

2021 Implementation Pathway

2021 Australian Infrastructure Plan

2021 Implementation Pathway

Infrastructure Australia™ is an independent statutory body that is the leading source of research and advice for governments, industry and the community on nationally significant infrastructure needs.

Infrastructure Australia has a mandate to prioritise and progress nationally significant infrastructure investments. It leads reform on key issues including means of financing, delivering and operating infrastructure and how to better plan and utilise infrastructure networks

Infrastructure Australia has responsibility to strategically audit Australia's nationally significant infrastructure, and develop 15-year rolling infrastructure plans that specify national and state level priorities.

Online

ISBN: 978-1-925352-63-4

2021 Australian Infrastructure Plan

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Acknowledgements

Infrastructure Australia would like to acknowledge and thank the contributors to the 2021 Plan.

David Tang, Helen Machalias, Inaara Jindani, James Robertson, Jim Chesterfield, Jonathan Cartledge, Mark Merrick, Matthew Faber, Nadeia Romanovski, Peter Colacino, Robert Glennon, Rory Butler, Sarah Holdsworth, Steve Brogan, Suzie Carruthers, Tim Mumford.



Acknowledgement of Country

Infrastructure Australia acknowledges the Traditional Custodians of Australia. and pays respect to their Elders past, present and emerging. We pay respect to their continuing connection to land, and the continuation of their cultural, spiritual and educational practices. In preparing for the future of our infrastructure, we acknowledge the importance of looking beyond the immediate past to learn from Aboriginal and Torres Strait Islander people's unique history of land management and settlement, art, culture and society that began over 65,000 years ago.

2021 Implementation Pathway

Note on the artwork

The artwork Moving Along Pathways was created by Kamilaroi/Gamilaraay artist Dennis Golding, specifically for Infrastructure Australia's first Reconciliation Action Plan. The artwork depicts examples of Australia's first infrastructure. Pathways and river systems are prominent in the artwork and reference the pathways First Nations peoples formed on land and water for transport and communication of knowledge and stories. Images of waterholes, campsites and boomerangs within the artwork acknowledge First Nations cultural practices, technology and places for gathering that continue to be operated today.

Table of contents

How to read the 2021 Implementation Pathway	5
How the 2021 Implementation Pathway supports the 2021 Australian Infrastructure Plan	6
1 Australian Government	8
2 State and territory government	86
3 Local government	169
4 Cross-jurisdictional bodies	181
5 Industry	199
6 Community groups	224
Index	229

How to read the 2021 Implementation Pathway

The 2021 Implementation Pathway summarises the actions proposed for each change agent across the 2021 Australian Infrastructure Plan. It provides a table for each change agent that identifies the actions (recommendations, outcomes and activities) that the change agent has been proposed to sponsor, lead or support. **Figure 1** explains how to read the 2021 Implementation Pathway.

1. Change agent

The name of the change agent is listed at the top of each table, signifying that it is the sponsor, lead or support for all of the actions underneath.

2. Sector/Focus area

The left-hand pane of each table shows which sector or focus area of the 2021 Plan actions belong to.

3. When this will impact

The columns of the table relate to the time horizon during which the action is expected to impact.

4. Change agent role

Each row of actions has a heading that identifies the role of the change agent – as either the proposed sponsor, lead or support.

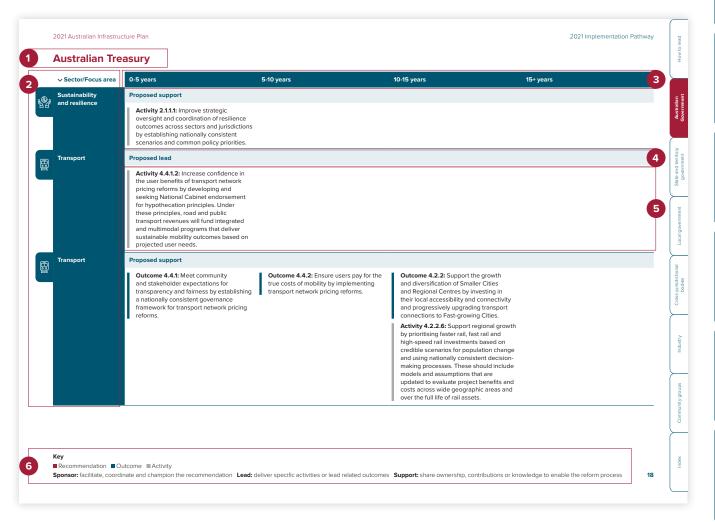
5. Actions

The body of the table contains the actions, tabulated by sector, change agent role and time horizon. Each action is identified as either a recommendation, outcome or activity (see the **Methodology chapter** of the *2021 Plan* for further detail).

6. Key

The key shows how the types of actions are identified and provides a definition of each change agent role.

Figure 1: Each table in the *Implementation Pathway* comprises of six sections



How the 2021 Implementation Pathway supports the 2021 Australian Infrastructure Plan

How to read the 2021 Australian Infrastructure Plan

2021 Australian Infrastructure Plan

Infrastructure Australia has developed the 2021 Australian Infrastructure Plan for a broad range of stakeholders.

Each stakeholder with a role in reform will be interested in different aspects of the 2021 Plan.

To meet this need, we have produced the 2021 Plan as a suite of documents that complement each other other (see **Figure 2**).

Each document guides different audiences towards the key pieces of information they need.

The document suite

2021 Australian Infrastructure Plan

This is the primary document and presents the reform recommendations that make up the *2021 Plan*. It is the starting point for all readers seeking to understand how Australia should address the key challenges and opportunities facing infrastructure over the next 15 years.

It provides 29 recommendations and outlines the activities needed to deliver each reform, as well as the stakeholders that are key to their delivery.

It explains why these reforms are critical priorities and presents evidence for how the reform will deliver the desired outcomes.

Executive Summary

The *Executive Summary* presents a concise view across all the reforms that make up the *2021 Plan*.

2021 Reform Priority List

The 2021 Reform Priority List guides decision-makers on which reforms to focus on, based on a multi-criteria analysis of their strengths and trade-offs. It allows decision-makers to prioritise reforms based on which are best suited to meeting specific policy objectives.

We developed the multi-criteria analysis framework with community sustainability, user benefits, ease of implementation and risks in mind. The framework is tailored to assess the impact of the *2021 Plan's* reform recommendations.

The 2021 Reform Priority List presents the impact of each recommendation in a one-page summary. This allows the reader to compare the relative impact of each recommendation.

It highlights reforms that have significant impact overall, those that are best suited for meeting specific policy priorities and those that perform well under different future scenarios.

2021 Implementation Pathway

The 2021 Implementation Pathway is written for stakeholders who have a role in delivering reform. This is primarily targeted at the Australian Government and state and territory governments, but also includes industry and community organisations that play a key part.

It identifies the role stakeholders have in delivering reform and outlines the specific activities that form part of their responsibility.

Its structure allows stakeholders to easily find all the activities where they are a key party responsible for delivery. It also presents the timeframe for implementation.

Detailed plans for each sector and strategic focus area

We have developed detailed plans for each of the six infrastructure sectors and three cross-sector themes. The plans are built around strategic focus areas for Infrastructure Australia.

These nine documents are intended for audiences that work in these sectors or have a deeper interest in the future of these sectors. They provide greater in-depth analysis, reasoning and evidence to support the need for reform and the activities that make up the 29 recommendations.

They include the analysis Infrastructure Australia undertook to develop the recommendations (using the theory of change and the multi-criteria analysis).

The detailed plans will be published after the 2021 Australian Infrastructure Plan.

Implementation support

Infrastructure Australia is also undertaking three projects that will support the adoption of best-practice reforms:

- Regional Strengths and Infrastructure Gaps –
 defining regional identity and localisation of the
 2019 Australian Infrastructure Audit Challenges
 and Opportunities.
- A Pathway to Infrastructure Resilience –
 a roadmap to embed a systemic all-hazards
 approach to resilience in infrastructure
 decision making.

Transforming Infrastructure Delivery —
 a policy roadmap for working collaboratively
 across government and industry to improve
 the productivity, innovation and deliverability
 of infrastructure.

These reports will be published as separate reports in late 2021.

The 2021 Plan – a continuation of reform

The release of the 2021 Australian Infrastructure Plan represents another step in the ongoing reform process.

The Australian Government has committed to respond to the 2021 Plan and we will work alongside them in developing a response and moving into implementation.

Infrastructure Australia will work alongside Australia's governments and industry to facilitate the implementation of our recommendations, providing them with the pathway and tools they need to reform the sector.

As the nation's infrastructure advisor, we are particularly well placed to facilitate collaboration across industries and jurisdictions. As a priority, we will support collaboration in the three strategic focus areas that cut across all infrastructure sectors, as outlined in their chapters:

- Place-based outcomes for communities
- Industry productivity and innovation
- Sustainability and resilience.

As Infrastructure Australia advocates more actively for the reforms in the 2021 Plan, we will also move to a more organic cycle of developing Audits and Plans for Australia's infrastructure networks.

In the future, we will focus resources on providing a unique, national perspective on issues as they emerge.

This will enable us to be more responsive in highlighting infrastructure challenges and opportunities in an increasingly uncertain world, and to guide industry and government on the necessary reform.

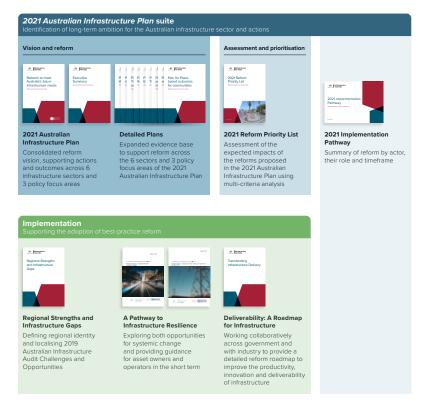
What's next

The Australian Government has committed that it will provide a response to the 2021 Australian Infrastructure Plan, as occurred in 2016 following the last Plan. The response should consider the 29 recommendations within the 2021 Plan, acknowledging the intent of the Australian Government to pursue, or otherwise.

While the Australian Government has committed to respond to the *2021 Plan*, responsibility for enacting reform is shared with state, territory and local government, as well as the industry and community. The *2021 Implementation Pathway* provides a roadmap for collaboration and sharing of responsibilities among these agencies to progress common goals for infrastructure reform.

Figure 2: 2021 Australian Infrastructure Plan suite of publications







Australian Government



Attorney-General's Department

∨ Sector/Focus area

0-5 years **5-10** years 10-15 years 15+ years

Transport

Proposed lead

Activity 4.3.3.1: Ensure reformed Disability Standards for Accessible Public Transport 2002 include minimum required feedback mechanisms for people with disability to hold transport service providers accountable for accessibility outcomes throughout the operating life of transport assets.

Activity 4.3.3.2: Increase the transparency of jurisdictional actions to address the travel needs of people with disability by reporting accessibility outcomes annually using nationally consistent and user-oriented measures. Provide information on changes in door-to-door accessibility outcomes as experienced by different groups of users over the reporting period and specify user-oriented improvements for the coming two years.

Activity 4.3.3.3: Develop and specify nationally consistent performance requirements for accrediting demandresponsive service providers as accessible. In the reformed Disability Standards for Accessible Public Transport 2002, include new performance requirements for 12-seater minibuses that are not currently covered by these standards, ensuring vehicles and associated customer interfaces meet the needs of people with disability.



∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Transport	Proposed support			
		Outcome 4.3.3: Ensure all people in Australia enjoy equivalent accessibility outcomes by investing in transport infrastructure and services in line with the Disability Discrimination Act 1992 (Cth), Disability Standards for Accessible Public Transport 2002 and broad objectives for universal access to services.		

Australian Building Codes Board

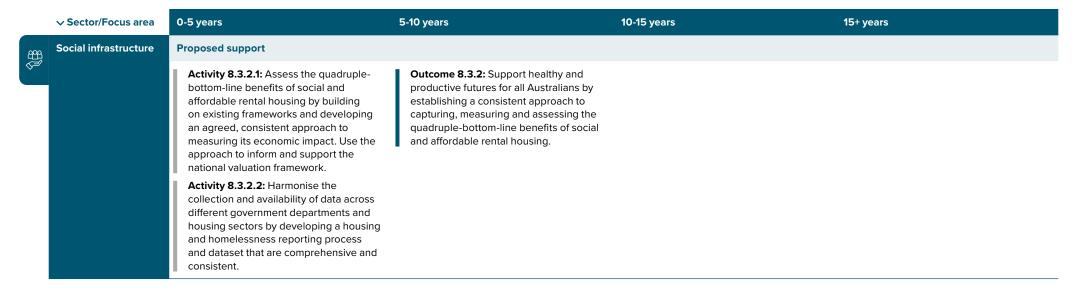
	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
رگي	Sustainability and resilience	Proposed support			
易品	and resilience	Activity 2.2.2.4: Improve energy efficiency and reduce emissions from new social infrastructure by increasing performance standards and updating the National Construction Code in line with the Trajectory for Low Energy Buildings.			
	Transport	Proposed support			
		Activity 4.3.5.1: Enable the longer-term rollout of fleets of electric vehicles that can both return power to, and draw it from, the grid by ensuring the National Construction Code formalises requirements and specifications for providing and operating next-generation two-way charging facilities and associated signage in multi-residential, commercial, industrial and public buildings, including bus depots.	Outcome 4.3.5: Ensure all road users can experience the benefits of world's best practice transport technologies by establishing a single national market for electric, connected and autonomous vehicles.		

Key

Australian Bureau of Agricultural and Resource Economics

√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Place	Proposed support			
	Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy.			
	Activity 1.4.1.2: Reduce investor uncertainty and improve decision-making by identifying, creating and publishing place and network-centric data, including assessing natural resource endowments.			

Australian Bureau of Statistics



How to read

Australian Climate Service

y Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Sustainability and resilience

Proposed support

Outcome 2.1.2: Improve community resilience and coordinated action through a consistent, nationwide, systemic approach to risk identification.

Activity 2.1.2.3: Inform decisions on risk reduction options and approaches, and enable data driven decision-making by standardising and sharing data about disasters, hazards and asset and network independency.

Activity 2.1.2.4: Improve place-and network-based systemic risk assessment and decision-making by producing local hazard maps for asset owners and operators and communities.

Activity 2.1.2.5: Inform decisions to increase the resilience of a place, network or asset across Australia by identifying cascading systemic failures, interdependencies and interconnections and local vulnerability of all sectors' assets and networks.

Outcome 2.1.3: Facilitate joint action by establishing a common, long-term understanding of the potential impacts of climate change, both nationally and locally, that informs land use and infrastructure planning and decisionmaking.

Activity 2.1.3.1: Enable consistent planning, shared responsibility and joint action by establishing long-term (2035, 2050 and 2100) Australian national climate scenarios. These should be based on possible climate futures that align with different Representative Concentration Pathways, and projections and forecasts for economic activity, energy use and land use patterns.

Activity 2.1.2.6: Better predict and mitigate major hazards and risks with a national risk and disaster probability model for all hazards.

Key

√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Sustainability and resilience	Activity 2.1.3.2: Establish a national understanding of climate adaptation risk assessment by publishing and communicating the scenarios. Target communities with differing levels of scientific and technical expertise, from technical roles to decision-makers and the broad community. Ensure the tools and data are accessible and increase understanding.			
	Activity 2.1.4.2: Support land use and strategic planners, infrastructure and emergency planners and local governments to develop state and territory, regional and local plans by enhancing infrastructure assessment frameworks and associated climate and disaster risk tools and guidance.			

Australian Competition and Consumer Commission

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Transport	Proposed support			
		Activity 4.4.2.3: Develop a national distance-based road user charging regime for all types of vehicles. Ensure the design of the regime addresses risks to privacy and cyber security.	Outcome 4.4.2: Ensure users pay for the true costs of mobility by implementing transport network pricing reforms.		
(~y)	Telecommunications	Proposed lead			
	and digital	Outcome 7.1.2: Empower and educate consumers by providing easy-to-understand information about the reliability and performance of all fixed and mobile networks through a public web portal with scores available at point of sale.			

∨ Sec	ctor/Focus area	0-5 years	5-10 years	10-15 years	15+ years
~ 20	ommunications ligital	Activity 7.1.2.1: Give consumers and businesses comprehensive, easy-to-understand information about network reliability and other key network features by further improving the Measuring Broadband Australia tool to include more reliability measures and simplifying the format of measurements presented as a graded system.			

Australian Cyber Security Centre

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Telecommunications and digital	Proposed support			
3				Outcome 7.3.3: Protect and educate all corners of society to become more digitally confident as new technology continues to evolve, with the launch of national initiatives addressing health concerns, data privacy, technology risks, cybercrime and digital confidence.	

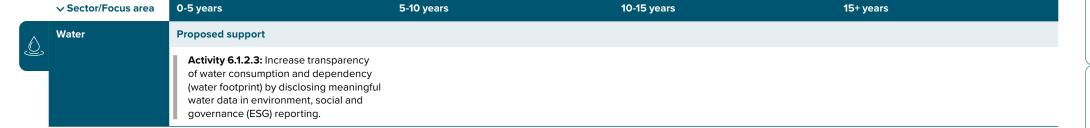
Australian Digital Health Agency

→ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed support			
		Activity 8.1.1.2: Provide seamless connections to existing state and territory digital health capabilities through a program to increase primary health providers' digital capability. Activity 8.1.1.5: Improve digital health literacy for citizens and the health workforce through targeted education programs, with a particular focus on vulnerable communities.	Activity 8.1.1.4: Enable different digital health systems to work together and share meaningful information by developing a collaborative work program that integrates health services to provide targeted, patient-centred care across human services sectors, including disability, aged care and community welfare services.	

Australian Institute of Health and Welfare

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Social infrastructure	Proposed support			
		Activity 8.3.2.1: Assess the quadruple-bottom-line benefits of social and affordable rental housing by building on existing frameworks and developing an agreed, consistent approach to measuring its economic impact. Use the approach to inform and support the national valuation framework.	Outcome 8.3.2: Support healthy and productive futures for all Australians by establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of social and affordable rental housing.		
		Activity 8.3.2.2: Harmonise the collection and availability of data across different government departments and housing sectors by developing a housing and homelessness reporting process and dataset that are comprehensive and consistent.			

Australian Prudential Regulation Authority



Australian Public Service Commission

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Flori	Industry	Proposed lead			
Hóó		Activity 3.1.2.2: Create a positive change culture by ensuring public sector project professionals are empowered and the organisation leadership is incentivised to be innovative and adopt best practices.			

Australian Radiation Protection and Nuclear Safety Agency

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Telecommunications and digital	Proposed support			
and digital	Activity 7.3.3.2: Protect the public from misinformation and cyber risks by investing in public education and communication programs addressing 5G health concerns, data privacy, technology risks and cybercrime. The engagement should extend previously successful public education and engagement campaigns around digital innovation.			

Australian Renewable Energy Agency

√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Transport	Proposed lead			
		Activity 4.3.5.4: Ensure that fast-charging facilities for buses (and other zero-emission heavy vehicles) funded under the Future Fuels Strategy are subject to compliance with new cross-jurisdictional technical specifications.		

Key

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→ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years	
Energy	Proposed support				
	Outcome 5.3.2: Transition Australia to a high-tech, low-cost, low-emission energy system by implementing appropriate regulatory and legislative environments, identifying opportunities to transition assets, and continuing to fund new energy technology development and adoption.				
	Activity 5.3.2.6: Give rural and remote communities access to clean, reliable and affordable energy by implementing an appropriate regulatory and legislative environment and funding that supports standalone power systems and micro-grids. • State and territory governments should accelerate the amendment of jurisdictional regulation and legislation to enable the implementation of standalone power systems. • ARENA should maintain funding for low emissions standalone power systems and micro-grids.				

Australian Securities Investment Commission

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Water	Proposed support			
	Activity 6.1.2.3: Increase transparency of water consumption and dependency (water footprint) by disclosing meaningful water data in environment, social and governance (ESG) reporting.			

Australian Treasury

0-5 years 10-15 years 15+ years y Sector/Focus area **5-10** years Sustainability **Proposed support** and resilience Activity 2.1.1.1: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities. **Transport Proposed lead** Activity 4.4.1.2: Increase confidence in the user benefits of transport network pricing reforms by developing and seeking National Cabinet endorsement for hypothecation principles. Under these principles, road and public transport revenues will fund integrated and multimodal programs that deliver sustainable mobility outcomes based on projected user needs. Transport **Proposed support** Outcome 4.4.1: Meet community Outcome 4.4.2: Ensure users pay for the Outcome 4.2.2: Support the growth and stakeholder expectations for true costs of mobility by implementing and diversification of Smaller Cities

transparency and fairness by establishing a nationally consistent governance framework for transport network pricing reforms.

transport network pricing reforms.

and Regional Centres by investing in their local accessibility and connectivity and progressively upgrading transport connections to Fast-growing Cities.

Activity 4.2.2.6: Support regional growth by prioritising faster rail, fast rail and high-speed rail investments based on credible scenarios for population change and using nationally consistent decisionmaking processes. These should include models and assumptions that are updated to evaluate project benefits and costs across wide geographic areas and over the full life of rail assets.

Key

19

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
5	Energy	Proposed lead			
		Activity 5.1.4.2: Give businesses a direct short-term incentive to implement energy efficiency measures and lift energy productivity by extending the instant asset write-off scheme to energy efficiency upgrades of up to \$150,000.			
	Social infrastructure	Proposed sponsor			
			Recommendation 8.2: Maximise social and economic community benefits by supporting shared use of social infrastructure through future agreements and capital funding programs prioritising shared use of facilities.	Recommendation 8.1: Support Australians to enjoy a healthier, safer, more connected and fulfilled quality of life by facilitating targeted investment in the right physical and digital social infrastructure.	
	Social infrastructure	Proposed lead			
		Activity 8.3.2.2: Harmonise the collection and availability of data across different government departments and housing sectors by developing a housing and homelessness reporting process and dataset that are comprehensive and consistent.	Outcome 8.3.2: Support healthy and productive futures for all Australians by establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of social and affordable rental housing. Activity 8.3.2.3: Deliver improved social and affordable rental housing outcomes by adopting the quadruple-bottom-line approach to prioritise investment.		
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Social infrastructure	Proposed support			
			Outcome 8.1.5: Enable greater social and economic participation by designing programs to increase the supply and improve the quality of social and affordable rental housing.		
			Activity 8.1.5.1: Expand the pipeline of well-located, high-quality social and affordable rental housing by prioritising and implementing efficient medium- to long-term financing programs.		

∨ Sector/	Focus area 0-5 years	5-10 years	10-15 years	15+ years	
Social info	rastructure	Activity 8.1.5.2: Improve hou quality by developing and im innovative efficient programs the maintenance backlog of dwellings within their remain life while recycling stock that or passed the end of its econ	plementing s to reduce social ing economic t has reached		
		Activity 8.1.5.4: Support con housing providers by continu develop and implement progbuild capacity and capability	uing to grams that		
		Recommendation 8.3: Supp development by recognising investment in social infrastru	the value of		

Bureau of Communications, Arts and Regional Research

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Q	Place	Proposed support			
		Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy.			

Bureau of Infrastructure and Transport Research Economics

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(()	Place	Proposed lead			
		Activity 1.2.3.2: Identify transport options by reviewing current and future movement between Smaller Cities and Regional Centres and Fast-growing Cities.			

Key

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Q	Place	Proposed support			
		Outcome 1.2.2: Benchmark performance of Smaller Cities and Regional Centres by defining a consistent set of urban data for provision by state, territory and local governments as a condition for funding projects identified by the needs assessment. Outcome 1.2.3: Support employment and population growth in Smaller Cities and Regional Centres by identifying and delivering enabling infrastructure.			
		Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy.			

Bureau of Meteorology

y Sector/Focus area 0-5 years **5-10** years 10-15 years 15+ years Sustainability **Proposed support** and resilience Activity 2.1.3.1: Enable consistent planning, shared responsibility and joint action by establishing long-term (2035, 2050 and 2100) Australian national climate scenarios. These should be based on possible climate futures that align with different Representative Concentration Pathways, and projections and forecasts for economic activity, energy use and land use patterns.

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Sustainability and resilience

Activity 2.1.3.2: Establish a national understanding of climate adaptation risk assessment by publishing and

Centre for Population

✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years

Transport

Proposed support

understanding.

Activity 4.1.1.1: Enable a consistent approach by all jurisdictions to the development of nationally significant transport infrastructure proposals by specifying the use of:

communicating the scenarios. Target communities with differing levels of scientific and technical expertise, from technical roles to decision-makers and the broad community. Ensure the tools and data are accessible and increase

- an agreed and consistent set of land use and transport modelling tools that meet minimum functional standards
- common inputs, including population scenarios.

Activity 4.1.3.1: Ensure the economic analysis of proposed transport investments, and other infrastructure decision-making processes, take account of significant shifts in user preferences and travel behaviours, by updating the Australian Transport Assessment and Planning Guidelines to:

- reflect changes to settlement and working patterns catalysed by the COVID-19 pandemic
- consider the impacts of new transport technologies and business models (including Mobility as a Service) on how people travel and freight is transported
- facilitate incremental investment in transport services, corridors and networks.

Outcome 4.1.1: Maximise the placeshaping impacts of transport investment by linking transport infrastructure funding decisions to published population and land use objectives.

Outcome 4.1.3: Bring forward the benefits of transport investments, in a context of uncertain and changing user needs, by promoting and facilitating the incremental delivery of transport services, corridors and networks as separable stages.

Key

y Sector/Focus area

15+ years

Critical Infrastructure Centre

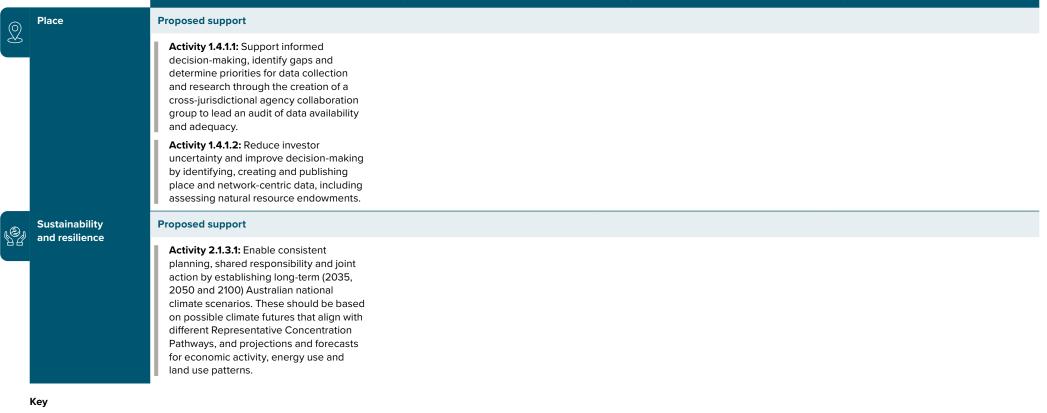
0-5 years

√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Telecommunications and digital	Proposed lead			
and digital	Activity 7.1.1.3: Protect communities from lost power and communications outages caused by emergencies with a roadmap for Australia's energy networks to introduce more power line shielding and line undergrounding in areas at high risk of disaster.			

10-15 years

CSIRO: Commonwealth Scientific and Industrial Research Organisation

5-10 years



y Sector/Focus area

0-5 years

15+ years

How to read

Sustainability Activity 2.1.3.2: Establish a national and resilience understanding of climate adaptation risk assessment by publishing and communicating the scenarios. Target communities with differing levels of scientific and technical expertise, from technical roles to decision-makers and the broad community. Ensure the tools and data are accessible and increase understanding. **Transport Proposed support** Activity 4.2.1.1: Identify supply chain Outcome 4.2.1: Maintain reliable access improvement opportunities across for supply chains under all conditions by multiple commodities and geographies coordinating technological, operational by developing and applying the TraNSIT and infrastructure improvements model. Drive more responsive supply delivered under the National Freight and chain management decision-making Supply Chain Strategy. by making this evidence accessible to governments, industry and other stakeholders through the National Freight Data Hub. Waste **Proposed support** Outcome 9.1.3: Build support for the circular economy and embed circular practices by developing a circular economy roadmap for the infrastructure sector, including annual progress reports.

10-15 years

5-10 years

Key

How to read

Department of Agriculture, Water and the Environment

y Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Place

Proposed support

Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy.

Activity 1.4.1.2: Reduce investor uncertainty and improve decision-making by identifying, creating and publishing place and network-centric data, including assessing natural resource endowments.



Sustainability and resilience

Proposed lead

Outcome 2.1.3: Facilitate joint action by establishing a common, long-term understanding of the potential impacts of climate change, both nationally and locally, that informs land use and infrastructure planning and decision-making.

Activity 2.1.3.1: Enable consistent planning, shared responsibility and joint action by establishing long-term (2035, 2050 and 2100) Australian national climate scenarios. These should be based on possible climate futures that align with different Representative Concentration Pathways, and projections and forecasts for economic activity, energy use and land use patterns.

Activity 2.1.3.2: Establish a national understanding of climate adaptation risk assessment by publishing and communicating the scenarios. Target communities with differing levels of scientific and technical expertise, from technical roles to decision-makers and the broad community. Ensure the tools and data are accessible and increase understanding.

Key

200

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Sustainability **Proposed support** and resilience Activity 2.1.1.1: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities. Activity 2.1.2.4: Improve place-based and network-based systemic risk assessment and decision-making by producing local hazard maps for asset owners and operators and communities. Activity 2.1.2.5: Inform decisions to increase the resilience of a place, network or asset across Australia by identifying cascading systemic failures, interdependencies and interconnections and local vulnerability of all sectors' assets and networks. Water **Proposed sponsor** Recommendation 6.1: Secure longterm water supply for urban, rural, environmental and cultural users by developing a national approach to water security, including independent national ownership. Recommendation 6.2: Value water in communities by prioritising a whole-ofwater-cycle management approach and applying fit-for-purpose, fit-for-place and fit-for-people approaches. Water **Proposed lead** Activity 6.1.1.1: Ensure a consistent Outcome 6.1.1: Achieve a common Outcome 6.2.2: Deliver safe, highnational approach to water security by approach to water security planning quality, secure, sustainable and fit-fordeveloping and committing to a renewed by developing a new National Water purpose water and wastewater services National Water Initiative that incorporates Initiative incorporating a national water to remote and isolated communities by a national water security framework. security framework. A national water partnering with communities and water

utilities, developing a funding pathway

and monitoring strategies.

security framework must include an

agreed definition of 'water security'

and opportunities.

within a whole-of-system context and provide an approach to assessing risks

✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years

Water

Activity 6.1.1.2: Ensure long-term water security challenges and risks are understood and opportunities identified on a nationally consistent basis by developing a national water security framework. A national water security framework must include:

- a definition of 'water security' within a whole-of-system context (including urban and rural systems), with reference to safety, quality and quantity and for meeting users' needs over time on an economic, environmental, social (including cultural) and governance basis.
- a method to measure the water security of a place or catchment over time and incorporate best available demographic, scientific and economic data. This method should also be capable of identifying water deficits or surpluses.

Activity 6.1.1.3: Improve reliability of water accounting within the total system by maintaining registers of all water entitlements and allocations aligned to the renewed National Water Initiative. Mineral and petroleum industries should also be incorporated within entitlement and planning arrangements under a renewed National Water Initiative.

Activity 6.1.1.5: Ensure ongoing commitment and application of the national water security framework by assigning independent ownership of the National Water Initiative, including the national water security framework.

Activity 6.1.2.1: Champion water-wise behaviours and increase water literacy. This includes water-wise campaigning and voluntary reporting of water use in business processes.

Activity 6.1.1.4: Meet the needs of water users into the future and ensure long-term water security objectives are considered in strategic decision-making. This includes:

- incorporating the national water security framework into business case development for state, territory and nationally significant water infrastructure proposals.
- incorporating the national water security framework into existing national infrastructure investment assessment frameworks, including the Infrastructure Australia Assessment Framework and the National Water Grid Investment Framework.

Outcome 6.1.3: Meet users' long-term water needs by ensuring that all options be fully evaluated in infrastructure planning.

Activity 6.1.3.2: Ensure water infrastructure decisions meet users' long-term needs through removing community perception barriers to the use of alternative water sources, particularly recycled water for drinking, by:

- publicising a position of support for alternative water sources, especially recycled water for drinking
- running public education and engagement campaigns on the benefits and risks of recycled water for drinking, including how water travels through the water cycle. Public education campaigning must be based on recognised positive messaging and avoid language or images that might cause stigma or negative reactions
- partnering with influential community representatives or businesses to champion the use of recycled water for drinking.

✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years



Water

Activity 6.1.2.2: Support community and businesses to embed a water-wise culture. This includes ongoing public education to improve water literacy and rebates on water-efficient products. Regulatory bodies must implement pricing structures that signal the full value of water and an economic water conservation method backed by community engagement.

Activity 6.1.3.1: Strengthen resilience of water supply infrastructure and meet outcomes for users' long-terms needs by:

- removing policies that unnecessarily restrict water supply options, including bans that prevent suitably treated wastewater or stormwater from augmenting potable water supplies, and bans that prevent the urban use of rural water
- removing mandates, targets and subsidies for the use of certain types of water, including recycled water
- removing regulatory barriers that discourage recycled water investments
- ensuring that water infrastructure planning decisions consider all options for expanding water supply fully and transparently. This includes determining the optimal mix of water supply options with consideration given to the national water security framework.

Outcome 6.1.4: Improve the long-term reliability of water infrastructure to meet future needs and expectations by advancing whole-of-life asset management and preventative maintenance.

Activity 6.1.4.1: Support maturity for water service providers in asset management and long-term planning by coordinating a national centre of excellence for resource sharing, and coordination of partnerships.

Activity 6.2.1.2: Establish a national stormwater management framework that includes:

- objectives and principles for total water cycle management, including urban amenity and community and waterway health
- guidelines on roles and responsibilities for planning, operation, and maintenance
- cost recovery mechanisms.

Key

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	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Water	Activity 6.2.2.1: Deliver secure, sustainable water and wastewater services to remote and isolated communities by implementing a funding pathway that considers whole-of-life-cycle infrastructure and whole-of-water-cycle services.			
	Water	Proposed support			
		Outcome 6.1.2: Normalise water-efficient practices and decisions by increasing water literacy in communities and businesses.	Activity 6.2.1.7: Embed a whole-of-water cycle management approach into long-term, large scale (city or catchment – including both metropolitan and regional settings) urban planning by defining and implementing community driven outcomes for public health, environmental (including ecological), health, amenity and urban resilience: • Define clear community-driven objectives for water cycle management over the long term. • Align long-term growth planning to community objectives. • Ensure long-term growth plans recognise the value of water within the entire water cycle and identify dependencies of urban growth on water by incorporating best available data and water modelling. • Identify water security risks and growth opportunities by applying the national water security framework.	Outcome 6.2.1: Provide enhanced community benefits, including water security, public health, environmental health, and urban resilience by integrating management of water infrastructure throughout the whole water cycle.	
298	Social infrastructure	Proposed lead			
			Outcome 8.3.4: Support and protect economic growth and the environment by valuing Australia's significant natural assets and their quadruple bottom line benefits.		

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Social infrastructure **Proposed support** Activity 8.3.4.1: Inform and prioritise investment by developing a framework to assess the quadruple bottom line of significant natural assets, building on existing frameworks and developing an agreed, consistent approach to measuring their economic impact. Use the approach to inform and support a national valuation framework. Activity 8.3.4.2: Inform decision-making by developing an agreed and integrated register of significant natural assets with a stocktake undertaken by individual levels of government. Waste **Proposed sponsor** Recommendation 9.2: Encourage market **Recommendation 9.1:** Avoid waste, development through government and improve resource recovery and build industry partnerships to accelerate demand and markets for recycled and extend the implementation of the products by integrating the circular National Waste Policy's data actions economy in national waste policy and and bring national consistency to the infrastructure projects. household waste collection and landfill levy system. Waste **Proposed lead** Outcome 9.1.1: Increase understanding Outcome 9.1.3: Build support for the of the role of consumers in the circular circular economy and embed circular economy through community education practices by developing a circular on responsible waste behaviour economy roadmap for the infrastructure sector, including annual progress reports. Activity 9.1.1.2: Increase consumer understanding by reviewing the Outcome 9.2.2: Create a higheffectiveness of current recycling labels. quality recycling system with lower processing costs by developing common Activity 9.1.1.3: Increase consumer benchmarks for each material stream, participation in product stewardship by consolidating services and targeting applying these recycling label insights infrastructure investment. to a broader range of materials and Activity 9.2.2.1: Support efficient products. resource recovery by prioritising Outcome 9.1.2: Reduce the impact investment in separation and processing of plastic on the environment by infrastructure by material volumes. implementing the National Plastics Plan.

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Activity 9.1.2.1: Increase plastic recycling Waste by providing guidance on aligning requirements and timeframes between state and territory governments and industries. Outcome 9.2.1: Support coordinated policy through an integrated whole-of-life waste data strategy for priority resources Activity 9.2.1.1: Enable nationally consistent reporting of waste data by developing a common approach to standards and definitions. Activity 9.2.1.2: Improve decision-making and investor confidence by implementing an integrated data strategy that leverages agreed definitions. Activity 9.2.2.2: Create clarity for consumers and industry by implementing common benchmarks between states and territories for the collection, transportation and sorting of each material stream. Outcome 9.2.3: Increase landfill diversion by developing a waste levy pricing strategy and national levy protocols Activity 9.2.3.1: Address cross-border waste issues by developing national levy protocols that define which wastes should be levied, levy liabilities, levy administration and maximum transportation limits. Activity 9.2.3.2: Increase resource recovery by introducing a national levy pricing strategy to minimise interstate levy differences. Waste **Proposed support** Activity 9.1.5.6: Develop end markets for reprocessed organics by developing a FOGO recovery strategy that tests new

uses for recovered materials.

