



CORDELL CONSTRUCTION MARKET MOVEMENT REPORT

QUARTER 1, 2018

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The Cordell Construction Market Movement Report presents a snapshot of the current state of progress for all active construction projects identified within the last twelve months that are currently being followed by Cordell's research team.

NEW PROJECT PIPELINE

The section covering '**New Project Pipeline**' describes the flow of projects identified within the current quarter in terms of volume and value and compares and contrasts this to earlier quarters.

The '**New Project Pipeline**' category does not include projects that were both identified and deferred or abandoned within the same quarter (eg. if a project was both identified and deferred within the same quarter it will be counted in the '**Deferred Projects**' but not in the '**New Project Pipeline**' section).

The New Project Pipeline monitors projects that have been flagged with the following status; early, commenced, firm, no further information, possible and registrations.

DEFERRED PROJECTS

The '**Deferred Projects**' section reports the volume and value of projects identified within the last twenty four months which have subsequently been deferred.

ABANDONED PROJECTS

The '**Abandoned Projects**' section reports the volume and value projects identified within the last twenty four months which have subsequently been abandoned.

IN CONSTRUCTION

The section covering projects '**In Construction**' reports the volume and value of projects identified within the last twenty four months which have subsequently moved into the stage of "construction." Actual construction commencement dates may vary.

Note the analysis does not report progress of projects identified outside of the twenty four month window.



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Q1 WELCOME

Each quarter, CoreLogic compiles the latest construction projects, captured through Cordell, to deliver an overview of the Australian construction industry.

As with previous quarters, the index at the back of the report provides a snapshot of the number and value of new projects in the pipeline, moving into construction, deferred for 6-8 months, or abandoned. This gives us an indicator of health in the industry in which ideally we would see an increase in construction, and a decrease in abandoned projects

In the March 2018 quarter, CoreLogic captured approximately 1,941 projects moving into construction, which was -28% lower than the number of projects commencing in the previous quarter. The value of construction projects that commenced however, was up 3% over the quarter, to \$13.7 billion. The value of commenced construction was up 20.2% over the year to March 2018.

This report also utilises a snapshot of the CoreLogic database to evaluate the number of projects underway, the value of all projects currently under construction, and what that construction looks like.

As of March 2018, the latest ABS economic data suggests the private sector is in recovery, and this is reflected in the pipeline data and in construction. The pipeline of new projects is generally seeing an increase in the value of commercial and industrial building, which were up 36% and 23% over the quarter, respectively.

There were 5,062 new project applications captured in the December quarter, with a combined construction value of \$43.4 billion. Over the year, there were 22,709 new projects captured at a combined construction value of \$189 billion. This was up from \$152.2 billion in the year to March 2017, and indicates continued strength in the construction sector

As with the previous quarter, civil engineering projects dominated the number commencements, with 823 projects entering construction. However, the value of projects moving

into construction is becoming increasingly evenly distributed across the different construction segments. In the March 2018 quarter, while civil engineering held the highest *volume* of projects, apartments and units had the highest value at \$3.6 billion, representing 26.3% of the total value of commencing projects.

In this report, the economic and construction outlooks provided for Australia, and each state and territory, provide further insight into the current construction landscape. Your feedback is greatly appreciated, so feel free to get in touch if there are any other data points or insights you require in future editions.

ABOUT US

Since 1969 Cordell Information has been at the forefront of providing the most reliable, timely and comprehensive construction industry information. Now that Cordell is part of CoreLogic we are part of the largest and most trusted property data and insights provider in the world and able to expand our insights across the entire property lifecycle.

Through CoreLogic, Cordell clients have access to more than half a billion data points generating insights that help more than a million government, construction, banking, finance, insurance and property clients navigate the property ecosystem. This means unparalleled access to critical information and insights across the market sectors of real estate, construction, design, building, engineering, finance, insurance and risk. CoreLogic Australia is a wholly owned subsidiary of CoreLogic (NYSE: CLGX), Australia's most comprehensive property databases. We have more than 20,000 customers and 150,000 end users and employ over 700 people across Australia and in New Zealand.

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This report aims to provide a broad overview of the construction industry. If you would like one of our specialists to highlight the detailed analytics that can help you and your business, please email: marketing@corelogic.com.au



Q2 AUSTRALIA

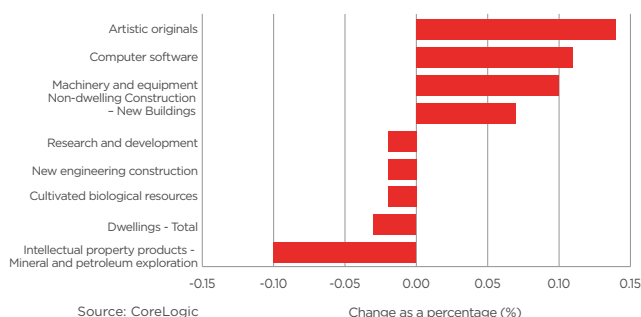
AUSTRALIA WIDE OVERVIEW

Just as the Australian economy is making a cautious recovery from the end of the mining boom, major property markets are entering the downswing phase of the current growth cycle.

The CoreLogic hedonic growth index results for June revealed a -0.6% decline in capital city dwelling values in the three months to May, with Melbourne seeing the largest declines (-1.2%).

Despite the slowdown in dwelling markets presenting a threat to interest in residential construction, other areas of the private sector are indicating recovery, while Government investment in infrastructure is being sustained through budget allocation. The highest value increases in private expenditure were investment in artistic originals (+13.7%), computer software investment (+10.7%), and machinery and equipment investment (+9.5%). This means that the construction sector is likely to find growth in non-residential assets and major civil engineering projects. Trend, year-on-year growth in private sector expenditure is displayed in Graph 1.

AU G1: Year-on-year change in Private Sector Expenditure by Expenditure Category



In June, the Australian Bureau of Statistics released key business performance indicators. Gross company profits were up 6.5% in the year to March 2018 in trend terms, above a 5 year average of 6.1%. The strongest growth sectors were utilities (11.9%), mining (10.9%) and construction (10.1%).

Gross profits declined in wholesale trade (-4.6%) and accommodation and food services (-5.3%). Overall growth in business profits is a good lead indicator of increased hiring, and may lead to more construction in commercial real estate. Furthermore, while it is not yet reflected in private sector expenditure, a rebound in commodity prices is resulting in increased pipeline activity in the mining sector.

As of the March 2018 quarter, CoreLogic project data indicates there were 9,295 projects under construction across Australia, up from 9,152 projects in the December 2017 quarter. The number of projects under construction is -5.1%, below the 9,797 projects underway in March 2017.

The slight decline in the number of projects being done across Australia was largely led by residential subdivisions and residential construction, which saw a decline of 377 projects on the previous year.

Despite the decline in the *number* of projects under construction in the year to March 2018, the combined construction value of projects underway across Australia is up 14.8%. The combined value of construction rose from \$385.6 billion in March 2017, to \$442.6 in March 2018. The top 10 highest categories of construction, by value of work underway in March 2018, is displayed in Graph 2.

AU G2: Value of Projects Under Construction (\$AUD millions)

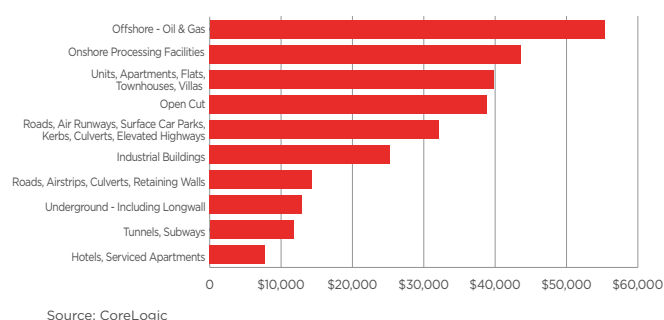


Figure 2 highlights the lasting contribution of mining to the construction sector, with the Gorgon Gas Project accounting

for \$54 billion of the \$55 billion in offshore oil and gas construction currently under construction and in production. It also hints at more recent construction trends emerging, with road works, industrial buildings and hotels and serviced apartments also comprising a significant part of the value of construction.

The highest construction value *gains* over the year, in terms of year on year change in the value of projects under construction, were in residential builds (+ \$117 billion), road works (+ \$43.2 billion) and administration facilities (+ \$23 billion). The value of residential work under construction appears to have 'scaled up' in the March 2018 quarter, with fewer projects at a much higher value under construction.

The largest losses in the value of work under construction were in offshore oil and gas (-\$59 billion), onshore processing facilities (- \$43.5 billion) and open cut mining construction (- \$33.9 billion). This indicates that larger mining projects are nearing the end of their construction and operational phases.

Discounting mining, Sydney and Melbourne currently have the most construction activity in terms of the value of work being done, with Sydney seeing \$46.2 billion worth of work underway, and Melbourne currently implementing projects worth \$44.6 billion.

Across each of the states and territories, major government infrastructure investment, the rise of industrial real estate, and the need to fund school development in response to dense residential development, are all themes that are generally reflected in the construction landscapes.



Q3 NEW SOUTH WALES

NEW SOUTH WALES OVERVIEW

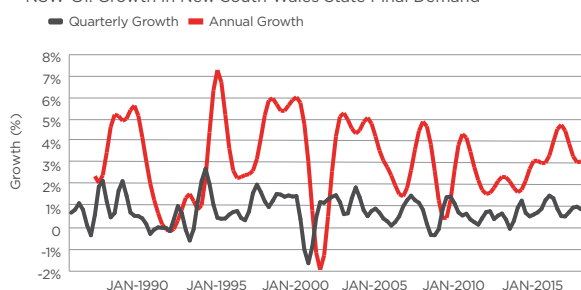
New South Wales has the highest value of work moving into construction

State final demand (SFD) figures for NSW indicate domestic demand in the state expanded 0.9% in the March quarter (the 18th consecutive quarter of positive growth), and 3.1% over the year. While NSW remains the largest state economy, its annual growth rate has fallen below the 4.8% peak in the year to December 2016, suggesting the state is in the downswing phase of the current cycle.

