



DRAFT STATE INFRASTRUCTURE STRATEGY

September 2021

The Department of State Development, Infrastructure, Local Government and Planning connects industries, businesses, communities and government (at all levels) to leverage regions' strengths to generate sustainable and enduring economic growth that supports well-planned, inclusive and resilient communities.

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Cover: Queensland Country Bank Stadium, Townsville
Brisbane Broncos vs North Queensland Cowboys

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A photograph of a man with dark skin and curly hair, wearing a dark blue t-shirt and white shorts, sitting on a rocky shore. He is playing a didgeridoo, a long, brown, cylindrical instrument. He is surrounded by green pandanus trees. In the background, there is a beach, the ocean with waves, and a city skyline with several high-rise buildings under a clear blue sky.

Acknowledgement of Country

The Department of State Development, Infrastructure, Local Government and Planning (DSDILGP) acknowledges the Country and people of Queensland's First Nations. We pay our respect to Elders, past, present and emerging.

We acknowledge the continuous living culture of First Nations Queenslanders – their diverse languages, customs and traditions, knowledges and systems. We acknowledge the deep relationship, connection and responsibility to land, sea, sky and Country as an integral element of First Nations identity and culture.

The Country is sacred. Everything on the land has meaning and all people are one with it. We acknowledge First Nations peoples' sacred connection as central to culture and being.

We acknowledge the stories, traditions and living cultures of First Nations peoples and commit to shaping our state's future together. DSDILGP recognises the contribution of First Nations peoples and communities to the State of Queensland and how this continues to enrich our society more broadly.

*Playing the didgeridoo at Jellurgal (Burleigh Headland) on the traditional lands of the Yugambeh language group and Kombumerri peoples
(Source: Tourism and Events Queensland)*

FOREWORD

Thanks to the efforts of Queenslanders, we now have an unprecedented head start on the economic recovery from the COVID-19 pandemic.

Infrastructure is a critical component of *Queensland's COVID-19 Economic Recovery Plan*. We will use record infrastructure investment to capitalise on our head start and turbo-charge significant job creation for Queenslanders.

Our recovery efforts have already resulted in more Australians wanting to call Queensland home and seen our economy grow with such confidence that Queensland outstrips the nation on almost every economic indicator.

As our state's economy continues to grow and transform, so do our infrastructure needs.

The *Draft State Infrastructure Strategy* identifies these needs and sets out a framework for building a strong, sustainable and resilient Queensland.

Queensland has the potential to become a **renewable energy superpower**. We are already investing in initiatives like the \$2 billion Queensland Renewable Energy and Hydrogen Jobs Fund, backed up by our target to achieve 50 per cent renewable energy by 2030. Alongside this is our commitment to be a leader in advanced manufacturing including key renewable energy equipment. This strategy sets out our infrastructure priorities to realise Queensland's lower-carbon future.

Queensland is the most decentralised mainland state in Australia. **Connecting our regions** with the rest of the country and the world is critical. This strategy focuses on digital infrastructure requirements that the Australian Government must address, as well as outlining steps the Queensland Government will take to achieve better digital outcomes for Queenslanders.

Infrastructure planning must help **create liveable communities** – delivering the right infrastructure to ensure Queenslanders have access to health, education, housing, transport and other community services. This means planning for population growth, particularly in South East Queensland and ensuring that needs are met in our regional communities.

The **Brisbane 2032 Olympic and Paralympic Games** present two decades of opportunities and benefits. With the right planning in place, we can also secure a vibrant and ongoing legacy, sustainable local supply chains, and new skills and knowledge in key sectors. This strategy describes key investments for the community that will enhance the delivery of the Brisbane 2032 Games.

This strategy sets out actions to **drive performance of the infrastructure program**, building on previous work to lift the quality of planning and improve delivery. It includes renewed commitments to pipeline reporting and for the use of data and analytics to improve productivity.

It provides clear direction for the Australian Government, local government and private sector partnership and investment.

To ensure our infrastructure strategy captures the right building blocks for the future, I'd encourage you to provide feedback on this draft document.

Together, we can ensure that Queensland's infrastructure investments maximise opportunities for our future.



The Honourable Steven Miles MP

Deputy Premier and Minister for State Development, Infrastructure, Local Government and Planning

INTRODUCTION

Queensland is a great place to live, and our best days are still ahead of us. This *Draft State Infrastructure Strategy* (SIS) presents a clear vision of the Queensland Government's infrastructure requirements over the next two decades. It's also clear about the challenges and opportunities we'll face over that time.

Our households have changed rapidly over the last 20 years. Internet access has become commonplace, hundreds of thousands of Queenslanders have installed roof-top solar power and electric vehicles have become a component of the transport network. In the coming two decades, more change will arrive. We will host the Brisbane 2032 Olympic and Paralympic Games, zero-emission vehicles will be commonplace and 50 per cent of our electricity will come from renewables. We need to plan for this future now. The constant is that we will continue to make Queensland the best place to live, work, raise a family and invest.

There are also challenges ahead. Our population is growing and ageing. Extreme weather-related events are increasing, posing a risk to infrastructure, industry and community resilience.

New technologies are changing the way we work, do business and the way we utilise and access infrastructure and services. Our infrastructure itself also needs to continue to be more sustainably designed, constructed and operated to meet the needs of existing and future populations. But challenges like these present great opportunities too.

Queensland is in a strong position to seize the opportunities ahead of it. But we'll only get those opportunities if we execute on plans like this with the involvement of key stakeholders and the broader community. This strategy is the chance for Queenslanders to do that.

Good governance and our commitment to fiscal responsibility necessitates that we should explore how to achieve doing more with less and investigate new infrastructure models to meet the challenges ahead.

This document sets out to align infrastructure investment across the state government to help inform industry and other levels of government. It will be reviewed every four years to reflect the changing nature of the strategy's infrastructure classes listed below. Key elements of the strategy are shown on the following page.

▼ INFRASTRUCTURE CLASSES



Transport

Roads, bridges, busways, railways, light rail, ports, airports, ferry connections, cycleways, shared paths, transport operational infrastructure, maritime infrastructure, shared mobility and other passenger transport solutions.



Energy

Generation, transmission, distribution and storage infrastructure.



Water

Dams and weirs, water and wastewater treatment plants, and pipelines.



Health

Hospitals, health, neighbourhood and community centres, residential care facilities, ambulance stations and supporting digital technologies.



Education and Training

Buildings and facilities supporting education from kindergarten through to secondary school and tertiary education.



Digital

Technology and equipment providing linkages, networks and pathways to connect people and communities with data, products and services, including the mobile network, fixed-line and satellite broadband services.



Justice and Public Safety

Detention centres (including correctional facilities, youth detention centres and police watchhouses), courthouses, and other police, fire and emergency and disaster management services infrastructure.



Arts, Culture, Recreation and Tourism

Art galleries, performing arts centres, museums, sporting fields and complexes, national parks and campgrounds.



Social Housing

Government and community housing provider-owned or managed homes for vulnerable Queenslanders least able to access and sustain appropriate market housing options.

KEY ELEMENTS OF THE STRATEGY

VISION

The Queensland Government's 20-year vision for infrastructure.

We will drive collaborative state infrastructure planning to boost productivity, grow our economy and create jobs throughout the state. Infrastructure planning and delivery will leverage opportunities to improve the liveability of our communities and capitalise on innovation to build a strong, sustainable, and resilient Queensland.

OBJECTIVES

The four objectives we are trying to achieve.



