

Q3 2022 RLB CRANE INDEX® HIGHLIGHTS:

- Crane numbers are at a record high of 868
- The non-residential index continued to rise, achieving a record value of 290. This represents 333 cranes or 38% of all cranes across Australia
- The Gold Coast, Sunshine Coast and Sydney all recorded record crane numbers
- The national churn rate continued to fall to 28%, indicating that cranes are remaining on site longer than recorded in previous editions
- Two new sectors are included in this edition of the RLB Crane Index®; aged care and data centres / industrial are included as separate counts
- Hobart saw a welcome return of cranes to the skyline, for the first time since Q1 2020
- There was a record number of cranes on civic, civil, data centre and health projects across the country

Q3 2022 RLB CRANE INDEX® SUMMARY:

CITIES	KEY SECTORS
ADELAIDE	AGED CARE
BRISBANE	CIVIC
CANBERRA	CIVIL
CENTRAL COAST	COMMERCIAL
DARWIN	DATA CENTRE / INDUSTRIAL
GOLD COAST	EDUCATION
HOBART	HEALTH
MELBOURNE	HOTEL
NEWCASTLE	MIXED USE
PERTH	RECREATION
SUNSHINE COAST	RESIDENTIAL
SYDNEY	RETAIL
WOLLONGONG	

LEGEND

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

AUSTRALIA

Crane numbers across the country rose sharply in the past six months; 300 new cranes were added on developments sites, and 245 were removed. With the additional 55 cranes, there is now a total of 868 cranes in operation nationally, a new high in the RLB Crane Index®. This edition of the Index includes the introduction of two new sectors within the non-residential market; cranes on aged care and data centre / industrial developments have been given their own sector to reflect the growing importance and numbers of these projects.

According to the latest ABS data, construction work done for the 2022 financial year was up by 1.1% (or \$2.4B) across Australia compared to 2021 results. Total residential work done was down 0.1% (or \$0.1B) non-residential activity was up by 2.3% (or \$1.1B). Engineering activity was up by 1.6% (or \$1.4B).

Growth in approval values was seen in the 2022 financial year, with total building approvals rising by 4.2%, or \$5B in real terms. Residential approvals lifted 2.6% and non-residential 6.3%. Recent July 2022 approval numbers are trending downwards, which may impact future crane numbers.

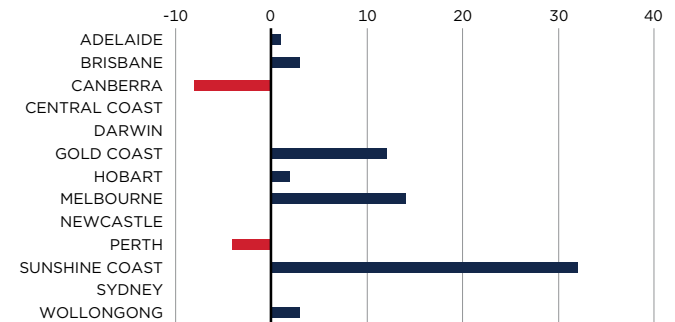
Strong national crane growth has been seen in almost all sectors except commercial and recreation, which both fell. The residential index rose to its highest level since Q1 2019, and the non-residential index continued its upward trajectory to reach its highest value in the past 21 editions of the index.

The non-residential index has again increased to a record level, rising to 290 points from 268 in Q1 2022. This 7.4% increase represents an additional 25 cranes. Included within the non-residential sectors are the new sectors of aged care and data centre / industrial. There are 14 cranes on aged care developments across the country and 21 on data centre / industrial developments.

Sydney's crane numbers increased by another 32 to total 380 cranes. This represents 44% of all cranes across the country. The Gold Coast and Melbourne recorded double figure lifts in crane numbers of 14 and 12 respectively. Canberra and Perth recorded crane reductions of eight and four respectively.

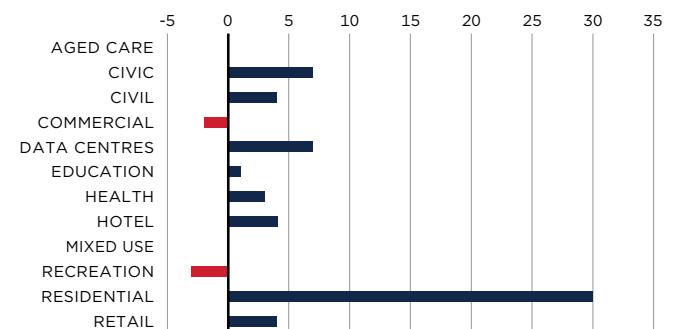
AUSTRALIA NET CRANE MOVEMENT BY CITY

NUMBER OF CRANES REMOVED / ADDED



AUSTRALIA NET CRANE MOVEMENT BY SECTOR

NUMBER OF CRANES REMOVED / ADDED



CRANE ACTIVITY - AUSTRALIA BY KEY CITIES

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
ADELAIDE	16	2.0%	5	-4	1	17	2.0%
BRISBANE	79	9.7%	29	-26	3	82	9.4%
CANBERRA	31	3.8%	8	-16	-8	23	2.6%
CENTRAL COAST	10	1.2%	2	-2	0	10	1.2%
DARWIN	2	0.2%	0	0	0	2	0.2%
GOLD COAST	40	4.9%	21	-9	12	52	6.0%
HOBART	0	0.0%	2	0	2	2	0.2%
MELBOURNE	192	23.6%	79	-65	14	206	23.7%
NEWCASTLE	12	1.5%	3	-3	0	12	1.4%
PERTH	55	6.8%	10	-14	-4	51	5.9%
SUNSHINE COAST	16	2.0%	10	-10	0	16	1.8%
SYDNEY	348	42.8%	125	-93	32	380	43.8%
WOLLONGONG	12	1.5%	6	-3	3	15	1.7%
TOTAL	813	100.0%	300	-245	55	868	100.0%

CRANE ACTIVITY - AUSTRALIA BY SECTOR

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	14	1.7%	7	-7	0	14	1.6%
CIVIC	15	1.8%	10	-3	7	22	2.5%
CIVIL	37	4.6%	13	-9	4	41	4.7%
COMMERCIAL	78	9.6%	27	-29	-2	76	8.8%
DATA CENTRES	14	1.7%	13	-6	7	21	2.4%
EDUCATION	23	2.8%	8	-7	1	24	2.8%
HEALTH	31	3.8%	6	-3	3	34	3.9%
HOTEL	12	1.5%	7	-3	4	16	1.8%
MIXED USE	72	8.9%	15	-15	0	72	8.3%
RECREATION	7	0.9%	2	-5	-3	4	0.5%
RESIDENTIAL	505	62.1%	186	-156	30	535	61.6%
RETAIL	5	0.6%	6	-2	4	9	1.0%
TOTAL	813	100.0%	300	-245	55	868	100.0%

The strong growth in crane numbers for Q2 2022 appears to correlate with the strong national activity numbers. Upon investigation, the churn rate of cranes around Australia has fallen significantly over the past 18 months. From Q1 2019 until Q1 2021, the churn rate hovered around the 50% mark. Since Q1 2021 the churn rate has dropped nationally to reach 28% in Q3 2022.

The RLB Crane Index® churn rate is calculated as the number of cranes removed in a period, divided by the closing number of cranes, and expressed as a percentage.

A lower crane churn rate percentage is an indicator that cranes are remaining on sites longer. This changing churn rate factor is aligned with recent media reports that projects are delayed due to increases in inclement weather events, shortages of materials, and lack of skilled labour.

If cranes providing logistical assistance to multi storey developments remain on site longer than anticipated due to weather events and supply chain disruptions, the cost of preliminaries increase, causing overall costs to rise. It is noticeable that both Sydney and Brisbane's churn rate has slowed more dramatically than Melbourne's. This appears to be in line with the significant increase in rainfall along the east coast relative to the southern regions of Australia during the past 12 months.

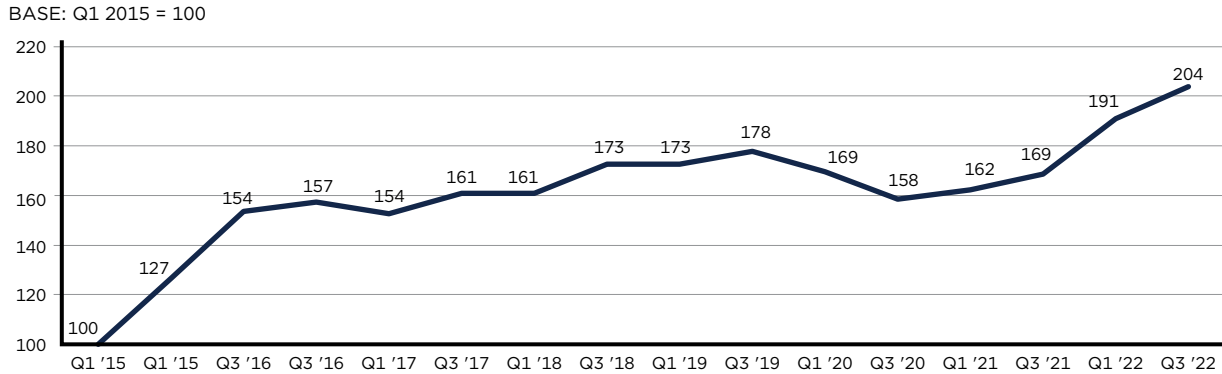
RLB CRANE INDEX® CHURN RATES

	Q3 18	Q1 19	Q3 19	Q1 20	Q3 20	Q1 21	Q3 21	Q1 22	Q3 22
ADELAIDE	31%	24%	32%	47%	120%	60%	45%	19%	24%
BRISBANE	58%	73%	60%	57%	60%	38%	42%	38%	32%
CANBERRA	35%	39%	46%	30%	30%	77%	21%	54%	70%
CENTRAL COAST	6%	62%	50%	78%	100%	11%	20%	30%	20%
DARWIN	CRANE NUMBERS TOO SMALL FOR FULL COMPARISON								
GOLD COAST	33%	31%	66%	48%	32%	45%	49%	28%	17%
HOBART	CRANE NUMBERS TOO SMALL FOR FULL COMPARISON								
MELBOURNE	47%	34%	48%	45%	54%	47%	51%	39%	32%
NEWCASTLE	17%	150%	25%	12%	54%	100%	56%	33%	25%
PERTH	30%	64%	71%	49%	28%	67%	46%	16%	27%
SUNSHINE COAST	31%	90%	36%	64%	20%	50%	62%	38%	63%
SYDNEY	66%	60%	56%	49%	40%	54%	36%	27%	24%
WOLLONGONG	NC	NC	NC	33%	91%	42%	58%	33%	20%
TOTAL	52%	51%	52%	47%	47%	51%	42%	32%	28%

AUSTRALIA

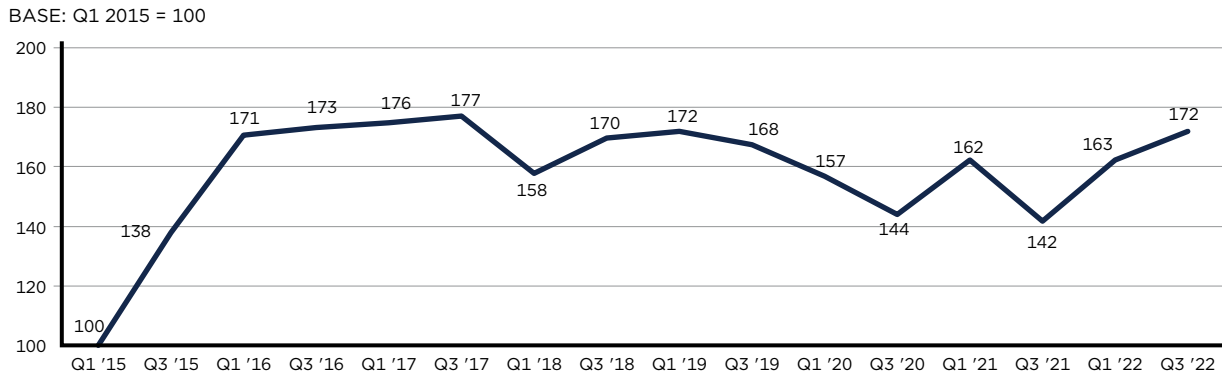
RLB CRANE INDEX®

The RLB Crane Index® rose again to record the highest value since the inception of the index. The index now stands at 204 points.



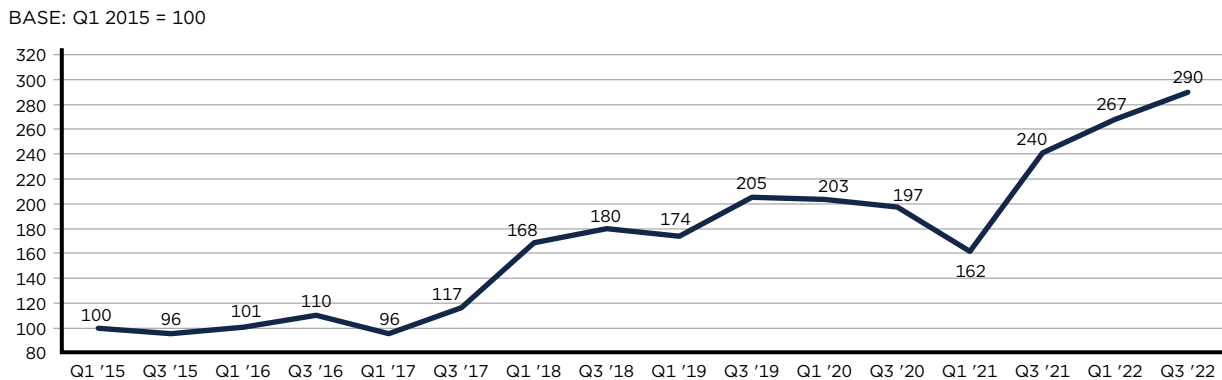
RESIDENTIAL AUSTRALIAN INDEX

The residential index, which represents the number of cranes on residential projects across the country, rose again to reach 172 points; five points behind the record high of 177 in Q3 2017.



NON-RESIDENTIAL SECTORS CRANE INDEX

Strong growth in cranes on non-residential projects continued across the country. The current level of 290 points is the highest value the index has achieved since it commenced in 2013.

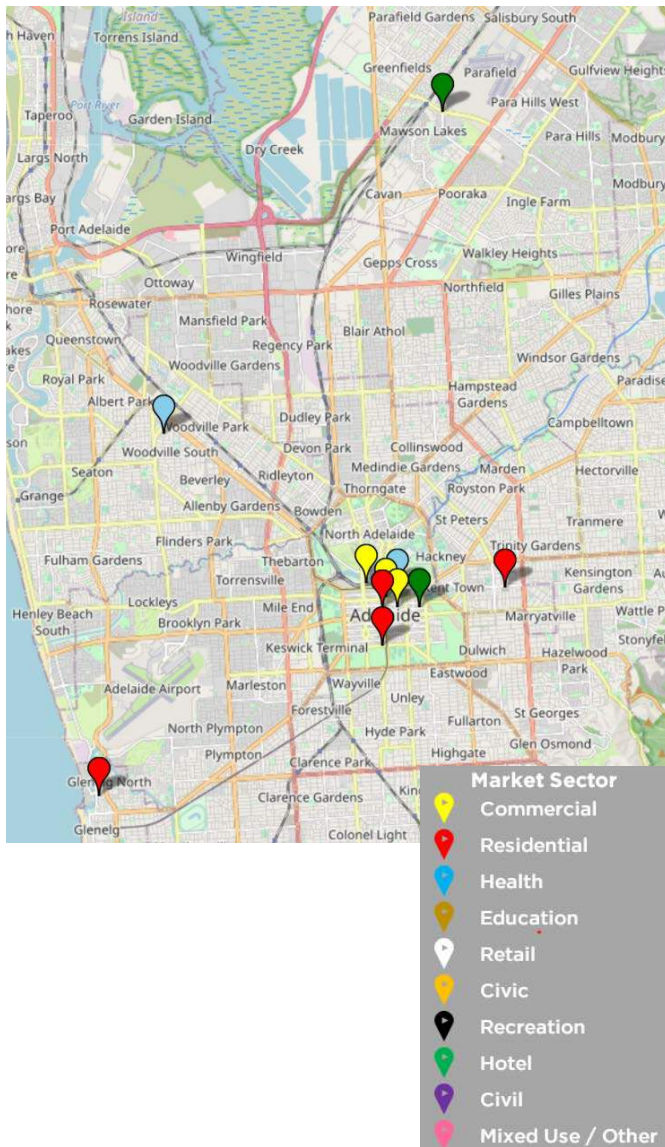


ADELAIDE

Adelaide's RLB Crane Index® increased to 283 points. The index represented 17 cranes across the city. Five new cranes were erected and four were removed from developments.

