



# Construction Advisor

# The Quarterly

by *Wolf & Bear Services*

**MARCH 2019**





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**#1 FOR CONSTRUCTION NEWS,  
INFORMATION AND RESOURCES**

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# Highlights

- Engineering Construction recorded a rise of 1.6% in the quarter to December led by \$6.2Bn in NSW despite the well documented project delays on WestConnex and Light Rail. Activity in QLD has slowed to \$5.6Bn whilst WA & VIC both contributed around \$4.6Bn. Victoria is on the rise however on the back of the infrastructure boom and should continue to grow over the coming year.
- Residential work done has started to turn downwards but the full effect of the residential price correction won't be felt for some time.
- Non-Residential remains flat with mixed activity nationally. Poor spending in retail is flowing into disappointing numbers for warehousing and logistics. Equally, health and education is mixed between the states – largely reflecting the current election cycles.
- Cladding is going to remain a hot topic in Residential Construction in 2019 as politicians and industry bodies grapple with who is responsible and ultimately, who has to pay to rectify the issues. A raft of class actions and legal cases will hit the courts this year with hundreds of affected buildings identified in each major city.
- Between Cladding and Opal tower the Residential industry is precipitously close to getting its own royal commission with some parties already making proposals.
- 2019 is going to be a year of digging with unprecedented levels of tunnelling activity – primarily in Victoria and New South Wales.
- Gold is back in fashion with exploration for the mineral far outstripping any other commodity domestically.
- The Residential price contraction in Sydney and Melbourne is well and truly underway with both markets recording significant falls. The impact of this on construction however is unclear with a mixed correlation to work done. What is clear is that the attached dwellings sub-sector is in retreat and there is still some way to go to the bottom of this cycle.
- South Australia is the surprise package of the quarter with all three major construction sectors on the rise and a residential pricing market that seems immune to the downturn in the Eastern States.
- The Half-Year results season has yielded some big winners and some big losers. A number of once-off items and write-downs have seriously impacted big players and their bottom line. In terms of a turn-around story it is hard to look past Coates Hire which recorded triple digit improvements on a year earlier as its post-mining boom reconstruction starts to bear fruit.
- Probably the most significant project announcements in the quarter were confirmation of the City-West Metro in Sydney and the green-light on the Snowy 2.0 project.



If you get a sense of déjà-vu it's because 2019 has a lot of cleaning up to do from 2018. Whether it is flammable cladding, dodgy grouting, delayed infrastructure or more elections, 2019 has only just started but it is already feeling old.

In the land-of-plenty there is plenty to talk about: Infrastructure booms, house price crashes, mining rebounds, global uncertainty, political instability and recession fears. There is no doubt that the economy is in flux, there were always going to be 'growing pains' in the transition from the 'mining economy' to the 'services economy', manufacturing left a big void to fill and the 'new-tech' renewables industry only makes the economic landscape more foreign to seasoned market watchers. In this edition of The Quarterly we are taking a deep dive into some of these issues with particular research into the tunnelling boom and what the housing market correction means for construction.

It is at this point that I will contrast the commentary in the media versus the focus of this publication. Many industry sources have highlighted a correction in residential pricing, this is interesting but does not necessarily reflect changes in construction activity. There have been plenty of headlines screaming about a '25% crash' and comparisons to international markets but remember this is about the price people are willing to pay each other for their property, not building it. For some, a soft price market means renovating instead of purchasing, for others, renting instead of selling, this isn't a direct correlation with building activity. It is important to remember that the majority of real-estate transactions in Australia (in dollar terms) relate to existing stock, this does not have a direct impact on construction.

In the 'transition' economy, Engineering Construction is the front-line. It rode the mining boom up, and down, and was caught in a soft landing by the rising infrastructure spend in the Eastern states. Despite many set-backs and delays, it is still driving the majority of construction activity. In recent years it has been heavily reliant on State Government driven projects which in themselves have been driven by election cycle promises (particularly in VIC and NSW). Eng Con work is lead by activity in NSW with \$6.2Bn work done in the December Quarter followed by QLD (\$5.6Bn), WA (\$4.7Bn) and VIC (\$4.6Bn). Given the current pipeline of infrastructure works it is anticipated that Victoria will continue to climb above WA and meet spend in QLD sometime towards the end of 2019.

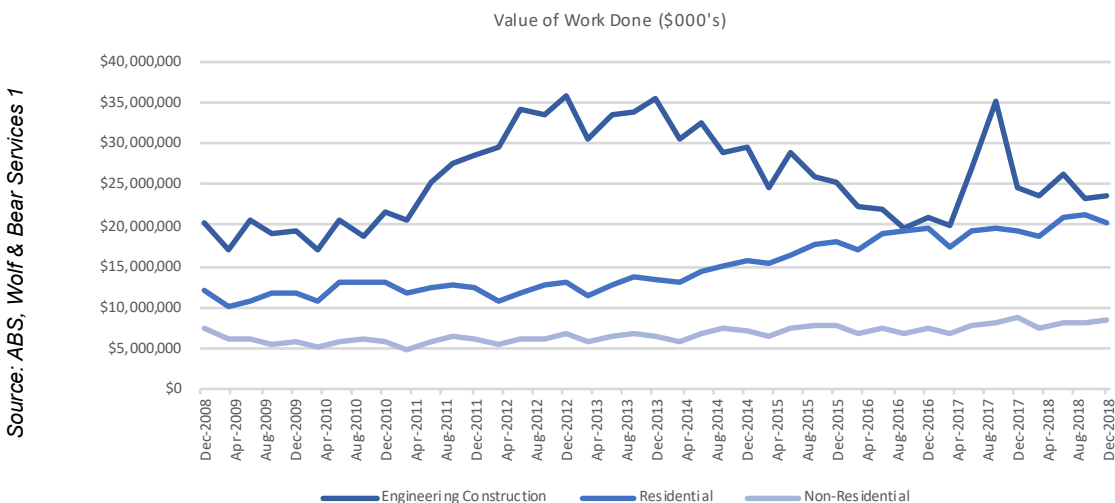
So, let's keep things in perspective.

Despite all of the doom and gloom, is construction on a precipice about to fall into despair? No. The pipeline is relatively strong and committed, there will be areas of contraction, there will be sectors that suffer but at the same time there will be sectors that thrive. Even in the darkest of economic times we're still building something, people still need a roof over their head, countries still need a defence force, roads/bridges/pipes/rail all need maintenance and upgrades. Don't dismiss the naysayers but at the same time don't drink the kool-aid. The media always make the good times sound better than they are and the bad times worse than they are.



# National

The construction sector continues to look promising with Engineering Construction, Residential and Non-Residential all trending upwards to the end of 2018. Despite a number of project delays, Engineering Construction work done is up 1.6% QoQ however down 3.3% YoY. Residential construction is down 4.3% QoQ but up 4.8% YoY and Non-Residential is up 3.4% QoQ but down 2.2% YoY. Somewhat of a mixed bag in terms of results but looking at the broader trend all sectors are pushing in the right direction.



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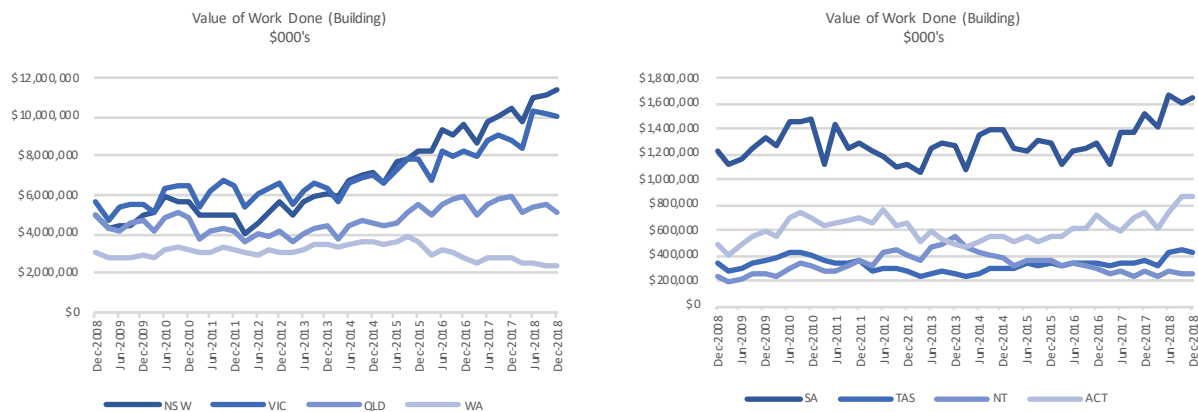
The main driver of Engineering Construction currently is the eastern states with the infrastructure boom propelling work done to record levels (with the exception of QLD which benefited from coal and gas expenditure through 2011-2015). Despite the many issues with these projects, the pipeline remains strong with a significant amount of work yet-to-be-done in VIC and NSW particularly.

Despite the pricing downturn in the residential sector, construction to the December quarter is yet to reflect any shift in work done as the existing pipeline continues to deliver on committed projects. As mentioned, whilst work done did fall QoQ it remains up from 2018 and to this point is still in its typical short-cycle pattern. Read more in our feature piece on house prices versus construction activity later in the bulletin.

Non-Residential Construction activity continues to slowly trend upwards still on course to double its value from 2011 – 2019. The sector does face some undeniable headwinds in coming years as the economy adjusts to falling retail sales activity (in physical stores), an uncertain global outlook (risk to tourism) among the most prominent. However, it is worth noting that the sector has largely shrugged off similar fears over the past 7-8 years as the high Australian dollar reduced tourism numbers and volatile office-space demand threatened, the sector if nothing else is resilient.

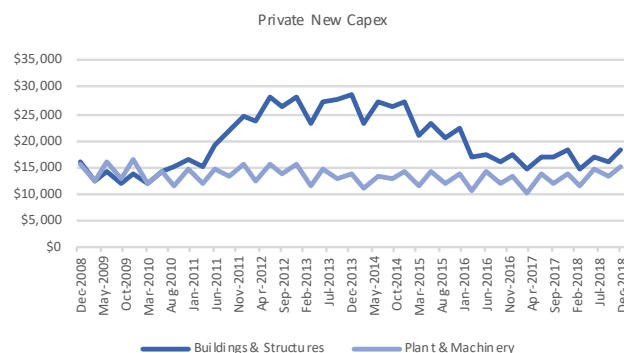
As we turn to the State view it is of little surprise to see NSW and VIC leading overall construction activity. Both regions continue to trend strongly upwards leaving the rest of the country in their wake. Queensland is trying to hold its activity levels but seems to be in a holding pattern looking for some new stimulus to kick-start growth. And despite renewed activity in mining, WA continues to slide as weakness in both Residential and Non-Residential combine with a flat Engineering Construction market to lead the market down.

Source: ABS, Wolf & Bear Services 2



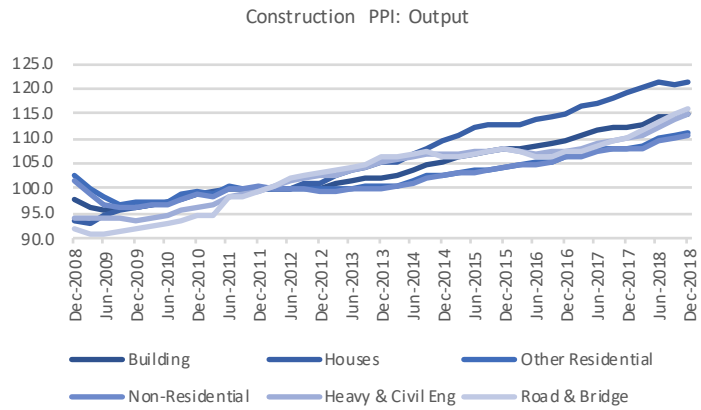
For the smaller States and Territories there are some strong signs. South Australia has been powering upwards since 2016 and is showing little sign of slowing down. Much of this strength is on the back of Engineering Construction however both Residential and Non-Residential are contributing to the growth. The ACT too is in an up-swing with a number of infrastructure projects contributing to work done.

Given the nature of the activity currently underway, it is not surprising to see Private New Capital Expenditure lifting from its post-mining boom trough. Some of this is reflection of cyclical fleet renewal, some major plant such as a string of new Tunnel Boring Machines. This uptick in spending is an interesting counter to the latest NAB business confidence index for December 2018 which indicated a below long-run average.



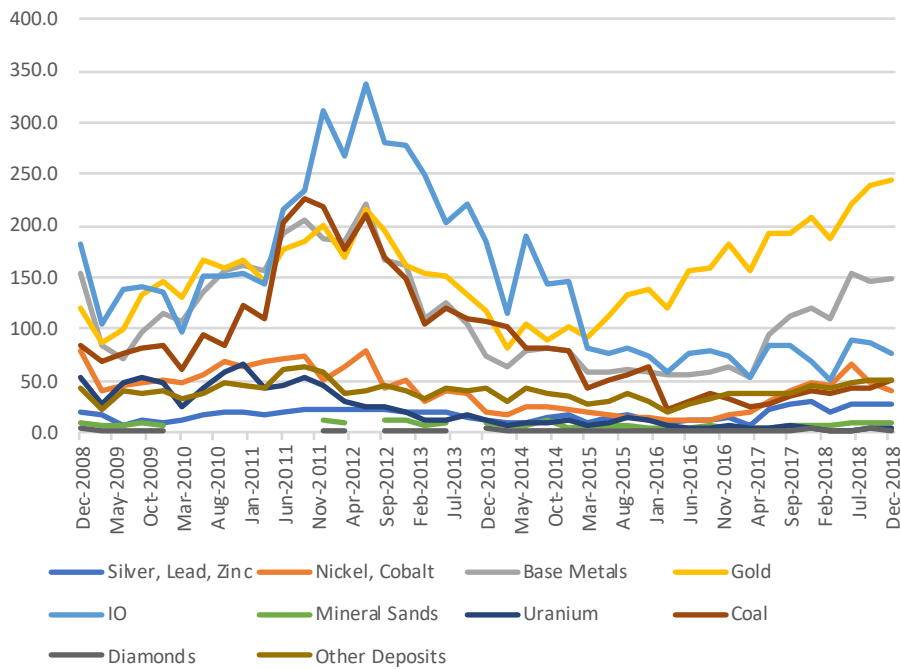
Source: ABS, Wolf & Bear Services 3

PPI output for the Construction sector largely continues to rise across all sub-sectors. Worth noting however is the outpaced increase in both the 'Heavy & Civil Engineering' and 'Road & Bridge' sectors. Viewed in light of the significant increase in infrastructure spending this is not necessarily a surprise. With so much concurrent work an increase in resource scarcity (both personnel and materials) will likely propel both of these sectors even higher over the course of 2019/20.