Encourage jobs, growth, and productivity



Develop regions, places and precincts



Enhance sustainability and resilience



Adopt smarter approaches

INFRASTRUCTURE FOCUS AREAS

The areas the Queensland Government will focus on in the medium-term to deliver its infrastructure vision and objectives.



Renewable energy superpower



Connecting our regions



Creating liveable communities



Building a 2032 Games legacy



Driving infrastructure performance

CROSS-GOVERNMENT

The cross-sectoral priorities that can improve the overall performance of the state's infrastructure.

INFRASTRUCTURE CLASSES

The nine infrastructure classes with state-significant priorities for each, to realise opportunities and address challenges for Queensland into the future.

MEASURING SUCCESS

The success of the final SIS will be assessed against the four objectives with ongoing monitoring and reviewing.

▼ RECOVERING FROM COVID-19

Economic impacts of COVID-19

The Queensland Government's strong response to the COVID-19 pandemic has ensured we are already on a path of recovery and growth. During the height of the pandemic in April – May 2020, employment fell by a record 205,100 persons.¹ However, by April 2021, employment was 54,900 people above pre-COVID-19 levels.² The extent of our recovery has exceeded expectations.

While sectors such as aviation, tourism, hospitality, retail, and international education have been hit hard, Queenslanders uniting to recover have given us the head-start we need to excel.

COVID-19 illustrated the interconnectedness of Queensland's regional economies as well as their exposure to global trade conditions.

Agriculture and mining have experienced fluctuating global trade conditions, with some agriculture sectors affected by seasonal workforce shortages.

Disrupted international and domestic supply chains at the height of the pandemic highlighted the need to build local capacity for goods and services and build in resilience and market diversity in international supply chains.

Planning in a time of uncertainty

Undertaking a long-term infrastructure strategy during a period of heightened uncertainty presents unique challenges. Population, employment, finances, travel, immigration, trade and supply chains have all been significantly impacted. It will take time to understand the longer-term implications, alongside existing trends including technological disruption and climate change.

The effects of COVID-19 on Australia's long-term population growth are uncertain and dependent on a range of factors including: the ongoing management of COVID-19 cases, vaccination rates, ongoing quarantine measures, international travel restrictions, and the recovery of the economy.

As our understanding increases and new datasets and modelling are adopted, more integrated and adaptive approaches to planning will help us respond to an increasingly uncertain environment.

Queensland's recovery plan

The pandemic necessitated a swift, coordinated response from government to protect our health, economy and our communities. The state government delivered *Queensland's COVID-19 Economic Recovery Plan* in direct response to the health and economic crisis, and Queenslanders backed it by working together to keep each other safe. The plan is founded on six economic recovery priority areas with commitments to deliver ongoing support, stimulus and reform for sustained economic growth and enduring jobs. The six economic recovery priority areas are:

- 1 Safeguarding our health** – protect the health and wellbeing of Queenslanders
- 2 Backing small business** – the backbone of our economy
- 3 Making it for Queensland** – businesses and industry make, grow and export more products
- 4 Building Queensland** – drive substantial investment in economic and social infrastructure
- 5 Growing our regions** – strong regions that attract people, talent and investment
- 6 Investing in skills** – ensure Queenslanders have the skills to find jobs and career paths

The SIS is aligned with and will support the achievement of the 'Building Queensland' priority, which focuses on infrastructure investment, with the introduction of Regional Infrastructure Plans also contributing to the 'Growing our regions' priority. Other priorities are driving forces in these documents and the government's infrastructure pipeline.

Infrastructure's role in our recovery

Infrastructure supports jobs. Fast-tracking projects, where possible, stimulates construction jobs in the short-term, while investing in productive, economic infrastructure will position us for future success.

As the plan transitions from shorter-term support and stimulus to enhancing the state's productivity and competitiveness, prudent infrastructure planning, delivery and investment will be vital. Provision of the right infrastructure, as directed by this strategy, will support sustainable economic growth and private investment.

QUEENSLAND GOVERNMENT OBJECTIVES

The Queensland Government is creating communities where Queenslanders thrive. Eight long-term objectives will guide this ambition and provide the strategic framework for this strategy.

These long-term objectives build on *Queensland's COVID-19 Economic Recovery Plan* and can only be achieved by collaborative efforts. The objectives are:

- ▼ Safeguarding our health**
 Safeguard people's health and jobs by keeping Queensland pandemic-ready.
- ▼ Supporting jobs**
 Support increased jobs in more industries to diversify the Queensland economy and build on existing strengths in agriculture, resources and tourism.
- ▼ Backing small business**
 Help small business, the backbone of the state's economy, thrive in a changing environment.
- ▼ Making it for Queensland**
 Grow manufacturing across traditional and new industries, making new products in new ways and creating new jobs.
- ▼ Building Queensland**
 Drive investment in the infrastructure that supports our recovery, resilience and future prosperity.
- ▼ Growing our regions**
 Help Queensland's regions grow by attracting people, talent and investment, and driving sustainable economic prosperity.
- ▼ Investing in skills**
 Ensure Queenslanders have the skills they need to find meaningful jobs and set up pathways for the future.
- ▼ Backing our frontline services**
 Deliver world-class frontline services in key areas such as health, education and community safety.
- ▼ Protecting the environment**
 Protect and enhance our natural environment and heritage for future generations and achieve a 50 per cent renewable energy target by 2030.



Building social housing, Palm Island

QUEENSLAND'S INFRASTRUCTURE FRAMEWORK

STATE INFRASTRUCTURE STRATEGY

State Infrastructure Strategy

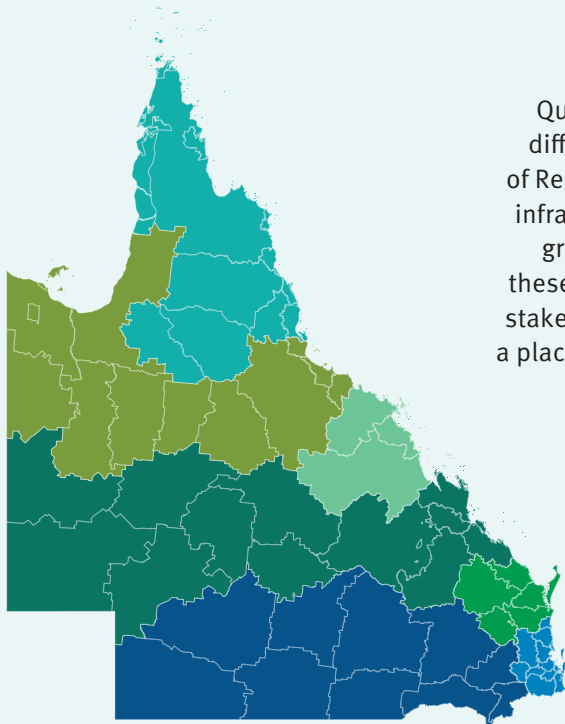
This strategy is built on the understanding that our regions are unique but we are stronger together. It provides an overarching framework which will enable all parts of Queensland to thrive.

The SIS sets the statewide priorities for infrastructure, providing a framework for how government will plan and invest in infrastructure over the next 20 years. These whole-of-state priorities drive portfolio and regional infrastructure planning. Developed with infrastructure providers and informed by industry and the community, this strategy aligns priorities across agencies while also seeking partnerships with other levels of government and the private sector. This strategy supports Queensland's economic recovery over the longer-term, aligning with *Queensland's COVID-19 Economic Recovery Plan*.

