



2024 QLD Major Projects & Pipeline Report

Townsville – 19th November 2024





























Queensland Major Projects Pipeline 2024































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2024 QLD Major Projects and Pipeline Report







Andrew Chapman QMCA

























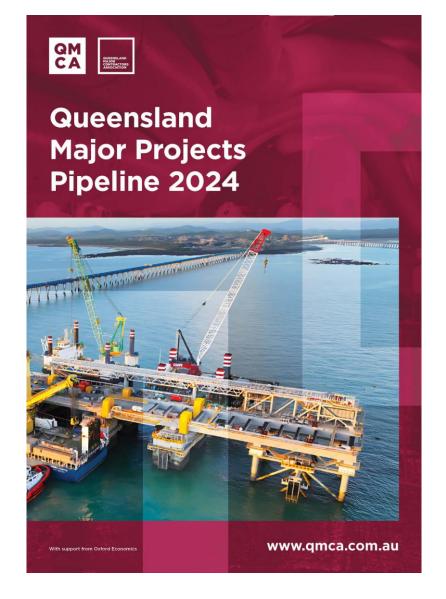
Agenda

- Key Findings
- Key challenges
- Opportunities
- Recommendations









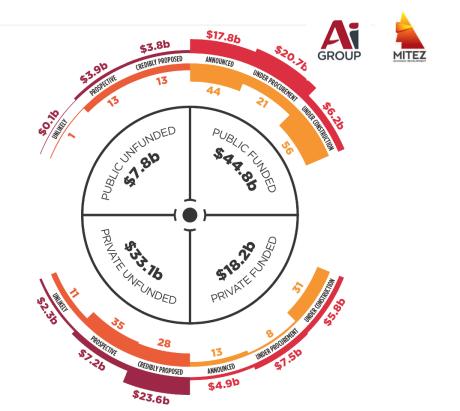


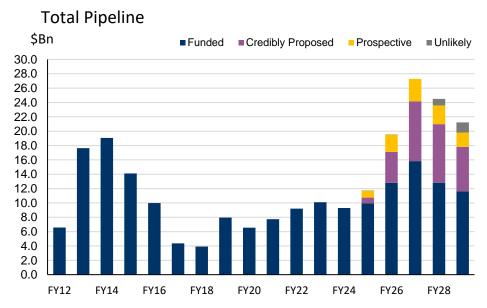




Key Messages

- Total 5 year pipeline value \$104b
 - \$12b increase on 2023 pipeline
 - 20% of the increase is down to "published" cost increases
- Delivery of work in FY24 was subdued
- Continued growth of mega projects (>\$1b)
- Labour- still need an extra 10,000+ people
- Regional hotspots: Wide Bay, Brisbane & south/ west (Logan-Ipswich- Toowoomba) and Fitzroy