Construction activity during the 2022 financial year saw an 11% rise (\$1.4B) across all main sectors. Work done in the engineering sector saw a 15.2% rise (or \$950M). Residential activity rose by 8.4% (or \$300M) and non-residential work done rose by 5.3% (or \$150M).

Building approvals rose by 25.7% (\$1.9B) in the 2022 financial year compared to 2021. Residential approvals were up by 4.4% (or \$167M) and non-residential were up by 47.1% (or \$1.8B). This is largely attributable to the approval of a significant health project in February 2022.



KEY SECTORS

- COMMERCIAL
- EDUCATION
- HEALTH
- HOTEL
- RESIDENTIAL

OVERALL STATUS

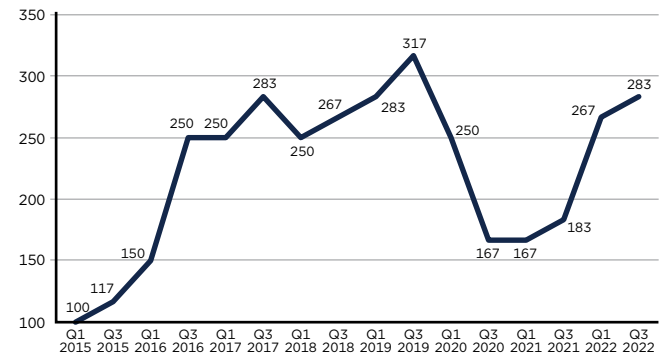


LEGEND

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

RLB CRANE INDEX® - ADELAIDE

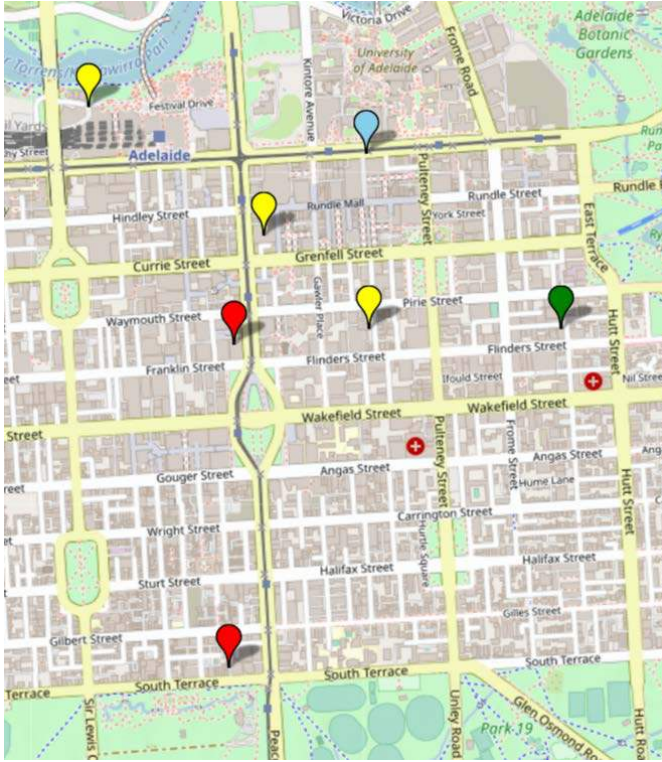
BASE: Q1 2015 = 100



CRANE ACTIVITY - ADELAIDE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	0	0.0%	0	0	0	0	0.0%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	7	43.8%	0	-2	-2	5	29.4%
DATA CENTRES	0	0.0%	0	0	0	0	0.0%
EDUCATION	0	0.0%	2	0	2	2	11.8%
HEALTH	2	12.5%	2	0	2	4	23.5%
HOTEL	2	12.5%	1	-1	0	2	11.8%
MIXED USE	0	0.0%	0	0	0	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	5	31.3%	0	-1	-1	4	23.5%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	16	100.0%	5	-4	1	17	100.0%

ADELAIDE



Five cranes were added to new developments at Flinders University (education), the Holiday Inn at Mawson Lakes (hotel) and the Queen Elizabeth Hospital (health).

Cranes remain on sites for:

- 60 King William (commercial)
- SAHMRI 2 North Terrace (health)
- Festival Tower (commercial)
- The Adelphi, 18 Adelphi Terrace (residential)
- Vibe Hotel, 260 Flinders Street
- Norwood Apartments, 166 The Parade
- 57 Wyatt Street (commercial)
- Park Terrace Apartments, 144 South Terrace and 141 King William Street (all residential)

Cranes were removed from developments at:

- CBUS Office, 73 Pirie Street (commercial)
- Botten & Bowser, 69 Melbourne Street (residential)
- Tryp Hotel, 266 Pulteney Street (hotel)

The commercial sector still has the greatest number of cranes within Adelaide at five, down from seven in the last edition of the index.

BRISBANE

Brisbane's Crane Index® slightly increased, from 108 points to 112. A total of 29 cranes has been added to the skyline and 26 removed, leaving 82 active cranes across the Brisbane area.

Within South East Queensland, crane numbers increased by 15, with the main increase in the residential sector. Most other sectors remained relatively stable. Residential cranes across Brisbane, the Gold Coast and the Sunshine Coast increased by 14 cranes to total 94, accounting for 63% of all cranes in South East Queensland.

Construction work done across Queensland increased by 2.7% (or \$1.1B) in the 2022 financial year. Residential work done was up by 2.7% (or \$0.35B), non-residential up by 3.3% (or \$0.25B), and engineering work done increased by 2.4% (or \$0.5B).

Queensland should see a strong pipeline of activity over the next few years with an increase in building approvals for the 2022 financial year. Total building approvals were up by 17.1% (or \$3.6B). Residential approvals increased 7%, with all forms of dwelling types seeing small increases. Apartments approvals increased the most, up 13% over 2021 figures. Non-residential approvals rose strongly by 33.5% with key jumps in the industrial and office sectors.

The largest project in the region—the development at Queens Wharf—continues to have nine cranes assisting the construction activities. This site accounts for 11% of all cranes in Brisbane.

Residential cranes remain the largest sector in Brisbane, accounting for almost 43% or 35 of the cranes across Brisbane followed by civil projects (21 cranes) and mixed use developments (largely through the Queens Wharf development) with 15 cranes.

Within mixed use developments, three cranes were removed from Long Island Brisbane in Newstead. Two new cranes were erected at the Ballymore redevelopment in Herston.

KEY SECTORS

AGED CARE	
CIVIL	
COMMERCIAL	
EDUCATION	
HEALTH	
MIXED USE	
RESIDENTIAL	

OVERALL STATUS

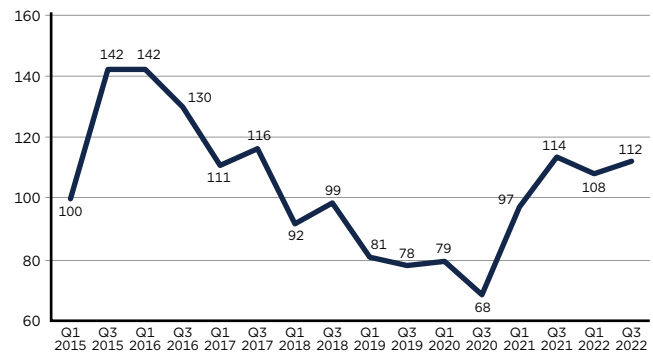


LEGEND

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

RLB CRANE INDEX® - BRISBANE

BASE: Q1 2015 = 100



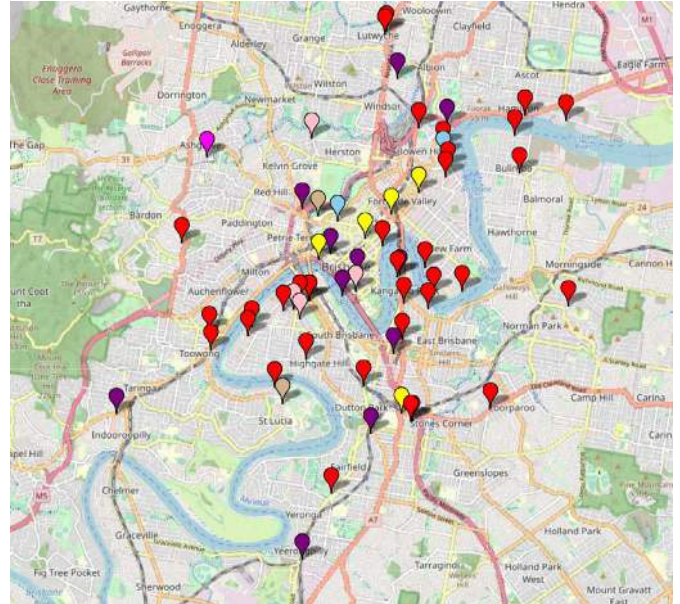
CRANE ACTIVITY - BRISBANE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	1	1.3%	0	0	0	1	1.2%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	17	21.5%	8	-4	4	21	25.6%
COMMERCIAL	5	6.3%	1	-1	0	5	6.1%
DATA CENTRES	0	0.0%	0	0	0	0	0.0%
EDUCATION	4	5.1%	1	-3	-2	2	2.4%
HEALTH	4	5.1%	0	-1	-1	3	3.7%
HOTEL	0	0.0%	0	0	0	0	0.0%
MIXED USE	16	20.3%	2	-3	-1	15	18.3%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	32	40.5%	17	-14	3	35	42.7%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	79	100.0%	29	-26	3	82	100.0%

BRISBANE

CRANE NUMBERS - SOUTH EAST QUEENSLAND (TOTALS INCLUDES BRISBANE, GOLD COAST & SUNSHINE COAST)

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	3	2.2%	1	-1	0	3	2.0%
CIVIC	1	0.7%	0	-1	-1	0	0.0%
CIVIL	17	12.6%	8	-4	4	21	14.0%
COMMERCIAL	7	5.2%	2	-1	1	8	5.3%
DATA CENTRES	0	0.0%	0	0	0	0	0.0%
EDUCATION	4	3.0%	1	-3	-2	2	1.3%
HEALTH	4	3.0%	0	-1	-1	3	2.0%
HOTEL	0	0.0%	0	0	0	0	0.0%
MIXED USE	19	14.1%	3	-3	0	19	12.7%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	80	59.3%	45	-31	14	94	62.7%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	135	100.0%	60	-45	15	150	100.0%



The civil sector once again saw strong net increases, with an additional net four cranes on civil projects across the city. New cranes were erected at:

- Breakfast Creek Green Bridge (1)
- Cross River Rail - Woolloongabba (from 2 to 3)
- Cross River Rail - Grafton St (1)
- Cross River Rail - Yeerongpilly (1)
- Ithaca Street / inner city bypass (1)
- Kangaroo Point Green Bridge (from 2 to 4)
- Moggill Road Corridor Upgrade (1)

Civil cranes were removed from:

- Cross River Rail - Dutton Park (from 5 to 3)
- Cross River Rail - Roma Street (from 4 to 3)
- Cross River Rail - Bowen Hills Station (1)

Residential cranes have increased to 35, up by three cranes for this edition. Seventeen cranes were erected and 14 removed. New cranes were seen on projects in: Bardon, Bulimba, Dutton Park, Hamilton, Kangaroo Point, New Farm, Newstead, South Brisbane, St Lucia, West End, Woolloongabba and Yeeronga.

BRISBANE

CRANE ACTIVITY - BRISBANE REGIONS

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
INNER BRISBANE	45	57.0%	13	-8	5	50	61.0%
EAST	3	3.8%	0	-2	-2	1	1.2%
NORTH	16	20.3%	9	-8	1	17	20.7%
SOUTH	7	8.9%	3	-2	1	8	9.8%
WEST	8	10.1%	4	-6	-2	6	7.3%
TOTAL	79	100.0%	29	-26	3	82	100.0%

INNER BRISBANE	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	0	0
CIVIC	0	0	0	0
CIVIL	3	10	11	14
COMMERCIAL	2	3	4	5
DATA C. / IND.	-	-	0	0
EDUCATION	2	3	2	1
HEALTH	0	0	1	1
HOTEL	0	0	0	0
MIXED USE	18	16	13	13
RECREATION	0	0	0	0
RESIDENTIAL	14	21	14	16
RETAIL	0	0	0	0
TOTAL	39	53	45	50

Inner Brisbane continues to have most cranes, accounting for 61% of all Brisbane's cranes. Crane numbers increased by five this edition, with eight cranes removed, and 13 added. With nine cranes on site, Queens Wharf's remains the largest project in the region, accounting for 18% of all cranes within Inner Brisbane.

New cranes were added to:

- Cbus Corporate Office, Brisbane
- Breakfast Creek Green Bridge, Brisbane
- Kangaroo Point Bridge
- 11 Thornton Street, Kangaroo Point
- Bianca Residences, New Farm
- Arklife Cordelia, South Brisbane
- Croft on Fish Lane, South Brisbane
- Botanica Residences, South Brisbane
- West End Project, West End
- Noir West End, West End
- Cross River Rail, Woolloongabba
- The Carl Residence, Woolloongabba

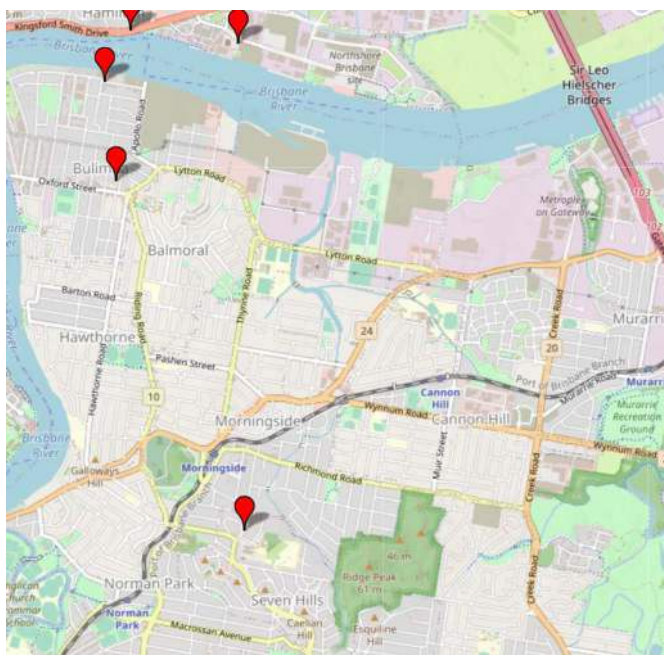
Twenty cranes were removed from projects in: Brisbane, South Brisbane, New Farm, West End and Woolloongabba.



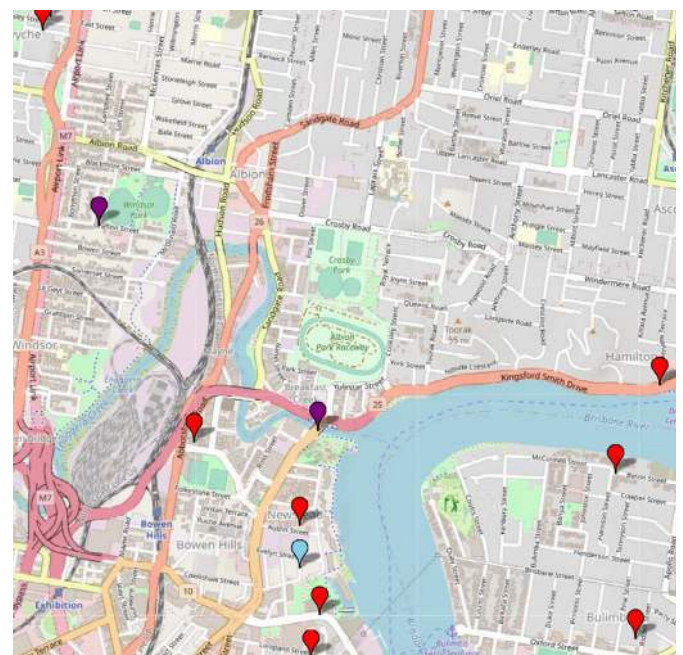
BRISBANE

BRISBANE EAST	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	0	0
CIVIC	0	0	0	0
CIVIL	0	0	0	0
COMMERCIAL	0	0	0	0
DATA C. / IND.	-	-	0	0
EDUCATION	0	1	1	0
HEALTH	0	0	0	0
HOTEL	0	0	0	0
MIXED USE	1	0	0	0
RECREATION	0	0	0	0
RESIDENTIAL	6	1	2	1
RETAIL	0	0	0	0
TOTAL	7	2	3	1

BRISBANE NORTH	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	1	1
CIVIC	0	0	0	0
CIVIL	0	1	1	2
COMMERCIAL	0	2	1	0
DATA C. / IND.	-	-	0	0
EDUCATION	1	0	0	0
HEALTH	2	2	2	2
HOTEL	0	0	0	0
MIXED USE	0	2	3	2
RECREATION	0	0	0	0
RESIDENTIAL	6	6	8	10
RETAIL	0	0	0	0
TOTAL	9	12	16	17



There were no cranes added in East Brisbane. Two cranes were removed from Dilkera Street and Balmoral High School. One crane remains at Clearview Urban Village in Seven Hills.