How to read

Department of Education, Skills and Employment

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
0	Place	Proposed lead			
		Activity 1.4.2.5: Support the infrastructure pipeline delivery for Northern Australia and grow key industries such as major resources, energy and agribusiness by developing a skills formation and attraction plan assessing skills requirements, skills training capability and liveability factors.	Activity 1.4.2.7: Facilitate local workforce participation by identifying opportunities for developing innovation or specialisation precincts alongside major infrastructure.	Activity 1.4.3.5: Sustain local community employment in infrastructure delivery and other projects by developing an essential skills training academy building infrastructure delivery skills and knowledge.	
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Social infrastructure	Proposed sponsor			
			Recommendation 8.2: Maximise social and economic community benefits by supporting shared use of social infrastructure through future agreements and capital funding programs prioritising shared use of facilities.	Recommendation 8.1: Support Australians to enjoy a healthier, safer, more connected and fulfilled quality of life by facilitating targeted investment in the right physical and digital social infrastructure.	
	Social infrastructure	Proposed support			
			Outcome 8.1.3: Deliver higher-quality school and early childhood education facilities that are well maintained and readily accessible to their communities by embedding place-based planning and asset management best practice.	Outcome 8.1.4: Ensure Vocational Education and Training (VET) aligns with industry-specific skills building and jobs growth objectives by designing, delivering and operating VET infrastructure appropriately.	
			Activity 8.1.3.2: Continue to develop state asset registers that identify the quality, condition and performance of early childhood education facilities, including best-practice asset performance methodology (such as a Value Rating Tool) to inform evidence-based decision-making on future infrastructure investment.		
			Outcome 8.2.2: Increase economic and social benefits by implementing strategic planning governance structures for health and education precincts, and innovative procurement and delivery models. Specialised agencies should also be established to deliver major social infrastructure capital projects.		

Key

Department of Finance

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
9	Place	Proposed lead			
8		Activity 1.3.3.3: Provide services efficiently by optimising investment in built assets and social infrastructure through developing integrated infrastructure strategies across governments.	Activity 1.3.3.2: Support service provision and sharing of Community Service Obligation benefits by integrating their funding arrangements with placecentric asset-sharing platforms tailored to Small Towns, Rural Communities and Remote Areas.		
0	Place	Proposed support			
\otimes		Outcome 1.3.3: Facilitate sharing of infrastructure services and resources between communities and individuals by enabling the sharing economy.			
	Industry	Proposed lead			
Hóó		Activity 3.2b.1.2: Apply appropriate consistency and improve certainty in procurement by developing a procurement decision-making tool to more effectively understand and allocate scope in line with project fundamentals.	Activity 3.4.2.4: Ensure funding and finance decisions for nationally significant projects reflect best practice by updating the Commonwealth Procurement Guidelines, including a clearer and broader definition of value for money.		
		Activity 3.2b.1.3: Improve consistency, certainty and value for money by developing and implementing a new nationally consistent contract suite to support a spectrum of procurement models.			
Fun	Industry	Proposed support			
			Recommendation 3.4: Deliver a greater return on investment by ensuring governments act as model clients and custodians of industry health and productivity.		

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Water	Proposed support			
		Activity 6.1.2.3: Increase transparency of water consumption and dependency (water footprint) by disclosing meaningful water data in environment, social and governance (ESG) reporting.			

Department of Foreign Affairs and Trade

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Place	Proposed support			
	Outcome 1.4.1: Improve investor certainty by collecting and publishing better data on the region's characteristics and infrastructure.			
	Activity 1.4.1.2: Reduce investor uncertainty and improve decision-making by identifying, creating and publishing place and network-centric data, including assessing natural resource endowments			
	Activity 1.4.2.4: Reduce business costs by improving supply chain efficiency and reliability through the inclusion of end-to-end key supply chain strategies that connect productive regions with domestic markets and export gateways in the National Freight Strategy.			

How to read

Department of Health

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Telecommunications and digital	Proposed support			
		Activity 7.3.3.2: Protect the public from misinformation and cyber risks by investing in public education and communication programs addressing5G health concerns, data privacy, technology risks and cybercrime. The engagement should extend previously successful public education and engagement campaigns around digital innovation.			
	Social infrastructure	Proposed sponsor			
			Recommendation 8.2: Maximise social and economic community benefits by supporting shared use of social infrastructure through future agreements and capital funding programs prioritising shared use of facilities.	Recommendation 8.1: Support Australians to enjoy a healthier, safer, more connected and fulfilled quality of life by facilitating targeted investment in the right physical and digital social infrastructure.	
2009	Social infrastructure	Proposed lead			
## A P P P P P P P P P P P P P P P P P P			Activity 8.1.1.2: Provide seamless connections to existing state and territory digital health capabilities through a program to increase primary health providers' digital capability. Activity 8.1.1.3: Accelerate the adoption of high-quality virtual care across Australia by identifying and examining existing platforms, sharing successful digital health technologies, educating platform users and developing behaviour change programs based on learnings and practices. Activity 8.1.1.5: Improve digital health literacy for citizens and the health workforce through targeted education programs, with a particular focus on vulnerable communities.	Outcome 8.1.1: Improve equity of access and facilitate safe, high-value, high-quality care for all Australians by accelerating the transition to digital health service delivery. This will help to achieve National Health Reform Agreement 2020–2025 goals. Activity 8.1.1.4: Enable different digital health systems to work together and share meaningful information by developing a collaborative work program that integrates health services to provide targeted, patient-centred care across human services sectors, including disability, aged care and community welfare services.	

Key

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	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Social infrastructure		Outcome 8.1.2: Ensure Australia is always fully prepared for pandemics across all jurisdictions by preparing an effective national pandemic health infrastructure response program.		
			Activity 8.1.2.1: Ensure consistent readiness for pandemics by retaining and continuously improving COVID-19 pandemic infrastructure planning and preparations for emergency response hospitals, and make ongoing national arrangements to access private hospital infrastructure during pandemics.		
			Activity 8.1.2.2: Ensure appropriate supply of emergency facility materials by establishing national contracts with major supply chain providers for personal protective equipment (PPE), critical medical devices and other essential facility materials.		
			Activity 8.1.2.3: Progress the recommendations in the <i>National Review</i> of <i>Hotel Quarantine</i> to ensure Australia has appropriate quarantine infrastructure to respond to emergency situations, emergency evacuations or urgent scalability needs.		
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Social infrastructure	Proposed support			
			Outcome 8.2.2: Increase economic and social benefits by implementing strategic planning governance structures for health and education precincts, and innovative procurement and delivery models. Specialised agencies should also be established to deliver major social infrastructure capital projects.		

Department of Home Affairs

∨ Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Sustainability and resilience

Proposed lead

Activity 2.1.2.2: Enable timely information exchange and build accountability by expanding participants to the Trusted Information Sharing Network, sharing information and best practice and developing connections and ongoing relationships.



Sustainability and resilience

Proposed support

Recommendation 2.1: Build community resilience to all hazards by considering systemic risks, interdependencies and vulnerabilities in infrastructure planning and decision-making.

Activity 2.1.1.1: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities.

Outcome 2.1.2: Improve community resilience and coordinated action through a consistent, nationwide, systemic approach to risk identification.

Activity 2.1.2.1: Facilitate collaboration across sectors, layers of government, asset owners and operators, businesses and communities by creating formal governance arrangements, resourcing and a convening authority in line with the National Disaster Risk Reduction Framework.

Activity 2.1.2.3: Inform decisions on risk reduction options and approaches, and enable data driven decision-making by standardising and sharing data about disasters, hazards and asset and network independency.

Activity 2.1.2.6: Better predict and mitigate major hazards and risks with a national risk and disaster probability model for all hazards.

Key



y Sector/Focus area

0-5 years 15+ years 5-10 years 10-15 years



Sustainability and resilience Activity 2.1.2.4: Improve place-based and network-based systemic risk assessment and decision-making by producing local hazard maps for asset owners and operators and communities.

Activity 2.1.2.5: Inform decisions to increase the resilience of a place, network or asset across Australia by identifying cascading systemic failures, interdependencies and interconnections and local vulnerability of all sectors' assets and networks.

Transport

Proposed support

Activity 4.4.2.3: Develop a national distance-based road user charging regime for all types of vehicles. Ensure the design of the regime addresses risks to privacy and cyber security.

Outcome 4.3.5: Ensure all road users can experience the benefits of world's best practice transport technologies by establishing a single national market for electric, connected and autonomous vehicles.

Activity 4.3.5.6: Ensure the data-sharing framework and associated digital infrastructure for gathering and using connected and autonomous vehiclegenerated data are designed to support the separate administration of a national distance-based road user charging regime. Also ensure they align with privacy and cyber security requirements.

Outcome 4.4.2: Ensure users pay for the true costs of mobility by implementing transport network pricing reforms.



Telecommunications and digital

Proposed lead

Outcome 7.1.1: Enable emergency services and network operators to better respond to emergencies by classifying telecommunications as an essential service and continue to develop management policies such as infrastructure protection, risk planning and vegetation management.

Key

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Telecommunications and digital	Activity 7.1.1.3: Protect communities from lost power and communications outages caused by emergencies with a roadmap for Australia's energy networks to introduce more power line shielding and line undergrounding in areas at high risk of disaster.			
	Telecommunications and digital	Proposed support			
2	and digital		Activity 7.1.3.4: Provide emergency services with more coverage and more capability for national public safety networks through a coordinated network expansion plan and capability strategy for improving coverage, capacity and the ability to transmit data.		

Department of Industry, Science, Energy and Resources

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(0)	Place	Proposed support			
			Recommendation 1.2: Attract growth to Smaller Cities and Regional Centres while maintaining quality of life by enhancing local identity, leveraging social infrastructure and improving digital and economic connectivity to Fast-growing Cities and neighbouring regions.		
			Activity 1.2.3.6: Support growth and incumbent industries in each region by establishing a framework to sequence infrastructure investment based on industry-specific, place-based infrastructure needs assessments.		

2021 Australian Infrastructure Plan 0-5 years **5-10** years 15+ years y Sector/Focus area 10-15 years Sustainability **Proposed lead** and resilience Activity 2.2.1.2: Meet Australia's commitments to net zero through long-term sector-specific plans that set interim emissions reduction targets and strategies that prioritise infrastructure investments and services. Outcome 2.2.3: Deliver cost-effective emissions reduction and broad sustainability benefits consistent with the quadruple-bottom-line by managing zero

> Activity 2.2.3.1: Ensure the uptake of electric vehicles at the right scale and time to optimise quadruple-bottom-line benefits by delivering a national electric vehicle strategy through the expansion of the Future Fuels Strategy.

emissions vehicle uptake and vehicle

Activity 2.2.3.2: Facilitate cost-effective emissions reductions by aligning vehicle emission standards with global best practice and requiring manufacturers to reduce emissions over vehicle portfolios.

Transport

Proposed lead

standards

Activity 4.3.5.1: Enable the longer-term rollout of fleets of electric vehicles that can both return power to, and draw it from, the grid by ensuring the National Construction Code formalises requirements and specifications for providing and operating next-generation two-way charging facilities and associated signage in multi-residential, commercial, industrial and public buildings, including bus depots.

Key

■ Recommendation ■ Outcome ■ Activity

2

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Transport	Proposed support			
			Outcome 4.2.1: Maintain reliable access for supply chains under all conditions by coordinating technological, operational and infrastructure improvements delivered under the National Freight and Supply Chain Strategy.		
			Activity 4.2.1.4: Enable remote area supply chain cost savings by increasing domestic freight operators' access to alternative fuels, including hydrogen produced under initiatives that are currently oriented towards overseas customers and/or non-transport heavy industrial uses such as mining.		
			Outcome 4.3.5: Ensure all road users can experience the benefits of world's best practice transport technologies by establishing a single national market for electric, connected and autonomous vehicles.		
5	Energy	Proposed sponsor			
V	smart, affordable, reliable by implementing regular introducing incentives for participation in energy management and plans	Recommendation 5.2: Transition to a smart, affordable, reliable future grid by implementing regulatory reforms, introducing incentives for customer participation in energy system management and planning cross-sector integration.	Recommendation 5.1: Help households and businesses reduce electricity bills by making sure they have the right information and incentives.		
		Recommendation 5.3: Transition Australia's exports and domestic energy demand to high-tech, low-cost, low- emission energy sources through a coordinated national strategy.			
5	Energy	Proposed lead			
7	cu se th to	Outcome 5.1.1: Help residential energy customers invest in products and services that reduce their energy bills through education campaigns and tools that help them access the right information when they need it.	Outcome 5.1.3: Give energy customers clear and consistent incentives to take up energy efficiency opportunities by harmonising energy efficiency obligation schemes across jurisdictions.	Outcome 5.2.3: Safeguard the reliability and security of electricity supply by implementing electricity transmission reforms.	
	Key				

Sponsor: facilitate, coordinate and champion the recommendation **Lead:** deliver specific activities or lead related outcomes **Support:** share ownership, contributions or knowledge to enable the reform process

5

Energy

Activity 5.1.1.1: Reduce household energy bills (and improve residential energy efficiency) through the broader promotion of easily accessible information and education campaigns (leveraging websites like Energy Made Easy and Your Home), and supporting residential customers to:

- invest in the energy efficiency of their homes, renovations and appliances
- understand and manage their energy consumption
- choose their retailer.

Activity 5.1.1.2: Reduce energy bills and improve health and wellbeing for vulnerable and low-income customers by delivering funding assistance programs to support energy audits and energy productivity upgrades for public and community housing, low-income households and associated rental properties with poor energy performance.

Outcome 5.1.2: Help buyers and renters make informed decisions by mandating energy efficiency disclosure for residential dwellings at time of sale or lease and raising minimum energy efficiency standards for rental properties.

Activity 5.1.2.1: Inform home owners, buyers, and tenants of the energy performance of their home through the development and application of a national residential energy performance rating scheme for all homes (new and existing) consistent with the *Trajectory for Low Energy Buildings* and *Report for Achieving Low Energy Existing Homes*.

Activity 5.1.3.1: Give energy customers clear and consistent incentives to take up energy efficiency measures by harmonising jurisdictional energy efficiency obligation schemes into a National Scheme, or otherwise harmonising schemes, incentives and standards across jurisdictions in line with National Energy Productivity Plan goals.

Key

5

Energy

Activity 5.1.2.2: Improve the energy efficiency, health and comfort of rental properties by implementing a national minimum energy efficiency standard, including mechanisms for tenants to initiate energy efficiency upgrades of rental properties. This should build on work already underway to set out considerations for development of rental standards through the *Trajectory for Low Energy Buildings* and *Report for Achieving Low Energy Existing Homes*.

Outcome 5.1.4: Help businesses lift energy productivity through targeted information, communications and education alongside direct incentives to invest in energy productivity upgrades.

Activity 5.1.4.1: Improve the energy efficiency and productivity of businesses through targeted communications and education campaigns and connecting businesses with expert advice to help them identify and implement upgrades to equipment and modernise processes.

- Include programs that specifically target manufacturing, energy-intensive small to medium enterprises and large energy users to assess and report on their opportunities for improving energy efficiency, in the style of the Energy Efficiency Opportunities program and building on the Business Energy Advice Program.
- These tools and touchpoints should help businesses take advantage of opportunities at key points of decision and investment (through major purchases or at tax time) and comply with obligations under harmonised national energy efficiency obligation schemes.

Outcome 5.2.2: Enable the orderly uptake of zero-emission vehicles by undertaking national cross-sector coordination planning.

Key

5

Energy

Activity 5.2.2.1: Enable the electrification of transport by forming a long-term national planning working group.

This should build on the work by the Distributed Energy Integration Program Electric Vehicle Taskforces on improving data access and data standards that help allow for effective national planning.

Activity 5.2.2.: Integrate zero-emission vehicles into the grid safely and cost-effectively by developing an electric vehicle integration strategy.

 This should build on the work by the Distributed Energy Integration Program Electric Vehicle Taskforces, and include the incorporation of demand management, increasing charging infrastructure visibility and ensuring uptake of smart charging and smart metering.

Outcome 5.3.1: Ensure Australia remains an energy export supplier of choice in decarbonised global supply chains by coordinating national development of low emission energy sources.

Activity 5.3.1.1: Enable collaboration opportunities, shared infrastructure and regulatory consistency across jurisdictions by coordinating a national approach to energy planning.

Activity 5.3.1.2: Support the development of clean energy export supply chains by identifying key precincts for new low-emission energy export hubs and developing enabling infrastructure plans.

Activity 5.3.1.3: Grow new export industries and jobs in clean energy commodities and value-added products such as aluminium, green steel, technology and services by developing coordinated clean energy industry strategies.

Key

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0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years **Energy** Activity 5.3.1.4: Increase investor certainty and enable emerging industries by developing clear, outcome-focused legislation and regulation for emerging low-emission energy technology. Outcome 5.3.2: Transition Australia to a high-tech, low-cost, low-emission energy system by implementing appropriate regulatory and legislative environments, identifying opportunities to transition assets, and continuing to fund new energy technology development and adoption. Activity 5.3.2.1: Increase investor certainty by restating commitment to collaboration through the national governance frameworks that support the National Electricity Market. Activity 5.3.2.3: Maintain electricity market reliability by developing and implementing a trigger-based electricity market review mechanism that is undertaken at key policy trigger-points such as announcement of accelerated retirement of thermal electricity generators. Activity 5.3.2.5: Ensure new sources of gas and hydrogen help provide reliable and affordable energy to Australian homes and businesses by reviewing the application of a nationally consistent policy on potential reservation or prioritisation of new gas sources and hydrogen for domestic consumption. Energy **Proposed support** Activity 5.1.4.2: Give businesses a direct short-term incentive to implement energy efficiency measures and lift energy productivity by extending the instant asset write-off scheme to energy efficiency upgrades of up to \$150,000.

How to read

∨ Sector/F	ocus area	0-5 years	5-10 years	10-15 years	15+ years
Waste		Proposed support			
			Outcome 9.1.3: Build support for the circular economy and embed circular practices by developing a circular economy roadmap for the infrastructure sector, including annual progress reports. Activity 9.1.3.1: Improve uptake and consistency in the use of recycled and recyclable materials in infrastructure and construction projects by incorporating targets in building and design codes.		Recommendation 9.1: Avoid waste, improve resource recovery and build demand and markets for recycled products by integrating the circular economy in national waste policy and infrastructure projects.

Department of Infrastructure, Transport, Regional Development and Communications

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Place	Proposed sponsor			
8	6	Recommendation 1.1: Deliver globally competitive quality of life in Fast-growing Cities by growing economies and populations, enabled by place-centric infrastructure investment and reform.	Recommendation 1.2: Attract growth to Smaller Cities and Regional Centres while maintaining quality of life by enhancing local identity, leveraging social infrastructure and improving digital and economic connectivity to Fast-growing Cities and neighbouring regions. Recommendation 1.3: Support a better quality of life by aligning funding and minimum standards with principles for sustainable infrastructure delivery in Small Towns, Rural Communities and Remote Areas.	Recommendation 1.4: Ensure Northern Australia and Developing Regions fulfil their economic role, attract and retain skilled workers and enable participation of Aboriginal and Torres Strait Islander peoples through greater collaboration between governments on infrastructure needs across the region.	
Q	Place	Proposed lead			
8		Activity 1.1.1.2: Embed priority quality of life outcomes for each Fast-growing City in a refreshed Smart Cities Plan. Activity 1.1.1.3: Benchmark performance of each city against the Australian Government's policy priorities through the National Cities Performance Framework.	Outcome 1.1.3: Maximise the impact of city-shaping infrastructure delivery and operations through collaborative placebased governance models.	Activity 1.4.3.5: Sustain local community employment in infrastructure delivery and other projects by developing an essential skills training academy building infrastructure delivery skills and knowledge.	

 ✓ Sector/Focus area
 0-5 years
 5-10 years
 10-15 years
 15+ years

Place

Outcome 1.1.2: Incorporate diverse approaches and innovation in urban policy through collaboration between government, industry and academia.

Activity 1.1.2.1: Invigorate the Cities Reference Group to provide an interface between government, academia and industry on urban policy, including:

- updated terms of reference that focus on quality of life and support population and economic growth
- renewed membership to ensure broad representation from all levels of government, the infrastructure sector and industry representatives.

Activity 1.1.3.7: Effectively deliver Australian Government-funded major infrastructure by developing a spectrum of place-based governance, financial and reporting models, including:

- managing the interface of federal assets and land holdings with neighbouring state, territory and local government infrastructure through asset or precinct specific models
- aligning city-shaping investment with supporting reforms and infrastructure provision through City Deal models
- driving targeted economic development of Fast-growing Cities by creating innovation districts and activity centres.

Outcome 1.2.2: Benchmark performance of Smaller Cities and Regional Centres by defining a consistent set of urban data for provision by state, territory and local governments as a condition for funding projects identified by the needs assessment.

Activity 1.2.2.1: Inform urban policy by publishing the data within the National Cities Performance Framework and Progress in Australia's Regions dashboard. Outcome 1.3.1: Ensure communities in Small Towns, Rural Communities and Remote Areas have access to infrastructure services in line with defined minimum standards.

Activity 1.3.1.2: Based on community size, demographics and location, define minimum standards across social infrastructure.

Outcome 1.3.2: Improve the transparency and effectiveness of Community Service Obligations by redesigning them to include robust criteria, be cost-neutral and reflect community priorities.

Activity 1.3.2.3: Ensure assets are culturally responsive and will be well-utilised by undertaking service design for Community Service Obligations in partnership with Aboriginal and Torres Strait Islander communities.

Outcome 1.4.3: Support participation of Aboriginal and Torres Strait Islander enterprises and individuals in infrastructure planning and delivery by developing joint programs for agencies leading the planning, delivery and operation of infrastructure.

Key

ă Q Q

Sector/Focus area

O-5 years

5-10 years

10-15 years

15+ years

Place

Activity 1.2.2.2: Monitor performance through bi-annual reporting on trends.

Outcome 1.2.3: Support employment and population growth in Smaller Cities and Regional Centres by identifying and delivering enabling infrastructure.

Activity 1.2.3.3: Support efficient planning and delivery by taking a staged

Activity 1.2.3.4: Facilitate more
Australians living within three hours of
an aviation gateway connected to a Fastgrowing City by using movement data to
prioritise investment in regional airport
infrastructure.

approach to connectivity, identifying

enabling infrastructure projects and accessibility improvements, basing decisions on current and forecast movement and embedding changes in land use and planning decision-making.

Outcome 1.2.4: Ensure existing and planned digital infrastructure will meet the changing requirements of users in Smaller Cities and Regional Centres by reviewing infrastructure rollout plans

Activity 1.2.4.1: Address capacity constraints in high-growth Smaller Cities and Regional Centres by targeting investment at established data-intensive industries.

Activity 1.2.4.2: Support greater wholesale and retail competition by facilitating greater sharing of physical infrastructure and infrastructure corridors servicing regional centres.

Activity 1.3.1.1: Based on community size, demographics and location, define minimum standards across economic infrastructure sectors (transport, energy, water, telecommunications and waste).

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years **Place Activity 1.3.2.1:** To ensure Community Service Obligations are delivering public value, establish an interdepartmental taskforce to review their performance and identify potential improvements. Activity 1.3.2.2: Improve understanding of costs and benefits of Community Service Obligations through mandatory public reporting on their performance. Outcome 1.3.3: Facilitate sharing of infrastructure services and resources between communities and individuals by enabling the sharing economy. Outcome 1.4.1: Improve investor certainty by collecting and publishing better data on the region's characteristics and infrastructure. Outcome 1.4.2: Support industry development by developing place and network-based infrastructure strategies linked to incumbent and emerging growth industries. Activity 1.4.2.2: Meet the requirements of growth industries by undertaking place-based assessment of digital adequacy, accessibility and affordability. Activity 1.4.2.3: Identify opportunities for shared infrastructure and reduced

Key

■ Recommendation
■ Outcome
■ Activity

costs by undertaking joint assessment of enabling infrastructure requirements for

Activity 1.4.2.4: Reduce business costs by improving supply chain efficiency and reliability through the inclusion of end-to-end key supply chain strategies that connect productive regions with domestic markets and export gateways in

major industry developments.

the National Freight Strategy.

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years **Place** Activity 1.4.3.1: Ensure infrastructure delivers improved social and economic outcomes for communities by aligning major infrastructure investment with the objectives of the Northern Australia Indigenous Development Accord and Closing the Gap targets. Activity 1.4.3.2: Support Aboriginal and Torres Strait Islander participation in the Northern Australia economy, including infrastructure delivery, by assessing and prioritising investment in enabling digital and transport connectivity in partnership with local First Nations communities. Activity 1.4.3.3: Build the capability of Aboriginal and Torres Strait Islander entrepreneurs and traditional owners to participate in the economic development process through financial and technical support to map the commercial potential of their land and water assets and develop feasibility studies and commercial partnerships with project proponents. Place Proposed support Outcome 1.1.1: Improve cooperation Activity 1.4.2.6: Attract and retain between all levels of government by a skilled workforce by supporting jointly developing a clear vision for liveability through investment in social each Fast-growing City that underpins infrastructure and connectivity. land use, infrastructure and planning strategies. Activity 1.1.1.1: Build buy-in for each city's vision through industry and community engagement. Activity 1.2.3.2: Identify transport options by reviewing current and future movement between Smaller Cities and Regional Centres and Fast-growing

Key

■ Recommendation ■ Outcome ■ Activity

Cities.

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Sustainability **Proposed sponsor** and resilience Recommendation 2.2: Meet Australia's present and future needs by establishing the quadruple-bottom-line as a goal for all infrastructure policy and investment. Recommendation 2.3: Build community trust in infrastructure decision-making and institutions by ensuring infrastructure decisions are transparent, and reflect place-based community needs and preferences. Sustainability **Proposed lead** and resilience Activity 2.1.4.1: Ensure infrastructure assessment frameworks, and associated tools and guidance, including the Australian Transport Assessment and Planning Guidelines, consider risks and resilience by incorporating future scenarios and hazard information. Outcome 2.2.1: Achieve consistency and shared ownership through embedding the quadruple-bottom-line into infrastructure decision-making frameworks. Activity 2.3.3.2: Improve transparency and community trust and understanding by publicly releasing key information supporting infrastructure decisions, subject to privacy and data sovereignty considerations. Industry **Proposed sponsor** Recommendation 3.3: Increase productivity and embed a culture of innovation in the infrastructure sector by adopting an evidence-based digital by default approach to infrastructure planning, delivery and operations.

Key

Sector/Focus area

0-5 years

5-10 years

10-15 years

15+ years

Recommendation 3.4: Deliver a greater return on investment by ensuring governments act as model clients and custodians of industry health and



Industry

Proposed lead

Outcome 3.1.3: Ensure the industry is a sector of choice for employees and can meet current and future workforce demands by introducing cultural reform that embraces diversity and inclusion.

Activity 3.2a.1.1: Uplift quality of infrastructure decision-making through the development and delivery of training for key decision-makers on due diligence and de-risk, construction innovation, timing of project announcements, commercial and legal, and project governance.

Activity 3.2a.1.2: Increase maturity and reporting of project planning and design through public-facing annual reports of de-identified Australian Government funded projects.

Activity 3.2a.2.3: Enhance the quality of decision-making by developing a nationally consistent whole-of-life infrastructure cost and schedule benchmarking tool and mandate its use on all nationally significant projects.

Activity 3.3.1.3: Kick-start digital by default in infrastructure by verifying all federally funded projects adopt innovative approaches across their lifecycle, including Building Information Modelling, digital engineering, embedded sensors and digital asset management. Strengthen nationally consistent guidance, tools and templates to match these objectives.

Outcome 3.1.2: Create a step change in infrastructure productivity by industrialising the sector.

productivity.

Activity 3.1.3.1: In partnership with industry, deliver a workforce attraction and retention strategy that navigates current workforce challenges and sets out tangible and achievable solutions that create a sector of choice for current and future talent.

Activity 3.1.3.2: Foster a new model of collaboration between governments and industry by developing and implementing an infrastructure industry culture commitment and industry policy aimed at improving project delivery.

Activity 3.2a.2.1: Improve consistency, efficiency and transparency of project decision-making by developing and promoting nationally consistent project information structures.

Outcome 3.3.1: Increase the productivity of the infrastructure sector by increasing digital adoption in infrastructure planning, delivery and operations.

Activity 3.3.1.1: Create ownership and vision for digital approaches to infrastructure planning, delivery and operations by establishing a national office for digital by default in infrastructure.

Activity 3.3.1.2: Increase the adoption of, and create greater national consistency for, digital approaches to infrastructure planning, delivery and operations by developing a national digital infrastructure roadmap.

Activity 3.1.2.3: Create, embed and pursue sector-wide efficiencies by developing and implementing project processes, templates and assurance activities that prioritise industrialisation.

Key



2021 Australian Infrastructure Plan 2021 Implementation Pathway 0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Industry Activity 3.3.1.4: Improve knowledge-Outcome 3.3.2: Accelerate the adoption sharing about digital approaches to of digital approaches to infrastructure infrastructure planning, delivery and planning, delivery and operations by operations and promote more consistent coordinating jurisdictions and achieving approaches between jurisdictions national consistency. by establishing a national digital Activity 3.3.2.1: Increase productivity infrastructure network. by implementing the national digital Outcome 3.4.2: Optimally allocate and infrastructure roadmap to establish an invest in infrastructure with the Australian Intelligent Infrastructure Innovation Government progressing towards a Scheme across all levels of government. mature and informed investor. Outcome 3.4.1: Improve user and Activity 3.4.2.2: Ensure Australian community outcomes by aligning taxpayer interests are well-represented investment and reforms with a unified and central vision for future Australian and drive national consistency in project infrastructure. delivery by appointing experienced senior responsible officers to all major Activity 3.4.1.1: Increase clarity and federally funded projects. confidence for industry, governments Activity 3.4.2.6: Strengthen asset and community practice by creating a management by ensuring asset registers common national infrastructure vision include condition, use and quality, with a commitment to principles, strategic facilitated by a community of practice focus areas, objectives and performance between governments, industry and metrics. academia promoting excellence in Activity 3.4.1.3: Provide a consistent view capabilities, processes, audits and on the maturity of major project decisionsystems. making by refreshing and reporting against the Infrastructure Decisionmaking Principles. Activity 3.4.2.1: Strengthen the

Australian Government's project delivery capabilities, processes and systems by establishing an office focused on infrastructure project delivery excellence.

Activity 3.4.2.3: Safeguard community interests and taxpayer funding by ensuring all proposed investments demonstrate an assessment of non-build solutions.

Activity 3.4.2.5: Provide a pathway for prospective bidders to submit proposals that align with federal infrastructure policy priorities by developing an Australian Government market-led proposals framework that integrates with jurisdictional guidance.

Key

2

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Industry **Proposed support** Activity 3.1.1.4: Ensure future Activity 3.4.1.2: Expand and promote infrastructure investment and project new and existing industry and delivery commitments are regularly jurisdictional reforms and best practices reviewed and considered against by establishing a government and the jurisdiction-wide, cross-sectoral industry collaborative leadership group. infrastructure project pipeline and industry capacity forecasts. **Transport Proposed sponsor** Recommendation 4.1: Maximise the Recommendation 4.4: Ensure the price overall benefits of transport investments paid for mobility supports the efficient by aligning transport programs with movement of people and goods by place-based objectives. leading the transition to a nationally coordinated and multimodal transport Recommendation 4.2: Improve the network pricing regime. liveability and economic sustainability of regional, rural and remote areas by developing, maintaining and operating integrated freight and passenger transport networks that meet end-to-end access needs. **Recommendation 4.3:** Free people from relying on driving for door-to-door mobility by ensuring urban transport services are managed as an integrated, inclusive, user-responsive and smart transport system. **Transport Proposed lead** Activity 4.1.1.1: Enable a consistent Outcome 4.1.1: Maximise the place-Outcome 4.2.2: Support the growth and diversification of Smaller Cities approach by all jurisdictions to the shaping impacts of transport investment development of nationally significant by linking transport infrastructure funding and Regional Centres by investing in transport infrastructure proposals by decisions to published population and their local accessibility and connectivity specifying the use of: land use objectives. and progressively upgrading transport connections to Fast-growing Cities. • an agreed and consistent set of land Activity 4.1.1.3: Align investment with use and transport modelling tools that place-based objectives by requiring that

Key

■ Recommendation
■ Outcome
■ Activity

meet minimum functional standards

• common inputs, including population

scenarios.

the proponents of nationally significant

reference a published place-based vision for the relevant linear corridor or broader geographic area in their business cases.

transport infrastructure projects

 ✓ Sector/Focus area
 0-5 years
 5-10 years
 10-15 years
 15+ years



Transport

Activity 4.1.2.1: Enable the achievement of consistent and predictable results from transport expenditure by developing a nationally uniform movement and place framework and associated performance standards for the function of links in a multimodal transport network hierarchy.

- Ensure the movement and place framework aligns with the National Service Level Standards Framework for Roads.
- Specify performance standards in the Australian Transport Assessment and Planning Guidelines.

Activity 4.1.5.1: Where required, bring forward the completion of cross-boundary local transport networks that meet users' short journey needs and prioritise funding support under place-based agreements for partnerships of two or more councils working together.

Activity 4.2.1.1: Identify supply chain improvement opportunities across multiple commodities and geographies by developing and applying the TraNSIT model. Drive more responsive supply chain management decision-making by making this evidence accessible to governments, industry and other stakeholders through the National Freight Data Hub.

Activity 4.2.3.1: Develop and adopt nationally consistent performance standards for Small Towns, Rural Communities and Remote Areas to physically access essential services that cannot be effectively provided online. Articulate standards in terms of the total time taken by people in a rural or remote area to travel to and access the education, health or other services offered by a Smaller City or Regional Centre and then return home

Outcome 4.1.2: Ensure the most costeffective mobility and land use outcomes from transport expenditure by tying transport budgets to the achievement of specified movement and place performance standards.

Activity 4.1.2.3: Maximise the benefits of public expenditure by making the allocation of all Australian Government transport program funds to jurisdictions subject to the demonstrated achievement of specified and agreed movement and place outcomes.

Outcome 4.1.3: Bring forward the benefits of transport investments, in a context of uncertain and changing user needs, by promoting and facilitating the incremental delivery of transport services, corridors and networks as separable stages.

Activity 4.1.3.3: Support incremental and demand-led transport network development, including the staged introduction of different public transport modes to cost-effectively grow the patronage base for these services, by executing new and updated Australian Government funding instruments with state and territory jurisdictions that commit to a multi-year staged funding approach. Take this approach under Federation Funding Agreements and place-based agreements.

Outcome 4.1.5: Maximise the collective benefits from local governments' transport investments by reorienting funding programs towards specified end-to-end journey outcomes.

Outcome 4.2.1: Maintain reliable access for supply chains under all conditions by coordinating technological, operational and infrastructure improvements delivered under the *National Freight and Supply Chain Strategy*.

Activity 4.2.2.6: Support regional growth by prioritising faster rail, fast rail and high-speed rail investments based on credible scenarios for population change and using nationally consistent decision-making processes. These should include models and assumptions that are updated to evaluate project benefits and costs across wide geographic areas and over the full life of rail assets.

Activity 4.2.2.7: Maximise economic, productivity and safety benefits from governments' fast rail, faster rail and high-speed rail investments. Invest in the timely preservation of surface corridors. Ensure the cross-border interoperability of projects is advanced in different locations.

Key

Transport

Activity 4.3.1.2: Maximise the accessibility of new mass transit services by active travel and local public transport and reduce reliance on the provision of commuter car parking by requiring mass transit corridor proposals to incorporate a first and last mile service delivery plan that addresses:

- active travel modes
- · bus priority access
- demand-responsive services
- Mobility as a Service subscription models
- multimodal interchanges connecting first- and last-mile choices to mass transit services.

Activity 4.3.3.4: Ensure all jurisdictions' mobility service support programs collectively provide efficient coverage for people with disability by ensuring mobility service providers' alignment with a national accreditation framework and empowering program participants to purchase services from accredited rideshare operators through a single point of access.

Activity 4.3.3.5: Invest in the capacity of operators to provide demand-responsive and rideshare services to improve access for people with disability in Small Towns, Rural Communities and Remote Areas where there is not the collective density of demand to support commercial operations.

Activity 4.3.3.6: Address the needs of older Australians, women, children and people who speak or read a language other than English by developing nationally consistent performance requirements for transport services that meet diverse user needs for safe, convenient and easy-to-navigate travel. Only invest in transport proposals that include a plan to meet these requirements.

Activity 4.2.1.2: Deliver local safety, environmental and economic benefits for regional, rural and remote communities by identifying and prioritising freight intermodal projects that promote shifting from road to Inland Rail and other freight rail services for targeted commodities.

Activity 4.2.1.3: Develop and implement place-based action plans for Fast-growing City port and airport precincts, through government, industry and community partnerships, that align with the National Urban Freight Planning Principles. Improve the efficiency of export- and tourism-oriented corridors by implementing actions that reduce friction between freight operations and dense land uses.

