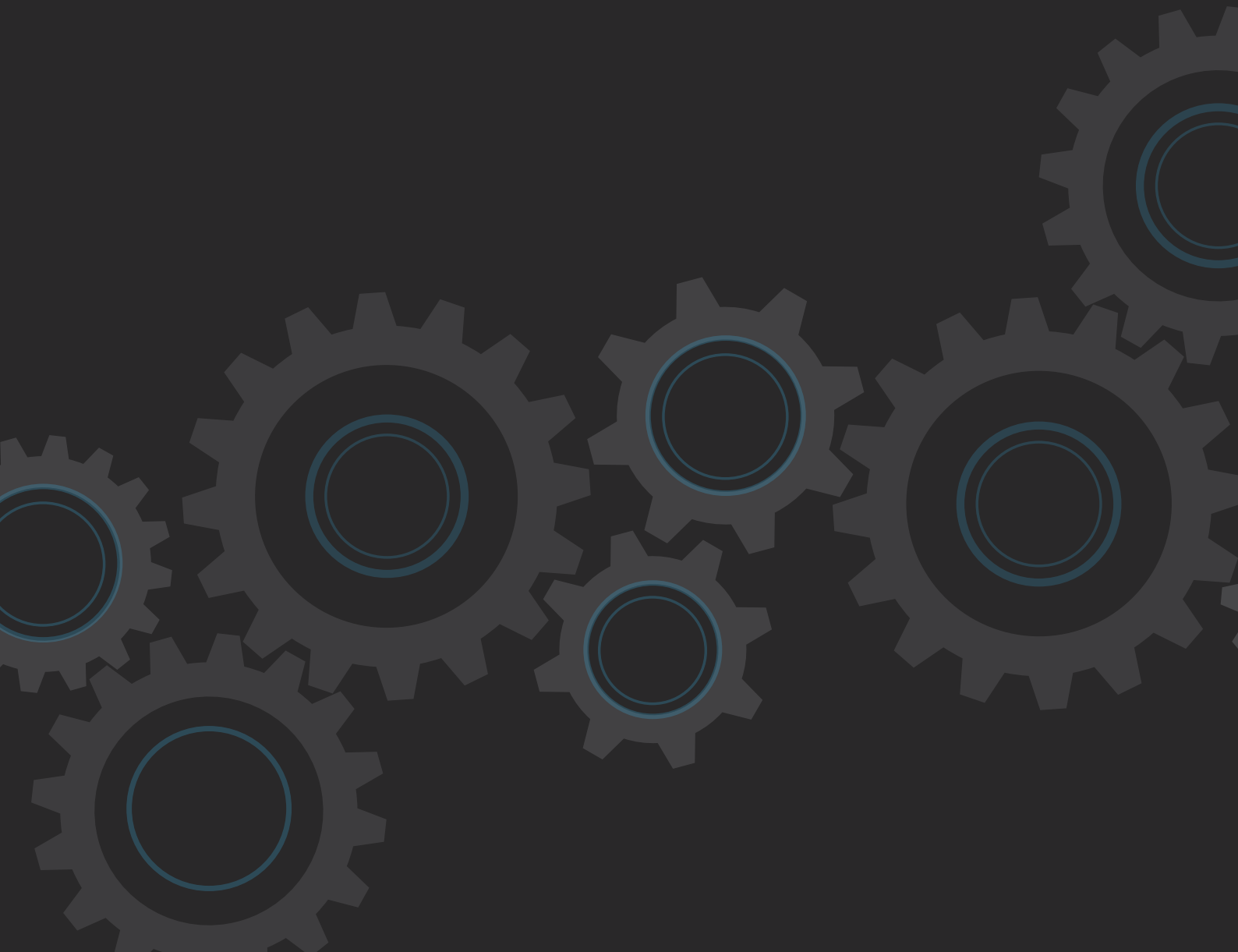


AUSTRALIA'S INFRASTRUCTURE SYSTEM

Policy settings to improve the lives of all Australians



FOREWORD

Why is it that we commonly refer to the health system, the education system and the justice system but never the infrastructure system?

Infrastructure is just as essential to modern life. It delivers the water we drink, the power we use in our homes and offices, the roads and railways that move people and goods, and the wires and signals that allow us to communicate anywhere, anytime. It provides the social infrastructure that is essential for health, education, public administration, housing and justice.

