



BIS OXFORD
ECONOMICS

CONSTRUCTION ROUNDTABLES

FINDINGS REPORT

OCTOBER 2018

BIS Oxford Economics

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1. EXECUTIVE SUMMARY

In late September 2018, the Department of Infrastructure, Regional Development and Cities (DoIRDC) asked BIS Oxford Economics (BISOE) to facilitate two roundtables between industry and the Australian Government and prepare a report to take to the COAG Transport and Infrastructure Council (TIC) later in November 2018.

The purpose of the roundtables was to better understand the implications of the Australian Government's \$75 billion, decade long, infrastructure investment pipeline on the market — focusing on value for money for Australian taxpayers and the development of a competitive, sustainable industry that encourages the participation of small, medium and large enterprises.

The Australian construction market is highly affected by cyclical market conditions in the short run. Currently, the market is in a cyclical upswing, which is contributing to cost pressures.

However, there are also more systemic, long run drivers of costs in the construction industry which affect productivity, efficiency and “value for money” procurement and delivery. These include the level of investment in skills and capabilities, the costs imposed on firms as a result of procurement and contracting arrangements, the allocation of risks in project contracts and opportunities for mid and lower tier contractors. This was the focus of the roundtables and this report.

Outcomes

While the Australian Government's infrastructure pipeline is historically large, the roundtables confirmed that industry retains confidence in its ability to deliver so long as they are given enough lead time — via a coordinated and coherent project pipeline — and are given the opportunity and incentive to fully participate through competitive and sustainable procurement and delivery processes.

Ultimately, only a competitive and sustainable construction industry — one that is able to fully participate in the procurement process and is incentivised to invest in its own capability and capacity to deliver — can offer true value for money for the Australian taxpayer, and the long run development of industry expertise and experience.

Industry roundtable discussions revealed, however, that there remain constraints in the procurement process that currently prevent optimal value for money outcomes. These include:

- Costly and inefficient procurement processes, terms and conditions
- Inefficient allocation of risk in construction contracts
- Lack of standardisation of construction contracts
- Not fully utilising the range of procurement approaches
- Lack of benchmarking for performance in the construction industry

The consequence of current, non-collaborative procurement approaches is that government is currently not maximising industry participation and competition in construction procurement. Through the use of prescriptive and increasingly

complex contractual approaches, there has been an unsustainable transfer of risk to the private sector (from head contracting Tier 1s, cascading through to lower tiers), impacting on broader industry profitability and its ability to invest in capacity and capability. Current processes and outcomes are not being adequately benchmarked and there appears to be little consequence for high or low contractual performance.

Directions for Consideration

These challenges are not new, and solutions are available. Industry roundtables highlighted the need for a 'step change' in how Australian governments engage with the construction industry to achieve better value outcomes:

"Incremental change is one step forward and two steps back in this country... We need real change in this country looking at real best practice models and we're not going to get there through sporadic growth."

In particular, there is a need for a more collaborative approach between governments and the construction industry that recognises these constraints to truly competitive, value for money outcomes, and works together to provide solutions.

Such collaborative approaches have been undertaken overseas. The industry roundtables highlighted the United Kingdom as a strong role model to base policy, as well as the recent *10 Point Commitment to the Construction Industry* initiative from the NSW Government, which was well supported. This Plan includes a focus on the following issues:

1. Procure and manage projects in a more collaborative way
2. Adopt partnership-based approaches to risk allocation
3. Standardise contracts and procurement methods
4. Develop and promote a transparent pipeline of projects
5. Reduce the cost of bidding
6. Establish a consistent Government policy on bid cost contributions
7. Monitor and reward high performance
8. Improve the security and timeliness of contract payments
9. Improve skills and training
10. Increase industry diversity

Considerations for the Australian Government

While the procurement and delivery of most major infrastructure projects is managed by state and territory governments, the views expressed in the industry roundtables suggested that there was a role for Australian Government leadership in helping solve these issues.

In particular, industry participants considered that:

- The Australian Government should work more closely with the state and territory governments to develop a set of **consistent standards** for procurement nationally, which could help lower costs and achieve greater value for money outcomes.
- The Australian Government should, furthermore, be supportive of jurisdiction-led initiatives such as NSW's 10 Point Action Plan, as an example of how governments can support the construction industry and its suppliers and work towards achieving these outcomes.
- The Australian Government may 'take the lead' in using more collaborative procurement approaches on its own signature projects, such as Inland Rail or Western Sydney Airport.
- The Department of Infrastructure, Regional Development and Cities should continue to engage with contractors and peak bodies on issues around government procurement processes and costs of tendering.

Notwithstanding these measures, the industry roundtables have highlighted a number of areas in which there may be scope for governments to do more to support the construction industry to efficiently and cost effectively deliver these significant investments in publicly funded infrastructure.

There is scope for governments to collaborate and identify common issues across jurisdictions. An agreed set of high level principles can provide a framework for individual governments to consider specific initiatives. State and territories need to consider specific initiatives in the context of their existing arrangements, local market issues and their ability to be implemented.

2. INTRODUCTION

2.1 SCOPE AND OBJECTIVES

In late September 2018, the Department of Infrastructure, Regional Development and Cities (DoIRDC) asked BIS Oxford Economics (BISOE) to facilitate two roundtables between industry and the Australian Government and prepare a report to take to the COAG Transport and Infrastructure Council (TIC) later in November 2018.

The purpose of the roundtables was to better understand the implications of the Australian Government's \$75 billion, decade long, infrastructure investment pipeline on the market — focusing on “how procurement policy and practices can deliver better value for taxpayers and foster the development of expertise and experience in the construction sector”.¹

The industry roundtables took place in Brisbane on the 19th October 2018 and Melbourne on the 29th October 2018.