REGIONAL INFRASTRUCTURE PLANS

Regional Infrastructure Plans

Queensland is a diverse state and its different regions have different priorities. Supporting the strategy, the introduction of Regional Infrastructure Plans recognises the significant role infrastructure plays in catalysing regional economic recovery, growth and liveability. Drawing on this strategy's priorities, these plans are being developed in consultation with regional stakeholders (industry, peak bodies and government) through a place-based approach to help prioritise regionally-significant infrastructure needs.



FNQ
Far North
Queensland

NWQ
North and
Western
Queensland

MIW
Mackay
Isaac and
Whitsunday

CQ
Central
Queensland

WBB
Wide Bay
Burnett

DDSW
Darling
Downs and
South West

SEQ
South East
Queensland

Map 1: Regional Infrastructure Plan regions

QUEENSLAND GOVERNMENT INFRASTRUCTURE PIPELINE

Queensland Government Infrastructure Pipeline

The Queensland Government Infrastructure Pipeline (QGIP) delivers on statewide and regional priorities through an annually-updated pipeline of planning investment and proposals. The QGIP provides industry with visibility of the government's forward infrastructure pipeline, creating confidence and enabling workforce planning.



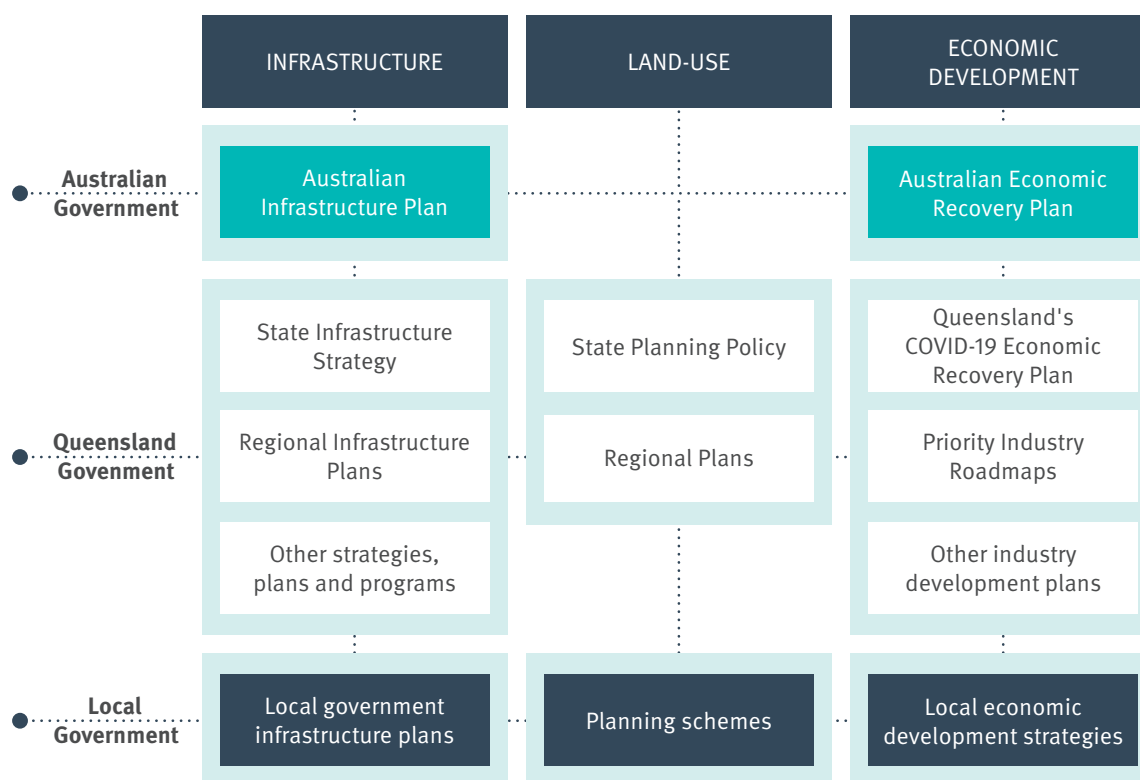
New Generation Rollingstock (Source: Department of Transport and Main Roads)

Alignment and integration of infrastructure planning

Importantly, the state government's infrastructure planning is integrated with work undertaken by other levels of government. It is also integrated with other types of planning and coordination, delivered through areas such as the Office of the Coordinator-General and Economic Development Queensland, acknowledging infrastructure is an enabler of residential and industrial development and broader industry and economic development.

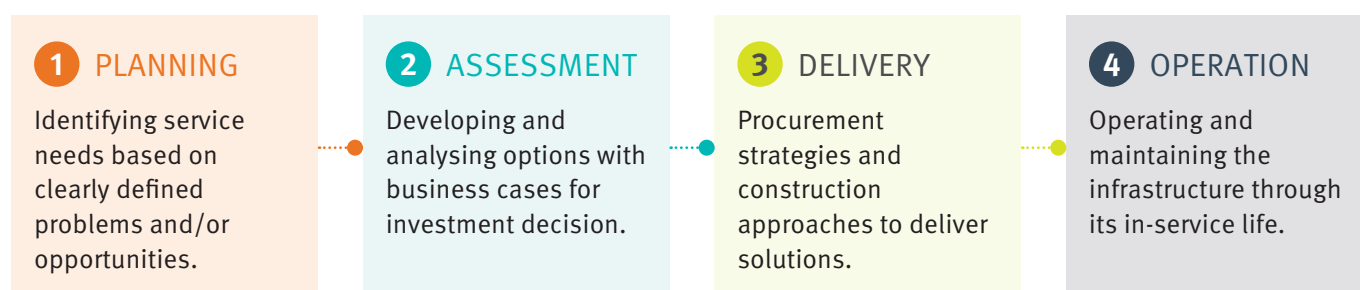
For example, at the state level, Regional Infrastructure Plans closely align with Regional Plans and together provide direction for local government planning.

The diagram below illustrates these relationships.



Rigorous infrastructure proposal development

Building on the priorities of this strategy and our Regional Infrastructure Plans, our program is supported by various frameworks that guide the rigorous development of proposals and major projects across the infrastructure lifecycle. The infrastructure lifecycle has four phases:



The Queensland Government has several frameworks, policies and guidelines to assist in the development, assessment and delivery of infrastructure proposals across this lifecycle, including:

- ▼ **Project Assessment Framework (PAF)**
At a project level, the PAF ensures a common, rigorous approach. It provides tools and techniques to assess projects throughout their lifecycle, from the strategic assessment of service requirements to delivery and benefits realisation.
- ▼ **Business Case Development Framework (BCDF)**
The BCDF is applied to major infrastructure proposals ensuring a consistent and rigorous approach to proposal development, enabling decision-makers to compare investment opportunities.
- ▼ **Infrastructure Proposal Development Policy**
This policy sets out infrastructure planning and assessment arrangements – including when the BCDF should be applied – with an emphasis on quality analysis from the inception of an infrastructure proposal, building capability across government and taking a more strategic and coordinated approach.
- ▼ **Strategic Asset Management Plans (SAMPs) framework**
State agency-prepared SAMPs help align asset portfolio/operational planning with higher-level strategic objectives and help drive improvements across all areas of infrastructure.

