

2017 MAJOR PROJECTS PIPELINE REPORT UPDATE



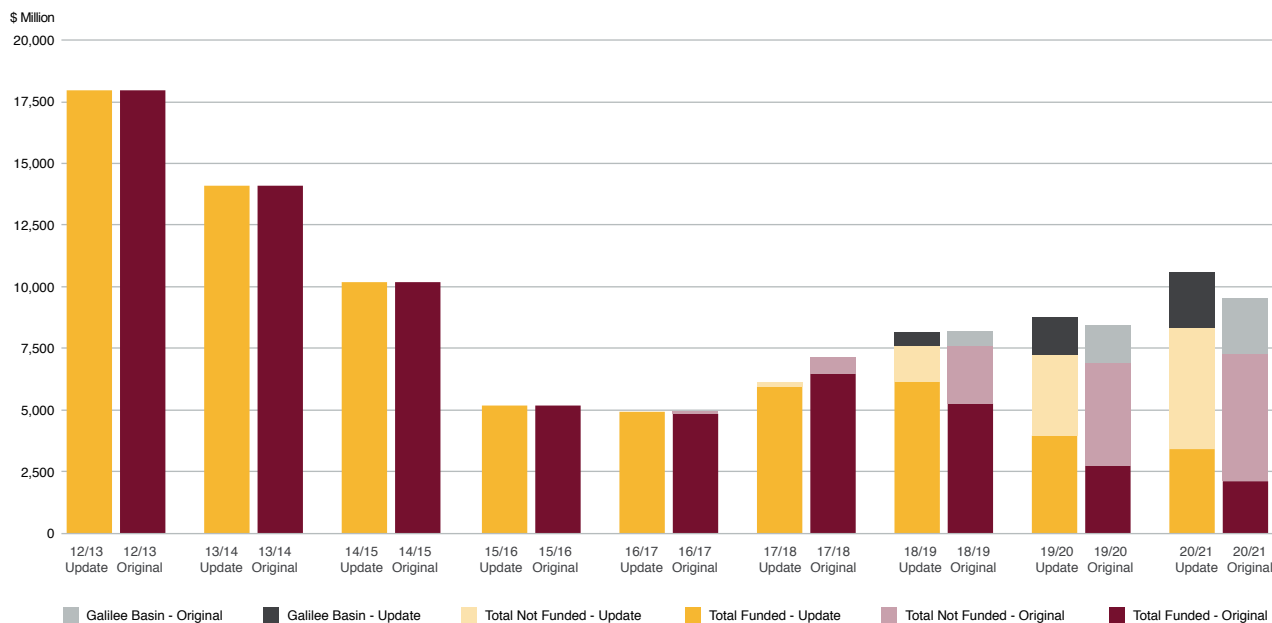
Overview – Key Messages

Welcome to the 2017 Major Projects Pipeline Report (MPPR) Update which provides a mid-term snap shot on the outlook for major engineering construction projects (>\$50 million in value) in Queensland.

The key message from the 2017 MPPR remains intact – major project work is expected to trough in 2016/17 at \$4.6 billion, but lift steadily to \$10.8 billion by 2020/21, a collective rise of 140 per cent.

CHART 1

Revised Outlook for Major Project Work – Original Vs Update



During 2017/18, it is anticipated that major project activity will rise 50 per cent to \$6.8 billion, slightly below the forecast in the original report. The weaker than anticipated result for 2017/18 stems from two main areas. Firstly, a number of projects in the mining industry have been pushed back, due to funding or environmental reasons. Projects include Eagle Downs Coking Coal, New Acland Stage 3 Expansion, Cannington Expansion, Millennium Expansion and Grosvenor Underground Stage 2.