The prosperity of our communities hinges on an effective infrastructure system that maximises the benefits of every public and private infrastructure dollar invested.

We sell ourselves short if we don't manage infrastructure as a well-functioning, complex system, rather than a collection of discrete projects.

This means maximising the efficient operation and maintenance of Australia's existing infrastructure assets. Also, the scale of funding earmarked for infrastructure across Australia makes it critically important to optimise delivery:

- \$339bn of committed funding by governments nationally towards public infrastructure in government budgets
- Over \$750bn worth of major capital investment projects under construction, in planning or possible according to the Deloitte Access Economics' Investment Monitor.

Australia ranks 38th out of 141 countries for transport infrastructure and 17th for utility infrastructure according to the World Economic Forum. We can do better. If we can get these systems working well


we can avoid some of the problems that have plagued infrastructure provision in the past: poor project selection, project cost and time overruns, increasing congestion and unreliable or expensive service quality.

The transformative developments underway in Western Sydney, such as the new airport and aerotropolis, demonstrate the long-term, place-based and systemic approach to planning and economic development that should be replicated in other areas of growth around the country.

The Business Council of Australia has developed a high-level view of the infrastructure system and how it relates to the rest of the economy – so we can identify what is working well and what isn't, and what we need to get right to be successful. No one should be saying that it 'seems to be working OK', we need an informed view across all participants of the health of the infrastructure system.

Our systems approach leads to a set of recommendations for government and business.

It is our hope that this framework aids discussions between public and private partners on opportunities to improve the infrastructure system's performance and therefore outcomes for the Australian community. This translates into more ribbons to cut on the right projects, greater economic performance and improving liveability for people.



Guy Templeton
CHAIR OF INFRASTRUCTURE
& GROWTH COMMITTEE
CEO OF WSP IN AUSTRALIA
& NEW ZEALAND



Jennifer Westacott AO
CHIEF EXECUTIVE
BUSINESS COUNCIL
OF AUSTRALIA

GOAL OF THE INFRASTRUCTURE SYSTEM

This paper sets out goals, markers of success and key components of Australia's infrastructure system, to help discussions between public and private partners on how to jointly improve outcomes for Australians. A systems approach to infrastructure is necessary and overdue.

With a substantial existing asset base and \$339bn of new investment in government budgets, how we manage, operate, and deliver Australia's infrastructure matters. It requires many things to go right.

A systems approach considers how a set of things works together as a complete whole. This is how we should think about infrastructure, rather than as a set of discrete projects or sectors in isolation.

To begin we need to have a common understanding of what the infrastructure system is trying to achieve. Infrastructure is a crucial enabler. Our starting point is:

The goal of the infrastructure system is to support a productive, competitive and growing economy that enables attractive places to live, study and work, where people realise their potential.

A systems view

Taking a systems view means every stage of the infrastructure life cycle will be managed well – from planning, funding and delivery through to operation and maintenance. It means infrastructure is well planned and integrated and that the projects prioritised for public funding are independently assessed to provide the highest value for the community.

The infrastructure system doesn't operate in isolation. It needs to interact seamlessly with the planning system and with systems for skills development, skilled migration, materials supply, security, and so on. It also competes for resources with other large private capital projects which can create bottlenecks in skilled labour and materials supply.

The cost of getting this wrong will be borne by all Australians. Losing time every day due to worsening congestion on our transport networks and increasing distances between home and jobs, due to under-investment in capacity. Inequitable outcomes for people due to uneven infrastructure investment across the country and within cities. An uneven pipeline leading to spikes in labour and materials costs reducing the funding available for the infrastructure we need. Fractured strategic land use and infrastructure planning leading to siloed projects that do not holistically focus on the people they should be enabling.

These problems are all avoidable with the right infrastructure policy settings.

SYSTEM-WIDE EXTERNAL CHALLENGES

We need to consider the context within which the infrastructure system is operating and adopt a future oriented approach to infrastructure provision.

