Turner & Townsend

Australia market insight

Q2 2020

making the **difference**

Market overview

Whilst construction activity and momentum remained strong over Q1, the full impact of COVID-19 on the construction industry became apparent in Q2. The cost of construction has increased across Australia as a result of a reduction in productivity due to heightened social distancing requirements.

With concerns increasing due to recession and the uncertainty of what the pandemic will do to our economy, businesses have tightened their belts and pulled back on their investments. This has resulted in a large number of projects in the private sector being deferred or abandoned.

Whilst construction activity remains at reasonably high levels in most states, this activity is from projects that were under construction prior to the pandemic. Moving into FY2021 a number of these projects will be reaching completion and construction activity is likely to contract significantly. Despite many states attempts to fast-track shovel-ready projects and bring forward construction projects, these will still take time to break ground and a trough in construction activity is expected in H2 2020 and H1 2021.

Leading this decline in construction activity will be the residential, office, retail and aged care sectors. Commercial and industrial building activity is also expected to see a sharp contraction over this period. Major transport projects and the public sector project pipeline that includes health, education, institutional buildings and defence will prevent construction activity from falling further. This insight paper focuses on the defence sector and the challenges it faces as defence sector clients pledge to invest $270bn over the coming decade.

Figure 1: **2020 cost escalation forecast by city**

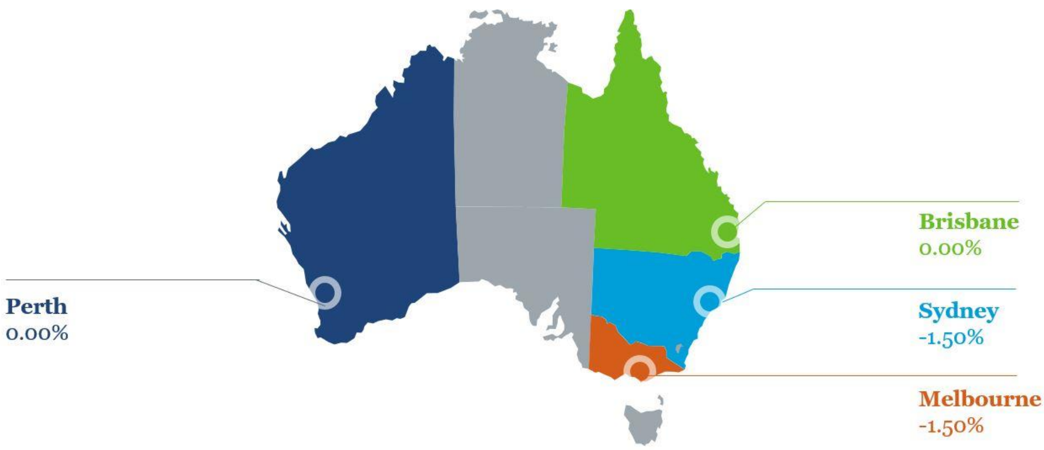
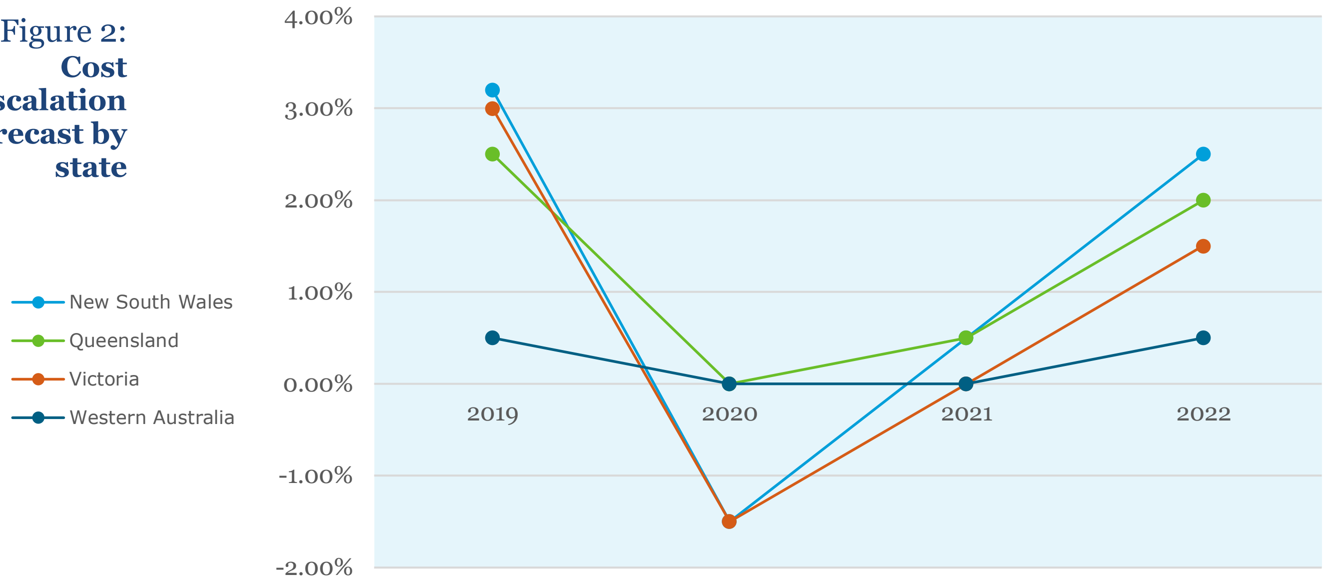


