



The Opportunity of a Lifetime

Roads Australia
National Capacity and Skills Forum
Outcomes

September 2017

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Introduction

There is no doubt; the nation agrees we're in the middle of delivering Australia's biggest infrastructure program in history.

Public investment promised to infrastructure currently exceeds two trillion dollars. Next year is set to be the largest capital spend ever in our national history. And that's just the east coast. West coast investment is increasing, coupled with the need to more strongly retain its people and the skills to continue to deliver Australia's resource commitments to drive the nation's expected level of GDP growth.

Over the next 5 to 10 years, the engineering and construction outlook for infrastructure is set to support a strong phase in economic opportunity and skills growth. Demand for talent to deliver smart, sustainable infrastructure solutions will remain high.

The engineering and construction sector welcomes the large, ongoing pipeline of work, however, recognises that the immediate challenge is that choices made today will impact the nation's ability to deliver quality projects in the right place, at the right time at the best public value price in the future.

Industry recognised that unprecedented workloads in New South Wales and Victoria has created competition between all states and territories, and that there is an important need to focus on the sustainability of capacity and capability moving forward.

If as a nation, we focus on achieving a more equitable gender and all abilities balance, and work to capture the full productive potential of our nation, we will create an enduring flexible and sustainable workforce.

This report captures the views and sentiments of government and industry peers on the challenges and opportunities to deliver the national infrastructure program.

It includes practical options that the sector can work on together to enhance the availability of people and experience across both public and private sectors delivering infrastructure for Australian communities.

About the Roads Australia - National Capacity and Skills Forum

On September 4, 2017, over 100 Roads Australia public and private sector member CEOs, senior leaders, engineering and construction managers representing over 60 organisations, met in Sydney to discuss nine key areas impacting on the efficient delivery of infrastructure.

Nine key areas of investigation

Roads Australia members and partners divided into groups to consult on nine key areas important to the capability and skills required for the efficient delivery on infrastructure.

1. Construction capacity – what we need & when?
2. Consultant capacity – what we need & when?
3. Skills & training pipeline – what we have, & what we lack
4. Materials/equipment supply, access & co-ordination
5. Utilities co-ordination
6. Procurement efficiency & speed
7. Regional works
8. Public safety & traffic management; and
9. Innovation & emerging technology

Industry perspectives

The meeting began with a presentation from *Craig Laslett, Chief Executive Officer, Engineering & Services Australia, Lendlease* who reminded industry that it is a little recognised fact that Indigenous Australia is home to some of the oldest engineering projects in the world, up to 30,000 years old, which is older than the pyramids and Stonehenge. It is important that the industry reconnects with and recognises this history.

Craig highlighted that in the last 12 months NSW has spent more on transport infrastructure than New York or London. Unprecedented workloads in NSW and VIC has created competition between the states, and that we need to focus on sustainability moving forward.

We are currently under pressure for resources and we are only tapping into half the population.

Craig raised the importance of ensuring everyone in the industry is working towards the same goal which is to deliver outcomes for the community. Infrastructure isn't just about building roads, it is about creating value and improving our lives. Price shouldn't be the main decision maker, it should be the value of the project to the community that decides whether a project goes ahead.

Government perspectives

Jeff McCarthy, Executive Director, Technical and Project Services at Roads and Maritime Services highlighted that the existing workforce is aging and will be retiring in the next 5 years as the baby boom moves through. Jeff explained that the total demand for labour in 2015-2020 doesn't necessarily change a lot, however the workforce gap is bigger due to the large number of retirees.

Jeff also presented Seek data that suggests health, safety and environment job vacancies have increased 37% and plant and machinery operations have increased by 33% in the last 12 months.

Later in the detailed discussion, the forum identified that further work needs to be done to better understand the *actual* skills gaps that industry is experiencing to target the response.

The forum also identified the need to better understand how to approach each segment of the Australian workforce. This requires further analysis of all possible workforce participants to better understand the gaps and opportunities, and how to approach, attract and retain each audience.