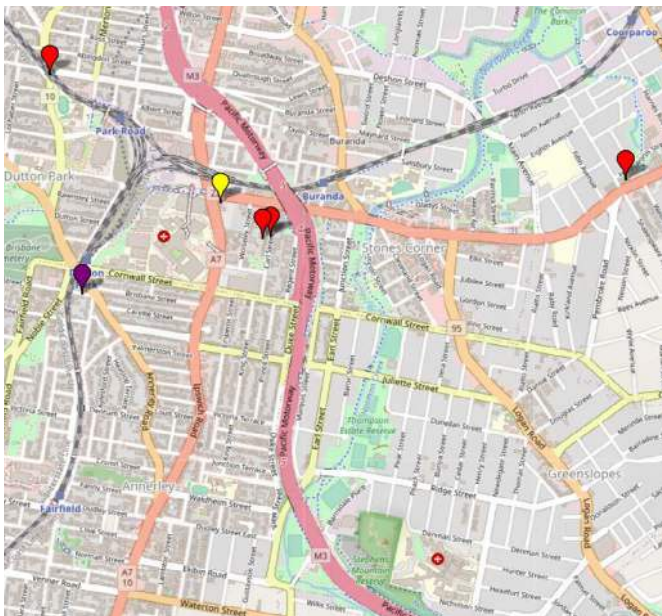
North Brisbane saw one crane added, for a total of 17. Nine new cranes commenced and eight were removed. New cranes were erected at Riverbank on Byron in Bulimba, Ravello Hamilton and Kingsford Smith Drive in Hamilton, Ballymore in Herston, Ithaca Street in Kelvin Grove, Waterfront Sky and Alouette Apartments in Newstead and Cross River Rail - Grafton Street in Windsor.

Cranes were removed from Perry House and Cross River Rail in Bowen Hills, Herston Commercial Carpark, The Chaussy in Lutwyche, Long Island Brisbane in Newstead and Rob Lane Street in Windsor.

BRISBANE

BRISBANE SOUTH	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	0	0
CIVIC	0	0	0	0
CIVIL	1	3	5	4
COMMERCIAL	0	0	0	0
DATA C. / IND.	-	-	0	0
EDUCATION	2	0	0	0
HEALTH	0	0	0	0
HOTEL	0	0	0	0
MIXED USE	2	0	0	0
RECREATION	0	0	0	0
RESIDENTIAL	3	4	2	4
RETAIL	0	0	0	0
TOTAL	8	7	7	8

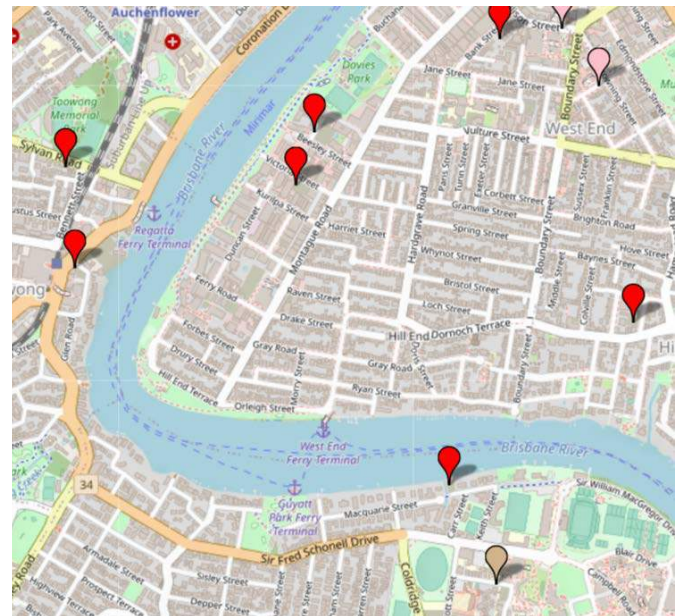
BRISBANE WEST	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	0	0
CIVIC	0	0	0	0
CIVIL	1	0	0	1
COMMERCIAL	0	0	0	0
DATA C. / IND.	-	-	0	0
EDUCATION	2	1	1	1
HEALTH	0	1	1	0
HOTEL	0	0	0	0
MIXED USE	0	0	0	0
RECREATION	0	0	0	0
RESIDENTIAL	5	7	6	4
RETAIL	0	0	0	0
TOTAL	8	9	8	6



Brisbane South saw a net increase of one crane, with three additions and two removals. Eight cranes are on sites within the region.

New cranes were added at Stanford and Oxford in Dutton Park, Cross River Rail - Yeerongpilly and Renovare in Yeronga.

Two cranes were removed from Cross River Rail - Dutton Park.



West Brisbane saw four additional cranes commence, while six were removed, bringing the total number of cranes to six. New cranes commenced on:

- Nuluxe Property Group, Bardon
- Moggil Road Corridor Upgrade, Indooroopilly
- University of Queensland, St Lucia
- 160 Macquarie Street, St Lucia

Cranes were removed from:

- Berlasco Court Caring Centre, Indooroopilly
- St Peters Lutheran College Centre for Learning and Innovation, Indooroopilly
- 100 Goldieslie Road, Indooroopilly
- The Ambrose, Milton
- Sonnet Residences, Taringa
- Deese Taringa, Taringa

CANBERRA

Canberra's RLB Crane Index® recorded a value of 460 points for this edition, a drop from 620 in the previous edition. Crane numbers decreased by eight from the last count to reach 23, with 16 removals and eight additions.

The capital's crane activity reflects the decreasing building approval levels seen over the 2022 financial year. The value of building approvals dropped by 13.1% (\$0.4B) compared to 2021 levels.

Construction work done for the 2022 financial year was slightly up by 0.4% (or \$14M) from 2021. Residential activity was down by 12.4%, while non-residential was up by 26.3%. Engineering work done reported a small gain, with activity up by 1.4%.

KEY SECTORS

CIVIC	↑
COMMERCIAL	↑
DATA CENTRE / INDUSTRIAL	↑
HEALTH	↓
HOTEL	↓
RESIDENTIAL	↑
RETAIL	↓

OVERALL STATUS

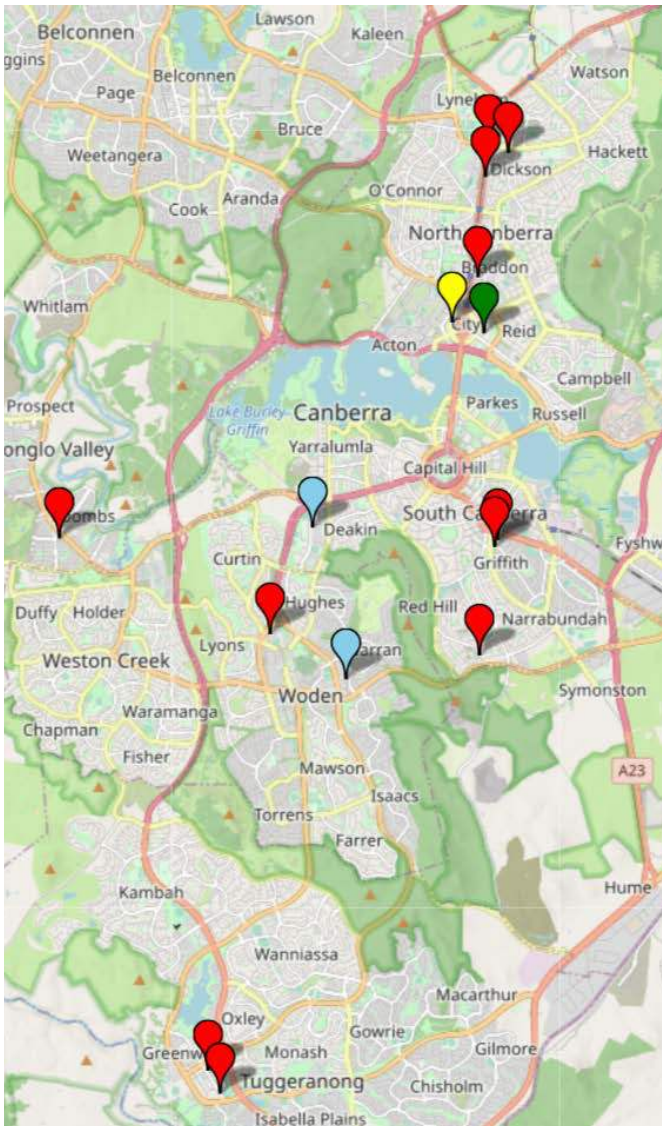
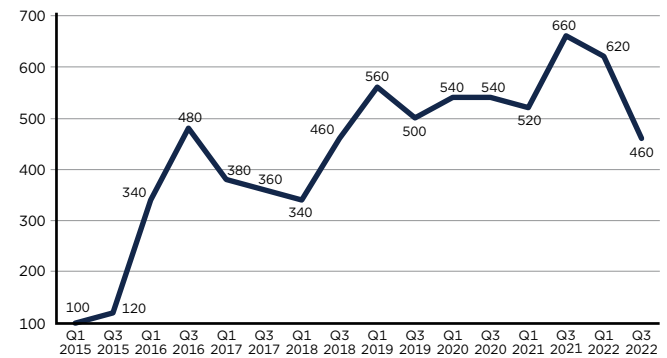


LEGEND

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

RLB CRANE INDEX® - CANBERRA

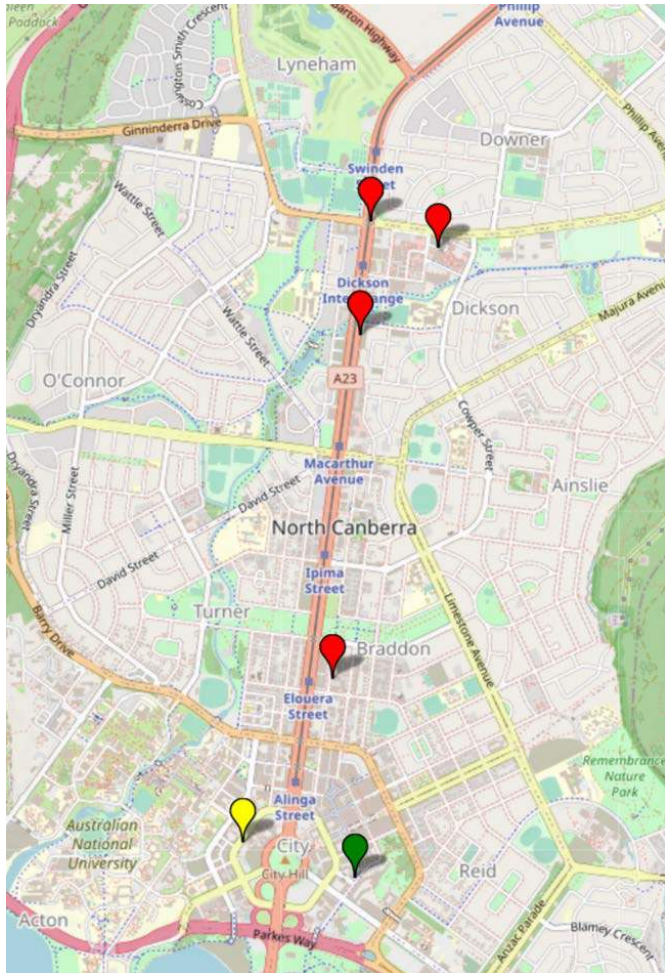
BASE: Q1 2015 = 100



CRANE ACTIVITY - CANBERRA

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	0	0.0%	0	0	0	0	0.0%
CIVIC	1	3.2%	0	-1	-1	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	3	9.7%	0	-1	-1	2	8.7%
DATA CENTRES	4	12.9%	0	-4	-4	0	0.0%
EDUCATION	0	0.0%	0	0	0	0	0.0%
HEALTH	2	6.5%	1	0	1	3	13.0%
HOTEL	0	0.0%	1	0	1	1	4.3%
MIXED USE	0	0.0%	0	0	0	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	21	67.7%	5	-10	-5	16	69.6%
RETAIL	0	0.0%	1	0	1	1	4.3%
TOTAL	31	100.0%	8	-16	-8	23	100.0%

CANBERRA



The majority of the eight additional cranes were added in the residential sector (five cranes), while new cranes are now operating at the Canberra Hospital Expansion Project, Gungahlin Market Place Stage 4 and at Meriton Suites Canberra.

New residential cranes were added at:

- Dickson Village, Dickson (two additional)
- Emporium Apartments, Greenaway
- Northbourne Village - The Sullivan, Lyneham
- The Parks, Red Hill (one additional)

Notable sites with multiple cranes include Canberra Hospital Expansion Project, Dickson Village in Dickson, Aspen Village in Greenaway, Renaissance Manuka in Griffith, The Parks in Red Hill and One City Hill.

CENTRAL COAST

The RLB Crane Index® for the Central Coast remained the same as the last count. Two cranes were added and two removed. Cranes still total 10 across the region.

The residential sector remains the only sector with cranes on developments around the region.

New cranes were recorded for Vista Gosford at Gosford and Azure at Point Frederick.

Cranes were removed from Ravello Residences in Point Frederick and 177-179 Albany Street.