Figure 2: **Cost escalation forecast by state**



New South Wales is expected to experience a contraction in construction activity towards the end of 2020 and start of 2021, given the significant number of private projects that have been deferred or abandoned. However, activity levels are expected to pick up again over H2 2021, owing to the significant pipeline of projects that have received government investment and have been fast-tracked.

Victoria is also expected to see a significant contraction over H2 2020 and H1 2021, and the outlook beyond this is still uncertain. With COVID-19 case numbers continuing to rise across the state, lockdown measures have been reintroduced. Victoria has been on a construction boom for the past two years but the pipeline of projects ahead appears to be much smaller than what we have seen previously.

Additionally, the state's construction activity, will largely be dependent on when current lockdown measures are lifted and case numbers are contained. Therefore, we anticipate that building activity will remain subdued until 2022.

Queensland's construction activity is not expected to contract as much as NSW and Victoria but there is expected to be a downturn over H2 2020 and H1 2021, as private investment has been pulled back in response to COVID-19. It is anticipated that this will start to bounce back from H2 2021, in line with confidence returning to the market.

Western Australia is unlikely to see much of a contraction over the remainder of 2020 as construction activity has remained relatively flat for some time in the state. It is likely that construction activity will continue to remain relatively flat over 2021 and 2022.

Overall, risks do still remain to the above outlooks. A second wave in active cases across the country, like we are currently seeing in Victoria, will have an impact on business confidence and new investment which will ultimately weigh on construction activity in the future.

New South Wales

Key price indicators
Movement (%) Q2 2019 to Q2 2020

Site foreman / hr	Group 1 tradesman	Concrete 30 MPa/m^3	Plasterboard 13mm thick to stud wall/m^2	Main contractors margin movement
0%	0%	4%	0%	-25%

Contractors are beginning to feel the impact of a downturn due to uncertainty caused by COVID-19 and the wider economic slowdown. As a result all parts of the supply chain are aggressively tendering for new work to secure short-term pipeline with reduced margins. This competitive pricing is negating the additional costs incurred on site due to the enhanced safety measures being implemented to combat COVID-19.

Contractors and consultants have pivoted tendering focus towards public projects as all levels of government fast track projects to create jobs and try to absorb some of the capacity created by a reduced private sector pipeline.

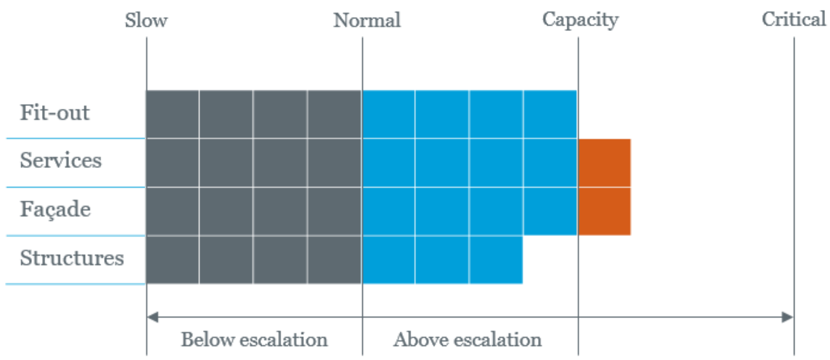
Due to economic uncertainty, a number of projects have been placed on hold, postponed, or cancelled whilst the majority of projects that were on site prior to the pandemic have continued. Many projects which were in the design and planning stage have been put on hold in the short term while companies attempt to understand the business impact of COVID-19, protect their staff and their balance sheet. This reduction in the pipeline of work has led to a number of contractors and design consultants standing down staff and/or implementing wage reductions.