Source: ABS, Wolf & Bear Services 4

Mineral Exploration Expenditure (\$m)



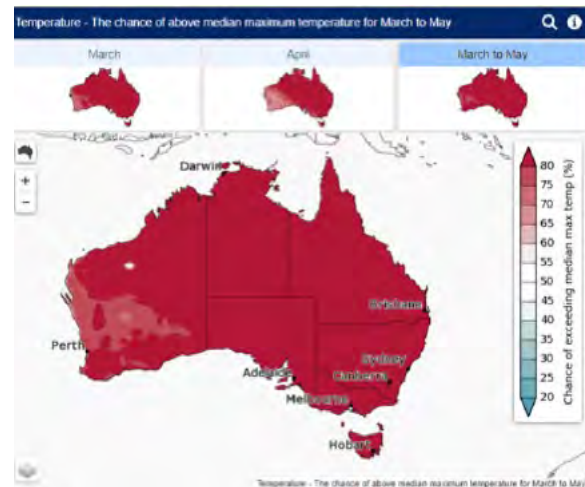
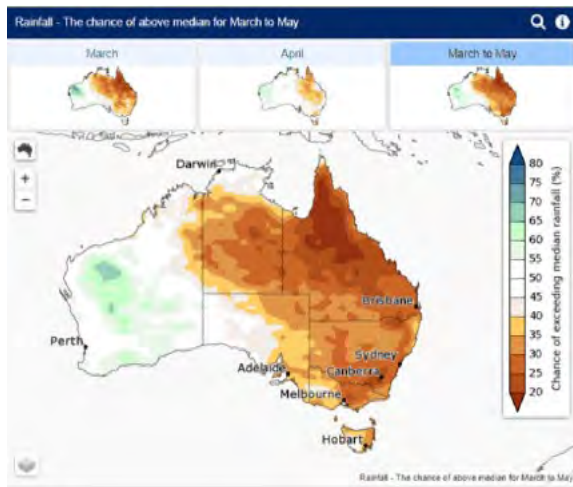
Source: ABS, Wolf & Bear Services 6

For an economy like Australia's, mining activity is not only a significant driver of construction activity but also a significant consumer of upstream materials and services. Exploration is a fascinating leading indicator of work in the sector and tells many stories of the economy as a whole.

The most glaring current trend of course is Gold. At an all time record high of \$250m for the quarter, we've never spent so much looking for the stuff. When compared with the price trend for the commodity, it has been largely stable in the USD\$1200 - \$1300/troy oz since 2013. A layman's interpretation of this relationship suggests that this is a critical price-point in viable production, but that only works if you find the stuff.



Of the other 3 of the 'big 4' (IO, Coal and Base Metals), only Base metals has rebounded from the 2012-2016 retreat returning to pre-boom 2010 levels of exploration. Whilst it is no surprise that the search for coal has gone cold, IO is holding steady as prices have slowly recovered from their 2016 low.



Source: Bureau of Meteorology 1

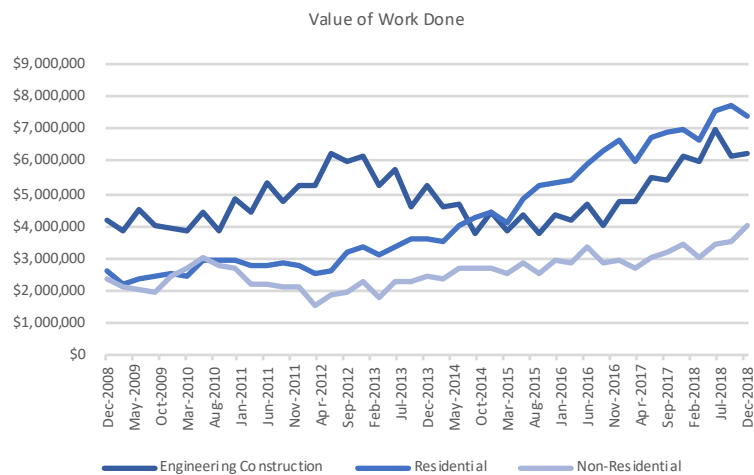
The long-term forecasts from the bureau suggest little respite from the recent weather patterns – hot and dry for most of the country. It also forecasts a likely El-Nino pattern for the eastern states developing throughout Autumn and into Winter meaning lower than average rainfall. This news will be particularly unwelcome as parts of Queensland and New South Wales continue to suffer in drought. Readers in both NSW and QLD may well raise an eyebrow to this given recent storm and cyclone events led to localised flooding however these extreme 'events' are not sufficient to offset the broader average and are notoriously difficult to forecast.



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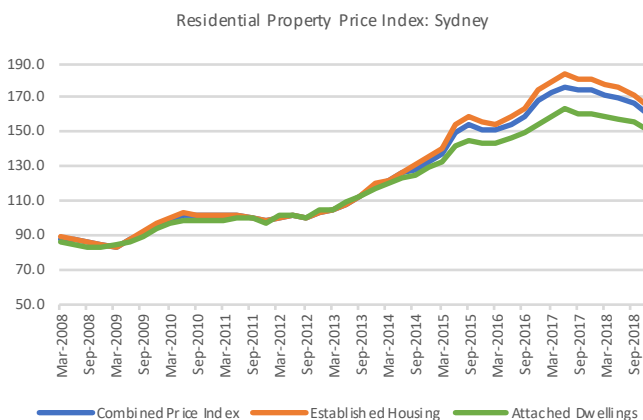
# New South Wales

Residential Construction continues to lead work done in NSW as Engineering Construction stalls on the back of project delays and major weather events. The state is not lacking in a pipeline of infrastructure works with both the tail of NorthConnex, WestConnex and light rail still under construction. City-West Metro has bipartisan support and regional fast rail is underway.



Residential Construction continues to outpace Engineering Construction in the latest reported quarter however it is expected that as the pricing correction hits the development pipeline will turn, and Engineering Construction will again take over as the primary driver of work done in the State. Quarter-on-quarter: Residential Construction fell 4.0%, Engineering Construction was stable at +0.4% and Non-Residential Construction rose 14.6%

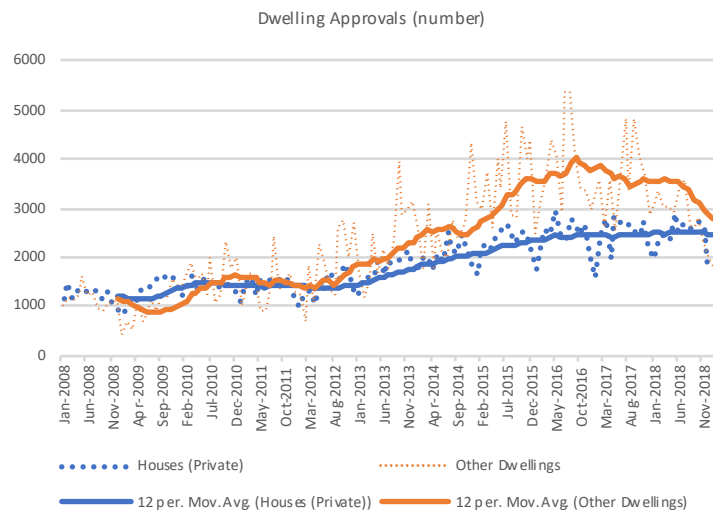
As we head to print it is clear that the Liberal/National Coalition has retained power in the state of NSW. This was never going to be an election that fundamentally changed the construction landscape in the state. However, business likes stability, so we can at least assume that the status quo will be maintained.



The house price correction is well and truly in effect in NSW entering its 15th consecutive month of contraction and the fall appears to be accelerating. Prices are now more reflective of 2016 however it is worth remembering that this still represents a significant price lift on the past decade.

Hindsight is a wonderful thing: the uniform price increases over 7 years should have sounded alarm bells when the attached and detached housing sectors diverted in early 2015 – certainly an indicator worth watching for in the future. But the data certainly illustrates that we are entering into uncharted territory. Over the past 10 years corrections or pauses have generally been mild and short-lived, this one is different.

It is, of course, fair to look at building approvals as a leading indicator of work done but we should also look at this data in the context of the broader macro-economic conditions that have driven the behaviour. The original data (dotted line), particularly for attached dwellings is highly volatile and despite the sudden downturn in the Dec/Jan figures this is probably an overreaction to market fears.



Source: ABS, Wolf & Bear Services 8

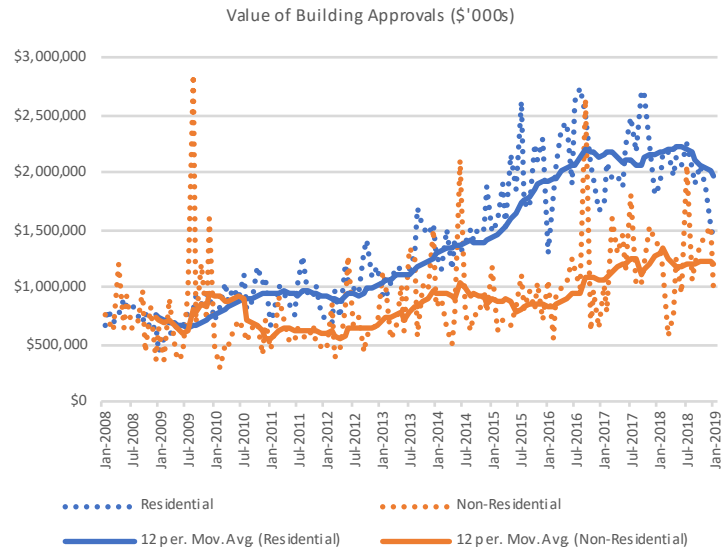
There is absolutely no doubt that the attached dwelling (apartments, units and townhouses) sector is entering a severe period of contraction. But again, this has to be viewed through the prism that it has just experienced a prolonged period of over-production. Consider the numbers: in the June 2008 month approx. 1000 attached dwellings were approved, in the August 2016 month 5387 dwellings were approved.

It is worth highlighting the resilience on the housing market approvals however despite the sharp downturn in the last couple of months of the reporting period. Approvals never followed the lofty heights of the attached dwellings sector and despite some short-term volatility appear to be heading for a relative plateau as opposed to a violent downturn, time will tell.

The spectre hanging over the residential construction market (apart from falling prices) is the lingering issues around both flammable cladding and the fallout from the Opal tower. Already there are some calling for a royal commission into the industry, a third major incident could easily tip the scales in this direction. 2019 will see much action in the courts as class-actions against builders and developers to rectify these issues get sorted. The only sure winners in all of this will be the lawyers.



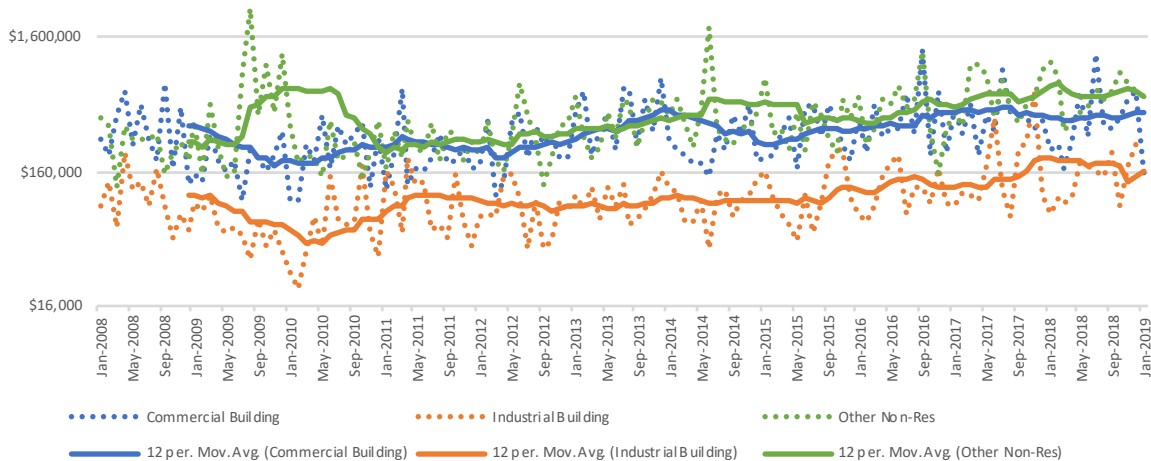
The value of building approvals echoes a similar theme with residential falling whilst non-residential is largely holding steady. Not to be cynical, but it is not surprising in an election year that non-residential is being held up by work done in health and education spending. The concern in this sector is the weakness we see in Industrial construction – this covers warehousing, factories and agriculture. There is no surprise in the manufacturing/factory sub-group but warehousing should be enjoying a boom period with internet purchasing combined with players such as Amazon, Costco and Lidl entering the fray.