KEY SECTORS

RESIDENTIAL



OVERALL STATUS



LEGEND



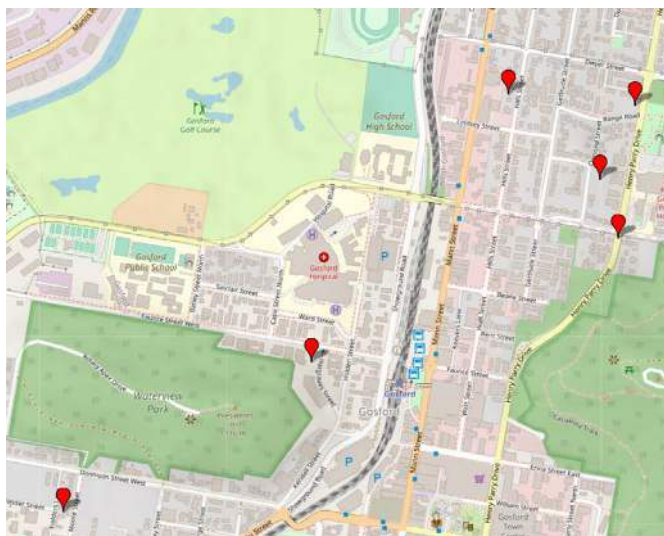
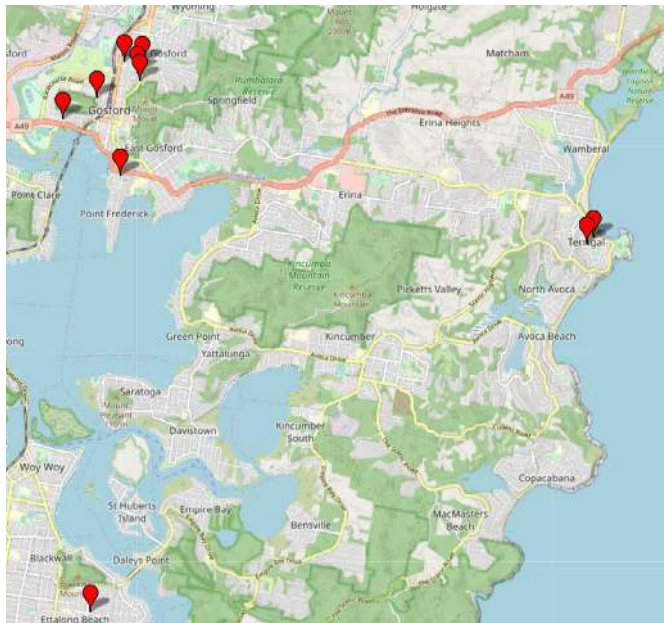
INCREASE IN NUMBER OF CRANES



DECREASE IN NUMBER OF CRANES

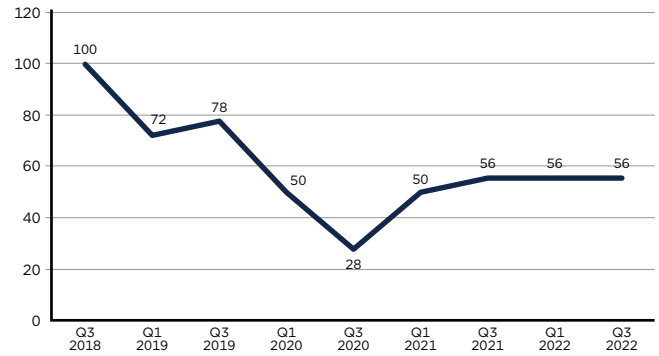


CRANE NUMBERS STEADY



RLB CRANE INDEX® - CENTRAL COAST

BASE: Q3 2018 = 100



CRANE ACTIVITY - CENTRAL COAST

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	0	0.0%	0	0	0	0	0.0%
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%
DATA CENTRES	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%	2	-2	0	10	100.0%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	10	100.0%	2	-2	0	10	100.0%

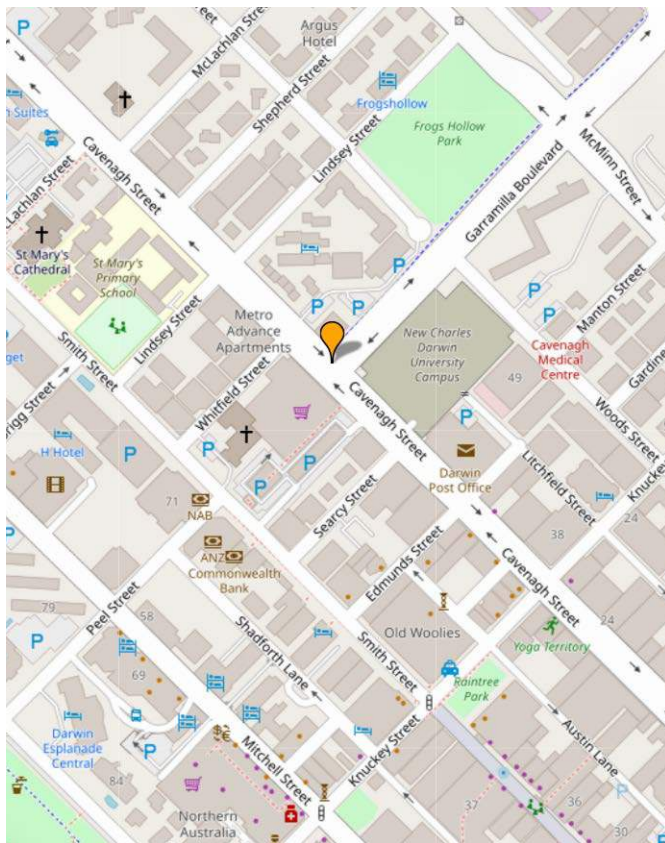
DARWIN


Darwin continues to have two cranes on the Education and Community Precinct in Cavenagh Street.

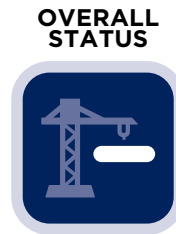
The \$250 million project and centerpiece of the Darwin City Deal is a partnership between the Federal Government, the Northern Territory Government and Charles Darwin University (CDU).

The new Charles Darwin University precinct is the centerpiece of the \$320 million Darwin City Deal and will help shape the culture and vibrancy of the city for future generations

Once complete, this project will have created more than 700 jobs, helping to diversify the local economy and elevate Darwin's competitiveness in the international education sector.



KEY SECTORS
CIVIC 

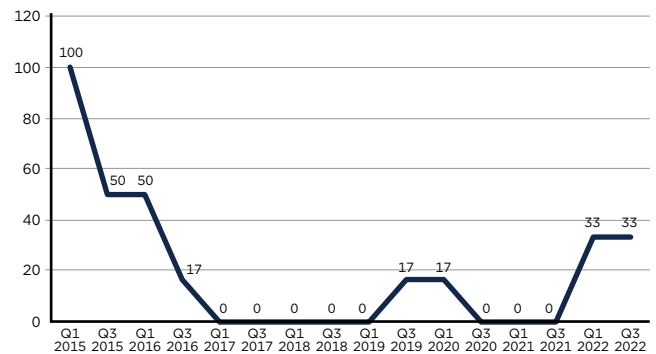


LEGEND

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

RLB CRANE INDEX® - DARWIN

BASE: Q1 2015 = 100



CRANE ACTIVITY - DARWIN

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	0	0%	0	0	0	0	0.0%
CIVIC	2	100%	0	0	0	2	100.0%
CIVIL	0	0%	0	0	0	0	0.0%
COMMERCIAL	0	0%	0	0	0	0	0.0%
DATA CENTRES	0	0%	0	0	0	0	0.0%
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	2	100.0%	0	0	0	2	100.0%

GOLD COAST

The Gold Coast RLB Crane Index® increased to 347 points compared to 267 at the last count. This continues the rise of the index value since its inception.

A total of 21 cranes was added and nine cranes were removed, bringing the coast's total to 52. The residential sector continues to dominate the region, accounting for more than 95% of all cranes on the Gold Coast. The other sectors with active cranes include aged care (1), commercial (1) and mixed use (1).

KEY SECTORS

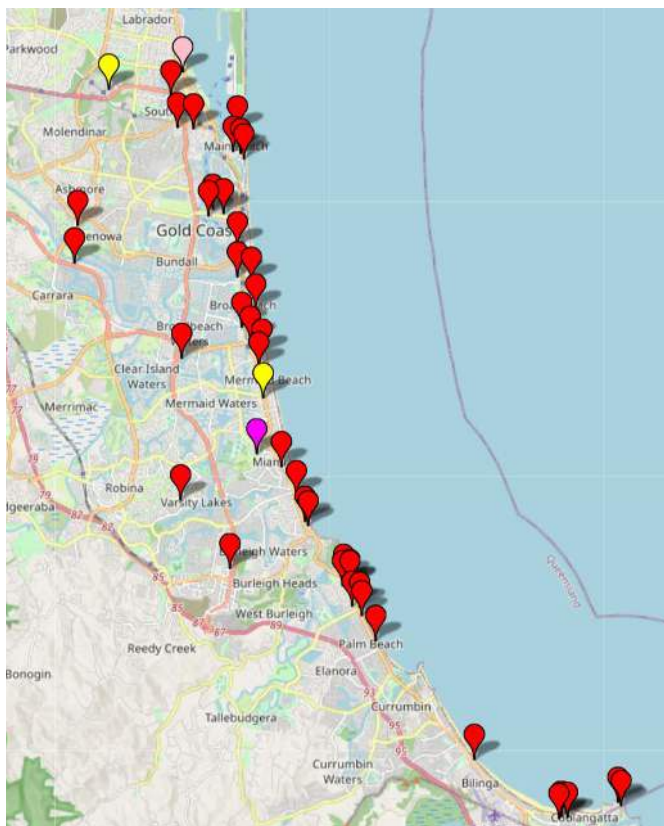
AGED CARE	
COMMERCIAL	
MIXED USE	
RESIDENTIAL	

OVERALL STATUS



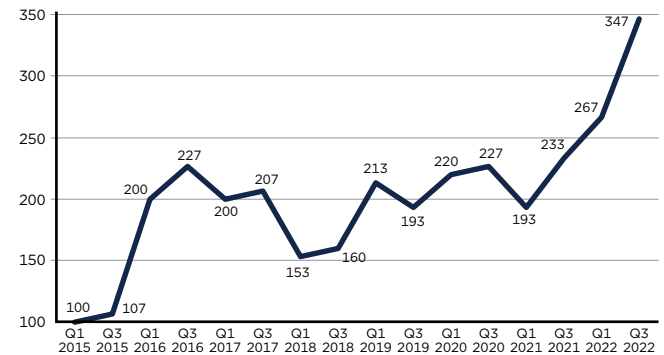
LEGEND

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



RLB CRANE INDEX® - GOLD COAST

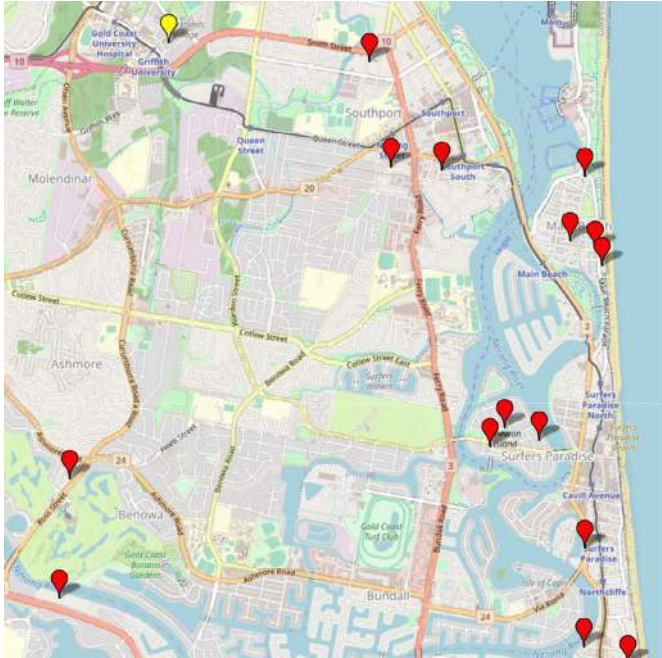
BASE: Q1 2015 = 100



CRANE ACTIVITY - GOLD COAST

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	2	5.0%	0	-1	-1	1	1.9%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	1	2.5%	1	0	1	2	3.8%
DATA CENTRES	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	1	2.5%	0	0	0	1	1.9%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	36	90.0%	20	-8	12	48	92.3%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	40	100.0%	21	-9	12	52	100.0%

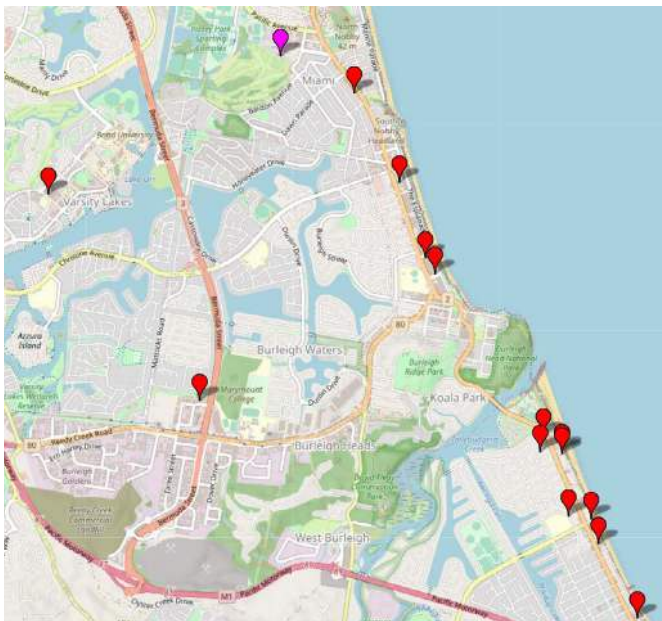
GOLD COAST



The residential sector saw 20 new cranes placed on sites and eight removed, bringing the sector's total to 48 cranes. This is an increase of 12 cranes from the Q1 2022 edition of the index.

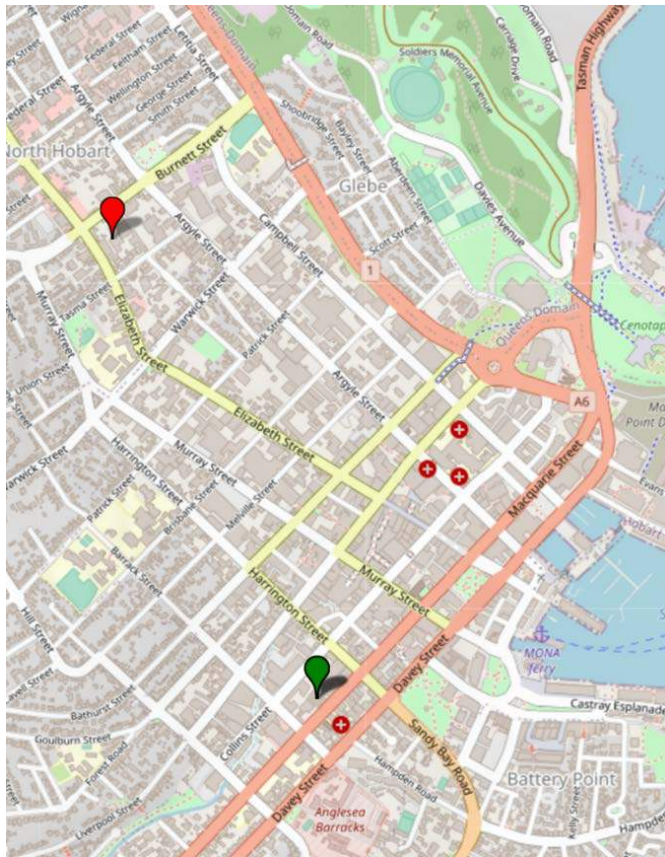
New cranes were added at:

- Vantage (Benowa)
- 39 Golden Four Drive (Bilinga)
- The Mondrian (Burleigh Heads)
- Kokomo Residences (Carrara)
- The Del Ray, Miles Residence, Awaken and Sol Apartments (Coolangatta)
- The Monaco and Dune (Main Beach)
- The Monroe, Hemingway, The Tally and Northshore Apartments (Palm Beach)
- Robina Grand (Robina)
- Chevron One, One Cannes and Shoreline Residence (Surfers Paradise)



HOBART

Cranes have emerged on the skyline of Hobart for the first time since Q1 2020, with two projects commencing. Cranes were erected at: Sixty Six, a contemporary apartment building in the heart of North Hobart at 66 Burnett Street; and at 179 Macquarie Street for a 206-room hotel with a restaurant, function centre and basement-level parking.



KEY SECTORS

HOTEL	
RESIDENTIAL	

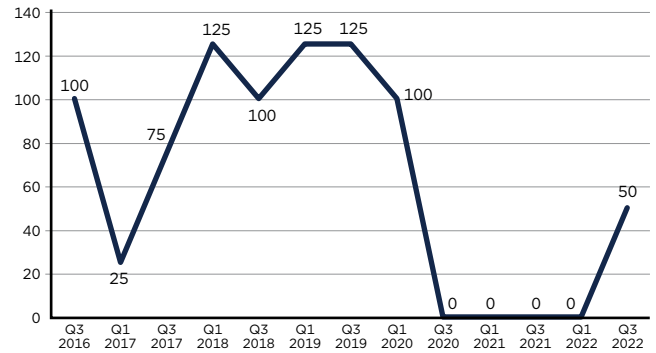


LEGEND

	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 2022	%	+	-	NET	Q3 2022	%
AGED CARE	0	0.0%	0	0	0	0	0%
CIVIC	0	0.0%	0	0	0	0	0%
CIVIL	0	0.0%	0	0	0	0	0%
COMMERCIAL	0	0.0%	0	0	0	0	0%
DATA CENTRES	0	0.0%	0	0	0	0	0%
EDUCATION	0	0.0%	0	0	0	0	0%
HEALTH	0	0.0%	0	0	0	0	0%
HOTEL	0	0.0%	1	0	1	1	50%
MIXED USE	0	0.0%	0	0	0	0	0%
RECREATION	0	0.0%	0	0	0	0	0%
RESIDENTIAL	0	0.0%	1	0	1	1	50%
RETAIL	0	0.0%	0	0	0	0	0%
TOTAL	0	0.0%	2	0	2	2	100.0%

MELBOURNE

Melbourne recorded a rise of 7% in the Q3 2022 RLB Crane Index®, continuing the upward trend of the 7% rise in the last edition. Melbourne's index now stands at 178 points, up from 166 in Q1 2022.