Prioritising effective solutions

The Queensland Government is prioritising investment in the focus areas outlined in this strategy, and in doing so it is also seeking to prioritise smarter approaches to providing these services. Throughout the infrastructure planning and assessment phases various options will be considered along with how they achieve value for money. The adjacent prioritisation hierarchy demonstrates a clear preference towards reforms and making better use of existing assets, and allowing additional infrastructure funding to be deployed to deliver more services across Queensland.

Priority preference



1. REFORM

Rethinking services through regulatory changes, alternative delivery models and reducing demand (e.g. provision of services digitally).

2. BETTER USE

Enabling better use of existing infrastructure including by spreading peak demand, reusing/repurposing underutilised assets, or increasing performance through low-cost technologies.

3. IMPROVE EXISTING

Upgrading existing infrastructure to better accommodate changing demand including increasing capacity, removing inefficiencies, using temporary facilities, or extending the useable life of existing assets.

4. NEW

Constructing new infrastructure where other more cost-effective options are not available and considering designs that provide for future needs.

STAKEHOLDER PARTNERSHIPS AND INDUSTRY DEVELOPMENT

Working together is critical to achieving our best. That's why this strategy serves as not just a roadmap, but also an invitation to partner with us in building the Queensland we all want to see.

Collaborative stakeholder partnerships help achieve responsive and effective infrastructure outcomes for Queenslanders.

Beyond the broader community, key stakeholders for the SIS include other levels of government, the infrastructure and construction sectors, potential investors and key industries that utilise state infrastructure to remain competitive.

Targeted stakeholder engagement has been invaluable in the development of this draft strategy, which will be continued through wider engagement on this consultation draft as part of the refinement process to arrive at a final SIS.

A shared infrastructure agenda that responds to objectives common to government, industry, and the community is essential to lifting productivity, harnessing innovation, building resilience and ensuring infrastructure delivery represents good value-for-money.

Working with other levels of government

The state government is one of many infrastructure providers responsible for delivering the services used by Queenslanders every day (see figure below).

For example, driving to work involves seamless travel across local, state and federally funded roads. When turning on a tap, water can travel from state-owned dams through local government-owned pipes. The partnerships across all three levels of government are critical for providing Queensland's essential services.

The SIS will be the framework to engage all tiers of government. Infrastructure productivity is enhanced when state, local and national infrastructure plans, priorities and investments are aligned. The SIS provides infrastructure providers with clarity about the state's priorities which is central to the coordination of infrastructure planning across jurisdictions. The SIS is informed by the Australian Government's priorities, including those of Infrastructure Australia and its *2021 Australian Infrastructure Plan*.

The transparency of the priority actions outlined in the SIS and delivered through government investments as reported in the QGIP, will support local government in forward infrastructure planning. Regional Infrastructure Plans provide a mechanism for local governments to advise on the availability and form of state infrastructure to support regional priorities and aspirations, and foster investment partnerships to drive regional economies.

	TRANSPORT					WATER			ARTS AND RECREATION			EDUCATION AND HEALTH				JUSTICE AND PUBLIC SAFETY			ENERGY		DIGITAL		HOUSING			
	State-controlled roads	Local roads	Busways	Heavy and light passenger rail	Cycleways	Regional water supply (source, treatment, transport)	Local water supply	Sewerage	Stormwater management	Conservation areas	District and local parks	Cultural and sporting	Universities	Technical and further education	Schools/kindergartens	Hospitals	Ambulance	Police	Fire and emergency services	Law courts	Correctional facilities	Electricity (generation/ transmission/ distribution)	Gas	National Broadband Network	Other telecommunications	Social housing
Australian Government	●	●	●	●	●	●				●		●	●							●				●		●
Queensland Government	●	●	●	●	●	●				●		●		●	●	●	●	●	●	●	●	●				●
Local government		●	●	●	●	●	●	●	●	●	●	●			●											●
Private sector													●	●	●	●						●	●	●	●	●

Note: Queensland Government includes government-owned corporations, statutory authorities and boards. Local government includes sub-regional entities with multiple local governments as shareholders. Private sector may include non-government organisations.



Working with the private sector

The private sector has a vital role to play in ensuring the delivery of the SIS vision and objectives.

The SIS is intended to reflect collective objectives and provide a platform for genuine collaboration. The consultation draft and stakeholder feedback is an important part of refining the document to achieve this outcome.

The Queensland Government invests in infrastructure that enables emerging industry development and supports the changing needs of established industries. Transport and ports infrastructure underpin the international competitiveness of industry supply chains including agricultural and resource commodities.

It's an exciting time to be growing an industry in Queensland. The Queensland Government has identified several priority and emerging industry sectors that will drive economic growth and diversification. Investments in priority industries will need to shift with demand and opportunity, and where appropriate, will be guided through 10-year roadmaps and dedicated industry development strategies (some under development) for the following sectors:

- ▼ Advanced manufacturing
- ▼ Aerospace
- ▼ Biomedical
- ▼ Biofutures
- ▼ Defence
- ▼ Mining equipment, technology and services (METS)
- ▼ Beef processing
- ▼ Space
- ▼ Hydrogen
- ▼ Superyachts
- ▼ Resource recovery
- ▼ Screen Industry
- ▼ Agriculture and food
- ▼ Tourism (the Action Plan for Tourism Recovery is currently under development)
- ▼ Resources (the Queensland Resources Industry Development Plan is currently under development).

The Queensland Government's investment in infrastructure alongside that of the private sector and other levels of government helps realise significant industry development opportunities. For example, the \$40 million Queensland Recycling Modernisation Fund is jointly funded with the Australian Government and will accelerate projects that address critical infrastructure gaps in Queensland's waste management and resource recovery industries.

Industry partnerships are also central to the \$3.34 billion Queensland Jobs Fund (QJF), which brings together current flagship industry development programs to boost the state's industry footprint, create jobs and strengthen the economy. One of these initiatives is the QJF's new \$350 million Industry Partnership Program. It provides flexible incentives for business, industry and research institutions to facilitate cross-sectoral opportunities that, if realised, would unlock growth in multiple industries or supply chains and produce significant economic gain. The Queensland Government is also partnering with resource companies through the Queensland Resources Council, to deliver the \$100 million Resources Community Infrastructure Fund.

The Queensland Government also owns and invests in research infrastructure to underpin the state's science and innovation capabilities and drive the growth of knowledge-intensive industries. For example, the Department of Agriculture and Fisheries' network of research stations are vital for de-risking agricultural innovation through trials in a real-world, on-farm environment. The Queensland Government has also invested in infrastructure to support industry innovation including the Advanced Robotics for Manufacturing (ARM) Hub and The Precinct, connecting Queensland startups, scaleups, incubators, investors and mentors under one roof.



Robotic manufacturing, Townsville (Source: NEM Group)

Eight emerging knowledge-intensive industries have been identified by the CSIRO that could be catalysed through strategic investments in scientific and industry capability and infrastructure. Knowledge-intensive industries thrive in innovation precincts with the co-location of symbiotic enterprises underpinned by enabling infrastructure.³ The Queensland Government supports major science precincts that drive new industry innovation and partnerships, including an Ecosciences Precinct, Health and Food Services Precinct, Gold Coast Health and Knowledge Precinct, TropiQ – Townsville Tropical Intelligence & Health Precinct and Translational Research Institute. Research undertaken by the University of Queensland suggests growing the number of innovation precincts in South East Queensland alone could contribute an additional \$11 billion and more than 80,000 jobs to the state's economy by 2030.⁴

Regional economies can thrive when competitive industries are supported through the alignment of land-use, infrastructure and industry development strategies. The infrastructure framework and delivery governance outlined in the SIS aims to drive strategic infrastructure partnerships that will enable industry development priorities to be realised. Regional Infrastructure Plans will provide a place-based focus for highlighting the infrastructure needed to support regional industries.