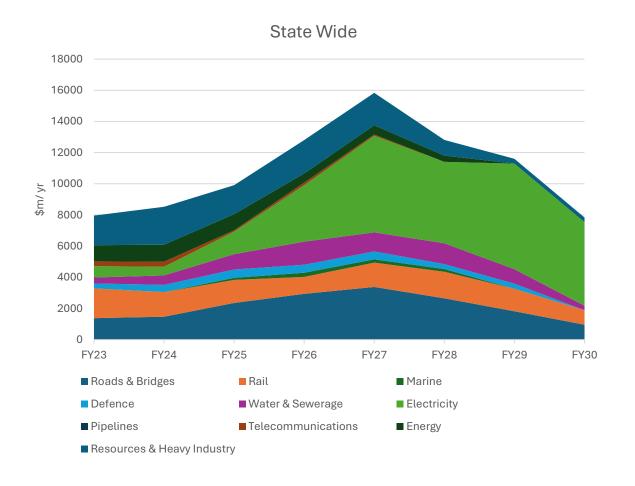


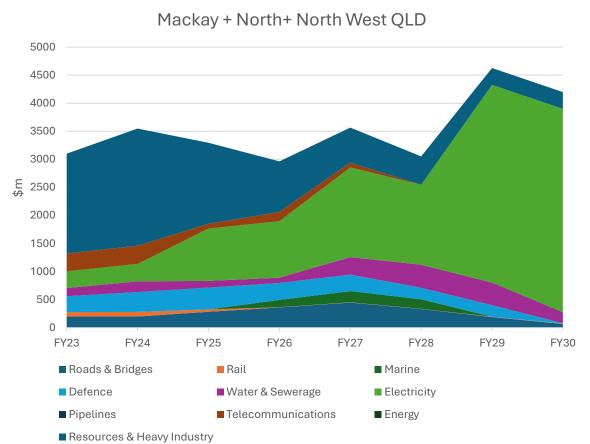






Pipeline Outlook- Funded Works







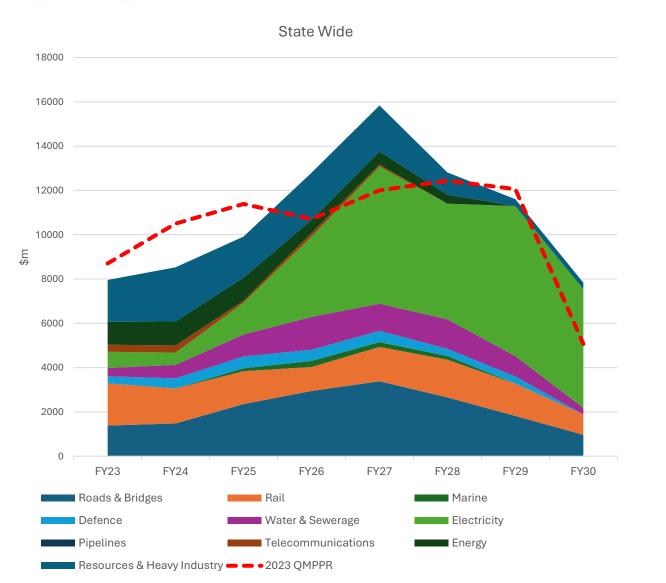


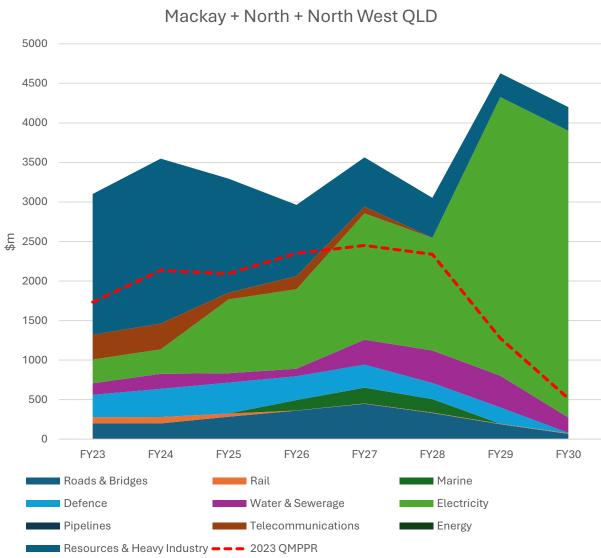






Pipeline Outlook- Funded Works







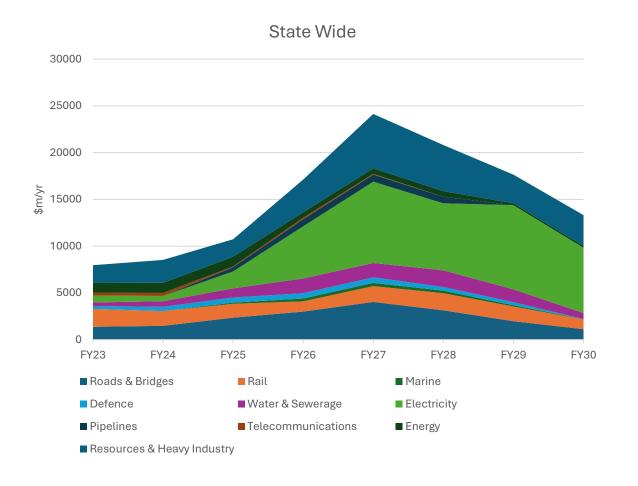


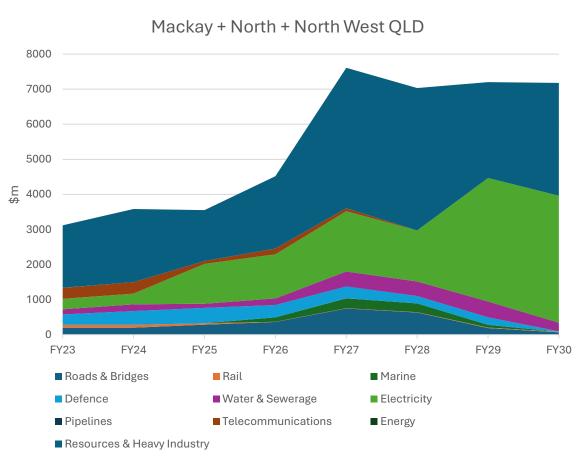
Pipeline Outlook- Funded + Credibly





Proposed







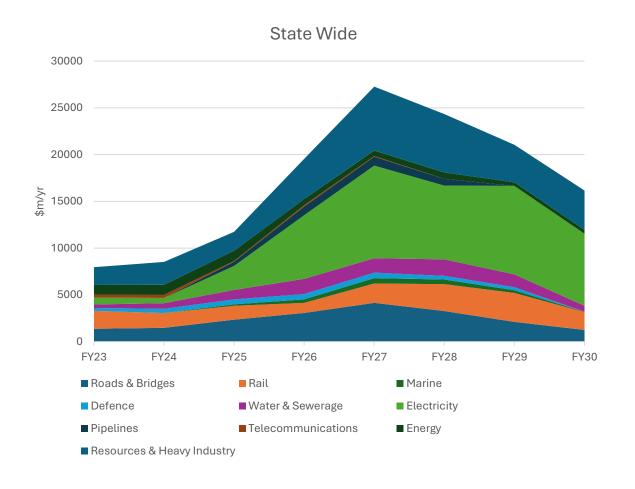


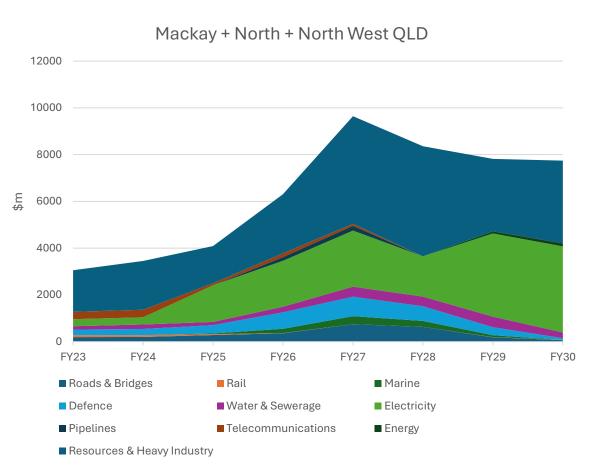






Pipeline Outlook- Total Pipeline









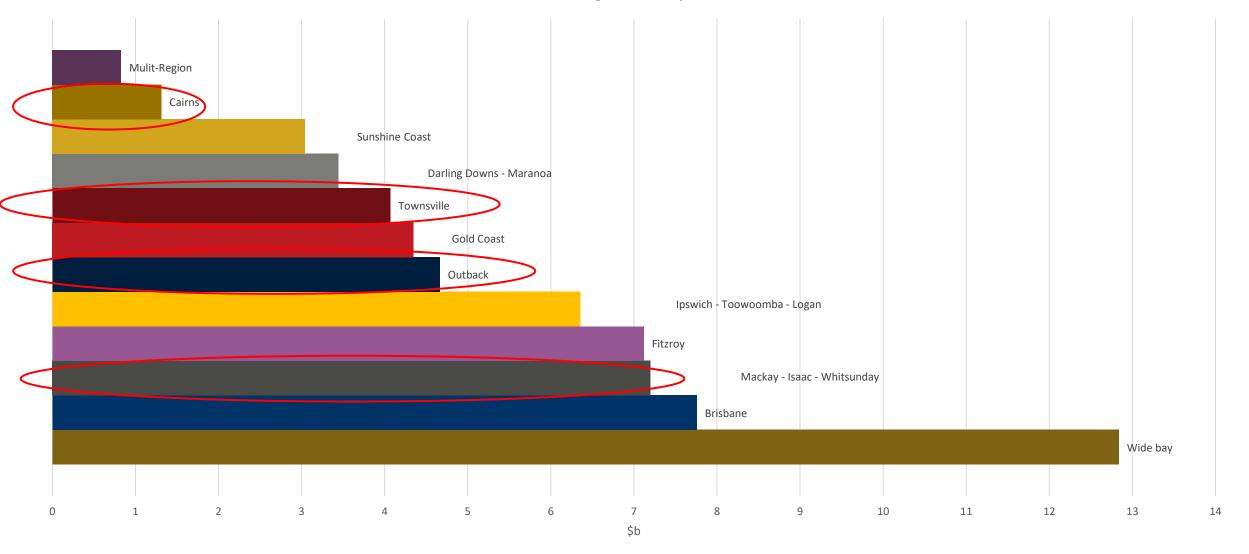
Regional Spend







Regional Analysis





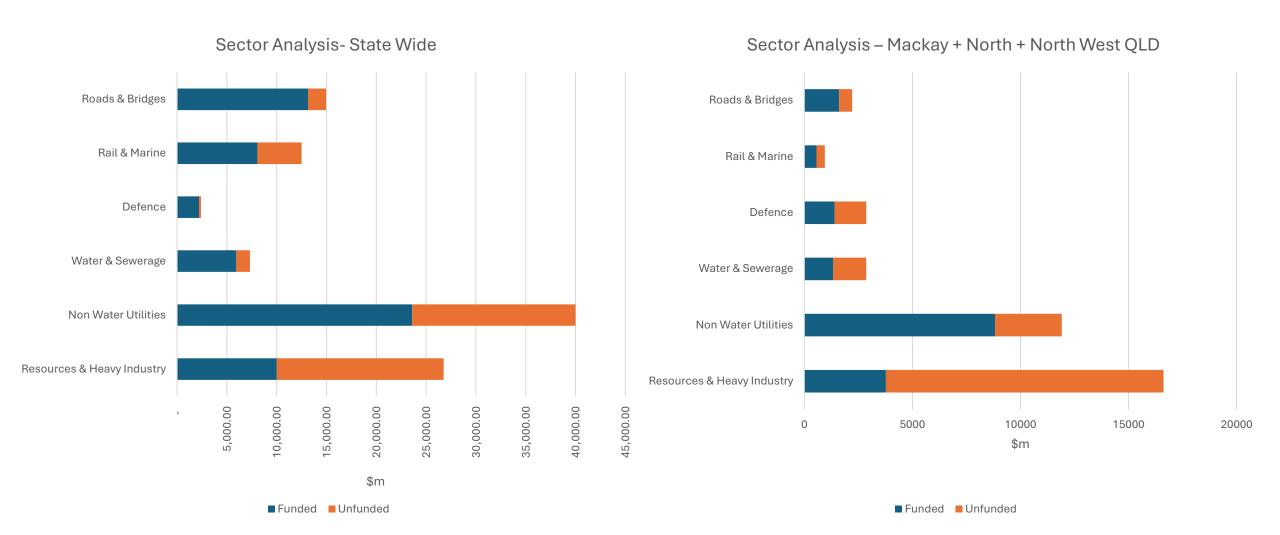


GROUE





What Type of investment?









Key Challenges







- Competing investments
- Capability
- Capacity
- Productivity
- Cost Pressures
- Pipeline Deliverability:
 - Industry capacity
 - Industry sustainability
 - Pipeline coordination





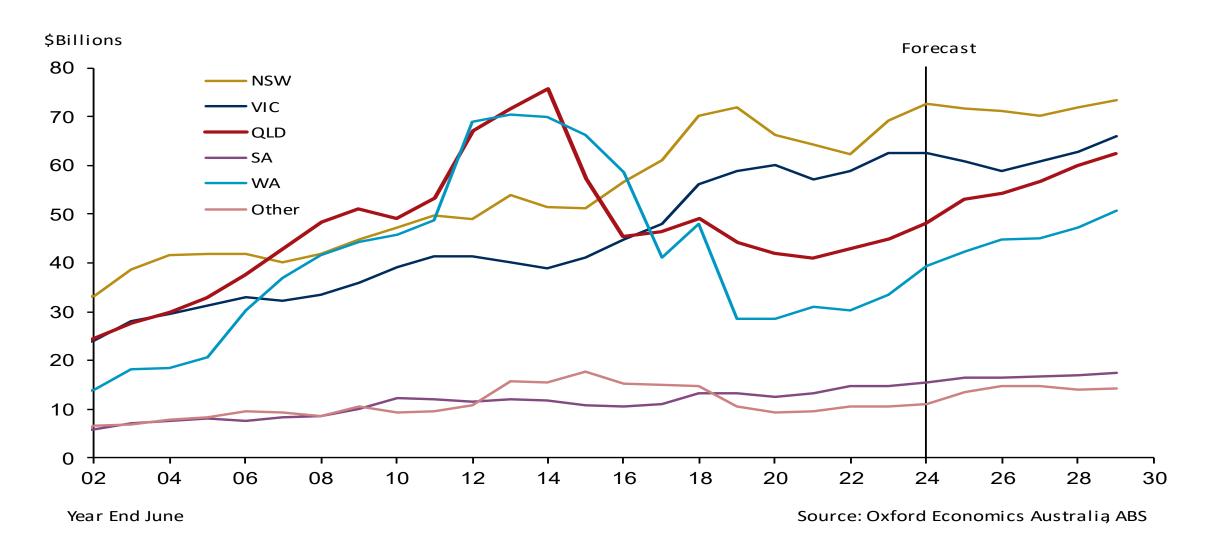








Competing Investments









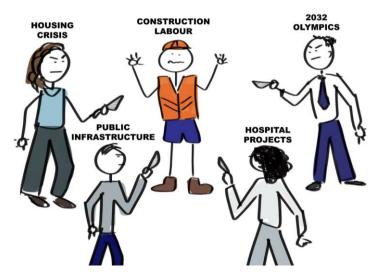




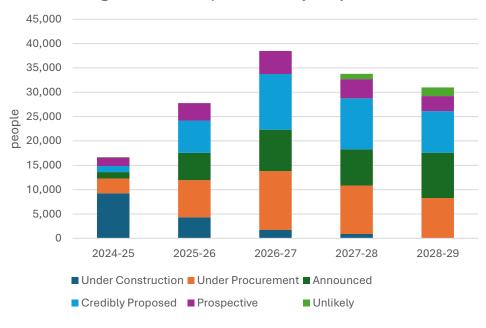


Labour demand:

- 30,000 people employed across all of engineering and construction in QLD
- Approx 55% only in major projects (~17k)
- Average requirement for the major projects pipeline is 30,000
- On that basis need to grow the total employment in the industry by 80%
- Current supply capacity of aggregates in QLD:
 - Steel: 1.2Mt/ yr
 - Concrete: 7.5Mm³/ yr
 - Aggregate: 52Mt/ yr
- Likely additional demand:
 - Steel: 180,000-200,000t/yr (Major projects ~150-160,000t/yr, Health, Housing & Olympics: 30-40,000t/yr)
 - Aggregates: New quarry sources will be required
 - Asphalt, cement and concrete