Source: ABS, Wolf & Bear Services 9

Non-Residential Construction is a mixed bag with many moving parts. Commercial work done had a significant data-point fall in January led by transport and 'other' which was somewhat offset by both office and retail construction. In Industrial, warehousing remains elevated whilst little activity is occurring in either factory or agri/aquaculture, the latter likely a reflection of the drought on the sector. Health can expect to see a boost early in 2019 with CIMIC commencing work on the \$107m Wagga Wagga Health Service. Despite its controversy, it is hard to see the \$700m Allianz stadium rebuild not going ahead after significant demolition works were conducted in the leadup to the election.

Non-Residential Construction by Sector



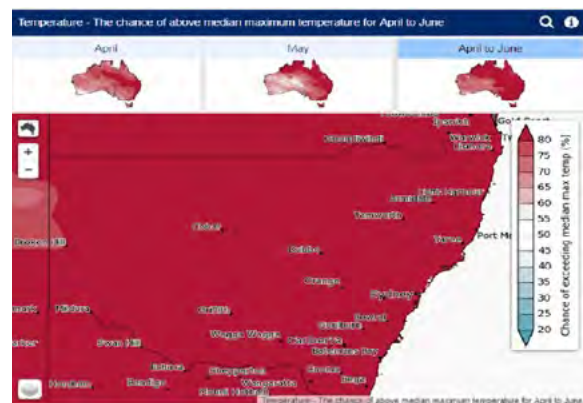
Source: ABS, Wolf & Bear Services 10

What does this actually mean for the industry? In short, it's about to get crowded. As residential contracts, those players will seek to back-fill that revenue by moving into the non-residential construction space. For some this will be an easy transition (cabinet fitters, chippies, sparkies etc...) but for others the change will be difficult as a lack of proven experience will be a barrier to entry.

The big news in renewables in the quarter came in February with the final commitment to the Snowy 2.0 Scheme. The project is forecast to deliver an additional 2000 MW of capacity – enough to power 500,000 homes. The 26km tunnel between Tantangara reservoir and Talbingo reservoir will be dug at a depth of up to 800mtrs underground. In total (including transmission infrastructure) the project is expected to cost around \$6.5Bn and take 6 years to complete. In January the Future Generation Consortium comprising of Salini Impregilo and Clough were announced as the winners of the civil works package whilst Leed Engineering was awarded the pre-construction works which are currently underway.



© NSW Government



Source: Bureau of Meteorology 2

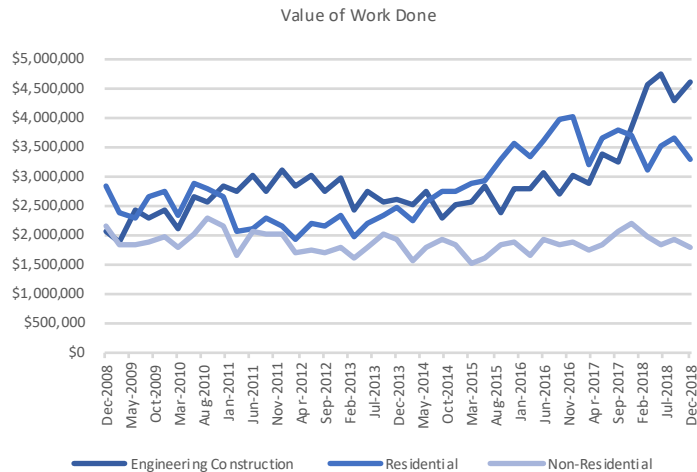
The good news from the bureau is that the big-dry may be easing with most of the state forecast to receive average rainfall in the coming quarter. There isn't expected to be any relief from the heat though with the state forecast to be significantly above average.

**Projects we're watching:** WestConnex, Light Rail, Badgerys Creek, Woolgoolga to Ballina, Snowy 2.0



# Victoria

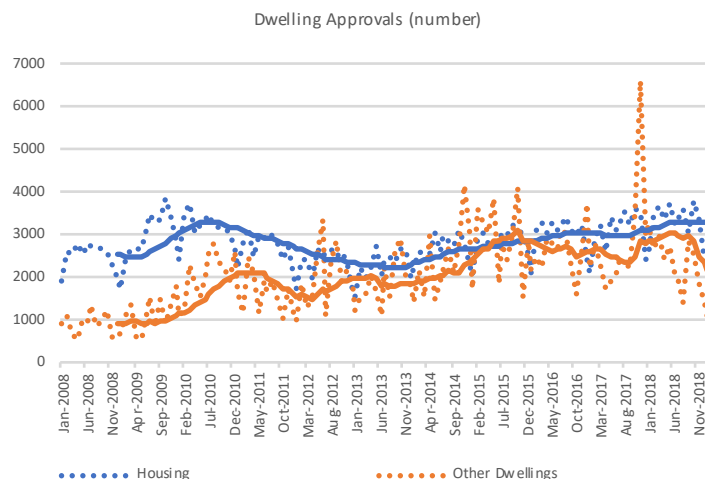
Victoria is under construction. This is no surprise to residents who can little avoid building sites be they rail or road. A re-elected Labor government has doubled-down on its infrastructure plans with additional level-crossing removal projects and significant road infrastructure spending. The rest of construction however is a different story with both Residential and Non-Residential in decline.



Source: ABS, Wolf & Bear Services 11

Engineering construction is clearly on a bull run and a full pipeline suggests that this is not going to stop anytime soon. With the additional sites announced, the Level Crossing Removal Program now looks to be nudging \$10Bn in value with the Southern Program Alliance (SPA) the next cab-off-the-rank. The 'big 3' are all contributing with the Westgate alternative commencing tunnelling, Metro Rail in full swing and the North-East Link on a hiring spree anticipating pre-construction works.

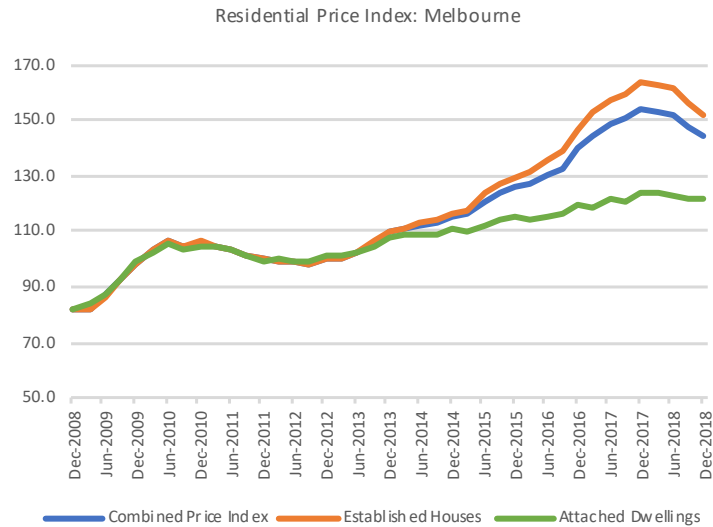
In contrast with the NSW residential construction cycle, VIC has been more measured in its approvals. Non-housing approvals have been surprisingly subdued and almost half that of the peak in NSW. Housing approvals too have been remarkably stable despite the surging prices registered over the last few years. Both sectors of the market recorded significant falls in recent months, whether this is a short-term reaction to the price contraction or the start of broader downward trend only time will tell. The attached dwelling market (units/apartments/townhouses) are certainly more exposed to the recent changes in the market with the withdrawal of foreign capital and tightening lending standards hitting the investor and first-home buyer favourite.



Source: ABS, Wolf & Bear Services 12



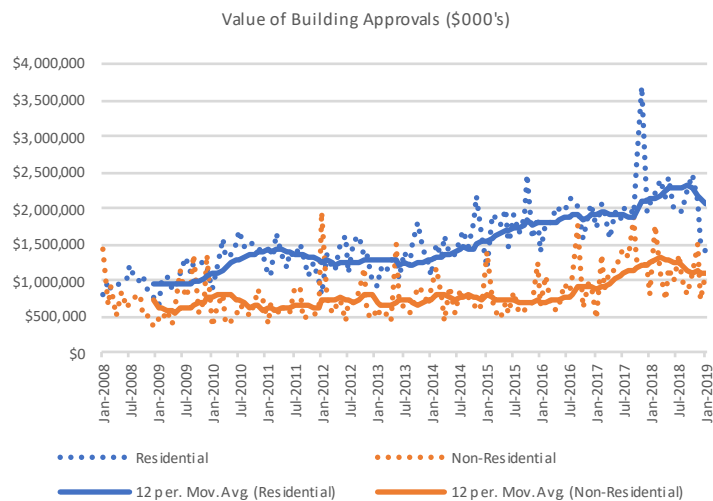
As noted in past editions, the property price index in Melbourne differed significantly from Sydney in that attached dwellings did not rise in line with the broader housing market. This is however not surprising when considering the development period leading into 2013/14 where supply was significantly higher in Melbourne tempering prices leading into the 2013-2018 price boom. As a result, prices in the attached dwelling sector have not yet seen the same sharp correction but more of a gentle easing. Driven mostly by fear of not getting out (FONGO), rather than fundamentals, existing house prices have turned in line with the Sydney trend – although 6 months after the Sydney peak.



Source: ABS, Wolf & Bear Services 13

Overall the market index moved -2.4% QoQ and -6.4% YoY. Housing -3.2% QoQ and -7.6% YoY and attached dwellings -0.2% and -2.0% YoY.

Non-Residential Construction despite experiencing a recent down-trend is holding on the back of Commercial and Other work done whilst Industrial noticeably in January however this is partially a seasonal movement.



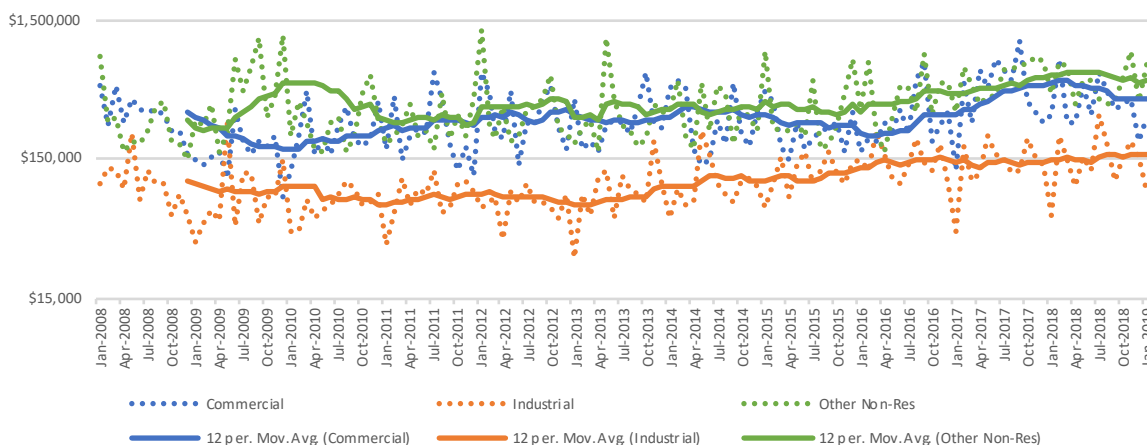
Source: ABS, Wolf & Bear Services 14

Offices led the Commercial sector back up in contrast with a softening retail construction environment. In Industrial the volatile Warehousing sector had a very soft January however this should normalise in coming months.

Contribution from both Factories and Agriculture was negligible in the quarter. It is in the 'Other' Non-Residential Sector that things get interesting with significant falls in Health, Aged Care and Religion being offset by rises in Education and Short-Term Accommodation. Turning to the pipeline following the 2018 State Election we can certainly expect spending in Health and Aged Care to rebound strongly as election promises start to materialise in actual work. An example of this is the new \$1.5Bn Footscray Hospital project that has been committed and is currently in community consultation.

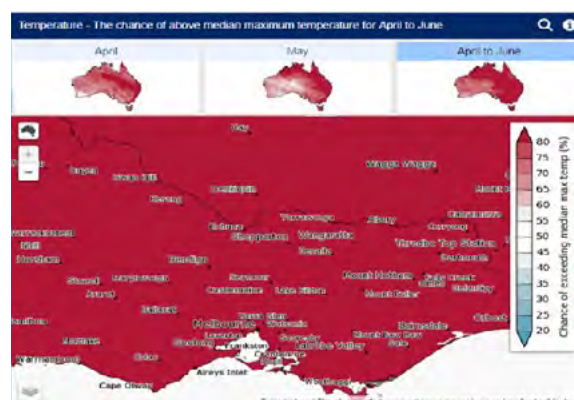
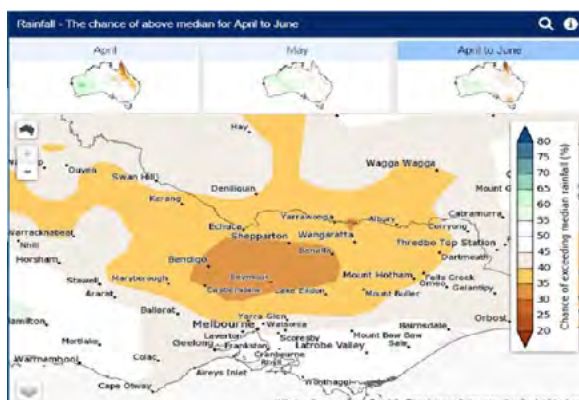
Non-Residential will also receive a boost in 2019 from the State and Federal Governments commitment to spend \$355m in the Geelong area. The project includes a \$170m convention centre, \$10m rebuild of the Queenscliff ferry terminal and spending to revitalise infrastructure on the Great Ocean Road.

Non-Res Construction by Sector (log scale)



Source: ABS, Wolf & Bear Services 15

It is going to be a big year in wind power in Victoria with works underway on both Mortlake South and Moorabool projects. Additionally, January saw work start on the 336MW Dundonnell wind farm for Tilt Renewables North-East of Mortlake. We can also reasonably expect to see soil turned on Berrybank, Hawkesdale and the \$1.7Bn Rokewood project. Solar activity includes Pacific Hydro’s 240MW Prairie project in Loddon Shire and the 68MW Congupna project. Coming out of the pipeline is the 100MW Numerkah project which is due to connect to the grid sometime in March.