Australian Institute of Tropical Health and Medicine, James Cook University, Townsville

Working with the community sector

Effective social infrastructure brings communities together and improves community well-being through careful design and multi-sector partnerships. These partnerships are critical to support the unique needs of each community, with the Queensland Government one of many social infrastructure and service providers.

We partner with and support the community sector, drawing upon their expertise to deliver strategic planning, integrated services, co-location and shared-use of government facilities, along with grants and funding assistance. As examples, the Community Infrastructure Investment Partnership (CIIP) program is investing in not-for-profit organisations, while the Queensland Schools Planning Reference Committee (QSPRC) collaboratively reviews demand for state and non-state schools.

▼ CASE STUDY

Social infrastructure supporting our communities

The Queensland Government is committed to doing more with our social infrastructure, collaborating across government to provide more multi-purpose, accessible facilities that provide a range of integrated services at a single location. One example is the FamilyLinQ program, a partnership between the state government and The Bryan Foundation to pilot integrated school-based hubs that deliver a pipeline of connected government services. These include early learning, schooling, health and well-being services, as well as skills and training opportunities for parents.

Shared-use and multi-functional social infrastructure results in more accessible, adaptable and well-used facilities that bring people together, effectively respond to changing local needs and support healthy, happy and liveable communities.

HEARING FROM QUEENSLANDERS

Stakeholder engagement has been fundamental to both shaping this draft strategy and informing the seven Regional Infrastructure Plans, building on previous outcomes including online and in-person activities.

In May and June 2021, more than 270 stakeholders attended 13 regional workshops held across Queensland. Workshops were held in Maryborough, Toowoomba, Sunshine Coast, Mackay, Rockhampton, Gold Coast, Longreach, Cairns, Townsville, Mt Isa, Charleville (online) and Brisbane. These were complemented by online engagement that resulted in more than 200 responses.



Queensland is a large and diverse state – economically, socially and environmentally. Despite this, the workshops identified many shared priorities for our state's infrastructure, with the following key themes identified:



PHYSICAL CONNECTIVITY

Increasing **physical connectivity** through our transport networks, including freight and supply chains.



GROWTH AND DIVERSIFICATION

Supporting **industry growth and diversification** by capitalising on each region's competitive advantages and utilising newer technologies.



DIGITAL CONNECTIVITY

Improving and extending **digital connectivity** and services across the state, which has been exacerbated by living and working changes brought about by COVID-19.



SUSTAINABILITY

Focusing on **sustainability**, including managing climate change and environmental impacts, renewable energy, water security, and sustainable and resilient design.



HOUSING

Improving **housing** availability, affordability, diversity, adaptability and accessibility was a significant statewide trend.



BETTER ASSET USE

Ensuring **better use of our existing assets**, by reforming, sweating assets, collaborating and partnering with all levels of government, the private sector and communities.



LIVEABILITY

Enhancing **liveability** to attract and retain residents and workforces, encompassing housing, employment, skills, digital connectivity, social services and supporting infrastructure.



TECHNOLOGY

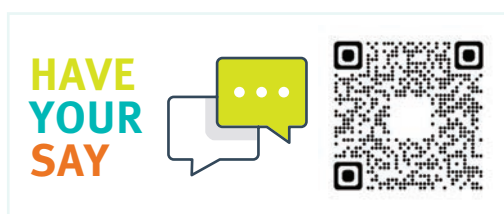
Improving the collection, sharing and use of quality **data, technology and innovation** across public and private sectors to drive better informed infrastructure decisions.

▼ YOUR OPPORTUNITY TO SHAPE OUR FUTURE

The Queensland Government is seeking your feedback on this draft strategy.

We want to know if we have outlined the right infrastructure priorities and reforms that drive the bright future we all want to see.

Throughout this document there are specific opportunities to provide feedback. Look out for the following icons throughout the document to have your say on any of the areas of interest to you.



As a long-term infrastructure strategy, we are looking to understand state significant priorities rather than suggestions of specific infrastructure projects.

You can use the interactive mapping tool on the department's website to provide details on more specific priorities for your region to help inform the development of our Regional Infrastructure Plans.

You can provide your input online by visiting www.statedevelopment.qld.gov.au/state-infrastructure-strategy. Consultation will close on 21 October 2021.

▼ QUESTIONS TO CONSIDER

We are keen to hear your feedback on particular elements of this draft strategy including:

- ▼ Will the strategy's 20-year vision and four objectives support the right infrastructure outcomes for Queensland?
- ▼ Will the strategy's focus areas help deliver on the Queensland Government's vision and objectives?
- ▼ Are there additional challenges or opportunities that should be considered?
- ▼ Are there any further cross-government priorities that need to be considered? Some examples include:
 - › recognising and appropriately valuing green and blue infrastructure
 - › tackling waste and the circular economy
 - › infrastructure opportunities specific to remote and Aboriginal and Torres Strait Islander communities.
- ▼ Are there additional priority actions that need to be considered for the infrastructure classes?
- ▼ How can the strategy and its priorities better facilitate private sector investment?

Finalising the strategy

Your feedback will be used, alongside other engagement, continued research and further analysis, to inform the final strategy.

The SIS is planned for release in early 2022. This strategy is also being supported by the seven Regional Infrastructure Plans that are being progressively developed from late 2021 and into 2022.



Ngarrri-dhum Falls, Springbrook National Park
(Source: Tourism and Events Queensland)



Storytelling through paintings with Brian 'Binna' Swindley, Janbal Gallery, Mossman

QUEENSLAND CONTEXT

Thanks to Queenslanders' united efforts, we have a chance to capitalise on our strong response to the COVID-19 pandemic.

Queensland's modern, vibrant economy is worth more than \$360 billion.⁵ The state's economic recovery from the COVID-19 pandemic is well underway. In fact, to date, Queensland's economy has bounced back faster than the rest of Australia and recovered more jobs than any other state or territory.⁶ We've secured the head-start we need to build a better future – now we can build on it.

Long-term infrastructure planning is essential to ensuring our economy remains globally competitive and our diverse communities across our large, decentralised state have access to the services they need.

Queensland's internationally renowned natural environment is one of our greatest assets. It makes our state a great place to live, however natural disasters and the impacts of climate change present ongoing risks to both our natural and our built environments.

Queensland's infrastructure planning and delivery approaches will be influenced by a range of global, national and regional trends. The implications of some of these trends are already evident. Others will require an agile approach to address changing circumstances and capitalise on new opportunities.

Where we are now

- Population growth trends disrupted by COVID-19 and the closure of national borders.^{7,8}
- Seventy per cent of the state's population lives in South East Queensland.⁹
- Regional, rural, and remote areas cover more than 95 per cent of Queensland and were home to more than 1.8 million Queenslanders in 2019.¹⁰
- Queensland is home to Australia's second-largest Aboriginal and Torres Strait Islander population. Despite some progress, there is still significant disparity between outcomes for Aboriginal and Torres Strait Islander peoples and non-Indigenous Queenslanders.¹¹
- COVID-19 transformed how and where we work, how we purchase goods and services, and how we interact with each other across our communities, including accelerating digital adoption.^{12,13}

Trends, opportunities and challenges

- ▶ Continuing demographic changes driven by more people aged over 65.¹⁴
- ▶ “Work from anywhere” is driving regionalisation.¹⁵
- ▶ Queensland’s annual population growth rate was the fastest of the states and territories in 2020.¹⁶
- ▶ Changing approaches to city design as a collection of villages and embracing of neighbourhoods.¹⁷
- ▶ Reimagining CBDs as centres of innovation, culture and entertainment.¹⁸
- ▶ Partnerships with Aboriginal and Torres Strait Islander peoples through Tracks to Treaty.¹⁹
- ▶ Cross government collaboration and partnerships to drive shared-use approaches that enable more integrated, multi-functional and cost-effective social infrastructure.

