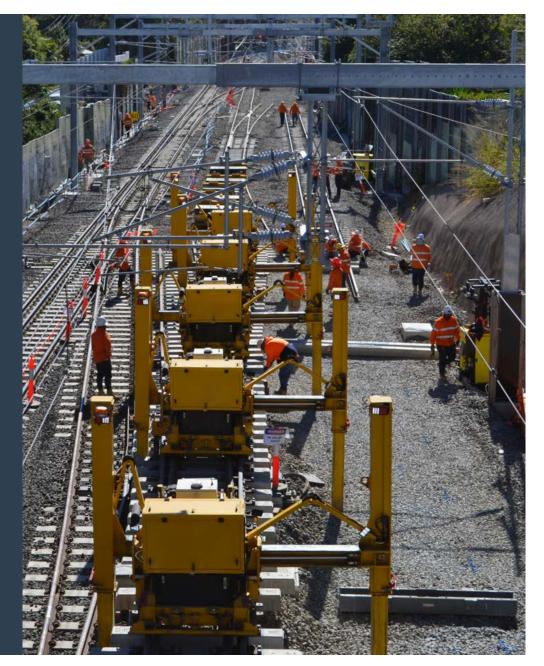
# Infrastructure Productivity and Workforce

**ACTION PLAN** 





Improving infrastructure productivity and workforce outcomes is vital to a healthy, sustainable infrastructure industry to deliver the infrastructure that underpins our economy, our communities and our quality of life. As set out in the Infrastructure Productivity and Workforce Roadmap, government and industry need to collaborate across the following five levers:

### COMMERCIAL

# **GOVERNANCE AND FRAMEWORKS**

# **INNOVATION, DIGITAL AND DATA**

# **SKILLS AND TRAINING**

# WORKFORCE WELLBEING AND DIVERSITY

This Action Plan sets out Priority Actions that both government and industry will implement to shift the dial on industry productivity and workforce outcomes. The Action Plan also includes a range of actions that are already being implemented to improve outcomes, as well as other ideas captured through engagement that will be considered as part of a regular review process to ensure the continued relevance of the Action Plan. The Priority Actions are what we will focus on initially, and what have been determined to be achievable, to deliver results in the near term and have a tangible impact.

The intent of this first Action Plan is to deliver, learn and repeat, building on successes and addressing challenges to progressively affect productivity and workforce outcomes. Future updates will be developed with industry over time, building on the successes of this Action Plan.

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WHAT WE'RE ALREADY DOING	LEAD	ACTIONS FOR FUTURE CONSIDERATION
Acknowledging Queensland Government's category management approach to procurement and the policy frameworks that apply, government is providing a clear and standardised approach to procurement and contracting with suppliers.	<ul> <li>Queensland Government-lead agencies:</li> <li>Department of Energy and Climate - responsible for general goods and services</li> <li>Department of Housing, Local Government, Planning and Public Works - responsible for building construction and maintenance</li> <li>Department of Transport and Main Roads - responsible for transport and infrastructure services and information and communication technology</li> </ul>	Investigate development of a consistent set of commercial principles for infrastructure projects, considering similar work in New South Wales, to complement existing project procurement, asses and contract management documentation.
		Consider publishing learnings on a whole-of-gove platform to support collaboration and shared knowledge, and inform best practice procurement contracting across different infrastructure classes
QBuild and the Office of the Queensland Government Architect, in partnership with industry suppliers, has a Modern Methods of Construction (MMC) program. The MMC program builds more quality homes in less time to support government housing needs in regional and remote areas of Queensland using innovative construction techniques. In 2023, in response to Queensland's housing crisis, a production facility was established at Eagle Farm in Brisbane to rebuild QBuild and start the MMC program. A further two production facilities have now opened in Zillmere, north Brisbane, and Cairns, Far North Queensland.	Queensland Government (Department of Housing, Local Government, Planning and Public Works) and industry partners	Consider opportunities to lift supplier capability a adopt new and flexible procurement processes an techniques across the Queensland Public Sector t enable construction-based small and medium-siz enterprises to do more business with government Conduct industry focus groups with a mix of contr
PRIORITY ACTIONS	LEAD(S)	suppliers and consultants to generate new and un opportunities to enhance productivity, or, alterna
To grow regional market capacity and improve deliverability of the Queensland Government's infrastructure pipeline, undertake a cross- agency pilot in Cairns to trial more programmatic approaches to planning and procurement of infrastructure projects. The pilot will include existing funded infrastructure projects for the Department of Education, Queensland Health and the Department of Employment, Small Business and Training and will be developed in consultation with industry.	Queensland Government (Department of State Development and Infrastructure) and industry	anonymous industry surveying to seek feedback o potential additional options to consider.
<ul> <li>Implement Buy Queensland 2023, informed by industry engagement, including:</li> <li>support the appropriate use of standard contracts across government and promote consistency within each procurement category</li> <li>monitor the use of standard contracts to understand how they are being operationalised, identify pain points and develop improvements</li> <li>develop common or standard tools to support effective procurement</li> </ul>	<ul> <li>Queensland Government -lead agencies:</li> <li>Department of Energy and Climate - responsible for general goods and services</li> <li>Department of Housing, Local Government, Planning and Public Works - responsible for building construction and maintenance</li> <li>Department of Transport and Main Roads - responsible for transport and</li> </ul>	

