

EXECUTIVE SUMMARY

Welcome to the second Queensland Major Projects Pipeline Report (the Report) developed by the Queensland Major Contractors Association (QMCA), Construction Skills Queensland (CSQ) and the Infrastructure Association of Queensland (IAQ). During this period, Queensland experienced a substantial boom and bust cycle in construction activity and major project work.

The key finding of this Report is that major project work has risen by 58% in 2017/2018 to \$6.9 billion after two successive years of low activity. Subject to level of funding commitments for 22 credibly proposed projects, activity in 2018/2019 is forecast to be retained at a similar level. However, recovery in activity may be short-lived and decline again in 2019/2020 due to an identified lack of viable replacement projects.

Maintaining recent momentum is therefore the core challenge facing the state, requiring a range of initiatives to improve levels of funding for infrastructure, ensure capability and capacity to manage a growing pipeline and, fundamentally, provide positive conditions and frameworks that support the economy's growth engines: public and private investment. Given rising major project activity in other states, and the need to provide infrastructure to meet growing demand in Queensland, governments need to consider how they can raise additional funding for infrastructure projects, accelerate existing projects or stimulate private investment. Maintaining a stable and mildly growing pipeline of major project work from here will not only support economic growth and the sustainability of the major projects industry, but importantly will likely cost the government much less than if the projects were undertaken later in the cycle or in a more heated environment.

Industry can feel more confident about investing in new equipment, productivity enhancing initiatives and skills development if they are given reasonable lead times to prepare in the form of a clear, long-term major projects pipeline – and if governments and procuring agencies implement supportive policies.

This year's Report provides a comprehensive list of major project work, together with analysis on the corresponding level of construction activity this entails and the subsequent demand for skilled construction labour. This analysis is based on both the completion of existing projects and the likelihood of potential projects proceeding. A complete list of major projects considered for this analysis, and the explicit assumptions for each project regarding work done and construction workforces employed each year, are provided in the Appendix at the end of this report.

As well as presenting the pipeline, the Report discusses the key economic settings where major project activity is taking place, for Queensland and Australia, together with global trends.

Given rising major project activity in other states and the need to meet growing demand in Queensland, governments need to consider how they can raise additional funding for infrastructure projects, accelerate existing projects or stimulate private investment

KEY FINDINGS

— **The total value of 190 projects identified in the 2018 pipeline is \$39.9 billion** (Engineering Value), compared to 166 projects valued at \$39.1 billion in the 2017 pipeline. However, the value of funded work in the pipeline is only \$23.8 billion, with 98 public and private projects still awaiting funding commitments.

— **New public and private investment** – including projects in the Major Projects Pipeline – is having a broader, stimulatory effect on the Queensland economy.

— **Public and private sector investment** – focused in roads, rail, telecoms and electricity – is driving the current recovery in major project work.

— **While major project activity has risen from the 2016-2017 trough** – the main challenge will be keeping activity at sustainable levels into the future given the weak outlook for currently funded work (Figure 1).

— **The value of public sector projects that have funds committed** or are currently under procurement now outstrip the private sector by a factor of 6 to 1. The ability of governments to identify and deliver on their planned infrastructure has therefore assumed even greater importance to the continued short-term sustainability of the major projects contracting sector.