Across Melbourne, 79 cranes were added to projects and 65 were removed. This brings the current crane number to 206, up from 192 cranes recorded in Q1 2022.

The value of building approvals increased 11.5% in the 2022 financial year compared to the previous 12-month period. Residential building approvals rose by 8.4%. This was largely seen in the 46% increase in new apartments. In contrast, housing approvals decreased by 3.1%.

Non-residential approvals increased by 16% which was largely due to the offices, retail and education sectors. The health sector saw approval values up 4.4% for the financial year. Industrial approvals were down 5.2%, hotel down 25% and commercial down 24.7%. Both offices and retail approvals were up 74% and 54% respectively.

Melbourne's inner-city remains the most prevalent region for cranes with 46% of all Melbourne's cranes. This number is close to the last edition, but the trend is still that larger scale projects are moving out to the suburbs. Traditionally, we have seen around 60% of all Melbourne's cranes centred around the CBD and surrounding inner city suburbs.

Overall, the rise in cranes occurred in the residential sector (+7), data centres/industrial (+4), retail (+4), commercial (+3), health (+2), recreation (+2) and civic (+1). Falls were seen in the mixed use sector (-5), aged care (-1) and within education projects (-1). The hotel sector remained constant.

The residential sector is still the dominant sector in the Melbourne region, accounting for 50% of all cranes for this edition.

Within the health sector, new cranes were added to the Peninsula Private Hospital (Langwarrin), Alfred Health (Melbourne) and Knox Private Hospital (Wantirna). Health sector cranes were removed from the Victoria Clinic (Prahran). The new Footscray Hospital remained constant at 10 cranes which is Australia's largest project in terms of crane size.

The civil sector fell by two cranes. These were spread over four projects that have been completed or are nearing completion. Projects included: Level crossing removal works at Chelsea and Preston; Metro tunnel works in the Melbourne CBD and at the North Melbourne project. Civil cranes commenced at the Westgate Tunnel and the new ANZAC and Arden train stations.

KEY SECTORS

AGED CARE	↓
CIVIC	↑
CIVIL	↓
COMMERCIAL	↑
DATA CENTRE / INDUSTRIAL	↑
EDUCATION	↓
HEALTH	↑
HOTEL	↓
MIXED USE	↓
RECREATION	↑
RESIDENTIAL	↑
RETAIL	↑

OVERALL STATUS

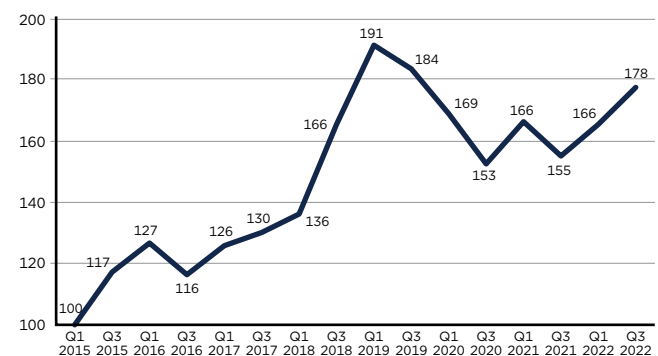


LEGEND



RLB CRANE INDEX® - MELBOURNE

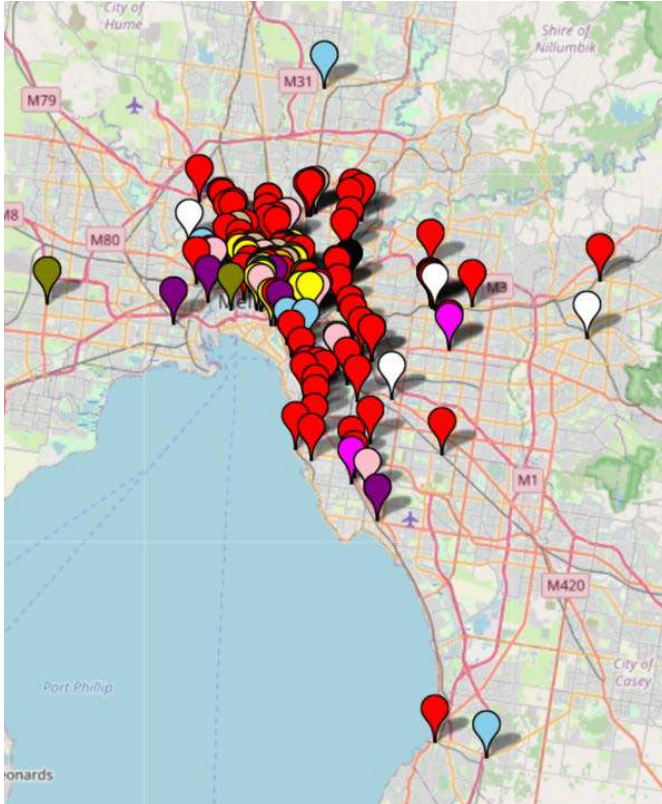
BASE: Q1 2015 = 100



CRANE ACTIVITY - MELBOURNE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	5	2.6%	2	-3	-1	4	1.9%
CIVIC	3	1.6%	1	0	1	4	1.9%
CIVIL	14	7.3%	3	-5	-2	12	5.8%
COMMERCIAL	22	11.5%	11	-8	3	25	12.1%
DATA CENTRES	1	0.5%	4	0	4	5	2.4%
EDUCATION	7	3.6%	1	-2	-1	6	2.9%
HEALTH	14	7.3%	3	-1	2	16	7.8%
HOTEL	5	2.6%	1	-1	0	5	2.4%
MIXED USE	23	12.0%	5	-10	-5	18	8.7%
RECREATION	1	0.5%	2	0	2	3	1.5%
RESIDENTIAL	96	50.0%	42	-35	7	103	50.0%
RETAIL	1	0.5%	4	0	4	5	2.4%
TOTAL	192	100.0%	79	-65	14	206	100.0%

MELBOURNE



The mixed use sector saw a decline of five cranes. Cranes were added at Liv Aston (Docklands), Malvern Collective (Malvern) and 480 Swan St (Richmond). Cranes were removed at New Epping (Epping), Sapphire by the Gardens (CBD), West Side Place (CBD), Richmond Quarter (Richmond) and Union Quarter (Spotswood).

The commercial sector saw an increase of three cranes to bring the sector to a total of 25 cranes. New commercial cranes were added to 36-52 Wellington Street (Collingwood), Dover House (Cremorne), 11-13 Pearson Street (Cremorne), 14-26 Bruce Street (Kensington), 1M (Malvern), Melbourne Quarter Tower (CBD), Metropolitan Hotel (CBD), 88 Laurens Street (North Melbourne), 236 Coppin Street (Richmond), and 151 Toorak Road (South Yarra).

Commercial cranes were removed from projects at Zero Gipps (Collingwood), 637 Flinders (Docklands), Victoria Place (East Melbourne), 555 Collins Street (CBD), Cnr Little Collins and Queens Street (CBD), AFP Headquarters (CBD), Pallas House (South Melbourne) and Goldfields House (South Yarra).

The hotel sector remained steady. The crane at Adina Apartment Hotel (Coburg) was removed and a new crane was added at Nesuto Apartment Hotel (Docklands).

Retail saw an increase of four cranes. Cranes were added at Mountain High Shopping Centre (Bayswater), Chadstone Shopping Centre (Chadstone), Highpoint Shopping Centre (Maribyrnong) and Westfield Knox (Wantirna South).

Across the city's six main regions, crane increases were seen in inner Melbourne, east, south and Geelong. Falls were seen only in the north with a loss of three cranes. The west remained constant at 24 cranes.

MELBOURNE

CRANE ACTIVITY - MELBOURNE REGIONS

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
INNER MELBOURNE	91	47.4%	37	-33	4	95	46.1%
EAST	25	13.0%	9	-8	1	26	12.6%
GEELONG	3	1.6%	2	0	2	5	2.4%
NORTH	29	15.1%	10	-13	-3	26	12.6%
SOUTH	20	10.4%	16	-6	10	30	14.6%
WEST	24	12.5%	5	-5	0	24	11.7%
TOTAL	192	100.0%	79	-65	14	206	100.0%

INNER MELBOURNE	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	0	0
CIVIC	2	2	2	2
CIVIL	9	8	7	7
COMMERCIAL	15	18	21	23
DATA C. / IND.	-	-	1	3
EDUCATION	10	4	5	4
HEALTH	0	0	0	1
HOTEL	7	3	3	4
MIXED USE	20	13	10	9
RECREATION	0	0	0	0
RESIDENTIAL	32	37	42	42
RETAIL	0	0	0	0
TOTAL	95	85	91	95

Inner Melbourne rose by three cranes to number 95. Thirty-seven new cranes commenced and 33 were removed.

Commercial cranes rose by two, data centres/ industrial by two and hotels by one.

New starts within the region included:

Commercial

Melbourne Quarter Tower and Metropolitan Hotel (CBD), 36-52 Wellington Street (Collingwood), Dover House and 11-13 Pearson Street (Cremorne), 14-26 Bruce Street (Kensington), 88 Laurens Street (North Melbourne), 236 Coppin Street (Richmond) and 151 Toorak Road (South Yarra).

Education

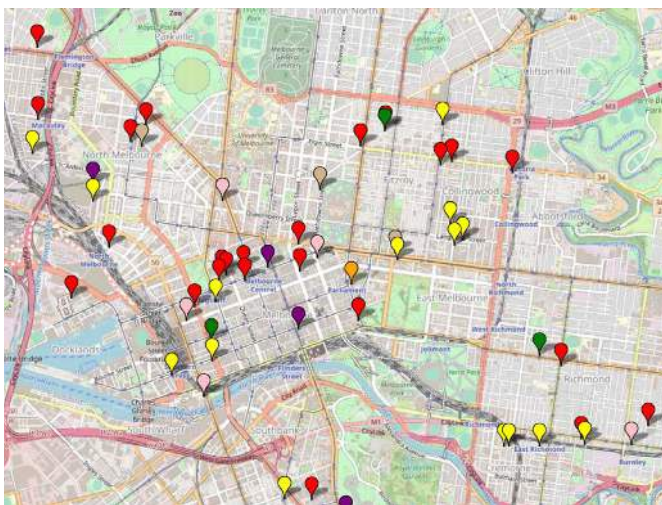
North Melbourne Primary School (North Melbourne)

Hotel

Nesuto Apartment Hotel (Docklands)

Residential

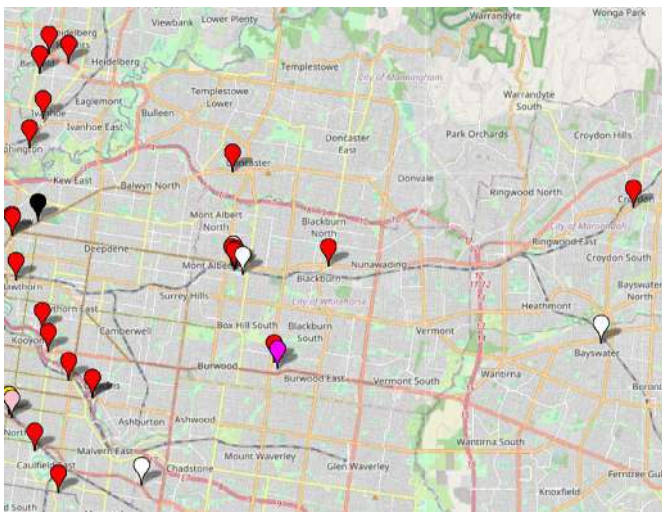
Encompass (Carlton), Scape Victoria Street and 183 A'Beckett Street (CBD), Home Docklands (Docklands), 419 Fitzroy Street and North Elm (Fitzroy), Flemington Housing and The Ascot (Flemington), Parkside Parkville (Parkville), 135 Stawell Street (Richmond), The Eighth (South Melbourne), Beach House (St Kilda) and 218-228 Stanley Street (West Melbourne).



MELBOURNE

MELBOURNE EAST	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	3	2
CIVIC	0	0	0	1
CIVIL	0	0	0	0
COMMERCIAL	4	2	0	0
DATA C. / IND.	-	-	0	0
EDUCATION	0	0	0	0
HEALTH	3	6	0	1
HOTEL	0	0	0	0
MIXED USE	2	0	2	2
RECREATION	0	0	1	1
RESIDENTIAL	9	14	18	16
RETAIL	0	0	1	3
TOTAL	18	22	25	26

GEELONG	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	-	0
CIVIC	1	2	1	1
CIVIL	0	0	0	0
COMMERCIAL	1	0	0	0
DATA C. / IND.	-	-	-	0
EDUCATION	1	0	0	0
HEALTH	1	0	0	0
HOTEL	0	0	1	1
MIXED USE	0	0	0	0
RECREATION	0	0	0	2
RESIDENTIAL	0	1	1	1
RETAIL	0	0	0	0
TOTAL	4	3	3	5

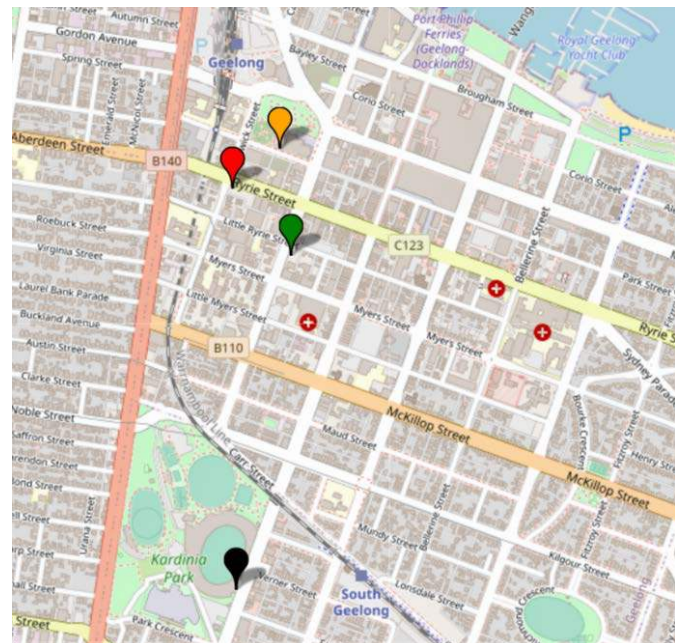


Melbourne East saw the removal of eight cranes and the addition of nine new cranes, reflecting an overall increase of one crane across the region. There are now 26 cranes across the region.

This was mainly due to the growth of retail projects with a net increase of two cranes. Residential cranes accounted for 60% of total cranes in east.

New cranes commenced at Fire Station (Ashburton), Mountain High Shopping Centre (Bayswater), 11-13 Hopetoun Parade (Box Hill), 1591-1597 Malvern Road (Glen Iris), Homes Victoria (Hawthorn), One Studley Park (Kew), Knox Private Hospital (Wantirna) and Westfield Knox (Wantirna South).

Cranes were removed at Homes Victoria (Ashburton), McMullin Aged Care (Chirnside Park), Glenarm Square, The Maitland and Novum (Glen Iris), 12 Coppin Grove and Sierra Hawthorn (Hawthorn).



Geelong recorded an increase of two cranes. These were erected at GMHBA Stadium.

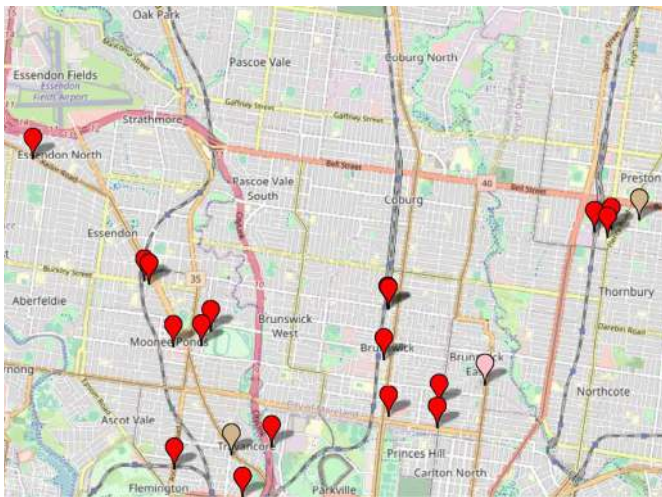
There were no cranes were removed.

