

Presidential Roundtable Summary: In conversation with Romilly Madew, CEO of Infrastructure Australia: improving infrastructure delivery

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How do we improve the deliverability of infrastructure – both effectiveness and efficiency? This is a question being asked globally as countries navigate adapting their infrastructure systems to the challenges of climate change, decarbonising their economies and recovering from the Covid-19 pandemic. By improving how projects are planned, procured, and delivered, these socio-economic and environmental priorities can be met more easily by producing higher quality, resilient and more sustainable infrastructure.

As part of this discussion on delivery, Infrastructure Australia presented their recent work and Deliverability Roadmap, which is being produced to establish a best practice plan to support efficient and effective infrastructure delivery across government and industry. This is taking place at a time when infrastructure investment in Australia (and around the world) is at historically high levels.

Attendees from the UK, Australia, New Zealand, Hong Kong, and the Middle East shared the challenges they are facing in this space and lessons Australia could consider in future strategic planning. The overwhelming message was the need for improved collaboration in all its forms in future infrastructure delivery. A summary of the discussion is set out in this paper.

Common challenges and common themes

During the discussion, it was widely recognised that there are similar themes worldwide. The desire to innovate and digitise, people and resources challenges, the need for better procurement and delivering value and challenges around site safety. This is all combined with sizeable infrastructure pipelines that need to be delivered, creating a significant challenge to solve.

Australia's deliverability challenges are the same. There are market capacity constraints due to a significant ramp-up in investment. For example, in Australia, 1 in 3 roles in infrastructure delivery are forecast to go unfilled in 2023. There is also the issue of delayed and overbudget delivery; globally, over 75% of transport projects are delivered over budget.

Infrastructure Australia's Deliverability Roadmap will focus on common themes to address these challenges in delivery, including looking after people, shifting from outputs to outcomes, developing solutions as interventions within a system, improving digital adoption, governance for collaboration, better contracting and commercial arrangements, and driving innovation.

Improving infrastructure delivery is a vital issue for politicians who recognise the value of investment for communities. While it doesn't get a lot of media attention, states and territories in Australia are very supportive, as we heard in the discussion.

How to enable collaboration

Engendering the right mindset: Getting collaboration right on a project is complicated because you are bringing together complex systems through people and ideas. Even within a Project 13 construct, there is something about the relationships that need to change in terms of accountabilities and behaviours. Everyone thinks they are collaborative until they are in an alliance with a broad range of skills and expertise and different company cultures. This takes a lot of work to manage and get right through training and actively addressing issues.

As part of the discussion, we heard that an industrial psychologist is a key role coming to the fore, which can support people from different backgrounds to come together across specialisms and generations. Getting this right is a central issue and is needed to get the contract structures used to engender collaboration working more effectively.

Using the best contracts and procurement methods: The point on contract form was picked up in the discussion where we heard that driving collaboration needs a contracting approach that is geared to that outcome. However, politicians will still announce project timelines and budgets well before anyone involved in the project knows the actual cost of delivery (something ICE explored in our [forecast vs. outturn study](#)). This makes it difficult to collaborate as everyone is fixated on a project's perceived worth, resulting in tendering on price. Despite non-price criteria such as innovation being the ambition, this is not being followed through.

Look beyond domestic borders: The construction industry needs to act with a more global mindset. Challenges are very often not unique. It was recognised that initiatives such as today's roundtable help. But there is a lot more that can be done. How can the existing thought leaders get together more regularly to share data, knowledge and lessons so that the same mistakes don't keep getting made? This is how we accelerate progress; we should look at how quickly we can turn best practice into everyday practice. In a time of so much change, this is needed. Learning from the wider sector and different sectors will be a huge enabler.

Bringing in more diverse minds: The infrastructure market is becoming better at linking work to outcomes for society, which is increasingly recognised. Infrastructure is not about concrete and steel or building monuments but about infrastructure services and systems that will last for decades. Despite the image of construction and engineering changing, there is still an issue with skills and capacity in the sector. What new approaches could we take to get more people into the sector?

A few ideas included modifying courses and coursework more readily and actively to make them meet the needs of the live construction market. Another area suggested was micro-credentialing in training

institutions, this was seen as a critical gap to enabling people from one career to quickly transition to another.

Transferability between sectors was seen as key - it is challenging to do. Still, you benefit from a skilled professional and their insight from another industry to drive innovation once it happens. If clients were a bit more flexible, they would not only address capability and capacity gaps but really get the benefit of a broader pool of insight.

Start early: Early-stage collaboration is essential; this is where you can make the most significant difference in addressing common problems that you can reasonably forecast will come up during delivery, such as capability gaps. Reference was made to the Project Routemap process that helps and adds value to client teams. If more people were using this, we would start seeing key changes at the early stages of projects and programmes.

Questions to take away

- We heard about the focus on geography and places. This is where all the infrastructure systems come together to serve people and society and nature. How do we ensure regions and 'places' can take advantage of the lessons learned at national and state levels to improve infrastructure delivery?
- Access, quality, and cost of the infrastructure system is important. How do you get the balance right between focusing on the productivity of projects vs. the system's performance? Is policy focused too much on the former over the latter?