Future infrastructure planning considerations

- ▶ Infrastructure that responds to the unique needs of communities and regions, including for particular cohorts, such as Aboriginal and Torres Strait Islander peoples, people with a disability, and other Queenslanders.
- ▶ Population growth and changes in population structure will impact social infrastructure requirements for health, education, training and transport.
- ▶ Additional health, technology and mobility solutions to meet the needs of our ageing population and people living with a disability.
- ▶ Digital and transport connectivity supporting liveability, amenity, labour mobility and service delivery across Queensland.
- ▶ Co-location of innovation, entertainment and cultural precincts and smart design of city spaces.



Where we are now



Trends, opportunities and challenges



Future infrastructure planning considerations

Economy



- Queensland's economic growth has generally exceeded the national average over the past two decades, driven by stronger population growth, a resources investment boom and associated upturn in LNG exports.²⁰
- COVID-19 has had far-reaching impacts on the Queensland economy, particularly services industries and those industries exposed to global trade conditions.²¹
- Queensland is leading the nation's economic recovery, growing faster and recovering more jobs.²²
- 10-year industry roadmaps for six priority sectors are driving economic diversification.²³

- Continued transition from a historically resources-based economic growth towards more broad-based growth, with increased specialisation in the traditional industries of mining, agriculture and manufacturing.²⁴
- Technology will drive new industries and disruptive business models with economy-wide implications, including the growth of science-based industries.²⁵
- Innovation and research infrastructure will support industry development and economic diversification.
- Changing energy mix driving electrification and decarbonised industries such as green manufacturing and hydrogen.²⁶

- Technology will influence infrastructure solutions (e.g. remote work and distributed work centres, while on-demand transport and autonomous vehicles are likely to impact levels of urban congestion).
- Infrastructure and construction sectors will adopt new technology to unlock productivity, such as digital approaches throughout the asset lifecycle.²⁷
- Embracing new approaches to regulation and service delivery for infrastructure.²⁸
- Infrastructure enables productivity gains across industries.
- Innovative approaches to infrastructure planning, delivery and financing will be essential to meet the infrastructure costs of the future.

Environment



- Queensland is Australia's most disaster-affected state. Since 2011, Queensland has been impacted by almost 90 significant natural disasters, causing more than \$16.4 billion in damage to public infrastructure over the decade.²⁹
- Half of the species living in Queensland are unique to the state. Queensland is also home to 72 per cent of Australia's native bird species, 85 per cent of its native mammals and just over 50 per cent of the country's native reptiles and frogs.³⁰
- Queensland is home to five World Heritage areas: Fraser Island, Gondwana Rainforests, the Great Barrier Reef, Riversleigh and the Wet Tropics.
- The Great Barrier Reef supported 33,000 jobs and contributed \$3.9 billion to the Queensland economy in 2015 – 2016.³¹

- Frequency and scale of natural disasters and severe weather to increase due to climate change. The cost of natural disasters to the state is estimated to be \$18.3 billion per year by 2050.³²
- Society is becoming increasingly environmentally conscious, driving new value creation including waste streams.³³
- Queensland Government targets of net zero emissions by 2050 and generating 50 per cent of energy from renewable sources by 2030.³⁴

- Reducing infrastructure vulnerability to future hazards and risks.
- Infrastructure that is more sensitive to the natural environment and increasing recognition of the value of green and blue infrastructure.
- Infrastructure that considers environmental vulnerabilities and supports decarbonisation, waste minimisation and resource reuse.

Note: At the time of publishing the Queensland Government, through the Department of Resources, was working with industry to develop the Queensland Resources Development Plan (QRDP), which will set out a 30 year shared vision for the future of the resources sector.

▼ OLYMPIC-SIZED BENEFITS

Queensland's success in securing the Brisbane 2032 Olympic and Paralympic Games sets us up for two gold-medal decades of exciting growth.

There are significant economic benefits forecast for Brisbane and across Queensland from hosting the Brisbane 2032 Games. In June 2021, KPMG released its *Brisbane 2032 Olympic and Paralympic Games Preliminary Economic, Social and Environmental Analysis summary report*.³⁵

It took into account the effects of COVID-19, the *Queensland Government's COVID-19 Economic Recovery Plan* and proposed expenditure on the Brisbane 2032 Games. It found the following significant benefits from hosting the event:

- ▼ total economic and social benefits for Queensland are estimated at up to \$8.1 billion, largely driven by estimated increases in the value of tourism, trade, health benefits and an increase in volunteering.
- ▼ total economic and social benefits nationally are estimated at up to \$17.6 billion.

The report found that the impact of new expenditures resulting from the Brisbane 2032 Games is projected to result in the creation of approximately:

- ▼ **91,600 FTE job years in Queensland**
- ▼ **122,900 FTE job years nationally.**

There are also significant social benefits derived from hosting the Brisbane 2032 Games. These include health benefits, an increase in volunteering, civic pride and social cohesion, the generation of sporting pathways for elite athletes, enhanced industry and government partnerships, better community infrastructure, diversity and inclusion, and enhanced social licence. The Brisbane 2032 Games will also deliver positive environmental impacts, including reduced congestion through the greater use of public transport, enhanced waste management, repurposed existing infrastructure (to reduce carbon usage) and long-term behavioural change.



An artist's impression of a redeveloped Gabba

Brisbane 2032 Games Master Plan

The Brisbane 2032 Games will be a catalyst for the long-term growth of Queensland's cities and regions.

Not only will it deliver a sustainable model where the event fits within the region, but it will also deliver an enduring legacy in lock-step with Queensland's growth.

In designing the master plan, the fundamental principle was to maximise use of existing and temporary venues with new permanent infrastructure only to be used when there is a clear, long-term legacy and community need. This has resulted in 84 per cent of venues being existing or temporary, including several venues used for the Gold Coast 2018 Commonwealth Games.

The master plan includes the construction of four new community centres across the region, which will be purpose-designed and built to meet community needs first and foremost, before being converted to competition venues, and then returned to the community. The construction of the Brisbane Arena as a replacement for the ageing Brisbane Entertainment Centre and the redevelopment of The Gabba will also provide a community legacy for Brisbane, the region and the state.

The master plan was also developed in tandem with the Brisbane 2032 Games transport solution – placing particular emphasis on the alignment of each venue's footprint within South East Queensland's existing and planned transport infrastructure. In particular, all Brisbane venues will be accessible by major road links, and most be accessible by one or more sustainable and accessible public transport modes including Cross River Rail, Brisbane Metro and other rail lines. The capacity of these systems will be increased significantly through planned investments and operational enhancements.

Given the proximity of the venues to the city centre, walking and cycling will also be promoted as key modes of travel. Similar transport connectivity will be available by 2032 on the Gold Coast and the Sunshine Coast, where venues will be accessed by major road links, cycleways, pedestrian footpaths, public transport and special Brisbane 2032 Games transport systems.