Cranes remained on site at GPAC, Quest Geelong Central and Geelong Quarter.

MELBOURNE

MELBOURNE NORTH	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	1	0
CIVIC	0	0	0	0
CIVIL	0	2	2	0
COMMERCIAL	0	0	0	0
DATA C. / IND.	-	-	0	0
EDUCATION	0	0	1	1
HEALTH	2	1	1	1
HOTEL	1	1	1	0
MIXED USE	0	0	5	2
RECREATION	0	0	0	0
RESIDENTIAL	24	19	18	22
RETAIL	0	0	0	0
TOTAL	27	23	29	26

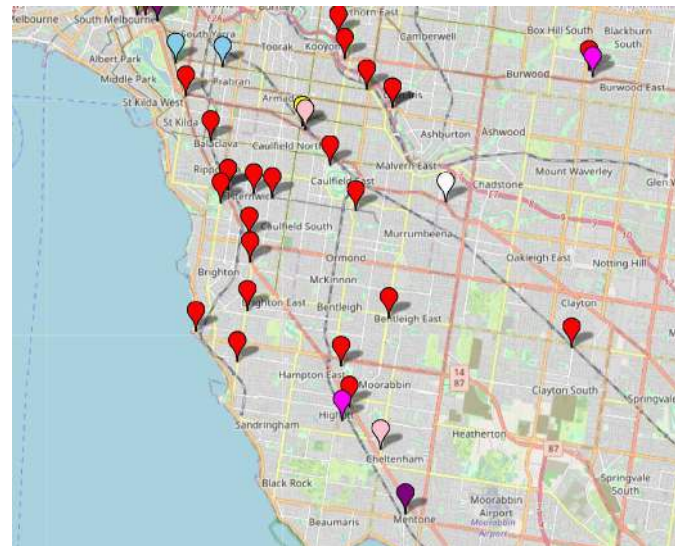
MELBOURNE SOUTH	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	0	2
CIVIC	0	1	0	0
CIVIL	4	7	1	0
COMMERCIAL	1	0	1	2
DATA C. / IND.	-	-	0	0
EDUCATION	1	1	1	1
HEALTH	5	5	2	2
HOTEL	0	0	0	0
MIXED USE	1	0	1	2
RECREATION	0	0	0	0
RESIDENTIAL	19	14	14	20
RETAIL	0	0	0	1
TOTAL	31	28	20	30



Melbourne North saw a decrease of three cranes in this edition, with the current number of cranes sitting at 26. A total of ten new cranes were added while 13 were removed.

New cranes were erected at: Bellfield Social Housing (Bellfield), Solarino House and Themeda (Brunswick), Homes Victoria and Cultivate (Heidelberg West), Valia and Samma Place (Ivanhoe) and Due North and Preston Crossing (Preston).

Cranes were removed from Ryman Healthcare (Aberfeldie), Home by Caydon (Alphington), Homes Victoria (Ascot Vale), Adina Apartment Hotel (Coburg), New Epping (Epping), Penny Lane Emporium (Moonee Ponds) and Bell-Cramer Street level crossing removal (Preston).



Melbourne South saw an increase of two cranes with current numbers at 30.

New cranes were added at: Homes Victoria, Sera Brighton and The Warriston (Brighton), 1254-1258 Glen Huntly Road (Carnegie), Broadway (Caulfield South), Chadstone Shopping Centre (Chadstone), Elsternwick Village Apartments (Elsternwick), Horizon (Frankston), Bert Newton Retirement Village (Highett), Peninsula Private Hospital (Karringal), Malvern Collective and 1M (Malvern) and Omnia (Moorabbin).

Cranes were removed from the level crossing removal (Chelsea), 146 Boundary Road (East Bentleigh), Accolade (Malvern), Moor Apartments (Moorabbin), Victoria Clinic (Pahran) and 12 Hill Street (Toorak).

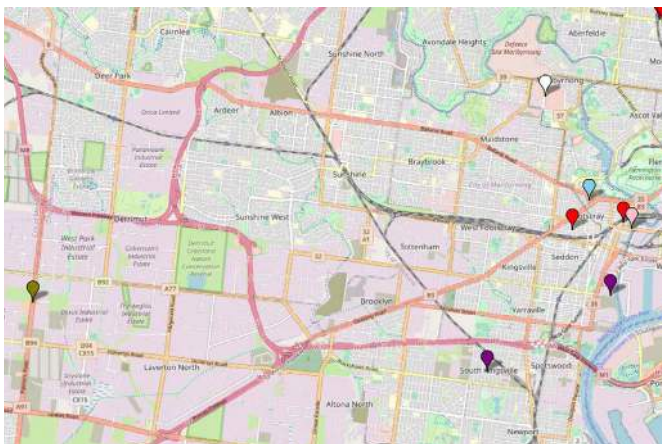
Major project cranes within the region are Homes Victoria (Brighton) with three cranes, Aster Apartments and the Bert Newton retirement village with two cranes.

MELBOURNE

MELBOURNE WEST	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	1	0
CIVIC	0	0	0	0
CIVIL	7	6	4	5
COMMERCIAL	1	0	0	0
DATA C. / IND.	-	-	0	2
EDUCATION	0	0	0	0
HEALTH	0	4	11	11
HOTEL	0	0	0	0
MIXED USE	4	3	5	3
RECREATION	0	0	0	0
RESIDENTIAL	6	6	3	2
RETAIL	0	0	0	1
TOTAL	18	19	24	24

Melbourne West remained constant at 24 cranes in total. This is the highest number of cranes seen in the west since the inception of the index.

Footscray remains the centre of activity within the region with 16 cranes. Ten cranes are now placed at the new Footscray Hospital (the largest number of cranes on one site in the country) with other Footscray sites including Liberty One, Arco, Victoria Square and at the West Gate Tunnel Project.



NEWCASTLE

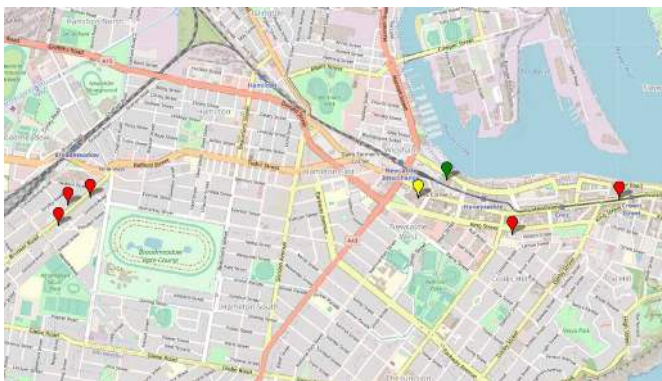
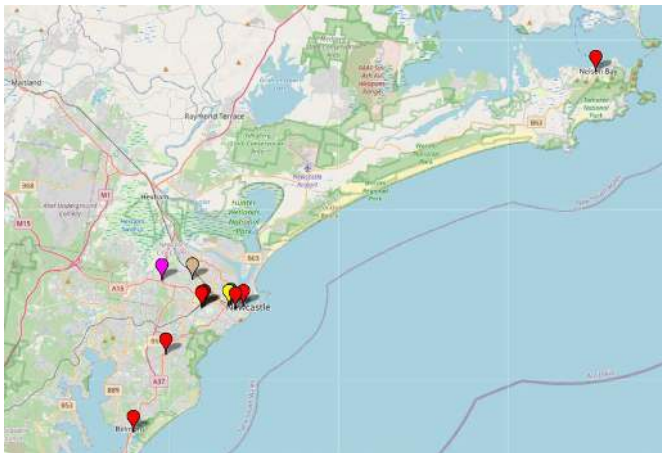
Newcastle's RLB Crane Index® remained at 150 points for this edition. Three cranes were added and three were removed, bringing the total count to 12.

The residential sector remains the dominant sector with 10 cranes. New cranes were added to:

- Little National Hotel
- 79-83 Bruncker Road (Adamstown)
- St Philip's Christian College (Waratah)

Cranes were removed from:

- Huntington Newcastle
- The Crossing
- Victory Residences (Toronto)



KEY SECTORS

AGED CARE	
COMMERCIAL	
EDUCATION	
HOTEL	
RESIDENTIAL	

OVERALL STATUS

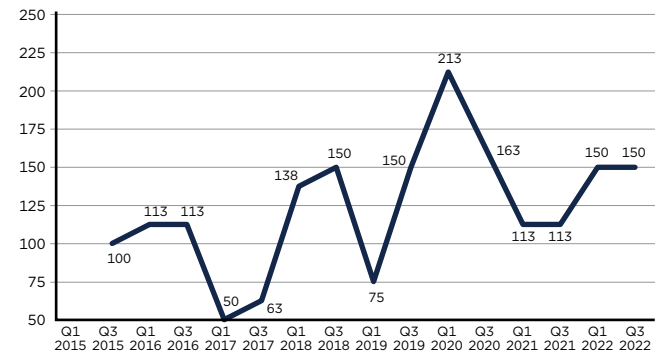


LEGEND

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

RLB CRANE INDEX® - NEWCASTLE

BASE: Q3 2015 = 100



CRANE ACTIVITY - NEWCASTLE

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	1	8.3%	0	0	0	1	8.3%
CIVIC	0	0.0%	0	0	0	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	1	8.3%	0	0	0	1	8.3%
DATA CENTRES	0	0.0%	0	0	0	0	0.0%
EDUCATION	0	0.0%	1	0	1	1	8.3%
HEALTH	0	0.0%	0	0	0	0	0.0%
HOTEL	0	0.0%	1	0	1	1	8.3%
MIXED USE	0	0.0%	0	0	0	0	0.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	10	83.3%	1	-3	-2	8	66.7%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	12	100.0%	3	-3	0	12	100.0%

PERTH

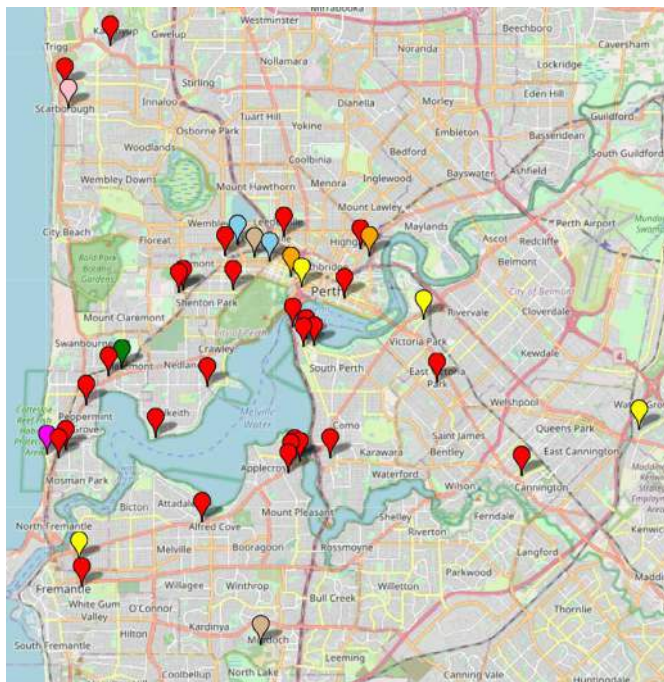
Perth recorded a drop of 7% in the Q3 2022 RLB Crane Index®, discontinuing the steep rise in the last edition. The index now stands at 119 points, down from 128 in Q1 2022.

A total of 10 cranes were added in the past six months and 14 were removed.

Building approvals in the 2022 financial year decreased 3.1% across the state. Residential approvals were down 19.3% (or \$1.5B) and non-residential approvals were up by 25.6% (or \$1.1B).

Construction work done for the 2022 financial year was down 4.7% (or \$1.4B). Residential activity increased 5.9% (or \$0.3B), non-residential was up by 14% (or \$0.5B), and engineering was down by 10.7% (or \$2.2B).

Perth's residential sector has seen the largest decrease in cranes, with nine cranes removed and six added to total 30 cranes, accounting for almost 59% of all cranes across Perth.



KEY SECTORS

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

OVERALL STATUS

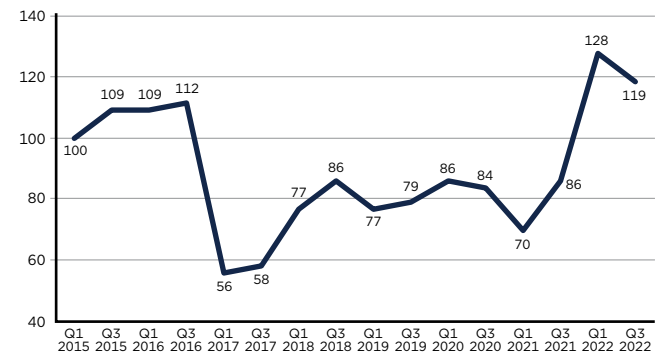


LEGEND

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

RLB CRANE INDEX® - PERTH

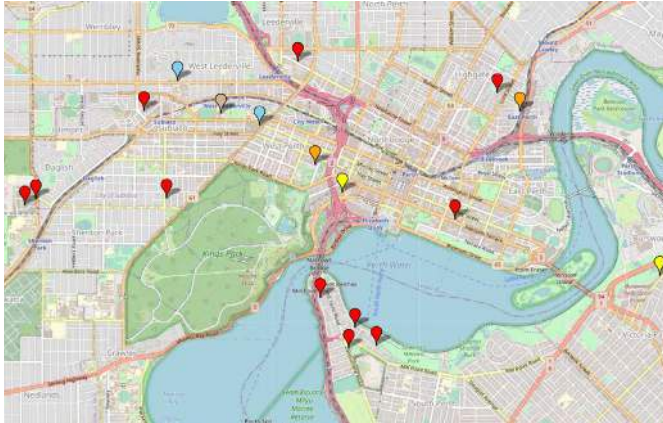
BASE: Q1 2015 = 100



CRANE ACTIVITY - PERTH

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	1	1.8%	1	-1	0	1	2.0%
CIVIC	1	1.8%	1	0	1	2	3.9%
CIVIL	1	1.8%	0	0	0	1	2.0%
COMMERCIAL	7	12.7%	0	-2	-2	5	9.8%
DATA CENTRES	0	0.0%	0	0	0	0	0.0%
EDUCATION	5	9.1%	0	0	0	5	9.8%
HEALTH	6	10.9%	0	-1	-1	5	9.8%
HOTEL	0	0.0%	1	0	1	1	2.0%
MIXED USE	0	0.0%	1	0	1	1	2.0%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	33	60.0%	6	-9	-3	30	58.8%
RETAIL	1	1.8%	0	-1	-1	0	0.0%
TOTAL	55	100.0%	10	-14	-4	51	100.0%

PERTH



New residential cranes were added at Aurora Apartments and Grandton (Applecross), Elements at Carousell (Cannington), Montreal Commons (Fremantle), South Scape (South Perth) and Rivean (Nedlands).

Cranes were removed from Amara City Gardens (Booragoon), Residential House (Dalkeith), Victoria House (Shenton Park), One Subiaco (Subiaco), The Bradshaw (Manning), Challis Apartments (Mt Lawley) and Belle Parc (Victoria Park).

There were no additions to commercial cranes. Two cranes were removed from Chevron Office.

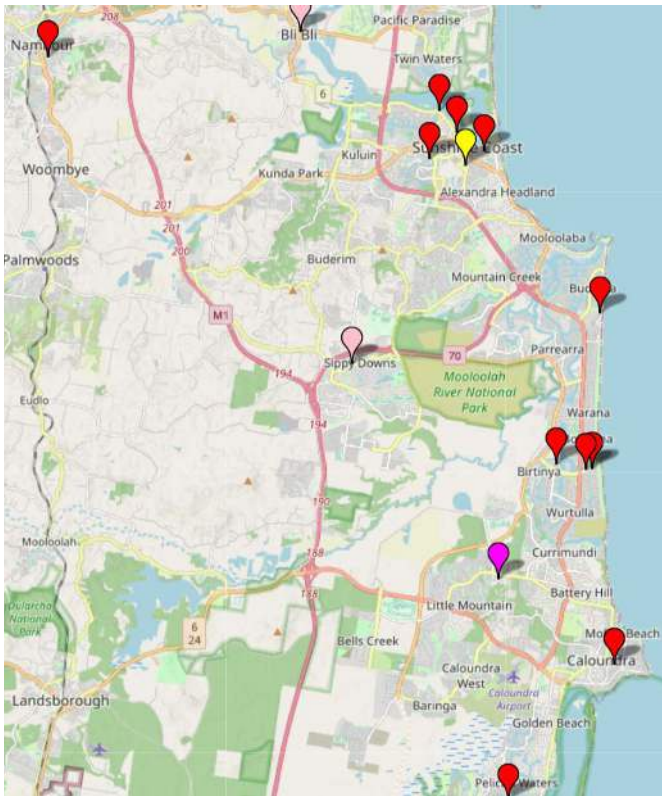
The health sector likewise saw no new cranes. One health crane was removed from the Abbotsford Private Hospital Redevelopment in Leederville.