Average Labour Requirement by Project Status



Source: CSQ





Capability



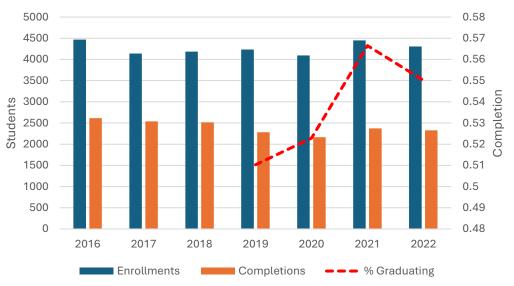




• Engineers:

- Change in investment requires far more multi disciplinary skill set (civil, mechanical, electrical)
- Graduating ~50-55% of those that commence
- Demand is far outstripping supply
- Different technology skill sets as the industry moves to greater modularisation, prefabrication, automation & use of robotics, etc
- Local manufacturing and fabrication needs to evolve to meet need (energy infrastructure, minerals processing etc)

Engineeering Education



Source: Engineers Australia







Engineering & Construction Productivity

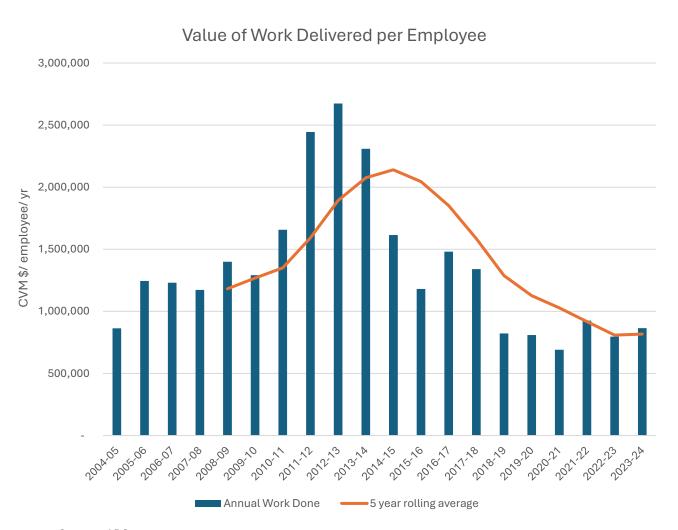






Factors affecting:

- Technology & innovation
- Work practices across project lifecycle (planning, approvals, engineering etc)
- Specifications (technical and operational)
- Lack of consistent and collaborative procurement and delivery management
- Industrial relations (3-3.5 effective working days per week)
- Policy settings affecting industry







Cost Pressures



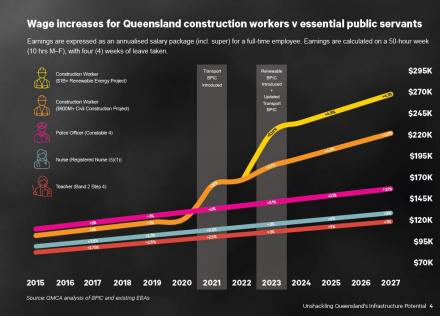
- Policy settings impacting on costs
- Public investment crowding out other capital and trades availability
- Construction cost escalation:
 - 2010 to 2024, construction costs have increased by 51.5%.
 - Construction costs have increased by 32.3% since 2019
 - 2010 and 2020 (pre-pandemic) YoY average was 1.7%.
 - Between 2021 and 2024 the YoY average is now 8.0%.

















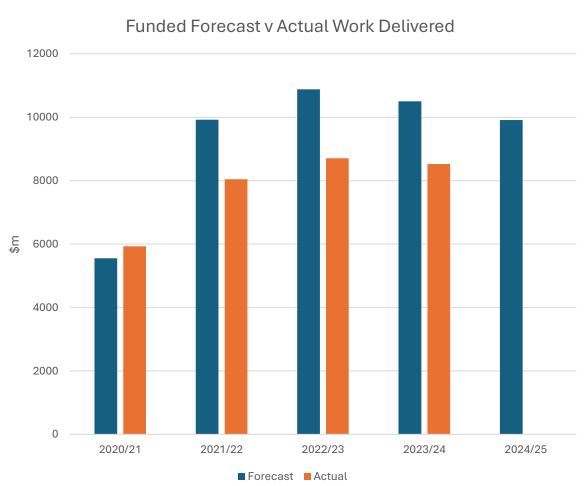
Pipeline Deliverability- Industry Capacity







- As the pipeline has grown, industry capacity to deliver has not been able to keep up.
- Between FY21 and FY24 have delivered on average 87% of the projected work
- External issues (Fed Gov't investment review) and productivity impacts have constrained delivery capacity
- Improving output and capacity by 10% and we are close to delivering the funded works







Pipeline Deliverability – Industry

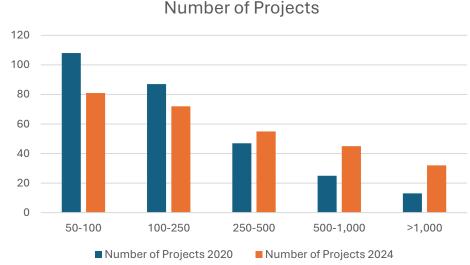


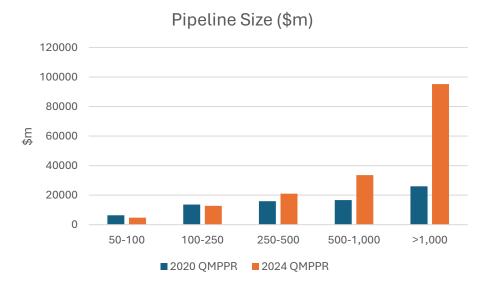




Sustainability

- Growth of the mega project- Since 2020:
 - 25% reduction in number of projects under \$100m
 - 146% growth in number of projects over \$1b
 - total value of projects over \$1b is 267% higher
- The sustainability of the industry relies on a diversity of work size
- Cost effective administration of projects?