It is predicted that transport construction is likely to face the greatest constraint in capacity over the next few years. Putting in place trainee and mentor targets, programs to encourage women into the sector and to commit to aboriginal participation in construction policies are immediate actions the forum agreed we can action today.

A panel discussion

A member panel discussion invited a number of senior leaders to share their perspectives on capacity and skills in the next 10 years.

Nicole Stoddart, Managing Director, Construction Services, AECOM forecasts that the biggest challenges for the consulting industry over the next 10 years will be competing for resources and fishing from the same pool in Sydney and Melbourne. To face this challenge, Nicole suggested recruiting more refugees and people from other countries and cultures, and encouraging women by creating flexible work places that enable women to continue their careers during child rearing years. Nicole stated that industry needs to market it better, inspire young people and speak in public space about the great jobs available in engineering. The prestige of engineering is greater in England than in Australia, maybe we need to work on that.

Seved Robin, Deputy Managing Director, Bouygues stated that the main objective for industry today is to manage the risk looking forward. A lot of improvements can be made in the preparation phase of major projects and any problems can be averted with proper planning. Speaking from his international experience, Seved outlined the issues around spoil handling. When handled by the authorities this process is done better, and maybe Australia could improve in this area to make spoil handling and recycling more sustainable with better systems. Seved believes the more we can industrialise and mechanise these techniques (such as using tunnel boring machines without drivers), the more we can use people to work on real challenges like recycling. Seved believes that things are moving quickly around the world with technology in this area, and predicts that in 10 years there will be no drivers - which will eliminate any health and safety issues. For the construction industry to attract young people it must adhere to sustainable practices. This is especially important to 25-35 year olds. Young people are environmentally conscious, keen to innovate and need mentoring and training opportunities.

Shalendra Ranasinghe, General Manager Commercial, Roads and Maritime Services explained that the main challenge for government and the private sector is to work together and collaborate on delivering valuable infrastructure for the community. The government is mainly

concerned with certainty of delivery, safety and quality. Whilst the private sector is understandably concerned with certainty of profit margin and reputation.

Shalendra explained that the three most difficult to fill roles in New South Wales and Victoria, according to Seek data, are construction directors, senior project managers and senior commercial managers. These roles are advertised at 20-30% above market rate. Jobs are competing from the same pool of people. In order to recruit more young people to the industry we must adopt design thinking into what we do and ask young people what they want out of their career. Currently government jobs appear more attractive than private industry because the workplaces are more culturally diverse and have a better gender balance. Such an environment creates excellent teams bringing different viewpoints and experience. It is key that workplaces follow through with their policies, for example, if you promote flexible working hours, then you must be accepting of people working from home, but this doesn't always happen.

Shalendra made the point that our industry hasn't joined other industries in the way we think. Many good ideas come out of the private sector, then once the idea reaches government it gets normalised. Shalendra believes we should embrace new technology, not stifle it. The question should always be: What is the public value? We don't have a real understanding of what public value means. We are here for public good, not the bottom line. Some projects will cost more, but add benefits to the community, which is value. Benefit cost ratio modelling for public benefit can show that great ideas may not add benefit to the community. To fix this, government needs to collaborate and communicate with private industry better. We often try and do things quickly, by headline, with not enough depth. A way to address this would be to run more workshops to understand the designs and price of projects. We also need cultural workshops to discuss public value. We need better education and to remember that we are all delivering the same thing.

Comments from the floor highlighted that our industry needs to market itself better to the public and raise its profile, like the Department of Defence does. We need to promote different roles and include both overseas and local opportunities to grab the attention of young people. The public don't understand what the industry does and this needs to change. What do we do from here? One suggestion was to organise workshops with the marketing staff in our member companies to come up with human stories to connect the industry with the community and show them what a difference they can make to the lives of others working in construction and engineering. Everyone in the room was asked to go back and challenge their marketing specialists to link the technical aspects of the work with human stories and shine a light on the great things the companies have done. If the public could see these stories it would raise the profile of the industry.