Activity 4.2.1.4: Enable remote area supply chain cost savings by increasing domestic freight operators' access to alternative fuels, including hydrogen produced under initiatives that are currently oriented towards overseas customers and/or non-transport heavy industrial uses such as mining.

Activity 4.2.2.4: Strengthen the connection of Smaller Cities and Regional Centres to Fast-growing Cities by progressively upgrading existing regional passenger rail services. Make services more comfortable and reliable, and grow the patronage base for public transport, by investing in customer experience improvements such as new rolling stock and in track projects that maximise the separation of freight and passenger movements.

Outcome 4.2.3: Ensure equitable access to essential services for Small Towns, Rural Communities and Remote Areas by coordinating passenger transport investments and operations.

Key

Transport

Activity 4.3.5.3: To bring down purchase costs for bus operators and speed up the rollout of new fleets, develop Australian Design Rules and common crossjurisdictional technical specifications for zero-emission buses that assist Australian manufacturers and importers in achieving economies of scale.

Outcome 4.4.1: Meet community and stakeholder expectations for transparency and fairness by establishing a nationally consistent governance framework for transport network pricing reforms.

Activity 4.4.1.1: Increase confidence in the fairness of the transport network pricing reform process by specifying the minimum level of protection that will be in place during the reform implementation period for users who are at risk of disadvantage for financial or geographic reasons. Reinforce this by nominating the independent agency that will monitor the rollout of user protections in each jurisdiction.

Activity 4.4.1.3: Demonstrate
a collaborative approach to the
implementation of transport network
pricing reforms by developing and
seeking National Cabinet endorsement
for the principles that jurisdictions
will follow when taking the lead in
implementing reforms. These will include
a commitment to timely information
sharing that facilitates the crossjurisdictional co-delivery of reforms.

Activity 4.4.2.1: Develop state and territory capability to administer an equitable and efficient user-pays charging regime for all vehicle types. Adopt and work towards this objective through the implementation of Heavy Vehicle Road Reform by participating jurisdictions.

Activity 4.2.3.2: Align spending and service delivery across transport modes with performance standards for Small Town, Rural Community and Remote Area access. Enable the greatest possible proportion of the population of these communities to access centre-based services cost-effectively within a dayreturn or other reasonable specified timeframe.

Activity 4.2.3.3: Ensure long-distance passenger travel needs are serviced cost-effectively and in line with access performance standards. Do this by integrating regional aviation infrastructure and services programs with land transport services under a multimodal hub-and-spoke network model.

Outcome 4.3.1: Relieve congestion growth at the start of the urban development lifecycle by making active and public transport first and last mile networks the first transport projects completed in the local catchment of emerging and new centres.

Outcome 4.3.3: Ensure all people in Australia enjoy equivalent accessibility outcomes by investing in transport infrastructure and services in line with the Disability Discrimination Act 1992 (Cth), Disability Standards for Accessible Public Transport 2002 and broad objectives for universal access to services.

Outcome 4.4.2: Ensure users pay for the true costs of mobility by implementing transport network pricing reforms

Activity 4.4.2.4: Maintain at least the level of revenue received from current road user taxes and charges by implementing a national distance-based road user charging regime with associated changes to the fixed costs of vehicle ownership.

Key

▼ Sector/Focus area O-5 years 5-10 years 10-15 years 15+ years

Transport Activity 4.4.2.3: Develop a national distance-based road user charging regime for all types of vehicles. Ensure the design of the regime addresses risks to privacy and cyber security.

Transport

Proposed support

Activity 4.3.3.1: Ensure reformed Disability Standards for Accessible Public Transport 2002 include minimum required feedback mechanisms for people with disability to hold transport service providers accountable for accessibility outcomes throughout the operating life of transport assets.

Activity 4.3.3.2: Increase the transparency of jurisdictional actions to address the travel needs of people with disability by reporting accessibility outcomes annually using nationally consistent and user-oriented measures. Provide information on changes in door-to-door accessibility outcomes as experienced by different groups of users over the reporting period and specify user-oriented improvements for the coming two years.

Activity 4.3.3.3: Develop and specify nationally consistent performance requirements for accrediting demandresponsive service providers as accessible. In the reformed Disability Standards for Accessible Public Transport 2002, include new performance requirements for 12-seater minibuses that are not currently covered by these standards, ensuring vehicles and associated customer interfaces meet the needs of people with disability.

Outcome 4.3.5: Ensure all road users can experience the benefits of world's best practice transport technologies by establishing a single national market for electric, connected and autonomous vehicles.

✓ Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Transport

Activity 4.4.1.2: Increase confidence in the user benefits of transport network pricing reforms by developing and seeking National Cabinet endorsement for hypothecation principles. Under these principles, road and public transport revenues will fund integrated and multimodal programs that deliver sustainable mobility outcomes based on projected user needs.



Proposed sponsor

Recommendation 7.1: Ensure every Australian can rely on digital services by providing transparency of the resilience of Australia's telecommunications infrastructure.

Recommendation 7.2: Give Australians improved telecommunications coverage, quality and reliability by taking strategic actions to improve digital inclusion, regional telecommunications and broadband quality levels.



Telecommunications and digital

Proposed lead

Activity 7.1.3.3: Improve resilience and coverage in high-risk areas and along evacuation routes with new investment in programs such as the Mobile Black Spot Program and the Mobile Network Hardening Program. The investment should prioritise improved mobile coverage and mobile network resilience in areas prone to natural disasters such as bushfires.

Outcome 7.2.1: Connect regional
Australians by improving the
coverage, quality and reliability of
telecommunications, through continued
government investment in infrastructure
outcomes that are not commercially
viable in Rural Communities and Remote
Areas of Australia.

Activity 7.2.1.2: Deliver increased mobile coverage to regional communities under a future approach to funding for mobile telephony in regional areas, to succeed the Mobile Black Spot Program after its sixth round.

Activity 7.2.2.1: Close the gap in digital inclusion with a national strategy and roadmap for digital access, affordability, ability and accessibility. A national program should drive a clear strategy for inclusion, set objectives, run studies, develop roadmaps and allocate funding to initiatives.

Outcome 7.3.1: Ensure Australian communities and businesses can rapidly access competitive, sustainable and contiguous 5G coverage in urban centres across Australia by increasing spectrum flexibility, ensuring sustainable pricing and simplifying planning processes.

Outcome 7.3.2: Improve the sustainability, liveability and efficiency of Australian communities by adopting a strategic approach to smart cities and the Internet of Things that facilitates investment and enables scalable projects.

Outcome 7.2.2: Reduce the digital divide in Australian society by launching a national digital inclusion strategy and a rolling national study on key affected groups.

Key

∨ Sector/Focus area
 0-5 years

0-5 years 5-10 years 10-15 years 15+ years



Activity 7.3.1.4: Consider adding the adoption of 5G technology to the evaluation criteria for regional Mobile Black Spot Program funding applications.

Activity 7.3.1.5: Increase access to choice in connectivity for mobile and smart applications by accelerating the rollout Open Radio Area Network technology, including by prioritising this technology in regional connectivity programs and 5G pilot programs.

Activity 7.3.2.1: Enable a smart infrastructure step-change by adopting best-practice policies that reduce friction and increase interoperability at a place level, including policies addressing:

- shared applications
- systems and processes
- capabilities
- · data exchange, storage and federation.

Activity 7.3.2.2: Accelerate the delivery of smart places through a refresh of the Smart Cities and Suburbs Program to focus on co-funding high initial cost, yet scalable, regional initiatives that align with the national digital infrastructure roadmap.

Activity 7.3.3.2: Protect the public from misinformation and cyber risks by investing in public education and communication programs addressing 5G health concerns, data privacy, technology risks and cybercrime. The engagement should extend previously successful public education and engagement campaigns around digital innovation.

Outcome 7.3.3: Protect and educate all corners of society to become more digitally confident as new technology continues to evolve, with the launch of national initiatives addressing health concerns, data privacy, technology risks, cybercrime and digital confidence.

Key

ğ

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
C.	Telecommunications and digital	Proposed support			
		Activity 7.2.3.2: Ensure NBN end users with slower-performing lines are covered by a prioritised upgrade plan for fixed-line and fixed wireless services, under a published suburb-level plan to upgrade copper lines that are unable to consistently deliver 25 Mbps upstream and 5 Mbps downstream speeds.			
	Waste	Proposed lead			
23			Activity 9.1.3.1: Improve uptake and consistency in the use of recycled and recyclable materials in infrastructure and construction projects by incorporating targets in building and design codes.		
A	Waste	Proposed support			
			Outcome 9.1.3: Build support for the circular economy and embed circular practices by developing a circular economy roadmap for the infrastructure sector, including annual progress reports.		
			Activity 9.2.2.1: Support efficient resource recovery by prioritising investment in separation and processing infrastructure by material volumes.		

How to read

Department of Social Services

y Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Transport

Proposed support

Activity 4.3.3.1: Ensure reformed Disability Standards for Accessible Public Transport 2002 include minimum required feedback mechanisms for people with disability to hold transport service providers accountable for accessibility outcomes throughout the operating life of transport assets.

Activity 4.3.3.3: Develop and specify nationally consistent performance requirements for accrediting demandresponsive service providers as accessible. In the reformed Disability Standards for Accessible Public Transport 2002, include new performance requirements for 12-seater minibuses that are not currently covered by these standards, ensuring vehicles and associated customer interfaces meet the needs of people with disability.

Activity 4.3.3.4: Ensure all jurisdictions' mobility service support programs collectively provide efficient coverage for people with disability by ensuring mobility service providers' alignment with a national accreditation framework and empowering program participants to purchase services from accredited rideshare operators through a single

Outcome 4.3.3: Ensure all people in Australia enjoy equivalent accessibility outcomes by investing in transport infrastructure and services in line with the Disability Discrimination Act 1992 (Cth), Disability Standards for Accessible Public Transport 2002 and broad objectives for universal access to services.

Energy

Proposed support

point of access.

Activity 5.1.1.2: Reduce energy bills and improve health and wellbeing for vulnerable and low-income customers by delivering funding assistance programs to support energy audits and energy productivity upgrades for public and community housing, low-income households and associated rental properties with poor energy performance.

Key

y Sector/Focus area

Social infrastructure

Social infrastructure

0-5 years

Proposed sponsor

Proposed lead

Activity 8.3.2.1: Assess the quadruple-

5-10 years

Activity 8.1.5.3: Meet the Closing the

15+ years

bottom-line benefits of social and Gap target for 88% of Aboriginal and affordable rental housing by building Torres Strait Islander peoples to be living on existing frameworks and developing in appropriately sized housing by 2031 by: an agreed, consistent approach to · addressing maintenance and utility measuring its economic impact. Use deficiencies for existing and future the approach to inform and support the housing stock national valuation framework. · renewing life-expired housing stock and Activity 8.3.2.2: Harmonise the developing new housing stock collection and availability of data across · addressing tenure issues different government departments and · providing infrastructure to prepare for housing sectors by developing a housing land development. and homelessness reporting process Outcome 8.3.2: Support healthy and and dataset that are comprehensive and productive futures for all Australians by consistent. establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of social and affordable rental housing. Social infrastructure **Proposed support** Outcome 8.1.5: Enable greater social and economic participation by designing programs to increase the supply and improve the quality of social and affordable rental housing. Activity 8.1.5.1: Expand the pipeline of well-located, high-quality social and affordable rental housing by prioritising and implementing efficient medium- to long-term financing programs. ■ Recommendation ■ Outcome ■ Activity Sponsor: facilitate, coordinate and champion the recommendation Lead: deliver specific activities or lead related outcomes Support: share ownership, contributions or knowledge to enable the reform process 63

10-15 years

infrastructure.

Recommendation 8.1: Support Australians to enjoy a healthier, safer, more connected and fulfilled quality of life by facilitating targeted investment in the right physical and digital social

∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure		Activity 8.1.5.2: Improve housing quality by developing and implementing innovative efficient programs to reduce the maintenance backlog of social dwellings within their remaining economic life while recycling stock that has reached or passed the end of its economic life.		
		Activity 8.1.5.4: Support community housing providers by continuing to develop and implement programs that build capacity and capability.		
		Activity 8.3.2.3: Deliver improved social and affordable rental housing outcomes by adopting the quadruple-bottom-line approach to prioritise investment.		

Department of the Prime Minister and Cabinet

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(0)	Place	Proposed lead			
		Activity 1.4.3.4: Improve the consistency and effectiveness of Aboriginal and Torres Strait Islander procurement policies by standardising monitoring and performance reporting across jurisdictions.			
r 🗟 j	Sustainability	Proposed support			
	and resilience	Activity 2.1.1.1: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities.			

∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed support			
		Outcome 8.2.2: Increase economic and social benefits by implementing strategic planning governance structures for health and education precincts, and innovative procurement and delivery models. Specialised agencies should also be established to deliver major social infrastructure capital projects.		

Digital Technology Taskforce

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed support			
		Activity 8.1.1.2: Provide seamless connections to existing state and territory digital health capabilities through a program to increase primary health providers' digital capability.		

Digital Transformation Agency

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
\bigcirc	Place	Proposed support			
\bowtie		Outcome 1.3.3: Facilitate sharing of infrastructure services and resources between communities and individuals by enabling the sharing economy. Activity 1.3.3.1: Ensure infrastructure assets in small towns, rural communities and remote areas are understood and used by incorporating them in the Digital Atlas of Australia.	Activity 1.3.3.2: Support service provision and sharing of Community Service Obligation benefits by integrating their funding arrangements with place-centric asset-sharing platforms tailored to Small Towns, Rural Communities and Remote Areas.		

Geoscience Australia

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Place	Proposed lead			
		Activity 1.3.3.1: Ensure infrastructure assets in small towns, rural communities and remote areas are understood and used by incorporating them in the Digital Atlas of Australia.			
(0)	Place	Proposed support			
		Outcome 1.3.3: Facilitate sharing of infrastructure services and resources between communities and individuals by enabling the sharing economy.			
		Activity 1.4.1.2: Reduce investor uncertainty and improve decision-making by identifying, creating and publishing place and network-centric data, including assessing natural resource endowments.			

Infrastructure and Project Financing Authority

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Q	Place	Proposed support			
		Activity 1.1.3.7: Effectively deliver Australian Government-funded major infrastructure by developing a spectrum of place-based governance, financial and reporting models, including: • managing the interface of federal assets and land holdings with neighbouring state, territory and local government infrastructure through asset or precinct specific models • aligning city-shaping investment with supporting reforms and infrastructure provision through City Deal models			

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Q	Place	driving targeted economic development of Fast-growing Cities by creating innovation districts and activity centres.			
	Industry	Proposed support			
			Activity 3.4.2.4: Ensure funding and finance decisions for nationally significant projects reflect best practice by updating the Commonwealth Procurement Guidelines, including a clearer and broader definition of value for money.		
			Activity 3.4.2.5: Provide a pathway for prospective bidders to submit proposals that align with federal infrastructure policy priorities by developing an Australian Government market-led proposals framework that integrates with jurisdictional guidance.		

Infrastructure Australia

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years	
Place	Proposed lead				
	Outcome 1.2.1: Identify infrastructure needs by developing a regional strengths and gaps infrastructure prioritisation framework, supported by a classification of the geography of regional Australia. Activity 1.2.1.1: Build the infrastructure pipeline by identifying and prioritising regional infrastructure gaps, based on existing regional development strategies across government and industry and community consultation.	establishing a framework to sequence infrastructure investment based on industry-specific, place-based infrastructure needs assessments.			
	Activity 1.4.1.3: Better meet the current and future needs of users by undertaking a new Northern Australia Infrastructure Audit.				

Key

15+ years

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✓ Sector/Focus area 0-5 years 5-10 years

Place Proposed support

Place

Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy.

Activity 1.4.2.5: Support the infrastructure pipeline delivery for Northern Australia and grow key industries such as major resources, energy and agribusiness by developing a skills formation and attraction plan assessing skills requirements, skills training capability and liveability factors.

Sustainability and resilience

Proposed lead

Activity 2.1.3.3: Support cross-sector coordination and shared responsibility by undertaking and publishing an annual assessment of the consideration and effectiveness of climate risk and resilience in infrastructure planning and decision-making.

Activity 2.1.3.4: Embed climate risk considerations into land use and infrastructure planning and decision-making by developing a training program, tools and guidance materials.

Activity 2.1.3.5: Ensure existing and future asset planning considers climate risk by conducting climate adaptation risk assessments, developing strategic planning and policy decisions, and designing and approving future assets using climate scenarios, tools and quidance.

Activity 2.1.4.3: Value resilience in infrastructure investment by developing a training program and guidance materials on how to value resilience in decisionmaking through the infrastructure lifecycle.

Activity 2.3.3.3: Encourage national consistency and cross-sector coordination by developing a national report highlighting best practice, including case studies based on publicly released data.

10-15 years

Key

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0-5 years 10-15 years 15+ years y Sector/Focus area 5-10 years Sustainability Activity 2.2.1.4: Facilitate national and and resilience cross-sectoral consistency by using quadruple-bottom-line guidelines to develop complementary, sector-specific sustainability principles and frameworks. Activity 2.2.1.5: Support common approaches to assessment, cross-sector collaboration, shared responsibility and best practice, and develop connections and networks, by forming a crossjurisdictional sustainability group. Sustainability **Proposed support** and resilience Activity 2.1.4.1: Ensure infrastructure assessment frameworks, and associated tools and guidance, including the Australian Transport Assessment and Planning Guidelines, consider risks and resilience by incorporating future scenarios and hazard information. Activity 2.1.4.2: Support land use and strategic planners, infrastructure and emergency planners and local governments to develop state and territory, regional and local plans by enhancing infrastructure assessment frameworks and associated climate and disaster risk tools and guidance. Industry **Proposed lead**

Activity 3.4.1.2: Expand and promote new and existing industry and jurisdictional reforms and best practices by establishing a government and industry collaborative leadership group.

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
		Activity 3.1.1.4: Ensure future infrastructure investment and project delivery commitments are regularly reviewed and considered against the jurisdiction-wide, cross-sectoral infrastructure project pipeline and industry capacity forecasts. Activity 3.2a.2.3: Enhance the quality of decision-making by developing a nationally consistent whole-of-life infrastructure cost and schedule benchmarking tool and mandate its use on all nationally significant projects Activity 3.2b.1.2: Apply appropriate consistency and improve certainty in procurement by developing a procurement decision-making tool to more effectively understand and allocate scope in line with project fundamentals.	Activity 3.4.1.3: Provide a consistent view on the maturity of major project decision-making by refreshing and reporting against the Infrastructure Decision-making Principles. Activity 3.4.2.3: Safeguard community interests and taxpayer funding by ensuring all proposed investments demonstrate an assessment of non-build solutions. Activity 3.4.2.5: Provide a pathway for prospective bidders to submit proposals that align with federal infrastructure policy priorities by developing an Australian Government market-led proposals framework that integrates with jurisdictional guidance.		
	Transport	Proposed lead			
		Activity 4.1.3.2: Promote the staged delivery of major transport corridor projects by updating assurance frameworks as required to assess business cases for multi-modal investment programs and monitoring their implementation.			
	Transport	Proposed support			
			Outcome 4.1.3: Bring forward the benefits of transport investments, in a context of uncertain and changing user needs, by promoting and facilitating the incremental delivery of transport services, corridors and networks as separable stages.		

y Sector/Focus area

Water

0-5 years

Proposed support

15+ years

considered in strategic decision-making. This includes: • incorporating the national water security framework into business case development for state, territory and nationally significant water infrastructure proposals. · incorporating the national water security framework into existing national infrastructure investment assessment frameworks, including the Infrastructure Australia Assessment Framework and the National Water Grid Investment Framework. Social infrastructure **Proposed sponsor** Recommendation 8.3: Support economic development by recognising the value of investment in social infrastructure. Social infrastructure **Proposed lead** Activity 8.2.1.3: Increase community Activity 8.2.1.1: Support shared use access to social infrastructure by of social infrastructure by establishing benchmarking, compiling and sharing national principles for place-based, crossbest practice examples of shared-use agency infrastructure governance. models that could be adapted or scaled Outcome 8.3.1: Guide better social nationally. infrastructure investment by developing a Activity 8.3.1.1: Guide social consistent, national valuation framework infrastructure investment by establishing that captures, measures and assesses the a cross-jurisdictional, multi-sector panel quadruple-bottom-line benefits of social to lead the collaborative development infrastructure. of an overarching social infrastructure valuation framework. This will strengthen existing approaches and draw on expertise from government, industry, environmental, First Nations and community leaders. Key ■ Recommendation ■ Outcome ■ Activity

Sponsor: facilitate, coordinate and champion the recommendation Lead: deliver specific activities or lead related outcomes Support: share ownership, contributions or knowledge to enable the reform process

10-15 years

5-10 years

Activity 6.1.1.4: Meet the needs of water users into the future and ensure long-term water security objectives are

0-5 years **5-10** years 10-15 years 15+ years ∨ Sector/Focus area Social infrastructure Activity 8.3.1.2: Support the effective evaluation of the economic contribution of social infrastructure by developing associated tools, methodology and guidance materials that can be used by infrastructure providers. Social infrastructure **Proposed support** Activity 8.2.2.3: Promote and accommodate innovative approaches to procuring social infrastructure delivery services, including updating existing Public Private Partnership guidelines and models. Outcome 8.3.2: Support healthy and productive futures for all Australians by establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of social and affordable rental housing.

National Disability Insurance Agency

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years	
Transport	Proposed support				
	Activity 4.3.3.4: Ensure all jurisdictions' mobility service support programs collectively provide efficient coverage for people with disability by ensuring mobility service providers' alignment with a national accreditation framework and empowering program participants to purchase services from accredited rideshare operators through a single point of access.	Outcome 4.3.3: Ensure all people in Australia enjoy equivalent accessibility outcomes by investing in transport infrastructure and services in line with the Disability Discrimination Act 1992 (Cth), Disability Standards for Accessible Public Transport 2002 and broad objectives for universal access to services.			

How to read

National Faster Rail Agency

0-5 years 10-15 years 15+ years y Sector/Focus area **5-10** years Place **Proposed support** Activity 1.2.3.3: Support efficient planning and delivery by taking a staged approach to connectivity, identifying enabling infrastructure projects and accessibility improvements, basing decisions on current and forecast movement and embedding changes in land use and planning decision-making. **Transport Proposed support** Activity 4.2.2.4: Strengthen the Outcome 4.2.2: Support the growth connection of Smaller Cities and Regional and diversification of Smaller Cities Centres to Fast-growing Cities by and Regional Centres by investing in progressively upgrading existing regional their local accessibility and connectivity passenger rail services. Make services and progressively upgrading transport more comfortable and reliable, and grow connections to Fast-growing Cities. the patronage base for public transport, Activity 4.2.2.6: Support regional growth by investing in customer experience by prioritising faster rail, fast rail and improvements such as new rolling stock high-speed rail investments based on and in track projects that maximise the credible scenarios for population change separation of freight and passenger and using nationally consistent decisionmovements. making processes. These should include Activity 4.2.2.5: To improve the models and assumptions that are connectivity and economic performance updated to evaluate project benefits and of outer-urban areas, ensure regional costs across wide geographic areas and rail service improvements improve over the full life of rail assets. accessibility outwards from Fast-growing Activity 4.2.2.7: Maximise economic, Cities, and better connect outer urbanproductivity and safety benefits from areas to their larger regional catchment governments' fast rail, faster rail and as well as making established central high-speed rail investments. Invest in the business districts more accessible to timely preservation of surface corridors. Regional Centres. Ensure the cross-border interoperability of projects is advanced in different locations.

How to read

National Housing Finance and Investment Corporation

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
A	Social infrastructure	Proposed lead			
			Outcome 8.1.5: Enable greater social and economic participation by designing programs to increase the supply and improve the quality of social and affordable rental housing.		
			Activity 8.1.5.1: Expand the pipeline of well-located, high-quality social and affordable rental housing by prioritising and implementing efficient medium- to long-term financing programs.		
			Activity 8.1.5.4: Support community housing providers by continuing to develop and implement programs that build capacity and capability.		
			Activity 8.3.2.3: Deliver improved social and affordable rental housing outcomes by adopting the quadruple-bottom-line approach to prioritise investment.		
A BB	Social infrastructure	Proposed support			
			Activity 8.1.5.2: Improve housing quality by developing and implementing innovative efficient programs to reduce the maintenance backlog of social dwellings within their remaining economic life while recycling stock that has reached or passed the end of its economic life.		

National Indigenous Australians Agency

0-5 years 10-15 years 15+ years y Sector/Focus area **5-10** years Place Proposed lead **Activity 1.4.3.5:** Sustain local community employment in infrastructure delivery and other projects by developing an essential skills training academy building infrastructure delivery skills and knowledge. Place

Proposed support

Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy.

Activity 1.4.3.1: Ensure infrastructure delivers improved social and economic outcomes for communities by aligning major infrastructure investment with the objectives of the Northern Australia Indigenous Development Accord and Closing the Gap targets.

Activity 1.4.3.2: Support Aboriginal and Torres Strait Islander participation in the Northern Australia economy, including infrastructure delivery, by assessing and prioritising investment in enabling digital and transport connectivity in partnership with local First Nations communities.

Activity 1.4.3.3: Build the capability of Aboriginal and Torres Strait Islander entrepreneurs and traditional owners to participate in the economic development process through financial and technical support to map the commercial potential of their land and water assets and develop feasibility studies and commercial partnerships with project proponents.

Activity 1.3.2.3: Ensure assets are culturally responsive and will be wellutilised by undertaking service design for Community Service Obligations in partnership with Aboriginal and Torres Strait Islander communities.

Outcome 1.4.3: Support participation of Aboriginal and Torres Strait Islander enterprises and individuals in infrastructure planning and delivery by developing joint programs for agencies leading the planning, delivery and operation of infrastructure.

Key

How to read

∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Place	Activity 1.4.3.4: Improve the consistency and effectiveness of Aboriginal and Torres Strait Islander procurement policies by standardising monitoring and performance reporting across jurisdictions.			
Social infrastructure	Proposed support	Activity 8.1.5.3: Meet the Closing the Gap target for 88% of Aboriginal and Torres Strait Islander peoples to be living in appropriately sized housing by 2031 by: • addressing maintenance and utility deficiencies for existing and future housing stock • renewing life-expired housing stock and developing new housing stock • addressing tenure issues • providing infrastructure to prepare for land development.		

National Recovery and Resilience Agency

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Sustainability and resilience	Proposed sponsor			
AR.	and resilience	Recommendation 2.1: Build community resilience to all hazards by considering systemic risks, interdependencies and vulnerabilities in infrastructure planning and decision-making.			
r Ba	Sustainability and resilience	Proposed lead			
	and resilience	Outcome 2.1.1: Create an environment for consistent action by establishing clear cross-sector policy priorities to inform resilience planning, policy prioritisation and reform decisions.		Activity 2.1.2.6: Better predict and mitigate major hazards and risks with a national risk and disaster probability model for all hazards.	

∨ Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Sustainability and resilience

Activity 2.1.1.1: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities.

Outcome 2.1.2: Improve community resilience and coordinated action through a consistent, nationwide, systemic approach to risk identification.

Activity 2.1.2.1: Facilitate collaboration across sectors, layers of government, asset owners and operators, businesses and communities by creating formal governance arrangements, resourcing and a convening authority in line with the National Disaster Risk Reduction Framework.

Activity 2.1.2.3: Inform decisions on risk reduction options and approaches, and enable data driven decision-making by standardising and sharing data about disasters, hazards and asset and network independency.

Activity 2.1.2.4: Improve place-based and network-based systemic risk assessment and decision-making by producing local hazard maps for asset owners and operators and communities.

Activity 2.1.2.5: Inform decisions to increase the resilience of a place, network or asset across Australia by identifying cascading systemic failures, interdependencies and interconnections and local vulnerability of all sectors' assets and networks.



Sustainability and resilience

Proposed support

Activity 2.1.2.2: Enable timely information exchange and build accountability by expanding participants to the Trusted Information Sharing Network, sharing information and best practice and developing connections and ongoing relationships.

Key

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Sustainability Activity 2.1.2.7: Ensure a systemic and resilience approach to resilience is established and considered by place-based resilience bodies, such as Resilience Sydney. Outcome 2.1.3: Facilitate joint action by establishing a common, long-term understanding of the potential impacts of climate change, both nationally and locally, that informs land use and infrastructure planning and decision-

Activity 2.1.3.5: Ensure existing and future asset planning considers climate risk by conducting climate adaptation risk assessments, developing strategic planning and policy decisions, and designing and approving future assets using climate scenarios, tools and quidance.

Activity 2.1.3.4: Embed climate risk considerations into land use and infrastructure planning and decision-making by developing a training program,

tools and guidance materials.

Outcome 2.1.4: Ensure infrastructure decisions consider resilience through clear and harmonised guidance on how projects can address risks and value resilience

Activity 2.1.4.2: Support land use and strategic planners, infrastructure and emergency planners and local governments to develop state and territory, regional and local plans by enhancing infrastructure assessment frameworks and associated climate and disaster risk tools and guidance.

Telecommunications and digital

Proposed lead

making.

Activity 7.1.1.2: Increase preparedness for dealing with outages caused by natural disasters with clearly defined plans to address power resilience and back-up power for telecommunications sites.

Key

National Regulatory System for Community Housing

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Social infrastructure	Proposed lead			
			Outcome 8.3.2: Support healthy and productive futures for all Australians by establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of social and affordable rental housing.		
(ABB)	Social infrastructure	Proposed support			
		Activity 8.3.2.1: Assess the quadruple-bottom-line benefits of social and affordable rental housing by building on existing frameworks and developing an agreed, consistent approach to measuring its economic impact. Use the approach to inform and support the national valuation framework. Activity 8.3.2.2: Harmonise the collection and availability of data across different government departments and housing sectors by developing a housing and homelessness reporting process and dataset that are comprehensive and consistent.			

National Water Grid Authority

√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Water	Proposed support			
	Activity 6.1.1.5: Ensure ongoing commitment and application of the national water security framework by assigning independent ownership of the National Water Initiative, including the national water security framework.	Activity 6.1.1.4: Meet the needs of water users into the future and ensure long-term water security objectives are considered in strategic decision-making. This includes: • incorporating the national water security framework into business case development for state, territory and nationally significant water infrastructure proposals • incorporating the national water security framework into existing national infrastructure investment assessment frameworks, including the Infrastructure Australia Assessment Framework and the National Water Grid Investment Framework.		

NBN Co



Key

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0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years **Telecommunications Proposed lead** and digital Activity 7.2.3.1: Deliver improved Outcome 7.2.3: Ensure the NBN delivers coverage, speed and reliability to all against the customer needs set out in its Australian broadband customers under Statement of Expectations by continuing a published Minimum NBN Customer to invest in upgrade pathways and Charter that obliges all companies ensuring basic performance standards involved in delivering a connection are met for all end users. (Statutory Infrastructure Providers and retail service providers) to meet a basic

Northern Australia Infrastructure Facility

and rebates.

guarantee for the end-to-end customer experience. The Charter should include speed (relative to plan selected), reliability, installation times, repair times

Activity 7.2.3.2: Ensure NBN end users with slower-performing lines are

covered by a prioritised upgrade plan for fixed-line and fixed wireless services, under a published suburb-level plan to upgrade copper lines that are unable to consistently deliver 25 Mbps upstream and 5 Mbps downstream speeds.

0-5 years ∨ Sector/Focus area **5-10** years 10-15 years 15+ years **Place Proposed support** Activity 1.4.3.2: Support Aboriginal and Torres Strait Islander participation in the Northern Australia economy, including infrastructure delivery, by assessing and prioritising investment in enabling digital and transport connectivity in partnership with local First Nations communities. Activity 1.4.3.4: Improve the consistency and effectiveness of Aboriginal and Torres Strait Islander procurement policies by standardising monitoring and performance reporting across jurisdictions.

Key

Office of Future Transport Technology

	y Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
/4	Energy	Proposed support			
7		Activity 5.2.2.1: Enable the electrification of transport by forming a long-term national planning working group. This should build on the work by the Distributed Energy Integration Program Electric Vehicle Taskforces on improving data access and data standards that help allow for effective national planning.			

Office of Northern Australia

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
0	Place	Proposed lead			
		Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy.	Activity 1.4.2.6: Attract and retain a skilled workforce by supporting liveability through investment in social infrastructure and connectivity.		
		Activity 1.4.1.2: Reduce investor uncertainty and improve decision-making by identifying, creating and publishing place and network-centric data, including assessing natural resource endowments.			
		Activity 1.4.2.1: Identify potential growth industries and growth patterns in key industries through a renewal of the Northern Australia Agenda.			

Office of Road Safety

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Transport	Proposed lead			
		Activity 4.3.4.1: Ensure active travel education for road users of all abilities and ages has an elevated profile in the updated <i>National Road Safety Strategy</i> . Address the needs of people walking, bike-riding and using micromobility devices, including e-bikes and e-scooters.			
	Transport	Proposed support			
		Outcome 4.3.4: Enable every person who wants to walk, ride a bike or use a micromobility device for a local journey or last-mile freight delivery to do so safely by completing continuous separated active travel networks.			
ļ	Key ■ Recommendation ■ Ou Sponsor: facilitate, coordin		deliver specific activities or lead related outcomes	Support: share ownership, contributions or kno	owledge to enable the reform process 83

How to read

Office of the Australian Information Commissioner

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(m.)	Telecommunications and digital	Proposed support			
	and digitar	Activity 7.3.3.2: Protect the public from misinformation and cyber risks by investing in public education and communication programs addressing 5G health concerns, data privacy, technology risks and cybercrime. The engagement should extend previously successful public education and engagement campaigns around digital innovation.	Activity 7.3.3.1: Ensure the Australian Privacy Principles are ready to deal with an entirely new generation of processing capabilities, with a review of the <i>Privacy Act 1988</i> (Cth) to consider the risks presented by artificial intelligence, quantum computing and machine learning.		

Office of the National Data Commissioner

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(0)	Place	Proposed support			
		Activity 1.3.3.1: Ensure infrastructure assets in small towns, rural communities and remote areas are understood and used by incorporating them in the Digital Atlas of Australia.			
Flui	Industry	Proposed support			
		Activity 3.2a.1.2: Increase maturity and reporting of project planning and design through public-facing annual reports of de-identified Australian Government funded projects.			

Services Australia

	y Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Q	Place	Proposed support			
		Outcome 1.3.3: Facilitate sharing of infrastructure services and resources between communities and individuals by enabling the sharing economy.	Activity 1.3.3.2: Support service provision and sharing of Community Service Obligation benefits by integrating their funding arrangements with placecentric asset-sharing platforms tailored to Small Towns, Rural Communities and Remote Areas.		
4	Energy	Proposed support			
7		Activity 5.1.1.2: Reduce energy bills and improve health and wellbeing for vulnerable and low-income customers by delivering funding assistance programs to support energy audits and energy productivity upgrades for public and community housing, low-income households and associated rental properties with poor energy performance.			

Significant Project Investment Delivery Office

	y Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
H.		Activity 3.4.2.2: Ensure Australian taxpayer interests are well-represented and drive national consistency in project delivery by appointing experienced senior responsible officers to all major federally funded projects.			

Key

2

State and territory government



Local education offices

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed support			
		Outcome 8.2.2: Increase economic and social benefits by implementing strategic planning governance structures for health and education precincts, and innovative procurement and delivery models. Specialised agencies should also be established to deliver major social infrastructure capital projects.		

Local health districts

∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed support			
		Activity 8.1.1.1: Improve the value and quality of virtual health care services by developing digital health infrastructure transformation plans that identify and prioritise enhancements to existing hospitals, health services and primary care services. Outcome 8.2.2: Increase economic and social benefits by implementing strategic planning governance structures for health and education precincts, and innovative procurement and delivery models. Specialised agencies should also be established to deliver major social infrastructure capital projects.		

Office of Local Government South Australia

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(0)	Place	Proposed lead			
		Activity 1.3.1.5: Ensure nationally consistent governance arrangements for municipal services in remote areas by including the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands in the South Australian Government's Municipal Services (MUNS) program.			

South Australian Department of Premier and Cabinet

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(0)	Place	Proposed support			
8		Activity 1.3.1.5: Ensure nationally consistent governance arrangements for municipal services in remote areas by including the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands in the South Australian Government's Municipal Services (MUNS) program.			

State and territory Aboriginal and Torres Strait Islander affairs agencies

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Q	Place	Proposed support			
S		Activity 1.4.3.4: Improve the consistency and effectiveness of Aboriginal and Torres Strait Islander procurement policies by standardising monitoring and performance reporting across jurisdictions.	Activity 1.3.2.3: Ensure assets are culturally responsive and will be well-utilised by undertaking service design for Community Service Obligations in partnership with Aboriginal and Torres Strait Islander communities.		

Key

0-5 years **5-10** years 10-15 years 15+ years y Sector/Focus area **Place** Outcome 1.4.3: Support participation of Aboriginal and Torres Strait Islander enterprises and individuals in infrastructure planning and delivery by developing joint programs for agencies leading the planning, delivery and operation of infrastructure. Water **Proposed support** Activity 6.2.2.5: Deliver co-designed, co-Activity 6.2.2.6: Ensure community delivered water education and demand outcomes are being met consistently management strategies focusing on by implementing ongoing risk-based outdoor water use by partnering with monitoring strategies. community leaders and Aboriginal land councils. Education strategies should

be delivered through schools and

knowledge.

key community forums, incorporating preferred language and traditional

State and territory arts, cultural, recreational and tourism departments

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed lead			
	Activity 8.3.3.1: Improve growth and liveability by assessing the quadruple-bottom-line of arts, culture, green, blue and recreation infrastructure, building on existing frameworks and developing an agreed, consistent approach to measuring its economic impact. Use the approach to inform and support a national valuation framework.	Activity 8.3.3.2: Catalyse economic development by using the new framework to collaboratively plan, develop and invest in arts, cultural, green, blue and recreational infrastructure that enhances unique regional identities and brands. Apply this approach when planning new precincts and renewal projects. Update existing plans every five years.		