Generally contractors are of the opinion that the market will reach the bottom around mid-2021, however, this is highly dependent on the course the pandemic takes.

Projects which were tendered prior to the pandemic outbreak and are now on site are experiencing unplanned additional costs arising from measures to protect against COVID. Costs incurred are generally related to additional site accommodation and cleaning. In order to implement appropriate social distancing, some contractors are staggering shifts, thus affecting efficiencies. Across the industry, contractors are implementing mitigation measures to avoid impacting programs dates.

Contractors in NSW are constantly reviewing their supply chains to mitigate any potential delays on site due to material delivery. With contractors continuing to tender competitively for works, additional assessments should be undertaken to confirm the parties have capacity to deliver the works, and the financial capability to deliver on reduced margins in the medium to long term.

Figure 3: Supply chain capacity in New South Wales Q2 2020



Queensland

Key price indicators
Movement (%) Q2 2019 to Q2 2020

-1.9%	0%	-5.88%	0%	-25%
Site foreman / hr	Group 1 tradesman	Concrete 30 MPa/m^3	Plasterboard 13mm thick to stud wall/m^2	Main contractors margin movement

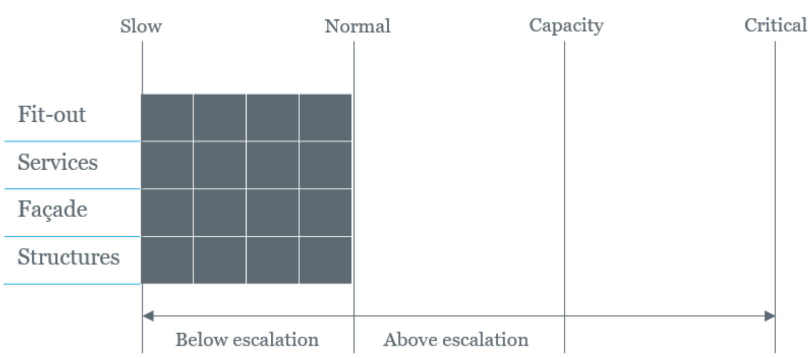
Prior to the COVID-19 crisis, construction activity in Queensland looked very positive. Residential construction, whilst still in a downturn, had almost bottomed out, with an upswing forecast to take place over 2020/21, driven by strong interstate migration. With border restrictions now in place and a likely decline in property prices, the upswing for residential construction is likely to be pushed out for some time.

Non-residential construction activity is likely to see a decline, as a number of privately funded projects have gone on hold with others cancelled. However the State is seeing projects like the Cross River Rail and Queens Wharf bring a much needed boost to the locally economy.

Demand for commercial real estate is likely to be impacted due to alternative work arrangements and this will put further strain on the pipeline of commercial projects. Further, due to border restrictions, both the tourism sector and the tertiary education sectors will see a reduction in demand and both sectors have already announced deferral of a number of projects and are likely to reduce capital spend even further depending on the duration of border closures.

On the other hand, there are still a number of projects being announced and progressing. There will be an increase in the number of publicly funded projects in transport, health, and defence, as the government boosts funding to maintain construction activity. However, it is unlikely that the public sector projects will be able to completely fill the gap created by the reduced activity in the private sector.