Source: Bureau of Meteorology 3

Similar to NSW, Victoria is enjoying a boom in renewable project development. Wind power generation is set to almost triple with comparable capacity in both ‘under construction’ and ‘planning approved’ status versus existing. The biggest shift however will be in solar with 366MW under construction compared with 2552MW in planning approved status.

After escaping the worst of the drought that has plagued NSW in recent years it is looking to be a dry quarter in the North Central of the State in the coming quarter. Unfortunately there looks to be no respite to the heat either as the state is forecast to remain significantly above average.

**Projects we’re watching:** Level Crossing Removals, North-East Link, Metro Tunnel, Westgate Alternative, Tulla Widening, Berrybank wind farm, Dundonnell wind farm, New justice centre north of Geelong.



## SECTOR IN FOCUS

# Tunneling

It seems odd that there would be such a boom in this sector of the construction industry that has received so little attention in the media, Australia is going underground. Since 2015/16 Australia has been digging more tunnels than at any point in history and we're still going with the peak projected to be in 2019/20.

Whilst we assume tunnelling to be very much a European phenomenon, Australia is no stranger to digging a hole. Whilst traditionally focussed on rail links and water infrastructure, auto tunnels came into their own in the 90's and 2000's (Melbourne's City Loop Rail was completed in the early 1980's). Since then, there has been a steady stream of tunnelling activity from Sydney's Cross Harbour Tunnel, Melbourne's Citylink and Brisbane's Airport Link to name but a few. It seems that the powers that be have decided it is cheaper and less disruptive to go down than up.

Each of these projects requires at least 1 if not multiple Tunnel Boring Machines (TBMs). It is quite common for multiple units to start from either end of a tunnel meeting together underground. Essentially, each TBM acts like a worm chewing through the ground with the soil and rock passing through the machine to a waiting conveyor/trucks which extricate the material from the tunnel. As the machine moves forward, the builders install reinforcement to the tunnel sections.

Here at *Construction Advisor* we were wondering why it seems like every project gets a brand new, shiny TBM? Why don't we just move them from project to project? After some digging (pun intended) it seems that in many cases it is more economical for the developer to bury the unit at the end of the project than extricate it for re-use – these machines are made to go forward, not backwards. So essentially, these machines are



digging their own graves. With each TBM costing between \$45-\$100m that seems like a lot of money leave underground.

We estimate that across the country there were 13 TBMs active in 2018, 15 will be churning in 2019 and the peak will see 19 in 2020. Key drivers of this activity are: Westconnex (NSW), Westgate Alternative (VIC) and Metro Rail (VIC). Bolstering the pipeline will the Sydney West-Metro (Rail) and Melbourne North-East Link (Road) coming online some time in 2020/21. Just to cap-off the activity, the 26km Snowy 2.0 project should be turning dirt by 2020.

So if you know how to dig a hole...

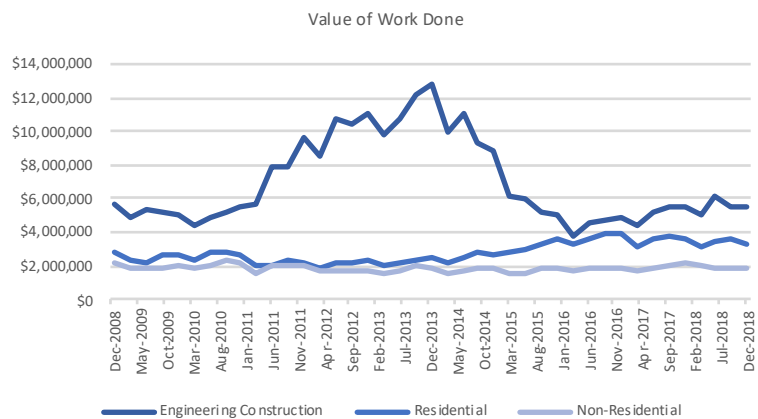


Source: Westgate Tunnel Authority



# Queensland

Queensland is just quietly stability in Non-Residential combined with growth in Engineering Construction is offsetting the easing Residential work done. The dust is settling on the Adani scrap with the much reduced project scope now set to proceed, even hints of a second wind in Gas development is coming through with the 300 gas wells being constructed by CIMIC on behalf of APLNG.



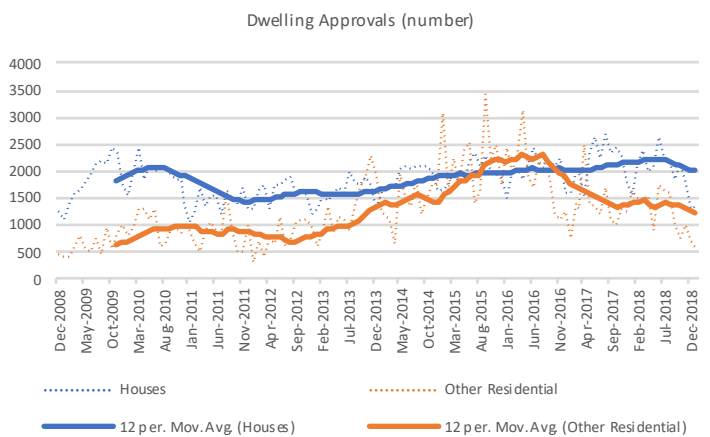
Source: ABS, Wolf & Bear Services 16

By the numbers, Engineering Construction was flat QoQ but up 2.5% YoY, Residential was down 9.7% QoQ and down 11.0% YoY, Non-Residential was down 6.0% QoQ and 17.9% YoY.

The big story in the quarter has certainly been the weather with major flooding events and cyclone Trevor carving a path through the cape. The main interruptions so far have been operations at Mt Isa and Phosphate Hill with both Incitec Pivot and Glencore identifying impacts on earnings.

Residential activity hasn't suffered the same contraction witnessed in the South-East States but is on a slow downward trend. Non-Residential Construction is being held up by works ranging from Townsville, Gold Coast and Brisbane with projects such as Queens Wharf under construction.

Engineering Construction, mining aside, is being supported by ongoing works on Cross River Rail, Inland Rail, Bruce Hwy and Warrego Hwy works. However, it is worth noting that the Gateway North project comes out of the pipeline with major works completing in March 2019.

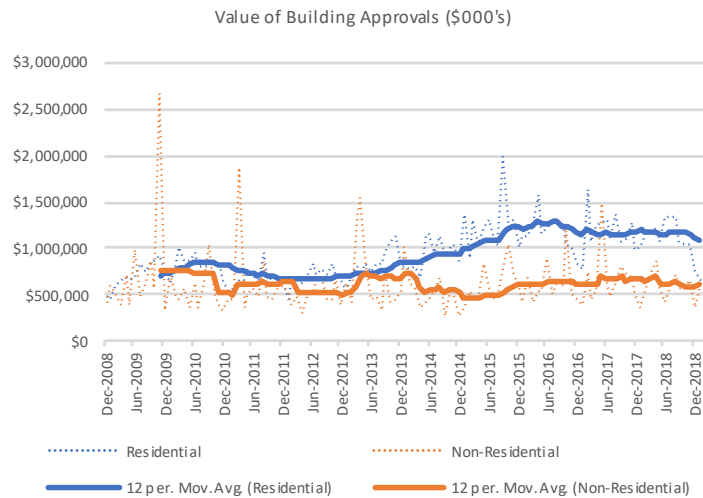


Source: ABS, Wolf & Bear Services 17

Dwelling approval numbers in Queensland march to their own beat in many respects with attached dwellings peaking much

earlier than the Southern states after the 2013-2015 boom in activity. However in the last quarter MoM approvals have fallen in line with the broader national market.

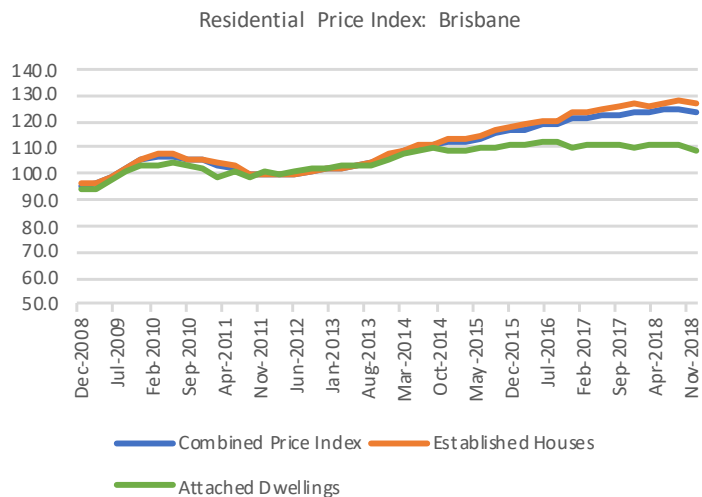
Looking at the value of approvals the numbers can seem quite large and confronting but they must be considered in the context of the changing economy and conditions in the state. In January, the value of Residential approvals was down 35.8% YoY but Non-Residential was up 77.8% YoY. Provided we accept that this is a volatile dataset and focus on the longer-term trends we get a far better read on conditions.



Source: ABS, Wolf & Bear Services 18

With a relatively strong development pipeline, non-residential construction is not expected to suffer a significant downturn in the state in the medium term. Supported by a lower Australian dollar, developments in tourism, gaming, health and education should continue to contribute to the construction landscape in the state.

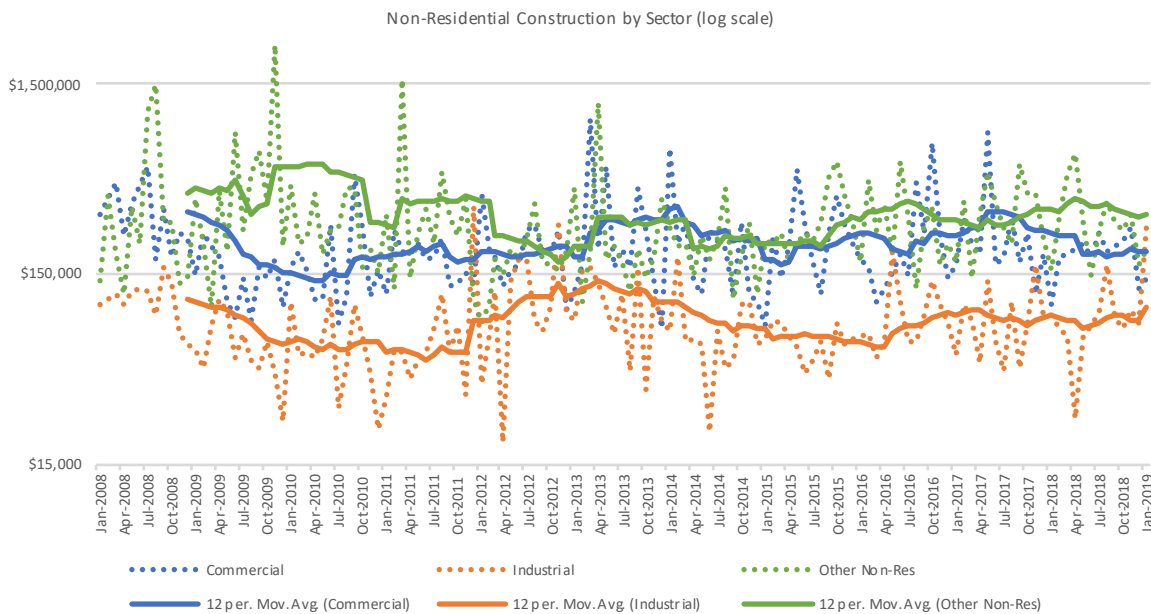
As flagged in previous editions, the Brisbane market has been relatively insulated from the pricing correction seen in VIC and NSW. Prices across the board were almost uniformly down by 1% QoQ with prices essentially level YoY. It is with this in mind that the sudden shift downwards in approvals seems to be an overreaction at this microeconomic level. We can speculate about interstate investment in the Brisbane market or this FONGO concept that is being pushed by the media but ultimately price does not seem to be the sole or key driver of this fall in approvals.



Source: ABS, Wolf & Bear Services 19

It seems odd that Commercial work done is being driven by record high levels of Retail & Wholesale Trade works offsetting a weak Office sector in recent quarters. Maybe less surprising is the significant uptick in Industrial work done driven by both the Warehousing and Factories sub-sectors.

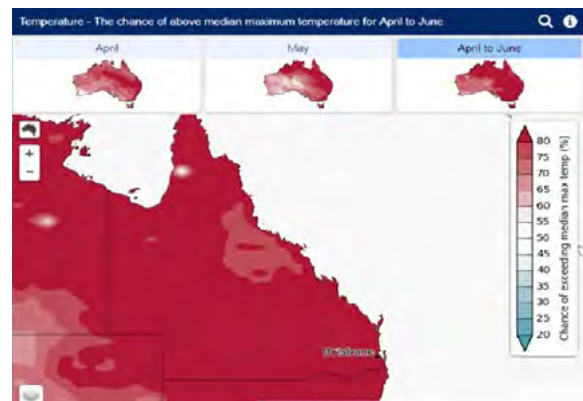
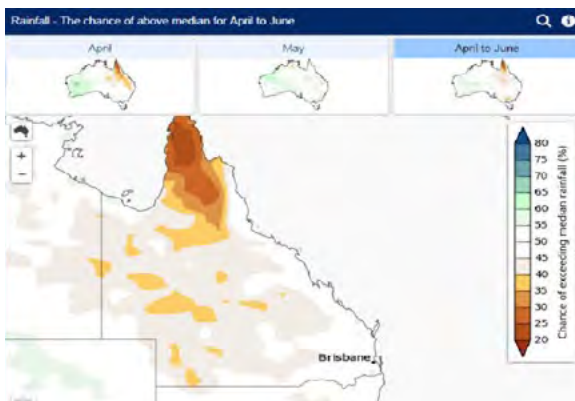




Source: ABS, Wolf & Bear Services 20

And the surprises don't stop there with the traditional Non-Residential sectors of Health and Education both at significant lows, with Aged Care, Short-term accommodation and Entertainment pushing the 'Other' Non-Residential sector along.