The value of work moving into the construction stages was 42% higher than the previous quarter. Meanwhile, the number of projects that moved into construction was 16% lower than the previous quarter, at 447.

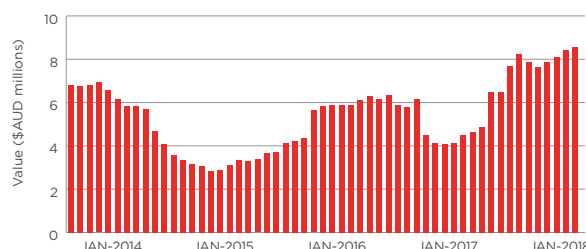
Generally, the construction pattern in NSW follows the national trend, where the number of projects moving into construction is falling, but their average value is rising. The average value of projects has been pushed up in the year to March 2018 by commencing components of the Sydney Metro and South West Rail.

NSW G1: Growth in New South Wales State Final Demand



Source: CoreLogic

NSW G2: Value of Projects Moving into Construction in NSW
- Rolling Quarterly Average



Source: CoreLogic

New South Wales has the highest value of work moving into construction

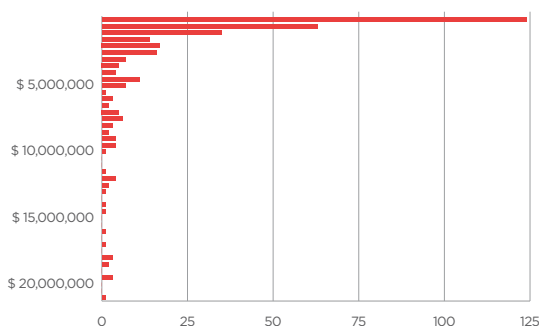
CoreLogic data indicates that at the end of March, there were 2,115 projects under construction across New South Wales. Combined, these projects are worth over \$77 billion. The most ubiquitous type of work under construction is currently apartment projects (912), followed by road and surface works (90) and primary and secondary school projects (88).

In the March 2018 quarter, a further \$3.9 billion worth of work moved into construction across NSW. This was the highest of all the states and territories.

Significant components of the rail project that were let for construction include the 15.5 km of tunnel from Chatswood to Sydney CBD, the Sydenham Station and Junction works package and the revitalisation of Central station.

Excluding the upper and lower bounds of the project value data in NSW, projects entering construction ranged between \$186,400 and \$21.5 million. When looking at the distribution of projects over the March 2018 quarter, a large portion of projects are in lower ranges. 41.2% of projects commencing were under \$1 million. However, this was a lower portion than the March 2017 quarter, where projects under \$1 million made up 44.9% of commencements.

NSW G3: Number of Projects By Value Range – Moving into Construction in NSW, March Quarter



Source: CoreLogic

The majority of projects under \$1 million in Q1 2018 were civil engineering. Road, bridge and water works were common in this value range. 64.4% of the projects in this value range were initiated by local government.

Meanwhile, 18 projects moved into construction across NSW that were above \$21.5 million in the quarter. The highest value project was a \$955 million package for the Central Station revitalisation and underground central walk. Laing O'Rourke Australia Construction Pty Ltd was announced as the contractor for the project, with site investigations currently in progress before work commences in October 2018.

Over the year to March 2018, there was \$17.8 billion worth of works that moved into construction across NSW, \$13.6 billion of which was in Greater Sydney, with the rest in regional NSW.

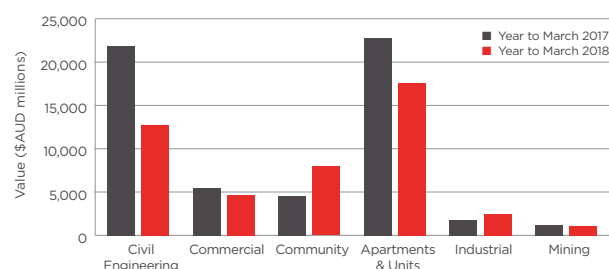
Development applications in NSW have a strong quarter, but decline over the year

The value of development applications rose 55% in the March 2018 quarter, driven by a strong rebound in the apartment development segment, where the apartment pipeline saw relatively weak performance over 2017.

Despite the recent declines in Sydney dwelling values, major developers such as Walker Corporation and Boyuan Holdings have recently submitted proposals for vast, mixed use communities, predominantly residential, to be established near the future Badgerys Creek Airport. The \$3.5 billion Wilton North Precinct, to establish over 3,000 dwellings near Sydney's second Airport, was the highest value new project captured by CoreLogic in Q1.

The value of new projects in NSW captured by CoreLogic fell 19% over the year to March 2018, to \$46.5 billion, from \$57.6 billion, despite the March 2018 quarter being 19% higher than the March 2017 quarter. The decline in the pipeline was largely driven by a \$9.1 billion decline in new civil engineering applications, followed by a \$5.2 billion decline in apartment applications.

NSW G4: Combined Value of New Projects - NSW



Source: CoreLogic

Growth segments in the pipeline are community and industrial builds. Education investment was particularly prominent in the last quarter within the community segment, as institutions seek to increase capacity where high rise residential projects have increased urban density, and the overseas student market continues to thrive. The highest value education in the pipeline over the March quarter was the \$390 million Central Courtyard Precinct Re-development at Macquarie University. The project is being led by the university, and is expected to commence in early 2021. The proposal outlines several new buildings for retail, student accommodation and management facilities.



VICTORIA 4

VICTORIA OVERVIEW

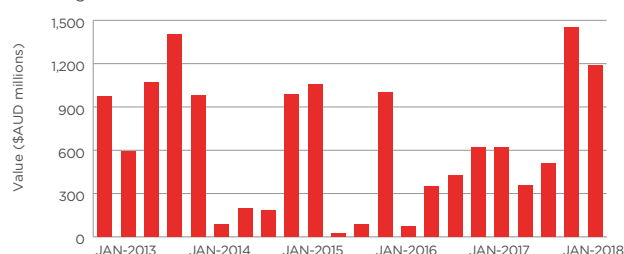
Decline in dwelling construction hinders growth in the December quarter

State Final Demand (SFD) trend figures indicate Victoria had the fastest growing economy of the states and territories over the year to March 2018 (4.7%). State and local government expenditure, largely in the form of gross fixed capital formation, were among the highest contributors to growth, at 14% of the annual economic increase.

Other major contributors to the Victorian economy over the year to March were non-dwelling construction (15%), business investment (9%) and a significant increase in household consumption.

Growth over the year was partially offset by a -3% decline in private sector expenditure on the establishment and alteration of dwellings. However, CoreLogic estimates there are still 23,000 units in the pipeline that have been approved for construction across Victoria that are yet to commence. In the 'moving into construction' space, where projects are commenced or contracts are let for construction, CoreLogic saw \$1.2 billion worth of residential projects in the March quarter. This is almost double the 5 year average of \$625 million per quarter, and signals continued confidence in the residential market.

VIC G1: Combined Value of New Unit Projects Entering Construction Stages Each Quarter - VIC



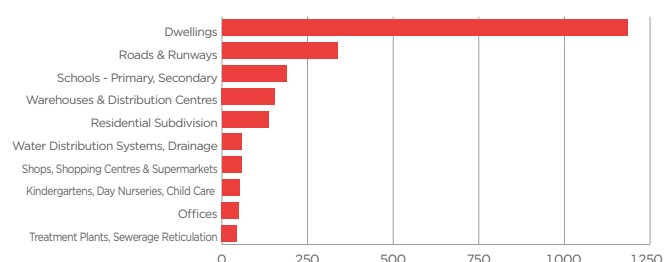
Source: CoreLogic

Infrastructure and residential still dominate construction, but commercial real estate is on the rise

At the end of March 2018, CoreLogic estimated 3,012 construction projects were underway across Victoria, making it the most active state for construction at that point in time. The combined construction value of the projects was \$53.1 billion, less than the \$77 billion worth of work underway in NSW, suggesting that the scale of construction per project was smaller.

The top 10 types of projects estimated to be under construction by volume as of March 2018 are presented in Graph 2. Of the 3,012 projects under construction, 40% were dwelling projects. The top 10 categories displayed in Graph 2 account for 75% of projects being constructed.

VIC G2: Number of Projects Estimated Under Construction in Victoria at March 2018 - Top 10 Categories



Source: CoreLogic

The number of new projects moving into construction over the March quarter was 575, down 26% on the previous quarter. 40% of the decline was due to fewer civil engineering projects. Despite the sharp decline in commencing work over Q1, project numbers were fairly steady over the year, at 2,827 - just 3% lower than the year to March 2017.

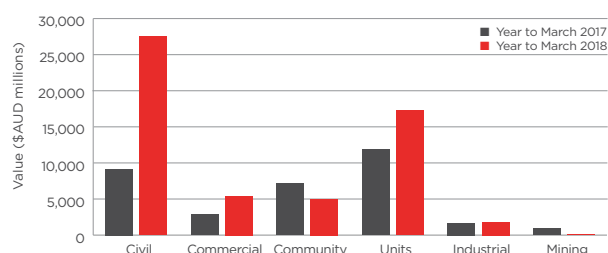
The combined value of commencing work in the March quarter was \$2.6 billion, almost half the value of work moving into construction in the previous quarter. However, the annual view was again more positive, with \$14.6 billion worth of projects commenced or let for construction, up 17% from the previous year.

The highest value works that moved into construction stages in the March quarter were:

- ▶ **Stage 1 of the Melbourne Square mixed-use Development at Southbank, including 1,043 apartments, worth \$490 million;**
- ▶ **The Paragon Apartments in the Melbourne CBD, comprised of 277 units, worth \$200 million; and,**
- ▶ **The \$110 million Botannica Corporate Business Park Building in Burnley, with the contract let and works expected to commence in June.**

Despite the focus on residential in the construction space, commercial real estate development is showing signs of growth. 155 of the projects currently underway across Victoria relate to warehousing for distribution and storage. These projects include industrial business parks, a Costco development and a QUBE logistics warehouse. 17% of these warehouse projects are focused in Greater Dandenong to the east, while 23% are spread across Brimbank and Hume to the west. Growing warehouse development represents a larger shift to wholesale retail and distribution through the rise of internet shopping.