Detailed outcomes and practical options

Participants at the forum represented over 60 organisations and included road agencies, construction and engineering companies, consultants, legal services, road maintenance, manufacturing, and both local, state and interstate governments. Outcomes from the forum include practical options that government and industry, in partnership, may consider and take forward.

A full list of participants at the Roads Australia National Capacity and Skills Forum is located on page 17. Select [presentations](#) and photos from the day are available on [RA's website](#).

Executive Summary

On September 4, 2017, over 100 Roads Australia public and private sector member CEOs, senior leaders, engineering and construction managers representing over 60 organisations, met in Sydney to discuss a number of key themes impacting the efficient delivery of infrastructure.

Key industry and government leaders discussed the key opportunities to access untapped productive potential across Australia.

The resounding four key opportunities are detailed below:

1. The engineering and construction industry has an image problem
 - There is a perception that engineering and construction is uninviting, not attractive and 'boring'
 - The biggest challenge for industry is to appeal to a diverse public to recruit workers from a variety of backgrounds and disciplines to feed growing infrastructure program requirements
 - More work needs to be done across each level of the career development cycle to investigate and recognise the potential for maximising our national employment capacity. For example, with schools during career-defining years and to increase the participation of women during child-rearing years
 - It is vital for the sector to increase the size of the 'pond' as infrastructure programs from a variety of states are competing for the same talent.
2. As a nation, we are only tapping into half the population to find the capability we need
 - Government and industry needs to support and enable the full productive potential across all ages and abilities in Australian society
 - Create opportunities and work environments for women to join and stay in the industry
 - Re-skill talent from declining industries
 - Encourage skilled and non-skilled workers from diverse backgrounds and disciplines
 - Create a friendly workplace where people with diverse abilities can flourish.
3. Tension continues to exist between project price and community value
 - A collaborative effort between the public and private sector to determine what 'value to the community means', and offer practical options to Government and industry on how to embrace and deliver it.
4. The engineering and construction industry's vision is to create a sustainable workforce that contributes to a productive and healthy Australian society.
 - Promote the engineering and construction industry to a diverse public
 - Seek ways to encourage low and high skilled people to the industry
 - Advertise the leadership and management opportunities available
 - Create a flexible and friendly workplace where people from different backgrounds and across disciplines can thrive
 - A strategic and cyclical approach to the planning, development and delivery of skills and capability that matches the infrastructure development needs of society during a set period of time.

This report offers a better understanding of the above key insights, as well as practical options for government and industry to consider when reviewing ways to encourage best outcomes associated with the delivery of public infrastructure for Australian communities.

Practical options to address capacity and skills demand

1. Construction capacity – what we need & when?

Forum discussion revealed a number of practical options to improve construction capacity, today. It highlighted the importance of attracting and retaining talent in an employment system that acknowledges and works in parallel with the cycles of human life, responds proactively to adversity on our community, and has a deep respect for all life experiences and capabilities.

*An employment systems needs to acknowledge
and work in parallel with the cycles of human life.*

The below list suggests a strong focus on the *full spectrum* of a low to high skilled construction workforce.

Practical options to consider to improve construction capacity:

- Run employment programs for women from tough social backgrounds to give them opportunities to enter the industry
- Commit to the Aboriginal participation in Construction Policy
- Conduct an annual pay gap analysis
- Set gender balance targets and encourage women into the construction sector
- Hold regular unconscious bias training sessions
- Monitor and share women's experiences in the workplace
- Re-skill people with 30 plus years' experience from other industries
- Promote our industry to a diverse crowd, including through schools to young people and engage students considering their career ahead
- Advertise to the public about the leadership and management opportunities
- Ensure the workplace is a flexible and friendly place
- Better understand the actual skills gaps
- Provide different job 'shapes' for all types of workforce capacity and capability
- Set trainee and mentor targets
- Develop more detailed and defined construction programming to help sector prepare
- Improve the efficiency of the bid process – avoid tying up skilled labour.

2. Consultant capacity – what we need & when?

Forum discussion revealed that many young engineers are propelled forward early due to the high demand for talent.