Renewables in Queensland is unsurprisingly focussed on solar with a number of farms under construction around Toowoomba and the Bowen Basin including Clermont, Lilyvale, and Rugby. We're watching with interest to see the early results from AGL's Coopers Gap wind farm which is starting to take shape. Typically not a wind-farm state, this could open up development in the sector. Due for completion in 2019, the 453MW project is ambitious as the \$850m project is delivered by engineering and civil operator CATCON.



Source: Bureau of Meteorology 4

It is not without a sad sense of irony that as we look to the long-term forecast from the bureau that the cape is identified as highly likely to receive below-average rainfall, just as cyclone Trevor crosses the community. However apart from this, the state looks to be in for an average period of moisture although still likely to be hotter than normal.

**Projects we're watching:** Adani, Inland Rail, Bruce Hwy, Cross River Rail, Coopers Gap Wind Farm, Warrego Hwy.



# South Australia

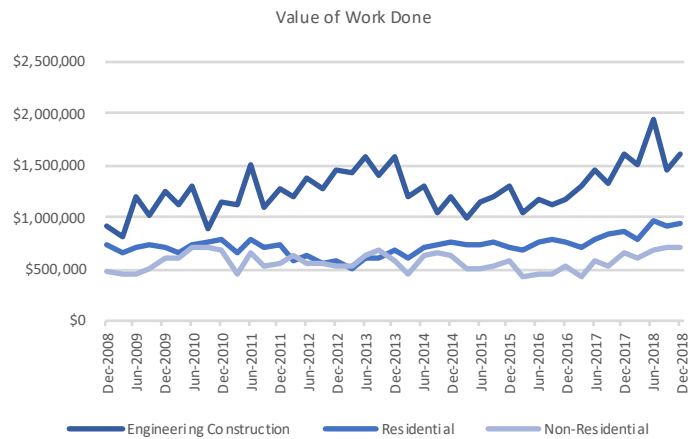
In a case of ‘the little State that could’ South Australia continues to power on despite any broader economic headwinds. With Engineering Construction powering ahead and both Residential and Non-Residential seemingly on an unstoppable march, the State is outshining its Eastern cousins.

There is no doubt that traditional infrastructure is playing its part with the \$885m Northern-Connector, \$620m Darlington Upgrade among others driving activity. This is backed up by a strong pipeline of works including the Joy Baluch bridge, Torrens to Torrens, City Tram and Flinders Link all moving through the approvals process.

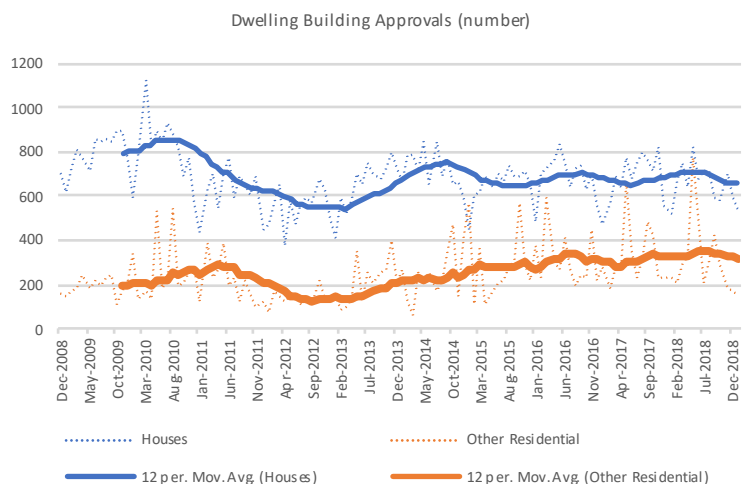
However, it is hard to understate the influence of British billionaire Sanjeev Gupta and the life he has breathed into Whyalla in particular. For a steel town that has many times faced the prospect of economic annihilation, Gupta’s GFG Alliance and its \$600m commitment to the aging steel plant has transformed the region. In December the local council predicted its population would grow from 22,000 to over 80,000 in the space of 10-20 years. It also announced a \$45m hotel, \$145m horticulture project and \$6m recycling business. Ambitious? Yes. Visionary? Maybe. But who cares, Whyalla is just happy to have its groove back and the State is happy to actually have someone sign a cheque as opposed to waiting for Olympic Dam to pull the trigger on the Mega-Mine expansion.

Seemingly blissfully unaware of the Residential booms experienced in the Eastern States, South Australia has maintained a relatively steady pace in dwelling approvals across both houses and attached dwellings.

Due to the relatively (compared with other states) small sample size, short term spikes need to be taken with a



Source: ABS, Wolf & Bear Services 21



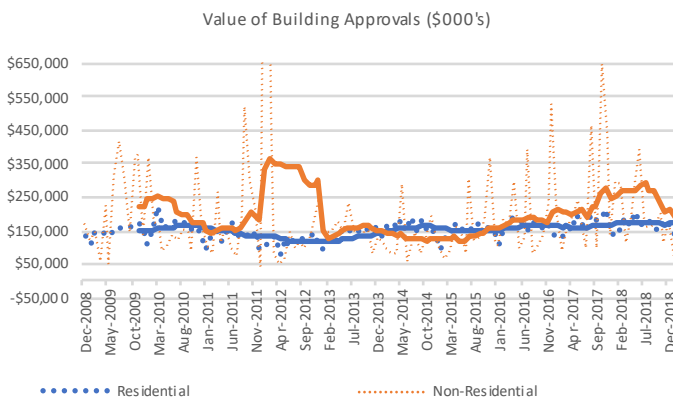
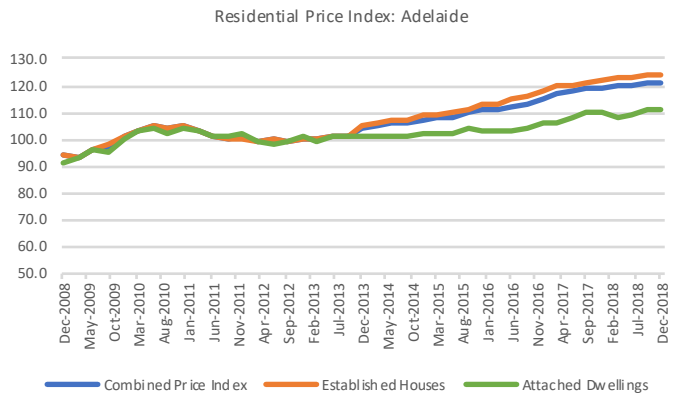
Source: ABS, Wolf & Bear Services 22

grain of salt but trend-wise, SA appears to be riding the Residential price 'crash' quite well.

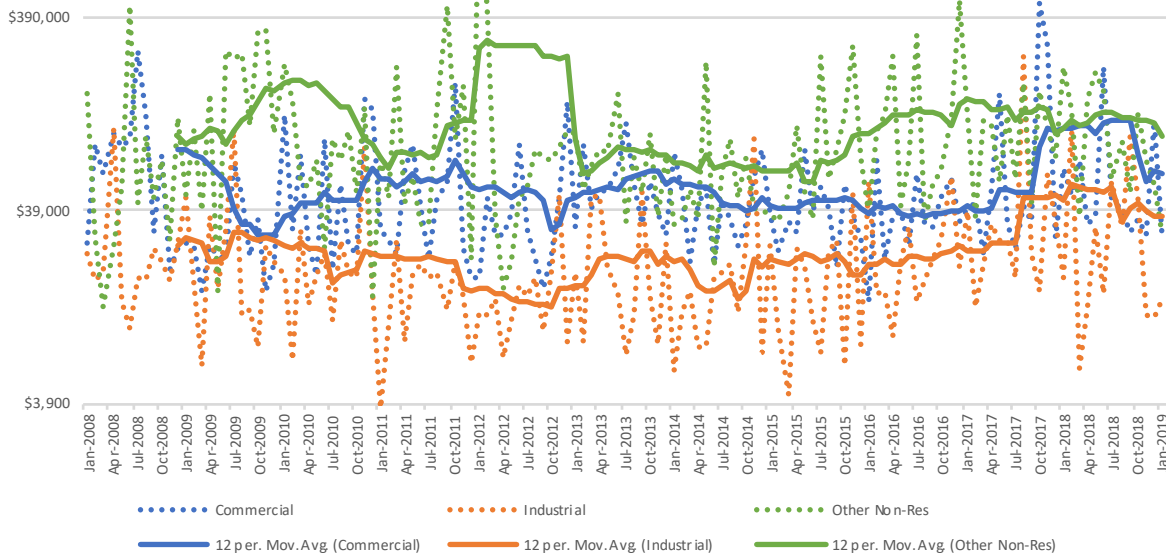
Similarly, the Residential Price Index is a stark contrast to the Eastern States with only a slight plateau in prices and indeed some signs of ongoing growth in attached dwellings prices. This sort of growth is simply at odds with the rest of the country. Adelaidians may have looked on with envy at the explosive price growth in Brisbane, Melbourne and Sydney but they are quite happily sitting back now as the rest of the country falls into a sharp contraction in prices.

Again, small sample sizes mean that the value of approvals is subject to volatile swings. However, there has been a tangible fall in Non-Residential approvals in recent months which appears to be directly related to Commercial activity (see commentary below). As discussed above, Residential remains largely flat as the State shakes off broader concerns about the market.

Big falls in Non-Residential Construction were led by both Commercial and Industrial work done. Commercial was again let down by Office work done after a strong spike in December, Retail remains a battler with a small up-tick in January. Industrial was down across all categories after short-term activity in both Factories and Warehousing. Traditional Non-Residential Construction in Health, Aged Care and Health were all disappointingly low and perhaps (like QLD) a reflection of the election cycle more than anything else.



Non-Residential Construction by Sector (log Scale)



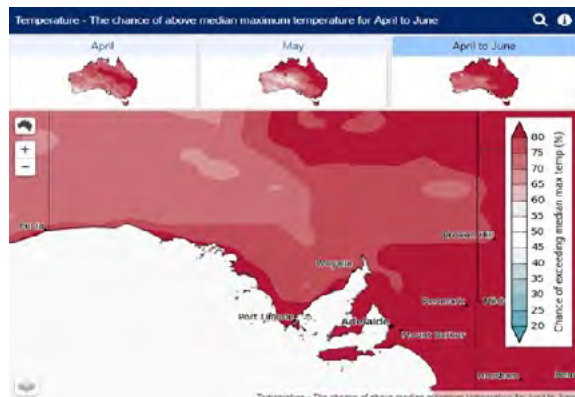
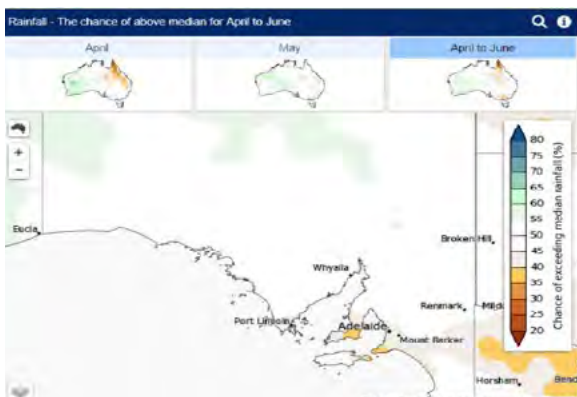
Source: ABS, Wolf & Bear Services 23

Source: ABS, Wolf & Bear Services 24

Source: ABS, Wolf & Bear Services 25



South Australia is looking at one of the milder long-term forecasts nationally with average rainfall predicted for most of the state and whilst the interior is likely to exceed the median temperature, the coast will remain much milder.



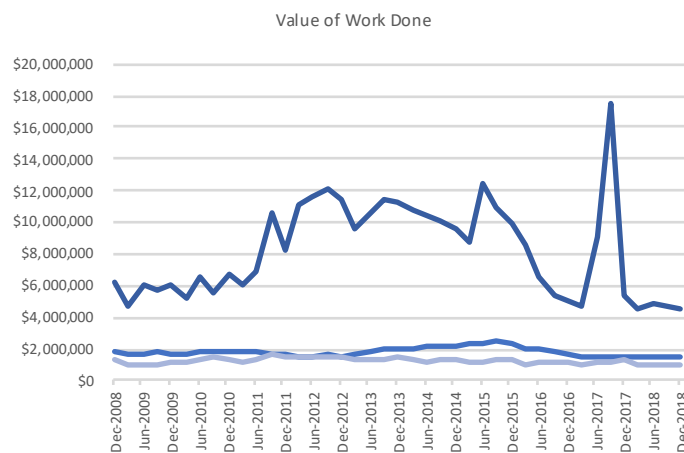
Source: Bureau of Meteorology 5

**Projects we're watching:** Whyalla Steel Works, Adelaide Riverbank, Defence spending



# Western Australia

The data in some cases can be misleading. We at Construction Advisor look at WA and can't reconcile some of the announcements that have been made versus the data we are receiving from the likes of the ABS. Forgive the data-spike in September 2017, assume some lag in data flowing through, we still feel that the Engineering Construction work done data is feeling soft. Prior to this quarter we had significant investment announcements from the likes of BHP (South Flank), Rio (Koodaideri and Winu) and FMG at Patterson Range.