The Australian construction market is highly affected by cyclical market conditions in the short-run. Factors affecting these market conditions include levels of investment, supply of inputs and global prices. Currently, the market is in a cyclical upswing, which is contributing to cost pressures in the construction industry.

However, while these factors are cyclical in nature, there are also more systemic, long-run drivers of productivity and development of the industry. These include the level of investment in skills and capabilities, the costs imposed on firms as a result of procurement and contracting arrangements, the allocation of risks in project contracts and opportunities for mid and lower tier contractors.

These underlying issues are not necessarily driven by current high levels of activity but, as they impact on cost pressures and the development of the industry, have been brought into sharper focus during the recent upswing. These issues, and the potential scope for governments to take action to address some of them with respect to government funded projects, have been the focus of much of the discussion at the industry roundtables. For example, the potential for governments to reduce the cost of bidding for projects through standardisation of contracts, and careful consideration in allocating risks to the party best placed to manage them cost effectively.

This report is the outcome of this project. As well as presenting findings from the industry discussions, this report also provides contextualising information from BIS Oxford Economics regarding current market conditions in the construction industry.

¹ McCormack, M. (2018) “Encouraging a Competitive Infrastructure Market”, Media Release, MM169/2018 – 21 September 2018, viewed 30th September
http://minister.infrastructure.gov.au/mccormack/releases/2018/september/mm169_2018.aspx

2.2 STRUCTURE OF THIS REPORT

This report is structured as follows:

- Executive summary
- Introduction
- Current market conditions
- Issues discussed
- Summary of industry discussions
- Implications and directions

3. CURRENT MARKET CONDITIONS

3.1 CYCLICAL FACTORS AFFECTING THE MARKET

The Australian construction market — encompassing residential building, non-residential building and engineering construction — remains highly cyclical by nature, driven by underlying cycles in investment.

Private investment cycles (such as in mining, housing, commercial building and some parts of the infrastructure market) are essentially natural stock cycles with uncertainty and long lead times between planning and completion influencing the stocking process. The cycle is about uncertainty: about underlying demand, about the amount of investment in other new capacity currently being undertaken and about prospective yields and prices.

Public investment cycles are also observable over time, along long term trends. While Australian Government's infrastructure investment has, in the past, been targeted as a counter cyclical spending measure to achieve macroeconomic objectives, lags in implementation may tend to make the actual expenditure pro-cyclical. State and territory governments, meanwhile, are less concerned with managing the economy. Their levels of expenditure are more closely linked to current revenues and borrowing limits. They do not control interest rates and need to keep budgets balanced to appease ratings agencies. Given that State governments have a much larger capital works budget, combined, than does the Australian Government, overall infrastructure spending by Australia's governments tend to be quite strongly pro-cyclical — i.e. when their revenues are strongest — exacerbating the business cycle in Australia.

When these investment cycles become highly synchronised, as during the 2000s, the resultant boom and bust in construction has very large impacts on the macroeconomy (in terms of incomes and employment, including multiplier impacts) as well as the industry itself (in terms of prices for key domestically sourced inputs and construction services, capacity and capability).

Recent cycles

Cycles in investment have continued to impact the structure of the construction market and its growth in recent years. In particular, there has been a very strong cycle in residential investment (now peaked) as well as rising levels of commercial and industrial building and infrastructure investment (ongoing), particularly in New South Wales and Victoria. This has helped offset a very large decrease in resources investment since the 2013/14 peak.

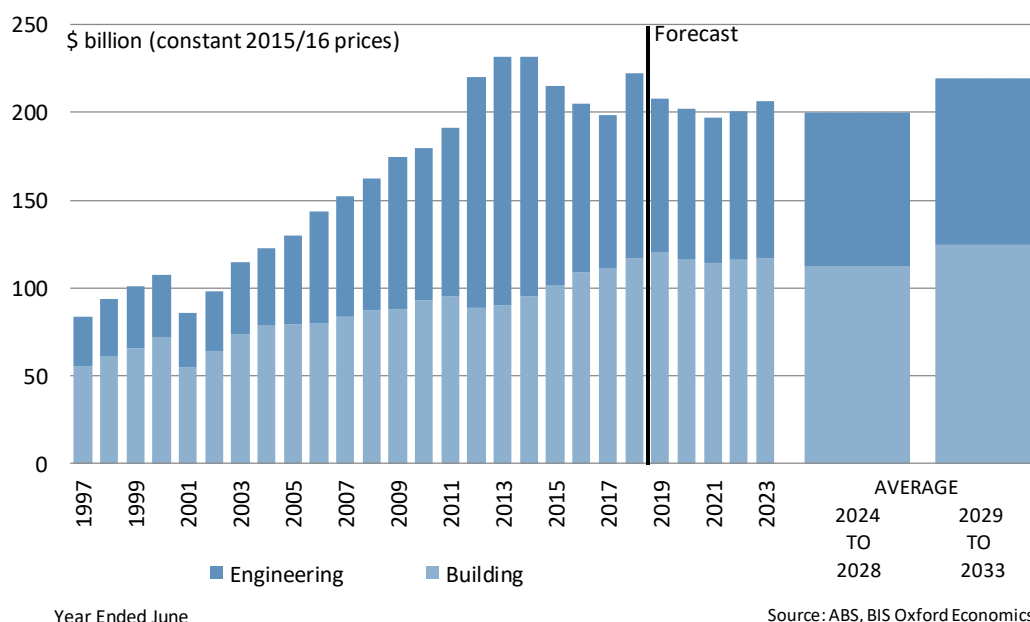
In many ways, the current cyclical upswing in non-resources investment and construction activity is a consequence of the massive resources investment cycle which preceded it. The resources investment boom and the associated rise in the Australian dollar drove a structural change away from other trade-exposed industries and thereby weakened investment in non-mining industries (tourism, education, finance, manufacturing and agriculture) and regions. Conversely, the resources investment bust and the associated fall in the Australian dollar is reversing that structural change and rebuilding activity in trade-exposed industries and regions.

