls of four and one crane respectively.

CRANE ACTIVITY - SYDNEY REGIONS

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
INNER SYDNEY	106	34.2%	66	-54	12	118	37.0%
EAST	13	4.2%	25	-10	15	28	8.8%
NORTH	107	34.5%	41	-69	-28	79	24.8%
SOUTH	27	8.7%	25	-19	6	33	10.3%
WEST	57	18.4%	32	-28	4	61	19.1%
WOLLONGONG	0	0.0%	0	0	0	0	0.0%
TOTAL	310	100.0%	189	-180	9	319	100.0%



SYDNEY



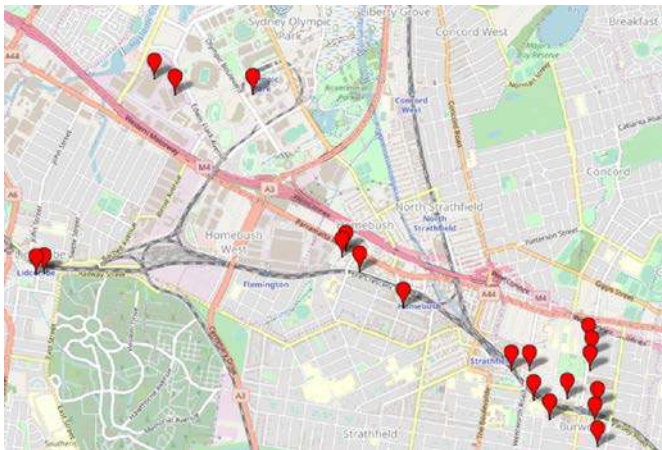
The east's crane count rose after the previously recorded fall. Cranes now number 28, up 15 for the past six months. Significant movements have been seen in the residential sector with 24 new cranes and eight removals. Most significant was the addition of seven cranes at Meriton's Pagewood Green development. Both Pemberton on the Park in Botany and The Hunter in Double Bay each saw two cranes erected.

Cranes in the north fell to 79 down from 107, with 69 removals and only 41 additions. Sixty-three cranes were removed from residential projects over the past six months with only 31 cranes erected, a fall of 36%.

Major projects with crane removals were Greenland's development in North Ryde and Ganellan's in Delhi Road (both 4) GrandMetro Constructions' Prime Macquarie, Ganellan's in Macquarie Park, Yuhu Group's Wharfside Residences in Manly, Mirvac's St Leonards Square, Calibre Construction Group's Villa De M.A. in Epping, Ceerose's Oxford Central in Epping (all 2 each).

The south now numbers 33 cranes, a rise of six cranes. The civil sector contributed half of the rise with cranes erected for works in Arncliffe, Bexley and Kingsgrove.

The west saw a rise of four cranes to now total 61. 90% of all cranes in the west are within the residential (75%) and commercial sector (15%).



WOLLONGONG

Wollongong enters the RLB Crane Index® for the first time showcasing 18 cranes within the region.

With the assistance of the Economic Development Department of the City of Wollongong, the Wollongong catchment area was deemed to be of a size and relevance that justified inclusion into the index. We note that data for Wollongong has been forwarded to us by the council.

Wollongong has the lowest recorded single residential mix of cranes across the country although it has the highest mixed use percentage. The majority of residential developments within the city and surrounds are within mixed use projects.

Currently 8 cranes are on mixed use sites and these include Parq on Flinders, Crownview Wollongong, Signature in Regent Street, Avante in Rawson Street, Skye Wollongong, Atchison Street, and the Verge in Underwood Street, Corrimal. All these developments whilst having residential components also have multi use elements such as commercial car parking, commercial offices, retail and child care facilities.

Five residential cranes are on projects in Loftus Street, two developments in Beatson Street, Church Street Apartments and The Village at Corrimal.

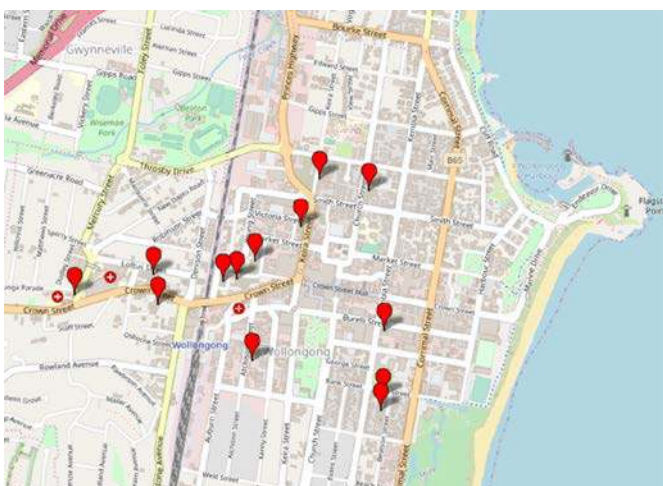
Commercial cranes are for the Gateway on Keira and IMB Bank Headquarters.

Education cranes can be seen at both the Molecular & Life Sciences Building and the Social Sciences and Law, Humanities and the Arts (Western) Building on the main campus at University of Wollongong.

The health crane is at the day surgery facility being developed in Urunga Parade.

CRANE ACTIVITY - WOLLONGONG

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2019	%	+	-	NET	Q3 2019	%
CIVIC	0	0	0	0	0	0	0.0%
CIVIL	0	0	0	0	0	0	0.0%
COMMERCIAL	0	0	2	0	2	2	11.1%
EDUCATION	0	0	2	0	2	2	11.1%
HEALTH	0	0	1	0	1	1	5.6%
HOTEL	0	0	0	0	0	0	0.0%
MIXED USE	0	0	8	0	8	8	44.4%
RECREATION	0	0	0	0	0	0	0.0%
RESIDENTIAL	0	0	5	0	5	5	27.8%
RETAIL	0	0	0	0	0	0	0.0%
TOTAL	0	0.0%	18	0	18	18	100.0%



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® '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. The index was recalibrated at Q2 2015, which saw the base index value of 100 established for each city. Subsequent cities which are now included within the index have had their base value of 100 established on their initial entry into the count. Subsequent movements in crane numbers are 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 Q2 2018, 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_{cp} 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 across the respective city. 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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