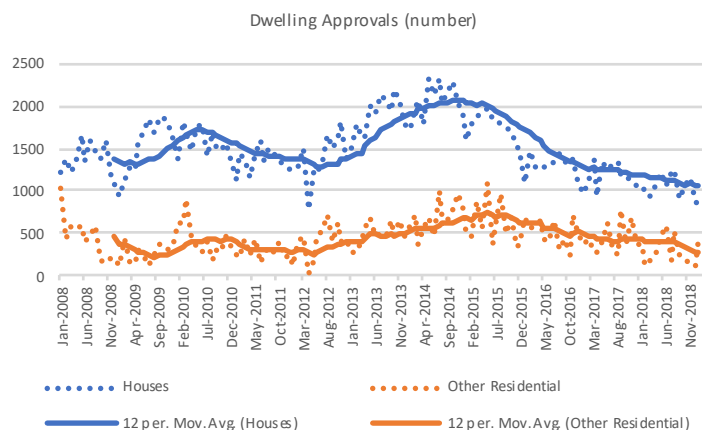


Source: ABS, Wolf & Bear Services 26

Perth Engineering Construction continues to be supported by the Forrestfield Airport Link and the NorthLink project activity. With the new airport runway proposal progressing through sign-off and other works planned for the CBD the pipeline, whilst not booming, is looking relatively stable in the short term. As we go to print we are watching cyclone Veronica as it impacts the Pilbara, being a slow moving system the impact will be hard to predict and we hope both for health and safety but also minimal disruption to operations.

In value terms, Engineering Construction was down 1.8% QoQ and 14.6% YoY, Residential was up 2.2% QoQ but down 3.2% YoY and Non-Residential was flat QoQ but down a significant 26.1% YoY.

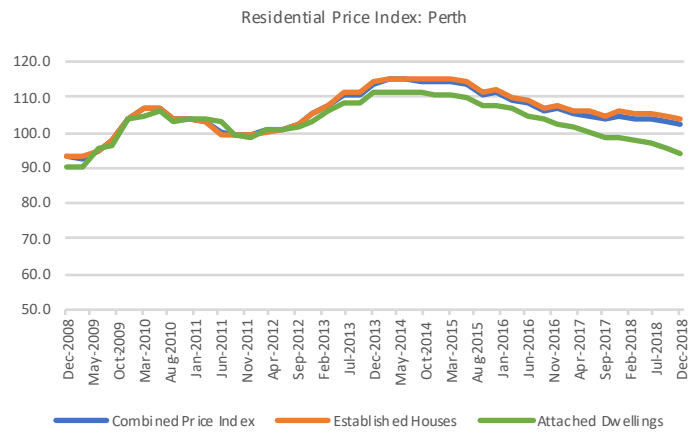
Unfortunately, the decline in dwelling approvals isn't showing much sign of slowing in either houses or other residential. Housing is now below pre-mining boom levels and attached dwellings have returned to the same number.



Source: ABS, Wolf & Bear Services 27

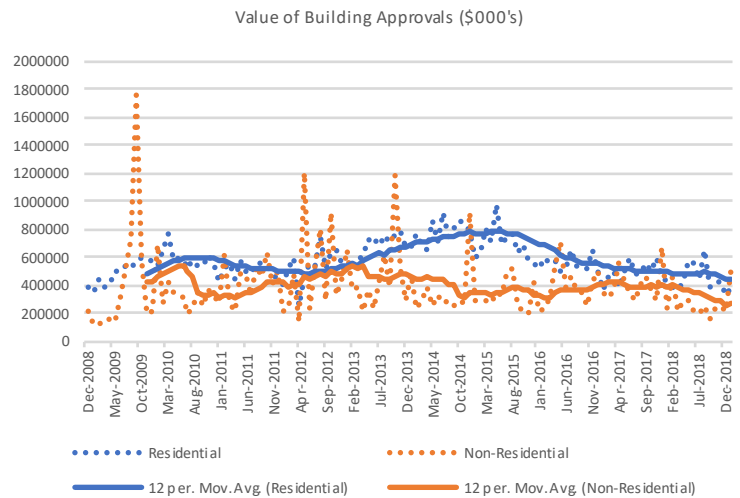
With the likelihood of a second mining boom remote at best, the Residential construction market is going to have to find some other trigger to turn the tide and return to growth.

The Perth residential price index continues to trend downwards in line the construction activity. Of note is the attached dwellings trend which appears to be accelerating and shows no sign of bottoming out. Of course this is not an issue isolated to Perth but as the market was the first metropolitan city to peak back in 2015, ongoing interventions and macro-factors are clearly exacerbating the underlying issues.



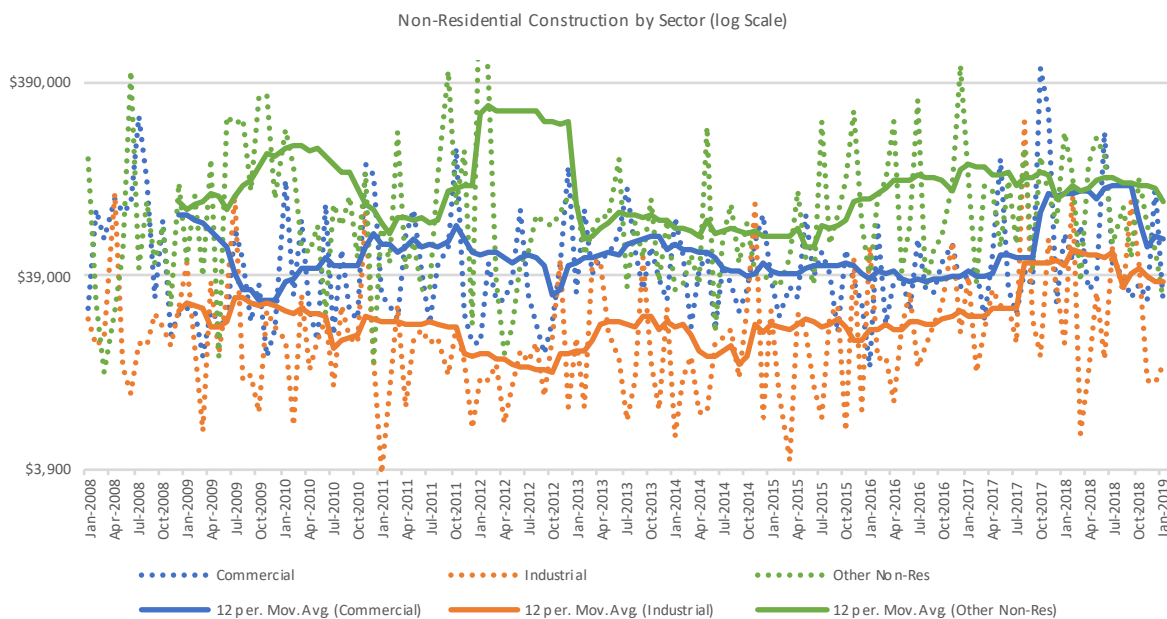
Source: ABS, Wolf & Bear Services 28

In terms of Residential Construction versus Non-Residential Construction, neither sector is trending well. Certainly the Non-Residential pipeline is looking a bit stronger but unfortunately there doesn't appear to be another stadium on the horizon.



Source: ABS, Wolf & Bear Services 29

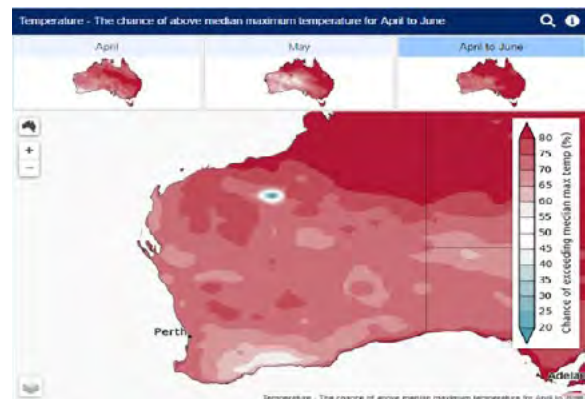
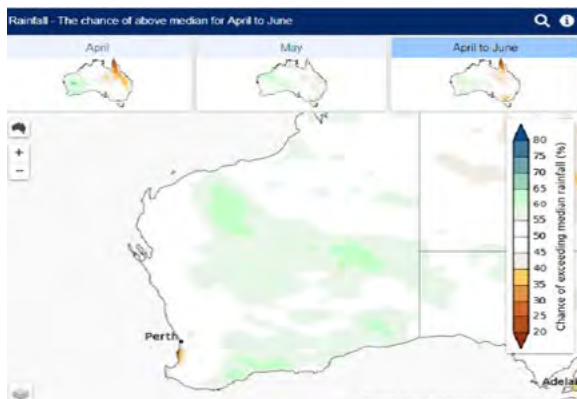
Commercial activity is significantly subdued with only an abnormal spike in 'other' driving up the results in the January month. Similarly, Industrial construction remains very low with little activity in warehousing, factories or agriculture. The only real bright spot in the Non-Residential sector is in Education spending which has enjoyed a lift since September 2018 somewhat masking a lack of activity in Health, Aged Care and Religious building.



Source: ABS, Wolf & Bear Services 30



The good news for WA is that the bureau is forecasting a mild (relative to the rest of the country) period of weather activity with slightly higher than average precipitation and whilst temperatures will be warm, they won't be as extreme as the East Coast.



Source: Bureau of Meteorology 6

**Projects we're watching:** South Flank (BHP), Koodaideri (Rio), Chevron HQ Perth



## SECTOR IN FOCUS

# What does a house price correction mean for construction?

Given the current media climate and fear-mongering of an approaching house price apocalypse, it is hardly surprising that many with exposure to this industry are starting to sweat. So we thought it was high time to look at the current climate and compare it with other market adjustments to try to get a handle on what is ahead.

In short, then Associate Professor Angelo Karantonis of UTS wrote a paper in 2010 that he could not identify a direct correlation between a shift in house prices with new housing construction in Australia. This seems counter-intuitive – surely if the prices in real estate fall then construction would at least slow if not stop? Well...

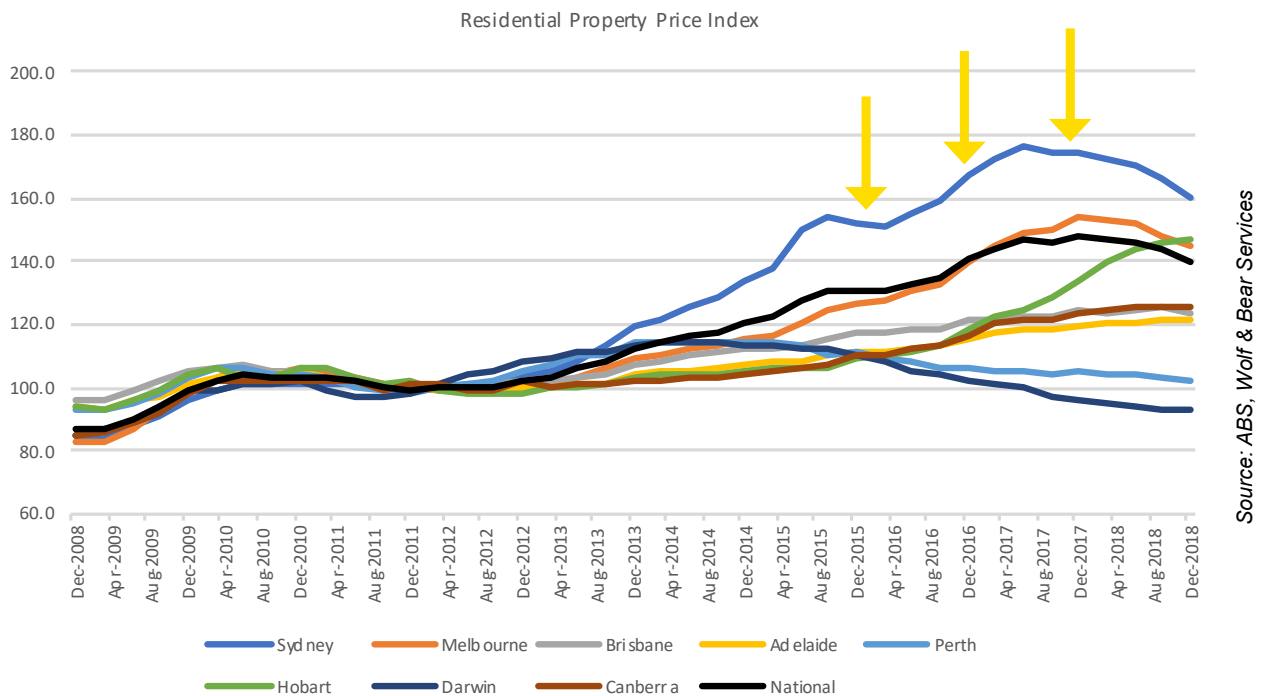
Firstly, let us deconstruct the residential construction market into segments – there are new houses, there are apartments/townhouses and then there are master-planned communities. Unfortunately, in the Karantonis paper, we feel that the approach of seeking a correlation over 2-3 quarters is insufficient. New housing, particularly master-planned communities, have a long lead time and are financially complicated. Developers of apartment towers and master-planned communities are not bound by clearance rates provided they are financially viable. They have options in regards to holding stock for the purpose of rental/lease and freedom to vary sale prices more so than traditional real-estate owner/occupiers. More importantly, their investment occurred 12-24 months prior to any housing price adjustment (up or down).

Again, let us deconstruct another factor – the price. Traditional media and industry analysts report on trends in housing price transactions. It is important to note that the vast, vast, majority of transactions in real estate relate to existing housing stock – that being the sale and purchase of a dwelling that has already been built. In

contrast, apartments, townhouses and master-planned communities are years in the making with finance and sales contracts locked in 12-24 months prior to completion of the project. It is in this scenario that we find the 'new' issues arising from sunset-clause claims and rising default rates. Put simply, the decisions were made years ago and are only now coming to fruition.