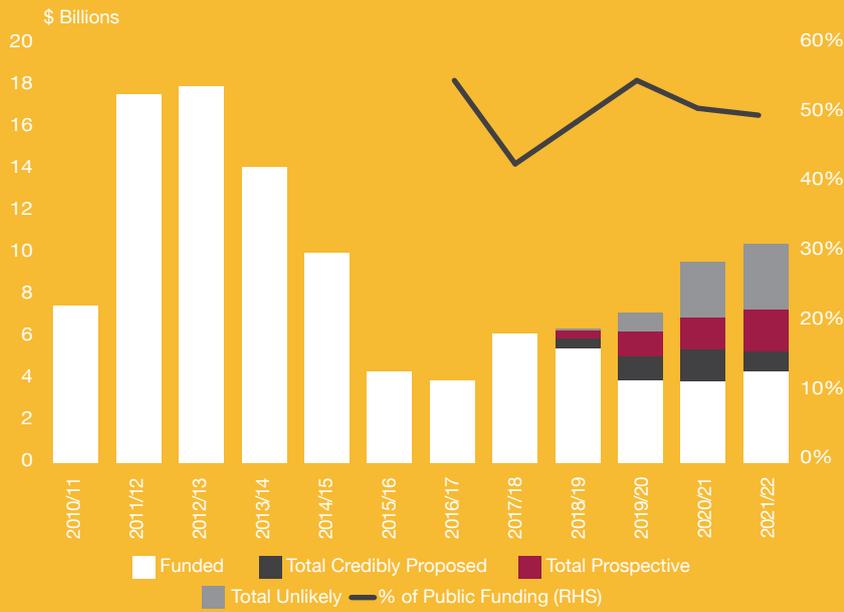
— **Northern Queensland has the strongest growth** prospects in the pipeline for all regions (including funded and unfunded work) compared to the past five years, but South East Queensland still commands the largest share of major projects activity (Figure 3).

— **Queensland still lags New South Wales and Victoria** in terms of funding and delivering infrastructure. As New South Wales and Victoria further ramp up infrastructure investment over the remainder of this decade, challenges may re-emerge in procuring construction services in Queensland. This is a challenge that will be compounded not only by digital disruption but by Queensland's and Australia's changing demographics – and in particular the ageing of the workforce, as identified in the workforce implications section of the Report.