- develop common or standard tools to support effective procurement and contract management (e.g., guidance material, which may incorporate collaboration principles, issue resolution strategies).
- Roads responsible for transport and infrastructure services and information and communication technology

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collab princi the co	nment will articulate a strong commitment on how it will work oratively with the construction industry through a set of core oles that will guide all interaction between the State Government and nstruction sector (e.g., collaboration, pipeline transparency, early ement, standardised contracts, reduced bidding costs).	Queensland Government (Department of State Development and Infrastructure with the Department of Housing, Local Government, Planning and Public Works)
Metho	ish whole-of-government targets for the adoption and use of Modern ds of Construction (MMC) and standardised designs on Queensland nment infrastructure projects, specifically:	Queensland Government (Department of State Development and Infrastructure) and industry
a)	By 2030, at least 50 per cent of projects in the Queensland Government's infrastructure pipeline will incorporate elements of modular construction or other forms of MMC	
b)	By 2027, all infrastructure delivery agencies with ongoing capital programs will have developed 'standardised designs,	
the ad that b enhan	ueensland Government will develop a strategic approach to increase option of MMC across government. This will establish a set of actions rings together agency work programs and government priorities to ce productivity, support sustainability and emissions reduction, and evelop local manufacturing in innovative construction methods.	
requir qualifi	take a review with the aim to remove or reduce prescriptive ements for personnel for engineering consultant engagements (e.g., cations, years experience etc) in preference for more performance- specifications.	Queensland Government (Department of Transport and Main Roads and Department of Housing, Local Government, Planning and Public Works)

WHAT WE'RE ALREADY DOING	LEAD
Conducting regular reviews of the Business Case Development Framework (BCDF), Project Assessment Framework (PAF) and Building Policy Framework (BPF) to streamline and enhance synergies and ensure they align with contemporary practice.	Queensland Government (Department of State Development and Infrastructure)
Strengthening the application of the BCDF, PAF and Infrastructure Proposal Development Policy and the linkages with Strategic Asset Management Plans to facilitate better strategic and project coordination and planning for infrastructure.	Queensland Government (Department of State Development and Infrastructure, Queensland Treasury)
Maintaining a publicly available forward procurement pipeline to improve transparency of upcoming tender releases and facilitate industry planning.	Queensland Government (Department of Energy & Climate)
PRIORITY ACTIONS	LEAD(S)
Review the current details of the Queensland Government's forward infrastructure pipeline with a view to increasing transparency, including forming a whole of program view to better identify timing and sequencing.	Queensland Government (Department of State Development and Infrastructure)
Facilitate market awareness of the forward infrastructure pipeline and industry preparedness through conducting industry briefing sessions on the forward infrastructure pipeline.	Queensland Government (Department of State Development and Infrastructure)
Better understand market capacity and specific constraints, including demand, supply chain and workforce matters, at a whole of state and regional level, leveraging market research and industry on-the-ground experiences to better understand critical roadblocks and consider potential responses.	Queensland Government (Department of State Development and Infrastructure)
Continue to engage with the Australasian Procurement and Construction Council to ensure ongoing cross-jurisdictional information sharing and inform best practice procurement and contracting in the Queensland environment.	Queensland Government (Department of Housing, Local Government, Planning and Public Works and Department of Transport and Main Roads)
Engage with the Commonwealth Government on the National Construction Strategy around national efforts and opportunities to improve productivity and workforce outcomes.	Queensland Government (Department of State Development and Infrastructure and Department of Transport and Main Roads)

### ACTIONS FOR FUTURE CONSIDERATION

Investigate strategies for facilitating improved industry understanding of whole of government procurement and contract management frameworks across multiple touchpoints and channels, including potential targeted learning and development programs or resources.