VIC G3: Construction Value of New Project Applications - VIC



Source: CoreLogic

The pipeline of new projects shows that civil engineering is undoubtedly leading proposed construction across Victoria. The value of new projects added to the pipeline over the year was \$27.5 billion, up from \$9.2 billion in the previous year. Large scale renewable projects, road and rail infrastructure saw the new application values in civil engineering rise 200%.

However, the second highest year on year growth in new projects added to the pipeline was not in residential, which was up 46%, but commercial real estate (86% growth). The year to March 2018 saw \$5.4 billion worth of new work added to the commercial building pipeline. This was led by a \$500 million passenger terminal development in Doncaster East, a \$450 million commercial and retail development in South Yarra, and the \$125 million Adina Hotel development in Southbank. The rise in commercial real estate development in Melbourne is a reflection of increased business investment in the state.



Q5 QUEENSLAND

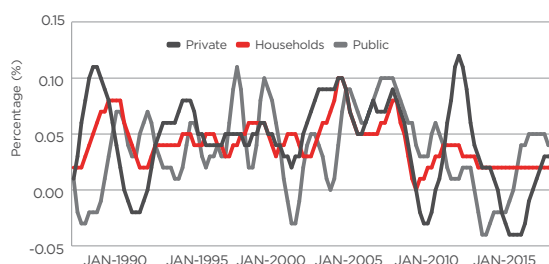
QUEENSLAND OVERVIEW

Queensland Economic Growth is Climbing Steadily

Growth in QLD State Final Demand (SFD) rose 0.7% in the March 2018 quarter, and 3.1% in the year. The highest contributors to increased domestic demand over the year were non-dwelling construction (27.4%), private business investment (36.3%) and state and local government consumption expenditure (22.9%).

Household consumption was the slowest growing sector of SFD, at 2.2% growth in the year to March 2018. The highest contributor to household consumption in the year to March 2018 was rent and dwelling expenses (23.1% of growth in household consumption), followed by insurance and financial services (19.6%).

QLD G1: Annual Growth in Components of State Final Demand - QLD



Source: CoreLogic

Following the decline of coal and iron ore prices in 2012 to 2015, household spending growth has been continually subdued at around 2%. This low household consumption growth came amid high levels of unemployment (which peaked at 6.6% in December 2014) and falling income growth as the mining boom came to an end.

Given the strong rebound in private and public sector consumption, as well as rising export volumes, Queensland households are likely to be moving into a better growth position, along with the state economy. This is already reflected in the Queensland Wage Price Index, where average annual growth has risen to 1.6% by the end of 2017, up from a record low growth rate of 1.4% in the March 2017 quarter.

QLD G2: Rolling Annual Average Growth in WPI - QLD



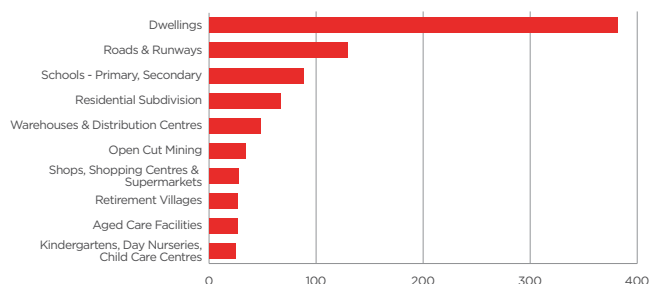
Source: CoreLogic

New project space shows the pivot from residential to civil engineering seen in other east coast states

At the end of March 2018, CoreLogic Project data indicated that there were 1,372 projects under construction across Queensland. The nature of projects was very similar to that of Victoria: the top category of projects under construction were residential, followed by road works, schools, residential subdivisions and warehouses. However, unlike Victoria, there was a lower portion of projects that were residential (27.8%).

The top 10 categories of projects under construction in Queensland are shown in Graph 3. The nature of construction in the state also shows higher emphasis on retirement living, and health and aged care and mining than Victoria and NSW. The top 10 categories here represent 62.3% of the works currently under construction.

QLD G3: Number of Projects Estimated to be Under Construction at the end of March Quarter - QLD



Source: CoreLogic

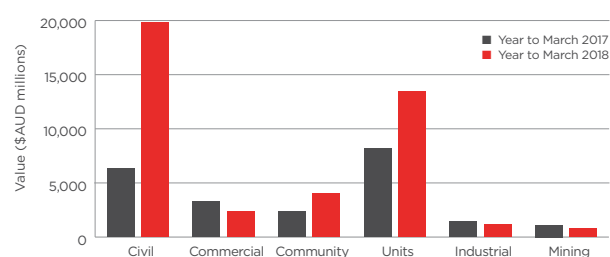
In the year to March 2018, there was \$19.8 billion worth of civil engineering projects submitted in development applications. This was far higher than the \$6.3 billion submitted in the previous year, contributing over 70% to the growth in the value of new project applications over the year. The three highest value civil engineering projects added to the pipeline in Queensland over the year contributed to almost 50% of this value. They were:

- ▶ The \$4.2 billion Tully Millstream Hydro Project, a state initiative submitted in August 2017;
- ▶ The \$3 billion North Coast Connect, a federal infrastructure fast rail project captured in the March quarter; and,
- ▶ A \$2 billion tunnel, stations and development package for the Cross River Rail.

Of the \$19.8 billion in civil engineering added to the pipeline over the 12 months to March, \$9.9 billion were in projects owned by the state government. This reflects the rapidly rising participation of the state government in the Queensland construction landscape, as has been demonstrated across NSW and VIC in the last two years.

One notable area of decline in the value of new project applications is commercial and industrial applications, which fell 27% and 17% in value respectively.

QLD G4: Value of New Project Applications by Segment - QLD



Source: CoreLogic

However, as private sector demand, wages and household consumption recover in the economy, added demand may fuel the need for non-residential building construction. This is already reflected in the increased construction of warehouses, and current state final demand figures, which show a strong annual increase in the value of non-residential construction underway.



06 SOUTH AUSTRALIA

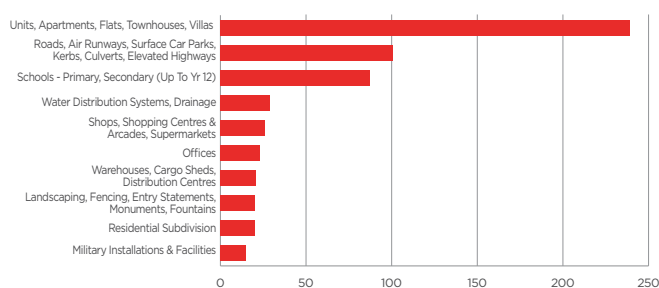
SOUTH AUSTRALIA OVERVIEW

Road projects leading construction in SA
Looking at the economy of South Australia, represented As of the end of the March 2018 quarter, CoreLogic estimates that there were 850 projects currently under construction across South Australia, representing 9.5% of the number of projects currently underway nationally.

Apartment builds represent 28.1% of the works currently being constructed across South Australia, while the next highest category of works underway were roads, air runways and other surfaced infrastructure projects. This generally follows the pattern of the type of works being done across Australia, where residential is still highly prominent alongside a rise in transport and social infrastructure investment.

Graph 1 shows the top 10 projects under construction by the number of projects underway, alongside their total construction value. While the highest frequency project category was undoubtedly apartment and unit builds, the highest combined value of projects under construction was the roads, air runways, surface carparks and kerbs and culverts.

SA G1: Top 10 Categories of Construction by Number of Projects, South Australia



Source: CoreLogic

This space was valued at \$2.8 billion. Of the \$2.8 billion worth of roads projects under construction in March 2018, 31.3% of this is held in a single project, the Northern Connector

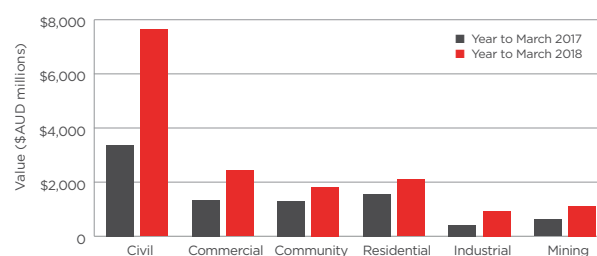
Road. The Northern connector road project is estimated to be employing 480 full time equivalent jobs. With the project expected to complete in late 2019, movements in the pipeline indicate future construction value will come from large civil projects, such as renewable energy and the Adelaide Tram Network.

Exceptional growth in the pipeline of new projects, driven by renewables

Over the year to March 2018, South Australia saw 2,148 new development applications for projects, representing a 5% increase on the previous year. In terms of new project value, the combined worth of new projects submitted over the year was an astonishing \$16 billion worth of construction work, an 81% increase on the previous year.

Examining the year on year values of new development applications in Graph 2 reveals that each sector had strong growth, though civil engineering accounted for 59.5% of the increase over the new pipeline values.

SA G2: New Projects by Segment and Value, Year on Year

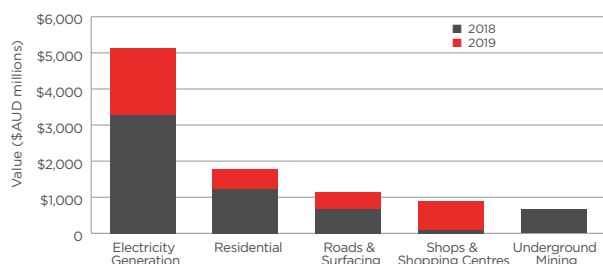


Source: CoreLogic

To dive deeper into this civil engineering opportunity, we may examine top construction categories by the value of work to be done based on the applications received in the 12 months to March. This is demonstrated in Graph 3, which displays the top 5 construction segments by the value of work expected to commence this year and next. While not all of these projects may go ahead, many projects with a commencement date in 2018 and 2019 have a firm status, with contracts let for

commencement.