3.2 CONSTRUCTION INDUSTRY STATE OF PLAY

3.2.1 Total construction activity and outlook

For more than a decade, the resources investment boom radically changed the profile of the construction market in Australia. This investment wave helped drive annual construction work done in Australia from \$82 billion in 2000/01 to a peak of \$226 billion in 2013/14. During the period, engineering construction grew almost four times, while non-residential and residential building activity grew around 90% and 60% respectively. Although population growth and domestic demand fuelled higher levels of building activity, the resources investment boom also underwrote a recovery in publicly funded infrastructure construction activity through the strong increases in tax revenues (through higher profits, wages and royalties) at the Federal and State level.

Fig. 1. Australian Total Construction: \$Billion, Value of Work Done



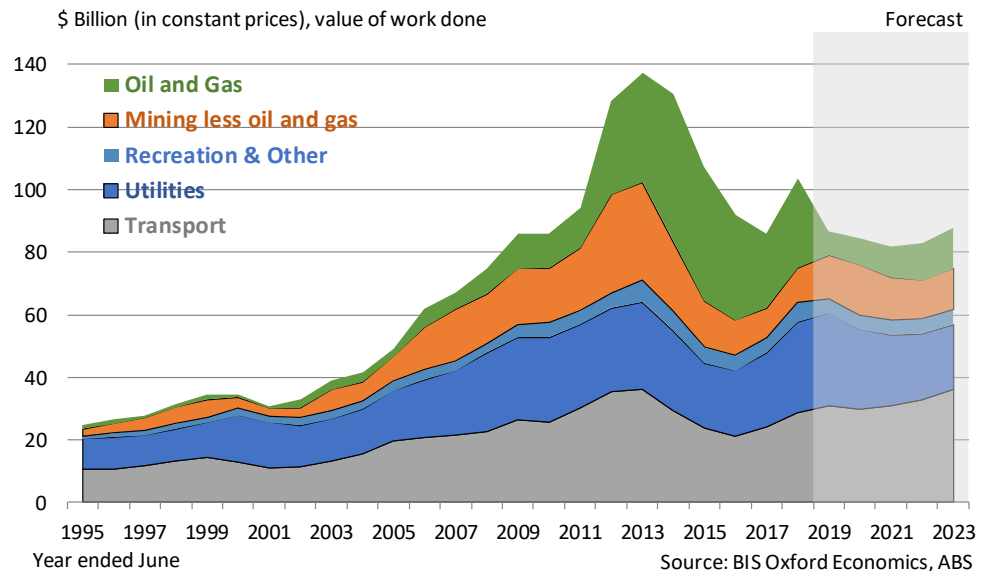
3.2.2 Infrastructure construction activity and outlook

Engineering construction includes the construction of transport infrastructure (roads, railways, bridges and ports), utilities (electricity, water, sewerage, telecommunications and pipelines), non-building recreation facilities and mining and heavy industry infrastructure construction (MHIC). In using this definition, it is acknowledged that a broader measure of infrastructure would also include health and education buildings, as well as plant and equipment that supports our infrastructure networks (such as rolling stock for railways).

As shown in Figure 2, the recent path of engineering construction activity has remained heavily impacted by measured oil and gas construction (a subsector of MHIC). Over FY18, work done in this sub-segment jumped to \$30bn (due to the arrival of the multibillion-dollar Prelude floating offshore platform in the September quarter) but is expected to fall to just \$7bn in FY19 as LNG-related activities move to completion, according to BIS Oxford Economics forecasts. The sheer scale of the decline in this segment is expected to see total

engineering construction fall 16% in FY19, despite work rising strongly in other sectors across transport and electricity. Excluding oil and gas, engineering construction activity in Australia is expected to peak at \$80.3bn in FY19 before easing slightly to FY22 as falling telecommunications (NBN) and electricity (renewables) works more than offset rising transport-related activity.

Fig. 2. Engineering Construction Outlook: \$Bn Work Done



Transport engineering construction includes the construction of roads, bridges, railways and harbours, which collectively amounted to \$29 billion in work done during 2017/18. While down from the peak reached in 2012/13, this is mainly due to much lower harbours activity as several multi-billion dollar iron ore ports were completed. By contrast, current railways and roads work combined (\$27 billion in 2017/18) is similar to the peak levels experienced during the resources boom, and is expected to move higher still from here.

Roads construction grew 15.7% to a record \$20.3 billion in 2017/18 and BIS Oxford Economics is forecasting activity to remain at similar levels over the next three years before moving higher again in the early 2020s, driven by strong Australian Government commitments in the Infrastructure Investment Program, as well as State Government and private sector initiatives.

Railways construction grew 47% to \$6.6 billion in 2017/18, and is now 74% up from the 2014/15 trough. A large pipeline of passenger (metro, light and heavy) and freight rail projects will see record levels of rail construction activity over the next five years, surpassing the peak of the resources boom.

Bridges construction has risen 50% over the past two years, boosted by rising roads and rail works. Activity is forecast to remain above \$1 billion per annum through 2019 before easing back.

Harbours construction fell a further 8.3% in 2016/17 and is down 85% from the 2012/13 peak. A further decline is expected through 2017/18 before recovering slightly towards \$1.1 billion p.a.