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Social infrastructure	Proposed support			
♦			Outcome 8.3.3: Drive economic growth and improve social cohesion and liveability by establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of arts, culture, green, blue and recreational infrastructure.		

State and territory Attorneys-General

	→ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(V-2))	Telecommunications and digital	Proposed lead			
2	and digital	Activity 7.1.1.1: Create a clear legislative framework for improved policies and processes for both state and territory governments and network operators to plan, manage and provide resilient services by consistently classifying telecommunications as an essential service in state and territory emergency management legislation.	Activity 7.3.3.1: Ensure the Australian Privacy Principles are ready to deal with an entirely new generation of processing capabilities, with a review of the <i>Privacy Act 1988</i> (Cth) to consider the risks presented by artificial intelligence, quantum computing and machine learning.		

State and territory chief engineers

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Waste	Proposed support			
[23]		Activity 9.1.3.2: Ensure greater use of recycled materials within government infrastructure projects by developing procurement targets and timelines.			

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 ✓ Sector/Focus area
 0-5 years
 5-10 years
 10-15 years

 Waste
 Activity 9.1.3.3: Support the piloting and early deployment of innovative technologies and processes through structured co-investment programs for products incorporating recycled materials.
 10-15 years

State and territory demographers

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Q	Place	Proposed lead			
\bigotimes			Activity 1.3.1.4: Identify demand pressures by monitoring and forecasting population and service density for infrastructure services for small towns.		
	Transport	Proposed support			
		Activity 4.1.3.1: Ensure the economic analysis of proposed transport investments, and other infrastructure decision-making processes, take account of significant shifts in user preferences and travel behaviours, by updating the Australian Transport Assessment and Planning Guidelines to: • reflect changes to settlement and working patterns catalysed by the COVID-19 pandemic • consider the impacts of new transport technologies and business models (including Mobility as a Service) on how people travel and freight is transported • facilitate incremental investment in transport services, corridors and networks.	Outcome 4.1.1: Maximise the place-shaping impacts of transport investment by linking transport infrastructure funding decisions to published population and land use objectives.		

State and territory departments of local government

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
r 🕞 j	Sustainability and resilience	Proposed support			
		Activity 2.1.2.5: Inform decisions to increase the resilience of a place, network or asset across Australia by identifying cascading systemic failures, interdependencies and interconnections and local vulnerability of all sectors' assets and networks.			
		Activity 2.1.2.7: Ensure a systemic approach to resilience is established and considered by place-based resilience bodies, such as Resilience Sydney.			

State and territory digital economy departments

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(0)	Place	Proposed support			
<u>&</u>		Activity 1.4.2.2: Meet the requirements of growth industries by undertaking place-based assessment of digital adequacy, accessibility and affordability.			

State and territory economic development departments

→ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Place	Proposed support			
	Outcome 1.4.1: Improve investor certainty by collecting and publishing better data on the region's characteristics and infrastructure.			
	Activity 1.4.1.2: Reduce investor uncertainty and improve decision-making by identifying, creating and publishing place and network-centric data, including assessing natural resource endowments.			
	Activity 1.4.2.1: Identify potential growth industries and growth patterns in key industries through a renewal of the Northern Australia Agenda.			
Social infrastructure	Proposed lead			
		Activity 8.1.4.2: Deliver industry- specific VET skills training and tertiary programs in targeted industry precincts by developing and implementing more industry partnerships and programs that share infrastructure and learning spaces. Activity 8.1.4.3: Ensure enduring skills development opportunities and jobs are created in line with the infrastructure pipeline by continuing to mandate industry-relevant onsite training facilities and skills legacy initiatives in infrastructure development programs. Activity 8.3.3.2: Catalyse economic development by using the new framework to collaboratively plan, develop and invest in arts, cultural, green blue and recreational infrastructure that enhances unique regional identities and brands. Apply this approach when planning new precincts and renewal projects. Update existing plans every		

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Social infrastructure	Proposed support			
			Activity 8.2.2.2: Yield the benefits of innovation districts by adopting a precinct maturity model to: • assess the maturity of existing health and education precincts • prioritise precincts to move along the precinct maturity pathway • develop investment attraction strategies, master plans and incentives to attract aligned industry sectors into precincts • include social and affordable rental housing in innovation districts.		

State and territory education departments

	y Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years		
	Place	Proposed support					
			Activity 1.4.2.7: Facilitate local workforce participation by identifying opportunities for developing innovation or specialisation precincts alongside major infrastructure.				
	Sustainability and resilience Activity 2.2.2.3: Ensure quadruple-bottom-line outcomes by accelerating performance upgrades to social infrastructure, including schools, hospitals and public and community housing stock. Prioritise the increased installation of solar PV, storage and smart meters in social housing.	Proposed lead					

15+ years

→ Sector/Focus area 0-5 years 5-10 years 10-15 years



Sustainability and resilience

Proposed support

Outcome 2.2.2: Deliver cost-effective emissions reduction and broad sustainability benefits consistent with the quadruple-bottom-line by prioritising energy efficiency in the built environment and social infrastructure.

Activity 2.2.2.4: Improve energy efficiency and reduce emissions from new social infrastructure by increasing performance standards and updating the National Construction Code in line with the *Trajectory for Low Energy Buildings*.

Social infrastructure

Proposed lead

Activity 8.1.3.1: Enable more equitable access to early childhood education centres by facilitating cross-sectorial partnerships between centre operators and planning and transport departments to support better access and transport connectivity, especially in the planning of new centres.

Outcome 8.1.3: Deliver higher-quality school and early childhood education facilities that are well maintained and readily accessible to their communities by embedding place-based planning and asset management best practice.

Activity 8.1.3.2: Continue to develop state asset registers that identify the quality, condition and performance of early childhood education facilities, including best-practice asset performance methodology (such as a Value Rating Tool) to inform evidence-based decision-making on future infrastructure investment.

Activity 8.1.3.3: Extend the longevity of existing school infrastructure through long-term asset management plans to progressively address maintenance and refurbishment needs.

Activity 8.2.1.4: Enable place-centric TAFE developments by developing principles to support this approach, including collaborative and shared-use opportunities. Review existing TAFE assets against these principles and migrate new or refurbished assets where there are benefits.

Outcome 8.1.4: Ensure Vocational Education and Training (VET) aligns with industry-specific skills building and jobs growth objectives by designing, delivering and operating VET infrastructure appropriately.

Activity 8.1.4.1: Provide contemporary education facilities by investing in VET facilities that are appropriately located, integrated into the local area, fit-for-purpose and digitally enabled, and include contemporary industry equipment.

Key

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Social infrastructure Outcome 8.2.2: Increase economic and social benefits by implementing strategic planning governance structures for health and education precincts, and innovative procurement and delivery models. Specialised agencies should also be established to deliver major social infrastructure capital projects. Activity 8.2.2.1: Drive the development of health and education precincts and innovation districts by developing and implementing place-based governance agreements that involve associated local institutions and community representatives. Social infrastructure **Proposed support** Recommendation 8.2: Maximise social Recommendation 8.1: Support and economic community benefits Australians to enjoy a healthier, safer, by supporting shared use of social more connected and fulfilled quality of

infrastructure through future agreements and capital funding programs prioritising shared use of facilities.

Activity 8.2.2.2: Yield the benefits of innovation districts by adopting a precinct maturity model to:

- · assess the maturity of existing health and education precincts
- · prioritise precincts to move along the precinct maturity pathway
- develop investment attraction strategies, master plans and incentives to attract aligned industry sectors into precincts
- · include social and affordable rental housing in innovation districts.

Activity 8.2.2.4: Deliver better capital outcomes by establishing standalone infrastructure agencies and major project offices for significant sector portfolios.

life by facilitating targeted investment in the right physical and digital social infrastructure.

Key

 ∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure		Activity 8.3.1.3: Enhance investment decisions by continuously improving and updating the framework by sharing information and best practice. Support the development of evaluation approaches for specific social infrastructure sectors to fill out the framework.		

State and territory emergency management agencies

Activity 2.1.2.2: Enable timely information exchange and build accountability by expanding participants to the Trusted

Information Sharing Network, sharing information and best practice and developing connections and ongoing

relationships.

0-5 years y Sector/Focus area **5-10** years 10-15 years 15+ years Sustainability **Proposed support** and resilience Recommendation 2.1: Build community Activity 2.1.2.6: Better predict and resilience to all hazards by considering mitigate major hazards and risks with systemic risks, interdependencies and a national risk and disaster probability vulnerabilities in infrastructure planning model for all hazards. and decision-making. Activity 2.1.1.1: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities. Activity 2.1.2.1: Facilitate collaboration across sectors, layers of government, asset owners and operators, businesses and communities by creating formal governance arrangements, resourcing and a convening authority in line with the National Disaster Risk Reduction Framework.

Key

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Activity 2.1.2.3: Inform decisions on risk reduction options and approaches, and enable data driven decision-making by standardising and sharing data about disasters, hazards and asset and network independency. Activity 2.1.2.4: Improve place-based and network-based systemic risk assessment and decision-making by producing local hazard maps for asset owners and operators and communities. Activity 2.1.3.4: Embed climate risk considerations into land use and infrastructure planning and decisionmaking by developing a training program, tools and guidance materials. **Social infrastructure Proposed lead** Activity 8.2.1.5: Enable the use of infrastructure during crises by identifying and funding fit-for-purpose facilities that would be available for rapid multipurposing and shared use at these times.

State and territory emergency services

0-5 years y Sector/Focus area 5-10 years 10-15 years 15+ years **Telecommunications Proposed support** and digital Outcome 7.1.1: Enable emergency services and network operators to better respond to emergencies by classifying telecommunications as an essential service and continue to develop management policies such as infrastructure protection, risk planning and vegetation management.





Telecommunications and digital

Activity 7.1.3.2: Enable network operators and state and territory emergency services to better respond and take better decisions during emergencies by creating a system that enables two-way, real-time access to emergency data and standardised network asset information.

State and territory energy departments

0-5 years y Sector/Focus area **5-10** years 10-15 years 15+ years Sustainability **Proposed lead** and resilience Activity 2.2.2.5: Support ongoing monitoring and improvements in social housing by creating and implementing a work program for updating energy performance standards that streamlines approval processes and conducts regular reviews. Sustainability **Proposed support** and resilience Activity 2.2.2.6: Ensure the built environment's emissions reduction pathway is understood and coordinated by establishing collaborative sectoral leadership groups, similar to the Better **Buildings Partnership or the Materials** and Embodied Carbon Leaders' Alliance. **Energy Proposed lead** Activity 5.1.3.2: Ensure widespread access to energy efficiency schemes throughout states and territories by introducing nationally harmonised schemes where they do not already exist. Outcome 5.2.1: Enable customers to manage their energy bills by incentivising smart meter installation, reforming pricing, and empowering them with the right information and tools.

✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years

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Energy

Activity 5.2.1.1: Accelerate smart meter uptake and enable customers to access emerging energy management technologies by subsidising smart meters, where not already mandatory or provided for free by the retailer as part of an electricity plan.

Activity 5.2.1.2: Empower customers to harness information from the smart meter to reduce their electricity bills by mandating that retailers accompany smart meter installation with the tools customers need to get the most out of them.

- Include free, user-friendly digital and mobile tools that integrate with home energy management systems, give customers transparent real-time access to their energy data, and enable customers to share their data in accordance with the Consumer Data Right for energy.
- Retailers and energy agencies should educate customers on the benefits of smart meters and provide support on how to use energy management tools.
- Retailers and energy agencies should provide free, timely advice on the benefits of an energy management system at the time of installation and whenever customers switch providers.
- Tools and information should be nationally consistent.

Activity 5.2.1.3: Enable customers to actively participate in the energy system and reduce their long-run costs by agreeing a transition towards default time-of-use tariffs for all customers with smart meters.

2021 Australian Infrastructure Plan 2021 Implementation Pathway 0-5 years **5-10** years 10-15 years 15+ years y Sector/Focus area **Energy** • State energy departments should mandate that retailers transfer customers with smart meters (including customers who have moved to a premise with a smart meter) to the default time-of-use tariff without any charges, except when the customer opts out or is a vulnerable customer and will be worse off on the time-of-use tariff based on historic consumption patterns. · Retailers and energy agencies should provide free, timely advice on the long-term benefits for all energy users participating more actively in the system whenever customers switch tariff or providers. Activity 5.2.3.1: Enable new renewable energy to connect to the grid by

implementing the Energy Security Board Renewable Energy Zones reform framework.

Activity 5.3.2.6: Give rural and remote communities access to clean, reliable and affordable energy by implementing an appropriate regulatory and legislative environment and funding that supports standalone power systems and micro-grids.

- · State and territory governments should accelerate the amendment of jurisdictional regulation and legislation to enable the implementation of standalone power systems.
- · ARENA should maintain funding for lowemissions standalone power systems and micro-grids.

✓ Sector/Focus area
0-5 years
5-10 years
10-15 years
15+ years

Energy

Proposed support

Outcome 5.1.1: Help residential energy customers invest in products and services that reduce their energy bills through education campaigns and tools that help them access the right information when they need it.

Activity 5.1.1.1: Reduce household energy bills (and improve residential energy efficiency) through the broader promotion of easily accessible information and education campaigns (leveraging websites like Energy Made Easy and Your Home), and supporting residential customers to:

- invest in the energy efficiency of their homes, renovations and appliances
- understand and manage their energy consumption
- · choose their retailer.

Activity 5.1.1.2: Reduce energy bills and improve health and wellbeing for vulnerable and low-income customers by delivering funding assistance programs to support energy audits and energy productivity upgrades for public and community housing, low-income households and associated rental properties with poor energy performance.

Outcome 5.1.2: Help buyers and renters make informed decisions by mandating energy efficiency disclosure for residential dwellings at time of sale or lease and raising minimum energy efficiency standards for rental properties.

Activity 5.1.2.1: Inform home owners, buyers, and tenants of the energy performance of their home through the development and application of a national residential energy performance rating scheme for all homes (new and existing) consistent with the *Trajectory for Low Energy Buildings* and *Report for Achieving Low Energy Existing Homes*.

Recommendation 5.1: Help households and businesses reduce electricity bills by making sure they have the right information and incentives.

Outcome 5.1.3: Give energy customers clear and consistent incentives to take up energy efficiency opportunities by harmonising energy efficiency obligation schemes across jurisdictions.

Activity 5.1.3.1: Give energy customers clear and consistent incentives to take up energy efficiency measures by harmonising jurisdictional energy efficiency obligation schemes into a National Scheme, or otherwise harmonising schemes, incentives and standards across jurisdictions in line with National Energy Productivity Plan goals.

Activity 5.2.3.3: Fully realise the market opportunity of renewable electricity generation and increase certainty for investors and contractors by implementing the Integrated System Plan and reducing the risk and time for grid connections.

Key

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years

Energy

Activity 5.1.2.2: Improve the energy efficiency, health and comfort of rental properties by implementing a national minimum energy efficiency standard, including mechanisms for tenants to initiate energy efficiency upgrades of rental properties. This should build on work already underway to set out considerations for development of rental standards through the Trajectory for Low Energy Buildings and Report for Achieving Low Energy Existing Homes.

Outcome 5.1.4: Help businesses lift energy productivity through targeted information, communications and education alongside direct incentives to invest in energy productivity upgrades.

Activity 5.1.4.1: Improve the energy efficiency and productivity of businesses through targeted communications and education campaigns and connecting businesses with expert advice to help them identify and implement upgrades to equipment and modernise processes.

- Include programs that specifically target manufacturing, energy-intensive small to medium enterprises and large energy users to assess and report on their opportunities for improving energy efficiency, in the style of the Energy Efficiency Opportunities program and building on the Business Energy Advice Program.
- · These tools and touchpoints should help businesses take advantage of opportunities at key points of decision and investment (through major purchases or at tax time) and comply with obligations under harmonised national energy efficiency obligation schemes.

Key

✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years

5

Energy

Recommendation 5.2: Transition to a smart, affordable, reliable future grid by implementing regulatory reforms, introducing incentives for customer participation in energy system management and planning cross-sector integration.

Outcome 5.3.1: Ensure Australia remains an energy export supplier of choice in decarbonised global supply chains by coordinating national development of low emission energy sources.

Activity 5.3.1.1: Enable collaboration opportunities, shared infrastructure and regulatory consistency across jurisdictions by coordinating a national approach to energy planning.

Activity 5.3.1.2: Support the development of clean energy export supply chains by identifying key precincts for new low-emission energy export hubs and developing enabling infrastructure plans.

Activity 5.3.1.3: Grow new export industries and jobs in clean energy commodities and value-added products such as aluminium, green steel, technology and services by developing coordinated clean energy industry strategies.

Activity 5.3.1.4: Increase investor certainty and enable emerging industries by developing clear, outcome-focused legislation and regulation for emerging low-emission energy technology.

Outcome 5.3.2: Transition Australia to a high-tech, low-cost, low-emission energy system by implementing appropriate regulatory and legislative environments, identifying opportunities to transition assets, and continuing to fund new energy technology development and adoption.

Key

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
5	Energy	Activity 5.3.2.1: Increase investor certainty by restating commitment to collaboration through the national governance frameworks that support the National Electricity Market.			
		Activity 5.3.2.2: Make the electricity market framework fit for purpose for a decentralised, renewable system by implementing a future market design that builds on the post-2025 work by the Energy Security Board and market bodies.			
		Activity 5.3.2.5: Ensure new sources of gas and hydrogen help provide reliable and affordable energy to Australian homes and businesses by reviewing the application of a nationally consistent policy on potential reservation or prioritisation of new gas sources and hydrogen for domestic consumption.			

State and territory environment departments

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years	
Sustainability and resilience	Proposed lead				
	Activity 2.2.1.1: Ensure consistent understanding by adopting the quadruple-bottom-line definition of sustainability.				
	Activity 2.2.2.6: Ensure the built environment's emissions reduction pathway is understood and coordinated by establishing collaborative sectoral leadership groups, similar to the Better Buildings Partnership or the Materials and Embodied Carbon Leaders' Alliance.				

Local government

2

✓ Sector/Focus area
0-5 years
5-10 years
10-15 years
15+ years

Sustainability and resilience

Proposed support

Recommendation 2.1: Build community resilience to all hazards by considering systemic risks, interdependencies and vulnerabilities in infrastructure planning and decision-making.

Activity 2.1.1.1: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities.

Activity 2.1.2.1: Facilitate collaboration across sectors, layers of government, asset owners and operators, businesses and communities by creating formal governance arrangements, resourcing and a convening authority in line with the National Disaster Risk Reduction Framework.

Activity 2.1.2.2: Enable timely information exchange and build accountability by expanding participants to the Trusted Information Sharing Network, sharing information and best practice and developing connections and ongoing relationships.

Activity 2.1.2.3: Inform decisions on risk reduction options and approaches, and enable data driven decision-making by standardising and sharing data about disasters, hazards and asset and network independency.

Activity 2.1.2.4: Improve place-based and network-based systemic risk assessment and decision-making by producing local hazard maps for asset owners and operators and communities.

Outcome 2.1.3: Facilitate joint action by establishing a common, long-term understanding of the potential impacts of climate change, both nationally and locally, that informs land use and infrastructure planning and decision-making.

Activity 2.1.2.6: Better predict and mitigate major hazards and risks with a national risk and disaster probability model for all hazards.

Key

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Sustainability Activity 2.1.3.4: Embed climate risk and resilience considerations into land use and infrastructure planning and decisionmaking by developing a training program, tools and guidance materials. Recommendation 2.2: Meet Australia's present and future needs by establishing the quadruple-bottom-line as a goal for all infrastructure policy and investment. Activity 2.2.1.2: Meet Australia's commitments to net zero through long-term sector-specific plans that set interim emissions reduction targets and strategies that prioritise infrastructure investments and services. Social infrastructure Proposed lead Activity 8.3.4.1: Inform and prioritise investment by developing a framework to assess the quadruple bottom line of significant natural assets, building on existing frameworks and developing an agreed, consistent approach to measuring their economic impact. Use the approach to inform and support a national valuation framework. Activity 8.3.4.2: Inform decision-making by developing an agreed and integrated register of significant natural assets with a stocktake undertaken by individual levels of government. Social infrastructure **Proposed support** Outcome 8.3.4: Support and protect economic growth and the environment by valuing Australia's significant natural assets and their quadruple bottom line benefits.

0-5 years **5-10** years 10-15 years 15+ years y Sector/Focus area Waste **Proposed lead** Activity 9.1.1.1: Increase understanding and compliance through community education, which highlights the benefits of landfill diversion and the importance of correct separation of materials for household waste collection services. Waste **Proposed support** Outcome 9.1.1: Increase understanding of the role of consumers in the circular economy through community education on responsible waste behaviour. Activity 9.1.1.2: Increase consumer understanding by reviewing the effectiveness of current recycling labels. Activity 9.1.1.3: Increase consumer participation in product stewardship by applying these recycling label insights to a broader range of materials and products. Outcome 9.2.3: Increase landfill diversion by developing a waste levy pricing strategy and national levy protocols. Activity 9.2.3.1: Address cross-border waste issues by developing national levy protocols that define which

Activity 9.2.3.2: Increase resource recovery by introducing a national levy pricing strategy to minimise interstate

wastes should be levied, levy liabilities, levy administration and maximum

levy differences.

transportation limits.

State and territory essential service economic regulators

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Water **Proposed support** Activity 6.1.3.1: Strengthen resilience Outcome 6.2.1: Provide enhanced of water supply infrastructure and meet community benefits, including water outcomes for users' long-terms needs by: security, public health, environmental health, and urban resilience by · removing policies that unnecessarily integrating management of water restrict water supply options, including infrastructure throughout the whole water bans that prevent suitably treated cycle. wastewater or stormwater from augmenting potable water supplies, Activity 6.2.1.6: Establish sustainable and and bans that prevent the urban use of community-driven recovery of efficient rural water costs, such as value sharing or levies, for · removing mandates, targets and stormwater infrastructure management. subsidies for the use of certain types of This should include urban waterway water, including recycled water enhancements and re-naturalisation in alignment with a national stormwater · removing regulatory barriers that management framework. discourage recycled water investments · ensuring that water infrastructure planning decisions consider all options for expanding water supply fully and transparently. This includes determining the optimal mix of water supply options with consideration given to the national water security framework. Activity 6.2.1.1: Clarify roles and responsibilities by reviewing stormwater infrastructure management, including governance, regulatory, pricing, physical and operational constraints.

State and territory finance departments

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Q	Place	Proposed support			
\otimes		Activity 1.4.3.4: Improve the consistency and effectiveness of Aboriginal and Torres Strait Islander procurement policies by standardising monitoring and performance reporting across jurisdictions.			
1 9 1	Sustainability	Proposed lead			
	and resilience	Activity 2.2.3.3: Ensure national consistency and coordination by aligning state and territory strategies and actions to the national strategy, including targets and timelines for transitioning all government fleet vehicles to electric vehicles whenever they are fit-for-purpose.			

State and territory first minister's departments

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Water	Proposed lead			
			Activity 6.2.2.4: Improve community health outcomes and introduce a total water cycle approach, including fit-for-purpose water use, by including sewerage services alongside potable water as part of minimum service standards for settlements in Remote Areas.	

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed lead			
		Outcome 8.2.2: Increase economic and social benefits by implementing strategic planning governance structures for health and education precincts, and innovative procurement and delivery models. Specialised agencies should also be established to deliver major social infrastructure capital projects.		
		Activity 8.2.2.4: Deliver better capital outcomes by establishing standalone infrastructure agencies and major project offices for significant sector portfolios.		

State and territory government property agencies

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Place	Proposed support			
\bowtie		Outcome 1.3.3: Facilitate sharing of infrastructure services and resources between communities and individuals by enabling the sharing economy.			
		Activity 1.3.3: Provide services efficiently by optimising investment in built assets and social infrastructure through developing integrated infrastructure strategies across governments.			
	Sustainability	Proposed lead			
	and resilience	Activity 2.3.4.2: Allow infrastructure co-location, precinct development and agency cost-sharing by centrally managing land acquisition and management.			

Sustainability and resilience
Activity 2.2.2.4: Improve energy efficiency and reduce emissions from new social infrastructure by increasing performance standards and updating the National Construction Code in line with the Trajectory for Low Energy Buildings.

State and territory health departments

0-5 years 5-10 years 10-15 years 15+ years y Sector/Focus area Water **Proposed support** Activity 6.2.2.5: Deliver co-designed, Activity 6.2.2.4: Improve community co-delivered water education and health outcomes and introduce a total demand management strategies water cycle approach, including fit-forfocusing on outdoor water use by purpose water use, by including sewerage partnering with community leaders and services alongside potable water as Aboriginal land councils. Education part of minimum service standards for strategies should be delivered through settlements in Remote Areas. schools and key community forums, Activity 6.2.2.6: Ensure community incorporating preferred language and outcomes are being met consistently traditional knowledge. by implementing ongoing risk-based monitoring strategies. Social infrastructure **Proposed lead** Activity 8.1.1.1: Improve the value and Outcome 8.2.2: Increase economic quality of virtual health care services by and social benefits by implementing developing digital health infrastructure strategic planning governance structures transformation plans that identify and for health and education precincts, and prioritise enhancements to existing innovative procurement and delivery hospitals, health services and primary models. Specialised agencies should also care services. be established to deliver major social infrastructure capital projects. Activity 8.2.2.1: Drive the development of health and education precincts and innovation districts by developing and implementing place-based governance agreements that involve associated local institutions and community representatives.

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Social infrastructure **Proposed support** Activity 8.1.1.2: Provide seamless Recommendation 8.1: Support connections to existing state and territory Australians to enjoy a healthier, safer, digital health capabilities through a more connected and fulfilled quality of program to increase primary health life by facilitating targeted investment providers' digital capability. in the right physical and digital social infrastructure. **Activity 8.1.1.3:** Accelerate the adoption of high-quality virtual care across Outcome 8.1.1: Improve equity of Australia by identifying and examining access and facilitate safe, high-value, existing platforms, sharing successful high-quality care for all Australians by digital health technologies, educating accelerating the transition to digital platform users and developing behaviour health service delivery. This will help change programs based on learnings and to achieve National Health Reform Agreement 2020-2025 goals. practices. Activity 8.1.1.5: Improve digital health Activity 8.1.1.4: Enable different digital literacy for citizens and the health health systems to work together and workforce through targeted education share meaningful information by programs, with a particular focus on developing a collaborative work program vulnerable communities. that integrates health services to provide targeted, patient-centred care across Outcome 8.1.2: Ensure Australia is always human services sectors, including fully prepared for pandemics across all disability, aged care and community jurisdictions by preparing an effective welfare services. national pandemic health infrastructure response program. Activity 8.1.2.1: Ensure consistent readiness for pandemics by retaining and continuously improving COVID-19 pandemic infrastructure planning and preparations for emergency response hospitals, and make ongoing national arrangements to access private hospital infrastructure during pandemics. Activity 8.1.2.2: Ensure appropriate

supply of emergency facility materials by establishing national contracts with major supply chain providers for personal protective equipment (PPE), critical

medical devices and other essential

facility materials.

0-5 years **5-10** years 10-15 years 15+ years y Sector/Focus area Social infrastructure Recommendation 8.2: Maximise social and economic community benefits by supporting shared use of social infrastructure through future agreements and capital funding programs prioritising shared use of facilities. Activity 8.2.2.2: Yield the benefits of innovation districts by adopting a precinct maturity model to: · assess the maturity of existing health and education precincts · prioritise precincts to move along the precinct maturity pathway · develop investment attraction strategies, master plans and incentives to attract aligned industry sectors into precincts · include social and affordable rental housing in innovation districts. Activity 8.2.2.4: Deliver better capital outcomes by establishing standalone infrastructure agencies and major project offices for significant sector portfolios. **Activity 8.3.1.3:** Enhance investment decisions by continuously improving and updating the framework by sharing information and best practice. Support the development of evaluation approaches for specific social infrastructure sectors to fill out the framework.

State and territory health infrastructure agencies

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(E)	Sustainability and resilience	Proposed lead			
AR	and resilience	Activity 2.2.2.3: Ensure quadruple-bottom-line outcomes by accelerating performance upgrades to social infrastructure, including schools, hospitals and public and community housing stock. Prioritise the increased installation of solar PV, storage and smart meters in social housing.			
		Proposed support			
		Activity 2.2.2.4: Improve energy efficiency and reduce emissions from new social infrastructure by increasing performance standards and updating the National Construction Code in line with the <i>Trajectory for Low Energy Buildings</i> .			

State and territory housing departments

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
L S	Sustainability and resilience	Proposed lead			
AR	and resilience	Activity 2.2.2.3: Ensure quadruple-bottom-line outcomes by accelerating performance upgrades to social infrastructure, including schools, hospitals and public and community housing stock. Prioritise the increased installation of solar PV, storage and smart meters in social housing.			

Key

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Sustainability and resilience	Proposed support			
P.E.	Outcome emissions sustainab the quadi energy et	Outcome 2.2.2: Deliver cost-effective emissions reduction and broad sustainability benefits consistent with the quadruple-bottom-line by prioritising energy efficiency in the built environment and social infrastructure.			
		Activity 2.2.2.4: Improve energy efficiency and reduce emissions from new social infrastructure by increasing performance standards and updating the National Construction Code in line with the Trajectory for Low Energy Buildings.			
	Social infrastructure	Proposed support			
			Activity 8.3.1.3: Enhance investment decisions by continuously improving and updating the framework by sharing information and best practice. Support the development of evaluation approaches for specific social infrastructure sectors to fill out the framework.		

State and territory industry departments

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Place	Proposed lead			
\bowtie		Activity 1.2.3.5: Support pandemic recovery by developing industry strategies for sectors that will deliver employment opportunities and growth.			
(0)	Place	Proposed support			
			Activity 1.4.2.7: Facilitate local workforce participation by identifying opportunities for developing innovation or specialisation precincts alongside major infrastructure.		

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years **Energy Proposed support** Activity 5.3.1.3: Grow new export industries and jobs in clean energy commodities and value-added products such as aluminium, green steel, technology and services by developing coordinated clean energy industry strategies. Waste **Proposed lead** Activity 9.1.5.6: Develop end markets for reprocessed organics by developing a FOGO recovery strategy that tests new uses for recovered materials.

State and territory infrastructure bodies

y Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years Sustainability **Proposed lead** and resilience Outcome 2.1.4: Ensure infrastructure decisions consider resilience through clear and harmonised guidance on how projects can address risks and value resilience. Sustainability **Proposed support** and resilience Activity 2.1.3.3: Support cross-sector Activity 2.3.3.3: Encourage national Activity 2.1.3.6: Ensure climate risk coordination and shared responsibility consistency and cross-sector is incorporated into infrastructure by undertaking and publishing an coordination by developing a national projects and services by mandating the annual assessment of the consideration report highlighting best practice, consideration of climate risk in project and effectiveness of climate risk and including case studies based on publicly assessment. resilience in infrastructure planning and released data. decision-making. Activity 2.1.3.4: Embed climate risk considerations into land use and infrastructure planning and decisionmaking by developing a training program, tools and guidance materials.

✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years



Activity 2.1.3.5: Ensure existing and future asset planning considers climate risk by conducting climate adaptation risk assessments, developing strategic planning and policy decisions, and designing and approving future assets using climate scenarios, tools and quidance.

Activity 2.1.4.1: Ensure infrastructure assessment frameworks, and associated tools and guidance, including the Australian Transport Assessment and Planning Guidelines, consider risks and resilience by incorporating future scenarios and hazard information.

Activity 2.1.4.2: Support land use and strategic planners, infrastructure and emergency planners and local governments to develop state and territory, regional and local plans by enhancing infrastructure assessment frameworks and associated climate and disaster risk tools and guidance.

Activity 2.1.4.3: Value resilience in infrastructure investment by developing a training program and guidance materials on how to value resilience in decision-making through the infrastructure lifecycle.

Outcome 2.2.1: Achieve consistency and shared ownership through embedding the quadruple-bottom-line into infrastructure decision-making frameworks.

Activity 2.2.1.1: Ensure consistent understanding by adopting the quadruple-bottom-line definition of sustainability.

Activity 2.2.1.3: Ensure consistent application of the quadruple-bottom-line at the strategic proposal development phase by embedding sustainability guidelines in investment frameworks and guidance materials. These should include considering sustainability when identifying problems, developing options and undertaking economic analysis.

Key

2021 Australian Infrastructure Plan 2021 Implementation Pathway 0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Sustainability Activity 2.2.1.4: Facilitate national and and resilience cross-sectoral consistency by using quadruple-bottom-line guidelines to develop complementary, sector-specific sustainability principles and frameworks. Activity 2.2.1.5: Support common approaches to assessment, cross-sector collaboration, shared responsibility and best practice, and develop connections and networks, by forming a crossjurisdictional sustainability group. **Recommendation 2.3:** Build community trust in infrastructure decision-making and institutions by ensuring infrastructure decisions are transparent, and reflect place-based community needs and preferences. Outcome 2.3.1: Improve community sustainability and build trust by embedding the quadruple-bottom-line in government decision-making and assessment. Activity 2.3.1.2: Ensure consideration of the quadruple-bottom-line by adding

> Activity 2.3.2.1: Align decision-making with community needs and preferences by incorporating decision-makers, communities, infrastructure owners and operators into early strategic planning stages. Collect information by conducting audits, assessing place-based community

engagement standards across assurance

process stages.

Outcome 2.3.3: Build community trust by providing transparent, timely and clear information about infrastructure decisionmaking and post completion assessments.

data and publicly releasing findings.

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Industry **Proposed lead** Activity 3.1.1.2: Develop a jurisdiction-Activity 3.1.2.1: Develop and implement wide, cross-sectoral infrastructure infrastructure productivity roadmaps project pipeline that actively tracks supported by adopting modern methods progress of projects throughout their of construction, including design reuse, lifecycle while considering critical inputs, standardised design elements, earlier constraints and risks that influence their supply chain involvement, digitalisation, deliverability. modularisation, prefabrication, offsite construction, frame agreements and bulk Activity 3.1.1.3: Provide annual procurement. jurisdiction-wide pipeline briefings that provide industry with a clear macro-level view of expected procurements and act as a forum to provide feedback on pipeline risk. Activity 3.2a.1.1: Uplift quality of infrastructure decision-making through the development and delivery of training for key decision-makers on due diligence and de-risk, construction innovation, timing of project announcements, commercial and legal, and project governance. Activity 3.2a.2.2: Ensure a consistent focus on value for money by developing in-house capabilities, in areas such as cost management systems and processes, scheduling, risk management, estimating and project controls. **Proposed support** Industry Activity 3.1.3.2: Foster a new model of collaboration between governments and industry by developing and implementing an infrastructure industry culture commitment and industry policy aimed at improving project delivery. Activity 3.4.2.3: Safeguard community interests and taxpayer funding by ensuring all proposed investments demonstrate an assessment of non-build solutions.

y Sector/Focus area

0-5 years

15+ years

Transport Proposed support Activity 4.1.3.2: Promote the staged Recommendation 4.1: Maximise the delivery of major transport corridor overall benefits of transport investments projects by updating assurance by aligning transport programs with frameworks as required to assess place-based objectives. business cases for multi-modal Outcome 4.1.3: Bring forward the investment programs and monitoring benefits of transport investments, in a their implementation. context of uncertain and changing user needs, by promoting and facilitating the incremental delivery of transport services, corridors and networks as separable stages. Social infrastructure **Proposed lead** Activity 8.3.1.3: Enhance investment decisions by continuously improving and updating the framework by sharing information and best practice. Support the development of evaluation approaches for specific social infrastructure sectors to fill out the framework Social infrastructure **Proposed support** Activity 8.2.1.3: Increase community Outcome 8.2.1: Allow community access to social infrastructure by access outside core operating hours by benchmarking, compiling and sharing developing shared-use plans for new best practice examples of shared-use and upgraded social infrastructure such models that could be adapted or scaled as health facilities, schools, VET, TAFE, nationally. universities and sporting facilities. Activity 8.3.1.1: Guide social Activity 8.2.1.1: Support shared use infrastructure investment by establishing of social infrastructure by establishing a cross-jurisdictional, multi-sector panel national principles for place-based, crossto lead the collaborative development agency infrastructure governance. of an overarching social infrastructure Activity 8.2.1.2: Promote shared use valuation framework. This will strengthen of social infrastructure by developing existing approaches and draw on incentives and measures that support expertise from government, industry, agencies to implement shared-use environmental, First Nations and arrangements and place-based, community leaders. collaborative planning and delivery.

10-15 years

5-10 years

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years	
\$\tag{\psi}\$	Social infrastructure	Activity 8.3.1.2: Support the effective evaluation of the economic contribution of social infrastructure by developing associated tools, methodology and guidance materials that can be used by infrastructure providers.	Activity 8.2.1.6: Support third-party use by establishing insurance and security arrangements, payment systems and associated services. Activity 8.2.1.7: Enable a shift in agencies adopting shared-use models by including principles for maximising shared use and associated community outcomes in business case policies.			
			Recommendation 8.3: Support economic development by recognising the value of investment in social infrastructure.			
			Outcome 8.3.1: Guide better social infrastructure investment by developing a consistent, national valuation framework that captures, measures and assesses the quadruple-bottom-line benefits of social infrastructure.			