Consider ways of facilitating regular regional engagement between the construction industry and government (e.g., regional infrastructure supplements/ plans, declaration of State Development Areas or coordinated projects under the State Development and Public Works Organisation Act 1971, regional groups) around the infrastructure pipeline to help inform delivery and workforce capacity.

FRAMEWORKS

AND

GOVERNANCE

WHAT WE'RE ALREADY DOING	LEAD
Model for Urban Land Use and Transport Interaction (MULTI) is a nation-leading tool for integrating land use and transport planning in Queensland. Developed by the Department of Transport and Main Roads, it provides projections of population and dwellings in response to housing demand, location choice, and their interactions with available housing supply, while also emphasising the role of transport and bulk services infrastructure in catalysing growth. ShapingSEQ 2023 and future reviews will rely on the MULTI to project future land use and housing requirements.	Queensland Government (Department of Transport and Main Roads)
The Queensland Government engaged the Australian Housing and Urban Research Institute to undertake modelling on future demand for social housing in Queensland.	Queensland Government (Department of Housing, Local Government, Planning and Public Works)
PRIORITY ACTIONS	LEAD(S)
Develop a proof of concept and program implementation plan as a part of investigating a digital twin for South East Queensland, demonstrating the benefits, technical feasibility and viability. The SEQ Digital twin aims to help drive the implementation of smart solutions across the Queensland Government to improve the planning, delivery and operation of infrastructure, and to support the adoption of a 'digital by default' approach.	Queensland Government (Department of State Development and Infrastructure)
Implement digital and innovation requirements in procurement and contracts for the Brisbane 2032 Olympic and Paralympic Games villages and venues to drive digital enablement and innovation and reduce risks during design, construction and operation, contributing to productivity improvements.	Queensland Government (Department of State Development and Infrastructure)
Develop a catalogue of available digital and smart products and services, including descriptions of the products, to facilitate digital and smart solutions uptake by industry.	Industry (Infrastructure Association of Queensland)
Building Information Modelling (BIM) maturity and policy review – benchmark and advance agency BIM maturity and look at updates to the BIM policy to drive greater adoption of digital approaches across the full lifecycle of assets.	Queensland Government (Department of State Development and Infrastructure)
Peak bodies involved in government forums proactively share their advocacy, good practice and expertise to continue to uplift the sector.	Industry (Consult Australia with other peak bodies)
Contribute to the development of an industry-led, standard approach to digitised building product conformity and sustainability information, together with a digitised traceability framework, via the Building Products Coalition.	Industry (Master Builders Queensland with Building Products Coalition)
Deliver an industry technology and innovation forum to raise the profile of innovative practices across the sector.	Industry (Queensland Major Constructors Association)

### ACTIONS FOR FUTURE CONSIDERATION

Consider undertaking strategic mapping exercise/s to:

- better understand and consider digital adoption requirements/suitability for projects across differing scales and complexity (i.e. which projects are most suited for adoption of Building Information Modelling, construction technologies, etc.)
- promote and contemplate levers to assist with the adoption of digital and data solutions in infrastructure projects
- identify areas related to these digital and data solutions that might benefit from standards (e.g., to support data sharing, contractual expectations, etc.)

Consider conducting industry and government forums on the strategic uptake of digital and data, including:

- strategy for upskilling and training on the benefits of digital adoption and data use
- defined approach to sharing knowledge and information.

Consider the role of underground utility mapping data in the digital framework in terms of providing a single point of truth to reduce project risks and improve productivity.

Consider opportunities through the Advance Queensland initiative, including the Ignite Ideas Fund and Industry Research Fellowships, for delivering innovative solutions for Queensland's infrastructure industry and contributing to increased productivity.

Deliver an innovation challenge-based program (e.g., Hackathon event) which engages innovation-driven Queensland small to medium enterprises (SMEs) to identify innovative solutions to key challenges impacting Queensland's infrastructure industry.

Explore opportunities to develop a strategic technology roadmap for Queensland's infrastructure and construction industry that will outline the key research and technology commercialisation capabilities required over the next 10 to 20 years and inform the development of local innovative solutions.