Pipeline Deliverability – Coordination



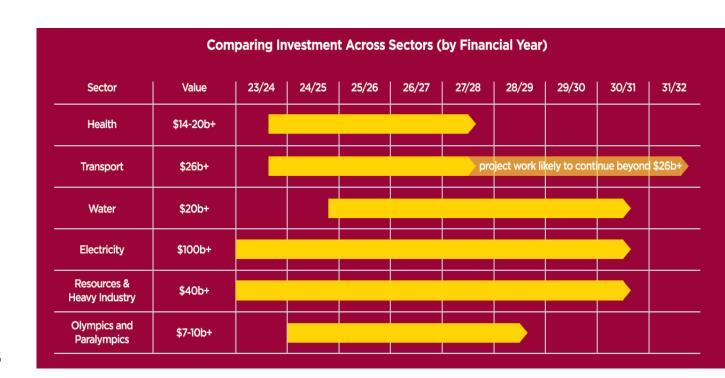




 Lack of a whole-of-government, sequenced approach to project delivery

and Collaboration

- Lack of Collaborative procurement means less surety around cost and time
- Project development and approval process is too long and cumbersome
- Project specifications are too tight and don't enable high levels innovation that can help drive productivity









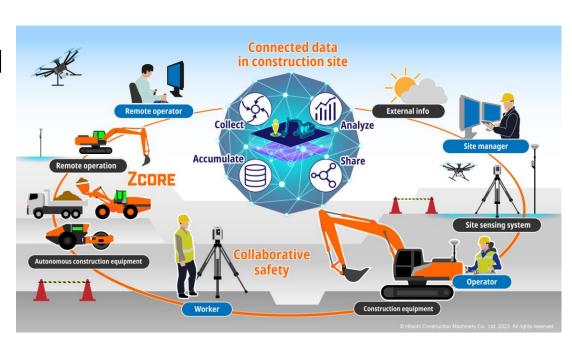
Opportunities







- Supply chain capacity- early investment in
- Value for money: Fit for purpose design and construction
- Productivity:
 - Digital tools, automation and construction methodologies
 - Policy settings changes
- Private sector investment
- Coordination of the pipeline
- Changing policy settings to enable safe productive work















Deliverability:

- Funding & financing
- Supply chain capacity
- Labour supply (and training)
- Technology and innovation

• Sustainability:

- Entire industry engagement
- Procurement and collaboration

Pipeline Coordination:

- Streamline and remove excesses in project development and procurement
- Prioritisation across the entire pipeline to help stimulate growth and investment (not boom bust)









Thank you to contributing authors:











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Construction Skills Queensland

General Manager Industry Services and Procurement

Sean Cummiskey



























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Industry Outlook

Construction Workforce

QMPP Labour & Skills

Facing the Challenge Ahead





Key Labour Demand Drivers

Government Investment

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Education & Training

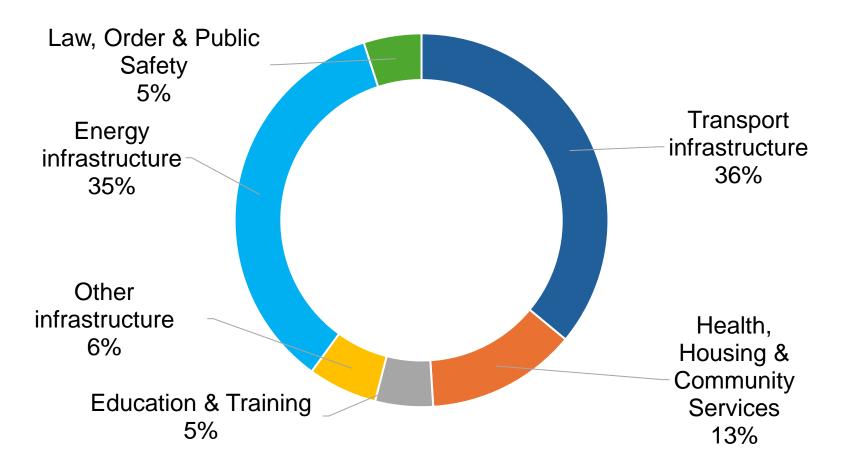
Health Expansion

Water Strategy



QLD Government Capital Purchases

Capital Purchases by Purpose for 2024-25

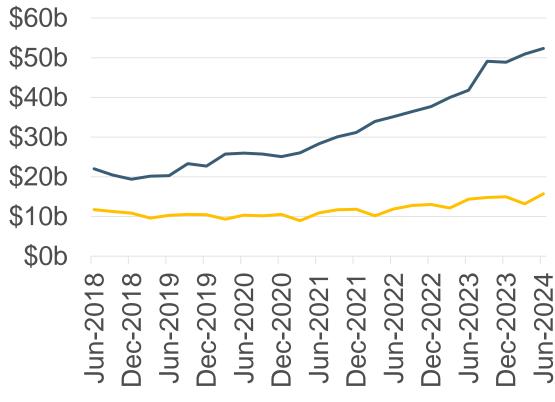


Source: The State of Queensland (Queensland Treasury) - 2024–25 Queensland Budget; CSQ



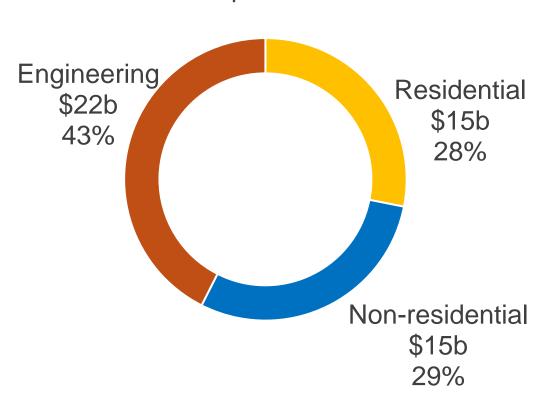
QLD Construction Activity





- —Pipeline as end of the quarter
- —Work done during the quarter

Pipeline as of June 2024: \$52b



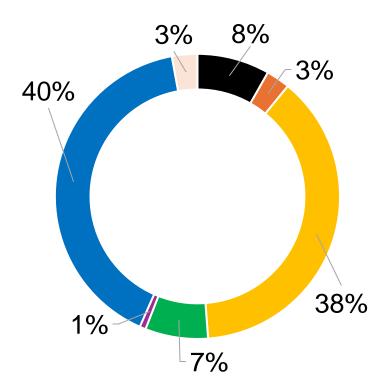
Source: ABS



Source: ABS

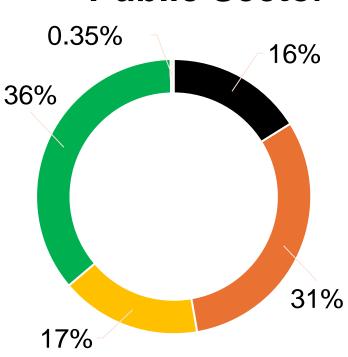
QLD Engineering Pipeline (yet to be done) As of June 2024: \$22b

Private Sector



- Roads, highways and subdivisions
- Bridges, railways and harbours
- Electricity generation, transmission etc.
 and pipelines
- Water storage and supply, sewerage and drainage;
- Telecommunications
- Heavy industry
- Recreation and other