State and territory infrastructure delivery agencies

Place Proposed support Activity 1.1.3.1: Meet community needs by improving physical and digital connectivity through place-based approaches to infrastructure planning and governance. Activity 1.1.3.2: Support the vision for a city by developing planning strategies focused on physical and digital connectivity that link places within cities, and their satellite areas. Activity 1.1.3.3: Connect assets to communities by defining a spectrum of appropriate governance models for		✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Activity 1.1.3.1: Meet community needs by improving physical and digital connectivity through place-based approaches to infrastructure planning and governance. Activity 1.1.3.2: Support the vision for a city by developing planning strategies focused on physical and digital connectivity that link places within cities, and their satellite areas. Activity 1.1.3.3: Connect assets to communities by defining a spectrum		Place	Proposed support			
city by developing planning strategies focused on physical and digital connectivity that link places within cities, and their satellite areas. Activity 1.1.3.3: Connect assets to communities by defining a spectrum			by improving physical and digital connectivity through place-based approaches to infrastructure planning			
communities by defining a spectrum			city by developing planning strategies focused on physical and digital connectivity that link places within cities,			
places of different scale.			communities by defining a spectrum of appropriate governance models for			

y Sector/Focus area

0-5 years 15+ years **5-10** years 10-15 years



Place

Activity 1.1.3.4: Prioritise industry specialisations, innovation precincts and activity centres through infrastructure distribution decisions.

Activity 1.1.3.5: Share best practice in planning and deliver place-based projects between state, territory and local governments.



Sustainability and resilience

Proposed support

Activity 2.2.1.1: Ensure consistent understanding by adopting the quadruple-bottom-line definition of sustainability.



Industry

Proposed sponsor

Recommendation 3.2a: Improve value for money and reduce risk by consistently adopting appropriate best-practice frontend due diligence for projects.



Industry

Proposed lead

Activity 3.1.1.4: Ensure future infrastructure investment and project delivery commitments are regularly reviewed and considered against the jurisdiction-wide, cross-sectoral infrastructure project pipeline and industry capacity forecasts.

Activity 3.1.3.4: Improve the productivity and attractiveness of the sector by adopting and promoting a five-day working week, working hour limits, and job-sharing practices across the public and private sectors.

Outcome 3.2a.1: Reduce risk, improve competition, lower bid costs and improve project outcomes by consistently applying due diligence activities to the front-end of all infrastructure projects.

Outcome 3.2b.2: Create a culture of genuine innovation by clarifying the desired project outcome innovation criteria in bid requirements, including outcomes, value for money, risk and embedding successful innovation in future projects.

Activity 3.2b.2.1: Normalise risk appetite and use of innovation by aligning innovation criteria in bid assessment with project and organisational needs, including tangible measurable outcomes that are owned by a project leader

Activity 3.3.3: Create accountability for quality digital asset management through the asset lifecycle by appointing digital asset champions on all projects, and consider the use of digital estate management contracts.

Key

✓ Sector/Focus area

0-5 years

5-10 years

10-15 years

15+ years

Industry

Activity 3.2a.1.4: Ensure a strategic view of risk is appropriately translated to project procurement by developing and applying mature risk allocation processes

Activity 3.2b.2.2: Reduce risk and lower the likelihood of variations by conducting constructability, operability and maintainability reviews on projects. Repeat reviews at multiple stages of each project's lifecycle, particularly in the early stages before awarding main works contracts.

that comprehensively assess and validate risk and uncertainty and fairly apportion them to the parties best-placed to

Activity 3.3.4: Digitise all major projects by applying contemporary digital engineering practices that leverage proven technologies and processes, such as Building Information Modelling.

Proposed support

manage them.

Industry

Outcome 3.1.1: Improve industry capacity and capability by prioritising procurement and portfolio management and increasing pipeline transparency, certainty and confidence.

Activity 3.1.1.1: Ensure active management of project procurement within the pipeline and help industry to actively manage its capacity and risk exposure by strengthening portfolio management capabilities within the public service.

Activity 3.1.1.2: Develop a jurisdictionwide, cross-sectoral infrastructure project pipeline that actively tracks progress of projects throughout their lifecycle while considering critical inputs, constraints and risks that influence their deliverability. **Recommendation 3.1:** Improve industry productivity and value for money by having a coordinated project pipeline with a mature approach to procurement and risk management.

Activity 3.1.2.1: Develop and implement infrastructure productivity roadmaps supported by adopting modern methods of construction, including design reuse, standardised design elements, earlier supply chain involvement, digitalisation, modularisation, prefabrication, offsite construction, frame agreements and bulk procurement.

Activity 3.1.3.2: Foster a new model of collaboration between governments and industry by developing and implementing an infrastructure industry culture commitment and industry policy aimed at improving project delivery.

Activity 3.1.2.3: Create, embed and pursue sector-wide efficiencies by developing and implementing project processes, templates and assurance activities that prioritise industrialisation.

Key

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✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years

Industry

Activity 3.1.1.3: Provide annual jurisdiction-wide pipeline briefings that provide industry with a clear macro-level view of expected procurements and act as a forum to provide feedback on pipeline risk.

Activity 3.1.2.2: Create a positive change culture by ensuring public sector project professionals are empowered and the organisation leadership is incentivized to be innovative and adopt best practices.

Recommendation 3.2b: Reduce uncertainty for industry and improve value for money by improving engagement with industry and the supply chain.

Outcome 3.2b.1: Reduce risk and improve value for money by using common and best practice commercial arrangements, standard contract forms and delivery approaches to infrastructure.

Activity 3.2b.1.1: Unlock market equality and lower risk by utilising more collaborative commercial models that facilitate value for money and smaller engagements directly with contractors and consultants.

Activity 3.2b.1.5: Increase competition in the industry by developing guidelines and training programs on market engagement best practices that are accessible to all project practitioners. Cover topics such as multi-stage bidding, fair risk appropriation processes, bidding requirements at each gate, receiving industry feedback, using nationally consistent contract forms and the supporting procurement decision-making tool.

Outcome 3.3.3: Embed a digital by default approach to infrastructure delivery and operations by significantly scaling up related capabilities, resources and activities.

Activity 3.3.1: Increase digital adoption in infrastructure and develop jurisdiction-wide digital twins of the built environment by creating or strengthening related capabilities and cross-departmental functions.

Activity 3.3.2: Embed a digital by default approach by creating and implementing a smart infrastructure policy in each jurisdiction that uses technology and data to drive economic success and social inclusion.

State and territory infrastructure departments

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Place **Proposed lead** Activity 1.1.5.1: Support amenity and Outcome 1.1.5: Provide greater Activity 1.4.3.5: Sustain local community infrastructure access for communities residential choice by planning and employment in infrastructure delivery undergoing densification by developing delivering high-quality medium-density and other projects by developing local character plans to define residential areas alongside wellan essential skills training academy expectations for the size and scale of sequenced infrastructure investment. building infrastructure delivery skills infrastructure that will be provided. and knowledge. Activity 1.1.5.4: Explicitly consider **Activity 1.1.5.2:** Encourage a diversity of provision of affordable housing when housing forms by revising planning codes planning medium density residential to embrace a diversity of housing options, including explicitly supporting medium-**Activity 1.1.5.5:** Effectively provide for density development. infrastructure enhancement in brownfield Activity 1.1.5.3: Support local communities undergoing step changes in government decision-making by linking densification by developing a transparent local character definitions to planning framework for population and activity codes for medium-density forms. levels, value-sharing funding mechanisms and associated infrastructure investment. Activity 1.2.1.2: Inform investment priorities by undertaking regional infrastructure needs assessments on a rolling basis. Place **Proposed support** Activity 1.1.4.2: Ensure business case Outcome 1.1.4: Ensure city-shaping development incorporates a place-based infrastructure projects deliver value approach when a project will create for money and amenity by applying or cause material impacts on adjacent place-based considerations to funding infrastructure. assessments. Outcome 1.2.1: Identify infrastructure Activity 1.1.4.1: Support a coordinated needs by developing a regional strengths approach to developing Fast-growing and gaps infrastructure prioritisation Cities by requiring funding applications framework, supported by a classification to demonstrate their strategic fit with the of the geography of regional Australia. vision and priorities identified at the local, state and territory and federal level. Activity 1.2.1.1: Build the infrastructure pipeline by identifying and prioritising Activity 1.2.1.3: Attract and retain regional infrastructure gaps, based on residents and businesses by existing regional development strategies identifying and sequencing appropriate across government and industry and infrastructure requirements according to

Key

community consultation.

local community characteristics.

15+ years

Place
O-5 years
5-10 years
10-15 years

Place
Outcome 1.4.1: Improve investor certainty by collecting and publishing better a skilled workforce by supporting

Dutcome 1.4.1: Improve investor certain by collecting and publishing better data on the region's characteristics and infrastructure.

Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy.

Activity 1.4.1.2: Reduce investor uncertainty and improve decision-making by identifying, creating and publishing place and network-centric data, including assessing natural resource endowments.

Outcome 1.4.2: Support industry development by developing place and network-based infrastructure strategies linked to incumbent and emerging growth industries.

Activity 1.4.2.3: Identify opportunities for shared infrastructure and reduced costs by undertaking joint assessment of enabling infrastructure requirements for major industry developments.

Activity 1.4.3.2: Support Aboriginal and Torres Strait Islander participation in the Northern Australia economy, including infrastructure delivery, by assessing and prioritising investment in enabling digital and transport connectivity in partnership with local First Nations communities.

Activity 1.4.2.6: Attract and retain a skilled workforce by supporting liveability through investment in social infrastructure and connectivity.

Outcome 1.4.3: Support participation of Aboriginal and Torres Strait Islander enterprises and individuals in infrastructure planning and delivery by developing joint programs for agencies leading the planning, delivery and operation of infrastructure.

Sustainability and resilience

Proposed lead

Activity 2.2.2.1: Identify potential to embed quadruple-bottom-line outcomes in social infrastructure assets by auditing existing social infrastructure assets and using Green Building Council of Australia's Green Star rating system, Infrastructure Sustainability Council of Australia IS Rating Scheme and NABERS tools.

Key

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∨ Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Sustainability and resilience

Activity 2.2.2: Ensure quadruplebottom-line outcomes by introducing procurement standards. These should mandate sustainable performance, including energy efficiency measures and the electrification of appliances, for government-owned social infrastructure.



Sustainability and resilience

Proposed support

Recommendation 2.1: Build community resilience to all hazards by considering systemic risks, interdependencies and vulnerabilities in infrastructure planning and decision-making.

Activity 2.1.1.: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities.

Activity 2.1.2.1: Facilitate collaboration across sectors, layers of government, asset owners and operators, businesses and communities by creating formal governance arrangements, resourcing and a convening authority in line with the National Disaster Risk Reduction Framework.

Activity 2.1.2.2: Enable timely information exchange and build accountability by expanding participants to the Trusted Information Sharing Network, sharing information and best practice and developing connections and ongoing relationships.

Activity 2.1.2.3: Inform decisions on risk reduction options and approaches, and enable data driven decision-making by standardising and sharing data about disasters, hazards and asset and network independency.

Activity 2.1.2.6: Better predict and mitigate major hazards and risks with a national risk and disaster probability model for all hazards.

Key

0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Sustainability Activity 2.1.2.4: Improve place-based and resilience and network-based systemic risk assessment and decision-making by producing local hazard maps for asset owners and operators and communities. Activity 2.1.3.4: Embed climate risk considerations into land use and infrastructure planning and decisionmaking by developing a training program, tools and guidance materials. Activity 2.3.3.2: Improve transparency and community trust and understanding by publicly releasing key information supporting infrastructure decisions, subject to privacy and data sovereignty considerations. **Social infrastructure Proposed support** Activity 8.1.4.3: Ensure enduring skills development opportunities and jobs are created in line with the infrastructure pipeline by continuing to mandate industry-relevant onsite training facilities and skills legacy initiatives in infrastructure development programs. Waste **Proposed lead** Activity 9.1.3.2: Ensure greater use of recycled materials within government infrastructure projects by developing procurement targets and timelines. Activity 9.1.3.3: Support the piloting and early deployment of innovative technologies and processes through structured co-investment programs for products incorporating recycled materials.

Key

State and territory insurance agencies

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Fin	Industry	Proposed support			
		Activity 3.2b.1.4: Maintain a viable, competitive industry and supply chain by ensuring insurance is available for consultants, contractors and subcontractors involved in major projects. This may include brokering insurance on behalf of industry on a pro rata basis and changing existing policies on retention or insurance limits.			

State and territory insurance policy-holders and their insurers

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Fun	Industry	Proposed lead			
		Activity 3.2b.1.4: Maintain a viable, competitive industry and supply chain by ensuring insurance is available for consultants, contractors and subcontractors involved in major projects. This may include brokering insurance on behalf of industry on a pro rata basis and changing existing policies on retention or insurance limits.			

State and territory justice departments

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed support			
		Activity 8.3.1.3: Enhance investment decisions by continuously improving and updating the framework by sharing information and best practice. Support the development of evaluation approaches for specific social infrastructure sectors to fill out the framework.		_

State and territory municipal services departments

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Water	Proposed lead			
	Activity 6.2.2.2: Develop a comprehensive understanding of community dynamics that relate to water consumption, including access, use and preferences, as well as an assessment of water and wastewater infrastructure performance and condition. This should be done by undertaking a 'whole-of-service assessment'.	Activity 6.2.2.3: Deliver resilient and sustainable water and wastewater infrastructure that meets communities' needs by applying fit-for-purpose, fit-for-place and fit-for-people approaches that directly respond to whole-of-service assessments. Activity 6.2.2.5: Deliver co-designed, co-delivered water education and demand management strategies focusing on outdoor water use by partnering with community leaders and Aboriginal land councils. Education strategies should be delivered through schools and key community forums, incorporating preferred language and traditional knowledge.	Activity 6.2.2.6: Ensure community outcomes are being met consistently by implementing ongoing risk-based monitoring strategies.	

∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Water	Proposed support			
			Outcome 6.2.2: Deliver safe, high- quality, secure, sustainable and fit-for- purpose water and wastewater services to remote and isolated communities by partnering with communities and water utilities, developing a funding pathway and monitoring strategies.	

State and territory place management agencies

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Waste	Proposed support			
		Activity 9.1.5.1: Reduce waste to landfill and emissions by introducing FOGO collection and processing for households when renewing existing waste management contracts.		

State and territory planning departments

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
0	Place	Proposed lead			
		Outcome 1.1.1: Improve cooperation between all levels of government by jointly developing a clear vision for each Fast-growing City that underpins land use, infrastructure and planning strategies. Activity 1.1.1.1: Build buy-in for each city's vision through industry and community engagement.	Activity 1.2.1.3: Attract and retain residents and businesses by identifying and sequencing appropriate infrastructure requirements according to local community characteristics. Activity 1.3.1.3: Manage potential future population and economic growth by developing staged land use plans that accommodate infrastructure and land use requirements.		

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0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years **Place** Activity 1.1.3.1: Meet community needs by improving physical and digital connectivity through place-based approaches to infrastructure planning and governance. Activity 1.1.3.2: Support the vision for a city by developing planning strategies focused on physical and digital connectivity that link places within cities, and their satellite areas. Activity 1.1.3.3: Connect assets to communities by defining a spectrum of appropriate governance models for places of different scale. **Activity 1.1.3.4:** Prioritise industry specialisations, innovation precincts and activity centres through infrastructure distribution decisions. Activity 1.1.3.5: Share best practice in planning and deliver place-based projects between state, territory and local governments. Activity 1.2.3.1: Inform business case development for major projects by analysing data about settlement patterns (including Aboriginal and Torres Strait Islander settlement patterns), employment availability and variety, business locations and housing and infrastructure access. **Place Proposed support**

Activity 1.1.1.4: Harmonise local character and neighbourhood plans within each city's vision to:

- account for local identity and assets
- guide timing and scope of current and proposed projects
- embed cultural considerations in planning, based on local demographics

Outcome 1.1.3: Maximise the impact of city-shaping infrastructure delivery and operations through collaborative placebased governance models.

Key

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years **Place** · address disparities in infrastructure provision within and across fast-

growing cities

· address community resilience, including behaviour changes associated with the COVID-19 pandemic.

Activity 1.2.4.2: Support greater wholesale and retail competition by facilitating greater sharing of physical infrastructure and infrastructure corridors servicing regional centres.

Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy.

Activity 1.4.1.2: Reduce investor uncertainty and improve decision-making by identifying, creating and publishing place and network-centric data, including assessing natural resource endowments.



Proposed lead

Activity 2.1.4.2: Support land use and strategic planners, infrastructure and emergency planners and local governments to develop state and territory, regional and local plans by enhancing infrastructure assessment frameworks and associated climate and disaster risk tools and guidance.

Outcome 2.3.1: Improve community sustainability and build trust by embedding the quadruple-bottom-line in government decision-making and assessment.

Activity 2.3.1.1: Facilitate participatory community engagement and build trust by clarifying consistent engagement and reporting requirements, resourcing plans and measurement mechanisms.

Key

✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years

Sustainability and resilience

Activity 2.3.1.4: Improve the business case for community engagement by conducting research on the benefits of effective engagement.

Activity 2.3.1.5: Understand the effectiveness of engagement activities in meeting quadruple-bottom-line outcomes, including equity and accessibility, by producing public reports on the impact of community feedback on decisions.

Outcome 2.3.2: Make more transparent and consistent decisions throughout infrastructure projects and services by responding to, and understanding, place-based community needs and preferences at state and territory, regional and local government levels.

Activity 2.3.2.1: Align decision-making with community needs and preferences by incorporating decision-makers, communities, infrastructure owners and operators into early strategic planning stages. Collect information by conducting audits, assessing place-based community data and publicly releasing findings.

Outcome 2.3.3: Build community trust by providing transparent, timely and clear information about infrastructure decision-making and post completion assessments.

Activity 2.3.3.1: Increase transparency by committing to, developing and releasing post completion reviews. Establish delivery dates for staged reviews when the project begins. Include information on whether the economic case in the project's business case was realised, lessons learnt, and whether the project was on time and within budget.

Outcome 2.3.4: Improve community certainty and confidence and meet long-term community needs by sequencing infrastructure delivery.

Key

∨ Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Sustainability and resilience

Activity 2.3.4.1: Ensure the acquisition and management of corridors in the long-term interests of users and taxpayers by identifying high-value corridors, conducting corridor feasibility studies and establishing joint funding and governance arrangements.



Sustainability and resilience

Proposed support

Recommendation 2.1: Build community resilience to all hazards by considering systemic risks, interdependencies and vulnerabilities in infrastructure planning and decision-making.

Activity 2.1.1.: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities.

Activity 2.1.2.1: Facilitate collaboration across sectors, layers of government, asset owners and operators, businesses and communities by creating formal governance arrangements, resourcing and a convening authority in line with the National Disaster Risk Reduction Framework.

Activity 2.1.2.2: Enable timely information exchange and build accountability by expanding participants to the Trusted Information Sharing Network, sharing information and best practice and developing connections and ongoing relationships.

Activity 2.1.2.3: Inform decisions on risk reduction options and approaches, and enable data driven decision-making by standardising and sharing data about disasters, hazards and asset and network independency.

Activity 2.1.2.6: Better predict and mitigate major hazards and risks with a national risk and disaster probability model for all hazards.

Key

y Sector/Focus area

0-5 years 15+ years 5-10 years 10-15 years Sustainability Activity 2.1.2.4: Improve place-based and resilience and network-based systemic risk assessment and decision-making by producing local hazard maps for asset owners and operators and communities. Activity 2.1.3.4: Embed climate risk considerations into land use and infrastructure planning and decisionmaking by developing a training program, tools and guidance materials. **Transport Proposed lead** Activity 4.3.2.2: Support the timely Activity 4.1.1.2: Prepare place-based deployment of transport products that visions that identify credible population offer a lower-impact alternative to motor and land use scenarios. Incorporate vehicle use for urban passenger and measurable objectives for proposed freight transport by ensuring traffic transport projects to contribute to the sustainability of community and user control systems, kerbside parking regimes, multimodal interchanges, outcomes for a defined area. commuter car parking, bus stops and Activity 4.3.1.4: Enable the use of access pathways are designed to innovative funding mechanisms such integrate with and support demandas developer contributions to meet responsive bus, minibus, rideshare, some of the operating costs of frequent micromobility device sharing and/or scheduled or demand-responsive microfreight operations, as required. services during the first three to five years of people settling in greenfield urban areas. **Transport Proposed support** Recommendation 4.1: Maximise the overall benefits of transport investments by aligning transport programs with place-based objectives. Outcome 4.1.1: Maximise the placeshaping impacts of transport investment by linking transport infrastructure funding decisions to published population and land use objectives.

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Water **Proposed lead** Activity 6.2.1.8: Embed whole-of-Activity 6.2.1.4: Integrate potable water, water cycle management at the wastewater, and stormwater infrastructure commencement stage of local land use planning by assigning a single planner planning through formal arrangements across the water cycle for greenfield between land use planners and the water development sites. cycle planner. Activity 6.2.1.7: Embed a whole-ofwater cycle management approach into long-term, large scale (city or catchment - including both metropolitan and regional settings) urban planning by defining and implementing community driven outcomes for public health, environmental (including ecological), health, amenity and urban resilience: · Define clear community-driven objectives for water cycle management over the long term. · Align long-term growth planning to community objectives. · Ensure long-term growth plans recognise the value of water within the entire water cycle and identify dependencies of urban growth on water by incorporating best available data and water modelling. · Identify water security risks and growth opportunities by applying the national water security framework.



Water

Proposed support

Activity 6.1.3.1: Strengthen resilience of water supply infrastructure and meet outcomes for users' long-terms needs by:

- removing policies that unnecessarily restrict water supply options, including bans that prevent suitably treated wastewater or stormwater from augmenting potable water supplies, and bans that prevent the urban use of rural water
- removing mandates, targets and subsidies for the use of certain types of water, including recycled water

Outcome 6.1.3: Meet users' long-term water needs by ensuring that all options be fully evaluated in infrastructure planning.

Activity 6.2.2.3: Deliver resilient and sustainable water and wastewater infrastructure that meets communities' needs by applying fit-for-purpose, fit-for-place and fit-for-people approaches that directly respond to whole-of-service assessments.

Recommendation 6.2: Value water in communities by prioritising a whole-of-water-cycle management approach and applying fit-for-purpose, fit-for-place and fit-for-people approaches.

Activity 6.2.2.4: Improve community health outcomes and introduce a total water cycle approach, including fit-for-purpose water use, by including sewerage services alongside potable water as part of minimum service standards for settlements in Remote Areas.

Key

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years



Water

· removing regulatory barriers that discourage recycled water investments

· ensuring that water infrastructure planning decisions consider all options for expanding water supply fully and transparently. This includes determining the optimal mix of water supply options with consideration given to the national water security framework.

Activity 6.2.2.2: Develop a comprehensive understanding of community dynamics that relate to water consumption, including access, use and preferences, as well as an assessment of water and wastewater infrastructure performance and condition. This should be done by undertaking a whole-ofservice assessment.

Activity 6.2.2.5: Deliver co-designed, co-delivered water education and demand management strategies focusing on outdoor water use by partnering with community leaders and Aboriginal land councils. Education strategies should be delivered through schools and key community forums, incorporating preferred language and traditional knowledge.

Activity 6.2.2.6: Ensure community outcomes are being met consistently by implementing ongoing risk-based monitoring strategies.



Proposed lead

Activity 7.3.1.1: Enable maximum contiguous coverage of Australia's emergent 5G networks by creating more affordable ways for network operators to locate 5G small cells on public assets (such as street furniture, public buildings and road trenches) in a way that resembles the arrangements made for other major utilities, with nominal or zero rental costs and wider facility-sharing of public infrastructure.

Activity 7.3.1.2: Provide communities in key suburbs and precincts.

with commercially viable, unobtrusive and contiguous coverage across Australia's suburbs by encouraging local governments to build telecommunications towers and poles (for network operators to mount small cells) for the public good

Key

2021 Australian Infrastructure Plan 2021 Implementation Pathway 0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years **Telecommunications Proposed support** and digital Activity 7.3.2.1: Enable a smart infrastructure step-change by adopting best-practice policies that reduce friction and increase interoperability at a place level, including policies addressing: shared applications systems and processes capabilities · data exchange, storage and federation. **Activity 7.3.2.2:** Accelerate the delivery of smart places through a refresh of the Smart Cities and Suburbs Program to focus on co-funding high initial cost, yet scalable, regional initiatives that align with the national digital infrastructure roadmap. Social infrastructure **Proposed lead** Outcome 8.1.6: Support mental and Activity 8.2.1.4: Enable place-centric physical health through appropriate TAFE developments by developing investment in green and blue and principles to support this approach, recreational infrastructure. including collaborative and shared-use opportunities. Review existing TAFE Activity 8.1.6.1: Improve health and assets against these principles and wellbeing by developing an appropriate migrate new or refurbished assets where methodology for analysing public space there are benefits. performance, including green and blue infrastructure. Review methodologies Activity 8.3.3.2: Catalyse economic

used in Australia and develop placebased access benchmarks across aeographies.

Activity 8.3.3.1: Improve growth and liveability by assessing the quadruplebottom-line of arts, culture, green, blue and recreation infrastructure, building on existing frameworks and developing an agreed, consistent approach to measuring its economic impact. Use the approach to inform and support a national valuation framework.

development by using the new framework to collaboratively plan, develop and invest in arts, cultural, green, blue and recreational infrastructure that enhances unique regional identities and brands. Apply this approach when planning new precincts and renewal projects. Update existing plans every five years.

Key

20

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed support			
Social lilliastructure	Activity 8.1.3.1: Enable more equitable access to early childhood education centres by facilitating cross-sectorial partnerships between centre operators and planning and transport departments to support better access and transport connectivity, especially in the planning of new centres.	Recommendation 8.2: Maximise social and economic community benefits by supporting shared use of social infrastructure through future agreements and capital funding programs prioritising shared use of facilities. Activity 8.2.2.1: Drive the development of health and education precincts and innovation districts by developing and implementing place-based governance agreements that involve associated local institutions and community representatives.		
Waste	Proposed lead			
		Outcome 9.1.4: Support co-location of circular economy facilities by undertaking collaborative land-use planning.		
		Activity 9.1.4.1: Improve waste infrastructure in rural and remote areas by developing land-use plans that include resource recovery facilities.		
		Activity 9.1.4.2: Improve levels of service in Rural Communities and Remote Areas by identifying locations for hub-and-spoke models of waste management services.		
		Activity 9.1.5.4: Enable FOGO collection in apartments by amending complying development provisions to allow retrofitting for facilities in existing apartments, and by incorporating FOGO and other collections in the design of new builds.		
	Social infrastructure	Activity 8.1.3.1: Enable more equitable access to early childhood education centres by facilitating cross-sectorial partnerships between centre operators and planning and transport departments to support better access and transport connectivity, especially in the planning of new centres.	Activity 8.1.3.1: Enable more equitable access to early childhood education centres by facilitating cross-sectorial partnerships between centre operators and planning and transport departments to support better access and transport connectivity, especially in the planning of new centres. Activity 8.2.2.1: Drive the development of health and education precincts and innovation districts by developing and implementing place-based governance agreements that involve associated local institutions and community representatives. Waste Proposed lead Outcome 9.1.4: Support co-location of circular economy facilities by undertaking collaborative land-use planning. Activity 9.1.4.1: Improve waste infrastructure in rural and remote areas by developing and alend use plans that include resource recovery facilities. Activity 9.1.4.2: Improve levels of service in Rural Communities and Remote Areas by identifying locations for hub-and-spoke models of waste management services. Activity 9.1.5.4: Enable Memoral-spoke models of waste management services. Activity 9.1.5.4: Enable Memoral-spoke models of waste management services. Activity 9.1.5.4: Enable Memoral-spoke models of waste management services in apartments by amending complying development provisions to allow retrofitting for facilities in existing apartments, and by incorporating FOGO and other collections in the design of	Activity 8.1.3.1: Enable more equitable access to early childhood education centres by facilitating cross-sectorial partnerships between centre operators and planning and transport departments to support better access and transport departments to support better access and transport departments to entry to connectivity, especially in the planning of new centres. Activity 8.2.2.1: Drive the development of health and education precincts and implementing place-based governance agreements that involve associated local institutions and community representatives. Waste Proposed lead Outcome 9.1.4: Support co-location of circular economy facilities by undertaking collaborative land-use planning. Activity 9.1.4: Improve waste infrastructure in rural and remote areas by developing land-use plans that include resource recovery facilities. Activity 9.1.4: Improve levels of service in Rural Communities and Remote Areas by identifying locations for hub-and-spoke models of waste management services. Activity 9.1.4: Enable PGOG collection in apartments by amending complying development provisions to allow retrolitting for facilities in existing apartments, and by incorporating FGOG and other collections in the design of

State and territory public service commissions

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed lead			
H==		Activity 3.1.2.2: Create a positive change culture by ensuring public sector project professionals are empowered and the organisation leadership is incentivized to be innovative and adopt best practices.			
	Industry	Proposed support			
Hee		Activity 3.1.1.1: Ensure active management of project procurement within the pipeline and help industry to actively manage its capacity and risk exposure by strengthening portfolio management capabilities within the public service.			
		Activity 3.2a.1.1: Uplift quality of infrastructure decision-making through the development and delivery of training for key decision-makers on due diligence and de-risk, construction innovation, timing of project announcements, commercial and legal, and project governance.			

State and territory regional service agencies



Key

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Q	Place	Activity 1.3.2.2: Improve understanding of costs and benefits of Community Service Obligations through mandatory public reporting on their performance.	Outcome 1.3.1: Ensure communities in Small Towns, Rural Communities and Remote Areas have access to infrastructure services in line with defined minimum standards. Activity 1.3.1.2: Based on community size, demographics and location, define minimum standards across social infrastructure. Activity 1.3.1.4: Identify demand		
			pressures by monitoring and forecasting population and service density for infrastructure services for small towns.		
			Outcome 1.3.2: Improve the transparency and effectiveness of Community Service Obligations by redesigning them to include robust criteria, be cost-neutral and reflect community priorities.		
			Activity 1.3.2.3: Ensure assets are culturally responsive and will be well-utilised by undertaking service design for Community Service Obligations in partnership with Aboriginal and Torres Strait Islander communities.		

State and territory resilience agencies

■ Recommendation ■ Outcome ■ Activity

15+ years 0-5 years **5-10** years 10-15 years y Sector/Focus area Sustainability **Proposed support** and resilience Recommendation 2.1: Build community resilience to all hazards by considering systemic risks, interdependencies and vulnerabilities in infrastructure planning and decision-making. Activity 2.1.1.1: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities. Key

143

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Sustainability and resilience	Activity 2.1.2.1: Facilitate collaboration across sectors, layers of government, asset owners and operators, businesses and communities by creating formal governance arrangements, resourcing and a convening authority in line with the National Disaster Risk Reduction Framework.			
(~g)	Telecommunications and digital	Proposed lead			
}			Activity 7.1.3.4: Provide emergency services with more coverage and more capability for national public safety networks through a coordinated network expansion plan and capability strategy for improving coverage, capacity and the ability to transmit data.		
(~y)	Telecommunications and digital	Proposed support			
	-ana digital	Activity 7.1.1.2: Increase preparedness for dealing with outages caused by natural disasters with clearly defined plans to address power resilience and back-up power for telecommunications sites.			

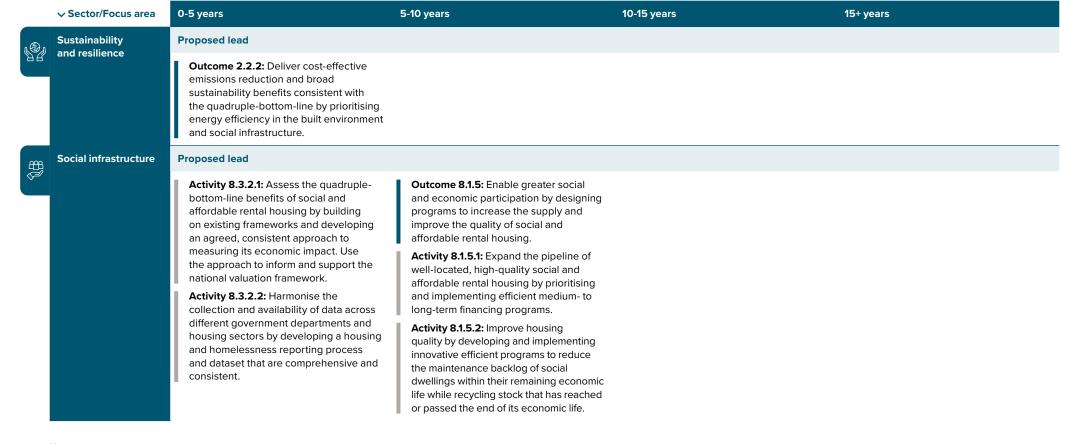
State and territory resilience departments

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(~g)	Telecommunications and digital	Proposed lead			
2	und digital	Outcome 7.1.3: Protect communities from emergencies by developing a comprehensive response and recovery plan, investing in tools, hardware and networks for use by state and territory governments, emergency services and industry.			

State and territory resources departments

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(0)	Place	Proposed support			
		Activity 1.4.1.2: Reduce investor uncertainty and improve decision-making by identifying, creating and publishing place and network-centric data, including assessing natural resource endowments.			

State and territory social housing providers



Key

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Social infrastructure		Activity 8.1.5.3: Meet the Closing the Gap target for 88% of Aboriginal and Torres Strait Islander peoples to be living in appropriately sized housing by 2031 by: • addressing maintenance and utility deficiencies for existing and future housing stock • renewing life-expired housing stock and developing new housing stock • addressing tenure issues • providing infrastructure to prepare for land development. Activity 8.1.5.4: Support community housing providers by continuing to develop and implement programs that build capacity and capability. Outcome 8.3.2: Support healthy and productive futures for all Australians by establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of social and affordable rental housing. Activity 8.3.2.3: Deliver improved social and affordable rental housing outcomes by adopting the quadruple-bottom-line		
			approach to prioritise investment.		
	Social infrastructure P	Proposed support			
				Recommendation 8.1: Support Australians to enjoy a healthier, safer, more connected and fulfilled quality of life by facilitating targeted investment in the right physical and digital social infrastructure.	

Local government

State and territory transport departments

0-5 years 10-15 years 15+ years y Sector/Focus area **5-10** years **Place Proposed support** Outcome 1.2.3: Support employment and population growth in Smaller Cities and Regional Centres by identifying and delivering enabling infrastructure. Activity 1.2.3.2: Identify transport options by reviewing current and future movement between Smaller Cities and Regional Centres and Fast-growing Cities. Activity 1.2.4.2: Support greater wholesale and retail competition by facilitating greater sharing of physical infrastructure and infrastructure corridors servicing regional centres. Activity 1.4.2.4: Reduce business costs by improving supply chain efficiency and reliability through the inclusion of end-to-end key supply chain strategies that connect productive regions with domestic markets and export gateways in the National Freight Strategy. Sustainability **Proposed support** and resilience Activity 2.2.2.6: Ensure the built environment's emissions reduction pathway is understood and coordinated by establishing collaborative sectoral leadership groups, similar to the Better Buildings Partnership or the Materials and Embodied Carbon Leaders' Alliance. Activity 2.2.3.3: Ensure national

Key

■ Recommendation ■ Outcome ■ Activity

purpose.

consistency and coordination by aligning state and territory strategies and actions

to the national strategy, including targets and timelines for transitioning all government fleet vehicles to electric vehicles whenever they are fit-for-

Transport

Proposed lead

Outcome 4.1.4: Increase the combined impact of existing transport funding allocations on safety, capacity, accessibility, connectivity and user experience outcomes by coordinating discrete maintenance and upgrade programs for roads, pathways and interchanges.

Activity 4.1.4.1: To ensure available funding delivers the greatest possible user and local economic activity benefits, identify and address multimodal transport network gaps under partnership programs that integrate periodic maintenance with the completion of minor missing links.

Activity 4.1.4.2: For urban areas, deliver quick wins for users and relieve pressures on congested roads by prioritising minor 'missing link' projects that upgrade walking and cycling networks and improve the accessibility and amenity of public transport interchanges.

Activity 4.1.5.2: Help councils to develop their capabilities in planning, prioritising and procuring local transport infrastructure and services that enable increased public transport and active travel use.

Activity 4.2.2.1: Improve connectivity in and around Smaller Cities and Regional Centres by investing in multimodal transport interchanges integrated with mixed land uses that are adjacent to the train station or (for locations without a train service) the central business district.

Activity 4.2.2.2: Improve public transport access to the heart of Smaller Cities and Regional Centres from their suburban and rural catchments by supporting the operation of flexible and demandresponsive services.

Activity 4.1.2.4: Apply nationally consistent performance standards by aligning the administrative classification of existing roads with their movement and place role.

Activity 4.1.5.3: Help councils to accelerate the delivery of public transport and active travel infrastructure early in the life of new urban areas by ensuring timely access to developer contributions, value-sharing mechanisms and/or low-cost borrowing facilities.

Activity 4.2.2.5: To improve the connectivity and economic performance of outer-urban areas, ensure regional rail service improvements improve accessibility outwards from Fast-growing Cities, and better connect outer urbanareas to their larger regional catchment as well as making established central business districts more accessible to Regional Centres.