Participants reported that young engineers have a lot of responsibility and endure a heavy reliance burden.

The key skills gaps and the challenges in engineering consulting were discussed and identified as:

- a. Missing middle level of skills gap of 10-20 years
- b. Lost workforce during industry slowdowns
- c. Cyclical nature of industry
- d. Workforce on contract/lack of certainty or permanence
- e. Central employment agency? Does Engineers Australia have a role?
- f. Specific skills, such as traffic modelling and flood modelling.

The practical options below begin to address key skills perceived as missing in engineering, discuss ways to manage the challenges of a cyclical market sector and the early responsibility currently endowed on young engineers at an early stage of their career.

Practical options to consider to improve consulting capacity:

- Targeted training programs – for skills gaps, and capability building
- Encourage cadetship programs to develop capability sooner
- Invite skilled engineering consultants to work directly with government in the early feasibility stage to improve procurement efficiency. This approach could substantially reduce infrastructure costs and provides governments with an independent assessment of key infrastructure projects, the public with the best possible outcome and increase the availability of specialist engineering expertise, e.g. geotechnical, for key projects.
- Use overseas skills and engineers to fill the middle level skills gap
- Target attracting experienced women back into the workforce with greater flexibility
- Very large contracts that focus the market, potentially restrict broader industry participation
- Plan for the whole of life cycle maintenance and operation of new (and existing) infrastructure today
- Period of assessed management contracts
- Develop panels or models that deliver greater participation of smaller consultants.

3. Skills & training pipeline – what we have, & what we lack

The forum highlighted the need for marketing construction industry and its supply chain to attract critical skills. Participants agree that once an infrastructure program is created, how to resource it should be reviewed first to better understand the demand for, and availability of, specialist skills and services required to deliver in the desired timeframe.

*Build the infrastructure program
first, then work to better
understand resource demand.*

The practical options below include ways to curate the most immediately required skills in a relative short time frame.

Practical options to consider to improve skills and training pipeline include:

- Promote vocational education as a choice and a meaningful opportunity - as 1st option
- Vocational and Education Training system can provide a balance of learning styles
- Agree a holistic, strategic workforce plan (share the methodology with industry) – to understand where to deploy specialist skills across the infrastructure sector and when
- Provide a granular breakdown of projects to understand the nature of the task/skills required by the infrastructure program. Develop capacity to track time/availability of skills
- Provide teachers with industry information – share the experience in industry/help teachers provide a better understanding about the industry/help increase numbers entering the industry – ATAR chasing is an issue
- Target schools, show where the construction industry is going, not just uni's, trades too!
- Improve the capacity of registered training organisations to deliver
- Consider the influence of parents and their perceptions of the industry
- Universities change their delivery model to increase availability of specialist skills
- Experience is essential – support a career pathway of 2 streams, (maybe 3) including all channels – schools, TAFE and universities
- Facilitate the conversion and transition of skills and experience from across sectors
- Recruit to potential – utilise untapped capability of emerging leaders
- Improve succession planning. Industry lacks senior people. Succession plans not done well
- Increase the availability of engineering cadetships
- Start early, educate students about the vast amount and type of infrastructure industry opportunities – profile real people and their real jobs in their early career
- Review how other nations have responded to major infrastructure investment programs
- Help make maths and physics favourably viewed, valuable subjects for young people
- Encourage industry and professional bodies to work together with teachers
- Encourage skills and capacity through the procurement process
- Look beyond apprenticeships and trainees – to create a career pathway construction and engineering skills – look beyond education, encourage professional development and showcase long-term career prospects.

4. Materials/equipment supply, access & co-ordination: what can we do differently & better?

The forum considered how the supply, access and co-ordination of materials and equipment supply to construction sites in urban environments could be better managed to offer a just-in-time service to the infrastructure program.

Local planning scheme amendments to expand quarry resources are taking too long and slow the ability for the supply chain to respond to project demand.