Public Sector

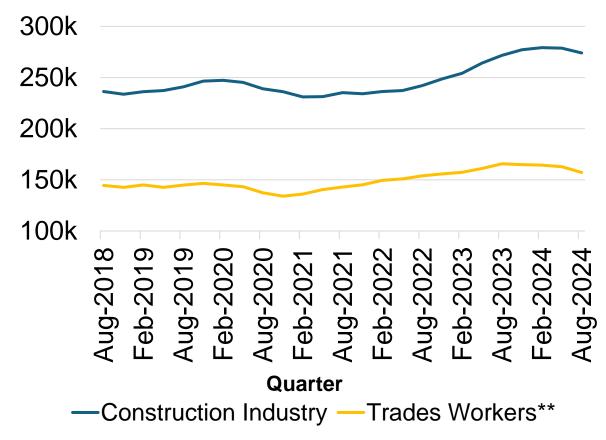


Source: ABS Source: ABS



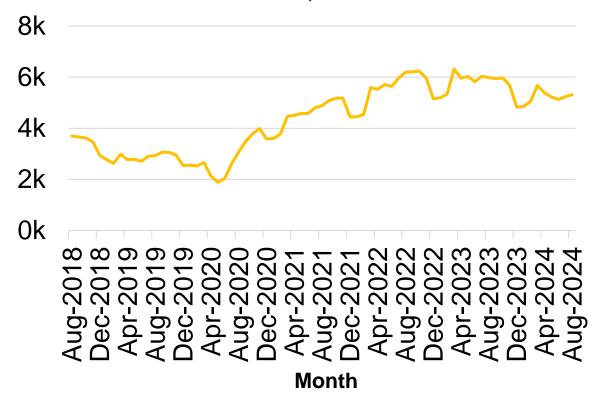
Employment

Construction Employment, QLD*



Source: ABS; JSA; CSQ

Internet Vacancies for Trades Jobs**, QLD



Source: ABS, JSA; CSQ

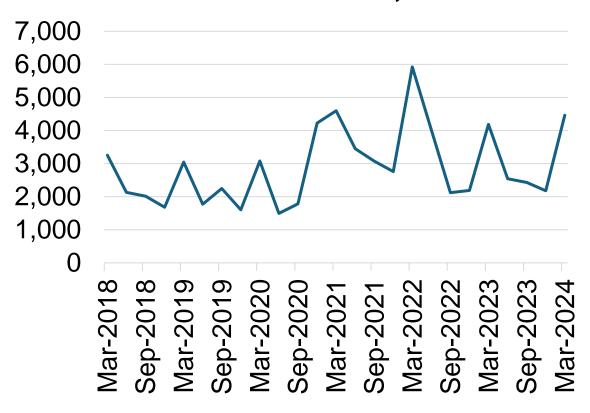


^{*} Averages of preceding 4 quarters

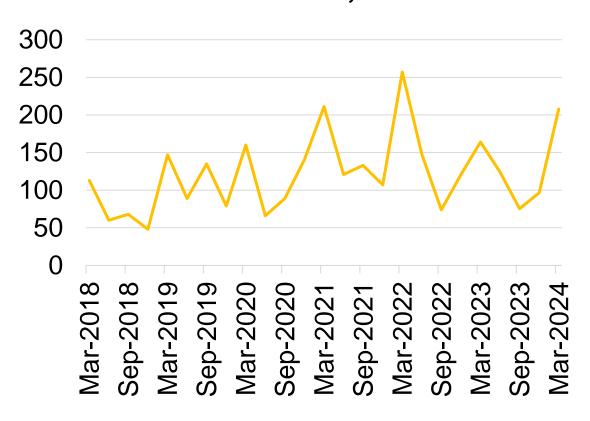
^{**} Includes trades, labourers and machine operators

Building our own

B&C Apprentice*Commencements, QLD



B&C Apprentice*Commencements, Northern



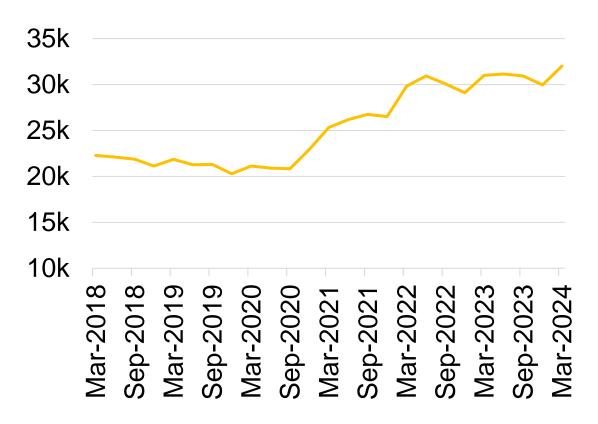
Source: NCVER (Based on March 2024 Database); CSQ *pursuing construction qualifications

Source: NCVER (Based on March 2024 Database); CSQ *pursuing construction qualifications



Building our own

B&C Apprentices* In-training, QLD



B&C Apprentices* In-training Northern



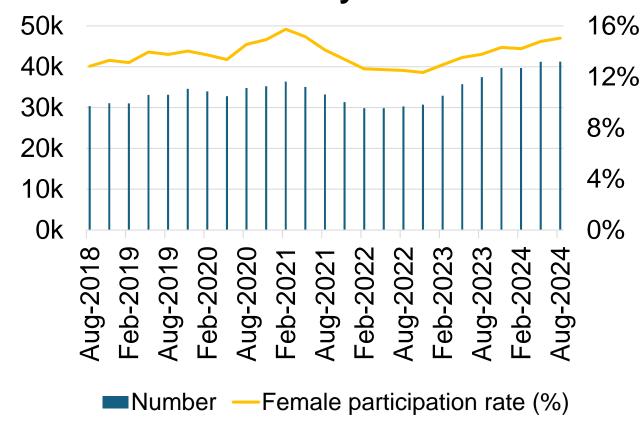
Source: NCVER (Based on March 2024 Database); CSQ *pursuing construction qualifications

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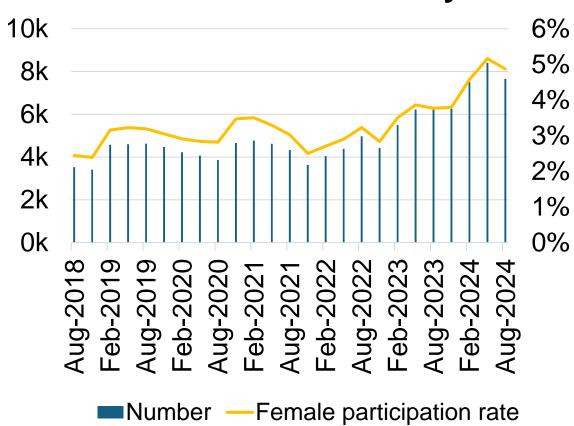
Females in Construction - QLD