Activity 4.3.1.3: Promote the emergence of sustainable travel patterns in new communities by facilitating the operation of bus services that offer an attractive and reliable alternative to the purchase of multiple cars by a single household.

Activity 4.3.2.4: To optimise door-to-door outcomes for users in lower-demand markets, ensure contracting models enable the integration of traditional and demand-responsive services under area-based public transport operating contracts.

Activity 4.3.3.7: Reduce dependence on car use for a growing population of petowners by developing and implementing performance requirements for public transport networks to meet the mobility needs of people travelling with companion animals, in addition to assistance animals.

Key

1

✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years

Transport

Activity 4.2.2.3: Promote active travel for tourism, recreation and local access in and around Smaller Cities, Regional Centres, Small Towns, Rural Communities and Remote Areas by investing in the adaptive reuse of disused railways and integrating these with other linear open space corridors and low-traffic rural roads to provide connected networks.

Activity 4.3.1.1: Pre-empt local congestion growth by identifying and delivering active and public transport networks around urban centres at the same time that they are designated as future mass transit station locations.

Outcome 4.3.2: Accelerate the trend towards people using their cars less in established urban areas and grow a sustainable patronage base for public transport use for all passenger journey needs by bringing forward traditional and demand-responsive road-based transport products as alternatives to car use for door-to-door suburban travel.

Activity 4.3.2.1: Meet existing and emerging travel demand during the project development phase for mass transit corridors within urban areas by ensuring frequent bus services are operational on parallel roads or preserved corridors (where these are available) before new mass transit projects are announced.

Activity 4.3.2.2: Support the timely deployment of transport products that offer a lower-impact alternative to motor vehicle use for urban passenger and freight transport by ensuring traffic control systems, kerbside parking regimes, multimodal interchanges, commuter car parking, bus stops and access pathways are designed to integrate with and support demand-responsive bus, minibus, rideshare, micromobility device sharing and/or microfreight operations, as required.

Activity 4.3.5.2: Facilitate the use of both privately owned and shared fleets of light electric vehicles and micromobility devices by ensuring standard and/or two-way charging facilities are installed at kerbside locations, and in public parking areas by the developers of off-street destinations such as shopping centres and long-term car parks.

Activity 4.4.2.8: Increase the perkilometre cost of using regional rail services between Fast-growing Cities and Smaller Cities or Regional Centres when these services are upgraded. Allocate the additional revenue directly to further service improvements.

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✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years

Transport

Outcome 4.3.4: Enable every person who wants to walk, ride a bike or use a micromobility device for a local journey or last-mile freight delivery to do so safely by completing continuous separated active travel networks.

Activity 4.3.4.2: Develop, implement and support councils' adoption of standardised designs for separated facilities that use temporary barriers or other quickly installed features. These will widen the choice of simplified, user-friendly, safe, lower-cost and cost-effective infrastructure solutions and accelerate the completion of gap-free networks.

Activity 4.3.4.3: Support councils' installation and management of small local freight depots on the edge of central business districts. These will enable the use of low-impact microfreight modes for last-mile deliveries in congested areas.

Activity 4.4.2.2: Support the efficient operation of urban transport networks in Fast-growing Cities by developing and implementing policy frameworks that impose an additional price on vehicle parking and use in areas affected by peak period congestion. Ensure revenues support the provision of alternative travel choices.

Activity 4.4.2.5: Review and reconfigure city public transport networks to optimise the number of users who can access centre-based jobs and services within a 30-minute or better performance standard.

Activity 4.4.2.6: Review and adjust public transport fares to ensure they reflect the quality of travel experience provided and promote efficient network use. To make fares equitable, reduce the cost of journeys requiring:

Key

y Sector/Focus area

15+ years

Index

Transport

0-5 years 5-10 years 10-15 years

- modal transfer, relative to 'single-seat' journeys
- the use of on-road public transport services, relative to rail
- the use of non-peak relative to peak services.

Activity 4.4.2.7: Develop and implement strategies to upgrade legacy rail networks in Fast-growing Cities and Smaller Cities by increasing revenues from non-transport activities and development outcomes that benefit from proximity to urban rail services.

Transport

Proposed support

Activity 4.1.2.1: Enable the achievement of consistent and predictable results from transport expenditure by developing a nationally uniform movement and place framework and associated performance standards for the function of links in a multimodal transport network hierarchy.

- Ensure the movement and place framework aligns with the National Service Level Standards Framework for Roads.
- Specify performance standards in the Australian Transport Assessment and Planning Guidelines.

Activity 4.1.2.2: Ensure that road authorities select, design, manage and operate road projects in line with their function under a uniform movement and place framework by updating the *Guide to Traffic Management* to incorporate nationally consistent performance standards.

Recommendation 4.1: Maximise the overall benefits of transport investments by aligning transport programs with place-based objectives.

Outcome 4.1.1: Maximise the placeshaping impacts of transport investment by linking transport infrastructure funding decisions to published population and land use objectives.

Activity 4.1.1.2: Prepare place-based visions that identify credible population and land use scenarios. Incorporate measurable objectives for proposed transport projects to contribute to the sustainability of community and user outcomes for a defined area.

Outcome 4.1.2: Ensure the most costeffective mobility and land use outcomes from transport expenditure by tying transport budgets to the achievement of specified movement and place performance standards.

Outcome 4.1.3: Bring forward the benefits of transport investments, in a context of uncertain and changing user needs, by promoting and facilitating the incremental delivery of transport services, corridors and networks as separable stages.

Outcome 4.2.2: Support the growth and diversification of Smaller Cities and Regional Centres by investing in their local accessibility and connectivity and progressively upgrading transport connections to Fast-growing Cities.

Activity 4.2.2.7: Maximise economic, productivity and safety benefits from governments' fast rail, faster rail and high-speed rail investments. Invest in the timely preservation of surface corridors. Ensure the cross-border interoperability of projects is advanced in different locations.

Recommendation 4.4: Ensure the price paid for mobility supports the efficient movement of people and goods by leading the transition to a nationally coordinated and multimodal transport network pricing regime.

Key

Transport

Activity 4.1.3.1: Ensure the economic analysis of proposed transport investments, and other infrastructure decision-making processes, take account of significant shifts in user preferences and travel behaviours, by updating the Australian Transport Assessment and Planning Guidelines to:

- reflect changes to settlement and working patterns catalysed by the COVID-19 pandemic
- consider the impacts of new transport technologies and business models (including Mobility as a Service) on how people travel and freight is transported
- facilitate incremental investment in transport services, corridors and networks.

Activity 4.1.5.1: Where required, bring forward the completion of cross-boundary local transport networks that meet users' short journey needs and prioritise funding support under place-based agreements for partnerships of two or more councils working together.

Activity 4.3.1.2: Maximise the accessibility of new mass transit services by active travel and local public transport and reduce reliance on the provision of commuter car parking by requiring mass transit corridor proposals to incorporate a first- and last-mile service delivery plan that addresses:

- active travel modes
- bus priority access
- demand-responsive services
- Mobility as a Service subscription models
- multimodal interchanges connecting first- and last-mile choices to mass transit services.

Activity 4.1.3.3: Support incremental and demand-led transport network development, including the staged introduction of different public transport modes to cost-effectively grow the patronage base for these services, by executing new and updated Australian Government funding instruments with state and territory jurisdictions that commit to a multi-year staged funding approach. Take this approach under Federation Funding Agreements and place-based agreements.

Outcome 4.1.5: Maximise the collective benefits from local governments' transport investments by reorienting funding programs towards specified end-to-end journey outcomes.

Recommendation 4.2: Improve the liveability and economic sustainability of regional, rural and remote areas by developing, maintaining and operating integrated freight and passenger transport networks that meet end-to-end access needs.

Outcome 4.2.1: Maintain reliable access for supply chains under all conditions by coordinating technological, operational and infrastructure improvements delivered under the *National Freight and Supply Chain Strategy*.

Activity 4.2.1.2: Deliver local safety, environmental and economic benefits for regional, rural and remote communities by identifying and prioritising freight intermodal projects that promote shifting from road to Inland Rail and other freight rail services for targeted commodities.

∨ Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Activity 4.3.3.2: Increase the transparency of jurisdictional actions to address the travel needs of people with disability by reporting accessibility outcomes annually using nationally consistent and user-oriented measures. Provide information on changes in door-to-door accessibility outcomes as experienced by different groups of users over the reporting period and specify user-oriented improvements for the coming two years.

Activity 4.3.3.4: Ensure all jurisdictionsí mobility service support programs collectively provide efficient coverage for people with disability by ensuring mobility service providers' alignment with a national accreditation framework and empowering program participants to purchase services from accredited rideshare operators through a single point of access.

Activity 4.3.3.5: Invest in the capacity of operators to provide demand-responsive and rideshare services to improve access for people with disability in Small Towns, Rural Communities and Remote Areas where there is not the collective density of demand to support commercial operations.

Activity 4.3.3.6: Address the needs of older Australians, women, children and people who speak or read a language other than English by developing nationally consistent performance requirements for transport services that meet diverse user needs for safe, convenient and easy-to-navigate travel. Only invest in transport proposals that include a plan to meet these requirements.

Activity 4.2.1.3: Develop and implement place-based action plans for Fast-growing City port and airport precincts, through government, industry and community partnerships, that align with the National Urban Freight Planning Principles. Improve the efficiency of export- and tourismoriented corridors by implementing actions that reduce friction between freight operations and dense land uses.

Activity 4.2.2.4: Strengthen the connection of Smaller Cities and Regional Centres to Fast-growing Cities by progressively upgrading existing regional passenger rail services. Make services more comfortable and reliable, and grow the patronage base for public transport, by investing in customer experience improvements such as new rolling stock and in track projects that maximise the separation of freight and passenger movements.

Outcome 4.2.3: Ensure equitable access to essential services for Small Towns, Rural Communities and Remote Areas by coordinating passenger transport investments and operations.

Activity 4.2.3.2: Align spending and service delivery across transport modes with performance standards for Small Town, Rural Community and Remote Area access. Enable the greatest possible proportion of the population of these communities to access centre-based services cost-effectively within a dayreturn or other reasonable specified timeframe.

Activity 4.2.3.3: Ensure long-distance passenger travel needs are serviced cost-effectively and in line with access performance standards. Do this by integrating regional aviation infrastructure and services programs with land transport services under a multimodal hub-and-spoke network model.

Key

∨ Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years

Transport

Activity 4.3.4.1: Ensure active travel education for road users of all abilities and ages has an elevated profile in the updated *National Road Safety Strategy*. Address the needs of people walking, bike-riding and using micromobility devices, including e-bikes and e-scooters.

Activity 4.3.4.4: Ensure technical resources support the prioritisation of investments that enable increased travel on foot, by bicycle or wheelchair, or using a micromobility device. Update the *Guide to Road Design* to include lower-cost and cost-effective active travel facilities and promote access to best practice data collection and modelling for active travel projects through updated *Australian Transport Assessment and Planning Guidelines*.

Activity 4.3.4.5: Optimise access for pedestrians, bike-riders, microfreight operators and people using a wheelchair or micromobility device by facilitating the revision of the *Australian Road Rules* to remove regulatory anomalies or obstacles to these outcomes in all jurisdictions:

- the use of lower-cost and cost-effective active travel infrastructure designs
- footpath access for micromobility devices.

Activity 4.3.4.6: Provide an improved and safer active travel experience ahead of the completion of active travel infrastructure improvements by reducing the speed limit on local roads that are identified as links in cycling and micromobility networks, where the existing speed limit is greater than 40 km/h.

Outcome 4.4.1: Meet community and stakeholder expectations for transparency and fairness by establishing a nationally consistent governance framework for transport network pricing reforms.

Recommendation 4.3: Free people from relying on driving for door-to-door mobility by ensuring urban transport services are managed as an integrated, inclusive, user-responsive and smart transport system.

Outcome 4.3.1: Relieve congestion growth at the start of the urban development lifecycle by making active and public transport first and last mile networks the first transport projects completed in the local catchment of emerging and new centres.

Activity 4.3.1.4: Enable the use of innovative funding mechanisms such as developer contributions to meet some of the operating costs of frequent scheduled or demand-responsive services during the first three to five years of people settling in greenfield urban areas.

Activity 4.3.2.3: Enable all jurisdictions to support efficient Mobility as a Service operations that provide users with seamless journey outcomes by developing and implementing a coordinated national position that addresses common definitions, data standards and system specifications.

Outcome 4.3.3: Ensure all people in Australia enjoy equivalent accessibility outcomes by investing in transport infrastructure and services in line with the Disability Discrimination Act 1992 (Cth), Disability Standards for Accessible Public Transport 2002 and broad objectives for universal access to services.

Outcome 4.3.5: Ensure all road users can experience the benefits of world's best practice transport technologies by establishing a single national market for electric, connected and autonomous vehicles.

Key

Transport

Activity 4.4.1.1: Increase confidence in the fairness of the transport network pricing reform process by specifying the minimum level of protection that will be in place during the reform implementation period for users who are at risk of disadvantage for financial or geographic reasons. Reinforce this by nominating the independent agency that will monitor the rollout of user protections in each jurisdiction.

Activity 4.4.1.2: Increase confidence in the user benefits of transport network pricing reforms by developing and seeking National Cabinet endorsement for hypothecation principles. Under these principles, road and public transport revenues will fund integrated and multimodal programs that deliver sustainable mobility outcomes based on projected user needs.

Activity 4.4.1.3: Demonstrate a collaborative approach to the implementation of transport network pricing reforms by developing and seeking National Cabinet endorsement for the principles that jurisdictions will follow when taking the lead in implementing reforms. These will include a commitment to timely information sharing that facilitates the cross-jurisdictional codelivery of reforms.

Activity 4.4.2.1: Develop state and territory capability to administer an equitable and efficient user-pays charging regime for all vehicle types. Adopt and work towards this objective through the implementation of Heavy Vehicle Road Reform by participating jurisdictions.

Activity 4.4.2.3: Develop a national distance-based road user charging regime for all types of vehicles. Ensure the design of the regime addresses risks to privacy and cyber security.

Activity 4.3.5.5: Facilitate the uptake of new transport technologies by developing nationally uniform standards for the design and operation of road and digital assets used by Level 4 and 5 connected and autonomous vehicles. For all new road and major maintenance projects, immediately adopt and implement standards that offer 'no-regrets' benefits for existing and Level 3 vehicle operations, including line marking and digital speed zone standards.

Activity 4.3.5.6: Ensure the data-sharing framework and associated digital infrastructure for gathering and using connected and autonomous vehiclegenerated data are designed to support the separate administration of a national distance-based road user charging regime. Also ensure they align with privacy and cyber security requirements.

Outcome 4.4.2: Ensure users pay for the true costs of mobility by implementing transport network pricing reforms.

Activity 4.4.2.4: Maintain at least the level of revenue received from current road user taxes and charges by implementing a national distance-based road user charging regime with associated changes to the fixed costs of vehicle ownership.

∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Telecommunications and digital	Proposed support			
	Activity 7.3.1.1: Enable maximum contiguous coverage of Australia's emergent 5G networks by creating more affordable ways for network operators to locate 5G small cells on public assets (such as street furniture, public buildings and road trenches) in a way that resembles the arrangements made for other major utilities, with nominal or zero rental costs and wider facility-sharing of public infrastructure.			
Social infrastructure	Proposed support Activity 8.1.3.1: Enable more equitable access to early childhood education centres by facilitating cross-sectorial partnerships between centre operators and planning and transport departments to support better access and transport connectivity, especially in the planning of new centres.			

State and territory treasuries

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Q	Place	Proposed lead			
\succeq		Activity 1.1.4.2: Ensure business case development incorporates a place-based approach when a project will create or cause material impacts on adjacent infrastructure.	Outcome 1.1.4: Ensure city-shaping infrastructure projects deliver value for money and amenity by applying place-based considerations to funding assessments. Activity 1.1.4.1: Support a coordinated approach to developing Fast-growing Cities by requiring funding applications to demonstrate their strategic fit with the vision and priorities identified at the local, state and territory and federal level.		



Sustainability and resilience

Proposed lead

Activity 2.2.1.3: Ensure consistent application of the quadruple-bottom-line at the strategic proposal development phase by embedding sustainability guidelines in investment frameworks and guidance materials. These should include considering sustainability when identifying problems, developing options and undertaking economic analysis.

Activity 2.3.1.3: Increase transparency and maintain social licence by reporting on activities as part of Environmental, Social and Governance and Corporate Social Responsibly reporting processes using existing standards and measures.

Activity 2.3.4.3: Meet infrastructure costs while maintaining community support by developing transparent, hypothecated levies on adjacent land and infrastructure service catchments, such as the Western Australian Government's Metropolitan Region Improvement Tax.



Proposed support

Activity 2.1.3.5: Ensure existing and future asset planning considers climate risk by conducting climate adaptation risk assessments, developing strategic planning and policy decisions, and designing and approving future assets using climate scenarios, tools and quidance.

Outcome 2.1.4: Ensure infrastructure decisions consider resilience through clear and harmonised guidance on how projects can address risks and value resilience.

Activity 2.3.3.3: Encourage national consistency and cross-sector coordination by developing a national report highlighting best practice, including case studies based on publicly released data.

Activity 2.1.3.6: Ensure climate risk is incorporated into infrastructure projects and services by mandating the consideration of climate risk in project assessment.



2021 Australian Infrastructure Plan 2021 Implementation Pathway 0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Sustainability Activity 2.1.4.1: Ensure infrastructure and resilience assessment frameworks, and associated tools and guidance, including the Australian Transport Assessment and Planning Guidelines, consider risks and resilience by incorporating future scenarios and hazard information. Outcome 2.2.1: Achieve consistency and shared ownership through embedding the quadruple-bottom-line into infrastructure decision-making frameworks. Activity 2.2.1.1: Ensure consistent understanding by adopting the quadruple-bottom-line definition of sustainability. Activity 2.2.1.4: Facilitate national and cross-sectoral consistency by using quadruple-bottom-line guidelines to develop complementary, sector-specific sustainability principles and frameworks. Activity 2.2.1.5: Support common approaches to assessment, cross-sector collaboration, shared responsibility and best practice, and develop connections and networks, by forming a crossjurisdictional sustainability group. Recommendation 2.3: Build community

Recommendation 2.3: Build community trust in infrastructure decision-making and institutions by ensuring infrastructure decisions are transparent, and reflect place-based community needs and preferences.

Activity 2.3.1.2: Ensure consideration of the quadruple-bottom-line by adding engagement standards across assurance process stages.

Outcome 2.3.3: Build community trust by providing transparent, timely and clear information about infrastructure decision-making and post completion assessments.

✓ Sector/Focus area O-5 years 5-10 years 10-15 years 15+ years
 Industry Proposed sponsor
 Recommendation 3.2b: Reduce uncertainty for industry and improve value for money by improving having a coordinated project pipeline



Industry

Proposed lead

supply chain.

Outcome 3.1.1: Improve industry capacity and capability by prioritising procurement and portfolio management and increasing pipeline transparency, certainty and confidence.

engagement with industry and the

Activity 3.1.1.1: Ensure active management of project procurement within the pipeline and help industry to actively manage its capacity and risk exposure by strengthening portfolio management capabilities within the public service.

Activity 3.1.1.2: Develop a jurisdictionwide, cross-sectoral infrastructure project pipeline that actively tracks progress of projects throughout their lifecycle while considering critical inputs, constraints and risks that influence their deliverability.

Activity 3.1.1.3: Provide annual jurisdiction-wide pipeline briefings that provide industry with a clear macro-level view of expected procurements and act as a forum to provide feedback on pipeline risk.

Activity 3.1.3.3: Embed the infrastructure sector culture commitment through existing social procurement frameworks and pre-qualification schemes.

Activity 3.2a.1.3: Improve value for money and reduce risk by prioritising resources and time to develop business cases, create reference designs and undertake comprehensive due diligence processes.

Activity 3.1.2.1: Develop and implement infrastructure productivity roadmaps supported by adopting modern methods of construction, including design reuse, standardised design elements, earlier supply chain involvement, digitalisation, modularisation, prefabrication, offsite construction, frame agreements and bulk procurement.

with a mature approach to procurement

and risk management.

Outcome 3.3.3: Embed a digital by default approach to infrastructure delivery and operations by significantly scaling up related capabilities, resources and activities.

Activity 3.3.3.1: Increase digital adoption in infrastructure and develop jurisdiction-wide digital twins of the built environment by creating or strengthening related capabilities and cross-departmental functions.

Activity 3.3.2: Embed a digital by default approach by creating and implementing a smart infrastructure policy in each jurisdiction that uses technology and data to drive economic success and social inclusion.



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✓ Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Industry

Outcome 3.2a.2: Improve infrastructure value for money by applying whole-of-life cost, scheduling and risk management best practices, processes and systems.

Outcome 3.2b.1: Reduce risk and improve value for money by using common and best practice commercial arrangements, standard contract forms and delivery approaches to infrastructure.

Activity 3.2b.1.1: Unlock market equality and lower risk by utilising more collaborative commercial models that facilitate value for money and smaller engagements directly with contractors and consultants.

Activity 3.2b.1.6: Maintain the financial health of the supply chain by reviewing payment certainty and payment security legislation in light of current practice. Focus on compliance with requirements and consider whether the scope of these frameworks sufficiently addresses poor practices.

Industry

Proposed support

Activity 3.1.1.1: Ensure active management of project procurement within the pipeline and help industry to actively manage its capacity and risk exposure by strengthening portfolio management capabilities within the public service.

Activity 3.1.1.4: Ensure future infrastructure investment and project delivery commitments are regularly reviewed and considered against the jurisdiction-wide, cross-sectoral infrastructure project pipeline and industry capacity forecasts.

Outcome 3.1.3: Ensure the industry is a sector of choice for employees and can meet current and future workforce demands by introducing cultural reform that embraces diversity and inclusion.

Outcome 3.1.2: Create a step change in infrastructure productivity by industrialising the sector.

Activity 3.4.2.3: Safeguard community interests and taxpayer funding by ensuring all proposed investments demonstrate an assessment of non-build solutions.

Key

0-5 years y Sector/Focus area 5-10 years 10-15 years



Industry

Activity 3.2b.1.2: Apply appropriate consistency and improve certainty in procurement by developing a procurement decision-making tool to more effectively understand and allocate scope in line with project fundamentals.

Activity 3.2b.1.3: Improve consistency, certainty and value for money by developing and implementing a new nationally consistent contract suite to support a spectrum of procurement models.

Activity 3.2b.1.5: Increase competition in the industry by developing guidelines and training programs on market engagement best practices that are accessible to all project practitioners. Cover topics such as multi-stage bidding, fair risk appropriation processes, bidding requirements at each gate, receiving industry feedback, using nationally consistent contract forms and the supporting procurement



Proposed support

decision-making tool.

Activity 4.4.1.2: Increase confidence in the user benefits of transport network pricing reforms by developing and seeking National Cabinet endorsement for hypothecation principles. Under these principles, road and public transport revenues will fund integrated and multimodal programs that deliver sustainable mobility outcomes based on projected user needs.

Recommendation 4.4: Ensure the price paid for mobility supports the efficient movement of people and goods by leading the transition to a nationally coordinated and multimodal transport network pricing regime.



Proposed lead

Outcome 8.2.1: Allow community access outside core operating hours by developing shared-use plans for new and upgraded social infrastructure such as health facilities, schools, VET, TAFE, universities and sporting facilities.

Key

2021 Australian Infrastructure Plan 2021 Implementation Pathway 0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Social infrastructure Activity 8.2.1.2: Promote shared use of social infrastructure by developing incentives and measures that support agencies to implement shared-use arrangements and place-based, collaborative planning and delivery. Activity 8.2.1.6: Support third-party use by establishing insurance and security arrangements, payment systems and associated services. Activity 8.2.1.7: Enable a shift in agencies adopting shared-use models by including principles for maximising shared use and associated community outcomes in business case policies. Outcome 8.2.2: Increase economic and social benefits by implementing strategic planning governance structures for health and education precincts, and innovative procurement and delivery models. Specialised agencies should also be established to deliver major social infrastructure capital projects.

Activity 8.2.2.2: Yield the benefits of innovation districts by adopting a precinct maturity model to:

- · assess the maturity of existing health and education precincts
- prioritise precincts to move along the precinct maturity pathway
- develop investment attraction strategies, master plans and incentives to attract aligned industry sectors into precincts
- · include social and affordable rental housing in innovation districts.

Activity 8.2.2.3: Promote and accommodate innovative approaches to procuring social infrastructure delivery services, including updating existing Public Private Partnership guidelines and models.

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Social infrastructure Outcome 8.3.3: Drive economic growth and improve social cohesion and liveability by establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of arts, culture, green, blue and recreational infrastructure. Social infrastructure **Proposed support** Activity 8.2.1.5: Enable the use of Activity 8.1.3.3: Extend the longevity of Activity 8.1.4.1: Provide contemporary infrastructure during crises by identifying existing school infrastructure through education facilities by investing in VET facilities that are appropriately and funding fit-for-purpose facilities long-term asset management plans to that would be available for rapid multiprogressively address maintenance and located, integrated into the local area, purposing and shared use at these times. refurbishment needs. fit-for-purpose and digitally enabled, and include contemporary industry Activity 8.3.2.1: Assess the quadruple-Recommendation 8.2: Maximise social equipment. bottom-line benefits of social and and economic community benefits affordable rental housing by building by supporting shared use of social on existing frameworks and developing infrastructure through future agreements an agreed, consistent approach to and capital funding programs prioritising measuring its economic impact. Use the shared use of facilities. approach to inform and support the Activity 8.2.1.4: Enable place-centric national valuation framework. TAFE developments by developing Activity 8.3.2.2: Harmonise the principles to support this approach, collection and availability of data across including collaborative and shared-use different government departments and opportunities. Review existing TAFE housing sectors by developing a housing assets against these principles and and homelessness reporting process migrate new or refurbished assets where and dataset that are comprehensive and there are benefits. consistent. Activity 8.3.1.3: Enhance investment decisions by continuously improving and updating the framework by sharing information and best practice. Support the development of evaluation approaches for specific social infrastructure sectors to fill out the framework.

Waste

Proposed support

Outcome 9.2.3: Increase landfill diversion by developing a waste levy pricing strategy and national levy protocols.

Key

∨ Sector/Focus area 0-5 years **5-10** years 10-15 years 15+ years Waste Activity 9.2.3.1: Address cross-border waste issues by developing national levy protocols that define which wastes should be levied, levy liabilities, levy administration and maximum transportation limits. Activity 9.2.3.2: Increase resource recovery by introducing a national levy pricing strategy to minimise interstate levy differences.

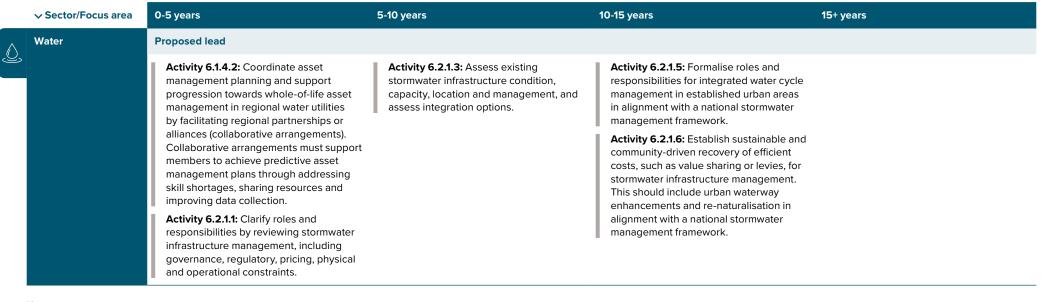
State and territory waste departments

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years	
		Proposed lead				
		Activity 9.1.5.3: Account for local factors such as geography, climate and storage when developing place-based guidance on FOGO implementation for local government. Activity 9.1.5.6: Develop end markets for reprocessed organics by developing a FOGO recovery strategy that tests new uses for recovered materials. Activity 9.1.5.7: Improve distribution	Outcome 9.1.5: Reduce organic waste to landfill through mandating local council food organics garden organics (FOGO) collection services. Activity 9.1.5.5: Reduce mixing of waste by commercial and industrial operators by creating an opt-in program to separate organic waste into a different stream.			
		of FOGO material to regional areas for further processing and use by consolidating collected FOGO material.				
		Activity 9.1.5.8: Avoid food waste across the supply chain by working with industry to connect with alternate markets for the quick and direct sale and redistribution of FOGO.				
		Activity 9.2.2.3: Reduce contamination of material streams through correct disposal and improved source separation by standardising household bins for each material type within states and territories.				

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0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years Waste **Proposed support** Outcome 9.1.2: Reduce the impact Outcome 9.2.2: Create a highof plastic on the environment by quality recycling system with lower implementing the National Plastics Plan. processing costs by developing common benchmarks for each material stream, Activity 9.1.2.1: Increase plastic consolidating services and targeting recycling by providing guidance on infrastructure investment. aligning requirements and timeframes between state and territory governments and industries. Activity 9.2.1.2: Improve decision-making and investor confidence by implementing an integrated data strategy that leverages agreed definitions. Activity 9.2.2.2: Create clarity for consumers and industry by implementing common benchmarks between states and territories for the collection, transportation and sorting of each material stream.

State and territory water departments





Water

Proposed support

Activity 6.1.1.1: Ensure a consistent national approach to water security by developing and committing to a renewed National Water Initiative that incorporates a national water security framework.

Activity 6.1.1.2: Ensure long-term water security challenges and risks are understood and opportunities identified on a nationally consistent basis by developing a national water security framework. A national water security framework must include:

- a definition of 'water security' within a whole-of-system context (including urban and rural systems), with reference to safety, quality and quantity and for meeting users' needs over time on an economic, environmental, social (including cultural) and governance basis.
- a method to measure the water security of a place or catchment over time and incorporate best available demographic, scientific and economic data. This method should also be capable of identifying water deficits or surpluses.

Activity 6.1.1.3: Improve reliability of water accounting within the total system by maintaining registers of all water entitlements and allocations aligned to the renewed National Water Initiative. Mineral and petroleum industries should also be incorporated within entitlement and planning arrangements under a renewed National Water Initiative.

Activity 6.1.1.5: Ensure ongoing commitment and application of the national water security framework by assigning independent ownership of the National Water Initiative, including the national water security framework.

Outcome 6.1.1: Achieve a common approach to water security planning by developing a new National Water Initiative incorporating a national water security framework. A national water security framework must include an agreed definition of 'water security' within a whole-of-system context and provide an approach to assessing risks and opportunities.

Activity 6.1.1.4: Meet the needs of water users into the future and ensure long-term water security objectives are considered in strategic decision-making. This includes:

- incorporating the national water security framework into business case development for state, territory and nationally significant water infrastructure proposals.
- incorporating the national water security framework into existing national infrastructure investment assessment frameworks, including the Infrastructure Australia Assessment Framework and the National Water Grid Investment Framework.

Outcome 6.1.3: Meet users' long-term water needs by ensuring that all options be fully evaluated in infrastructure planning.

Activity 6.1.3.2: Ensure water infrastructure decisions meet users' long-term needs through removing community perception barriers to the use of alternative water sources, particularly recycled water for drinking, by:

 publicising a position of support for alternative water sources, especially recycled water for drinking Recommendation 6.1: Secure longterm water supply for urban, rural, environmental and cultural users by developing a national approach to water security, including independent national ownership.

Outcome 6.2.1: Provide enhanced community benefits, including water security, public health, environmental health, and urban resilience by integrating management of water infrastructure throughout the whole water cycle.



Water

Activity 6.1.2.2: Support community and businesses to embed a water-wise culture. This includes ongoing public education to improve water literacy and rebates on water-efficient products. Regulatory bodies must implement pricing structures that signal the full value of water and an economic water conservation method backed by community engagement.

Activity 6.1.3.1: Strengthen resilience of water supply infrastructure and meet outcomes for users' long-terms needs by:

- removing policies that unnecessarily restrict water supply options, including bans that prevent suitably treated wastewater or stormwater from augmenting potable water supplies, and bans that prevent the urban use of rural water
- removing mandates, targets and subsidies for the use of certain types of water, including recycled water
- removing regulatory barriers that discourage recycled water investments
- ensuring that water infrastructure planning decisions consider all options for expanding water supply fully and transparently. This includes determining the optimal mix of water supply options with consideration given to the national water security framework.

Outcome 6.1.4: Improve the long-term reliability of water infrastructure to meet future needs and expectations by advancing whole-of-life asset management and preventative maintenance.

Activity 6.1.4.1: Support maturity for water service providers in asset management and long-term planning by coordinating a national centre of excellence for resource sharing, and coordination of partnerships.

- running public education and engagement campaigns on the benefits and risks of recycled water for drinking, including how water travels through the water cycle. Public education campaigning must be based on recognised positive messaging and avoid language or images that might cause stigma or negative reactions
- partnering with influential community representatives or businesses to champion the use of recycled water for drinking.

Activity 6.2.1.2: Establish a national stormwater management framework that includes:

- objectives and principles for total water cycle management, including urban amenity and community and waterway health
- guidelines on roles and responsibilities for planning, operation, and maintenance
- cost recovery mechanisms.

Activity 6.2.1.7: Embed a whole-of-water cycle management approach into long-term, large scale (city or catchment – including both metropolitan and regional settings) urban planning by defining and implementing community driven outcomes for public health, environmental (including ecological), health, amenity and urban resilience:

- Define clear community-driven objectives for water cycle management over the long term.
- Align long-term growth planning to community objectives.
- Ensure long-term growth plans recognise the value of water within the entire water cycle and identify dependencies of urban growth on water by incorporating best available data and water modelling.
- Identify water security risks and growth opportunities by applying the national water security framework.

Key

VSector/Focus area

O-5 years

5-10 years

10-15 years

15+ years

Activity 6.2.2.1: Deliver secure, sustainable water and wastewater services to remote and isolated communities by implementing a funding pathway that considers whole-of-life-cycle infrastructure and whole-of-water-cycle services.



Local government



Local governments

 ✓ Sector/Focus area
 0-5 years
 5-10 years
 10-15 years
 15+ years

 Place
 Proposed lead

 Activity 1.1.1.4: Harmonise local character

Activity 1.1.1.4: Harmonise local character and neighbourhood plans within each

account for local identity and assets

- guide timing and scope of current and proposed projects
- embed cultural considerations in planning, based on local demographics
- address disparities in infrastructure provision within and across Fastgrowing Cities
- address community resilience, including behaviour changes associated with the COVID-19 pandemic.

Activity 1.1.3.6: Identify local priorities and support efficient place-based planning and delivery by using community-led governance groups.

Proposed support

city's vision to:

Outcome 1.1.1: Improve cooperation between all levels of government by jointly developing a clear vision for each Fast-growing City that underpins land use, infrastructure and planning strategies.

Activity 1.1.1: Build buy-in for each city's vision through industry and community engagement.

Activity 1.1.3.1: Meet community needs by improving physical and digital connectivity through place-based approaches to infrastructure planning and governance.

Activity 1.1.3.2: Support the vision for a city by developing planning strategies focused on physical and digital connectivity that link places within cities, and their satellite areas.

Outcome 1.1.3: Maximise the impact of city-shaping infrastructure delivery and operations through collaborative placebased governance models.

Outcome 1.1.5: Provide greater residential choice by planning and delivering high-quality medium-density residential areas alongside well-sequenced infrastructure investment.

Activity 1.1.5.4: Explicitly consider provision of affordable housing when planning medium density residential areas.

Activity 1.1.5.5: Effectively provide for infrastructure enhancement in brownfield communities undergoing step changes in densification by developing a transparent framework for population and activity levels, value-sharing funding mechanisms and associated infrastructure investment.

Key

Place

2

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Place Activity 1.1.3.3: Connect assets to communities by defining a spectrum of appropriate governance models for places of different scale. Activity 1.1.3.4: Prioritise industry specialisations, innovation precincts and activity centres through infrastructure distribution decisions. Activity 1.1.3.5: Share best practice in planning and deliver place-based projects between state, territory and local governments. Activity 1.1.5.1: Support amenity and infrastructure access for communities undergoing densification by developing local character plans to define expectations for the size and scale of infrastructure that will be provided. Activity 1.1.5.2: Encourage a diversity of housing forms by revising planning codes



Sustainability and resilience



Activity 2.1.2.7: Ensure a systemic approach to resilience is established and considered by place-based resilience bodies, such as Resilience Sydney.

to embrace a diversity of housing options, including explicitly supporting medium-

government decision-making by linking local character definitions to planning codes for medium-density forms.



Sustainability and resilience

Proposed support

Proposed lead

density development.

Activity 1.1.5.3: Support local

Recommendation 2.1: Build community resilience to all hazards by considering systemic risks, interdependencies and vulnerabilities in infrastructure planning and decision-making.

Activity 2.1.2.6: Better predict and mitigate major hazards and risks with a national risk and disaster probability model for all hazards.

Key

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✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years



Activity 2.1.1.: Improve strategic oversight and coordination of resilience outcomes across sectors and jurisdictions by establishing nationally consistent scenarios and common policy priorities.

Activity 2.1.2.1: Facilitate collaboration across sectors, layers of government, asset owners and operators, businesses and communities by creating formal governance arrangements, resourcing and a convening authority in line with the National Disaster Risk Reduction Framework.

Activity 2.1.2.2: Enable timely information exchange and build accountability by expanding participants to the Trusted Information Sharing Network, sharing information and best practice and developing connections and ongoing relationships.