The major external challenges that are relevant to an infrastructure system include:

- Energy security and reliability, climate change and climate resilience.
- Technological change and digital disruption
- Skills development and the changing nature of work
- Population growth, demographic change, social cohesion and inequality
- Patterns of urban and regional development
- Low economic growth, budget pressures and rising public debt
- Global economic forces, rise of Asia and the need for faster access to Asian markets

The Australian Infrastructure Audit 2019, released by Infrastructure Australia, considers Australia's future infrastructure needs within the context of an uncertain future driven by these forces. It calls for infrastructure planning to end the practice of projecting forward the status quo. We need to work towards an ambitious vision for the country. Infrastructure Australia is saying that planning for more of the same is not good enough, and we agree.



POLICY DECISIONS

The policy settings of government are a critical factor in determining how well the infrastructure system will function.

We identify five key policy shifts to a systems approach

- Intergovernmental collaboration – a national approach to population growth and development on which all governments and their key agencies are aligned and working together.
- Place-based approach – focus on a vision for places that seizes economic and social opportunity, realised through detailed planning and sequenced infrastructure delivery.
- Long-term planning and more certain project pipeline – long-term and stable funding commitments that give greater certainty to the infrastructure pipeline and ensure that businesses are ready and equipped to deliver infrastructure.
- Private investment – more private ownership of infrastructure (with appropriate regulation) and greater use of private finance and innovation in new projects, with government's principle role prioritising and de-risking projects.
- User pays – user pays and value capture as default funding models to take the pressure off government budgets, with government funding of infrastructure linked to clear social need.

These shifts require collaboration and awareness between public and private partners to help to reduce friction in how the infrastructure system works.

THE INFRASTRUCTURE SYSTEM

The infrastructure system defined below starts with a core system and then identifies the outer related systems that all need to work together to deliver Australia's infrastructure goals.

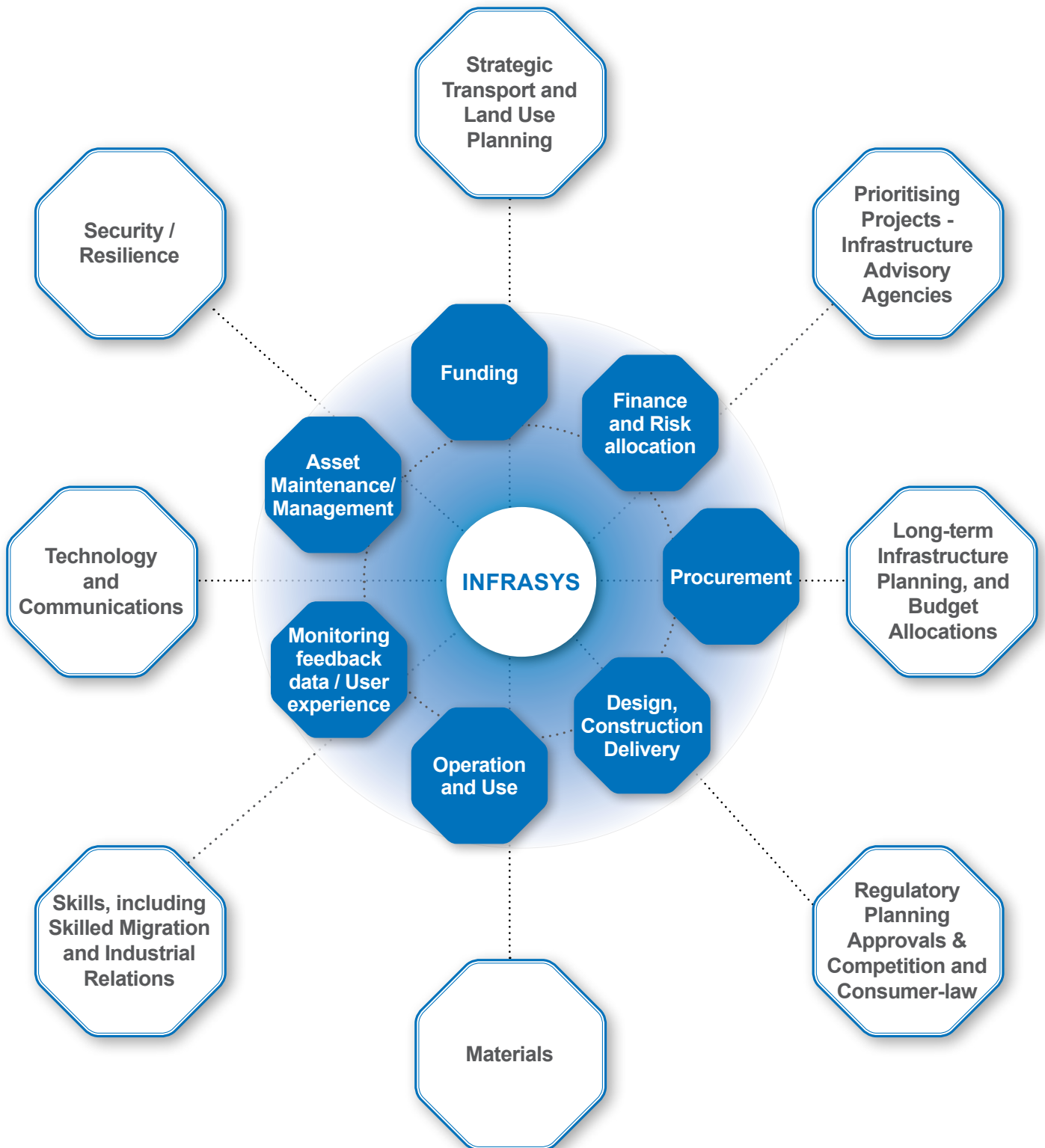
The core infrastructure system includes those components that are focussed on delivering, operating and maintaining infrastructure.