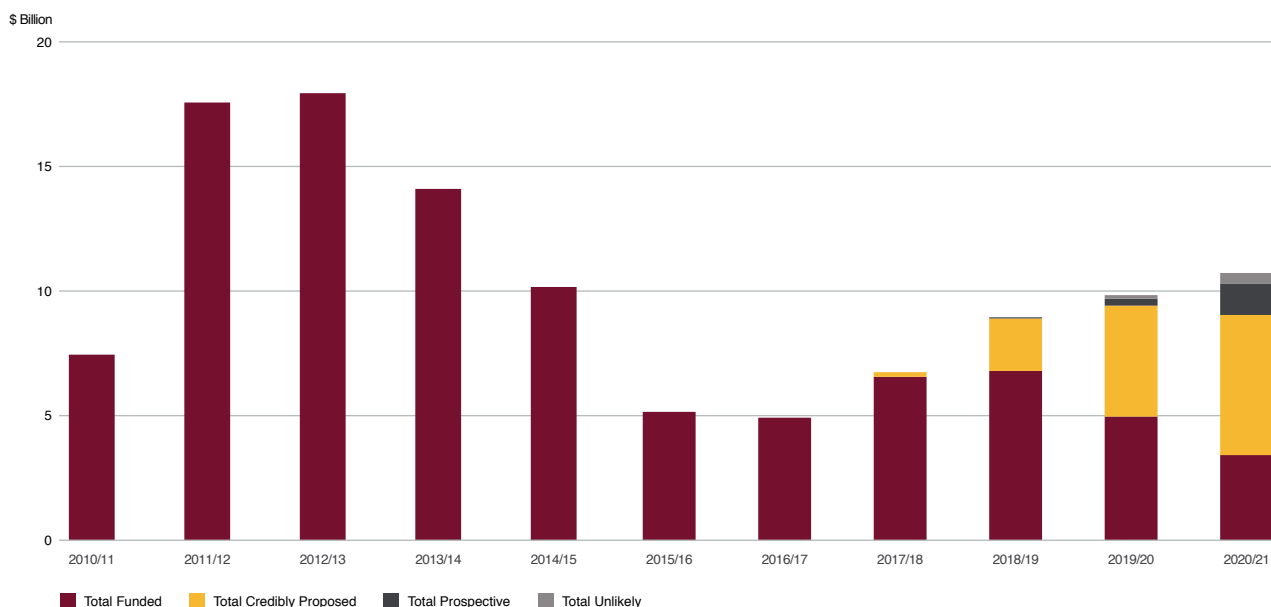
Secondly, the Queensland budget forecasted spend appears to have slowed construction on a number of publicly funded projects with lower construction values for 2017/18, pushing funding into the 2017/18 to 2018/19 period. The State government has also pushed back a couple of public projects that did not receive funding during 2017/18, mainly water projects such as Lower Fitzroy River Infrastructure Project and Nullinga Dam.

However, the outlook for major project work is now higher than forecast in the original 2017 MPR for 2019/20 and 2020/21 period. The increased spend in 2019/20 and 2020/21 is reflective of slower than anticipated start-up of major projects originally expected through 2016/17 and 2017/18. A number of new projects have also been added to the pipeline in these later years.

Furthermore, since the original report the pipeline has experienced a considerable change in composition. The value of work in the pipeline now classified as funded has increased substantially, on the back of major public funding commitments (Inland Rail and Cross River Rail). Unfunded work, despite falling over the past six months as projects moved through the pipeline, has seen major improvements in the credibly proposed category, following Adani's Carmichael Coal project receiving all environmental approvals.

CHART 2

Outlook for Major Project Work by Category – Updated



Overall, it would appear the worst has now passed for Queensland, with major project activity returning to “new normal” levels over coming years. On the positive side, this “new normal” is likely to be much higher than pre-mining boom levels.

Queensland Major Projects Update

Overall, the revised Mid-Year forecasts for major project work still follows a similar path. Following a flat period in 2015/16 and 2016/17, major project work is forecast to rise steadily in subsequent years, peaking at over \$10 billion by 2020/21.

The total value of the major project market remains similar to the original report (\$39.4 billion to \$39.2 billion), with the number of projects increasing by 5 to 171 (from 166). These minor changes, however, mask solid improvements

in the outlook. Specifically, funded work in the pipeline has increased by 17 per cent to \$25.1 (from \$21.5 billion), with work under construction lifting 19 per cent to \$19.6 billion and announced moving to \$3.9 billion (up 47 per cent). The significant improvement in the announced category reflects both the Inland Rail and Cross River Rail projects moving towards funded status, following the recent Federal and State government budget commitments.

