

Submission to the Queensland Productivity Commission Inquiry into Construction Productivity

From: Modscape (Manufacturers of Modern Methods of Construction)

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About Modscape + Modbotics

Modscape + Modbotics is a leader in Modern Methods of Construction (MMC) in Australia, specialising in the design and manufacture of prefabricated, modular buildings. With advanced manufacturing facilities in Helensvale (Gold Coast) and Essendon Fields (Melbourne), we support government and private sector clients in delivering high-quality, sustainable, and efficient building solutions across housing, health, education, commercial, and infrastructure sectors.

Our work includes the recent Cairns Social and Affordable Housing Project — one of the largest volumetric modular housing projects in the Southern Hemisphere with 490 apartments — and we are actively engaged with stakeholders across the public and private sectors to promote innovation in construction delivery.

Key Issues and Opportunities to Improve Construction Productivity

1. Embracing MMC to Reduce Cost, Risk, and Time

Construction productivity in Queensland can be significantly improved through greater adoption of Modern Methods of Construction. Modular and offsite manufacturing processes enable:

- Greater certainty in delivery (fixed cost, time, and quality)
- Reduced or eliminated weather-related delays
- Lower wastage and improved environmental outcomes
- Less disruption to surrounding communities
- Improved workplace safety and labour efficiency

Evidence from our own projects indicates program savings of up to 50%, with parallel onsite/offsite activities compressing critical path schedules and improving cash flow for government and developers.

2. Regulatory Alignment and Standards

A major barrier to MMC adoption is regulatory fragmentation. Differences in planning approvals, building codes, and procurement practices across jurisdictions often mean MMC projects are assessed through a traditional lens, disadvantaging innovation.

We recommend:

- A clear MMC-friendly regulatory pathway and fast-track assessment processes
- Harmonised planning and building regulations that recognise prefabrication standards
- A dedicated MMC advisory body to support best-practice guidance across councils and agencies
- Utilizing modern procurement methods such as ECI's, Panel Arrangements or Sole Sourcing

3. Government Procurement and Pipeline Certainty

Queensland Government has the opportunity to play a catalytic role through procurement reform. By embedding MMC requirements or incentives in social infrastructure and housing projects, government can help create the scale needed to unlock manufacturing investment and innovation.

Recommendations:

- Increase MMC mandated procurement in all QLD Government Projects
- Aggregated procurement to support batch manufacturing and cost efficiencies
- Transparent pipeline visibility to support investment in local MMC capability

4. Skills and Workforce Modernisation

A shift to MMC requires new skill sets — in digital design, manufacturing, logistics, and on-site assembly. We support efforts to modernise construction training and qualifications to better align with the needs of an industrialised construction future.

Opportunities include:

- MMC-focused TAFE and higher education programs
- Upskilling traditional trades for hybrid site/offsite roles
- Stronger industry partnerships to deliver job-ready graduates

5. Data, Digital and Design Integration

Digitally enabled design (BIM), parametric modelling, and digitally controlled manufacturing (Industry 4.0) are core to productivity gains. Government can accelerate this shift through:

- BIM and digital twin mandates on all public construction
- Investment in digital infrastructure and standards
- Supporting open data platforms enabling secure data sharing to streamline collaboration and compliance
- Utilising advanced manufacturing such as robots etc

Conclusion

Modern Methods of Construction represent a critical lever to improve productivity, reduce risk, and accelerate delivery in Queensland's construction sector. Modscape encourages the Commission to champion MMC through policy reform, procurement leadership, and regulatory innovation.

We welcome the opportunity to engage further and provide insights from our operations and projects in Queensland and across Australia.

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