The largest crane site is still the new Health and Knowledge Precinct at Murdoch University within the education sector. There are four cranes at this precinct.

Two cranes are on each of the Elizabeth Quay Lot 2, Civic Heart, Victoria House, The Grove Residences and Joondalup Health Campus Expansion sites.

SUNSHINE COAST

The Sunshine Coast RLB Crane Index® remained steady compared to the previous edition at 160 points. This was also achieved in Q1 2021 and Q3 2018. The region saw the removal of 10 cranes and the addition of 10 new cranes, leaving the number of cranes across the coast unchanged at 16.



KEY SECTORS

- AGED CARE
- CIVIC
- COMMERCIAL
- MIXED USE
- RESIDENTIAL

OVERALL STATUS

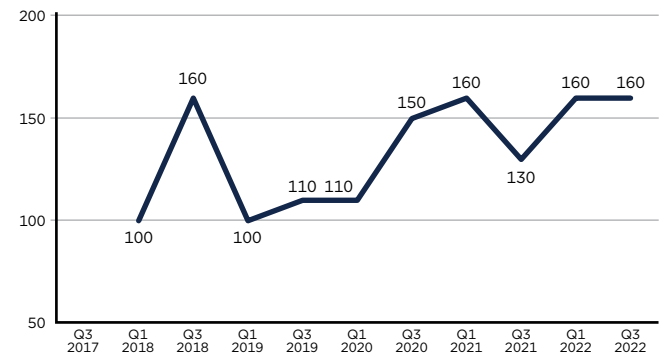


LEGEND

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

RLB CRANE INDEX® - SUNSHINE COAST

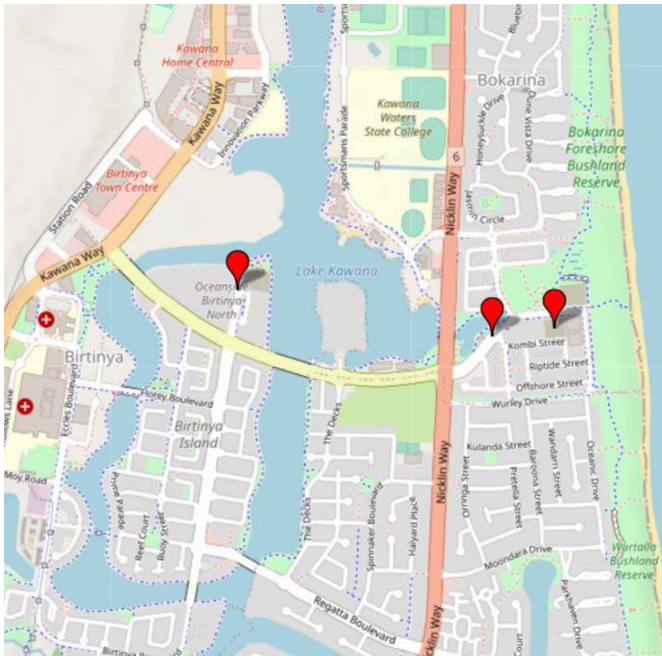
BASE: Q1 2018 = 100



CRANE ACTIVITY - SUNSHINE COAST

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	0	0.0%	1	0	1	1	6.3%
CIVIC	1	3.2%	0	-1	-1	0	0.0%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	1	3.2%	0	0	0	1	6.3%
DATA CENTRES	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	2	6.5%	1	0	1	3	18.8%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	12	38.7%	8	-9	-1	11	68.8%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	16	51.6%	10	-10	0	16	100.0%

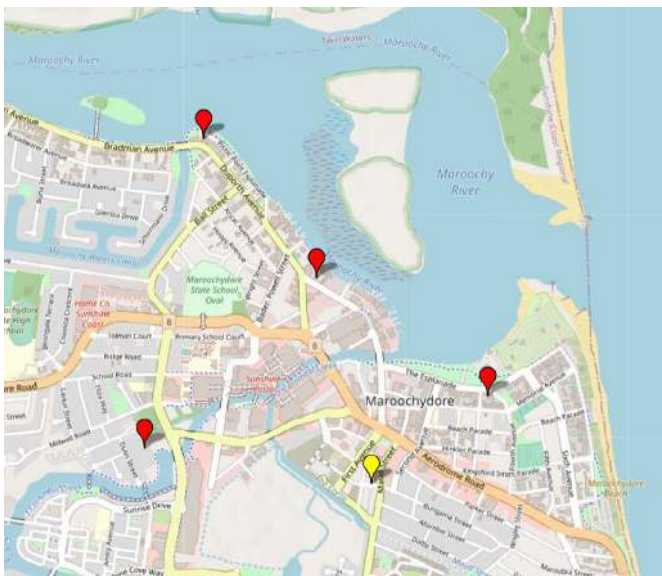
SUNSHINE COAST



Residential cranes remain the largest sector, with 11 of the 16 cranes erected in the Sunshine Coast. They are operating at:

- Jewel, Birtinya (from 2 to 1)
- Zinc, Bokarina
- Azzure, Bokarina
- The Beach Front, Buddina
- One The Esplanade, Cotton Tree
- Ocean Verge, Kings Beach
- Eclipse Picnic Point, Maroochydore
- Reflection Cove, Maroochydore
- Lorient, Maroochydore
- Pinnacle on Maud, Nambour
- The Cove

Non-residential cranes are positioned at The Tavern (Bli Bli), Churches of Christ Aged Care (Little Mountain) and A1 Maroochydore.



SYDNEY

Sydney's Q3 2022 RLB Crane Index® recorded its highest ever result in the 22th edition. The index rose from 215 points to 235, a 9% increase. The increase represents a net increase of 32 cranes across Sydney. During the past six months there have been 93 cranes removed and 125 new additions resulting in a total of 380 cranes, up from 348 previously. This is the highest number of cranes seen since the peak of 341 cranes in Q3 2017.

Current approval levels dropped for the 2022 financial year, with an 8.3% (or \$3.4B) decrease year over year. The residential sector (down by 1%) saw a substantial drop in apartments approvals by 26.6% (or \$1.8B), while semidetached dwellings increased by 22.3% (or \$0.8B). Houses for the same period were up by 11.1% (or \$1.2B) while non-residential approvals decreased by 18% (or \$3.6B). Health approvals rose by 36.4% (or \$0.8B). Entertainment and recreation and health projects were the only sectors to report gains. All other sectors endured declines in approval values.

In this edition, Sydney recorded significant crane number increases in the residential, civic and data centres/industrial sectors. Small increases were recorded in the aged care, civil, education and mixed use sectors, while the health, hotel and retail sectors remained static. There was a small drop in recreation projects.

The civic sector increased to a total of 13 cranes, with eight additions and one removal. New civic projects included Western Sydney Airport (Badgerys Creek), 518 Old South Road (Rose Bay), Revesby Commuter Car Park (Revesby), 16-18 Stoddart Street (Roselands) and Western Sydney Community and Conference Centre (Penrith). Cranes were removed from Parramatta RSL Carpark (Parramatta).

The civil sector increased to seven cranes. Two cranes were added at Westconnex interchange (Rozelle) and Canberra Avenue (St Leonards). No cranes were removed during this period.

The commercial sector remained steady at a total of 30 cranes. There were 14 new cranes and 14 removed.

New commercial cranes were added to 30 Kerr Parade (Auburn), 36 Bronte Road (Bondi Junction), 5 Central Park Avenue (Chippendale), 477 Pit Street (Haymarket), M-Park Building A Development and 388 Lane Cove Road (Macquarie Park), 341 Oran Park Drive (Oran Park), 116 Macquarie Street (Parramatta), 477 South Dowling Street (Surry Hills) and Department of Lands Building, 33 Alfred Street and 32 York Street (Sydney).

KEY SECTORS

AGED CARE	↑
CIVIC	↑
CIVIL	↑
COMMERCIAL	↑
DATA CENTRE / INDUSTRIAL	↑
EDUCATION	↑
HEALTH	↑
HOTEL	↓
MIXED USE	↑
RECREATION	↑
RESIDENTIAL	↑
RETAIL	↓

OVERALL STATUS

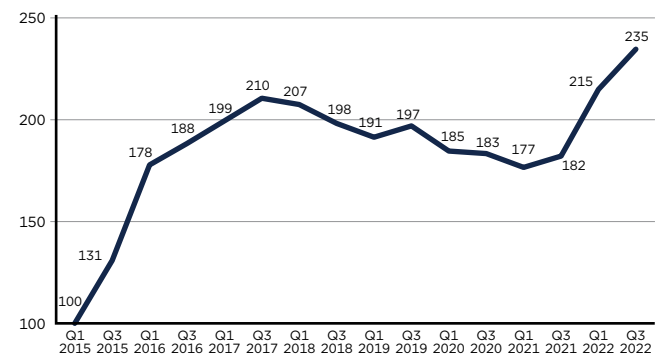


LEGEND



RLB CRANE INDEX® - SYDNEY

BASE: Q1 2015 = 100



CRANE ACTIVITY - SYDNEY

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	4	1.1%	3	-2	1	5	1.3%
CIVIC	6	1.7%	8	-1	7	13	3.4%
CIVIL	5	1.4%	2	0	2	7	1.8%
COMMERCIAL	30	8.6%	14	-14	0	30	7.9%
DATA CENTRES	9	2.6%	9	-2	7	16	4.2%
EDUCATION	7	2.0%	3	-2	1	8	2.1%
HEALTH	3	0.9%	0	0	0	3	0.8%
HOTEL	5	1.4%	1	-1	0	5	1.3%
MIXED USE	27	7.8%	5	-2	3	30	7.9%
RECREATION	6	1.7%	0	-5	-5	1	0.3%
RESIDENTIAL	243	69.8%	79	-63	16	259	68.2%
RETAIL	3	0.9%	1	-1	0	3	0.8%
TOTAL	348	100.0%	125	-93	32	380	100.0%

SYDNEY

Commercial cranes were removed from 297-299 Canterbury Road (Canterbury), Syd 55 - Compass Logistics (Eastern Creek), Merrylands RSL Club (Merrylands), Aspire Tower and 2A Macquarie Street (Parramatta), Polycentre and 19 Bridge Street (Sydney) and 1 Head heritage trail (Watsons Bay).

The education sector increased by one crane. Two cranes were removed, and three new cranes were sighted. The sector now accounts for eight cranes across Sydney. New cranes were recorded at Chatswood Public School (Chatswood), 854 Military Road (Mosman) and North Sydney Demonstration School (Waverton).

Cranes were removed from Cranbrook School Redevelopment (Bellevue Hill) and Loreto Kirribilli (Kirribilli).

The health sector reported no change with three cranes.

The hotel sector remained steady at five cranes. One crane was added on The Star (Pyrmont) and one crane was removed from The Sydney Sandstone Projects

The mixed use sector increased by three to number 30 cranes.

Five cranes were added to sites across Sydney along with two removals. Major mixed use and other additions include: New Sydney Fish Markets (Glebe), Mason and Main (Merrylands), Victoria Cross Station (North Sydney), 6-8 Phillip Street (Parramatta) and Surry Hill Village (Redfern).

Cranes were removed from Waterloo Station (Waterloo).

The recreation sector saw a fall of five cranes to number only one crane. One crane was removed from Brookvale Oval (Brookvale) and four cranes were removed from the Sydney Football Stadium (Moore Park). A crane remains at North Sydney Olympic Pool (Milsons Point).

The retail sector remained steady at three cranes with one removal and one new addition. A crane was removed from 2-8 Parsons Street (Rozelle) and one new crane was sighted at Tallawong Village (Rouse Hill).

The residential sector jumped this count to record 79 additions and the removal of 63, bringing the total count to 259 cranes across Sydney. Residential cranes make up almost 70% of all cranes across Sydney.

The largest developments based on crane numbers are:

- Sites with five cranes include: One Sydney Harbour (Barangaroo)
- Sites with four cranes include: 180 George (Parramatta)
- Sites with three cranes include: 18 Church Street (Lidcombe), Midtown Macpark (Macquarie Park), Sky High Revolution- East Side Quarter (Penrith) and Artarmon Road (Willoughby)
- Sites with two cranes include: Kitchener Place, (Bankstown), Inspire Apartments (Blacktown), 29 Terry Road (Box Hill), Skyview and Hills Living (Castle Hill), Frog Lann (Lidcombe), The Hoxton (Liverpool), The Parkside and 8 Cottonwood Cres (Macquarie Park), 190A Victoria Road (Marrickville), No 1 Zoe (Mount Druit), Aura (North Sydney), 13 Gibbons Street (Redfern), Rugby Street (Schofields), The Ribbon (Sydney), Parada Apartments (West Ryde) and 106-116 Epsom Road (Zetland)

CRANE ACTIVITY - SYDNEY REGIONS

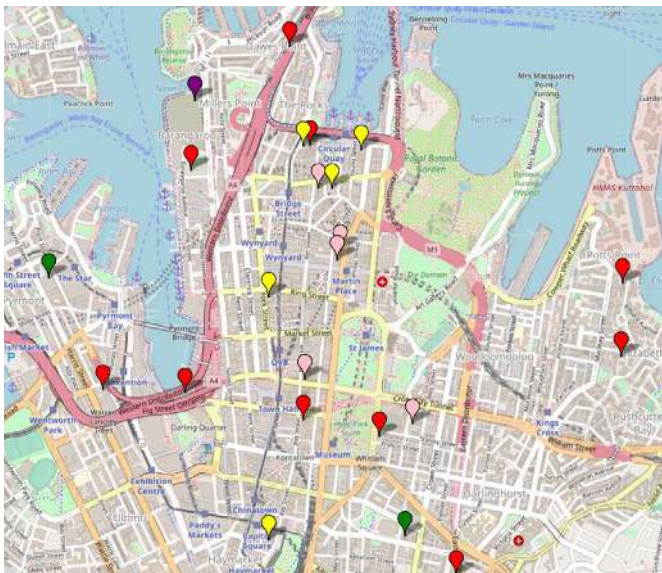
	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
INNER SYDNEY	95	27.3%	27	-24	3	98	25.8%
EAST	34	9.8%	8	-9	-1	33	8.7%
NORTH	101	29.0%	41	-32	9	110	28.9%
SOUTH	46	13.2%	19	-10	9	55	14.5%
WEST	72	20.7%	30	-18	12	84	22.1%
TOTAL	348	100.0%	125	-93	32	380	100.0%

Across Sydney's five main regions, increases were seen in all regions except for the East. The North recorded the most cranes with almost 29% of all cranes surveyed, followed closely by the CBD and Surrounds with 26%.