Unfunded work fell 20 per cent to \$14.1 billion, as projects moved through the pipeline. Interestingly, however, projects in the credibly proposed category increased 4 per cent to \$12 billion, with unlikely projects down 87 per cent to \$550 million following major revisions to key projects in the mining sector. Most notably, Adani’s Carmichael Coal project has moved to credibly proposed from unlikely after receiving all environmental approvals.

TABLE 1

Major Projects Pipeline Statistics – Original Vs Update

	Engineering Value, \$ Billions				Number of Projects			
	Original	Update	%CH	Difference	Original	Update	%CH	Difference
Under Construction	\$16.5	\$19.6	19%	\$3.1	44	59	34%	15
Under Procurement	\$2.4	\$1.6	-33%	-\$0.8	15	15	0%	0
Announced	\$2.7	\$3.9	47%	\$1.2	20	22	10%	2
Funded	\$21.5	\$25.1	17%	\$3.6	79	96	22%	17
Credibly Proposed	\$11.5	\$12.0	4%	\$0.5	56	49	-13%	-7
Prospective	\$1.7	\$1.6	-5%	-\$0.1	20	21	5%	1
Unlikely	\$4.4	\$0.6	-87%	-\$3.8	11	5	-55%	-6
Unfunded	\$17.6	\$14.1	-20%	-\$3.5	87	75	-14%	-12
Total	\$39.1	\$39.2	0%	\$0.1	166	171	3%	5

Source: BIS Oxford Economics

The revised outcome for major project work is the net result of the following adjustments to the industry developed Major Projects List based on recent State and Federal Budgets as well as news on private sector funded projects. Major changes include:

- **Moving the Queensland packages of Inland Rail to announced and funded**, from credibly proposed and unfunded.
- **Moving the Cross River Rail to announced and funded**, from credibly proposed and unfunded.
- **Moving Adani's Carmichael Coal project and associated infrastructure from unlikely to credibly proposed**, given Federal and State government approvals are all currently in place. The project has not yet moved to funded given financial backing remains somewhat unknown at this stage, with falling coal prices also adding another element of uncertainty.

Other minor changes include:

- **Accelerated commencement and/or upward revisions to project values** from the original list based on latest budget information and company announcements include:
 - Cairns Southern Access Corridor Stage 3 – Edmonton to Gordonvale Duplication (prospective)
 - Kennedy Developmental Road (Hann Highway) sealing (under construction)
 - Port of Cairns – Cruise Terminal Expansion – Trinity Inlet Dredging (announced)
 - Telegraph Road Upgrade – Stage 2 (under construction)
 - Wynnum Road Corridor Upgrade – Stage 1 (under procurement)
 - North Queensland Bio Energy – Ethanol Plant (credibly proposed)
 - Inner City Bypass Widening (under construction)
 - Brisbane New Parallel Runway Phase 2 (under construction)
 - Dryanda Drive (under construction)
 - Logan Motorway Enhancement (under construction)
 - Rocklea to Darra Stage 1 (under construction)
 - Mudgeeraba to Varsity Lakes Capacity Upgrade (under procurement)
 - Sunshine Coast Airport (under procurement)
 - Gold Coast Rapid Transit System Stage 2 (under construction)
 - Caval Ridge Expansion (under construction)

- **Delaying commencement and / or lowering project values** from the original list based on latest budget information include:

- Gateway Motorway / Pacific Motorway Merge Upgrade (under procurement)
- Sarina to Cairns – Mackay Ring Road / Bypass – Stage 1 (under construction)
- Sarina to Cairns – Haughton River and Pink Lily Lagoon Upgrade (under procurement)
- Sarina to Cairns – Cattle Creek and Frances Creek Upgrades (under construction)
- Lower Fitzroy River Infrastructure Project – Raising Eden Bann Weir Stage 1 (credibly proposed)
- Urannah Dam (credibly proposed)
- Eagle Downs Coking Coal (credibly proposed)
- New Acland Stage 3 Expansion (unlikely)
- East End No.5 (prospective)