Employment in Construction Industry*



Source: ABS; CSQ *Average of preceding 4 quarters

Trades Workers in Construction Industry***



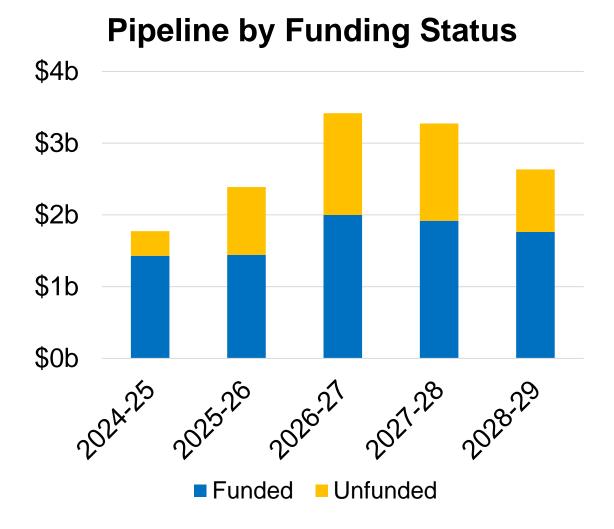
Source: ABS: CSQ

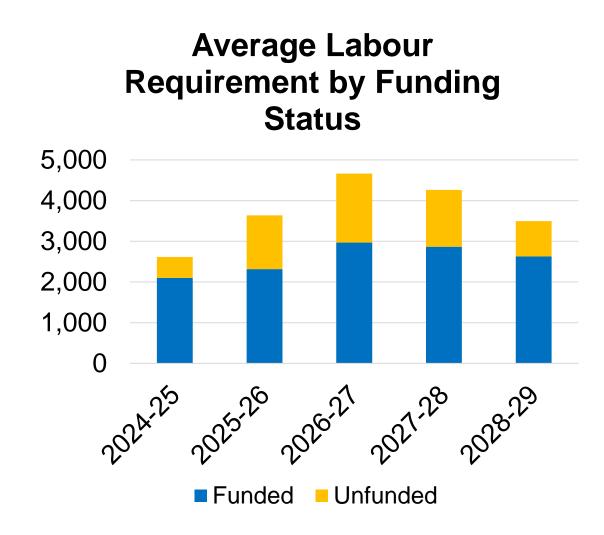


^{**}Includes trades, labourers and machine operators

^{*}Average of preceding 4 quarters



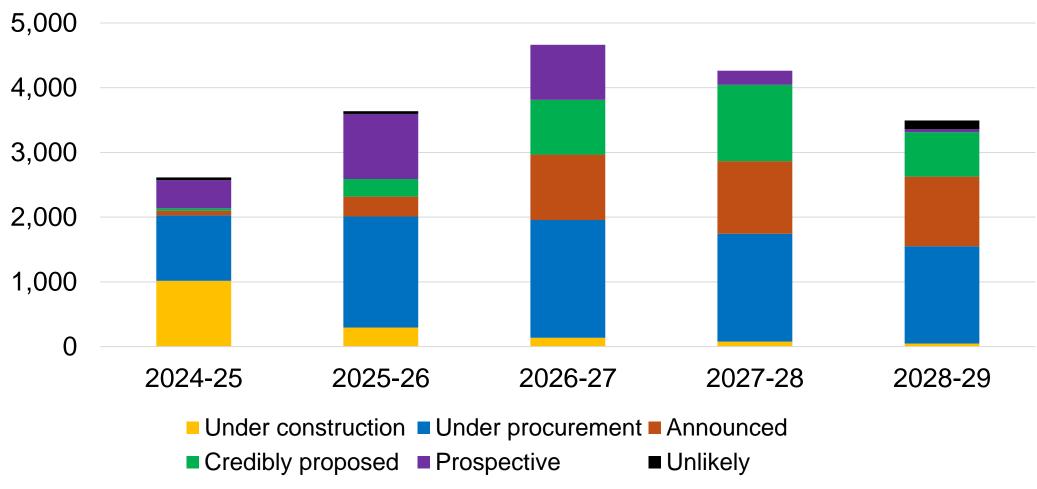




Source: QMCA; CSQ Source: QMCA; CSQ

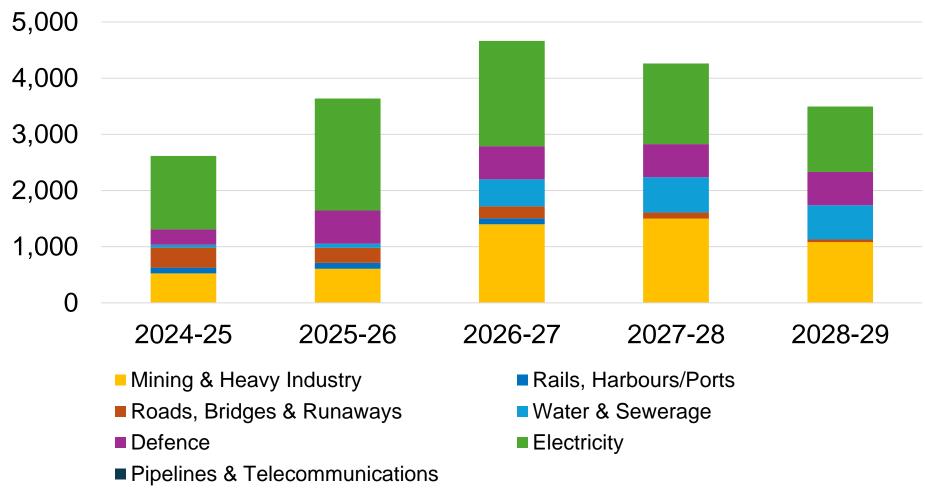


Average Labour Requirement by Project Status



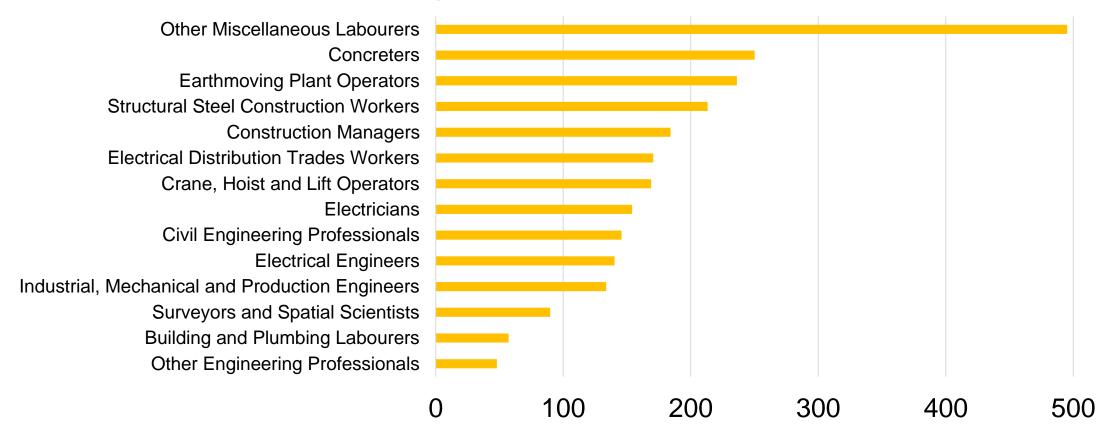
Source: QMCA; CSQ





Source: QMCA; CSQ

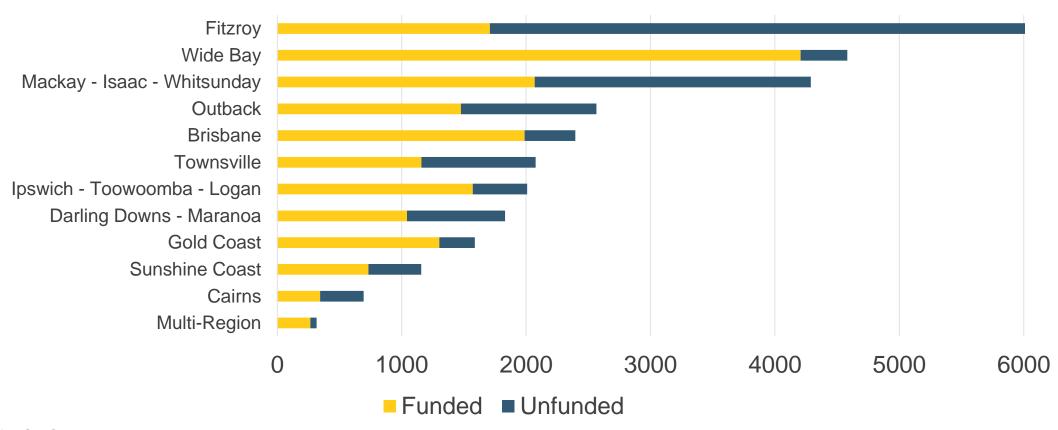
Key Construction Occupations in Demand Average (2024-25 to 2028-29)



Source: QMCA; CSQ

Regional labour requirement - QMPP

Labour demand by region and funding status, average (2024-25 to 2028-29)



Source: CSQ for QMCA



What does industry need to do?



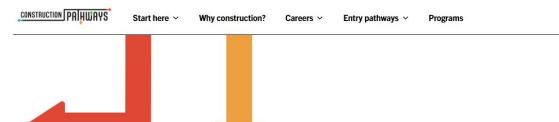
Breakdown barriers for underrepresented groups

Attract & retain apprentices

Improve apprentice completion rates



Be part of the solution

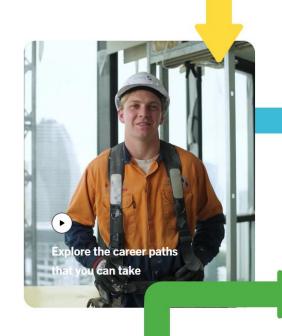


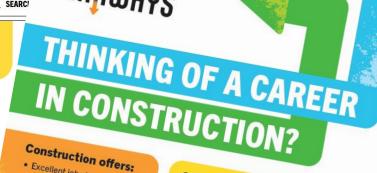
FIND YOUR **PATHWAY**

Be a part of one of the biggest and most exciting industries in Queensland.

WHY CHOOSE CONSTRUCTION?







Construction offers:

- Excellent job stability and earning potential Great work/life balance/
- In-demand skills and travel
- Opportunities for earning whilst you are learning through an apprenticeship/
- Many construction pathways - over 60 job types
- Lots of funded training to grow your career
- Varied work and job sites with changing scenery
- Great career progression on and off the tools

Choosing between uni or non-uni?

There is a lot to think about when choosing a career. It's easy to feel overwhelmed by the options and pressure to make the right choice.

Don't stress, you're not alone. Many young people haven't decided what they want to do yet and it is not uncommon to change over time. What is important is joining an industry where you can succeed.