Activity 2.1.2.3: Inform decisions on risk reduction options and approaches, and enable data driven decision-making by standardising and sharing data about disasters, hazards and asset and network independency.

Activity 2.1.2.4: Improve place-based and network-based systemic risk assessment and decision-making by producing local hazard maps for asset owners and operators and communities.

Activity 2.1.2.5: Inform decisions to increase the resilience of a place, network or asset across Australia by identifying cascading systemic failures, interdependencies and interconnections and local vulnerability of all sectors' assets and networks.

Activity 2.1.3.4: Embed climate risk considerations into land use and infrastructure planning and decision-making by developing a training program, tools and guidance materials.

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Sustainability Activity 2.3.2.1: Align decision-making and resilience with community needs and preferences by incorporating decision-makers, communities, infrastructure owners and



Transport

Proposed lead

Activity 4.3.4.6: Provide an improved and safer active travel experience ahead of the completion of active travel infrastructure improvements by reducing the speed limit on local roads that are identified as links in cycling and micromobility networks, where the existing speed limit is greater than 40 km/h.

operators into early strategic planning stages. Collect information by conducting audits, assessing place-based community data and publicly releasing findings.

> Activity 4.3.1.5: Improve the attractiveness of public transport compared to car use in new release areas by ensuring the design and construction sequencing of road networks enable direct, frequent and efficient bus routes and services between separate subdivisions.



Proposed support

Outcome 4.1.4: Increase the combined impact of existing transport funding allocations on safety, capacity, accessibility, connectivity and user experience outcomes by coordinating discrete maintenance and upgrade programs for roads, pathways and interchanges.

Activity 4.1.4.1: To ensure available funding delivers the greatest possible user and local economic activity benefits, identify and address multimodal transport network gaps under partnership programs that integrate periodic maintenance with the completion of minor missing links.

Activity 4.1.4.2: For urban areas, deliver quick wins for users and relieve pressures on congested roads by prioritising minor 'missing link' projects that upgrade walking and cycling networks and improve the accessibility and amenity of public transport interchanges.

Recommendation 4.1: Maximise the overall benefits of transport investments by aligning transport programs with place-based objectives.

Outcome 4.1.2: Ensure the most costeffective mobility and land use outcomes from transport expenditure by tying transport budgets to the achievement of specified movement and place performance standards.

Activity 4.1.2.4: Apply nationally consistent performance standards by aligning the administrative classification of existing roads with their movement and place role.

Outcome 4.1.5: Maximise the collective benefits from local governments' transport investments by reorienting funding programs towards specified endto-end journey outcomes.

Outcome 4.2.2: Support the growth and diversification of Smaller Cities and Regional Centres by investing in their local accessibility and connectivity and progressively upgrading transport connections to Fast-growing Cities.



Transport

Activity 4.1.5.1: Where required, bring forward the completion of cross-boundary local transport networks that meet users' short journey needs and prioritise funding support under place-based agreements for partnerships of two or more councils working together.

Activity 4.1.5.2: Help councils to develop their capabilities in planning, prioritising and procuring local transport infrastructure and services that enable increased public transport and active travel use.

Activity 4.2.2.1: Improve connectivity in and around Smaller Cities and Regional Centres by investing in multimodal transport interchanges integrated with mixed land uses that are adjacent to the train station or (for locations without a train service) the central business district.

Activity 4.2.2.2: Improve public transport access to the heart of Smaller Cities and Regional Centres from their suburban and rural catchments by supporting the operation of flexible and demandresponsive services.

Activity 4.2.2.3: Promote active travel for tourism, recreation and local access in and around Smaller Cities, Regional Centres, Small Towns, Rural Communities and Remote Areas by investing in the adaptive reuse of disused railways and integrating these with other linear open space corridors and low-traffic rural roads to provide connected networks.

Activity 4.3.1.1: Pre-empt local congestion growth by identifying and delivering active and public transport networks around urban centres at the same time that they are designated as future mass transit station locations.

Activity 4.1.5.3: Help councils to accelerate the delivery of public transport and active travel infrastructure early in the life of new urban areas by ensuring timely access to developer contributions, value-sharing mechanisms and/or low-cost borrowing facilities.

Recommendation 4.2: Improve the liveability and economic sustainability of regional, rural and remote areas by developing, maintaining and operating integrated freight and passenger transport networks that meet end-to-end access needs.

Outcome 4.2.1: Maintain reliable access for supply chains under all conditions by coordinating technological, operational and infrastructure improvements delivered under the *National Freight and Supply Chain Strategy*.

Activity 4.2.1.2: Deliver local safety, environmental and economic benefits for regional, rural and remote communities by identifying and prioritising freight intermodal projects that promote shifting from road to Inland Rail and other freight rail services for targeted commodities.

Activity 4.2.1.3: Develop and implement place-based action plans for Fast-growing City port and airport precincts, through government, industry and community partnerships, that align with the National Urban Freight Planning Principles. Improve the efficiency of export- and tourism-oriented corridors by implementing actions that reduce friction between freight operations and dense land uses.

 ✓ Sector/Focus area
 0-5 years
 5-10 years
 10-15 years
 15+ years

Transport

Activity 4.3.1.2: Maximise the accessibility of new mass transit services by active travel and local public transport and reduce reliance on the provision of commuter car parking by requiring mass transit corridor proposals to incorporate a first- and last-mile service delivery plan that addresses:

- active travel modes
- · bus priority access
- demand-responsive services
- Mobility as a Service subscription models
- multimodal interchanges connecting first- and last-mile choices to mass transit services.

Outcome 4.3.2: Accelerate the trend towards people using their cars less in established urban areas and grow a sustainable patronage base for public transport use for all passenger journey needs by bringing forward traditional and demand-responsive road-based transport products as alternatives to car use for door-to-door suburban travel.

Activity 4.3.2.2: Support the timely deployment of transport products that offer a lower-impact alternative to motor vehicle use for urban passenger and freight transport by ensuring traffic control systems, kerbside parking regimes, multimodal interchanges, commuter car parking, bus stops and access pathways are designed to integrate with and support demandresponsive bus, minibus, rideshare, micromobility device sharing and/or microfreight operations, as required.

Activity 4.2.2.5: To improve the connectivity and economic performance of outer-urban areas, ensure regional rail service improvements improve accessibility outwards from Fast-growing Cities, and better connect outer urbanareas to their larger regional catchment as well as making established central business districts more accessible to Regional Centres.

Recommendation 4.3: Free people from relying on driving for door-to-door mobility by ensuring urban transport services are managed as an integrated, inclusive, user-responsive and smart transport system.

Outcome 4.3.1: Relieve congestion growth at the start of the urban development lifecycle by making active and public transport first and last mile networks the first transport projects completed in the local catchment of emerging and new centres.

Activity 4.3.1.3: Promote the emergence of sustainable travel patterns in new communities by facilitating the operation of bus services that offer an attractive and reliable alternative to the purchase of multiple cars by a single household.

Activity 4.3.1.4: Enable the use of innovative funding mechanisms such as developer contributions to meet some of the operating costs of frequent scheduled or demand-responsive services during the first three to five years of people settling in greenfield urban areas.

Transport

Activity 4.3.3.2: Increase the transparency of jurisdictional actions to address the travel needs of people with disability by reporting accessibility outcomes annually using nationally consistent and user-oriented measures. Provide information on changes in door-to-door accessibility outcomes as experienced by different groups of users over the reporting period and specify

coming two years.

Outcome 4.3.4: Enable every person who wants to walk, ride a bike or use a micromobility device for a local journey or last-mile freight delivery to do so safely by completing continuous separated active travel networks.

user-oriented improvements for the

Activity 4.3.4.2: Develop, implement and support councils' adoption of standardised designs for separated facilities that use temporary barriers or other quickly installed features. These will widen the choice of simplified, user-friendly, safe, lower-cost and cost-effective infrastructure solutions and accelerate the completion of gap-free networks.

Activity 4.3.4.3: Support councils' installation and management of small local freight depots on the edge of central business districts. These will enable the use of low-impact microfreight modes for last-mile deliveries in congested areas.

Activity 4.4.2.2: Support the efficient operation of urban transport networks in Fast-growing Cities by developing and implementing policy frameworks that impose an additional price on vehicle parking and use in areas affected by peak period congestion. Ensure revenues support the provision of alternative travel choices.

Outcome 4.3.3: Ensure all people in Australia enjoy equivalent accessibility outcomes by investing in transport infrastructure and services in line with the Disability Discrimination Act 1992 (Cth), Disability Standards for Accessible Public Transport 2002 and broad objectives for universal access to services.

Outcome 4.3.5: Ensure all road users can experience the benefits of world's best practice transport technologies by establishing a single national market for electric, connected and autonomous vehicles.

Activity 4.3.5.2: Facilitate the use of both privately owned and shared fleets of light electric vehicles and micromobility devices by ensuring standard and/or two-way charging facilities are installed at kerbside locations, and in public parking areas by the developers of off-street destinations such as shopping centres and long-term car parks.

2021 Australian Infrastructure Plan 2021 Implementation Pathway 0-5 years y Sector/Focus area **5-10** years 10-15 years 15+ years Water **Proposed lead** Outcome 6.2.1: Provide enhanced community benefits, including water security, public health, environmental health, and urban resilience by integrating management of water infrastructure throughout the whole water cycle. Water **Proposed support** Activity 6.2.1.1: Clarify roles and Activity 6.2.1.3: Assess existing Activity 6.2.1.5: Formalise roles and responsibilities by reviewing stormwater stormwater infrastructure condition, responsibilities for integrated water cycle infrastructure management, including capacity, location and management, and management in established urban areas governance, regulatory, pricing, physical assess integration options. in alignment with a national stormwater and operational constraints. management framework. Activity 6.2.1.4: Integrate potable Activity 6.2.1.8: Embed whole-ofwater, wastewater, and stormwater Activity 6.2.1.6: Establish sustainable and water cycle management at the infrastructure planning by assigning a community-driven recovery of efficient commencement stage of local land use single planner across the water cycle for costs, such as value sharing or levies, for planning through formal arrangements greenfield development sites. stormwater infrastructure management. between land use planners and the water This should include urban waterway Activity 6.2.1.7: Embed a whole-ofcycle planner. enhancements and re-naturalisation in water cycle management approach into alignment with a national stormwater Activity 6.2.2.2: Develop a long-term, large scale (city or catchment management framework. - including both metropolitan and comprehensive understanding of

comprehensive understanding of community dynamics that relate to water consumption, including access, use and preferences, as well as an assessment of water and wastewater infrastructure performance and condition. This should be done by undertaking a whole-of-service assessment.

water cycle management approach into long-term, large scale (city or catchment – including both metropolitan and regional settings) urban planning by defining and implementing community driven outcomes for public health, environmental (including ecological), health, amenity and urban resilience:

- Define clear community-driven objectives for water cycle management over the long term.
- Align long-term growth planning to community objectives.
- Ensure long-term growth plans recognise the value of water within the entire water cycle and identify dependencies of urban growth on water by incorporating best available data and water modelling.
- Identify water security risks and growth opportunities by applying the national water security framework.

Outcome 6.2.2: Deliver safe, highquality, secure, sustainable and fit-forpurpose water and wastewater services to remote and isolated communities by partnering with communities and water utilities, developing a funding pathway and monitoring strategies.

Activity 6.2.2.4: Improve community health outcomes and introduce a total water cycle approach, including fit-for-purpose water use, by including sewerage services alongside potable water as part of minimum service standards for settlements in Remote Areas.

Activity 6.2.2.6: Ensure community outcomes are being met consistently by implementing ongoing risk-based monitoring strategies.

200

0-5 years **5-10** years 10-15 years 15+ years y Sector/Focus area Water Activity 6.2.2.3: Deliver resilient and sustainable water and wastewater infrastructure that meets communities' needs by applying fit-for-purpose, fitfor-place and fit-for-people approaches that directly respond to whole-of-service assessments. Activity 6.2.2.5: Deliver co-designed, codelivered water education and demand management strategies focusing on outdoor water use by partnering with community leaders and Aboriginal land councils. Education strategies should be delivered through schools and key community forums, incorporating preferred language and traditional knowledge. Telecommunications **Proposed support**

Telecommunications and digital

Activity 7.3.1.1: Enable maximum contiguous coverage of Australia's emergent 5G networks by creating more affordable ways for network operators to locate 5G small cells on public assets (such as street furniture, public buildings and road trenches) in a way that resembles the arrangements made for other major utilities, with nominal or zero rental costs and wider facility-sharing of public infrastructure.

Activity 7.3.1.2: Provide communities with commercially viable, unobtrusive and contiguous coverage across Australia's suburbs by encouraging local governments to build telecommunications towers and poles (for network operators to mount small cells) for the public good in key suburbs and precincts.

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years **Telecommunications** Activity 7.3.2.1: Enable a smart and digital infrastructure step-change by adopting best-practice policies that reduce friction and increase interoperability at a place level, including policies addressing: · shared applications systems and processes · capabilities · data exchange, storage and federation. Social infrastructure Proposed support Outcome 8.1.6: Support mental and Outcome 8.2.2: Increase economic physical health through appropriate and social benefits by implementing investment in green and blue and strategic planning governance structures recreational infrastructure. for health and education precincts, and innovative procurement and delivery Activity 8.1.6.1: Improve health and models. Specialised agencies should also wellbeing by developing an appropriate be established to deliver major social methodology for analysing public space infrastructure capital projects. performance, including green and blue infrastructure. Review methodologies Outcome 8.3.3: Drive economic growth used in Australia and develop placeand improve social cohesion and based access benchmarks across liveability by establishing a consistent geographies. approach to capturing, measuring and assessing the quadruple-bottom-line Activity 8.3.3.1: Improve growth and benefits of arts, culture, green, blue and liveability by assessing the quadruplerecreational infrastructure. bottom-line of arts, culture, green, blue and recreation infrastructure, building Activity 8.3.3.2: Catalyse economic

Key

■ Recommendation ■ Outcome ■ Activity

on existing frameworks and developing

an agreed, consistent approach to

national valuation framework.

measuring its economic impact. Use

the approach to inform and support a

development by using the new

five years.

framework to collaboratively plan,

develop and invest in arts, cultural, green,

blue and recreational infrastructure that

enhances unique regional identities and brands. Apply this approach when planning new precincts and renewal projects. Update existing plans every

Index

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Waste **Proposed lead** Activity 9.1.5.2: Increase uptake of FOGO Activity 9.1.5.1: Reduce waste to landfill services and encourage positive waste and emissions by introducing FOGO behaviours by implementing ongoing collection and processing for households education and communications with when renewing existing waste households before and during the life of management contracts. the collection service. Activity 9.2.2.4: Reduce congestion, amenity and road safety impacts by consolidating services to minimise transport congestion impacts. Waste **Proposed support** Activity 9.1.1.1: Increase understanding Outcome 9.1.4: Support co-location of and compliance through community circular economy facilities by undertaking education, which highlights the benefits collaborative land-use planning. of landfill diversion and the importance Activity 9.1.4.1: Improve waste of correct separation of materials for infrastructure in rural and remote areas household waste collection services. by developing land-use plans that include Activity 9.1.5.3: Account for local factors resource recovery facilities. such as geography, climate and storage Activity 9.1.4.2: Improve levels of service when developing place-based guidance in Rural Communities and Remote Areas on FOGO implementation for local

> government. **Activity 9.1.5.7:** Improve distribution of FOGO material to regional areas for further processing and use by

consolidating collected FOGO material.

Activity 9.2.1.2: Improve decision-making and investor confidence by implementing an integrated data strategy that leverages agreed definitions.

Activity 9.2.2.2: Create clarity for consumers and industry by implementing common benchmarks between states and territories for the collection, transportation and sorting of each material stream.

Activity 9.2.2.3: Reduce contamination of material streams through correct disposal and improved source separation by standardising household bins for each material type within states and territories.

by identifying locations for hub-andspoke models of waste management services.

Activity 9.1.5.4: Enable FOGO collection in apartments by amending complying development provisions to allow retrofitting for facilities in existing apartments, and by incorporating FOGO and other collections in the design of new builds.

Outcome 9.2.2: Create a highquality recycling system with lower processing costs by developing common benchmarks for each material stream, consolidating services and targeting infrastructure investment.

4

Cross-jurisdictional bodies



ATAP Steering Committee Secretariat

y Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Place

Proposed support

Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy.



Sustainability and resilience

Proposed support

Activity 2.1.4.1: Ensure infrastructure assessment frameworks, and associated tools and guidance, including the Australian Transport Assessment and Planning Guidelines, consider risks and resilience by incorporating future scenarios and hazard information.



Transport

Proposed lead

Activity 4.1.3.1: Ensure the economic analysis of proposed transport investments, and other infrastructure decision-making processes, take account of significant shifts in user preferences and travel behaviours, by updating the Australian Transport Assessment and Planning Guidelines to:

- reflect changes to settlement and working patterns catalysed by the COVID-19 pandemic
- consider the impacts of new transport technologies and business models (including Mobility as a Service) on how people travel and freight is transported
- facilitate incremental investment in transport services, corridors and networks.

Key

How to read 15+ years 10-15 years

0-5 years **5-10** years y Sector/Focus area **Transport Proposed support** Activity 4.1.2.1: Enable the achievement Outcome 4.1.2: Ensure the most costeffective mobility and land use outcomes of consistent and predictable results from transport expenditure by developing a from transport expenditure by tying nationally uniform movement and place transport budgets to the achievement framework and associated performance of specified movement and place standards for the function of links in a performance standards. multimodal transport network hierarchy. Outcome 4.1.3: Bring forward the • Ensure the movement and place benefits of transport investments, in a framework aligns with the National context of uncertain and changing user Service Level Standards Framework for needs, by promoting and facilitating Roads. the incremental delivery of transport • Specify performance standards in the services, corridors and networks as Australian Transport Assessment and separable stages. Planning Guidelines.

Australasian BIM Advisory Board

y Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years Industry **Proposed support** Activity 3.3.1.3: Kick-start digital by default in infrastructure by verifying all federally funded projects adopt innovative approaches across their lifecycle, including Building Information Modelling, digital engineering, embedded sensors and digital asset management. Strengthen nationally consistent guidance, tools and templates to match these objectives.

Index

Australian Communications and Media Authority

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Telecommunications and digital	Proposed sponsor			
	and digital			Recommendation 7.3: Fully realise the digital economic dividend by better enabling emerging technologies such as 5G, the Internet of Things and smart cities across Australia through regulation, investment and coordination.	
\(\int_{\text{\sqrt}}\)	Telecommunications	Proposed lead			

Activity 7.1.3.1: Protect lives in high-risk bushfire areas with improved cut-through for emergency alert warning system national emergency broadcast messages through the introduction of Emergency Cell Broadcasting across all mobile operators.

Activity 7.3.1.3: Facilitate the introduction of 5G to regional areas by giving flexibility to operators to utilise any low-band spectrum to roll out 5G coverage in these areas.

Activity 7.2.1.1: Empower customers by stipulating clear performance levels for data speed, reliability and key processes such as installation or repair times in the Statutory Infrastructure Provider Regime. The Regime should clarify and publish basic performance levels and ensure these evolve to include specific targets for repair times and service uptime.

Telecommunications and digital

Proposed support

Activity 7.2.3.1: Deliver improved coverage, speed and reliability to all Australian broadband customers under a published Minimum NBN Customer Charter that obliges all companies involved in delivering a connection (Statutory Infrastructure Providers and retail service providers) to meet a basic guarantee for the end-to-end customer experience. The Charter should include speed (relative to plan selected), reliability, installation times, repair times and rebates.

Activity 7.3.3.2: Protect the public from misinformation and cyber risks by investing in public education and communication programs addressing 5G health concerns, data privacy, technology risks and cybercrime. The engagement should extend previously successful public education and engagement campaigns around digital innovation.

Outcome 7.3.2: Improve the sustainability, liveability and efficiency of Australian communities by adopting a strategic approach to smart cities and the Internet of Things that facilitates investment and enables scalable projects.

Key

Australian Energy Market Commission

reform.

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Proposed lead **Energy** Activity 5.2.2.3: Enable the better understanding of locational electric vehicle charging patterns and facilitate

> Energy Resource portal. Activity 5.2.3.2: Ensure transmission interconnector costs are allocated to the beneficiaries and help new generation connect to the grid more efficiently by implementing transmission access

infrastructure be added to the Distributed

efficient distribution grid investment by mandating electric vehicle charging

Activity 5.2.4.1: Reduce project delivery timeframes and regulatory duplication by exempting planned component upgrades and renewals or projects with unviable non-network options that are included in approved five-year regulated revenue determinations from the Regulatory Investment Tests for transmission and distribution.

Activity 5.3.2.2: Make the electricity market framework fit for purpose for a decentralised, renewable system by implementing a future market design that builds on the post-2025 work by the Energy Security Board and market bodies.

Energy

Proposed support

Recommendation 5.2: Transition to a smart, affordable, reliable future grid by implementing regulatory reforms, introducing incentives for customer participation in energy system management and planning cross-sector integration.

Outcome 5.2.3: Safeguard the reliability and security of electricity supply by implementing electricity transmission reforms.

Key

∨ Sector/Focus area 0-5 years **5-10** years 10-15 years 15+ years Energy Activity 5.2.2.2: Integrate zero-emission vehicles into the grid safely and costeffectively by developing an electric vehicle integration strategy. • This should build on the work by the Distributed Energy Integration Program Electric Vehicle Taskforces, and include the incorporation of demand management, increasing charging infrastructure visibility and ensuring uptake of smart charging and smart metering. Outcome 5.2.4: Reduce electricity network project delivery timeframes by streamlining the Regulatory Investment Test for Transmission (RIT-T) and Regulatory Investment Test for Distribution (RIT-D).

Australian Energy Market Operator

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
4	Energy	Proposed lead			
7		Activity 5.3.2.4: Get the most out of existing and shared gas infrastructure by enhancing Integrated System Plan modelling to co-optimise gas and electricity systems. This will include consideration of the potential for existing gas infrastructure to transition to renewable sources, such as hydrogen or biogas.		Activity 5.2.3.3: Fully realise the market opportunity of renewable electricity generation and increase certainty for investors and contractors by implementing the Integrated System Plan and reducing the risk and time for grid connections.	
4	Energy	Proposed support			
		Activity 5.2.2.2: Integrate zero-emission vehicles into the grid safely and costeffectively by developing an electric vehicle integration strategy.			

Australian Government

0-5 years **5-10** years 10-15 years 15+ years y Sector/Focus area **Energy** · This should build on the work by the Distributed Energy Integration Program Electric Vehicle Taskforces, and include the incorporation of demand management, increasing charging infrastructure visibility and ensuring uptake of smart charging and smart metering. Activity 5.2.2.3: Enable the better understanding of locational electric vehicle charging patterns and facilitate efficient distribution grid investment by mandating electric vehicle charging infrastructure be added to the Distributed Energy Resource portal. Outcome 5.3.2: Transition Australia to a high-tech, low-cost, low-emission energy system by implementing appropriate regulatory and legislative environments, identifying opportunities to transition assets, and continuing to fund new energy technology development and adoption. Activity 5.3.2.2: Make the electricity market framework fit for purpose for a decentralised, renewable system by implementing a future market design that builds on the post-2025 work by the Energy Security Board and market Activity 5.3.2.3: Maintain electricity market reliability by developing and implementing a trigger-based electricity market review mechanism that is undertaken at key policy trigger-points such as announcement of accelerated

retirement of thermal electricity

generators.

Australian Energy Regulator

y Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Energy

Proposed lead

Outcome 5.2.4: Reduce electricity network project delivery timeframes by streamlining the Regulatory Investment Test for Transmission (RIT-T) and Regulatory Investment Test for Distribution (RIT-D).

Activity 5.2.4.2: Focus regulatory scrutiny on higher-value projects by reviewing the cost threshold for the Regulatory Investment Tests for transmission and distribution with a view to increasing the threshold to only capture material investment.

Activity 5.2.2.4: Secure electric vehicle adoption across the distribution grid and reduce user and taxpayer costs by providing network businesses with limited flexibility to invest in at-risk distribution grids for locations with high electric vehicle uptake.

5

Energy

Proposed support

Activity 5.1.1.1: Reduce household energy bills (and improve residential energy efficiency) through the broader promotion of easily accessible information and education campaigns (leveraging websites like Energy Made Easy and Your Home), and supporting residential customers to:

- invest in the energy efficiency of their homes, renovations and appliances
- understand and manage their energy consumption
- choose their retailer.

Recommendation 5.2: Transition to a smart, affordable, reliable future grid by implementing regulatory reforms, introducing incentives for customer participation in energy system management and planning cross-sector integration.

Activity 5.2.1.2: Empower customers to harness information from the smart meter to reduce their electricity bills by mandating that retailers accompany smart meter installation with the tools customers need to get the most out of them.

Key

0-5 years **5-10** years 10-15 years 15+ years y Sector/Focus area **Energy** · Include free, user-friendly digital and mobile tools that integrate with home energy management systems, give customers transparent real-time access to their energy data, and enable customers to share their data in accordance with the Consumer Data Right for energy. · Retailers and energy agencies should educate customers on the benefits of smart meters and provide support on how to use energy management tools. · Retailers and energy agencies should provide free, timely advice on the benefits of an energy management system at the time of installation and whenever customers switch providers. · Tools and information should be nationally consistent. **Activity 5.2.4.1:** Reduce project delivery timeframes and regulatory duplication by exempting planned component upgrades and renewals or projects with unviable non-network options that are included in approved five-year regulated revenue determinations from the Regulatory Investment Tests for transmission and

Key

■ Recommendation ■ Outcome ■ Activity

distribution.

Activity 5.3.2.2: Make the electricity market framework fit for purpose for a decentralised, renewable system by implementing a future market design

that builds on the post-2025 work by the Energy Security Board and market bodies.

Australian, state and territory government fleet managers

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Sustainability and resilience	Proposed support			
AR		Activity 2.2.3.3: Ensure national consistency and coordination by aligning state and territory strategies and actions to the national strategy, including targets and timelines for transitioning all government fleet vehicles to electric vehicles whenever they are fit-for-purpose.			

Austroads

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
ם _	Transport	Proposed lead			
		Activity 4.1.2.2: Ensure that road authorities select, design, manage and operate road projects in line with their function under a uniform movement and place framework by updating the Guide to Traffic Management to incorporate nationally consistent performance standards. Activity 4.3.4.4: Ensure technical resources support the prioritisation of investments that enable increased travel on foot, by bicycle or wheelchair, or using			
		a micromobility device. Update the <i>Guide</i> to Road Design to include lower-cost and cost-effective active travel facilities and promote access to best practice data			
		collection and modelling for active travel projects through updated <i>Australian</i>			
		Transport Assessment and Planning Guidelines.			

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0-5 years **5-10** years 15+ years y Sector/Focus area 10-15 years **Transport Proposed support** Outcome 4.3.2: Accelerate the trend Outcome 4.1.2: Ensure the most costeffective mobility and land use outcomes towards people using their cars less in established urban areas and grow a from transport expenditure by tying sustainable patronage base for public transport budgets to the achievement transport use for all passenger journey of specified movement and place needs by bringing forward traditional performance standards. and demand-responsive road-based Outcome 4.3.5: Ensure all road users transport products as alternatives to car can experience the benefits of world's use for door-to-door suburban travel. best practice transport technologies by Outcome 4.3.4: Enable every person establishing a single national market for who wants to walk, ride a bike or use a electric, connected and autonomous micromobility device for a local journey vehicles. or last-mile freight delivery to do so safely **Activity 4.3.5.5:** Facilitate the uptake by completing continuous separated of new transport technologies by active travel networks. developing nationally uniform standards Activity 4.3.5.1: Enable the longer-term for the design and operation of road rollout of fleets of electric vehicles and digital assets used by Level 4 and that can both return power to, and 5 connected and autonomous vehicles. draw it from, the grid by ensuring the For all new road and major maintenance National Construction Code formalises projects, immediately adopt and

implement standards that offer 'no-

and digital speed zone standards.

regrets' benefits for existing and Level 3

vehicle operations, including line marking

requirements and specifications for

two-way charging facilities and

commercial, industrial and public buildings, including bus depots.

providing and operating next-generation

associated signage in multi-residential,

Building Ministers Meeting

Local government

Industry

Key ■ Recommendation ■ Outcome ■ Activity

0-5 years 15+ years ∨ Sector/Focus area **5-10** years 10-15 years Sustainability **Proposed lead** and resilience Activity 2.2.2.4: Improve energy efficiency and reduce emissions from new social infrastructure by increasing performance standards and updating the National Construction Code in line with the Trajectory for Low Energy Buildings.

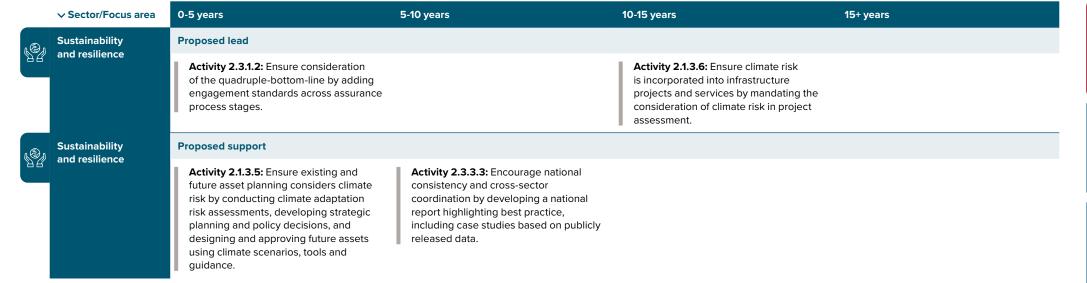
Distributed Energy Integration Program

✓ Sector/Foc	us area	0-5 years	5-10 years	10-15 years	15+ years
Energy		Proposed support			
		Activity 5.2.2.2: Integrate zero-emission vehicles into the grid safely and costeffectively by developing an electric vehicle integration strategy. This should build on the work by the Distributed Energy Integration Program Electric Vehicle Taskforces, and include the incorporation of demand management, increasing charging infrastructure visibility and ensuring uptake of smart charging and smart metering.			

Energy Security Board

0-5 years 10-15 years 15+ years y Sector/Focus area **5-10** years **Proposed support** Energy Activity 5.2.3.2: Ensure transmission interconnector costs are allocated to the beneficiaries and help new generation connect to the grid more efficiently by implementing transmission access reform. Activity 5.3.2.2: Make the electricity market framework fit for purpose for a decentralised, renewable system by implementing a future market design that builds on the post-2025 work by the Energy Security Board and market bodies.

Infrastructure investment assurance and assessment agencies



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✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years



Outcome 2.1.4: Ensure infrastructure decisions consider resilience through clear and harmonised guidance on how projects can address risks and value resilience.

Activity 2.1.4.1: Ensure infrastructure assessment frameworks, and associated tools and guidance, including the Australian Transport Assessment and Planning Guidelines, consider risks and resilience by incorporating future scenarios and hazard information.

Outcome 2.2.1: Achieve consistency and shared ownership through embedding the quadruple bottom line into infrastructure decision-making frameworks.

Activity 2.2.1.3: Ensure consistent application of the quadruple-bottom-line at the strategic proposal development phase by embedding sustainability guidelines in investment frameworks and guidance materials. These should include considering sustainability when identifying problems, developing options and undertaking economic analysis.

Activity 2.2.1.4: Facilitate national and cross-sectoral consistency by using quadruple-bottom-line guidelines to develop complementary, sector-specific sustainability principles and frameworks.

Activity 2.2.1.5: Support common approaches to assessment, cross-sector collaboration, shared responsibility and best practice, and develop connections and networks, by forming a cross-jurisdictional sustainability group.

Recommendation 2.3: Build community trust in infrastructure decision-making and institutions by ensuring infrastructure decisions are transparent, and reflect place-based community needs and preferences.

Key

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Sustainability and resilience	Outcome 2.3.3: Build community trust by providing transparent, timely and clear information about infrastructure decision-making and post completion assessments.			
	Industry	Proposed support			
Hee			Activity 3.4.2.3: Safeguard community interests and taxpayer funding by ensuring all proposed investments demonstrate an assessment of non-build solutions.		

National Skills Commission

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Fu	Industry	Proposed support			
H			Activity 3.1.3.1: In partnership with industry, deliver a workforce attraction and retention strategy that navigates current workforce challenges and sets out tangible and achievable solutions that create a sector of choice for current and future talent.		

National Transport Commission

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Transport	Proposed lead			
	Activity 4.3.4.5: Optimise access for pedestrians, bike-riders, microfreight operators and people using a wheelchair or micromobility device by facilitating the revision of the <i>Australian Road Rules</i> to remove regulatory anomalies or obstacles to these outcomes in all jurisdictions:	Activity 4.3.2.3: Enable all jurisdictions to support efficient Mobility as a Service operations that provide users with seamless journey outcomes by developing and implementing a coordinated national position that addresses common definitions data standards and system specifications.		

Key

2021 Australian Infrastructure Plan 2021 Implementation Pathway 0-5 years 15+ years y Sector/Focus area 5-10 years 10-15 years **Transport** • the use of lower-cost and cost-effective Outcome 4.3.5: Ensure all road users active travel infrastructure designs can experience the benefits of world's best practice transport technologies by · footpath access for micromobility establishing a single national market for devices. electric, connected and autonomous vehicles. Activity 4.3.5.5: Facilitate the uptake of new transport technologies by developing nationally uniform standards for the design and operation of road and digital assets used by Level 4 and 5 connected and autonomous vehicles. For all new road and major maintenance projects, immediately adopt and implement standards that offer 'noregrets' benefits for existing and Level 3 vehicle operations, including line marking and digital speed zone standards. Activity 4.3.5.6: Ensure the data-sharing framework and associated digital infrastructure for gathering and using connected and autonomous vehiclegenerated data are designed to support the separate administration of a national

Transport

Proposed support

Activity 4.2.1.1: Identify supply chain improvement opportunities across multiple commodities and geographies by developing and applying the TraNSIT model. Drive more responsive supply chain management decision-making by making this evidence accessible to governments, industry and other stakeholders through the National Freight Data Hub.

Outcome 4.2.1: Maintain reliable access for supply chains under all conditions by coordinating technological, operational and infrastructure improvements delivered under the National Freight and Supply Chain Strategy.

distance-based road user charging regime. Also ensure they align with privacy and cyber security requirements.

Outcome 4.4.2: Ensure users pay for the true costs of mobility by implementing transport network pricing reforms.

Key

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Transport	Outcome 4.3.2: Accelerate the trend towards people using their cars less in established urban areas and grow a sustainable patronage base for public transport use for all passenger journey needs by bringing forward traditional and demand-responsive road-based transport products as alternatives to car use for door-to-door suburban travel.			
	Outcome 4.3.4: Enable every person who wants to walk, ride a bike or use a micromobility device for a local journey or last-mile freight delivery to do so safely by completing continuous separated active travel networks.			
	Activity 4.3.5.3: To bring down purchase costs for bus operators and speed up the rollout of new fleets, develop Australian Design Rules and common crossjurisdictional technical specifications for zero-emission buses that assist Australian manufacturers and importers in achieving economies of scale.			
	Activity 4.4.2.1: Develop state and territory capability to administer an equitable and efficient user-pays charging regime for all vehicle types. Adopt and work towards this objective through the implementation of Heavy Vehicle Road Reform by participating jurisdictions.			

Regional development bodies

0-5 years 15+ years y Sector/Focus area **5-10** years 10-15 years Place **Proposed support** Outcome 1.2.1: Identify infrastructure Activity 1.2.1.2: Inform investment needs by developing a regional strengths priorities by undertaking regional and gaps infrastructure prioritisation infrastructure needs assessments on a rolling basis. framework, supported by a classification of the geography of regional Australia.

Key

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0-5 years **5-10** years 10-15 years 15+ years y Sector/Focus area **Place** Activity 1.2.1.1: Build the infrastructure Activity 1.2.1.3: Attract and retain pipeline by identifying and prioritising residents and businesses by regional infrastructure gaps, based on identifying and sequencing appropriate existing regional development strategies infrastructure requirements according to across government and industry and local community characteristics. community consultation. Activity 1.4.1.1: Support informed decision-making, identify gaps and determine priorities for data collection and research through the creation of a cross-jurisdictional agency collaboration group to lead an audit of data availability and adequacy. Sustainability **Proposed support** and resilience Activity 2.1.2.1: Facilitate collaboration across sectors, layers of government, asset owners and operators, businesses and communities by creating formal governance arrangements, resourcing and a convening authority in line with the National Disaster Risk Reduction Framework.



Industry



Airport operators

0-5 years **5-10** years 10-15 years 15+ years y Sector/Focus area **Transport Proposed support** Outcome 4.2.1: Maintain reliable access for supply chains under all conditions by coordinating technological, operational and infrastructure improvements delivered under the National Freight and Supply Chain Strategy. Activity 4.2.1.3: Develop and implement place-based action plans for Fastgrowing City port and airport precincts, through government, industry and community partnerships, that align with the National Urban Freight Planning Principles. Improve the efficiency of export- and tourism-oriented corridors by implementing actions that reduce friction between freight operations and dense land uses. Outcome 4.2.3: Ensure equitable access to essential services for Small Towns, Rural Communities and Remote Areas by coordinating passenger transport investments and operations. Activity 4.2.3.3: Ensure long-distance passenger travel needs are serviced cost-effectively and in line with access performance standards. Do this by integrating regional aviation infrastructure and services programs with land transport services under a multimodal hub-and-spoke network model.