ACTIONS FOR FUTURE CONSIDERATION

# Productivity and Workforce Levers and Actions

WHAT WE'RE ALREADY DOING	LEAD	Investigate potential needs for new qualifications and
The Good people. Good jobs: Queensland Workforce Strategy 2022-2032 is a whole-of-government strategy focussed on strengthening Queensland's workforce. It delivers innovative and practical solutions to ensure Queensland has a ready workforce to support growth, strengthen communities and keep Queensland at the forefront of new economic opportunities. Specific activities from the Strategy	Queensland Government (Department of Employment, Small Business and Training)	new skillsets to support new methods of construction (bespoke trades), and work with industry to attract people, including developing an education pathway in schools.
<ul> <li>currently underway include:</li> <li>supporting industry-led solutions such as the Master Builders Association Business Basics Micro-credentials training series and the Civil Pathways</li> </ul>		Investigate providing scholarships to complete Construction Skills Queensland training programs.
Program, led by the Civil Contractors Federation Queensland and funded through the Workforce Connect Fund		Consider opportunities for Manufacturing Skills
<ul> <li>Group Training Organisation Pre-Apprenticeships Program which provides a head start into a trade career for Queenslanders from backgrounds not strongly represented in apprenticeships, including in construction and engineering.</li> </ul>		Queensland to assist in workforce skills and training in consultation with Construction Skills Queensland, to look at new and innovative mechanisms to bolster the incoming cohorts of future labour.
Through Queensland's Vocational Education and Training system, the Queensland Government is ensuring that Queensland's Big Build is delivering good jobs for Queenslanders: • Since 2019-20, the Queensland Government has invested more than \$800	Queensland Government (Department of Employment, Small Business and Training)	Explore facilitating increased awareness and understanding of the industry by connecting students with industry representatives.
million in construction-related training, including more than \$177 million in 2022-23 alone. In the past two years, more than 34,000 Queenslanders have graduated with a construction-related qualification.		Raise awareness of existing training resources for hands-on learning and training, including digital skills
<ul> <li>More than 60 free apprenticeships for under 25s are supporting the Big Build and the clean energy transition, including Certificate III in Electrotechnology, Engineering, Carpentry and Plumbing.</li> </ul>		and upskilling of current workforce.
<ul> <li>The Queensland Government has also announced the Free Construction Apprenticeships for over 25s program enabling eligible Queenslanders to take up an apprenticeship in one of 27 priority qualifications.</li> </ul>		
• The Free TAFE initiative is equipping Queenslanders with a wide range of skills that are crucial to delivering on the Big Build, including:		
<ul> <li>Certificate IV in Project Management</li> </ul>		
<ul> <li>Diploma of Project Management</li> </ul>		
° Certificate IV in Residential Drafting.		
<i>Queensland's Clean Energy Workforce Roadmap</i> was released in 2023 and provides direction to further develop Queensland's highly skilled workforce to support the continued growth of the state's clean energy industry, including construction, through comprehensive and targeted actions for government, industry, workers and the broader community.	Queensland Government (Department of Employment, Small Business and Training)	