A sustainable Brisbane 2032 Games

The Queensland Government and other key stakeholders have committed to work with the International Olympic Committee and other partners to deliver the first climate-positive Games. To support this, stakeholders have committed to a range of environmental sustainability measures relevant to infrastructure including:

- ▶ all new infrastructure projects or significant upgrades to existing venues will target 6-star (world leadership) Green Star for Buildings ratings from the Green Building Council of Australia
- ▶ all existing venues will be audited for energy efficiency and on-site cost-effective, renewable energy retrofits
- ▶ all new linear infrastructure or significant upgrades will target an infrastructure sustainability (IS) rating of 'excellent' or greater from the Infrastructure Sustainability Council of Australia
- ▶ as part of the Green Star and IS rating approach, the infrastructure program will target zero net waste and 100 per cent renewable electricity and fuel use for construction phases and deliver assets that achieve the same in operation
- ▶ Brisbane 2032 Games infrastructure will incorporate technologies that support low carbon operations as appropriate, for example, electric vehicle charging infrastructure
- ▶ all on-site permanent and temporary venue construction activity will be closely monitored for compliance with sustainability, environment, workplace health and safety and industrial relations legislative requirements.

▼ INFRASTRUCTURE VISION

Great infrastructure is the platform for Queenslanders to thrive. From connecting businesses with overseas markets, boosting liveability, and enabling the delivery of world-class health and education services – infrastructure is a key enabler of our economy and community.

We recognise the services and outcomes infrastructure facilitates, as well as the role it has in protecting and enhancing our natural environment. We also understand the value of good planning.

This section sets out the government's new infrastructure objectives to deliver on its vision for Queensland. These are embedded in the following chapters, providing more detail on the challenges, opportunities, and the cross-government and infrastructure class priorities.

Our 20-year vision for infrastructure

- ▼ We will drive collaborative state infrastructure planning to boost productivity, grow our economy and create jobs. Infrastructure planning and delivery will leverage opportunities to improve the liveability of our communities and capitalise on innovation to build a strong, sustainable and resilient Queensland.

▼ INFRASTRUCTURE OBJECTIVES

ENCOURAGE JOBS, GROWTH AND PRODUCTIVITY

Investment in productive infrastructure will drive industry diversification and be critical to unlocking the state's future success. It will improve longer-term economic resilience and growth by reducing input costs for business, enhancing market access and supply chain linkages, unlocking economic opportunities and attracting workers by improving liveability. Delivery of a sustainable pipeline of infrastructure will support local jobs and respond to increasing growth pressures in South East Queensland.

DEVELOP REGIONS, PLACES AND PRECINCTS

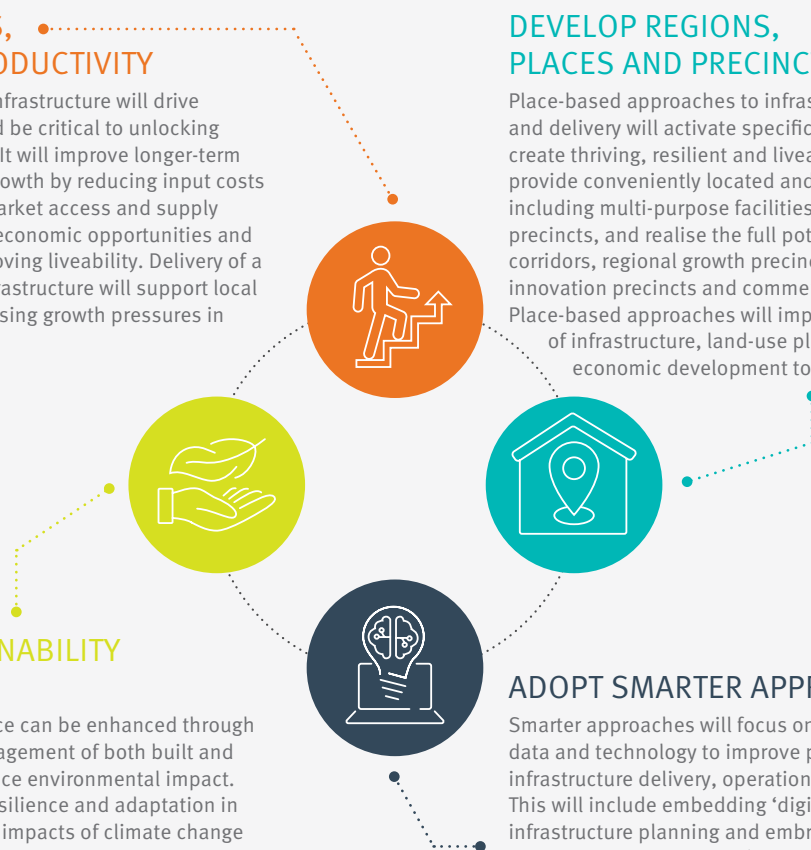
Place-based approaches to infrastructure planning and delivery will activate specific areas or sectors and create thriving, resilient and liveable communities. It will provide conveniently located and accessible services including multi-purpose facilities and mixed-used precincts, and realise the full potential of economic corridors, regional growth precincts, knowledge and innovation precincts and commercial/industrial areas. Place-based approaches will improve the integration of infrastructure, land-use planning and social and economic development to benefit communities.