Let's clarify that this is not a 'national' issue. The price index shows many moving parts, Perth and Darwin actually peaked back in 2014 and fell as the mining boom came to an end with Perth slowly showing some signs of bottoming out. Brisbane, Canberra and Adelaide are all relatively stable and Hobart has only just started to show signs of levelling off after a meteoric rise of the past 2 years. Which brings us to Sydney and Melbourne, the largest markets in the country and obviously the biggest drivers of the national average.

Sydney peaked in June 2017 after huge price rises over 5 years outperformed the rest of the country significantly. The contraction is now well underway with 6 quarters of consecutive falls. Melbourne peaked 6 months later in December 2017 and is now back to levels seen 18 months ago. The timing of these peaks is important when we look at the political interventions into the market.



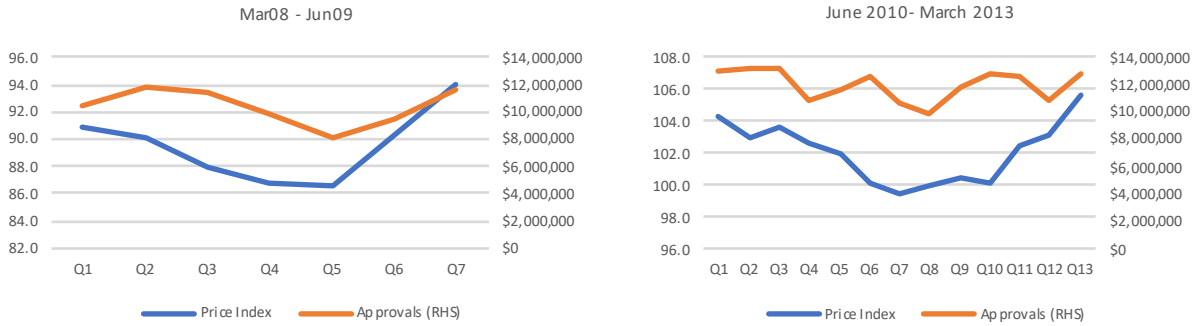
Source: ABS, Wolf & Bear Services

The first intervention was in December 2015 when the Foreign Investment Review Board (FIRB) tightened its rules and processes on the international sector leading to a short dip in the index in Sydney. How effective this was is debatable given that it coincided with measures taken (particularly in China) on foreign capital outflows. In March 2017, APRA introduced a benchmark restricting bank lending to interest-only loans, this has since been lifted in December 2018. The next significant factor was the launch of the banking royal commission in December 2017 which delivered its findings in February 2019. All the while, interest rates have remained at record lows.

So on the face of it, intervention 1 only slightly dented Sydney, intervention 2 appears to have turned the market in Sydney and started the slowdown in Melbourne and it is the response of the financial sector to the banking royal commission that has mostly driven the contraction we are currently seeing.



Let's consider the last two contractions in the residential price index: March 2008 – June 2009 and June 2010 – March 2013. We may not have gone into the depth of the Karantonis paper, but there looks like there is a correlation to us? To the current pricing correction and its impact on approvals and construction work. It is fair to assume that approvals and work done in both the Melbourne and Sydney markets will be entering a period of reduced activity. This however should not be a surprise to anyone, Melbourne is well documented as having a burgeoning supply of attached dwellings and Sydney is equally coming off an unprecedented boom in development.



Source: ABS, Wolf & Bear Services

So let's all just take a breath. Yes, prices are coming off in Melbourne and Sydney. Yes, construction activity is going to fall in the short term (but not to catastrophic levels). Whilst not as sharp as the current contraction, the June 2010 - March 2013 lasted for 3 years and the sky didn't fall in. Roll with the punches, play the game, we still need to build things.



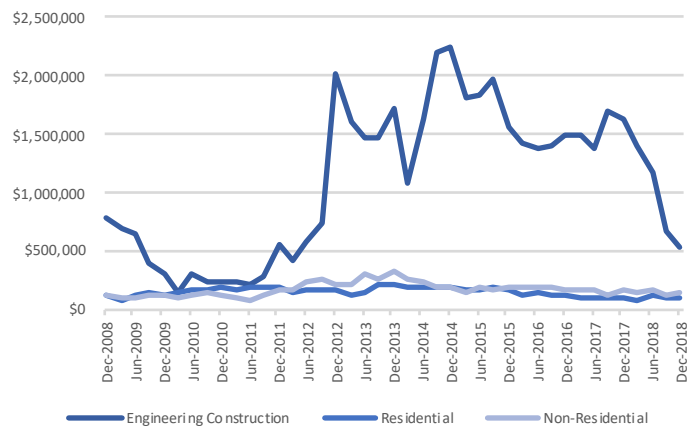
# Northern Territory

Despite many attempts, it is now clear that the Engineering Construction economy in NT is coming to a sharp end and this will have a significant impact on the Territory. Inpex Ichthys is well and truly operational with the onshore facilities officially opening in November 2018. NT is resting its hopes on defence spending to lift it from this new low in construction activity. But we need to keep this in perspective, the activity of the past 7 years has been both unprecedented and out of character for the region.

Much of the development pipeline is going to rely on government funded projects such as; the Northern Roads Program, Defence Infrastructure and Health Infrastructure. Other activity includes the long-awaited Project Sea Dragon aquaculture project, Berrimah Farm and ongoing LNG exploration.

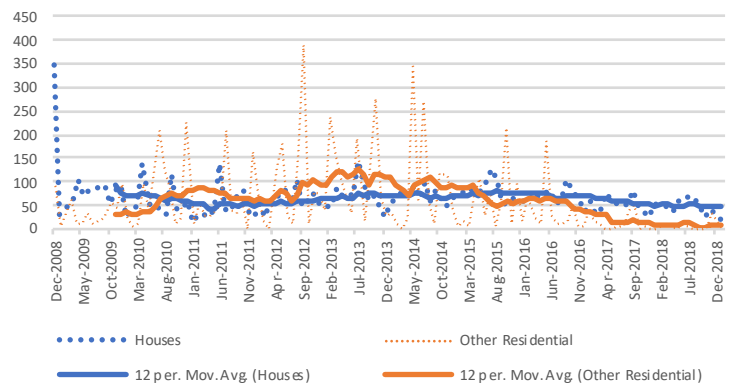
It can be hard to get excited about Residential and/or Non-Residential Construction activity in the Territory with comparatively low values and volumes. The current trend is largely unremarkable, settling to pre-Ichthys levels.

Value of Work Done



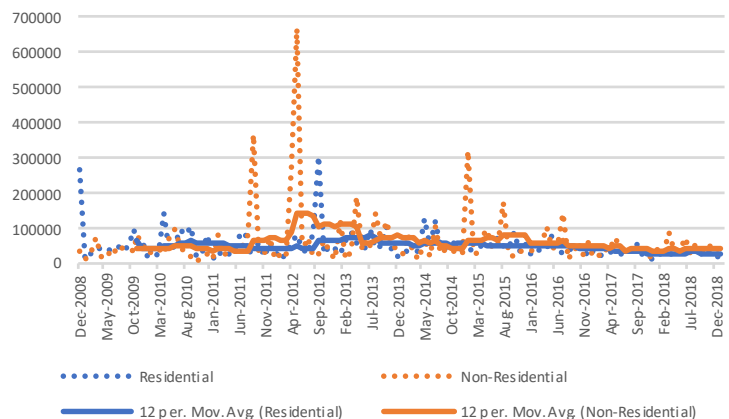
Source: ABS, Wolf & Bear Services 31

Dwelling Approvals (number)



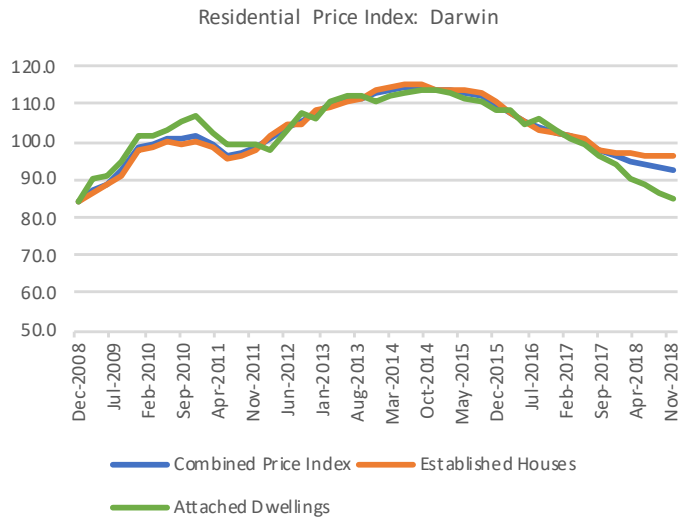
Source: ABS, Wolf & Bear Services 32

Value of Building Approvals (\$000's)

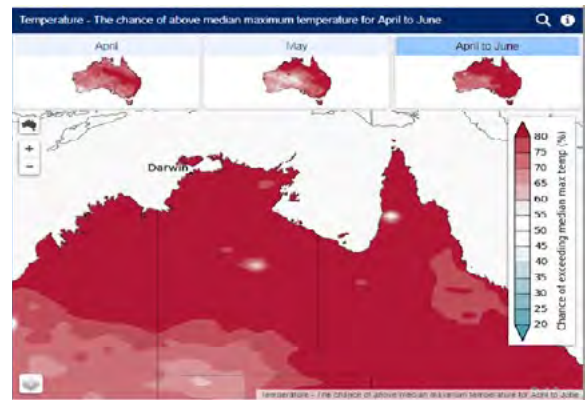
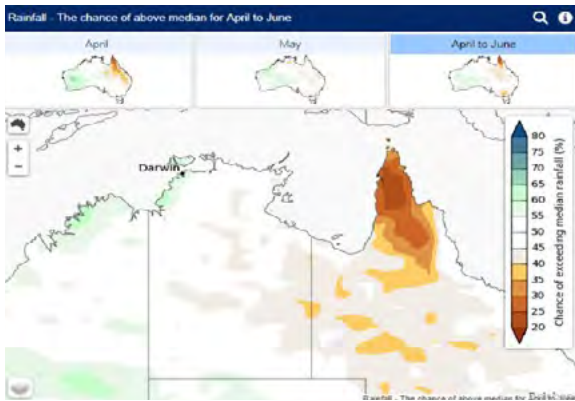


Source: ABS, Wolf & Bear Services 33

In terms of the residential price index for Darwin, prices overall now appear to have retreated beyond pre-Ichthys levels however there are signs that houses at least are levelling off. Whilst attached dwellings continue to plummet.



Source: ABS, Wolf & Bear Services 34



Source: Bureau of Meteorology 7

Despite watching cyclone Trevor wash through the Territory as we go to publication, the region (according to the bureau) can expect relatively normal conditions for the quarter ahead. The forecast for rainfall is mostly average yet like the rest of the country, temperatures are predicted to be higher than normal.





**The Quarterly**  
March 2019

# Tasmania

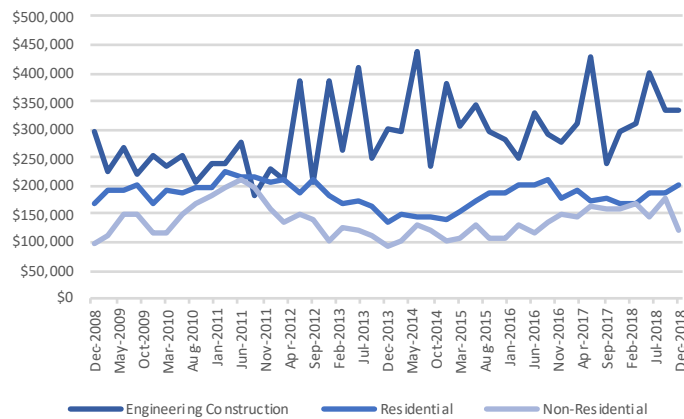
The apple isle continues to just roll along largely unfazed by the turbulence on the mainland. Engineering Construction activity is largely unchanged in trend terms and Non-Residential construction remains flat. Remarkably, Residential Construction in the state is actually one of the strongest markets in the country.

The Non-Residential Construction pipeline is modest but strong enough to support current activity levels particularly with the muted \$400m redevelopment of MONA in the planning stage.

Residential building approvals continue to trend upwards – even if ‘Other’ Residential has recently turned into negative territory however this is on very small numbers.

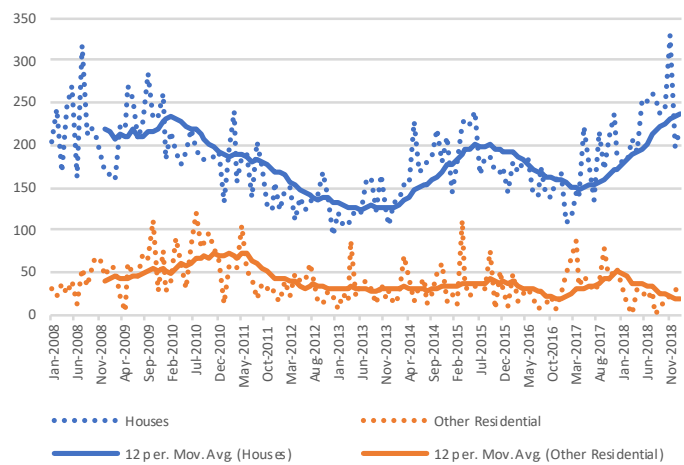
It is hardly surprising then to see that the residential pricing index is the strongest in the country with all sectors continuing to trend upwards. Established housing is displaying some signs of slowing its growth rate however time will tell if this is truly a peak or just a pause in the longer-term trend.