SA G3: Top 5 construction segments based on value of commencements over 2018/19 - South Australia



Source: CoreLogic

The graph shows that in the next two years, over \$5 billion worth of power-related projects are to commence across the state, particularly renewables. This is largely held in the Aurora energy project in Port Augusta, worth \$650 million, and the Riverland and solar storage project in Morgan, worth \$700 million.

Energy in South Australia remains a key infrastructure issue. The state currently has the highest retail electricity prices in the country. Increasing supply through renewable energy projects will be an important step in reducing energy prices and disruptions. However, Researcher at the Australian German Climate and Energy College, University of Melbourne, Dylan McConnell, cites that over 97% of electricity supply interruptions are due to *distribution* issues, such as trees falling on power lines during storms.¹

Despite this, much of the energy related construction is focused on increased power generation. The distribution energy, such as through substations and power lines, may provide the next area of focus for civil engineering construction in the state.



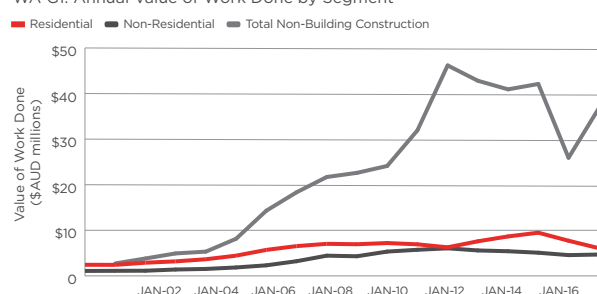
¹ 13/03/2018, The Conversation, "FactCheck: does South Australia have the 'highest energy prices' in the nation and 'the least reliable grid'?" Accessed Online at <https://theconversation.com/factcheck-does-south-australia-have-the-highest-energy-prices-in-the-nation-and-the-least-reliable-grid-92928>, 15/04/2018.

07 WESTERN AUSTRALIA

WESTERN AUSTRALIA OVERVIEW

ABS and Cordell data suggests recovery in heavy and civil construction in Western Australia, while residential building construction across the state is still far from levelling.

WA G1: Annual Value of Work Done by Segment



Source: CoreLogic

Graph 1 shows the annual value of work done in building construction in WA, in constant prices. This broken up between residential building, non-residential building, and non-building construction (such as roads, waterways and heavy industry). Across the three segments, 2017 saw \$47.5 billion in construction work done across the state over the year. This is 24% higher than the previous year, almost entirely driven by a rebound in 'heavy industry construction', which accounted for 62.3% of the value of work done over the year.

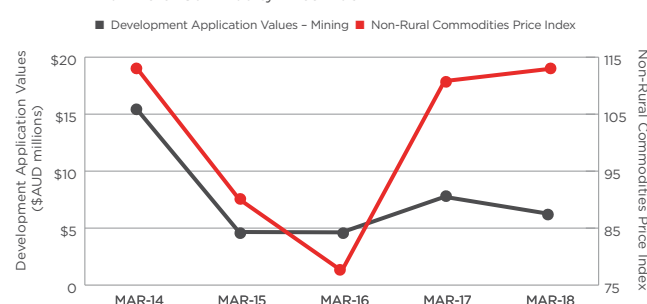
The flattening of building construction activity may be largely attributed to a recovery in economic activity across the state. Heavy industry construction refers to the construction of production, storage and distribution facilities, pumping stations and mines. It also relates to steel mills and processing facilities that are not necessarily related to mining. Residential construction was down 21% over the year, and non-residential construction was fairly steady at 3%.

The recovery in heavy industry construction is also supported by Cordell project data. The pipeline of new projects indicates a rebound in the value of mining projects across Western Australia over the March quarter, despite a decline in the 12 months to March. The number of mining-related development applications was up 39% in the March quarter to 131 new projects, and the combined value of these applications was up a staggering 128%, to \$3 billion.

The value of mining projects was largely lifted through a \$1.2 billion iron ore mine, the Eliwana Iron Ore Project. If approved, the mine has an estimated life span of 24 years, and will see 143 km of associated infrastructure. The developer of the project is Fortescue Metals Group Ltd. Pending a feasibility study, the mine construction is expected to commence in 2020.

Graph 2 demonstrates that a rebound in mining related activity has coincided with a rebound in the non-rural commodity price index. Between March 2016 and March 2018, the non-rural commodity price index rose 4.7%, coinciding with a 47% rise in the value of new development applications.

WA G2: Value of Development Applications in Mining - Western Australia, Non-Rural Commodity Price Index



Source: CoreLogic

Iron ore had a particularly strong recovery following its price collapse between 2012 and 2015. Since bottoming out at \$0.56 AUD in December 2015, the price has recovered 51.8%. Ultimately, the renewed iron-ore related construction in Western Australia is supported by improved demand from China, where iron ore is used to make steel. Data from the World Steel Association suggests that China reached unprecedented steel production in April 2018, of 76.7 million tonnes over the month. This figure is 4.8% higher than 12 months before.

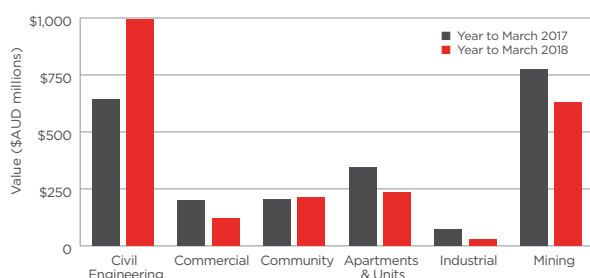
Increased steel production in the year to date has been supported by recovering economic momentum in developed economies, and the recent lift of stringent production constraints over the 'heating season' period (designed to limit air pollution between November and March).

While mining construction values are generally elevated, the total value of mining development applications over the year to March were lower than in the previous 12 months.

The value of development applications in the last 12 months across all construction segments in WA was \$22.2 billion, which represents 11.7% of the total value of projects submitted across Australia.

Graph 3 shows the year on year value of development applications by segment. Two segments saw higher application values on the previous year: civil engineering, which increased 55% in value, and community, which remained fairly steady at 3%.

WA G3: Value of Development Applications Year on Year, by Segment

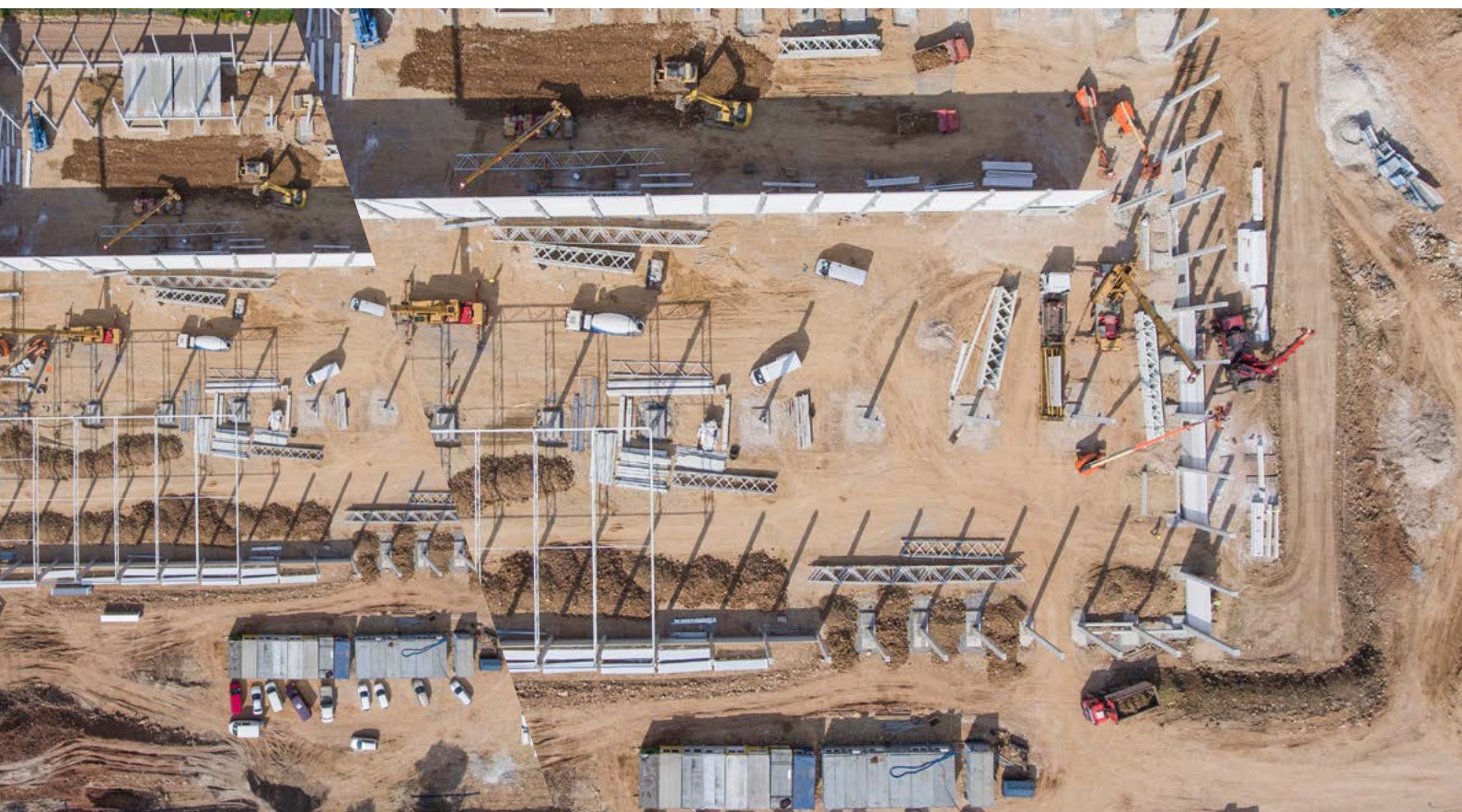


Source: CoreLogic

The increase in civil engineering was supported by the \$1.2 billion, federal proposal for the Perth-Darwin National Highway Roadworks. Pending feasibility, works on the Highway would commence late 2019.