- **Adding new projects to the list** from the latest budgets or improved fundamentals include:

- Toowoomba to Oakey Stage 2 – Leeson Road to Kingsthorpe (under construction)
- Port of Townsville – Outer Harbour Expansion Stage 1 Dredging (announced)
- Gold Coast Council South Stradbroke Pipeline (credibly proposed)
- Boondooma Dam Repair / Upgrade (under construction)
- Kawana Sewage Treatment Plant Upgrade (under construction)
- Bowen to Gladstone Pipeline (unlikely)
- Gladstone Oil Refinery (prospective)
- Overland Conveyor System Peak Downs Mine to Caval Ridge Prep Plant (under construction)
- Fairbairn Dam Spillway Improvement Project – Stage 2 (under construction)
- Smithfield Transport Corridor Upgrade (announced)
- Upgrading forecasts to electricity and telecommunications (NBN) works based on recent project developments and ABS data.

Risks to the Outlook

Since the 2017 Major Projects Pipeline Report was released in April 2017 the risks to the project pipeline have moderated slightly for Queensland. This is reflected in the sharp improvement in the funded category of the major projects pipeline and the value of unfunded and unlikely major projects decreasing sharply, with the credibly proposed category conversely increasing sharply.

Nonetheless, key challenges facing the major project pipeline and the Queensland economy remain:

- The Queensland economy is still in the midst of a difficult transition period. The state economy has, over the past two years, endured its sharpest recorded fall in domestic demand (4.3 per cent) – compared to a 1.3 per cent decline following the GFC and a 0.3 per cent decline in the early 1990s. While mining production will continue to grow based on recent investment in new capacity (particularly LNG), this phase of the resources cycle is less employment intensive than the investment phase and has weaker multiplier impacts on the rest of the economy through population growth, housing and non-mining business investment. Over the past three years, a 25 per cent pickup in dwelling investment has helped soften the impact of the resources investment bust, but this growth driver is starting to turn as a surge in new housing supply catches up with demand. After a peak in 2016/17, housing investment is likely to be a significant detraction from economic growth, with negative consequences for Queensland construction industry employment.
- Generally slow growth in State Government revenues (due mainly to weak tax and GST receipts), coupled with high volatility in commodity prices (particularly coal) which is creating risk around the future path of revenues and hence “own source” funding available for productive infrastructure investment. With revenues projected to ease 1 per cent in 2017/18, to just under \$56 billion, before stabilising at around \$55-58 billion per annum through the remainder of the decade. The state will need to increase taxation revenue, increase debts limits or explore new funding options consequently.¹
- Queensland Government’s commitments to infrastructure funding remains uncertain. At the State level, tight government finances remain a constant threat to future infrastructure funding. Without a clear plan to recycle capital from existing assets into new infrastructure funding, or increase borrowing for productive infrastructure investment – the State Government’s infrastructure funding plan relies heavily on other, less predictable, funding mechanisms such as value capture, market led proposals, and an increased reliance on Federal funding for projects.

- Uncertainty in the outlook for the global economy is also presenting new challenges for Queensland businesses and the broader economy. Since the 2017 Major Projects Pipeline Report, there has been continued uncertainty from the Trump administration on key topics (including potential trade sanctions, uncertain domestic infrastructure and health care plans), all of which may vary significantly in coming years. The re-commencement of interest rate increases in the United States is also impacting the Australian dollar – key for North Queensland tourism, manufacturing and educational services and subsequently influencing the Australian interest rate outlook, with the Reserve Bank of Australia (RBA) signalling a return to neutral levels is back on the agenda. North Korea tensions also remain an issue on the global front, as does continued fighting in the Middle East. Brexit is on the verge of fruition, which will have further impacts across Europe.
- Finally, while commodity prices for most base metals have continued to improve over the last 6 months, coal prices and to a lesser extent oil prices have pulled back significantly. Substantial uncertainty regarding the timing and magnitude of recovery in resources investment remains, which is the other key driver of major project work in Queensland. Prices for coal, both thermal and coking, sit at around US\$85/tn and US\$140/tn respectively. Both products are expected to trend lower from here, which will see many coal projects, in particular thermal coal, struggle to reach financial close. Meanwhile, LNG investment in Queensland has plummeted with the commissioning of all new LNG trains. This sector has been dealt a further blow with Qatar, the largest LNG exporter globally, lifting self-imposed limits which could see Qatar LNG exports rise 30 per cent in the decade ahead. This would mostly affect the Asian market and Asian prices, which are key for Australian based exporters. Here, the opportunities are in sustaining capital works (and maintenance) in Queensland’s coal seam gas fields (across the Surat Basin, Lower Bowen Basin and Western Queensland) to provide gas to feed the downstream processing trains.