Practical options to consider to improve supply, access and co-ordination of materials and equipment supply include:

- Forecasting materials and equipment requirements based on likely project demand
- Consider the use of Australian quality standard imported materials
- Develop ways to extract appropriate construction materials from recycled materials
- Allow flexibility in technical specifications – balancing project quality, innovation and value
- Consider new and other alternate transport methods and modes to deliver materials and equipment
- Plan to co-ordinated deliveries from different materials suppliers to the same or similar local sites
- Encourage the use of pre-fabricated materials to support more efficient delivery and construction
- Review policies regarding supply from local quarries and urban access hours to support project delivery
- Monitor the price of materials and equipment during peak periods and consider alternative bulk or volume deals to enhance public value.

5. Project Procurement: efficiency & speed

Forum participants reviewed five important aspects of project procurement to unravel how to expedite the process.

Capturing the lessons of the past and translating these learnings into current projects, reducing documentation throughout the procurement process and allowing time for efficiency were key themes.

Practical options to consider to improve project procurement efficiency and speed include:

- **Legals / Contracting**
 - Capture lessons learnt, what projects have worked well, retain competitiveness until the end
 - Explore options and take time to go to market
 - Appropriate risk allocation to those most capable of managing that particular risk.
- **Preparation/Pre-contracts (avoid addenda)**
 - Political drive can lead to poor outcomes, public vs personal duties
 - 5 years + programs published
 - Disconnect the infrastructure investment programs from the election cycle.
- **Simplification of procurement**
 - Capture lessons learnt from other projects (NCNX 8 pages)
 - Reduce 'business as usual' documents until shortlisting
 - Simplify documents, reduce volume
 - Shorten word limits in submissions
 - Appropriate shortlisting of proven suppliers – reduce industry workload.
- **Design detail**
 - Hold interactive tender sessions
 - Allow enough time to develop feasible options - more to satisfy the contractors, not necessarily the client
 - Align expectations, de-risk projects.
- **Government Interaction**
 - Market appetite is still there to interact more with government
 - Find ways to encourage innovations into project
 - Streamline government interactions in parallel
 - No procurement before approvals (approvals in some cases have occurred in parallel with good efficiency outcomes)
 - Efficiency not necessarily speed
 - Decentralise procurement practices, gateway review, design, risk, panel for greater efficiency.

6. Regional projects: Who is going to deliver this work?

Forum participants considered the implications of increased demand for capacity and skills in a regional context.

Increased visibility of upcoming projects, project delivery timeframes, ensuring procurement efficiency and looking for local solutions are key themes.

Local people are the answer.

Practical options to better understand who may be best placed to deliver regional projects include:

- Increase visibility, of what, when, where – continue what's commenced – we need more! – for example in urban development, State Government, Council, Country Rail, renewables and mining
- Pre-qualifications – Local companies need to pre-qualification too!
- Procurement – Be mindful of costs, allowances and plant – and continue to encourage and enhance the ability for tier 2 and 3 contractors to bid and win work
- Client-side to ensure a smooth process experience. Stick with the committed projects.
- Attractiveness – continue to support regional industry to attract people, develop projects and enable profitable/sustainable practices.
- Invest in regional education – particularly engineering in the regions e.g. blue collar training in regional centres and towns
- Local people – is an answer – client, designers and contractors
- Set up regional centres just like Parramatta, but in the regions to strength a local solution to regional infrastructure delivery
- Increase the use of technology – use this as an enabler to support the productivity of the regional infrastructure sector.

7. Public safety & traffic management: how can we deliver projects better & safer?

Forum participants reviewed safety as a first priority and discussed ways to better deliver projects and increase public and worker safety at the same time.

Key themes discussed include the separation of workers from live, active areas, the need for more public awareness of the benefits of construction in their communities and to embrace technology to improve safety today.

Create a consistent traffic management experience for all road users.