Figure 4: **Supply chain capacity in Queensland Q2 2020**



Victoria

Key price indicators
Movement (%) Q2 2019 to Q2 2020

4%	4%	3%	7%	-25%
Site foreman / hr	Group 1 tradesman	Concrete 30 MPa/m^3	Plasterboard 13mm thick to stud wall/m^2	Main contractors margin movement

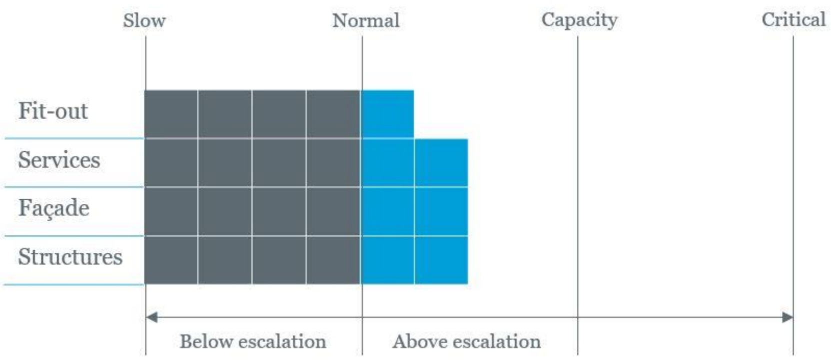
Construction sites with projects in flight are incurring reduced productivity and resultant delays to programs. Depending on contracts this is impacting twofold; in some instances, it is driving up costs with Extension of Time (EOT) claims and associated costs, in other instances EOTs are without costs, which is having an adverse impact, causing significant financial pressure on the industry.

There is a significant level of uncertainty within the private sector and anticipated investments for both current and new assets are been delayed or held under review. This is resulting in a reduced pipeline of work and what could be described as a 'negative spike' within the industry, placing a downward pressure on costs

It is currently anticipated that the competitive market conditions will remain in place throughout 2020 and for much of 2021. Government budgets are due this November, and stimulus packages have been promised or are starting to come to market. However, until the private sector regains a level of confidence, or possibly takes advantage of current market conditions, it is likely the current status will continue.

The lockdown in Victoria could have the potential to affect projects in all other states. The reduced capacity allowed in factories could decrease the supply of Victorian produced products and the border closures could lead to delays in delivery. To date this effect appears to be at a minimum and contractors are able to mitigate delays. Some factories have received exemptions to be allow them to continue operating enabling them to maintain supply.

Figure 5: Supply chain capacity in Victoria Q2 2020



Western Australia

Key price indicators
Movement (%) Q2 2019 to Q2 2020

Site foreman / hr	Group 1 tradesman	Concrete 30 MPa/m^3	Plasterboard 13mm thick to stud wall/m^2	Main contractors margin movement
0%	0%	0%	0%	-10%

The WA economy and construction market appears to have stabilised following the last three months of uncertainty. There has been volatility with project funding decisions, supply chain disruption, material costs, labour inputs, future projects, construction costs and tender price returns.

The Government's easing of restrictions has assisted in the economic recovery, however it is anticipated to be a slow journey back to our 'new normal'.

Each market sector has been impacted in different ways, i.e. dictated by scale/value/complexity/risk/supply chain appetite. The Government stimulus in defence, education and infrastructure (road/rail) together with food retail being cash rich, has seen a steady progression of works in these sectors and tender prices remain at normal levels.

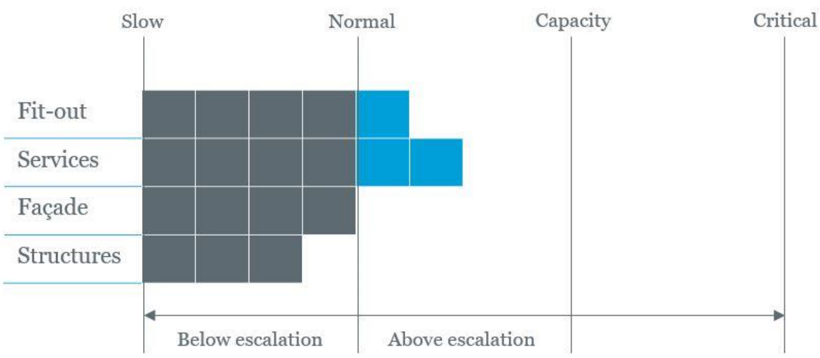
The majority of real estate projects are still commencing to program. Construction work is underway and continuing. Food retail has accelerated activities to cater for increased demand from online ordering and delivery.

Many large natural resource organisations particularly in the energy sector, have postponed projects leading to a slowdown in construction output which is mainly due to reduced export demand for oil and gas.

Aviation sector developments remain postponed as airports close terminals and airlines reduce their operations. Airport developments are on hold due to reduced passenger numbers and revenue from passenger/landing charges reducing.