17%
of the overall
project pipeline
(\$6.9B) is **unlikely**
to proceed

Figure 1

Major Projects Work Done: All Segments



The total value of 190 projects identified in the 2018 pipeline is **\$39.9b**

Figure 2 – Outlook by Sector

Total Pipeline of Work Over the Next Five Years

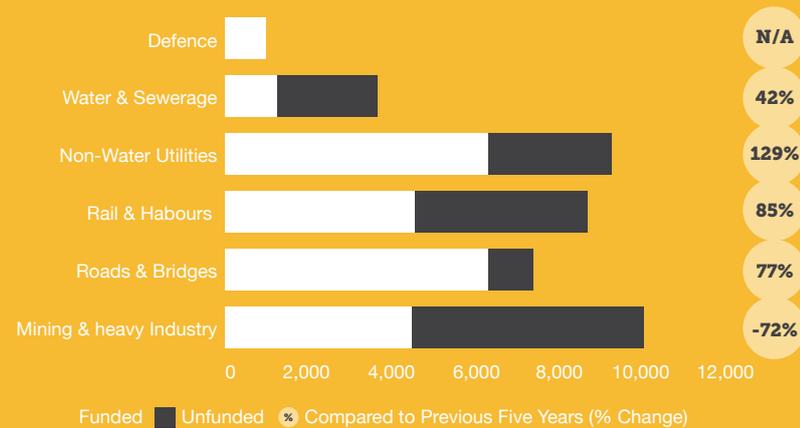


Figure 3

Outlook by Region Over the Next Five Years

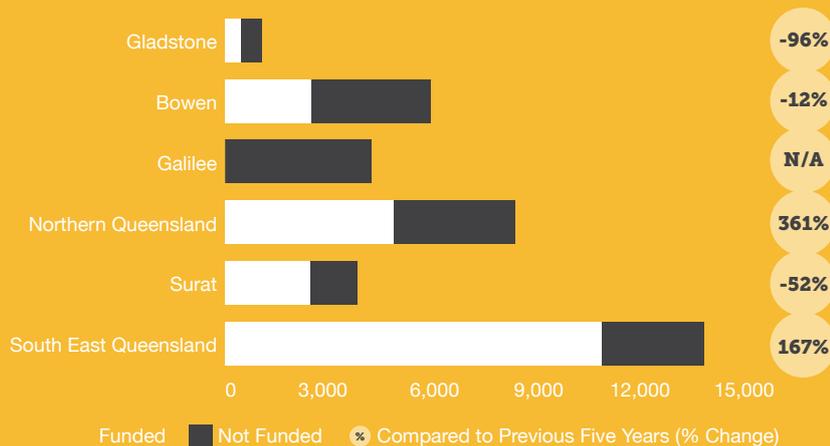


Figure 4

Major Project Work Done and Queensland State Economic Performance



LONG-TERM CHALLENGES AND RECOMMENDATIONS

While investment in major engineering projects has improved in Queensland, the general outlook for growth in investment, employment and the broader economy is not exactly spectacular. Rather than the high growth rates experienced during much of the 1990s and 2000s, economic growth (as captured by Gross State Product or GSP) is expected to average around 2.8% per annum through the next five years, with Queensland State Final Demand (SFD) growth averaging a slightly better 3.3% per annum. Historically, Queensland has significantly outperformed the Australian economy, however the next five years only sees very marginal outperformance overall.

It's unsurprising that there is a correlation between major project work done and Queensland's economic performance – with the latter represented by growth in SFD and GSP. Major project work has strong multiplier impacts on the economy, particularly when it uses local labour and resources. Essentially, additional major project work requires other industries to boost their outputs also – both directly to service the initial increase in construction output, and then indirectly to satisfy the subsequent expansion in the other industries. The overall gross multiplier (or total direct requirement) for heavy and civil engineering construction is over two, suggesting that every dollar increase in major project work “requires” an overall boost of over two dollars across the broader economy.

Apart from the short-term impacts, investment in critical infrastructure major projects can also boost long-run economic growth by improving productivity (e.g. reducing transport times and costs). This boosts the economy's “speed limit” before it runs back into capacity constraints.

Overall, sustaining growth in the Queensland economy requires putting into place plans and policies that will encourage and sustain both public and private investment in the state over the long-term. This means addressing funding issues highlighted in the 2017 Major Projects Pipeline Report, continuing to develop new productive infrastructure projects, and providing a supportive environment for privately funded projects to proceed.



Port Drive upgrade

There has been a 64% reduction in credibly proposed projects from \$11.5 billion identified in our 2017 Report to just \$4.1 billion in this year's Report, which indicates challenges to sustaining major project work at 2017/2018 levels over the next two years. In the short-term, funding for \$4.1 billion of credibly proposed projects is required and detailed business cases are needed to further support \$5 billion of prospective project investment decisions.

Over half of the private sector projects identified in the Pipeline are either Prospective or unlikely to receive funding approval in the medium term. This is leading to a distinct lack of replacement projects for those currently under construction and is skewing the investable project ratio towards public sector projects. The challenge is to understand the barriers that are preventing greater private investment in existing or new private infrastructure – be that regulation, approvals, risk on financial return, perception of sovereign risk or confidence in the long-term outlook for the region.

Meeting the infrastructure challenge requires all levels of government to develop policies that align their infrastructure priorities and streamline approval of their project funding co-contributions. This is particularly important in Queensland as the split in policy between Commonwealth and State on long-term asset leasing and capital recycling means using this option to raise infrastructure funding is not possible in the medium term, unlike the high-growth states of New South Wales and Victoria. Policies are also required that encourage private sector proponents to invest in their existing infrastructure while attracting new investment to Queensland.



Encourage the adoption of new technologies that increase the productivity of the construction industry

There are initiatives that governments can undertake to boost their funding capability and deliver the infrastructure Queensland requires, including:

– Continue to mature the development of independently prepared business cases and ensure that public infrastructure projects are selected through transparent cost benefit analysis (CBA). To ensure continued regional investment, regional projects in existing areas or networks with low populations or relatively low initial demand may require more careful consideration of business case benefit-cost-ratios of less than 1, taking a longer term and wider view of the project benefits.