The Queensland Government Building and Construction Training Policy supports employment opportunities and skills development in Queensland's building and construction industry. It also focuses on increasing the economic independence of Aboriginal and Torres Strait Islander Queenslanders in the industry. The training policy is one element in a longstanding partnership between the building and construction industry and the Queensland Government to develop the skills base and future workforce capability.	Queensland Government (Department of Employment, Small Business and Training)
<ul> <li>Supporting small businesses to plan for their future workforce through:</li> <li>development of Workforce Planning Connect free tools and resources</li> <li>delivery of a Workforce Planning for Business micro-credential in partnership with the University of Sunshine Coast.</li> </ul>	Queensland Government (Jobs Queensland)
PRIORITY ACTIONS	LEAD(S)
A key action under the <i>Queensland Workforce Strategy, the new Good Jobs,</i> <i>Great Training: Queensland Skills Strategy 2024 – 2028</i> aims to forge a modern, responsive, and accessible training system that delivers for Queensland and Queenslanders. It sets out the future direction for the training system in Queensland over the next five years. It means one million Free TAFE and funded training places for Queenslanders in priority industries such as construction. This provides cost-of-living relief as well as quality training pathways to good high-demand jobs at all career stages, whether Queenslanders are starting their career or seeking to upskill or reskill to get into better paid jobs.	Queensland Government (Department of Employment, Small Business and Training)
The Gateway to Industry Schools Program (GISP) is a key industry engagement strategy and aligns with the vision for all Queenslanders to have the skills and opportunities to participate and prosper in the economy. The program builds partnerships between schools and industry to enable young people to acquire the knowledge, skills and attributes to participate effectively in the Queensland economy and provides opportunities for industry and the education sector to work together to deliver outcomes for students, local communities and businesses.	Queensland Government (Department of Employment, Small Business and Training)
The Building and Construction GISP will play a key role in supporting employment pathways to construction by:	
- raising the profile of all careers in construction;	
- providing opportunities for industry placements;	
<ul> <li>promote digital skills in the building and construction workforce through their 'Try a Skill' and Virtual Reality (VR) experiences, offering students early exposure to digital tools and technology</li> </ul>	
<ul> <li>creating links between industry and schools; and assisting with professional development for teachers</li> </ul>	
Encourage new industry recruits, including apprentices, through the regional Master Builders' Industry Champions program.	Industry (Master Builders Queensland)
Deliver an Industry Skills & Workforce Summit to understand the issues underpinning workforce shortages and to develop a range of strategies to increase workforce supply and improve attraction and retentions rates.	Industry (Queensland Major Contractors Constructors Association)

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Ě	WHAT WE'RE ALREADY DOING	LEAD
DIVERS	The Good people. Good jobs: Queensland Workforce Strategy 2022-2032 is a whole-of-government strategy focussed on strengthening Queensland's workforce. It delivers innovative and practical solutions to ensure Queensland has a ready workforce to support growth, strengthen communities and keep Queensland at the forefront of new economic opportunities. Specific activities from the strategy currently underway include:	Queensland Government (Department of Employment, Small Business and Training)
ING AND	<ul> <li>Attracting and Retaining Engineers from Migrant Backgrounds: A Guide for Employers provides practical advice and information to tap into the pool of international skills and knowledge of people from migrant backgrounds with engineering qualifications that are often underutilised.</li> <li>Train and retain initiatives are being implemented to strengthen support for apprentices and trainees to complete their training.</li> </ul>	
E WELLBEING	The Queensland Government has committed to supporting people with disability to enter and thrive in employment through the <i>Queensland's Disability Plan 2022-27</i> (QDP). Under the QDP, Queensland has committed to increasing employment for people with disability, improving the transition of young people with disability from education to employment, and strengthening the financial independence of people with disability.	Queensland Government (Department of Child Safety, Seniors and Disability Services)
WORKFORCE	The Queensland Indigenous (Aboriginal and Torres Strait Islander) Procurement Policy aims to grow a diverse and sustainable Indigenous business sector in Queensland by increasing the capacity and capability of Indigenous businesses to supply the Queensland Government and the private sector through supply chains and increased private sector demand.	Queensland Government (Department of Energy and Climate, Department of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities and the Arts )
$\leq$	PRIORITY ACTIONS	LEAD(S)
	The new Queensland Construction Workforce Fund, formulated with industry consultation, has been allocated to support the construction industry workforce to position for the future by funding initiatives to increase the number of apprentices and skilled workers, and address barriers to workforce participation to bolster the residential construction sector.	Queensland Government (Department of Employment, Small Business and Training)
	Adopting and supporting campaigns and initiatives to increase workplace diversity throughout membership, including pilot programs, champions of change, women in construction, and construction industry culture taskforce	Industry (Consult Australia with other peak bodies)

Industry

(Australian Constructors Association)

Significantly improve the culture of the construction industry within five years through delivery of a culture pledge underpinned by two key initiatives:

- Embed flexible work practices on all ACA member projects. ٠
- Attract more women to the sector from other industries and backgrounds through a nationwide program to promote the benefits of a career in construction.

### **ACTIONS FOR FUTURE CONSIDERATION**

Consider developing and implementing other policies or investigating other levers that create training and employment opportunities for those less represented in the infrastructure industry, which will in turn help grow the workforce and increase diversity. Examples include the Queensland Government's Women in Manufacturing Strategy and the related diversity, equity and inclusion toolkit.

Explore developing and adopting a workforce retention strategy to increase diversity, avoid employee turnover and churn, address loss of skills, provide career growth pathways, and promote work-life balance, ensuring the infrastructure industry is an industry of choice for current and future talent.

initiatives.