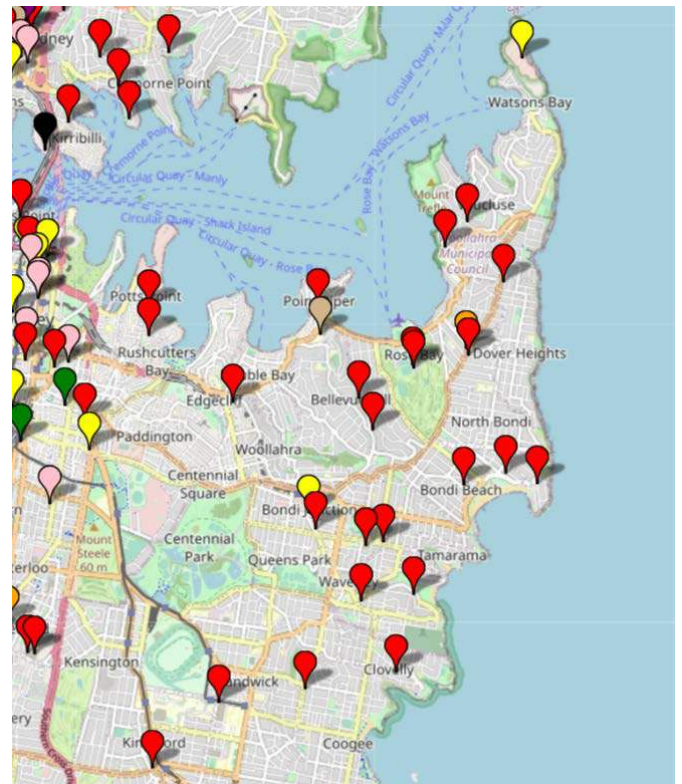
SYDNEY

INNER SYDNEY	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	0	0
CIVIC	0	0	3	3
CIVIL	3	1	2	3
COMMERCIAL	15	10	7	10
DATA C. / IND.	-	-	0	2
EDUCATION	0	3	1	1
HEALTH	0	0	0	0
HOTEL	4	4	3	3
MIXED USE	8	11	16	15
RECREATION	6	7	5	1
RESIDENTIAL	47	54	57	60
RETAIL	0	0	1	0
TOTAL	83	90	95	98

SYDNEY EAST	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	0	0
CIVIC	0	0	0	1
CIVIL	0	0	0	0
COMMERCIAL	0	2	3	3
DATA C. / IND.	-	-	0	0
EDUCATION	3	2	2	1
HEALTH	0	0	0	0
HOTEL	0	0	1	1
MIXED USE	0	0	0	0
RECREATION	0	0	0	0
RESIDENTIAL	22	21	28	27
RETAIL	0	0	0	0
TOTAL	25	25	34	33



Inner Sydney saw 27 cranes added along with the removal of 24 cranes, bringing the total crane count to 98 or 26% of Sydney’s cranes. The commercial and residential sectors saw the largest increase of cranes, both adding three cranes. Increases were also seen in civil and data centres/industrial sectors.



Cranes in the East dropped by one to total 33. Residential cranes decreased by one to number 27. Residential cranes account for 82% of total cranes in the East.

Only the civic sector reported a small increase of one crane.

The residential sector constitutes 82% of the region’s crane numbers. Six new cranes were added and seven were removed from developments in the East.

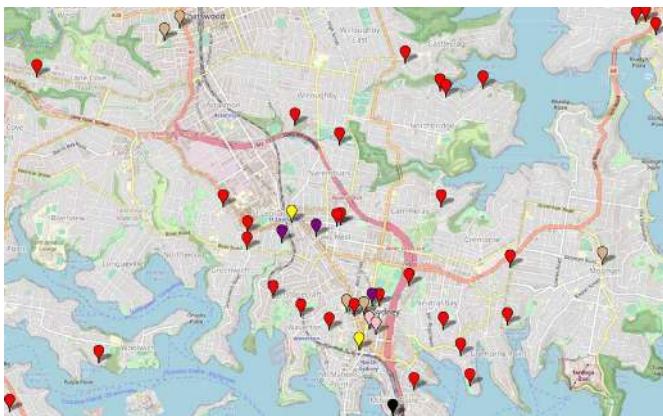
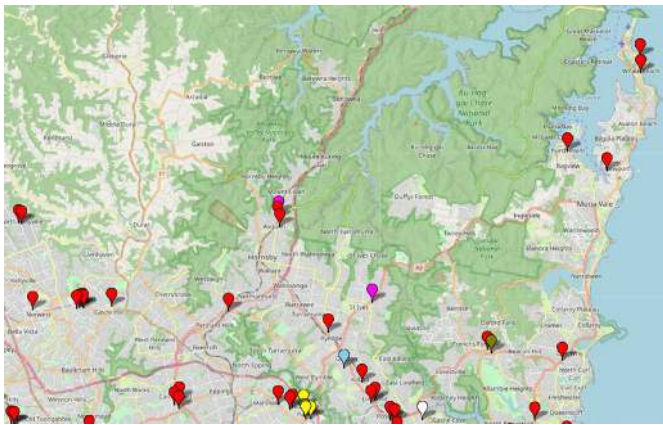
Cranes can be found in Bellevue Hill, Bondi, Bondi Beach, Bondi Junction, Bronte, Clovelly, Coogee, Eastgardens, Edgecliff, Kingsford, Mascot, North Bondi, Point Piper, Randwick, Rose Bay, Vaucluse, Watsons Bay and Waverley.

SYDNEY

SYDNEY NORTH	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	1	2
CIVIC	0	1	0	0
CIVIL	3	3	3	4
COMMERCIAL	5	4	6	7
DATA C. / IND.	-	-	6	8
EDUCATION	7	4	4	6
HEALTH	2	2	1	1
HOTEL	0	0	0	0
MIXED USE	5	7	3	4
RECREATION	0	1	1	0
RESIDENTIAL	48	41	75	77
RETAIL	1	1	1	1
TOTAL	71	64	101	110

The North of Sydney recorded an increase of nine cranes to total 110. A total of 41 cranes were added to sites and 32 cranes were removed.

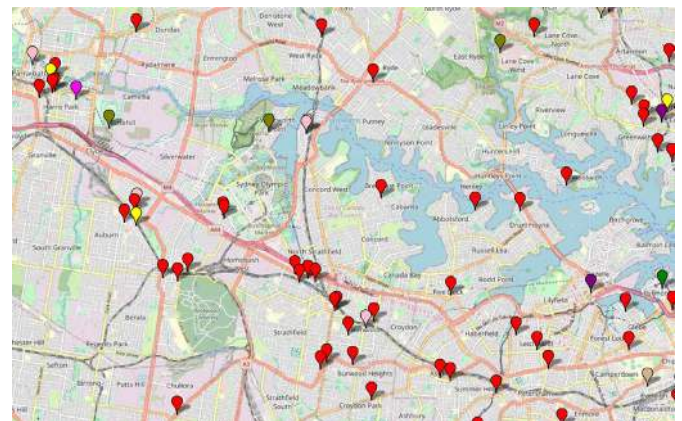
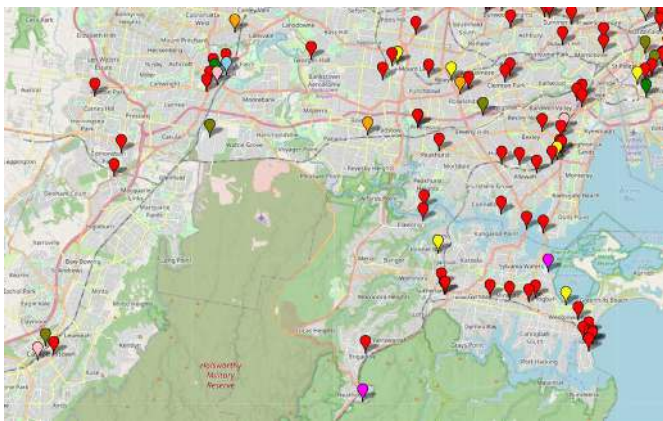
Most cranes continue to be centered on the main arterial corridors in the North and can be found in 50 suburbs including Artarmon, Asquith, Cammeray, Carlingford, Castle Hill, Castlecrag, Chatswood, Church Point, Clontarf, Cremorne, Crows Nest, Dee Why, Fairlight, Frenchs Forest, Gordon, Greenwich, Hunters Hill, Kellyville, Killara, Kirribilli, Kurraba Point, Lane Cove, Lane Cove North, Lane Cove West, Lindfield, Macquarie Park, Manly, Manly Vale, Macquarie Park, Maroubra, Mosman, Naremburn, Neutral Bay, Newport, North Sydney, Northbridge, Norwest, Palm Beach, Pymble, Roseville, Ryde, Seaforth, St Ives, St Leonards, Thornleigh, Waverton, Wentworthville, West Ryde, Whale Beach, Willoughby and Wollstonecraft.



SYDNEY

SYDNEY SOUTH	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	2	2
CIVIC	2	1	0	1
CIVIL	0	1	0	0
COMMERCIAL	4	2	4	5
DATA C. / IND.	-	-	1	2
EDUCATION	1	0	0	0
HEALTH	5	3	0	0
HOTEL	0	0	0	0
MIXED USE	0	0	4	5
RECREATION	0	0	0	0
RESIDENTIAL	34	35	35	40
RETAIL	0	0	0	0
TOTAL	46	42	46	55

SYDNEY WEST	Q1 2021	Q3 2021	Q1 2022	Q3 2022
AGED CARE	-	-	1	1
CIVIC	5	5	3	8
CIVIL	0	0	0	0
COMMERCIAL	8	10	10	5
DATA C. / IND.	-	-	2	4
EDUCATION	0	0	0	0
HEALTH	1	3	2	2
HOTEL	0	0	1	1
MIXED USE	1	7	4	6
RECREATION	0	0	0	0
RESIDENTIAL	46	49	48	55
RETAIL	0	0	1	2
TOTAL	61	74	72	84



The South of Sydney recorded a net increase of nine cranes to number 55. This was attributed to gains in civic (+1), commercial (+1), data centres/industrial (+1), mixed use (+5) and residential (+5) with no falls recorded.

A total of 19 cranes were added and 10 were removed from sites across the region.

Residential cranes across the South were sighted in 23 suburbs including Arncliffe, Bexley, Blakehurst, Camden, Campbelltown, Caringbah, Carlton, Cronulla, Engadine, Hillsdale, Hurstville, Illawong Kogarah, Kyle Bay, Lugarno, Miranda, Peakhurst, Redfern, Rockdale, Roselands, San Souci, Sutherland and Wolli Creek.

Sydney's West saw 30 new cranes and 18 removed to bring the region's total cranes to 84. Increases were seen in the civic (+5), data centres/industrial (+2), mixed use (+2), residential (+7) and retail (+1) sectors with a decrease in commercial (-5) cranes.

Cranes are situated in 26 suburbs across the west. Suburbs include Bankstown, Blacktown, Box Hill, Campsie, Croydon Park, Dundas, Edmondson Park, Georges Hall, Greenacre, Harris Park, Kingswood, Liverpool, Merrylands, Merrylands West, Mount Druitt, North Kellyville, Northmead, Parramatta, Penrith, Punchbowl, Riverwood, Rouse Hill, Schofields, Seven Hills, Toongabbie and Villawood.

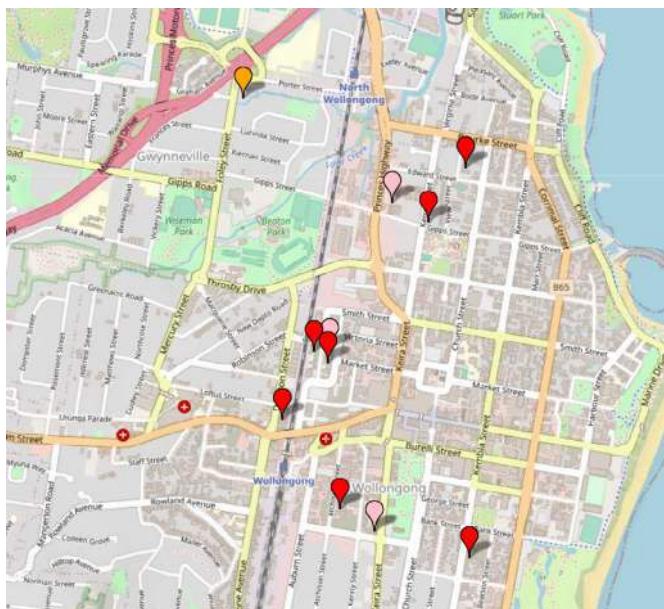
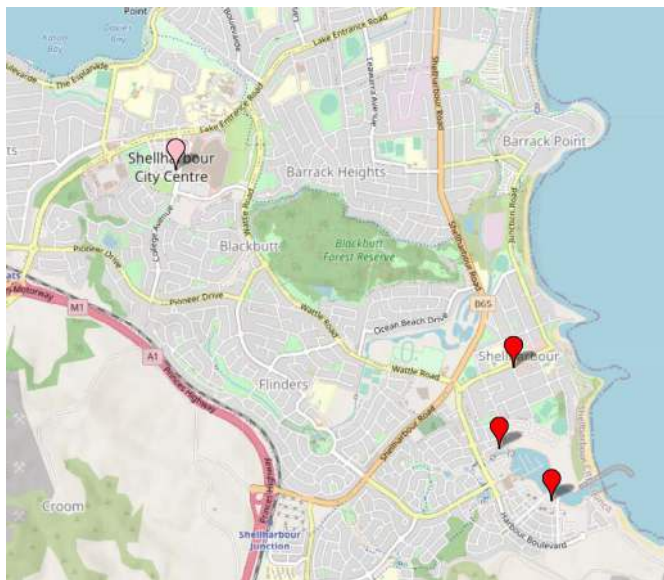
WOLLONGONG

Wollongong's RLB Crane Index® recorded an increase from 67 points to 83 cranes. This represents a total of 15 cranes, a lift of three compared to the previous edition.

There are 11 cranes in the Wollongong Local Government Area, with an additional four cranes located in Shell Harbour and Shell Cove.

Three cranes were removed from projects since our last edition including Lang's Corner, ASEA Apartments and Sealink Apartments, all in Wollongong.

Cranes were added at Rise on Gipps, 93-99 Kembla Street, Platinum on Park Street and Central Park in Wollongong, Ancora Apartments in Shell Cove, and Areia Apartments in Shell Harbour.



KEY SECTORS

CIVIC	
COMMERCIAL	
MIXED USE	
RESIDENTIAL	

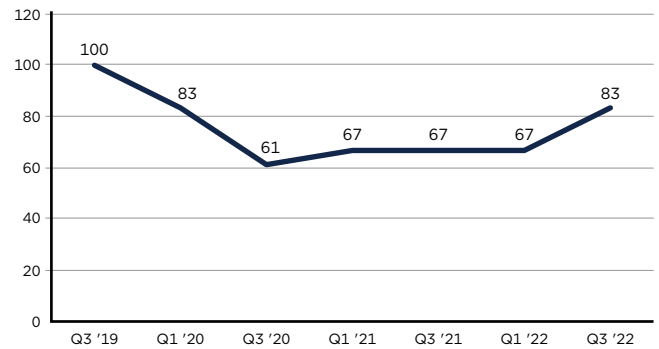


LEGEND

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

RLB CRANE INDEX® - WOLLONGONG

BASE: Q3 2019 = 100



CRANE ACTIVITY - WOLLONGONG

	OPENING COUNT		MOVEMENT			CLOSING COUNT	
	Q1 2022	%	+	-	NET	Q3 2022	%
AGED CARE	0	0.0%	0	0	0	0	0.0%
CIVIC	1	8.3%	0	0	0	1	6.7%
CIVIL	0	0.0%	0	0	0	0	0.0%
COMMERCIAL	1	8.3%	0	-1	-1	0	0.0%
DATA CENTRES	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	3	25.0%	1	0	1	4	26.7%
RECREATION	0	0.0%	0	0	0	0	0.0%
RESIDENTIAL	7	58.3%	5	-2	3	10	66.7%
RETAIL	0	0.0%	0	0	0	0	0.0%
TOTAL	12	100.0%	6	-3	3	15	100.0%

ABOUT THE RLB CRANE INDEX®

The RLB Crane Index® is published by Rider Levett Bucknall biannually in Australia, New Zealand, USA, Canada, Gulf States, Hong Kong, Singapore, Indonesia, Vietnam, Malaysia and Myanmar and South 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 Q1 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 Q1 2015, which saw the base index value of 100 established for each city. Subsequent cities that 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 Q1 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 Q1 2015, against the count in Q1 2018, the following formula can be used to determine the percentage increase (or decrease).

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

where Crane Index_{cp} is the RLB Crane Index_{cp} for the current period and Crane Index_{pp} is the RLB Crane Index® for the previous period.

LOCALITY MAPS

The RLB Crane Index® locality maps offer a pictorial representation of the collected data for each city using a pin locator for the approximate location and sector of the development to where cranes are located.

The pin colour indicates the market sector of the development. The pins are not an indication of the numbers of cranes in that location.

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

Locality maps have been created by RLB at GPSVisualiser.com using Leaflet and map data from OpenStreetMap.org

CONTACT DETAILS

For further comments, please contact:

Contact: Domenic Schiafone
Director Research & Development

Email: domenic.schiafone@au.rlb.com
Tel: +61 3 9690 6111

Contact: John Cross
Oceania Research & Development Manager

Email: john.cross@au.rlb.com
Tel: +61 3 9690 6111