The pipeline data indicates that the physical building space will continue to decline in the short term, with commercial and industrial development applications down a combined 46% over the year. Apartment and unit applications declined 32%. The local government areas with the most residential and non-residential building applications were around Perth, in Stirling (131), Gosnells (50) and Melville (41).

While incentives are not high for building developers in the state, the amount of decline in the housing market and state final demand is shrinking. In the year to May 2018, the rate of decline across Perth dwellings was -1.2% - the smallest annual decline in two years. Trend data in state final demand showed declines decelerated to -1.6% in the year to December 2017, up from -4.4% in the previous year. Though the state is not yet in positive growth, the rate of decline appears to have bottomed out in March 2017 (-8.4%). Assuming there are no external economic shocks, the state is on its way to recovery, and sentiment around development opportunities will follow.



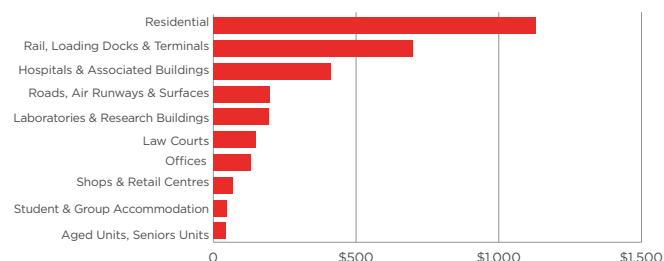
AUSTRALIAN CAPITAL TERRITORY

AUSTRALIAN CAPITAL TERRITORY OVERVIEW

At the end of the March 2018 quarter, the ACT saw 116 projects at \$2.7 billion worth of work under construction across the territory.

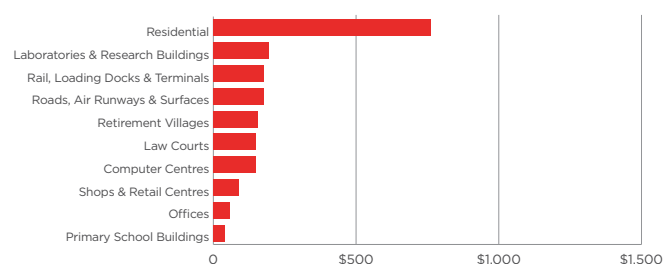
This is a significant decline on the number and value of projects underway in the same time last year, when 163 projects worth \$3.3 billion were under construction. The type of works under construction in March 2018 versus March 2017 are compared in graphs 1 and 2.

ACT G1: March 2017 – Most Valuable Types of Projects Under Construction (\$AUD millions)



Source: CoreLogic

ACT G2: March 2018 – Most Valuable Types of Projects Under Construction (\$AUD millions)



Source: CoreLogic

The graphs highlight a -33% decline in residential construction, a -74% decline in the value of rail construction, and a -56% decline in the value of office projects underway.

The value of new works submitted to the pipeline in the ACT are largely residential. In the 12 months to May, the CoreLogic hedonic Indices suggest the ACT dwelling market saw 2.3% growth – the second highest of the capital city markets.

However, the unit asset class has started moving into the downswing phase of the housing cycle.

The highest value development applications submitted across the ACT in the year to March were:

- ▶ **The \$500 million London Circuit Development, a \$500 million mixed-use development comprising units, services apartments and offices;**
- ▶ **A \$200 million waste to energy plant in Fyshwick. The EIS is yet to be submitted, but if approved, the project would commence in 2019; and,**
- ▶ **Stage 2 of the Republic Residential Development in Belconnen, worth \$158 million and comprising 547 units.**

The decline of new residential development, which may be inevitable after prices begin to decline, will likely have a severe impact on construction in the ACT from 2020, when several major developments (Including the Republic Residential Development) are estimated to reach completion.

This is already foreshadowed in the pipeline, where the value of new works submitted have fallen 43% to \$2.2 billion in new works submitted over the year. It is worth noting that most of this decline was due to the proposal of the \$1.7 billion University of Canberra development in the previous year – April 2016. However, most construction segments still saw modest declines.

The only growth segment, civil engineering, increased 20%. The aforementioned waste to energy plant planned for Fyshwick made up 50% of the value of civil engineering development applications over the year.

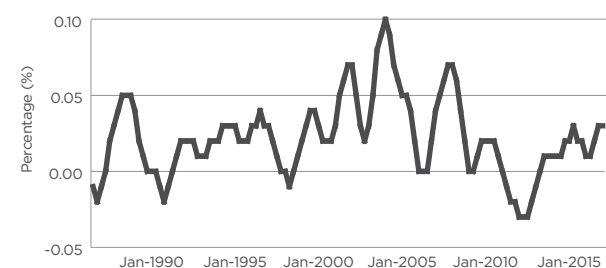
Economic growth and construction across the ACT has typically been aligned with federal government employee expenditure and hiring. Following the lift of a hiring freeze in 2014, the ACT experienced increased levels of migration, and overall demand from a lift in full time, public sector employment, peaking at 76,300 in the November 2016. As of May 2018, this had declined to 67,300. In the same period however, full time private sector employment has risen by approximately 12,000, with many jobs created in retail, accommodation and food, and education. Ultimately, construction is still not an integral part of the territory economy, even with the recent inflation in residential construction.

TASMANIA

TASMANIA OVERVIEW

In the year to March 2018, growth in state final demand in Tasmania was 3.8% in the year, and 1.1% in the quarter. Graph 1 presents the rolling annual growth of state final demand in Tasmania. It appears that the economy is still in a boom period following a significant decline in demand in 2012, and has sustained positive annual growth rates for the last 4 years.

TAS G1: Rolling Annual Growth in State Final Demand, Tasmania



Source: CoreLogic

In trend state final demand from households, businesses and government in Tasmania, 81% of the increase over the year came from the private sector. Within the private sector, the highest value added was in business investment, capital formation and machinery and equipment investment.

In chain volume measures, private consumption of new engineering construction was \$425 million, an increase of 34.5% on the previous year.

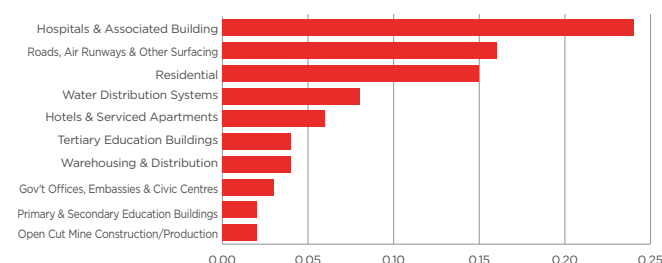
The thriving private sector in Tasmania has a flow on effect for the construction sector, particularly with an uptick in commercial development. The value of projects moving into construction over the year to March 2018 was \$852.5 million, over double the value of projects that commenced in the year before.

Each of the major construction segments saw a significant increase, but the highest level of growth was in commercial real estate construction, which saw \$349.6 million worth of work commence over the year according to CoreLogic construction records. \$150 million of this was in held in the Parliament Square Hobart Development, which has since seen retail spaces open, and office occupants from the Tasmanian Department of

Treasury and Finance. A further \$100 million of the commercial development moving into construction was held in stage 3 of the Living City Devonport Redevelopment, worth \$100 million. This involves construction of a 4-star hotel of 150-200 rooms, car park, new arts centre, and a waterfront marina.

As of March 2018, CoreLogic estimates that there were 232 projects currently underway across Tasmania, worth \$1.6 billion. Interestingly, medical-related projects such as the Royal Hobart Hospital Redevelopment made up 23.9% of this construction value. The top 10 segments of construction currently underway, as a share of total construction value, is displayed in Graph 2.

TAS G2: Share of Construction Value in Progress, Tasmania



Source: CoreLogic

The pipeline also reflects a continued increase in physical building for years ahead. The value of commercial building development applications rose 71.5% in the year to March 2018, to \$366 million. Apartment applications were up 65.9% to \$217 million, and industrial build applications rose 24% to \$126 million.

The value of development applications across all segments was down 10.2% over the year, due to a \$269.4 million decline in the civil engineering space. The absence of large scale projects that were proposed in the year to March 2017 contributed to this decline. The year to March 2017 also saw many applications for renewables across the country, including a \$120 million wind farm development proposal in George Town Council. However, most the decline was in the roadworks projects, which have since been reflected in the 'under construction' stage across the state. While civil engineering is likely to steadily decline across the state, niche opportunities are rising for this small-scale market in residential and non-residential building.

10 NORTHERN TERRITORY

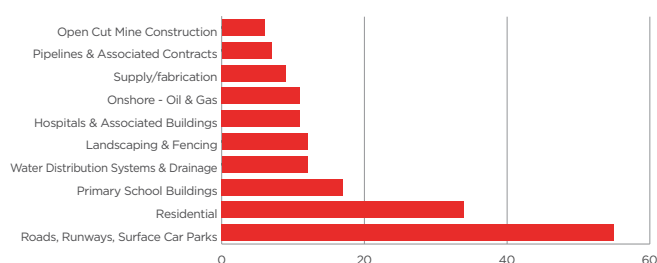
NORTHERN TERRITORY OVERVIEW

Growth in state final demand in the Northern Territory fell -2.9% in the March 2018 quarter, following a -2.9% decline in the December quarter. The declines in demand in the NT are coming off the back of 7 quarters of growth from December 2015 to June 2017.

Declines in non-dwelling construction (-14%), business investment (-12.7%) and private fixed capital formation (-11.6%) contributed significantly to declines in private sector demand over the December quarter. Household consumption was unchanged from the previous quarter in real dollar terms, while public sector consumption rose 1.4%, offsetting some of the loss of consumption in the private sector. This also translates to a high share of construction work across the Territory being government initiatives, as appetite in the private sector dwindles.