We anticipate the government will bring forward key infrastructure projects such as METRONET, Main Roads portfolio and Westport to stimulate the economy. Most recently, the government has formed the new Office of Major Transport Infrastructure Delivery (OMITD) to co-ordinate the key road and rail sector stimulus spend.

Figure 6: Supply chain capacity in Western Australia Q2 2020



Economic outlook

The economic contraction seen in Q1 2020 almost certainly means that the Australian economy was in recession during Q2.

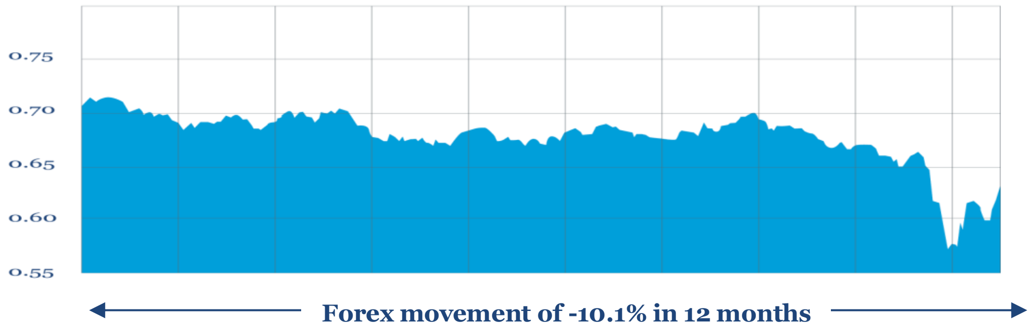
With lockdown measures in full effect in Q2 and unemployment on the rise, GDP growth is expected to significantly decline over this period. When the economy contracts spending goes down, the labour market gets tougher and wages often decrease. However, this is not a typical recession, as it was not preceded by a boom. This recession has been an unforeseen shock to the economy through the forced temporary closure of businesses and restrictions on the movement of people to stop the spread of COVID-19. Therefore, it is likely that recovery after this recession will be much swifter than expected with a typical recession.

With restrictions now easing around the country and people gradually returning to their workplaces, there is optimism that a recovery is already underway. The latest National Australia Bank Business Confidence index has recovered to above 0 (being as low as -20 last year with a long term average 6), indicating that business conditions are improving. Additionally, most people have still been earning money whilst in lockdown but spending patterns have changed. Hence, there is likely pent up demand, which we are likely to see reflected in Q3 and Q4 GDP figures.

Unemployment increased to 7.4 percent over June 2020, a 2.2 percent increase since March. While this figure remains lower than expected, it does not fully depict the reality of the impact COVID-19 has had on the labour force and this is due to the government's JobKeeper and JobSeeker policies. The impact can be seen in the surge in the underutilisation rate, which increased from 14 percent in March to 19.1 percent in June, and the decline in employment which fell by 0.3 percent from May to June.

Ultimately, risks to the recovery still remain as seen in Victoria with a surge in new COVID-19 cases. Should the number of cases continue to grow and new outbreaks occur around the country, positive growth in the economy will be at risk and the recovery could be delayed.

AUD: USD performance (Q2 2019 – Q2 2020)



AUD FOREX forecasts

	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021
USD	0.71	0.71	0.71	0.70	0.69
GBP	0.55	0.55	0.55	0.54	0.54
EUR	0.61	0.61	0.60	0.60	0.60
YUAN	4.92	4.85	4.77	4.79	4.77

Economic data

GDP annual growth rate	0.5% Sept 19 – Dec 19	-0.3% Jan 19 – Mar 20*	0.8% Decrease
GDP quarterly growth rate	2.2% Dec 19 – Dec 19	1.4% Mar 19 – Mar 20*	0.8% Decrease
Inflation	2.2% Mar 20	-0.3% Jun 020	2.5% Decrease
Unemployment rate	7.1% May 20	7.4% Jun 20	0.3% Increase
Business confidence index	-20 May 19	1 May 20	21 Increase
Interest rate	0.25% Mar 20	0.25% Jun 20	0% Change