Workforce Outlook Update

The outlook for Queensland’s construction workforce continues on the path outlined in the 2017 MPPR. With the adjustment from high levels of mining-led construction now complete, we foresee the civil construction workforce more focussed on delivering public infrastructure for the next few years.

The employment trend for civil construction workers continues to fall in-line with the decline in activity, but we expect the trend to bottom-out and stabilise over the next 12 months as the industry settles into its ‘new normal.’ While there have been anecdotal reports of civil trades being hard to find in remote areas, we do not foresee any widespread labour shortages with forecasts suggesting the industry will be carrying a moderate surplus of labour out to 2021.

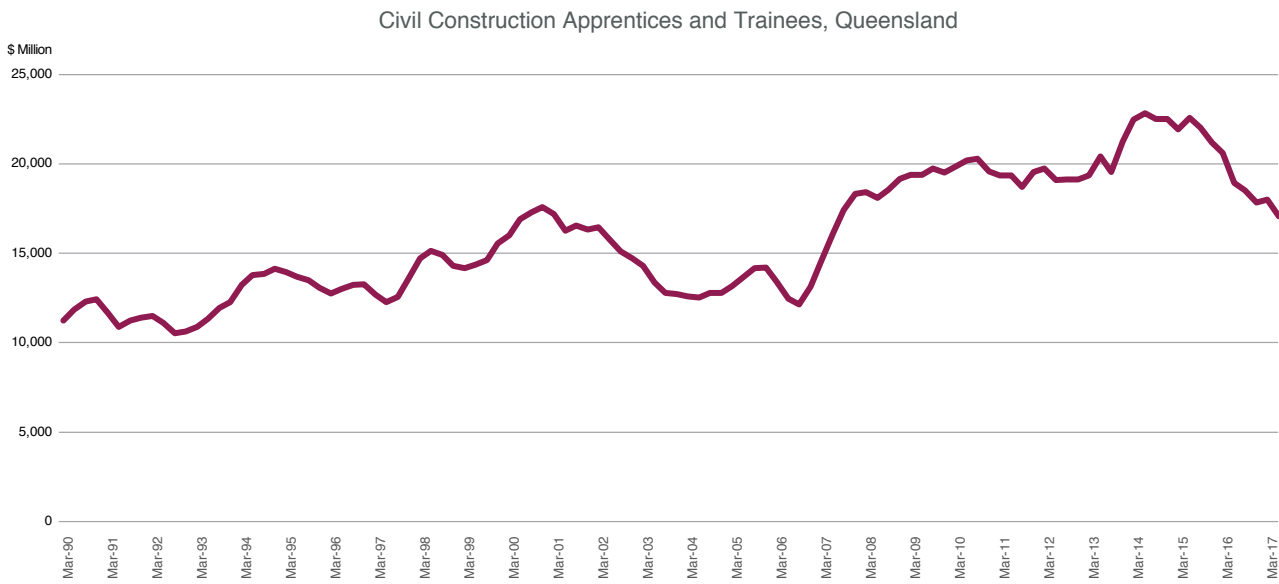
¹ Queensland Budget 2017-18 Budget Strategy and Outlook, Budget Paper No 2

While overall employment numbers are adjusting as expected, some areas of the workforce warrant a close watch, with the civil sector's apprenticeship and traineeship pipeline a key area to keep an eye on.