– Improve identification of specific markets, networks or regions where privately-led infrastructure proposals can provide critical infrastructure. For different reasons, the State-sponsored Market-led Proposal initiative and the Commonwealth-sponsored Northern Australia Infrastructure Facility initiative have yet to stimulate substantial increased economic investment and major project activity. Rather than await proposals, the formulation of specific prospectus by government that invite interest in developing desirable infrastructure may assist both international and domestic private investors to actively participate.

– Provide increased certainty of long-term Commonwealth funding streams through expanding the number of City Deals. The Townsville City Deal struck in December 2016 was the first in Australia and an important start. A South East Queensland (SEQ) Regional City Deal has the potential to be the foremost City Deal in the nation involving eleven separate Councils. This second generation City Deal can provide a structured, coordinated plan for the long-term funding of SEQ infrastructure by all tiers of government.

– Research, identify and work to remove barriers to private sector infrastructure investment. The current value of funded private sector projects announced or being procured is less than 20% than those funded by the public sector. This indicates a significant skew from the historical average of 50-50 public-private investment in major engineering projects.

– Do not rule out infrastructure debt for capital investment. In the right circumstance where productive economic infrastructure is identified through an independent business case, increased debt funding can have a powerful impact on economic growth.

– Provide increased certainty of Commonwealth and State contributions to funding of transport projects on the National Land Transport Network. Since last year's Report, there have been further public disagreements by the respective governments on major contributions towards funding major projects on the M1 motorway and Cross River Rail. This decreases confidence and leads to uncertainty of the transport projects in the Pipeline.

– Maintain strong oversight and monitoring of government capital works expenditure and breaking the underspend pattern on planned infrastructure investment. As highlighted in the previous Report, there continues to be sharp differences in planned public investment (measured as 'purchases of non-financial assets' in various Budgets) and actual spending outcomes. The 2016/17 State Budget, for example, planned for \$8.3 billion in such investment, which the recent 2017 Mid-Year Fiscal and Economic Review (MYFER) confirmed to be \$7.3 billion – around a \$1 billion shortfall.



Logan Enhancement Project

The existence of a highly skilled and efficient engineering and contracting market in Queensland can help to stretch tax-payer funds and attract private sector proponents looking to develop low-cost infrastructure and exploit global markets. For these reasons governments, private sector proponents and major project participants could collectively explore how to drive out waste, improve productivity and improve project risk allocation through the following:

– Utilise accurate capital planning, state infrastructure plans and long-term project pipelines such as in this Report to give industry the best possible chance of participating in major projects.

– Increase collaboration between infrastructure developers and the construction industry, through the use of contract forms that seek to maximise value through reduction in waste, reward innovation, lead to genuine improvements in productivity and best allocate risk.

– Increase efficiency in procurement of infrastructure projects through use of more selective and collaborative tender processes that recognise the significant cost involved in bidding for large infrastructure projects (costs that ultimately need to be recovered either through direct reimbursement or mark-up).

– Strengthen the focus on workforce planning and skills development initiatives so that demand for key onsite skills can meet the infrastructure activity.

– Develop and maintain a plan for construction materials so that the demand and supply balance for scarce products can be quantified, mapped and emerging gaps identified early in the process. Similarly, attention needs to be focused on the development and maintenance of a construction transport and logistics plan to avoid bottlenecks, delays and rising costs for construction materials as a result of congested road transport networks.

– Encourage the adoption of new technologies that increase the productivity of the construction industry. These can include offsite modular construction, automation, digitisation, use of Building Information Modelling (BIM) to enhance supply chain collaboration and investigate better forms of knowledge transfer.

– Encourage the development of formal dispute avoidance strategies that include the use of effective collaboration to develop construction price certainty and allocate project risk using best practice.