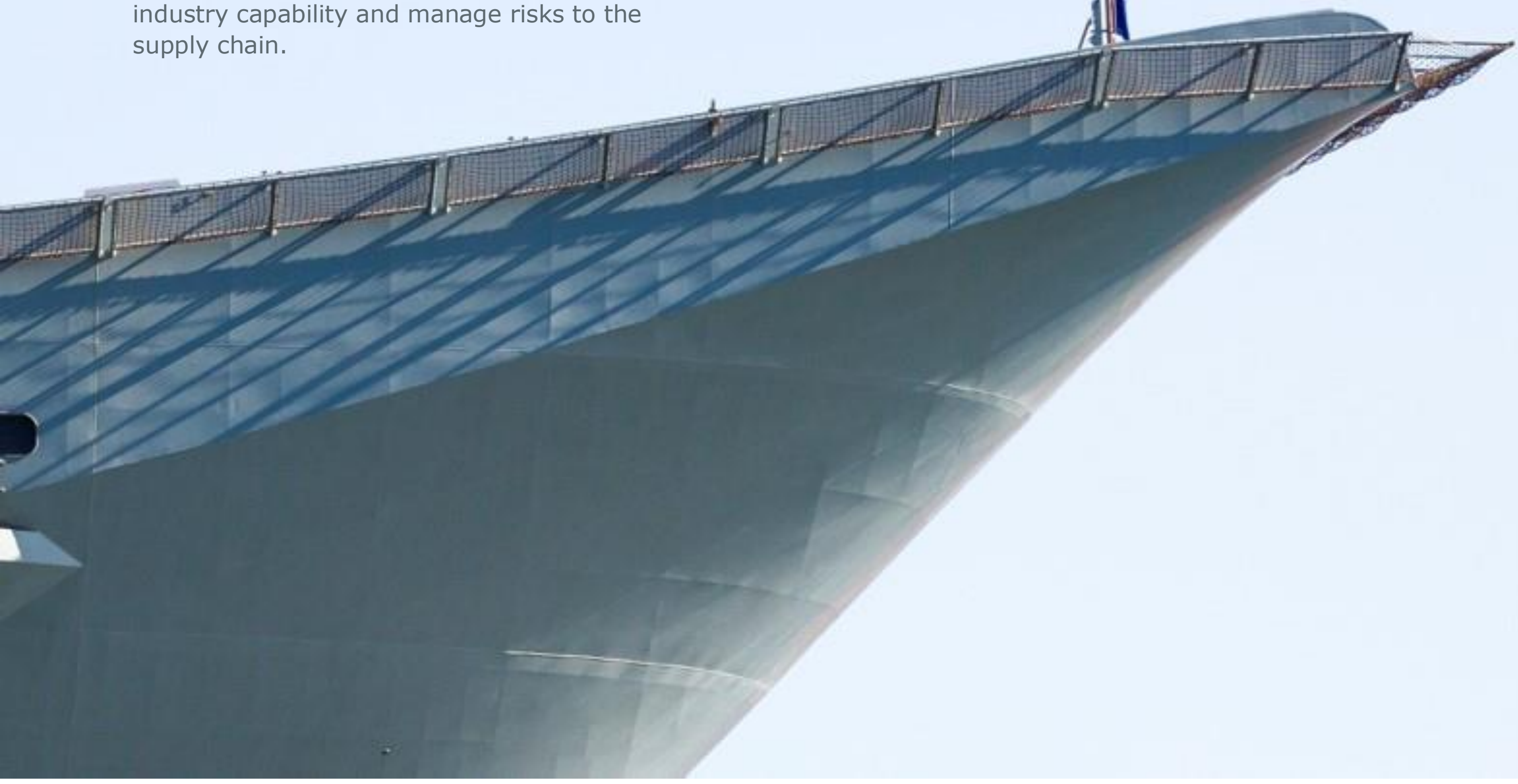
*Q2 data not available

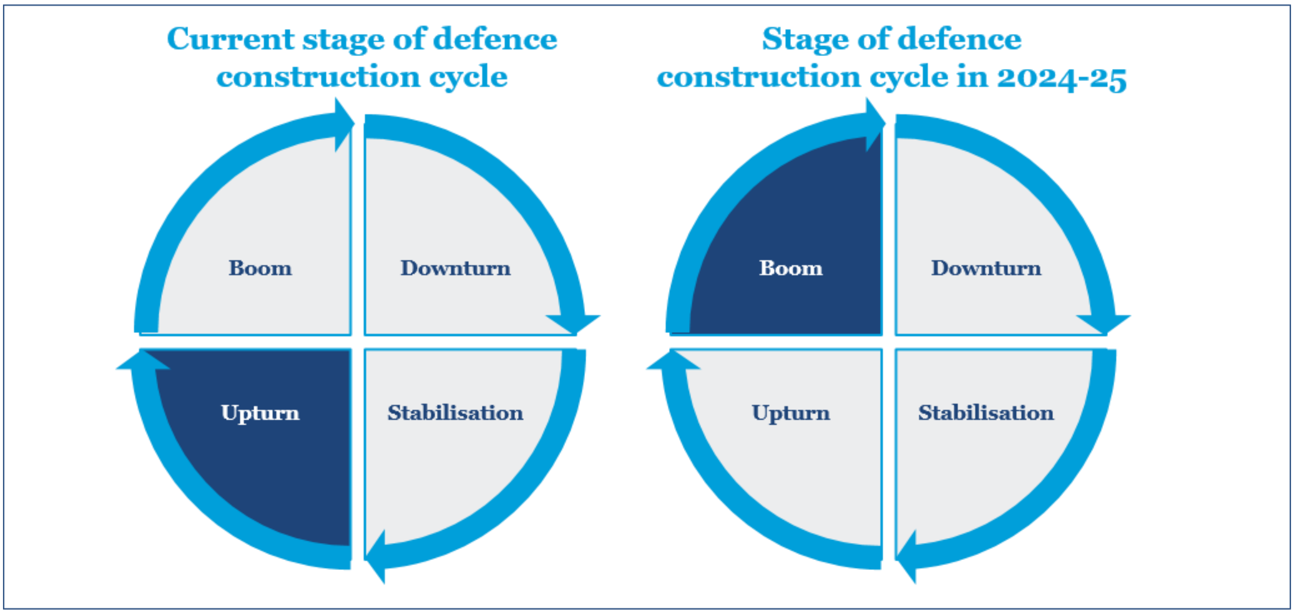
Three areas where the Australian defence sector can increase its capital efficiency

The Australian defence sector has continued to invest during the pandemic with the Australian Defence Force in a period of unprecedented change as it makes a strategic realignment to transform and become more agile, adaptive and capital efficient.

To regenerate and expand its maritime capabilities, deliver a fifth-generation air force and enhance the mobility and security of its land forces, the Australian Government has launched the 2020 Defence Strategic Update which pledges to invest $270bn over the coming decade into new and upgraded defence capabilities. This builds further on the 2016 Defence White Paper where approximately $200bn was earmarked for forward estimated budgets. The most recent update sees annual spending in defence more than doubling in the next decade to 2030.

As the Australian Defence Force and Australian Defence Industry look to remain responsive to the challenges of today and to those in the future, there are three areas in which the defence industry can become more agile and adaptive in order to access the right skills resources, bolster industry capability and manage risks to the supply chain.





Bolster industry capability

The Australian Government Department of Defence currently engages over 4,000 businesses Australia-wide. The marketplace is characterised in Australia by a few multi-national prime contractors and a substantial pool of fabrication and component distribution organisations, but with gaps in mid-tier systems integration and design capabilities. Furthermore, the capability of organisations, is often challenged with regard to complying in areas such as cyber-security, program management, cost/value management and quality management, which are demanded by both defence primes and defence itself.

For defence to gain access to leading-edge innovation, skills and production capacity to meet the requirements of future programs, there is a need to bolster local industry capability and capacity.

Federal and state governments are already working to address these gaps, with organisations such as the Centre for Defence Industry Capability (CDIC), the Naval Shipbuilding College and the Defence Science & Technology Group providing the link between government and industry to drive development.

One identified area for further development is the need for targeted investment to be linked to specific local industry capability objectives. To support the major infrastructure investment over the past ten years in Australia, capacity and capability within this sector has been bolstered through positive migration support. A similar approach should be considered to enable the delivery of future defence projects.

Bolstering industry is not just about developing technical capabilities. Enhancing the delivery of major defence programs is critical at an organisational and cultural level if the investment in defence is to meet its sovereign and inward investment objectives.

By identifying and adopting new ideas, technologies and processes from other sectors Australia will increase its defence sector capability and will keep up with technological, social and cultural changes seen in other developed countries. An example of this can be seen in the UK, where the transformation agenda from the UK Ministry of Defence was centred on evolving commercially to put the right people, responsibilities and skills in place.