Fig. 3. Major Australian Transport Projects Work Done (> A\$2 Billion)

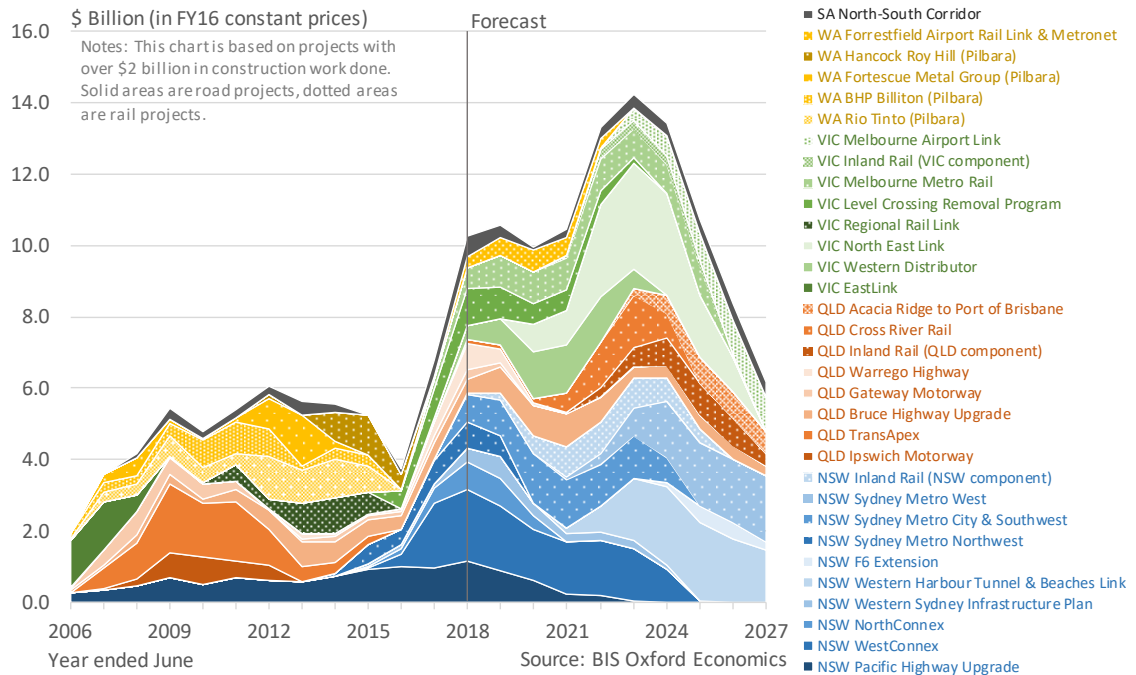


Fig. 4. Major Australian Road Projects Work Done (> A\$2 Billion)

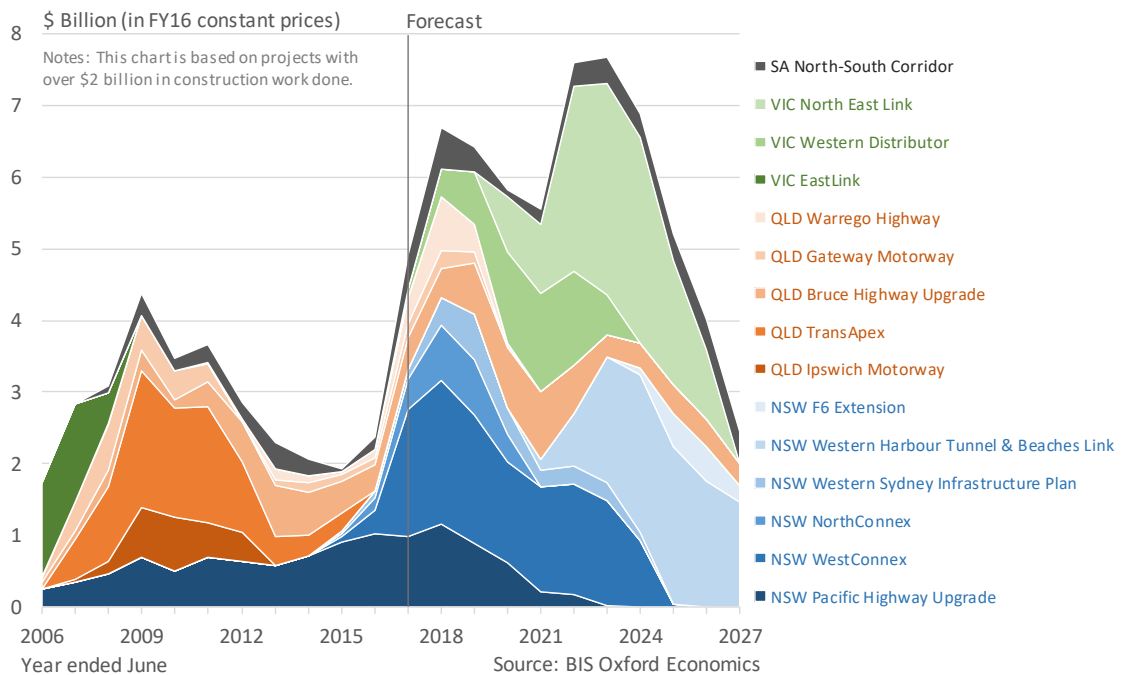
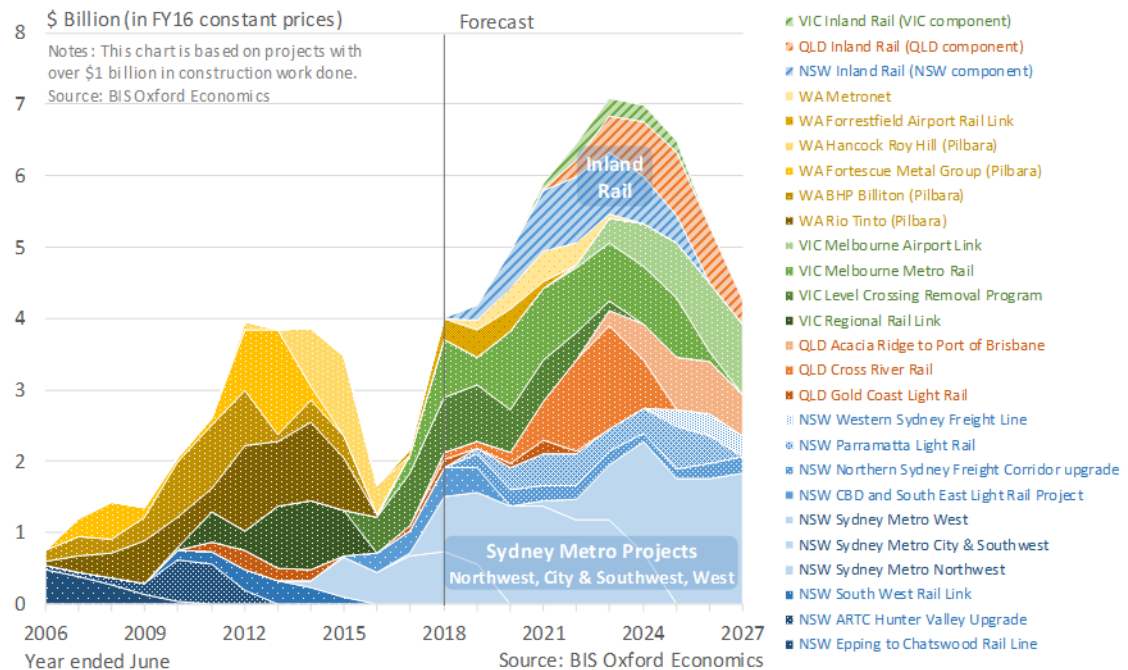