Asset Management Council

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
Hen		Activity 3.2a.2.3: Enhance the quality of decision-making by developing a nationally consistent whole-of-life infrastructure cost and schedule benchmarking tool and mandate its use on all nationally significant projects.			

Asset owners and operators

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Sustainability and resilience	Proposed support			
- and resilience	Recommendation 2.1: Build community resilience to all hazards by considering systemic risks, interdependencies and vulnerabilities in infrastructure planning and decision-making.			
	Activity 2.1.2.2: Enable timely information exchange and build accountability by expanding participants to the Trusted Information Sharing Network, sharing information and best practice and developing connections and ongoing relationships.			
	Activity 2.1.2.4: Improve place-based and network-based systemic risk assessment and decision-making by producing local hazard maps for asset owners and operators and communities.			
	Activity 2.1.2.5: Inform decisions to increase the resilience of a place, network or asset across Australia by identifying cascading systemic failures, interdependencies and interconnections and local vulnerability of all sectors' assets and networks.			

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Sustainability and resilience	Activity 2.1.3.4: Embed climate risk considerations into land use and infrastructure planning and decision-making by developing a training program, tools and guidance materials.			
		Activity 2.1.3.5: Ensure existing and future asset planning considers climate risk by conducting climate adaptation risk assessments, developing strategic planning and policy decisions, and designing and approving future assets using climate scenarios, tools and guidance.			
	Industry	Proposed support			
H		Activity 3.1.1.2: Develop a jurisdiction-wide, cross-sectoral infrastructure project pipeline that actively tracks progress of projects throughout their lifecycle while considering critical inputs, constraints and risks that influence their deliverability.			

Australasian Procurement and Construction Council

	✓ Sector/Focus area	U-5 years	5-10 years	10-15 years	15+ years
F <u>u</u>	Industry	Proposed lead			
H		Activity 3.2b.1.5: Increase competition in the industry by developing guidelines and training programs on market engagement best practices that are accessible to all project practitioners. Cover topics such as multi-stage bidding, fair risk appropriation processes, bidding requirements at each gate, receiving industry feedback, using nationally consistent contract forms and the supporting procurement decisionmaking tool.			

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
Háá		Activity 3.2b.1.2: Apply appropriate consistency and improve certainty in procurement by developing a procurement decision-making tool to more effectively understand and allocate scope in line with project fundamentals.	Outcome 3.2b.2: Create a culture of genuine innovation by clarifying the desired project outcome innovation criteria in bid requirements, including outcomes, value for money, risk and embedding successful innovation in future projects.		
			Activity 3.2b.2.1: Normalise risk appetite and use of innovation by aligning innovation criteria in bid assessment with project and organisational needs, including tangible measurable outcomes that are owned by a project leader.		

Australian Constructors Association

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
			Activity 3.1.3.2: Foster a new model of collaboration between governments and industry by developing and implementing an infrastructure industry culture commitment and industry policy aimed at improving project delivery.		
			Outcome 3.4.1: Improve user and community outcomes by aligning investment and reforms with a unified and central vision for future Australian infrastructure.		

Australian Cost Engineering Society

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
Hoo		Activity 3.2a.2.2: Ensure a consistent focus on value for money by developing in-house capabilities, in areas such as cost management systems and processes, scheduling, risk management, estimating and project controls.			
		Activity 3.2a.2.3: Enhance the quality of decision-making by developing a nationally consistent whole-of-life infrastructure cost and schedule benchmarking tool and mandate its use on all nationally significant projects.			

Australian Institute of Quantity Surveyors

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
H		Activity 3.2a.2.3: Enhance the quality of decision-making by developing a nationally consistent whole-of-life infrastructure cost and schedule benchmarking tool and mandate its use on all nationally significant projects.			

Australian Stock Exchange

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
$^{\wedge}$	Water	Proposed support			
<u>ප</u> _ _		Activity 6.1.2.3: Increase transparency of water consumption and dependency (water footprint) by disclosing meaningful water data in environment, social and governance (ESG) reporting.			

Key

Business Council of Australia

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Fun	Industry	Proposed support			
			Outcome 3.1.2: Create a step change in infrastructure productivity by industrialising the sector.		
			Outcome 3.4.1: Improve user and community outcomes by aligning investment and reforms with a unified and central vision for future Australian infrastructure.		

Businesses

∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Water	Proposed support			
	Activity 6.1.2.1: Champion water-wise behaviours and increase water literacy. This includes water-wise campaigning and voluntary reporting of water use in business processes.			

Coalition for Climate Resilient Investment

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
LE)	Sustainability and resilience	Proposed support			
	and resilience	Outcome 2.1.4: Ensure infrastructure decisions consider resilience through clear and harmonised guidance on how projects can address risks and value resilience.			
		Activity 2.1.4.3: Value resilience in infrastructure investment by developing a training program and guidance materials on how to value resilience in decision-making through the infrastructure lifecycle.			

2021 Implementation Pathway

Community housing providers

y Sector/Focus area

0-5 years 10-15 years 15+ years **5-10** years



Sustainability and resilience

Proposed support

Outcome 2.2.2: Deliver cost-effective emissions reduction and broad sustainability benefits consistent with the quadruple-bottom-line by prioritising energy efficiency in the built environment and social infrastructure.



Proposed lead

Activity 8.3.2.1: Assess the quadruplebottom-line benefits of social and affordable rental housing by building on existing frameworks and developing an agreed, consistent approach to measuring its economic impact. Use the approach to inform and support the national valuation framework.

Activity 8.3.2.2: Harmonise the collection and availability of data across different government departments and housing sectors by developing a housing and homelessness reporting process and dataset that are comprehensive and consistent.

Outcome 8.1.5: Enable greater social and economic participation by designing programs to increase the supply and improve the quality of social and affordable rental housing.

Activity 8.1.5.1: Expand the pipeline of well-located, high-quality social and affordable rental housing by prioritising and implementing efficient medium- to long-term financing programs.

Activity 8.1.5.2: Improve housing quality by developing and implementing innovative efficient programs to reduce the maintenance backlog of social dwellings within their remaining economic life while recycling stock that has reached or passed the end of its economic life.

Activity 8.1.5.3: Meet the Closing the Gap target for 88% of Aboriginal and Torres Strait Islander peoples to be living in appropriately sized housing by 2031 by:

- · addressing maintenance and utility deficiencies for existing and future housing stock
- · renewing life-expired housing stock and developing new housing stock
- · addressing tenure issues
- · providing infrastructure to prepare for land development.

Key

	0-5 years	5-10 years	10-15 years	15+ years
ocial infrastructure		Outcome 8.3.2: Support healthy and productive futures for all Australians by establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of social and affordable rental housing.		
		Activity 8.3.2.3: Deliver improved social and affordable rental housing outcomes by adopting the quadruple-bottom-line approach to prioritise investment.		
ocial infrastructure	Proposed support			
			Recommendation 8.1: Support Australians to enjoy a healthier, safer, more connected and fulfilled quality of	
			life by facilitating targeted investment in the right physical and digital social	
			productive futures for all Australians by establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of social and affordable rental housing. Activity 8.3.2.3: Deliver improved social and affordable rental housing outcomes by adopting the quadruple-bottom-line approach to prioritise investment.	productive futures for all Australians by establishing a consistent approach to capturing, measuring and assessing the quadruple-bottom-line benefits of social and affordable rental housing. Activity 8.3.2.3: Deliver improved social and affordable rental housing outcomes by adopting the quadruple-bottom-line approach to prioritise investment. Proposed support Recommendation 8.1: Support Australians to enjoy a healthier, safer, more connected and fulfilled quality of life by facilitating targeted investment

Consult Australia

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
Hoo			Outcome 3.4.1: Improve user and community outcomes by aligning investment and reforms with a unified and central vision for future Australian infrastructure.		

Cooperative Research Centre for Northern Australia

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
(6)	Place	Proposed support			
		Activity 1.4.2.4: Reduce business costs by improving supply chain efficiency and reliability through the inclusion of end-to-end key supply chain strategies that connect productive regions with domestic markets and export gateways in the National Freight Strategy.			

Energy Networks Australia

	∨ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
[]	Energy	Proposed support			
7		Activity 5.2.2.2: Integrate zero-emission vehicles into the grid safely and costeffectively by developing an electric vehicle integration strategy. This should build on the work by the Distributed Energy Integration Program Electric Vehicle Taskforces, and include the incorporation of demand management increasing charging infrastructure visibility and ensuring uptake of smart charging and smart metering.			

Governance industry and their representatives

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Water	Proposed lead			
	Activity 6.1.2.3: Increase transparency of water consumption and dependency (water footprint) by disclosing meaningful water data in environment, social and governance (ESG) reporting.			

Key

Industry representative groups

y Sector/Focus area

0-5 years 5-10 years 10-15 years 15+ years



Sustainability and resilience

Proposed support

Activity 2.1.2.2: Enable timely information exchange and build accountability by expanding participants to the Trusted Information Sharing Network, sharing information and best practice and developing connections and ongoing relationships.

Activity 2.1.3.3: Support cross-sector coordination and shared responsibility by undertaking and publishing an annual assessment of the consideration and effectiveness of climate risk and resilience in infrastructure planning and decision-making.

Activity 2.1.3.5: Ensure existing and future asset planning considers climate risk by conducting climate adaptation risk assessments, developing strategic planning and policy decisions, and designing and approving future assets using climate scenarios, tools and quidance.

Outcome 2.1.4: Ensure infrastructure decisions consider resilience through clear and harmonised guidance on how projects can address risks and value resilience

Activity 2.1.4.3: Value resilience in infrastructure investment by developing a training program and guidance materials on how to value resilience in decision-making through the infrastructure lifecycle.

Activity 2.2.1.2: Meet Australia's commitments to net zero through long-term sector-specific plans that set interim emissions reduction targets and strategies that prioritise infrastructure investments and services.

Activity 2.3.3.3: Encourage national consistency and cross-sector coordination by developing a national report highlighting best practice, including case studies based on publicly released data.

Activity 2.1.3.6: Ensure climate risk is incorporated into infrastructure projects and services by mandating the consideration of climate risk in project assessment.

Key

✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years



Sustainability and resilience

Activity 2.2.1.4: Facilitate national and cross-sectoral consistency by using quadruple-bottom-line guidelines to develop complementary, sector-specific sustainability principles and frameworks.

Activity 2.2.1.5: Support common approaches to assessment, cross-sector collaboration, shared responsibility and best practice, and develop connections and networks, by forming a cross-jurisdictional sustainability group.

Industry

Proposed support

Activity 3.1.1.3: Provide annual jurisdiction-wide pipeline briefings that provide industry with a clear macro-level view of expected procurements and act as a forum to provide feedback on pipeline risk.

Activity 3.1.1.4: Ensure future infrastructure investment and project delivery commitments are regularly reviewed and considered against the jurisdiction-wide, cross-sectoral infrastructure project pipeline and industry capacity forecasts.

Activity 3.1.3.4: Improve the productivity and attractiveness of the sector by adopting and promoting a five-day working week, working hour limits, and job-sharing practices across the public and private sectors.

Outcome 3.2a.1: Reduce risk, improve competition, lower bid costs and improve project outcomes by consistently applying due diligence activities to the front-end of all infrastructure projects.

Activity 3.2a.1.1: Uplift quality of infrastructure decision-making through the development and delivery of training for key decision-makers on due diligence and de-risk, construction innovation, timing of project announcements, commercial and legal, and project governance.

Activity 3.1.2.1: Develop and implement infrastructure productivity roadmaps supported by adopting modern methods of construction, including design reuse, standardised design elements, earlier supply chain involvement, digitalisation, modularisation, prefabrication, offsite construction, frame agreements and bulk procurement.

Activity 3.1.3.1: In partnership with industry, deliver a workforce attraction and retention strategy that navigates current workforce challenges and sets out tangible and achievable solutions that create a sector of choice for current and future talent.

Activity 3.2a.2.1: Improve consistency, efficiency and transparency of project decision-making by developing and promoting nationally consistent project information structures.

Outcome 3.3.1: Increase the productivity of the infrastructure sector by increasing digital adoption in infrastructure planning, delivery and operations.

Activity 3.3.1.1: Create ownership and vision for digital approaches to infrastructure planning, delivery and operations by establishing a national office for digital by default in infrastructure.

Activity 3.1.2.3: Create, embed and pursue sector-wide efficiencies by developing and implementing project processes, templates and assurance activities that prioritise industrialisation.

Key



✓ Sector/Focus area
0-5 years
5-10 years
10-15 years
15+ years

Industry

Activity 3.2a.1.3: Improve value for money and reduce risk by prioritising resources and time to develop business cases, create reference designs and undertake comprehensive due diligence processes.

Activity 3.2a.1.4: Ensure a strategic view of risk is appropriately translated to project procurement by developing and applying mature risk allocation processes that comprehensively assess and validate risk and uncertainty and fairly apportion them to the parties best-placed to manage them.

Outcome 3.2b.1: Reduce risk and improve value for money by using common and best practice commercial arrangements, standard contract forms and delivery approaches to infrastructure.

Activity 3.2b.1.1: Unlock market equality and lower risk by utilising more collaborative commercial models that facilitate value for money and smaller engagements directly with contractors and consultants.

Activity 3.2b.1.4: Maintain a viable, competitive industry and supply chain by ensuring insurance is available for consultants, contractors and subcontractors involved in major projects. This may include brokering insurance on behalf of industry on a pro rata basis and changing existing policies on retention or insurance limits.

Activity 3.2b.1.5: Increase competition in the industry by developing guidelines and training programs on market engagement best practices that are accessible to all project practitioners. Cover topics such as multi-stage bidding, fair risk appropriation processes, bidding requirements at each gate, receiving industry feedback, using nationally consistent contract forms and the supporting procurement decision-making tool.

Activity 3.3.1.2: Increase the adoption of, and create greater national consistency for, digital approaches to infrastructure planning, delivery and operations by developing a national digital infrastructure roadmap.

Outcome 3.3.2: Accelerate the adoption of digital approaches to infrastructure planning, delivery and operations by coordinating jurisdictions and achieving national consistency.

Outcome 3.3.3: Embed a digital by default approach to infrastructure delivery and operations by significantly scaling up related capabilities, resources and activities.

Activity 3.3.3.1: Increase digital adoption in infrastructure and develop jurisdiction-wide digital twins of the built environment by creating or strengthening related capabilities and cross-departmental functions.

Activity 3.3.2: Embed a digital by default approach by creating and implementing a smart infrastructure policy in each jurisdiction that uses technology and data to drive economic success and social inclusion.

Activity 3.3.3: Create accountability for quality digital asset management through the asset lifecycle by appointing digital asset champions on all projects, and consider the use of digital estate management contracts.

Activity 3.4.1.2: Expand and promote new and existing industry and jurisdictional reforms and best practices by establishing a government and industry collaborative leadership group.

Activity 3.4.2.1: Strengthen the
Australian Government's project delivery
capabilities, processes and systems
by establishing an office focused on
infrastructure project delivery excellence.

Key

✓ Sector/Focus area 0-5 years 5-10 years 10-15 years 15+ years

Industry

Activity 3.2b.1.6: Maintain the financial health of the supply chain by reviewing payment certainty and payment security legislation in light of current practice. Focus on compliance with requirements and consider whether the scope of these frameworks sufficiently addresses poor practices.

Activity 3.2b.2.2: Reduce risk and lower the likelihood of variations by conducting constructability, operability and maintainability reviews on projects. Repeat reviews at multiple stages of each project's lifecycle, particularly in the early stages before awarding main works contracts.

Activity 3.3.1.3: Kick-start digital by default in infrastructure by verifying all federally funded projects adopt innovative approaches across their lifecycle, including Building Information Modelling, digital engineering, embedded sensors and digital asset management. Strengthen nationally consistent guidance, tools and templates to match these objectives.

Activity 3.3.1.4: Improve knowledgesharing about digital approaches to infrastructure planning, delivery and operations and promote more consistent approaches between jurisdictions by establishing a national digital infrastructure network.

Activity 3.3.3.4: Digitise all major projects by applying contemporary digital engineering practices that leverage proven technologies and processes, such as Building Information Modelling.

Activity 3.4.2.6: Strengthen asset management by ensuring asset registers include condition, use and quality, facilitated by a community of practice between governments, industry and academia promoting excellence in capabilities, processes, audits and systems.

Activity 3.4.2.5: Provide a pathway for prospective bidders to submit proposals that align with federal infrastructure policy priorities by developing an Australian Government market-led proposals framework that integrates with jurisdictional guidance.

Key

20

0-5 years **5-10** years 10-15 years 15+ years y Sector/Focus area **Energy Proposed support** Activity 5.1.4.1: Improve the energy efficiency and productivity of businesses through targeted communications and education campaigns and connecting businesses with expert advice to help them identify and implement upgrades to equipment and modernise processes. Include programs that specifically target manufacturing, energy-intensive small to medium enterprises and large energy users to assess and report on their opportunities for improving energy efficiency, in the style of the Energy Efficiency Opportunities program and building on the Business Energy Advice Program. • These tools and touchpoints should help businesses take advantage of opportunities at key points of decision and investment (through major purchases or at tax time) and comply with obligations under harmonised national energy efficiency obligation schemes. Social infrastructure **Proposed support** Activity 8.1.4.4: Support workplacebased learning accreditation schemes in industry precincts by actively participating in developing micro-

credential curricula and accreditation.

Infrastructure Partnerships Australia

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
Hóó			Outcome 3.4.1: Improve user and community outcomes by aligning investment and reforms with a unified and central vision for future Australian infrastructure.		

Institution of Civil Engineers

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
H		Activity 3.2b.1.3: Improve consistency, certainty and value for money by developing and implementing a new nationally consistent contract suite to support a spectrum of procurement models.			

Mobility as a Service operators

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Transport	Proposed support			
	Outcome 4.3.2: Accelerate the trend towards people using their cars less in established urban areas and grow a sustainable patronage base for public transport use for all passenger journey needs by bringing forward traditional and demand-responsive road-based transport products as alternatives to car use for door-to-door suburban travel.	Activity 4.3.2.3: Enable all jurisdictions to support efficient Mobility as a Service operations that provide users with seamless journey outcomes by developing and implementing a coordinated national position that addresses common definitions, data standards and system specifications.		

Key

National Association of Women in Construction

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
Heel			Activity 3.1.3.2: Foster a new model of collaboration between governments and industry by developing and implementing an infrastructure industry culture commitment and industry policy aimed at improving project delivery.		

Port operators

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years	
Transport	nsport Proposed support				
		Outcome 4.2.1: Maintain reliable for supply chains under all conditions coordinating technological, operand infrastructure improvement delivered under the National Fresupply Chain Strategy.	litions by crational cs		
		Activity 4.2.1.3: Develop and in place-based action plans for Fa growing City port and airport pr through government, industry a community partnerships, that al the National Urban Freight Plan Principles. Improve the efficience export- and tourism-oriented complementing actions that reduce between freight operations and land uses.	st- recincts, and lign with ning by of prridors by ce friction		

Primary health networks

	y Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
######################################	Social infrastructure	Proposed support			
			Activity 8.1.1.1: Improve the value and quality of virtual health care services by developing digital health infrastructure transformation plans that identify and prioritise enhancements to existing hospitals, health services and primary care services. Activity 8.1.1.2: Provide seamless connections to existing state and territory digital health capabilities through a program to increase primary health providers' digital capability.		
			Activity 8.1.1.5: Improve digital health literacy for citizens and the health workforce through targeted education		
			programs, with a particular focus on vulnerable communities.		

Risk Engineering Society

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
Hº		Activity 3.2a.2.2: Ensure a consistent focus on value for money by developing in-house capabilities, in areas such as cost management systems and processes, scheduling, risk management, estimating and project controls.			

Social Procurement Australasia

	y Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
Hoo		Activity 3.1.3.3: Embed the infrastructure sector culture commitment through existing social procurement frameworks and pre-qualification schemes.			

Social Traders

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Flori	Industry	Proposed support			
		Activity 3.1.3.3: Embed the infrastructure sector culture commitment through existing social procurement frameworks and pre-qualification schemes.			

Society of Construction Law Australia

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Industry	Proposed support			
H		Activity 3.2b.1.3: Improve consistency, certainty and value for money by developing and implementing a new nationally consistent contract suite to support a spectrum of procurement models.			

Telecommunications network operators – fixed and mobile

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
	Place	Proposed support			
\bigotimes		Activity 1.4.2.2: Meet the requirements of growth industries by undertaking place-based assessment of digital adequacy, accessibility and affordability.			
	Telecommunications and digital	Proposed lead			
	and digital	Activity 7.1.3.2: Enable network operators and state and territory emergency services to better respond and take better decisions during emergencies by creating a system that enables two-way, real-time access to emergency data and standardised network asset information.			
	Telecommunications	Proposed support			
	and digital	Outcome 7.1.1: Enable emergency services and network operators to better respond to emergencies by classifying telecommunications as an essential service and continue to develop management policies such as infrastructure protection, risk planning and vegetation management.			

Telecommunications network operators – mobile

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
$\mathcal{C}_{\mathscr{Y}}$	Telecommunications and digital	Proposed support			
3	and digital	Activity 7.1.3.1: Protect lives in high-risk bushfire areas with improved cut-through for emergency alert warning system national emergency broadcast messages through the introduction of Emergency Cell Broadcasting across all mobile operators. Activity 7.1.3.3: Improve resilience and coverage in high-risk areas and along evacuation routes with new investment in programs such as the Mobile Black Spot Program and the Mobile Network Hardening Program. The investment should prioritise improved mobile coverage and mobile network resilience in areas prone to natural disasters such as bushfires.			

Transmission network service providers

	√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
/ <u>L</u>	Energy	Proposed support			
V				Activity 5.2.3.3: Fully realise the market opportunity of renewable electricity generation and increase certainty for investors and contractors by implementing the Integrated System Plan and reducing the risk and time for grid connections.	

Transport service operators

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Transport	Proposed support			
	Activity 4.3.3.2: Increase the transparency of jurisdictional actions to address the travel needs of people with disability by reporting accessibility outcomes annually using nationally consistent and user-oriented measures. Provide information on changes in door-to-door accessibility outcomes as experienced by different groups of users over the reporting period and specify user-oriented improvements for the coming two years.	Outcome 4.3.3: Ensure all people in Australia enjoy equivalent accessibility outcomes by investing in transport infrastructure and services in line with the Disability Discrimination Act 1992 (Cth), Disability Standards for Accessible Public Transport 2002 and broad objectives for universal access to services.		

Universities

√ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed support			
		Activity 8.1.4.2: Deliver industry- specific VET skills training and tertiary programs in targeted industry precincts by developing and implementing more industry partnerships and programs that share infrastructure and learning spaces. Outcome 8.2.2: Increase economic and social benefits by implementing strategic planning governance structures for health and education precincts, and innovative procurement and delivery models. Specialised agencies should also be established to deliver major social infrastructure capital projects.		

Key

~ S	Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Soc	cial infrastructure		Activity 8.2.2.1: Drive the development of health and education precincts and innovation districts by developing and implementing place-based governance agreements that involve associated local institutions and community representatives.		
			Activity 8.2.2.2: Yield the benefits of innovation districts by adopting a precinct maturity model to: - assess the maturity of existing health and education precincts		
			 prioritise precincts to move along the precinct maturity pathway develop investment attraction strategies, master plans and incentives to attract aligned industry sectors into 		
			precincts include social and affordable rental housing in innovation districts.		

Vocational Education and Training providers

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
Social infrastructure	Proposed lead			
		Activity 8.1.4.4: Support workplace-based learning accreditation schemes in industry precincts by actively participating in developing microcredential curricula and accreditation.		
Social infrastructure	Proposed support			
		Activity 8.1.4.2: Deliver industry- specific VET skills training and tertiary programs in targeted industry precincts by developing and implementing more industry partnerships and programs that share infrastructure and learning spaces.	Outcome 8.1.4: Ensure Vocational Education and Training (VET) aligns with industry-specific skills building and jobs growth objectives by designing, delivering and operating VET infrastructure appropriately.	

Water utilities

0-5 years y Sector/Focus area **5-10** years 10-15 years 15+ years Water **Proposed lead** Outcome 6.2.1: Provide enhanced community benefits, including water security, public health, environmental health, and urban resilience by integrating management of water infrastructure throughout the whole water cycle. Water **Proposed support** Outcome 6.1.2: Normalise water-efficient Activity 6.1.3.2: Ensure water Activity 6.2.1.5: Formalise roles and practices and decisions by increasing infrastructure decisions meet users' responsibilities for integrated water cycle water literacy in communities and long-term needs through removing management in established urban areas businesses. community perception barriers to the use in alignment with a national stormwater of alternative water sources, particularly management framework. Activity 6.2.1.1: Clarify roles and recycled water for drinking, by: responsibilities by reviewing stormwater Activity 6.2.1.6: Establish sustainable and · publicising a position of support for infrastructure management, including community-driven recovery of efficient alternative water sources, especially governance, regulatory, pricing, physical costs, such as value sharing or levies, for recycled water for drinking and operational constraints. stormwater infrastructure management. running public education and This should include urban waterway Activity 6.2.2.2: Develop a engagement campaigns on the enhancements and re-naturalisation in comprehensive understanding of benefits and risks of recycled water alignment with a national stormwater community dynamics that relate to water for drinking, including how water management framework. consumption, including access, use and travels through the water cycle. Public preferences, as well as an assessment Outcome 6.2.2: Deliver safe, higheducation campaigning must be based of water and wastewater infrastructure quality, secure, sustainable and fit-foron recognised positive messaging and performance and condition. This should purpose water and wastewater services avoid language or images that might be done by undertaking a 'whole-ofto remote and isolated communities by cause stigma or negative reactions service assessment'. partnering with communities and water · partnering with influential community utilities, developing a funding pathway representatives or businesses to and monitoring strategies. champion the use of recycled water for

> Activity 6.2.1.3: Assess existing stormwater infrastructure condition. capacity, location and management, and assess integration options.

drinking.

Activity 6.2.1.4: Integrate potable water, wastewater, and stormwater infrastructure planning by assigning a single planner across the water cycle for greenfield development sites.

Activity 6.2.2.4: Improve community health outcomes and introduce a total water cycle approach, including fit-for-purpose water use, by including sewerage services alongside potable water as part of minimum service standards for settlements in Remote Areas.

Activity 6.2.2.6: Ensure community outcomes are being met consistently by implementing ongoing risk-based monitoring strategies.

Key

■ Recommendation ■ Outcome ■ Activity

✓ Sector/Focus area 0	0-5 years	5-10 years	10-15 years	15+ years
Water		Activity 6.2.1.7: Embed a whole-of-water cycle management approach into long-term, large scale (city or catchment – including both metropolitan and regional settings) urban planning by defining and implementing community driven outcomes for public health, environmental (including ecological), health, amenity and urban resilience: Define clear community-driven objectives for water cycle management over the long term. Align long-term growth planning to community objectives. Ensure long-term growth plans recognise the value of water within the entire water cycle and identify dependencies of urban growth on water by incorporating best available data and water modelling. Identify water security risks and growth opportunities by applying the national water security framework. Activity 6.2.2.3: Deliver resilient and sustainable water and wastewater infrastructure that meets communities' needs by applying fit-for-purpose, fit-for-place and fit-for-people approaches that directly respond to whole-of-service assessments. Activity 6.2.2.5: Deliver co-designed, co-delivered water education and demand management strategies focusing on outdoor water use by partnering with community leaders and Aboriginal land councils. Education strategies should be delivered through schools and key community forums, incorporating preferred language and traditional knowledge.		

6

Community groups



y d

Australian Council of Social Services

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years
4	Energy	Proposed support			
7		Activity 5.1.1.2: Reduce energy bills and improve health and wellbeing for vulnerable and low-income customers by delivering funding assistance programs to support energy audits and energy productivity upgrades for public and community housing, low-income households and associated rental properties with poor energy performance.			

Coalition of Peaks

	✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years	
A BB	Social infrastructure	Proposed lead				
			Activity 8.1.5.3: Meet the Gap target for 88% of Ab Torres Strait Islander peo in appropriately sized how addressing maintenanc deficiencies for existing housing stock renewing life-expired how developing new housin addressing tenure issue providing infrastructure land development.	original and ples to be living using by 2031 by: e and utility and future pusing stock and g stock		

Communities

y Sector/Focus area

0-5 years 15+ years **5-10** years 10-15 years



Sustainability and resilience

Proposed support

Activity 2.1.2.5: Inform decisions to increase the resilience of a place, network or asset across Australia by identifying cascading systemic failures, interdependencies and interconnections and local vulnerability of all sectors' assets and networks.



Water

Proposed lead

Outcome 6.1.2: Normalise water-efficient practices and decisions by increasing water literacy in communities and businesses.



Water

Proposed support

Activity 6.1.2.1: Champion water-wise behaviours and increase water literacy. This includes water-wise campaigning and voluntary reporting of water use in business processes.

Activity 6.2.2.2: Develop a comprehensive understanding of community dynamics that relate to water consumption, including access, use and preferences, as well as an assessment of water and wastewater infrastructure performance and condition. This should be done by undertaking a 'whole-ofservice assessment'.

Activity 6.2.2.3: Deliver resilient and sustainable water and wastewater infrastructure that meets communities' needs by applying fit-for-purpose, fitfor-place and fit-for-people approaches that directly respond to whole-of-service assessments.

Activity 6.2.2.5: Deliver co-designed, codelivered water education and demand management strategies focusing on outdoor water use by partnering with community leaders and Aboriginal land councils. Education strategies should be delivered through schools and key community forums, incorporating preferred language and traditional knowledge.

Activity 6.2.2.4: Improve community health outcomes and introduce a total water cycle approach, including fit-for-purpose water use, by including sewerage services alongside potable water as part of minimum service standards for settlements in Remote Areas.

Activity 6.2.2.6: Ensure community outcomes are being met consistently by implementing ongoing risk-based monitoring strategies.

Key



∨ Sector/Focus area 0-5 years **5-10** years 10-15 years 15+ years Social infrastructure **Proposed support** Activity 8.3.3.1: Improve growth and Activity 8.3.3.2: Catalyse economic liveability by assessing the quadrupledevelopment by using the new bottom-line of arts, culture, green, blue framework to collaboratively plan, and recreation infrastructure, building develop and invest in arts, cultural, green, on existing frameworks and developing blue and recreational infrastructure that an agreed, consistent approach to enhances unique regional identities measuring its economic impact. Use and brands. Apply this approach when the approach to inform and support a planning new precincts and renewal national valuation framework. projects. Update existing plans every five years.

Energy Consumers Australia

✓ Sector/Focus area	0-5 years	5-10 years	10-15 years	15+ years	
Energy	Proposed support				
7	Activity 5.1.1.2: Reduce energy bills and improve health and wellbeing for vulnerable and low-income custome by delivering funding assistance programs to support energy audits and energy productivity upgrades for public and community housing, low income households and associated rental properties with poor energy performance.	or ers or			

15+ years

Local Aboriginal land councils

y Sector/Focus area

0-5 years **Proposed support**

service assessment'.

Water

Activity 6.2.2.2: Develop a comprehensive understanding of community dynamics that relate to water consumption, including access, use and preferences, as well as an assessment of water and wastewater infrastructure performance and condition. This should be done by undertaking a 'whole-of-

Activity 6.2.2.3: Deliver resilient and sustainable water and wastewater infrastructure that meets communities' needs by applying fit-for-purpose, fitfor-place and fit-for-people approaches that directly respond to whole-of-service assessments.

5-10 years

Activity 6.2.2.5: Deliver co-designed, codelivered water education and demand management strategies focusing on outdoor water use by partnering with community leaders and Aboriginal land councils. Education strategies should be delivered through schools and key community forums, incorporating preferred language and traditional knowledge.

Activity 6.2.2.4: Improve community health outcomes and introduce a total water cycle approach, including fit-for-purpose water use, by including sewerage services alongside potable water as part of minimum service standards for settlements in Remote

10-15 years

Activity 6.2.2.6: Ensure community outcomes are being met consistently by implementing ongoing risk-based monitoring strategies.

Key

■ Recommendation ■ Outcome ■ Activity

Index

2021 Australian Infrastructure Plan

Airport operators	200	Australian Institute of Health and Welfare	15	Community housing providers	206
Asset Management Council	201	Australian Institute of Quantity Surveyors	204	Consult Australia	207
Asset owners and operators	201	Australian Prudential Regulation Authority	15	Cooperative Research Centre for Northern Australia	208
ATAP Steering Committee Secretariat	182	Australian Public Service Commission	16	Critical Infrastructure Centre	23
Attorney-General's Department	9	Australian Radiation Protection and Nuclear Safety Agence	y 16	CSIRO: Commonwealth Scientific and Industrial Research Organisation	23
Australasian BIM Advisory Board	183	Australian Renewable Energy Agency	16	-	25
Australasian Procurement and Construction Council	202	Australian Securities Investment Commission	17	Department of Agriculture, Water and the Environment	
Australian Building Codes Board	10	Australian, state and territory government fleet managers	190	Department of Education, Skills and Employment	32
Australian Bureau of Agricultural and Resource Economics	11	Australian Stock Exchange	204	Department of Finance	
Australian Bureau of Statistics	11	Australian Treasury	18	Department of Foreign Affairs and Trade	34
Australian Climate Service	12	Austroads	190	Department of Health	35
Australian Communications and Media Authority	184	Building Ministers Meeting	192	Department of Home Affairs	37
Australian Competition and Consumer Commission	13	Bureau of Communications, Arts and Regional Research	20	Department of Industry, Science, Energy and Resources	39
Australian Constructors Association	203	Bureau of Infrastructure and Transport Research Economic	cs 20	Department of Infrastructure, Transport, Regional Development and Communications	46
Australian Cost Engineering Society	204	Bureau of Meteorology	21	Department of Social Services	62
Australian Council of Social Services	225	Business Council of Australia	205	Department of the Prime Minister and Cabinet	64
Australian Cyber Security Centre	14	Businesses	205	Digital Technology Taskforce	65
Australian Digital Health Agency	14	Centre for Population	22	Digital Transformation Agency	65
Australian Energy Market Commission	185	Coalition for Climate Resilient Investment	205	Distributed Energy Integration Program	192
Australian Energy Market Operator	186	Coalition of Peaks	225	Energy Consumers Australia	227
Australian Energy Regulator	188	Communities	226	Energy Networks Australia	208

Energy Security Board	193	NBN Co	80	State and territory digital economy departments	92
Geoscience Australia	66	Northern Australia Infrastructure Facility	81	State and territory economic development departments	93
Sovernance industry and their representatives	208	Office of Future Transport Technology	82	State and territory education departments	94
ndustry representative groups	209	Office of Local Government South Australia	88	State and territory emergency management agencies	97
nfrastructure and Project Financing Authority	66	Office of Northern Australia	82	State and territory emergency services	98
nfrastructure Australia	67	Office of Road Safety	83	State and territory energy departments	99
nfrastructure investment assurance and assessment agencies	193	Office of the Australian Information Commissioner	84	State and territory environment departments	105
nfrastructure Partnerships Australia	214	Office of the National Data Commissioner	84	State and territory essential service economic regulators	109
nstitution of Civil Engineers	214	Port operators	215	State and territory finance departments	110
Local Aboriginal land councils	228	Primary health networks	216	State and territory first minister's departments	110
Local education offices	87	Regional development bodies	197	State and territory government property agencies	111
	170	Risk Engineering Society	216	State and territory health departments	112
Local governments		Services Australia	85	State and territory health infrastructure agencies	115
Local health districts	87	Significant Project Investment Delivery Office	85	State and territory housing departments	115
Mobility as a Service operators	214	Social Procurement Australasia	217	State and territory industry departments	116
National Association of Women in Construction	215	Social Traders	217	State and territory infrastructure bodies	117
National Disability Insurance Agency	72	Society of Construction Law Australia	217	State and territory infrastructure delivery agencies	122
National Faster Rail Agency	73	South Australian Department of Premier and Cabinet	88	State and territory infrastructure departments	126
National Housing Finance and Investment Corporation	74	State and territory Aboriginal and Torres Strait Islander		State and territory insurance agencies	130
National Indigenous Australians Agency	75	affairs agencies	88	State and territory insurance policy-holders	
National Recovery and Resilience Agency	76	State and territory arts, cultural, recreational and tourism departments	89	and their insurers	130
National Regulatory System for Community Housing	79	State and territory Attorneys-General	90	State and territory justice departments	131
National Skills Commission	195	,	90	State and territory municipal services departments	131
National Transport Commission	195	State and territory chief engineers		State and territory place management agencies	132
National Water Grid Authority	80	State and territory demographers	91	State and territory planning departments	132
		State and territory departments of local government	92		

State and territory public service commissions	142
State and territory regional service agencies	142
State and territory resilience agencies	143
State and territory resilience departments	144
State and territory resources departments	145
State and territory social housing providers	145
State and territory transport departments	147
State and territory treasuries	156
State and territory waste departments	164
State and territory water departments	165
Telecommunications network operators – fixed and mobile	218
Telecommunications network operators – mobile	219
Transmission network service providers	219
Transport service operators	220
Universities	220
Vocational Education and Training providers	221
Water utilities	222

2021 Australian Infrastructure Plan

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It leads reform on key issues including the means of financing, delivering and operating infrastructure and how to better plan and utilise infrastructure networks. Infrastructure Australia has responsibility to strategically audit Australia's nationally significant infrastructure, and develop 15-year rolling infrastructure plans that specify national and state-level priorities.

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