Both the number of civil apprentices / trainees in-training and the annual intake of new commencements have dipped sharply from recent highs. Queensland employers were taking-on around nine new civil apprentices / trainees for every hundred workers in 2015/16, but that rate has since fallen to 3.5. Similarly, the number of civil apprentices and trainees in training per 100 workers has taken a steep dive from their historical highs.

CHART 3

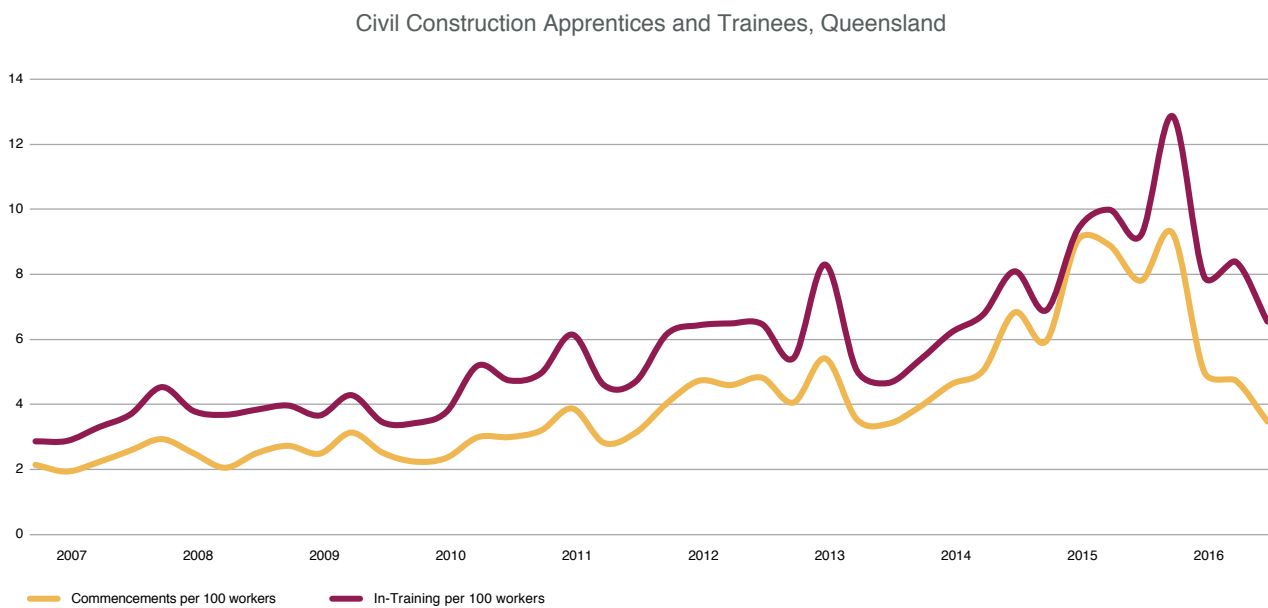
Civil Construction Employment (Trend)



Source: ABS, CSQ

CHART 4

Civil Construction Apprentices and Trainees, QLD



Source: NCVET, ABS

While the steepness of the downward trend demands a close watch, these rates are still robust by long-term standards. It appears that the numbers of civil construction apprentices and trainees are simply returning to more normal levels after an extraordinary period of growth.

A similar trend is playing out in completion rates. Current estimates suggest only 57% of the 2015 cohort of civil apprentices and trainees will complete their apprenticeship / traineeship. If this forecast holds, it will be the first time since 2000 that civil construction apprentices and trainees in Queensland have completed at a rate below 60%, and will be well below the long-run average completion rate of 65%.

So the civil apprentice market is correcting, and correcting quickly, but at this stage it appears to reflect a rebalancing to more natural, sustainable levels of activity in the sector, rather than a symptom of any underlying problems with the apprenticeship system.

The focus for the civil sector should now be on upskilling the existing workforce in an effort to keep abreast with industry trends, and maintaining compliance and a strong safety culture.