Practical options to better deliver traffic management and public safety include:

- Safety through separation of workers/public from live, active areas
- Safety vs flow – better balance of traffic flow and roadside safety design
- Practical vs political (public awareness campaign) – public safety and the safety of road/construction workers becomes a mindset for all who use the roads in all capacities
- Increase the focus on the elimination of risk, positive direction
- Road workers vs public debate – through public campaign show the benefits the public receive in return for patience
- Training – National harmonisation, consistency, public and practitioners – use national guides to create a national traffic management experience for road users
- Behavioural change – industry (eliminate risk), worker (assess risk vs procedure) time driven (increase consciousness), public (awareness, communications and enforcement)
- Industry – remove barriers to the use of enhanced technology (innovation vs compliance)
- Shift from labour to technology where possible – automate where possible – get people off live roads
- Make sexy, career paths, all sectors – promote the benefits and opportunities of the safety and traffic management industries to contribute to the big infrastructure program
- Continue to commit to improving community engagement. Keep the public – well informed – throughout the planning phase, and develop clear ongoing communications
- Safe journey, well sign posted, consistent/credibility – consistently deliver a familiar road traffic management environment
- Invest in industry to ensure employees are educated on new technical enhancements that improve safety and project delivery
- Review temporary traffic management and safe work policies to embrace new technologies, and enhance the skills in the traffic management industry (currently behind)
- Assess and address the current barriers to innovation (OHS risk) state by state.

8. Innovation & emerging technology: what will make a difference for the next 5 years?

To examine how our approach today may evolve in an environment of constant change, forum participants discussed ways that the infrastructure sector could make the most of the challenges and opportunities that industry will face in the next 5 years.

Investment in developing digital engineering skills, increased flexibility of technical specifications and standards, allow a margin of error and being able to showcase Australian technical capability and share knowledge with international peers were key themes.

Loosen prescriptive technical specifications to allow for innovation.

Practical considerations that may assist in an increasing technological environment with constant innovation include:

- **Skills and training**
 - Increasing difficulty to find staff with digital engineering skills, older and younger
 - Focus on STEM skills now as basis of training on new technology
 - Retraining required in some areas – these areas to be specifically identified
 - Government to lead incentives to encourage spend on training
- **Standards and procurement**
 - Standards – where specifications are too prescriptive
 - Procurement process can actually stifle innovation
 - Differing understanding of requirements from clients
 - Consistent definition of capabilities and standards - harmonisation
- **Acceptance of change**
 - Some resistance to change
 - Client learning too on what they want, asset management
 - Client acceptance of new technologies required. Change of mindset – paperless?
 - Innovation is also risk acceptance
 - Recognised cost in adopting and applying something new
- **Global leadership**
 - Bring overseas technologies/skills to Australia
 - Showcase capabilities.

9. Inclusion & Diversity: what are the social procurement policies we need?

Forum participants considered the impact of current employment policies and practices to consider how the infrastructure sector could invite greater workforce participation across the infrastructure program.

The key inclusion and diversity messages highlighted at the forum were:

1. Show that we (the infrastructure sector as a whole) are serious about diversity
2. Start early in the project phase e.g. tender phase
3. Move towards a changing mindset: Client – qualifications. Industry – hours of work. Image – flexible working.
4. Promote our industry – a career building a better life for all
5. Mentoring – commit mentoring opportunities to employees and continue to share industry and project knowledge.

Practical options offered to invite greater overall workforce participation in infrastructure include:

- **Different ages and life stages**
 - Encourage and support the transfer of knowledge from new through to experienced employees
 - Establish mentoring, be trained in mentoring skills, leave a legacy
 - Awareness of situation and available support, structure informing mentoring/parenting. Encourage support within the work site.
- **Flexibility**
 - Based on roles, office and site environments
 - Change mind-set that flexibility means lower productivity
 - Increase job share opportunities
 - Prepare part-time work opportunities, understand the value, 4 days on/4 days off.
- **Transfer of skills**
 - Understanding that people have transferrable skills
 - Employee flexibility, recruiters to help shape how this might work
 - Employers to provide support to promote transfer of skills
 - Employers to be incentivised to promote transition in to our industry
 - Use promotion, campaigns, advertising to encourage employees to sector
 - Focus on all areas of diversity
 - Migration, accessing other qualifications – facilitate faster accreditation
 - Recruit who we know.