While private investment in the Northern Territory declines and household demand remains flat, the value of exports from the NT is up 15% on a recent low in April 2016. This is a reflection of mining projects moving from construction to production, such as the \$30 billion Ichthys Gas Project. The latest report on the Ichthys project captured by CoreLogic was for the provision of cable services for the Operations phase of the Ichthys Project, valued at \$1 million. The first LNG shipment is expected off the Kimberly by the end of September this year.

NT G1: Highest Frequency Categories of Projects Under Construction, NT - March 2018



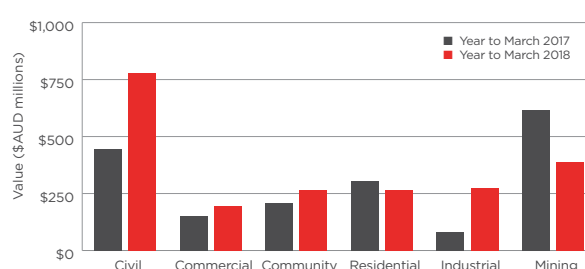
Source: CoreLogic

CoreLogic estimates there were approximately 276 projects across the NT under construction at the March 2018 quarter, worth approximately \$1.7 billion. This is a significant decrease from activity in the March 2017 quarter, where CoreLogic estimates there were 349 projects worth \$2.1 billion.

Graph 1 shows the top 10 categories of projects currently under construction in the Territory. The nature of projects under construction in the NT partially reflects the work underway across the rest of Australia. The most common type of project underway across the Territory were classified under 'roads, airstrip runways and car parks'. Of the 276 projects underway at March 2018, 55 of them were in this category.

Graph 2 shows the value of construction work submitted to the construction pipeline over the year to March 2018. The value of new projects submitted over the year rose 21% to \$2.2 billion, led by industrial real estate development and civil engineering.

NT G2: Value of Construction Work in Development Applications



Source: CoreLogic

The highest value construction projects submitted over the year to March were:

- ▶ A \$250 million facilities project to host remote piloting operations. The development is based at the Tindal RAAF, and is owned by the department of defence;
- ▶ The space centre and launch site for the Arnhem Land Space Centre Project. The project is worth over \$235 million; and,

- The Palmerston circuit mixed use development. The \$160 million development accounts for 74% of the value of residential applications submitted in the territory in the year to March. It currently has development approval and is expected to commence in November this year.

Private sector construction rebounds in the NT are more likely to come from the mining sector, as they have in WA. This is because of the recovery in commodity and fuel values. It does mean that physical building projects in the Territory, as reflected in the highest development applications submitted over the year, are likely to be led by government initiatives.

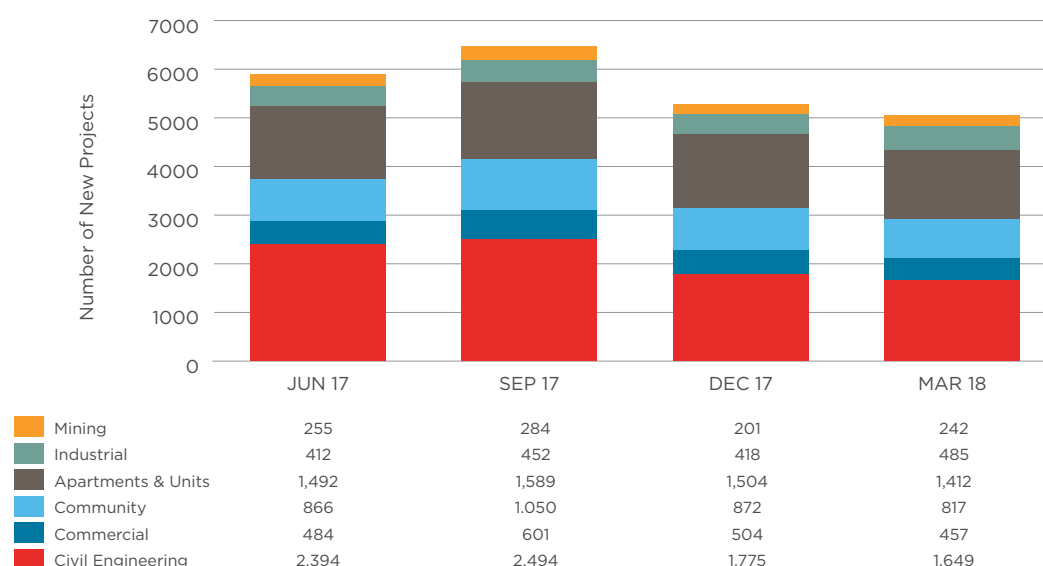


11 APPENDICES

New Projects
Projects Entering Construction
Deferred Projects
Abandoned Projects

Number of New Projects by Sector of Work

Source: CoreLogic



Number of New Projects in the March Quarter of 2018

	NSW	VIC	QLD	SA	WA	TAS	NT
Civil Engineering	333	545	245	145	217	60	81
Commercial	135	93	79	61	49	18	10
Community	248	235	138	49	92	18	29
Apartments & Units	334	653	149	151	55	27	13
Industrial	122	153	71	75	20	36	6
Mining	23	3	31	36	131	9	9
All Sectors	1,195	1,682	713	517	564	168	148

Change in the Number of New Projects by Sector

	MAR 17	MAR 18	Change
Civil Engineering	2,057	1,649	-20%
Commercial	541	457	-16%
Community	912	817	-10%
Apartments & Units	1,731	1,412	-18%
Industrial	418	485	16%
Mining	253	242	-4%
All Sectors	5,912	5,062	-14%

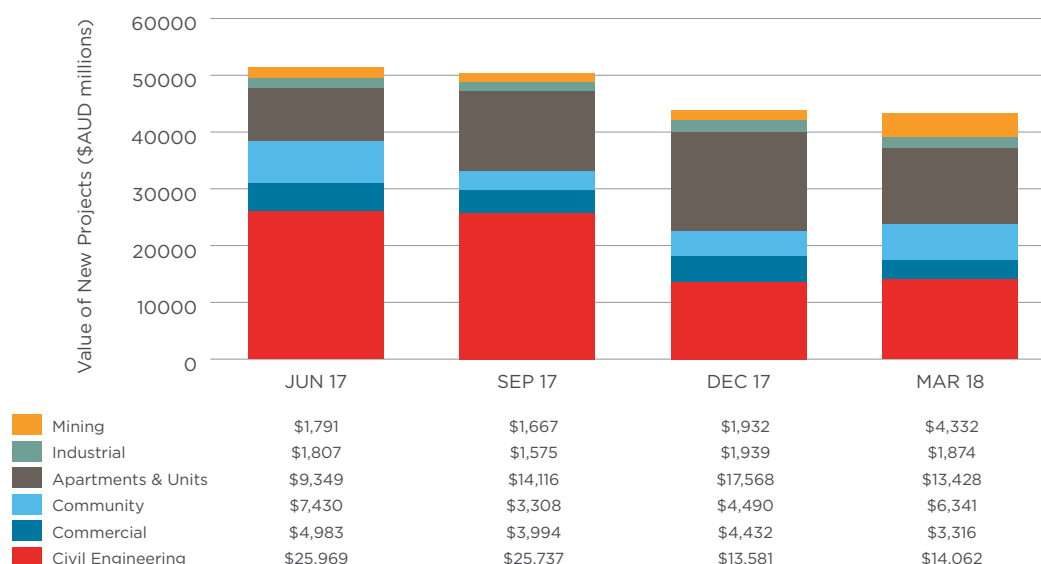
Change in the Number of New Projects by State

	MAR 17	MAR 18	Change
NSW	1,129	1,195	6%
VIC	1,916	1,682	-12%
QLD	892	713	-20%
SA	531	517	-3%
WA	980	564	-42%
TAS	223	168	-25%
NT	178	148	-17%
All Sectors	5,849	4,987	-15%

Source: CoreLogic

Value of New Projects by Sector of Work

Source: CoreLogic



Value of New Projects in the March Quarter of 2018

	NSW	VIC	QLD	SA	WA	TAS	NT
Civil Engineering	\$3,248	\$1,722	\$3,968	\$3,346	\$1,595	\$43	\$106
Commercial	\$1,327	\$562	\$525	\$520	\$254	\$59	\$11
Community	\$2,508	\$1,394	\$1,399	\$494	\$458	\$15	\$54
Apartments & Units	\$8,370	\$2,078	\$1,206	\$297	\$626	\$83	\$25
Industrial	\$491	\$583	\$328	\$393	\$42	\$28	\$8
Mining	\$525	\$9	\$149	\$511	\$3,043	\$48	\$47
All Sectors	\$16,469	\$6,349	\$7,576	\$5,561	\$6,018	\$276	\$252

Change in the Value of New Projects by Sector

	MAR 17	MAR 18	Change
Civil Engineering	\$11,701	\$14,062	20%
Commercial	\$3,449	\$3,316	-4%
Community	\$3,819	\$6,341	66%
Apartments & Units	\$11,317	\$13,428	19%
Industrial	\$1,407	\$1,874	33%
Mining	\$4,979	\$4,332	-13%
All Sectors	\$36,670	\$43,354	18%