Fig. 5. Major Australian Rail Projects Work Done (> A\$1 Billion)



BIS Oxford Economics forecasts of infrastructure and mining construction – based on an analysis of projects, funding programs and future economic conditions, indicates that the current four year downturn in engineering construction activity (since 2012/13) is likely to continue for three more years, albeit at a more gradual pace, as shown in Figure 2.

4. ISSUES DISCUSSED

4.1 SCOPE AND OBJECTIVES

Through extensive industry liaison, BIS Oxford Economics has identified a number of key themes across the construction sector in response to higher levels of activity, including:

1. Constraints on market resources and capacity to bid for and undertake projects where multiple large projects are in the market at the same time. When there are a high number of tenders, limited bid budgets and access to skills can dilute the quality of bid teams and tender responses.
2. Issues surrounding risk allocation, the pricing of risk and risk mitigation.
3. The availability of professional and trade construction skills when governments release large and highly specialised projects concurrently.

While these key themes are to some extent related to cyclical market conditions, there are elements relating to long-term drivers of productivity and sustainable growth in the industry and which can be issues at any stage of the cycle, such around risk allocation and contracting arrangements. These elements have been the primary focus of the industry roundtables.

4.2 PROMPTED QUESTIONS AT THE MELBOURNE AND BRISBANE ROUNDTABLES:

Do current procurement models encourage partnerships that maximise the opportunities provided by the significant pipeline of infrastructure work?

- *How can governments and industry work together to support fair and reasonable opportunities for businesses across the supply chain to compete for work?*
- *Is “value for money” in a long-term sense, or innovation, valued in the procurement process?*
- *What are the key issues that are preventing contractors from bidding for work, both as the lead or in a consortium? Has this changed over recent years?*

How might ‘unbundling’ larger projects into smaller packages, to support mid-tier contractors to bid effectively, affect risk allocation and value for money considerations?

Is there an issue regarding risk allocation between different size contracts?

- *If so, is there a role for government to address and how?*

Is the timing and sequencing of large infrastructure projects contributing to shortages of materials or skills in the construction sector, or is market capacity responding?

- *In which materials / skills in particular?*
- *How is the sector responding to these peak demands?*

To what extent could greater focus on project sequencing in planning stages help moderate market pressures and capability/capacity gaps?

Do current procurement models encourage investment in industry capacity and capability?

5. SUMMARY OF INDUSTRY DISCUSSIONS

5.1 THEME 1 – PROCUREMENT APPROACHES

At both the Brisbane and Melbourne Roundtables, the opening discussion was prompted by the question:

Do current procurement models encourage partnerships that maximise the opportunities provided by the significant pipeline of infrastructure work?

The participants were in broad agreement that the current procurement models were lacking.

- *“We’ve distorted these procurement models into something that’s different and I don’t think it’s working.”*
- *“I don’t hear any dissent that the market is distorted”*

It has been issue which has been covered in previous forums, including extensive recommendations by the Productivity Commission’s 2014 inquiry into Public Infrastructure.

- *“There is a volume of background material that we can draw on”*
- *“Much of the recommendations about procurement are very similar “*

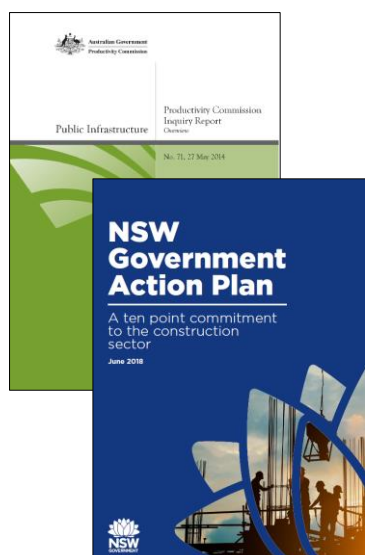
The recently released NSW Government Action Plan² **“A ten point commitment to the construction sector”** was frequently cited as summarising the key issues and providing a blueprint for procurement moving forward:

- *“I think that is heading in the right direction, but getting some traction, that is the challenge”*
- *“If that actually lands and comes into an action ... I think that’s a step change”*
- *“They are going in the right direction”*
- *“That 10 point plan is 95% right”*
- *“From the point of view of the mid-Tier contractors, I agree that the propositions of the 10 point plan ... ought to be pursued with vigour”*

Most of the issues addressed in the NSW 10 point plan were covered throughout the discussions, echoing the first five points extensively, specifically:

1. the need collaborative procurement models,
2. appropriate allocation of risks between levels,
3. standardised contracts for different procurement processes
4. the value of a transparent pipeline of projects
5. reducing the cost of bidding.