To find out if a construction pathway is right for you, visit **constructionpathways.csq.org.au**BROUGHT CSQ



Spotlight Story



Tiara EdwardsCivil Construction
Labourer / Plant Operator

"Females or younger people, don't hold back. Even if you've never done it before, trial it out because you just never know."

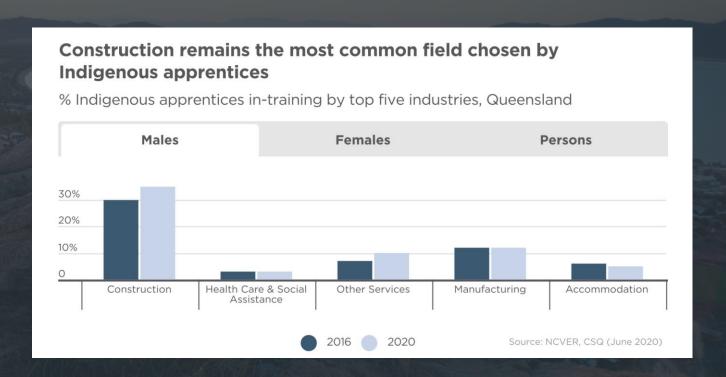






North Queensland - a bright future for Set to Succeed

- ✓ Set to Succeed works hand-in-hand with Industry to co-design programs for First Nations Young People in the Construction Sector.
- ✓ Set to Succeed provides a holistic model of support to a young person entering a traineeship, apprenticeship or construction related qualifications.
- ✓ Holistic support includes, Housing, Transport, Mentoring, Living Skills, Financial Literacy, Employment, Training, Leadership, Health and Wellbeing.



Help us, Help the Future of our Region – 2025 Pilot Program

What do S2S need?

- Funding & Donations
- Employment and Training Pathways
- Co-designed Initiatives





Key Takeaways

- QLD's construction activity pipeline is projected to maintain its upward trend.
- Residential activity may reach 2023 levels or slightly higher as we close out 2024.
- Non-residential activity, particularly hospital builds, and engineering work, remain buoyant.
- Labour shortages, material supply constraints, and cost escalation persist as key challenges.
- Population growth, NET ZERO transition, and the Brisbane 2032 Games are driving record infrastructure investment across the state.



Thank You







2024 QLD Major Projects & Pipeline Report

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Panel Discussion







- Moderator: Glenn Mintern
- Panelists:
 - Inaki Goni Sunwater
 - Maria James MITEZ
 - Dean Deighton AiGroup
 - Terry Waterston BMD







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2024 QMPPR

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