Change in the Value of New Projects by State

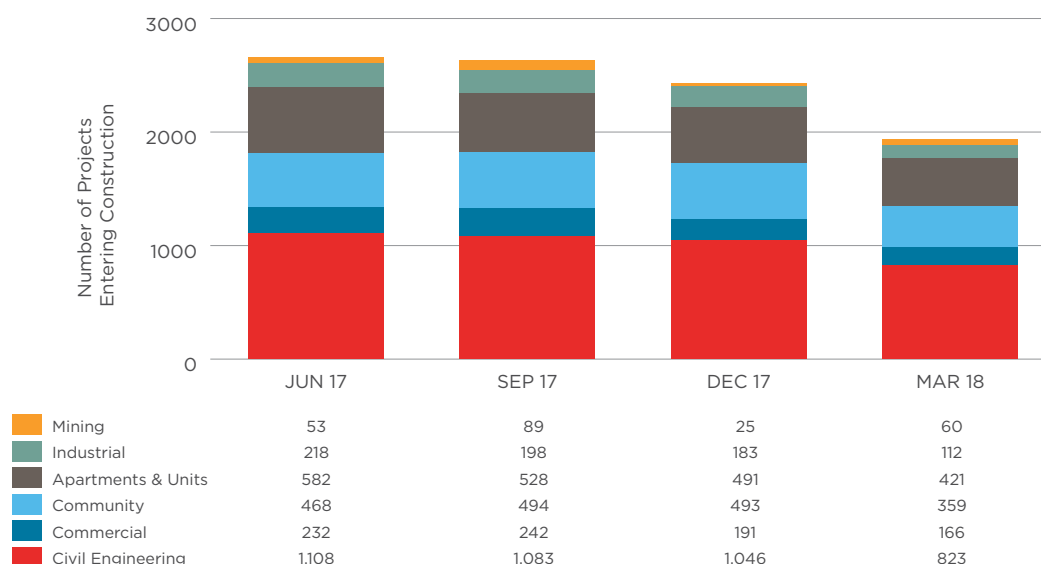
	MAR 17	MAR 18	Change
NSW	\$12,816	\$16,469	29%
VIC	\$6,558	\$6,349	-3%
QLD	\$6,725	\$7,576	13%
SA	\$1,723	\$5,561	223%
WA	\$7,416	\$6,018	-19%
TAS	\$585	\$276	-53%
NT	\$484	\$252	-48%
All Sectors	\$36,306	\$ 2,500	17%

*value in \$AUD millions

Source: CoreLogic

Number of Projects Entering Construction by Sector of Work

Source: CoreLogic



Number of Projects Entering Construction in the March Quarter of 2018

	NSW	VIC	QLD	SA	WA	TAS	NT
Civil Engineering	180	285	109	46	101	54	38
Commercial	36	31	35	16	19	6	14
Community	85	89	79	24	49	12	17
Apartments & Units	117	140	89	33	25	3	7
Industrial	29	30	30	8	6	1	7
Mining	0	0	10	14	35	0	1
All Sectors	447	575	352	141	235	76	84

Change in the Number of Projects Entering Construction by Sector

	MAR 17	MAR 18	Change
Civil Engineering	1,298	823	-37%
Commercial	207	166	-20%
Community	512	359	-30%
Apartments & Units	434	421	-3%
Industrial	201	112	-44%
Mining	57	60	5%
All Sectors	2,709	1,941	-28%

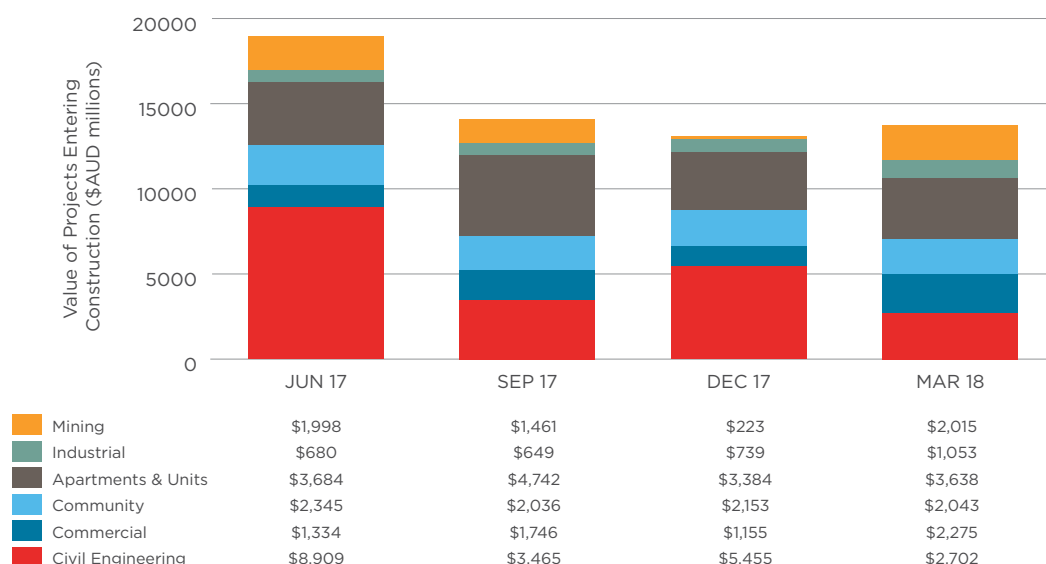
Change in the Number of Projects Entering Construction by State

	MAR 17	MAR 18	Change
NSW	563	447	-21%
VIC	852	575	-33%
QLD	461	352	-24%
SA	203	141	-31%
WA	401	235	-41%
TAS	108	76	-30%
NT	87	84	-3%
All Sectors	2,675	1,910	-29%

Source: CoreLogic

Value of Projects Entering Construction by Sector of Work

Source: CoreLogic



Value of Projects Entering Construction in the March Quarter of 2018

	NSW	VIC	QLD	SA	WA	TAS	NT
Civil Engineering	\$606	\$274	\$802	\$659	\$203	\$93	\$42
Commercial	\$1,184	\$521	\$148	\$67	\$117	\$14	\$36
Community	\$387	\$516	\$640	\$224	\$131	\$47	\$18
Apartments & Units	\$1,417	\$1,186	\$691	\$108	\$79	\$3	\$10
Industrial	\$273	\$74	\$112	\$60	\$321	\$0	\$8
Mining	—	—	\$422	\$532	\$1,061	—	\$0
All Sectors	\$3,867	\$2,571	\$2,815	\$1,651	\$1,912	\$158	\$114

Change in the Value of Projects Entering Construction by Sector

	MAR 17	MAR18	Change
Civil Engineering	\$2,918	\$2,702	-7%
Commercial	\$1,040	\$2,275	119%
Community	\$4,935	\$2,043	-59%
Apartments & Units	\$2,646	\$3,638	37%
Industrial	\$921	\$1,053	14%
Mining	\$806	\$2,015	150%
All Sectors	\$13,265	\$13,725	3%

Change in the Value of Projects Entering Construction by State

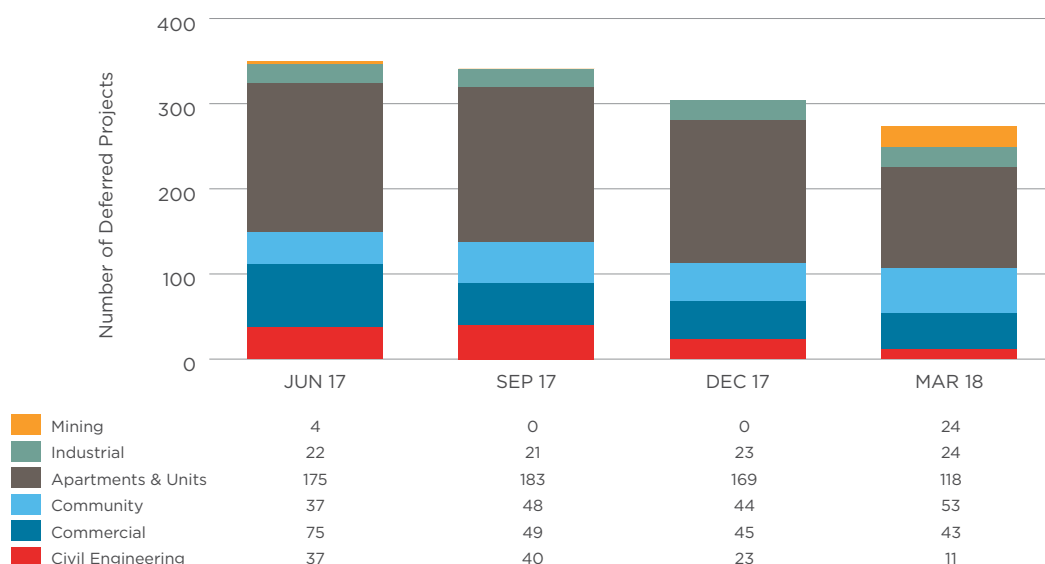
	MAR 17	MAR18	Change
NSW	\$3,284	\$3,867	18%
VIC	\$4,590	\$2,571	-44%
QLD	\$2,758	\$2,815	2%
SA	\$373	\$1,651	343%
WA	\$1,842	\$1,912	4%
TAS	\$108	\$158	45%
NT	\$136	\$114	-16%
All Sectors	\$13,090	\$13,087	0%

*value in \$AUD millions

Source: CoreLogic

Number of Deferred Projects by Sector of Work

Source: CoreLogic



Number of Deferred Projects in the March Quarter of 2018

	NSW	VIC	QLD	SA	WA	TAS	NT
Civil Engineering	0	5	2	0	2	2	0
Commercial	8	8	11	3	8	5	0
Community	15	7	15	9	3	3	0
Apartments & Units	55	9	42	3	9	0	0
Industrial	8	6	7	1	1	0	1
Mining	1	0	15	0	0	6	2
All Sectors	87	35	92	16	23	16	3

Change in the Number of Deferred Projects by Sector

	MAR 17	MAR 18	Change
Civil Engineering	35	11	-69%
Commercial	51	43	-16%
Community	49	53	8%
Apartments & Units	195	118	-39%
Industrial	21	24	14%
Mining	0	24	—
All Sectors	351	273	-22%