Access to the right skilled resources

In the next six to ten years, the defence industry will accelerate military modernisation by implementing robotics, immersive technologies and quantum computing into projects. To do this successfully, Australia must have access to the right people with the right skill sets.

With a limited number of recourses, there is a lot of competition with other sectors within the construction industry.

In order to develop a strong, sustainable and secure Australian workforce, which supports and understands cutting edge innovation, there is a requirement to upskill blue collar workers in areas such as program management, 3D modelling, engineering and system integration.

To deal with the immediate pressures, the defence industry needs to have a tight focus on defence planning and alignment with broader initiatives in order to manage the limited skilled resources required to deliver complex programs. Before the COVID-19 pandemic, procuring resources from overseas would have been a viable option for the industry. Given the situation that COVID-19 has created with border closures and travel restrictions, the need to upskill the local labour force is now greater than ever.

Focusing on long-term objectives, the Australian Government has committed to a $3bn investment in innovation, science and technology over the next decade.

Part of this strategy includes the Schools Pathways Program, the Defence Industry Internship Program and a new Skilling Australia's Defence Industry Program which will equip the sector with the skilled workforce it will require. Additionally, the defence sector plans to continue to partner with universities to offer defence-oriented courses across a range of disciplines in order to develop a larger and more skilled workforce.

Managing supply chain risk

The COVID-19 pandemic has disrupted global supply chains and has highlighted the potential vulnerability to local supply chains in providing critical defence supplies and equipment. The Australian Defence Force relies on materiel from other parts of the world both directly (in terms of major systems) and indirectly (in terms of components within systems built and integrated in Australia). If these necessary materials cannot be accessed when needed, it can significantly impact Australia's national defence capability. This need has been recognised by defence in recent programs, and in response a strong focus on establishing sovereign capability has been implemented, particularly for key defence assets such as the Future Submarine Program.

With increased strain on the global supply chain and rising political tensions between major nations, supply chain risks are prevalent. Not only are these risks associated with physical disruptions, but there are also risks associated with cyber-security that can impact Australia's supply chain. Such attacks can directly compromise military capability and operations and can also drive disinformation and destabilising interference in economic, political and social systems and infrastructure.

To minimise vulnerabilities in Australia's supply chain, critical infrastructure and support services, the Australian Government needs to understand their supply chain risk exposure; not just from direct suppliers to government, but from these suppliers' extended supply chains.

Such understanding requires deep analytics and situational awareness of complex supply chains, and a willingness to invest where sovereign capability requirements are identified.

Getting it right

Recent global events have further underpinned the need for establishing sovereign capability in Australia.

There is bi-partisan political support for ensuring the Australian Government and the Australian Defence Force have the necessary assets at their disposal to protect Australia's sovereign interests.

The Australian Government has identified the need to invest in specific areas to provide the sovereign capability and independence that the new global reality requires. The key to getting it right with these investments is a structured approach to defining and managing outcomes, together with an ability to adapt and pivot in a rapidly changing environment. Strategic procurement models and rigorous program management of defence projects will help to achieve this agility and underpin successful outcomes.

Today, Turner & Townsend is proud to support both Government and the Defence Industry on major projects around the world. Our Australian defence team is already helping major programs to manage complex interfaces between procurement, program management and industry capability. With the future challenges ahead, we believe that adopting program and portfolio management rigour across industry development, together with a strategic view of procurement and global supply chains, will help Australia meet the needs a rapidly changing world.

Turner & Townsend globally continues to invest in the defence sector which has recently seen the UK Ministry for Defence become our 4th biggest client globally.

About Turner & Townsend

We are an independent professional services company specialising in programme management, project management, cost and commercial management and advisory across the real estate, infrastructure and natural resources sectors.

With 110 offices in 45 countries, we draw on our extensive global and industry experience to manage risk while maximising value and performance during the construction and operation of our clients' assets.

Our team

Matt Billingham
Head of Real Estate

matt.billingham@turntown.com

Dave Liddle
Head of Cost Management

dave.liddle@turntown.com

Simon Kearney
Director – Real Estate

simon.kearney@turntown.com

Alan King
Defence Sector Lead

alan.king@turntown.com

Jason Veale
Defence Sector Project Delivery
jason.veale@turntown.com

Greg Parkinson
Defence Sector Procurement

greg.parkinson@turntown.com