We’ve distorted these procurement models into something that’s different and I don’t think it’s working.



Procurement remains expensive, does not encourage competitive participations.

² <http://www.infrastructure.nsw.gov.au/media/1649/10-point-commitment-to-the-construction-industry-final-002.pdf>

Standardized contracts were widely agreed to be a sensible move forward.

- *“Some uniformity in the procurements models is welcome. It is my view that there is a place for all the different types of contract models; there's a place for construction only, there's a place for D& C., there's a place for PPPs, and there's a place for alliances. And I think that they can all exist. Some of the models need adjustment, one of those being PPPs. However, there's a role for all of those.”*
- *“the Commonwealth can only really use the biggest power that its got and that's the money. So, the leveraging of Commonwealth funding for the states to incentivise standardization contracts across the Commonwealth across the Federation, in an if not, why not basis.”*

Procurement is too price focused, where price is mistaken as value for money.

While touched upon in the 10 point plan, there was a broad agreement that the term “value for money” needs to be move beyond the definition of lowest cost.

- *“if you're looking at ... value for money it depends what value of what money means. If it's a person administering one contract for government value for money the cheaper they can get that delivered for the better it is probably for them. That does not mean it's their value for money for the economic growth of the state or county in general.”*
- *“One of the problems is that treasuries often look at the forward estimates in their yearly budgets, not necessary the whole of life costs”*

In addition industry had concerns around how contracts are administered.

- *“One of the challenges the sector has at present is ... the ability of government enterprises ... to administer the contracts on the basis of experience”*
- *“We echo that concern about diminishing procurement skills within government itself ... rebuilding those skills will be critically important”*
- *“Diminished capacity in our clients in a concern at the moment”*

5.2 THEME 2 – RISK ALLOCATION

At both the Brisbane and Melbourne Roundtables, this discussion naturally segued from procurement into risk allocation between contractors and government, and between different size contractors.

Is there an issue regarding risk allocation between different size contracts?

Industry noted that clients don't use the procurement models which allocate risks with those best placed to manage it, in particularly with the head contractor.

All the risks are being passed onto the contractor, which is creating uninsurable conditions

- *"Right at the top of tree ... you have a responsibility to in terms of ensuring that the risk profile, delivery mechanism and procurement method is reasonable"*
- *"Most of the client organisations are looking to de-risk themselves... and the reality is there are some things you can't take the risks for"*
- *"I don't think we're understanding and applying the risk correctly... I think government has to get more comfortable they can and should take appropriate risk levels."*

Observations were consistent that the pipeline of activity overlaid with the structure of risks were creating problems between government and the contractors. Conditions such as fit for purpose clauses inserted into these contracts have been becoming uninsurable.

There is broad agreement that the risks being passed onto the head contractor is being passed through

- *"we are pushing the capacity of the insurance market to be able to deliver these projects"*
- *"The global insurance market has now formally identified Australia as the second most litigious market in the world"*
- *"I'm getting unprecedented levels of requests for scope detail from insurance brokers"*
- *"even Tier 1 contractors are looking at them and say well, 'do we really want to take that risk'"*
- *"nobody can really take on their balance sheets the size of projects coming onto the market"*

Specific observations include

- *"Gap between Tier 1 & Tier 2 is getting larger and larger"*
- *"Tier 2s cannot get involved in the consortium because of the risk profile."*
- *"At the moment... a lot of the mid-tiers cannot participate because they are being compelled to take on risk that can break them."*
- *"From the Tier 2 point of view... there is some widening gaps and we need your support and leadership to help make Australian companies, make the Tier 2s profitable. We don't want to make a lot of money – we are happy with 7%, 8% to 10% on projects, but on average we are probably minus 5% across the board."*
- *"To get a sustainable industry, contractors need to make money...I can assure you... contractors are not making reasonable money"*

CASE STUDY: ORIGIN ALLIANCE

Focusing on what can be done, the contractors were prompted:

How might 'unbundling' larger projects into smaller packages, to support mid-tier contractors to bid effectively, affect risk allocation and value for money considerations?

One very well received comment outlined how an innovative procurement model was employed in Queensland a decade ago to deal with a similar problem currently facing the construction sector.

"As an example... when the heat was on in the Queensland sector and there was a real shortage of contractors, suppliers, consultants... The government showed some real courage up there when they put out what was called the Origin Alliance contract.

"They put this contract worth about a billion to the market, but you could only prequalify in your own right. The government selected a Tier 3, a Tier 2, and a Tier 1 [and two consultants], and they forced the marriage. It wasn't a consortia that got together in advance. What it did in a very heated market, it enabled the Tier 3 and Tier 2 to play in the sandpit where they wouldn't be in a D&C or a typical PPP type model...

"So the use of innovation, given the heat that was in the market at the time, to work out how best do we access untapped resource in the sector. Today in NSW and Victoria where these mega-projects are out, is an enormous part of the sector are not participating in these projects and doesn't have continuity of work because there just is not the volume of ... contracts in the market to \$200 million range.

"You have a whole sector of the industry that is not participating. Some of those innovate procurement models – if it is through a collaborative model – then the smaller participant will be able to participate without fear of losing their shirt because they will can ring-fence their risk appetite and participate at that level."

5.3 THEME 3 – SKILLS AND MARKET CAPACITY

At both the Brisbane and Melbourne Roundtables, the discussion concluded covering industry capacity and shortages in skills. Asked:

Is the timing and sequencing of large infrastructure projects contributing to shortages of materials or skills in the construction sector, or is market capacity responding?