The related 'outer' systems that are intertwined with the core infrastructure system include strategic transport and land use planning, government budget allocations, security and resilience, materials, skills and so on.

Taking this approach allows us to identify each component and the markers for success, and then the critical elements that are required to ensure all the components are working together to provide affordable and reliable infrastructure services to the community.

Every part of the infrastructure system must be in sync and move quickly to maximise infrastructure's contribution to the economy and for people. It involves public and private partners working together seamlessly.

INFRASTRUCTURE SYSTEM



GOAL OF THE INFRASTRUCTURE SYSTEM

The goal of the infrastructure system is to support a productive, competitive and growing economy that enables attractive places to live, study and work, where people realise their potential.

A HIGH PERFORMING INFRASTRUCTURE SYSTEM

Core system elements

 <p>Funding</p>	<ul style="list-style-type: none"> • User pays (or beneficiary pays) funding models preferred - with any government subsidies clearly designed to achieve social welfare objectives. • Government funding of infrastructure guided by recommendations of the independent infrastructure agencies. • Adequately provision for maintenance spending.
 <p>Finance / Risk Allocation</p>	<ul style="list-style-type: none"> • Innovative financing that maximises private investment. • Allocate risk to the party best able to manage it. • Governments de-risk projects to attract greater private sector investment, for example, by streamlining approvals. • Competitive tax settings for private capital investment • Implement asset recycling initiatives to use the proceeds of asset sales to fund new productive infrastructure.
 <p>Procurement</p>	<ul style="list-style-type: none"> • Transparent and efficient procurement processes to increase competitive tendering and reduce the cost of bidding. • Partnership-based approach to risk allocation (eg NSW 10 point plan). • Market-led proposals to encourage innovative ideas from the private sector. • Consistent procurement practices across jurisdictions
 <p>Design Construction and Delivery</p>	<ul style="list-style-type: none"> • Good, innovative design and strong project management skills. • Efficient and safe project development. • Careful approach to packaging of major projects to engage the whole supply chain and to manage risk. • Skilled, well balanced workforce to deliver projects.
 <p>Operation and Use</p>	<ul style="list-style-type: none"> • Use of technology to increase efficiency and innovation. • Skilled, well balanced workforce to operate infrastructure. • Accessible, affordable and reliable for users.
 <p>Monitoring Feedback Data / User Experience</p>	<ul style="list-style-type: none"> • Publish infrastructure performance service measures. • Establish and publish an index for construction costs by jurisdiction. • Use outcome-focussed system performance measures. • Infrastructure performance data is used for planning.
 <p>Asset Maintenance / Management</p>	<ul style="list-style-type: none"> • Data on the condition and value of assets is collected and used for planning upgrades and spending on maintenance. • Maintenance programs are packaged, funded and managed with the same rigour as capital programs.

