

Overview

The infrastructure industry faces an unprecedented combination of market constraints **as well as cost and demand escalation pressures. This comes at a time of greater focus on sustainability and targets to achieve net zero via infrastructure projects, and a forecasted increase of 5.8% skill demand by November 2026.**

The construction sector is lagging other major industries when it comes to innovation. Productivity growth in the construction industry has trailed other major industries by 25 percent over the past 30 years and is the second worst performing for digital innovation ([Reinventing Construction: A route to higher productivity – McKinsey Global Institute – Feb 2017](#)). In addition, Infrastructure Australia's 2023 Infrastructure Market Capacity report shows industry is expecting a shortage of 229,000 workers. Challenges to productivity are further compounded by the escalation in the cost and scarcity of local materials, issues which are contributing to increased projects costs and delays.

The opportunity

Based on Infrastructure Australia's 2023 Market Capacity report, Australia's public infrastructure pipeline has over \$230 billion committed to projects over the next five years. Transport alone has more than \$70 billion in projects in development and delivery across the State.

Industry has expressed a desire to work with Transport) to identify opportunities for innovation and realise benefits to cost and overall productivity. They have told us that there are barriers that limit innovation opportunities - namely the project lifecycle is too short, new approaches and materials can be costly, as well as a perception that project trials are high risk. This can result in industry reverting to 'tried and tested' approaches to meet deadlines and remove risk.

In this environment, Transport is seeking innovative solutions to help us work smarter and improve the productivity and capability of our partners and the broader industry.

Challenge Statement

What tools or processes could we introduce or change to increase productivity on our projects and make our industry more efficient?

To improve capacity and increase productivity, Transport wants to hear from industry in a new way. Gateway to Innovate (Gtl) provides a platform for industry to propose solutions in the form of new tools or approaches that Transport can trial to improve longer term productivity gains in construction across our infrastructure projects.

About Gateway to Innovate

Gtl is an initiative designed to provide a pathway for industry to propose innovative solutions to challenges set out by Transport. The challenges will focus on target areas that Transport believes collaboration with industry can help resolve.

Gtl is not a research and development grant program. Instead, Transport hopes to work with industry once ideas have passed the development phase to pilot and trial their innovations on larger infrastructure projects. The innovations we are looking for can be something useful that adds value from creating something new, adapting existing processes or introducing improvement.

Solutions

We are looking to industry for ideas that they are ready to trial on our projects.

Meeting the program objective and delivering outcomes that improve productivity, the solutions we are looking for could include, but are not limited to:

- Project management tools and systems (eg. agile project management approaches)
- Enhancing the effectiveness of early market and stakeholder interactions
- Streamlining and automation to enhance productivity
- Modern Methods of Construction (MMC)
- Attraction and retention initiatives, for a multidisciplinary workforce
- Upskilling and training tools and programs for productivity
- Leadership, lean and continuous improvement tools and approaches
- Reduction of waste and construction downtime initiatives
- Design for manufacturing and assembly
- Repeat manufacturing in construction approaches

We are keen to see proposals, that after a successful trial, can be a solution applied at scale. This means the innovation itself could be applied to a broad range of project scopes in either size, technical areas, or for different modes of transport.

The solution will also need to address the broader NSW Government economic sustainability commitments and infrastructure objectives. Refer to the Gtl Guidelines for further details on requirements.

Solutions should:

- Directly address the challenge statement
- Demonstrate productivity benefits
- Have measurable outputs and Key Performance Indicators (KPIs)
- Have potential for scalability and varied scope
- Be ready for pilot/trial

[Check out some of our recent examples of innovation with industry.](#)

Benefits of a solution

Innovative resourcing solutions will have the potential to influence changes to specifications, policy, regulatory and commercial landscape and will inform decisions on future investment and state-wide implementation.

A more innovative approach to Transport's infrastructure program will support the sector to:

- Increase productivity
- Reduce costs, time and waste
- Increase attraction and retention of our workforce
- Upskill and enhance professional development
- Manage burnout/fatigue
- Create greater opportunities for a multidisciplinary workforce
- Introduce modern methods and practices

Relevant Strategies and Government Priorities

[Future Transport Strategy](https://www.future.transport.nsw.gov.au/) - <https://www.future.transport.nsw.gov.au/>

Infrastructure Australia, [2023 Infrastructure Market Capacity report](https://www.infrastructureaustralia.gov.au/publications/2023-infrastructure-market-capacity-report) - <https://www.infrastructureaustralia.gov.au/publications/2023-infrastructure-market-capacity-report>

How to get involved

Have an innovation that is ready for trial? Stay up to date on the [Gtl website](#).

Still got questions?

[Check out the guidelines or FAQs](#)



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