Industry responded that while there were many things outside of the control of government, there were a number of areas where government could help. One theme emerged regarding reducing the red tape which holds back the efficient allocation of skilled staff. While staff shortages were acknowledged to be across the board, inconsistent and non-transferrable qualifications in skilled staff across state lines creates barriers in redistributing resources to follow the demand.

- *“We also have a struggle working across state boundaries ... and having engineers registered in different states”*
- *“we need harmonisation across the states in everything we do”*

On top of this, changes in visa rules combined with a surge in very specific technical demands have recently created extended lags in visa processing.

- *“immigration constraints are just bashing up against us”*
- *“processing time to get someone in could be 6-8 months since recent visa changes”*
- *“we have heard of circumstances where various state government agencies have said no we don't accept your project team because these people coming through Switzerland and 20 thousand kilometres high speed route haven't worked in this country so they don't have the experience”*
- *“we have a big issue with the senior, very experienced engineers... you can't bring in anyone who is over the age of 45... if you are looking at that senior level engineers, they are probably going to be 45-plus, but they can't come in on that visa”*

These speed bumps across state lines and visas collectively create issues longer term for peoples' careers.

From a structural point of view, it was noted that a more reliable sequencing and sustainable industry (which is strongly related to the procurement models and risk distribution) would facilitate reinvestment by the industry into their skills and capacity.

Tier 3s often bear the cost of the training of staff which then move up to Tier 2s and Tier 1s, but are not getting the sustainable or reliable margins to facilitate those investments in staff

- *“labour needs are going to have to come from investing and training in Australians and so for a business – particularly a Tier 3 – to do that they need to know that they can afford to put someone in training with 10 years of work, not two years of work or six months of work”*
- *“it's actually taking a macro view and how do we build a program that's stimulates the economy to continue to have the construction industry going, but that is sustainable, so people are making some profits. My view is that you want industry not to make exceptionally large profits, but they need to be making a profit but at the moment it is becoming an unsustainable business.”*
- *“without continuity, the option that industry looks for is how do we get short term from overseas”*
- *“pipeline is vital”*

Private industry generally feels capable of doing the work if they are given sufficient lead time to build capacity and capability. Better coordination between governments on the scheduling of projects was noted as essential so as to not overload the requirements of key skills and facilitate the industry to have their “A-Teams” readily available for tenders.

- *“So it doesn't matter what the pipeline looks like, it might sound sexy, but the problem is there's no adequate collaboration and coordination to how the projects are established.”*
- *“You need to even out the humps and bumps.”*
- *“The issue of how you build your pipelines, and how you address your skill needs on the other... There has to be an overarching mechanism to bring those two strands together.”*

6. IMPLICATIONS AND DIRECTIONS

6.1 SUMMARY OF FINDINGS

Australia is experiencing high levels of building and construction activity. Given a strong forward pipeline of infrastructure investment outlined in Section 3 of this report, construction activity is likely to be sustained at high levels over the coming decade to meet demands from a growing population, trade and transport task.

This report, however, does not focus on the outlook for construction industry demand. Rather, the overarching concern is how this infrastructure pipeline can be delivered that provides **value for money** for taxpayers and **fosters the development of expertise and experience in the construction sector**. Importantly, given that much of the infrastructure pipeline is procured and managed by state and territory governments, this report also considers how the Commonwealth Government may help support this objective.

Industry roundtables undertaken for this project emphasised that achieving value for money for taxpayers should be considered in a long term, whole of project sense — and is not about simply selecting the cheapest tendered price for construction. Ultimately, only a **competitive** and **sustainable** construction industry — one that is able to fully participate in the procurement process and is incentivised to invest in its own capability and capacity to deliver — can offer true value for money for the Australian taxpayer, and the development of industry expertise and experience.

Industry roundtable discussions revealed, however, that there are constraints in the procurement process and the broader relationship between governments and the construction industry that currently prevent optimal value for money outcomes. These include:

- **Costly and inefficient procurement processes, terms and conditions** which prevent full participation across the construction contractor spectrum (Tier 1s through to Tier 3s)
- **Inefficient allocation of risk in construction contracts**, with excessive risk taken on by head contractors (typically Tier 1s) initially, which are then passed down to subcontractors (Tier 2s and Tier 3s) who do not have the ability to manage them
- **Lack of standardisation of construction contracts**, with inclusion of specific 'fit for purpose' clauses which are becoming uninsurable
- **Not fully utilising the range of procurement approaches (e.g. Design and Construct, Construction Only, Alliances, PPPs etc)** which can provide the best value for money delivery in each circumstance.
- **Lack of benchmarking for performance in the construction industry**, with tangible consequences for high or low performance.

Addressing these constraints will be critical for the successful delivery of the infrastructure program and the broader Australian economy. Successful negotiation of these constraints will mean that infrastructure projects will be delivered on time, on budget and to the highest quality, providing important economic benefits and value for money for Australian taxpayers. Getting it

wrong will likely result in project delays, potential project and business failures (including costly litigation, rectification works as well as social costs) and, overall, higher industry cost escalation.

6.2 DIRECTIONS FOR CONSIDERATION

To a large degree, these challenges are not new. At both the Brisbane and Melbourne Roundtables, there was mention that these challenges have been noted before³, are well known in industry, and there is a clear need now for action. One participant in the roundtables summed up the general mood — under current engagement approaches and the volume of work projected:

“I think the industry is on the verge of a crisis...”

Part of the solution is recognising that true value for money, in a long-term sense, requires industry sustainability, right across the construction supplier spectrum. Low industry sustainability, and the associated failure of construction businesses ultimately means lower competition for construction work and, in aggregate, a lack of industry capacity and capability to deliver the project pipeline, resulting in delays and potentially higher prices.