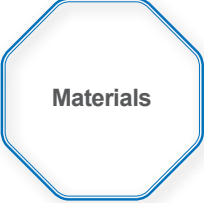



A HIGH PERFORMING INFRASTRUCTURE SYSTEM

Outer system elements

 <p>Strategic Transport and Land Use Planning</p>	<ul style="list-style-type: none"> • Long-term strategic land use planning, in consultation with the community, that sets out the infrastructure and housing needed by a growing population. • Adopt a hub and spoke model of regional development with government investment decisions building on existing city and regional hubs. • Place-based approach - undertake a full review of regional capabilities and set long-term infrastructure plans that enable the regions to play to their strengths. This enables government and business to more easily locate and invest in regional areas that are complementary to their needs. • Take a holistic view of infrastructure, housing and sustainability.
 <p>Prioritising Projects - Infrastructure Advisory Agencies</p>	<ul style="list-style-type: none"> • Infrastructure Australia determines nationally significant public infrastructure priorities and policy reforms. • Infrastructure advisory bodies in all jurisdictions with independence and teeth. • Assurance role on public delivery (avoid projects going off the rails). • Business cases for every major project are promptly published. • Rigorous cost-benefit analysis and environmental impact statements to assess the community impacts of infrastructure investment in a holistic manner, taking a long-term approach.
 <p>Long-term Infrastructure Planning and Budget Allocations</p>	<ul style="list-style-type: none"> • Strategic planning leadership on nationally significant projects at the Federal level. • A clear infrastructure pipeline to give businesses and the community certainty, with infrastructure priorities based on independent advice. • Stable long-term government budget funding allocations for infrastructure (as a percentage of GDP). • The Productivity Commission undertakes a strategic assessment of infrastructure policies and the quality of service provision and recommend reforms – repeated every five years. • Make sure we use our existing infrastructure as effectively as possible.
 <p>Regulatory Planning Approvals & Competition and Consumer Law</p>	<ul style="list-style-type: none"> • Adopt the BCA best practice model for more efficient major project approvals. • Agencies to monitor and publish performance data on approvals time/cost. • Use coordinating authorities to oversee simultaneous approvals for larger projects with multiple stages of approvals of complementary infrastructure. • Strive for best practice regulation – planning approvals, industrial relations, building and safety protections, protecting competition and consumers, making efficient use of assets.

A HIGH PERFORMING INFRASTRUCTURE SYSTEM

Outer system elements

 <p>Materials</p>	<ul style="list-style-type: none">• Remove obstacles to materials supply such as unnecessary constraints on the mining and processing of construction materials.• Provide options for Australian business in project supply chains but avoid excessive local content requirements and restrictions on imports that impact on value for money.• Adopt prompt payment policies throughout the supply chain, especially for small business suppliers.
 <p>Skills Development, Skilled Migration and Industrial Relations</p>	<ul style="list-style-type: none">• Skills training and skilled migration linked in a timely manner to the investment pipeline, such as planners, engineers, and project managers.• Provide information about job opportunities in infrastructure sectors and offer microcredentialing courses.• Allow for project-length greenfields agreements.
 <p>Technology and Communications</p>	<ul style="list-style-type: none">• Emerging technologies are embraced to improve project and industry efficiency and deliver better outcomes for infrastructure users.• Use technology to implement road pricing and investment reform.• Infrastructure's role is recognised in the Commonwealth 2020 Cyber Security Strategy.
 <p>Security / Resilience</p>	<ul style="list-style-type: none">• Adapt to climate impacts.• Back-up arrangements for securing access to services.• National approach to responding to natural disasters.