Value of Work Done



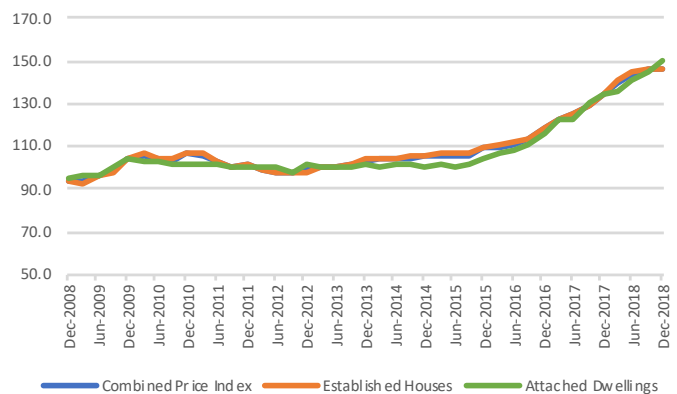
Source: ABS, Wolf & Bear Services 35

Residential Approvals (number)

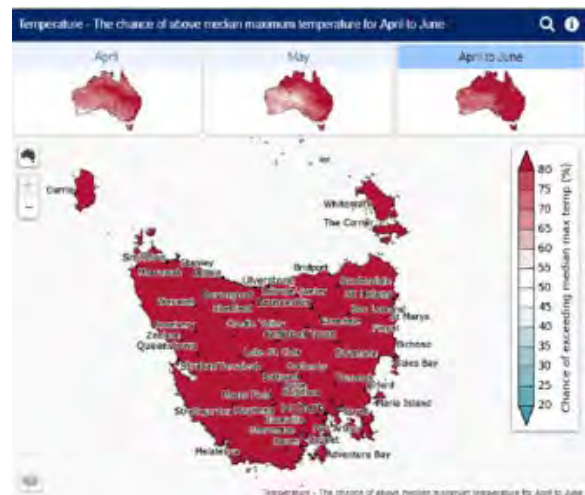
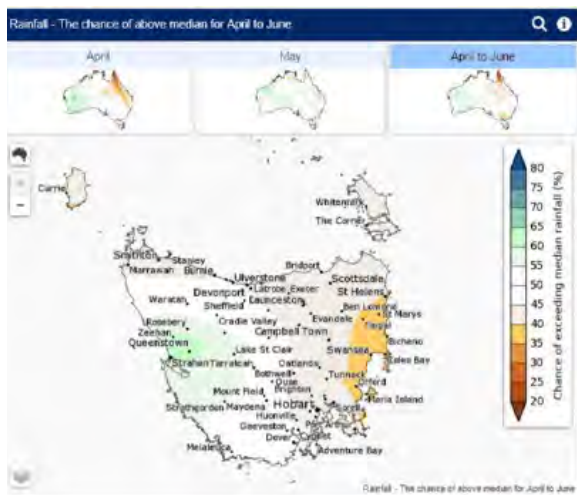


Source: ABS, Wolf & Bear Services 36

Residential Price Index: Hobart



Source: ABS, Wolf & Bear Services 36



Source: Bureau of Meteorology 8

Tasmania is looking to be mildest of the states in terms of weather for the quarter with most areas expected to receive average rainfall and temperatures will be mostly average if a little higher than the median.



# Commodities Update

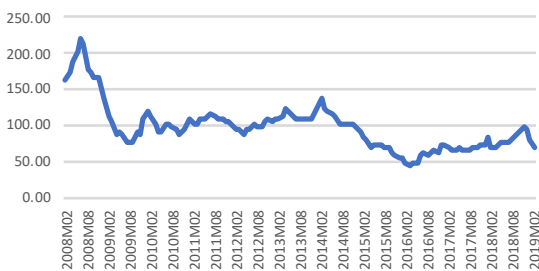
Crude oil, average (\$/bbl)



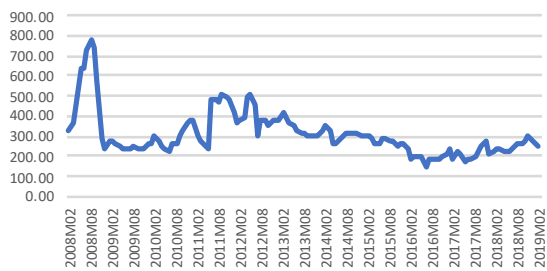
Coal, Australian (\$/mt)



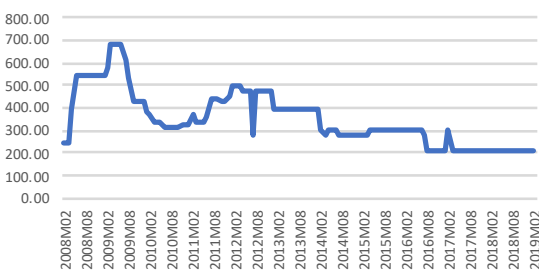
Natural gas index (2010=100)



Urea (\$/mt)



Potassium chloride (\$/mt)



Aluminum (\$/mt)



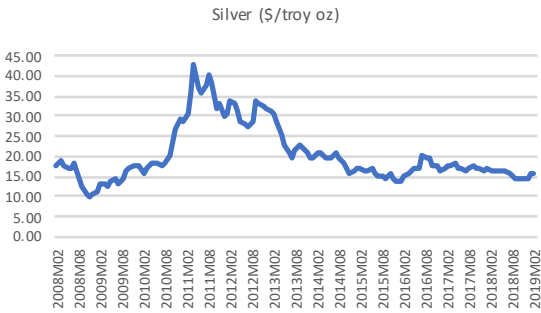
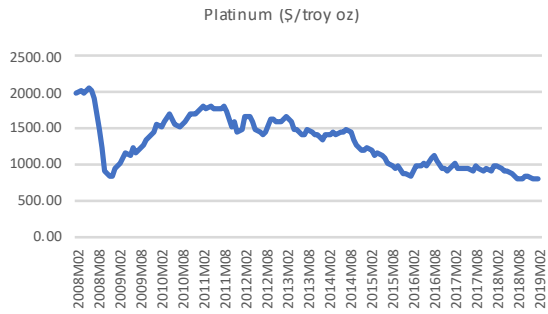
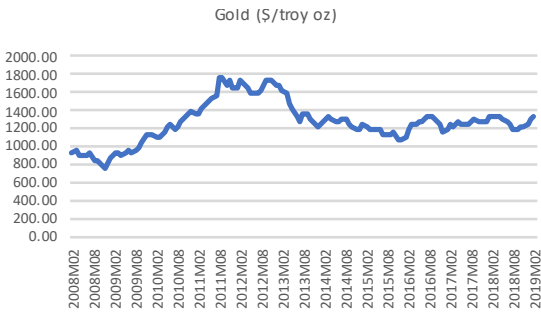
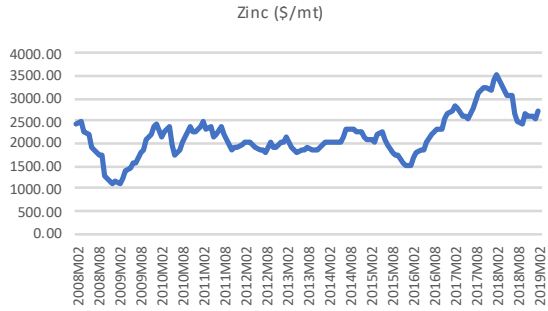
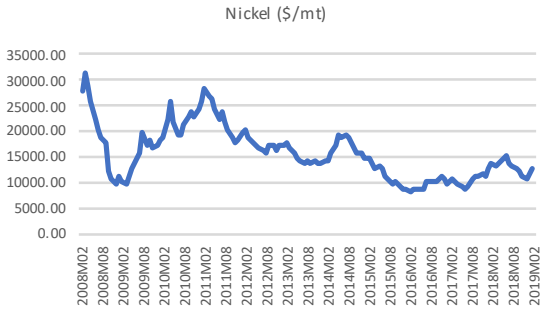
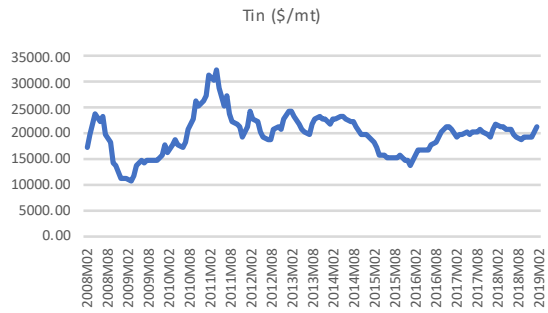
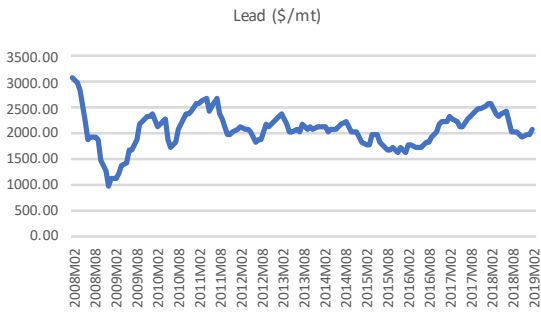
Iron ore, cfr spot (\$/dmtu)



Copper (\$/mt)



\*Source: World Bank Commodity Price Data (Pink Sheet) \$USD



\*Source: World Bank Commodity Price Data (Pink Sheet) \$USD



# Half-Year Results

\*\*Please note that none of this data does, or is intended to constitute financial advice.

		H1 FY19								YoY Comparison			
		Total Revenue	EBITDA	EBIT	NPAT	EBITDA % Rev	EBIT % Rev	NPAT % Rev	Share Price (1 March 2019)	Revenue % change	EBIT-DA % change	EBIT % change	NPAT % change
DOW	Downer	\$6,325	\$400	\$223	\$134	6.3%	3.5%	2.1%	\$7.45	8.98%	9.81%	24.92%	-1309.01%
BHP	BHP	\$29,629	\$14,585	\$10,492	\$5,307	49.2%	35.4%	17.9%	\$37.18	11.92%	7.77%	12.43%	105.45%
MND	Monodelphous	\$779	\$51	\$41	\$31	6.6%	5.3%	3.9%	\$17.75	-8.38%	-14.67%	-20.13%	-18.30%
FMG	Fortesque	\$5,016	\$2,253	\$1,430	\$912	44.9%	28.5%	18.2%	\$5.98	36.33%	24.81%	21.67%	33.99%
CIM	CIMIC	\$14,670	\$1,629	\$1,070	\$781	11.1%	7.3%	5.3%	\$50.09	9.24%	4.72%	2.44%	11.18%
ORI	Orica	\$5,402	\$678	\$440	-\$48	12.5%	8.1%	-0.9%	\$17.65	6.54%	-16.07%	-23.84%	-112.45%
Seven Grp Sub	Coates Hire	\$493	\$176	\$102	na	35.6%	20.7%	na	na	214.56%	155.98%	151.60%	na
BOL	Boom Logistics	\$92	\$9	\$0	\$0	9.5%	0.5%	0.2%	\$18.00	0.04%	-21.32%	-81.45%	-53.07%
RIO	Rio Tinto	\$57,413	\$23,188	\$17,685	\$19,323	40.4%	30.8%	33.7%	\$94.92	11.87%	10.06%	19.01%	72.01%
LLC	Lend Lease	\$7,761	-\$308	-\$370	\$16	-4.0%	-4.8%	0.2%	\$13.36	-10.70%	-169.12%	-193.48%	-96.31%
ABC	Adelaide Brighton	\$1,631	\$299	\$211	\$185	18.3%	13.0%	11.4%	\$4.75	4.53%	-0.10%	-3.21%	1.81%
MGR	Mirvac	\$1,173	\$374	\$351	\$648	31.9%	29.9%	55.2%	\$2.61	55.78%	17.24%	18.18%	39.35%
EHL	Emeco	\$224	\$90	\$47	\$12	40.3%	21.2%	5.3%	\$2.19	31.01%	60.88%	80.70%	-4186.01%
CSR	CSR	\$1,399	\$149	\$109	\$27	10.6%	7.8%	1.9%	\$3.35	5.66%	-14.79%	-16.51%	-77.44%
JHX	James Hardie	\$1,836	\$407	\$324	\$227	22.2%	17.7%	12.4%	\$17.84	38.54%	33.26%	30.75%	42.92%
BLD	Boral	\$2,929	\$424	\$240	\$237	14.5%	8.2%	8.1%	\$4.89	4.65%	11.74%	22.92%	36.71%
NWH	NRW Holdings	\$494	\$73	\$44	\$28	14.8%	8.9%	5.7%	\$2.29	57.97%	91.30%	170.06%	83.74%
MAH	MacMahon Holdings	\$542	\$77	\$28	\$23	14.3%	5.2%	4.3%	\$0.24	100.83%	77.75%	280.82%	180.31%
ASL	Ausdrill	\$643	\$106	\$36	\$217	16.5%	5.6%	33.8%	\$1.71	45.68%	50.78%	-0.63%	515.24%



## Who and What Is *Wolf & Bear Services* ?

Wolf & Bear Services is a data consultancy that focusses on the Construction and Construction Equipment Rental markets in Australia. We have > 15 years' experience in tracking industry trends, data, news and applying this to business needs.

Our founder and principal consultant has spent many years in construction and equipment rental in roles across operations, sales, commercial/finance and pricing. The broader team each bring unique skills and experience to their area of expertise be-it; HR, HSEQ, construction law, operations, sales management or IT systems.

## What do we do?

Our team works with clients to better understand their; customers, market, fleet/resources, profitability and data systems and capabilities. Taking all of our extensive data library, we apply this to our client's own datasets to provide new and revealing insights into organisations activities and performance.

We are highly experienced in managing equipment tenders, building pricing structures, producing system/process development roadmaps and project management.

Had a bad experience with consultants? So have we. We offer performance-based services that means if you don't see the value and progress against agreed milestones, you aren't locked in to a bad investment. We won't 'borrow your watch to tell you the time', we pride ourselves on delivering real value to our clients in everything we do.

## Where are we?

We are where you need us to be. Contact the team now to find out how we can help you to get the best out of your business.

**[enquiries@wolfandbear.net.au](mailto:enquiries@wolfandbear.net.au)**

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