Participants

Organisation	First name	Last name	Role
AAM Group	Laren	Collen	Business Development Specialist
Acciona Infrastructure	Julian	Elliott	Head of Corporate Communications
AECOM	Nicole	Stoddart	Managing Director - Construction Services ANZ
Allroad Group	Lee	Vossen	Managing Director
Aurecon	John	Figuerola	Technical Director, Transport Services
Aurecon	Mary	O'Keeffe	Recruitment & Sourcing Consultant
Aurecon	Peter	Fisher	
Australian Asphalt Pavement Association	Dougall	Broadfoot	NSW Executive Officer
Australian Constructors Association	Lindsay	Le Compte	Executive Director
Avant Garde Solutions	Luigi	Rossi	Director
BG&E	Kaiyu	Lin	Associate Director
Bouygues Construction Australia	Peter	Tilley	National Strategic Projects Manager
Bouygues Construction Australia	Seved	Robin	Deputy Managing Director
Broadspectrum	Naomi	Murnain	HR Consultant
Cardno	Stephen	Oxley	Business Unit Manager - Transport NSW/ACT
Cement Concrete & Aggregates Australia	John	Nichols	Engineer Construction Solutions
Civil Contractors Federation	Liesel	Henn	Manager - Policy & Project
Coffey Tetra Tech	Urs	Meyerhans	Chief Executive Officer
Colas Australia	Ray	Simpson	Project Manager - TMC
ConnellGriffin	Andrew	Nguyen	Advisor
ConnellGriffin	Richard	Martin	Director
Davidson Workplace Performance	Jeremy	Symes	Practice Leader
Davidson Workplace Performance	James	Greig	Engineering Consultant
Davidson Workplace Performance	Gareth	Broadrick	NSW General Manager - Projects
Deleg8 - Infrastructure Project Specialists	Omar	Faruqi	Director Operations
Ditchfield Contracting	David	Jurd	Managing Director
Engineers Australia	Collin	Jennings	Policy Advisor for NSW / ACT
Engineers Australia	Greg	Ewing	General Manager, Sydney Division
Engineers Australia	Jonathan	Russell	National Manager, Public Affair
Engineers Australia	Mike	Veysey	Chair Transport Australia Society
Engineers Australia	Collin	Jennings	Policy Advisor for NSW / ACT

Organisation	First name	Last name	Role
Freyssinet Australia	Pierre-Yves	Souesme	Technical & Business Development Manager, Civil
Fulton Hogan	Kyle	Clements	Business Development Manager
GTA Consultants	Nicole	Vukic	Director
Holcim (Australia) Pty Ltd	Warren	Ashton	Sydney Aggregates Sales Manager
Institute of Public Works Engineering Australia	Carina	Jakobsen	Event Coordinator
Institute of Public Works Engineering Australia Ltd	Loan	Kiss	Head of Production
Jacobs Group	Dion	Bowen	Section Leader Roads & Highways
Jacobs Group	Alex	Paton	Marketing & Business Development Leader Buildings & Infrastructure Asia Pacific
John Holland Group	Penny	Bonnefin	Bid Manager, NSW ACT Region
John Holland Group	Scott	Olsen	Executive General Manager, NSW/ACT and RA Board Member
Kellogg Brown & Root	Max	Towns	Manager, Transport, NSW
Kier Group	Simon	Berry	Technical Lead - Roads
Laing O'Rourke Australia	David	Whatmough	General Manager - Project Delivery
Lendlease	James	Yerbury	National Pre Contracts Manager Roads Services
Lendlease	David	Snook	Training and Development Manager
Lendlease	Romy	Sullivan	Human Resources Coordinator
Lendlease	Ashley	Johnson	Civil Estimator
Lendlease Engineering	Anne-Maree	Clarke	Social Sustainability Coordinator
Lendlease Engineering	Stephen	Harmer	Business Development Manager NSW/ACT
Lendlease Engineering	Justine	Voigt	Program Manager
Lendlease Engineering	Craig	Laslett	CEO Engineering & Services
Level Crossing Removal Authority	Bradley	Giddins	Director, Industry Capability And Inclusions
MIEngineers	Amy- Ruth	MacDonald	Strategic Relationships Manager
MIEngineers	Robert	MacDonald	CEO
NorthConnex	Richard	Merrett	Engineering Manager
NorthConnex	Faisal	Rasul	Surface Works Verifier
Office of Coordinator General	Celia	Pollard	Director Sector Development - Transport
Office of Projects Victoria	Briony	Grigg	Assistant Director, Skills and Performance
OneSteel Manufacturing	Rob	Johnson	Market Development Manager Construction