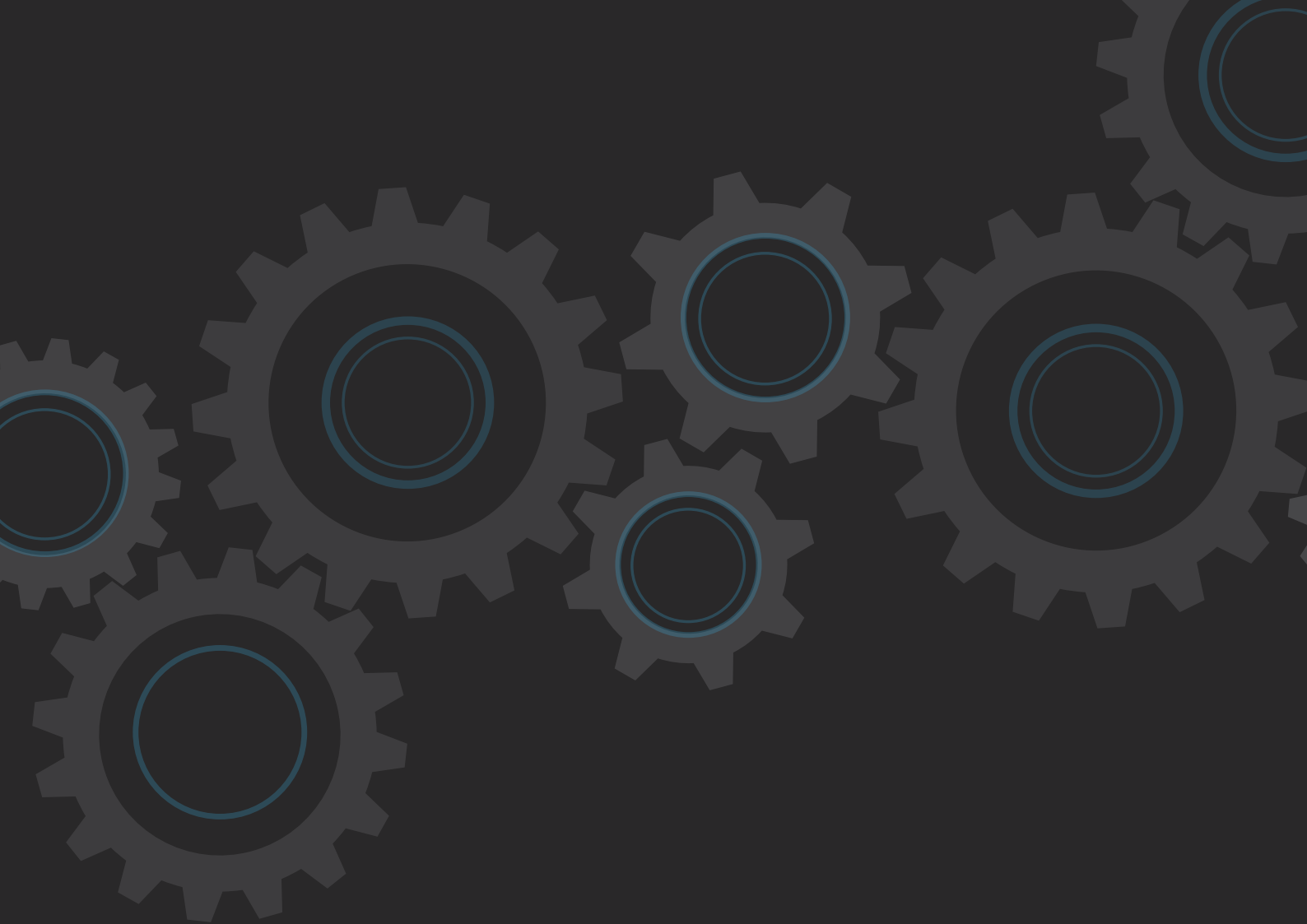
LET'S IMPROVE THE INFRASTRUCTURE SYSTEM TOGETHER

By defining the infrastructure system we have provided a platform to aid discussion and action across the industry to focus in on how we can collaborate to improve outcomes for businesses, governments and communities. It provides us with a common language so that we can more quickly, and collaboratively, make a difference.

The BCA is working towards achieving a well-functioning infrastructure system by:

- Setting clear goals for infrastructure provision in Australia to lift productivity and improve liveability in our cities and regions.
- Continuing to promote the role of private investment and innovation.
- Advocating for stable funding and a long-term infrastructure pipeline to avoid peaks and troughs that raise costs.
- Identifying and monitoring the links between the infrastructure system and other systems across the economy, for the purpose of ensuring they all work together effectively.

To further develop our contribution towards improving the efficiency of Australia's infrastructure system the BCA will conduct further research and consultation on the elements and linkages of the system. We will focus on defining good practice and identifying what needs to be fixed.



Business Council of Australia

42/120 Collins Street Melbourne 3000
T 03 8664 2664 F 03 8664 2666 |
www.bca.com.au

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