Achieving industry sustainability means providing contractors a fair return on effort; one that provides an incentive for them to invest in their businesses, employ and train new staff and prepare for growth. However, this is not currently the case. As one participant put it:

“From the Tier 2 point of view... there is some widening gaps and we need your support and leadership to help make Australian companies, make the Tier 2s profitable. We don’t want to make a lot of money – we are happy with 7%, 8% to 10% on projects, but on average we are probably minus 5% across the board.”

Low industry profitability — particularly amongst lower tier building and construction contractors — combined with its “increasing litigiousness and aggressiveness” as another participant put it, is the consequence of a non-collaborative approach to procuring and delivering construction projects which concentrates on minimising tender prices at the expense of longer-term value for money outcomes. It is exemplified by the value-constraining procurement approaches listed in the previous subsection.

What is required, instead, is a more **collaborative** approach between governments and the construction industry that recognises these constraints to truly competitive, value for money outcomes, and works together to provide solutions.

Such collaborative approaches have been undertaken overseas. The industry roundtables highlighted the United Kingdom as a strong role model to base policy, as well as the recent “10 Point Commitment to the Construction Industry” initiative from the NSW Government. The 10 Point Commitment includes the following focus areas:

³ And they have also been raised in other recent construction industry reviews, such as BIS Oxford Economics (2018) *NSW Construction Delivery Assessment; Capacity and Capability*, expert report prepared for Infrastructure NSW.

1. Procure and manage projects in a more collaborative way
2. Adopt partnership-based approaches to risk allocation
3. Standardise contracts and procurement methods
4. Develop and promote a transparent pipeline of projects
5. Reduce the cost of bidding
6. Establish a consistent Government policy on bid cost contributions
7. Monitor and reward high performance
8. Improve the security and timeliness of contract payments
9. Improve skills and training
10. Increase industry diversity

“Reflect on where the UK industry was at pre-Olympics — lot of companies going broke, and they actually had to say ‘How do we fix this?’. A lot of the change that occurred over the last decade in the UK... made the UK industry more stable, right through the GFC period, because they shifted to a lot of those points that the 10 Point Plan is addressing.”

Considerations for the Australian Government

For its part, the Australian Government’s \$75 billion pipeline of investments, which sets out priority transport projects over the next 10 years, provides a range of opportunities across the construction supply chain and provides increased certainty around the level of activity in the medium term.

While the procurement and delivery of most major infrastructure projects is managed by state and territory governments, the views expressed in the industry roundtables suggested that there was a role for Australian Government leadership in solving these issues, particularly given the size of its funding contribution to national infrastructure investment:

“Right at the top of tree ... you have a responsibility to in terms of ensuring that the risk profile, delivery mechanism and procurement method is reasonable.”

In this respect, the Department of Infrastructure, Regional Development and Cities should continue to engage with contractors and peak bodies on issues around government procurement processes and costs of tendering.

While initiatives to support small-medium sized businesses are already in place (such as the requirements for a local industry participation plan on all projects receiving more than \$20 million in Australian Government funding, and a range of other measures to assist smaller players develop capability to compete for, and deliver projects successfully),⁴ there is potentially more that could be carefully considered.

In particular, industry participants considered that the Australian Government should work more closely with the state and territory governments to develop a set of **consistent standards** for procurement nationally, which could help lower costs and achieve greater value for money outcomes. Here it is important to emphasise that standardisation and innovation are not incompatible goals. What is important is that approaches to procurement are better harmonised across Australia and optimised so that the procurement models which offer the best opportunities for innovation on complex projects are employed, rather than taking an unduly prescriptive approach.

While some participants mentioned potential leveraging of Australian Government infrastructure funding to incentivise standardisation in procurement approaches, this would need to be carefully and thoughtfully considered to ensure that such approaches did not impact unduly on pipeline stability and coherency.

In a similar vein, the Australian Government could also consider utilising innovative, collaborative procurement approaches on projects where it is the dominant provider of equity or debt finance, such as the Inland Rail or Western Sydney Airport initiatives. This may involve approaches such as the Origin Alliance (mentioned earlier in this report) where the government deliberately selects a consortia of Tier 1, 2 and 3 contractors to ensure maximum industry participation and engagement.

Undertaking a range of approaches is likely to be critical to the Government's objective of ensuring value for money for its transport investments by creating opportunities and building capability rather than through preferential treatment or being prescriptive.

States and territories, as the level of government normally responsible for the delivery of major projects, also have in place measures to support the industry.

⁴ This includes the Entrepreneurs' Programme, which offers support through Accelerating Commercialisation (to commercialise novel products, services and processes), Business Management (a review of business operations), Innovation Connections (identifies knowledge gaps preventing business growth), growth grants, and supply chain services. Other support includes the Australian Small Business Advisory Services Programme provides low cost advice to small business, and AusIndustry, which has a network of offices including Regional Managers who link businesses to relevant assistance programs and work together with experts providing face-to-face advice tailored to the profile and needs of each business. State and territory governments also provide business support programs and many have local industry participation policies to ensure access to major projects for SMEs. The Industry Capability Network (ICN) connects potential suppliers to project opportunities through a national database of industry capability and project opportunities. There is an ICN in every state and the Australian Government has committed funding to Industry Capability Network Limited to transition the ICN Gateway service to a broader, national system for company capability and opportunities, together with a new standardised customer relationship management solution for ICN offices.

The Australian Government should be supportive of jurisdiction-led initiatives such as NSW's 10 Point Action Plan, as an example of how governments can support the construction industry and its suppliers and work towards achieving these outcomes.

Notwithstanding these measures, the industry roundtables have highlighted a number of areas in which there may be scope for governments to do more to support the construction industry to efficiently and cost effectively deliver these significant investments in publicly funded infrastructure.

There is scope for governments to collaborate and identify common issues across jurisdictions. An agreed set of high-level principles can provide a framework for individual governments to consider specific initiatives. State and territories need to consider specific initiatives in the context of their existing arrangements, local market issues and their ability to be implemented.



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