Organisation	First name	Last name	Role
OneSteel Manufacturing	David	Bell	Business Development Manager
Opus International Consultants	Hugh	Tait	Sector Leader Transportation Asset Development Australia
Pricewaterhouse Coopers	Owen	Hayford	Partner
Pricewaterhouse Coopers	James	Betts	Consultant
Programmed	Joseph	Yayalo	National Manager - Infrastructure
Programmed	Mick	Smith	National Account Manager
Rider Levett Bucknall	Roy	Jones	Senior Estimator
Rider Levett Bucknall	Richard	Talbot	Advisor
Rizzani de Eccher	Gabriel	Vieites	Project Engineer
Rizzani de Eccher	Ashraf	Alias	Bid Assistant
Rizzani de Eccher	Aurelio	Mortoni	Country Manager
Roads & Maritime Services	Anna	Andrews	Communications Manager Pacific Highway Program Office
Roads & Maritime Services	Shalendra	Ranasinghe	General Manager Commercial
Roads & Maritime Services	Jeff	McCarthy	Executive Director Technical and Project Services Division (Chief Engineer)
Roads Australia	Mandi	Mees	Executive Director - Policy
Roads Australia	Alex	Stott	Policy Manager
Rocla	Paul	Rutherford	Sales Engineer
Saitec Engineering	Alberto	Galdos Ispizua	Country Manager Australia
Samsung C&T Corporation	Simon	Leeper	Vice President - Head of Australia Business
Samsung C&T Corporation	Mark	Curzon	Business Development Manager, Australia Business
Seed Engineering	Nina	Kilpinen	Managing Director
Seed Engineering	Sarah	Stante	Engineering Manager
SMEC Australia	John	Wheatley	AM Manager Central
SMEC Australia	Dan	Reeve	General Manager Transport
Tasman Associates	Ken	Littlefair	General Manager
The WorkPac Group	Adrian	Roberts	National Manager Infrastructure
The WorkPac Group	Jennifer	Trimboli	Regional Manager
Transport for NSW	Megan	Whitlocke-Jones	Director, TMC Systems Development
Transport for NSW	Jennie	Symonds	Senior Workforce Planner
Ventia	Robert (Bob)	Smith	Regional Operations Manager East
Ventia	Milan	Miljus	
Ventia	Nadir	Hashmi	Operations & Maintenance Manager
Ventia	Ashok	Shekhawat	Manager, Technology & ITS Asset & Infrastructure Services

Organisation	First name	Last name	Role
Ventia	Paul	Khawaga	Transport
Ventia	Sarah	Novelli	HR Advisor
Ventia	Charmaine	Higgins	Head of P&C
Ward Civil and Environmental Engineering	Julia	Ward	Chief Executive Officer
Ward Civil and Environmental Engineering	Don	Edwards	Operations Manager
Ward Civil and Environmental Engineering	Brian	Mahon	Chief Operating Officer
WBHO Infrastructure	Laura	Vessey	HSE Advisor
WSP	Steve	Cooley	Technical Executive, Asset & Network Performance
WSP	Peter	Letts	Transport Major Project Executive
WSP	Michael	Cudmore	Principal Engineer
	Michael	Patmore	Transport Infrastructure Manager

For information about the Roads Australia Capacity Policy Chapter, please contact Alex Stott, Policy Manager alex@roads.org.au , or visit the [RA website](#).