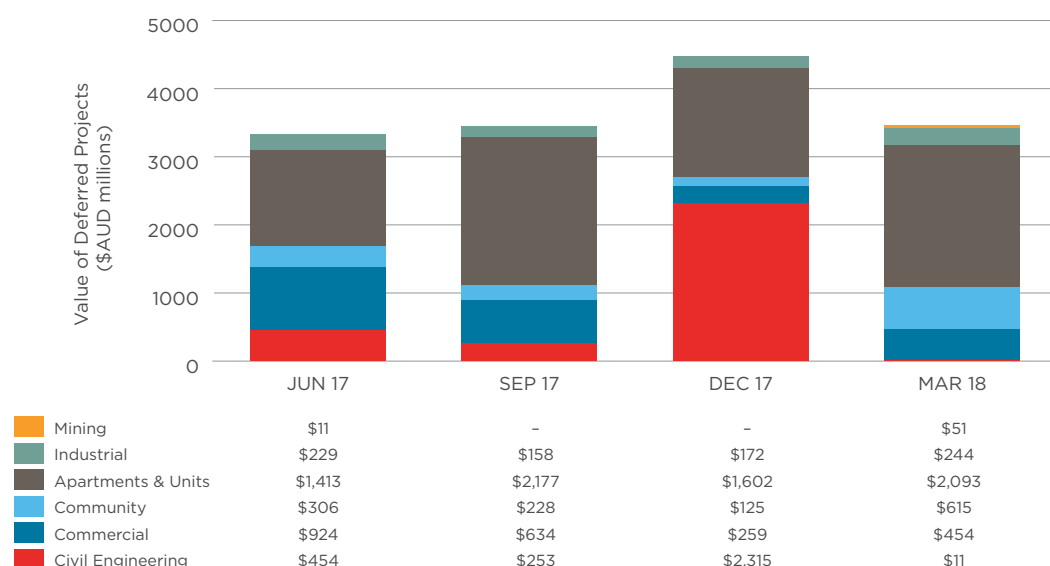
Change in the Number of Deferred Projects by State

	MAR 17	MAR 18	Change
NSW	104	87	-16%
VIC	56	35	-38%
QLD	142	92	-35%
SA	13	16	23%
WA	23	23	0%
TAS	8	16	100%
NT	5	3	-40%
All Sectors	351	272	-23%

Source: CoreLogic

Value of Deferred Projects by Sector of Work

Source: CoreLogic



Value of Deferred Projects in the March Quarter of 2018

	NSW	VIC	QLD	SA	WA	TAS	NT
Civil Engineering	—	\$2	\$5	—	\$4	\$1	—
Commercial	\$315	\$58	\$23	\$7	\$40	\$10	—
Community	\$62	\$41	\$186	\$284	\$1	\$2	—
Apartments & Units	\$925	\$227	\$873	\$16	\$51	—	—
Industrial	\$42	\$116	\$70	\$15	\$0	—	\$0
Mining	\$10	—	\$30	—	—	\$7	\$4
All Sectors	\$1,354	\$443	\$1,188	\$322	\$97	\$20	\$4

Change in the Value of Deferred Projects by Sector

	MAR 17	MAR 18	Change
Civil Engineering	\$237	\$11	-95%
Commercial	\$391	\$454	16%
Community	\$216	\$615	185%
Apartments & Units	\$2,388	\$2,093	-12%
Industrial	\$190	\$244	29%
Mining	—	\$51	0%
All Sectors	\$3,422	\$3,468	1%

Change in the Value of Deferred Projects by State

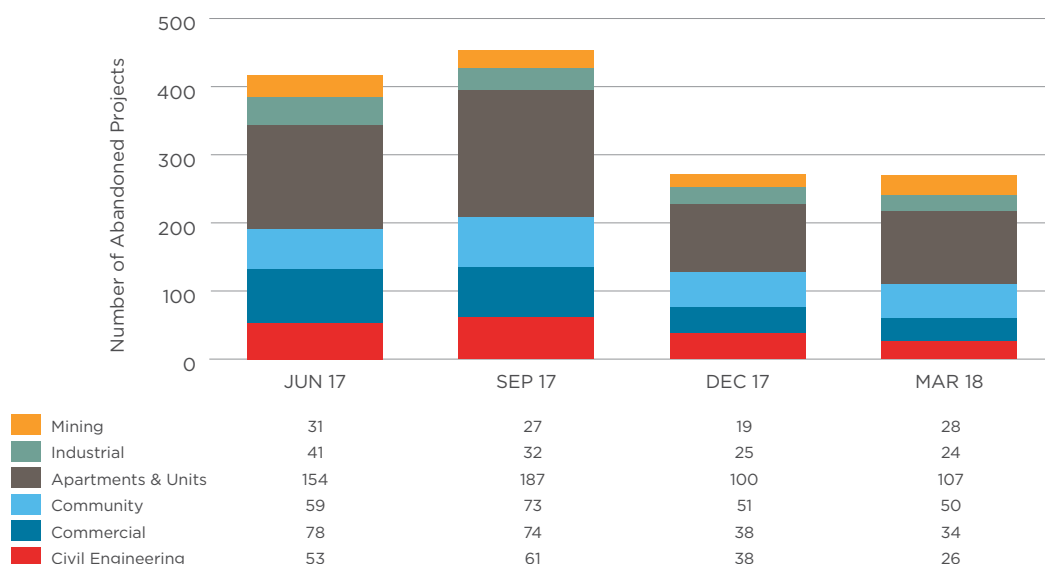
	MAR 17	MAR 18	Change
NSW	\$1,045	\$1,354	30%
VIC	\$726	\$443	-39%
QLD	\$1,389	\$1,188	-14%
SA	\$144	\$322	124%
WA	\$70	\$97	39%
TAS	\$20	\$20	0%
NT	\$5	\$4	-16%
All Sectors	\$3,399	\$3,430	1%

*value in \$millions

Source: CoreLogic

Number of Abandoned Projects by Sector of Work

Source: CoreLogic



Number of Abandoned Projects in the March Quarter of 2018

	NSW	VIC	QLD	SA	WA	TAS	NT
Civil Engineering	8	5	6	1	4	—	2
Commercial	11	6	11	3	2	—	1
Community	24	9	8	6	—	1	2
Apartments & Units	41	21	19	15	4	3	3
Industrial	7	5	4	5	1	2	—
Mining	3	—	1	11	12	—	1
All Sectors	94	46	49	41	23	6	9

Change in the Number of Abandoned Projects by Sector

	MAR 17	MAR 18	Change
Civil Engineering	48	26	-46%
Commercial	63	34	-46%
Community	51	50	-2%
Apartments & Units	132	107	-19%
Industrial	28	24	-14%
Mining	5	28	460%
All Sectors	327	269	-18%

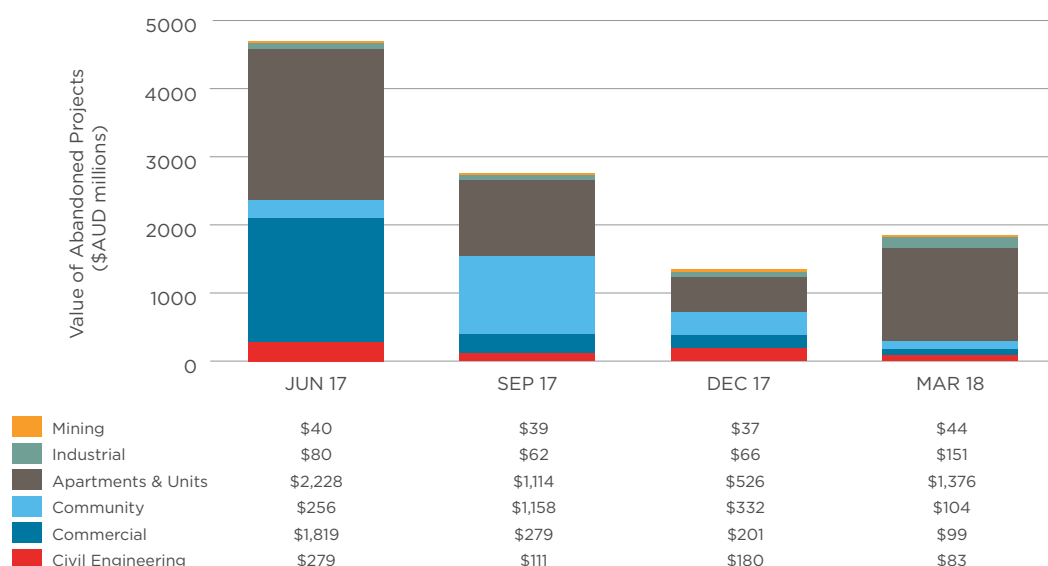
Change in the Number of Abandoned Projects by State

	MAR 17	MAR 18	Change
NSW	130	94	-28%
VIC	66	46	-30%
QLD	62	49	-21%
SA	27	41	52%
WA	30	23	-23%
TAS	4	6	50%
NT	7	9	29%
All Sectors	326	268	-18%

Source: CoreLogic

Value of Abandoned Projects by Sector of Work

Source: CoreLogic



Value of Abandoned Projects in the June March Quarter of 2018

	NSW	VIC	QLD	SA	WA	TAS	NT
Civil Engineering	\$21	\$3	\$29	\$0	\$28	—	\$1
Commercial	\$49	\$9	\$32	\$5	\$3	—	\$2
Community	\$55	\$23	\$22	\$3	—	\$1	\$1
Apartments & Units	\$1,126	\$39	\$125	\$17	\$31	\$8	\$29
Industrial	\$62	\$43	\$14	\$32	\$0	\$1	—
Mining	\$6	—	\$0	\$12	\$24	—	\$2
All Sectors	\$1,319	\$117	\$221	\$68	\$87	\$10	\$34

Change in the Value of Abandoned Projects by Sector

	MAR 17	MAR 18	Change
Civil Engineering	\$899	\$83	-91%
Commercial	\$300	\$99	-67%
Community	\$194	\$104	-46%
Apartments & Units	\$1,013	\$1,376	36%
Industrial	\$59	\$151	155%
Mining	\$20	\$44	122%
All Sectors	\$2,485	\$1,858	-25%

Change in the Value of Abandoned Projects by State

	MAR 17	MAR 18	Change
NSW	\$1,977	\$1,319	-33%
VIC	\$147	\$117	-21%
QLD	\$196	\$221	13%
SA	\$63	\$68	9%
WA	\$66	\$87	32%
TAS	\$2	—	-100%
NT	\$31	\$34	8%
All Sectors	\$2,483	\$1,846	-26%

*value in \$AUD millions

Source: CoreLogic

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