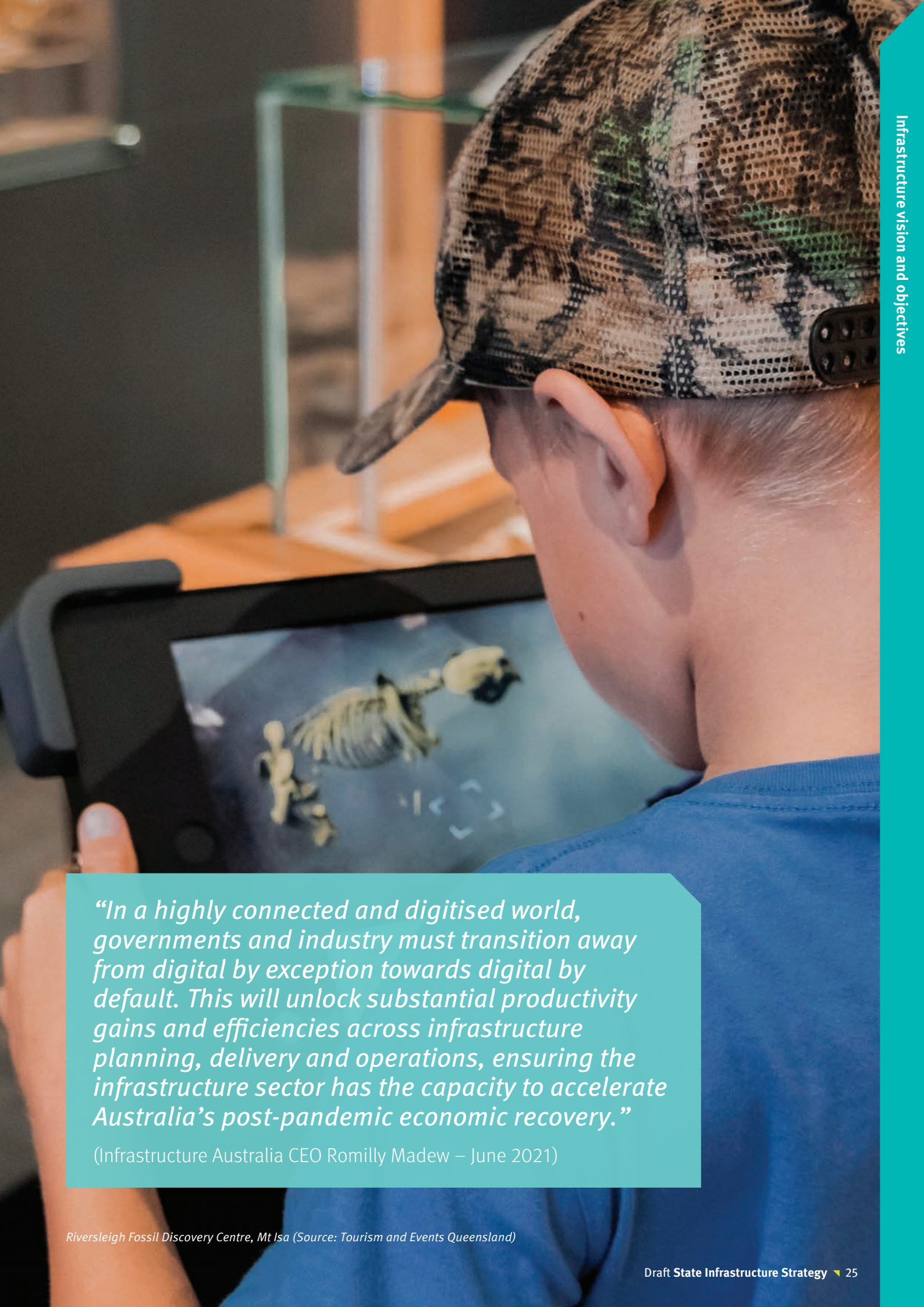
ENHANCE SUSTAINABILITY AND RESILIENCE

Sustainability and resilience can be enhanced through the better design and management of both built and natural assets to their reduce environmental impact. Improving infrastructure resilience and adaptation in response to the increasing impacts of climate change is also vital given the increasing frequency and scale of natural disasters. Core to this objective is moving to a more sustainable and renewable future including incorporating flexibility to meet changing needs.

ADOPT SMARTER APPROACHES

Smarter approaches will focus on innovation and using data and technology to improve productivity through infrastructure delivery, operation and maintenance. This will include embedding 'digital by default' into infrastructure planning and embracing innovative and non-traditional solutions (e.g. better use of existing assets or non-build solutions). Adopting smarter and more innovative approaches can also strengthen evidence-driven decision-making.



A child wearing a camouflage cap is looking at a tablet. The tablet screen shows a fossil of a small animal, possibly a marsupial, with a long tail and limbs. The child is holding the tablet with their left hand. The background is slightly blurred, showing what appears to be a museum or educational center setting with wooden tables and glass display cases.

“In a highly connected and digitised world, governments and industry must transition away from digital by exception towards digital by default. This will unlock substantial productivity gains and efficiencies across infrastructure planning, delivery and operations, ensuring the infrastructure sector has the capacity to accelerate Australia’s post-pandemic economic recovery.”

(Infrastructure Australia CEO Romilly Madew – June 2021)

QUEENSLAND'S INFRASTRUCTURE FOCUS AREAS

Five key focus areas will concentrate our efforts over the medium-term to maximise benefits for Queenslanders and align with the achievement of the four objectives.



REALISING OUR FUTURE AS A RENEWABLE ENERGY SUPERPOWER

As the world transforms its energy use, Queensland has the potential to become a renewables and hydrogen superpower, creating new jobs in the growing clean energy economy.

We have the fundamentals in place and are already investing in initiatives such as the development of Renewable Energy Zones and a detailed investigation into a Pumped Hydro Energy Storage site.

This work is backed up by the \$2 billion Queensland Renewable Energy and Hydrogen Jobs Fund, which will create more jobs in more industries and ensure we meet our target of 50 per cent renewable energy by 2030, and zero-net carbon emissions by 2050.

Already, we are positioning the state as a leader in advanced manufacturing and the processing of green minerals.

More consumers around the world want to buy products made with low or net zero emissions. In Queensland, we can leverage that opportunity to secure a greater share of the supply chain, manufacturing key renewable energy equipment like batteries and solar photovoltaic systems (PV).

This strategy sets out our priorities for further investment in public infrastructure to realise Queensland's low-carbon future and drive the development of value-added export industries.

None of this is possible without our greatest investment – our people. The training sector continues to require strong, efficient and sustainable public providers to meet the evolving skills needs of industry, the economy, and the employment aspirations of Queenslanders. The Queensland Government is partnering with industry to deliver cutting-edge training facilities for growth industries in communities where these industries are emerging, such as the Queensland Apprenticeships Centre in Beenleigh that is getting a new Hydrogen Training Centre of Excellence.

Renewable energy is a key enabler for other sectors to reduce emissions. As the amount of renewable energy in the system increases, we could see energy demand rise through the electrification of industry with renewable power, the uptake of zero-emission vehicles (ZEVs) and the development of new industries, including hydrogen production and green metals.

The Queensland Government's Zero Emission Vehicle Strategy will continue to drive ZEVs uptake and will increasingly be powered by renewable energy. The government will continue to deliver charging sites across the state for Queensland's Electric Super Highway. Over time, this extension will connect Queenslanders across the regions, driving tourism and economic growth. This will complement a continued increase in charging infrastructure from industry and local governments.

Specific priorities that will help deliver our future as a renewable energy superpower are included in the energy, water and transport chapters.



Encourage jobs, growth and productivity



Enhance sustainability and resilience



CONNECTING OUR REGIONS

Queensland is the most decentralised mainland state in Australia. Families, friends and businesses live, work and socialise across thousands of kilometres. Connecting our regions - both digitally and physically - with Australia and the rest of the world is critical.

Digital connectivity remains an ongoing challenge for many of the state's regional communities and for particular cohorts of Queenslanders, such as people with a disability. Queensland's industries are embracing digital technology to advance the economy, create new jobs, and improve our lifestyle. The vibrancy of tomorrow's communities and businesses - particularly in regional Queensland - and the effectiveness of education and training, healthcare, public safety, transport and other services, directly depends on establishing infrastructure to bridge the digital divide. Action led by the Australian Government and NBN Co over the coming years will be critical to avoid the digital divide widening in Queensland. The Queensland Government is keen to work with responsible parties to ensure rural and regional Queenslanders are not left behind as speeds in metropolitan areas accelerate at a much faster rate than the rest of Queensland.

The Queensland Government will provide a single point of coordination to develop the state's digital infrastructure, with a focus on improving connectivity

in regional communities. This will help catalyse Queensland's digital economy by unlocking opportunities that increase market competition and attract network investment.

Existing infrastructure like the Sunshine Coast submarine cable and fibre used by QCN Fibre will be leveraged to boost connectivity.

This strategy also prioritises investments in existing transport infrastructure to respond to our growing population and support economic productivity. For example, the Bruce Highway Upgrade Program is the largest road infrastructure project ever delivered in Queensland - improving safety, flood resilience and capacity along the length and breadth of the highway between Brisbane and Cairns. The \$13 billion of works are being implemented over a 15-year period from 2013-14 to 2027-28.

New Regional Infrastructure Plans will provide a tool to focus infrastructure planning on the unique strengths and opportunities of each region and provide an overarching guide to longer term investment.

Priorities to connect our regions are included in the digital and transport chapters.



Adopt smarter approaches



Develop regions, places and precincts



Caloundra interchange (Source: Department of Transport and Main Roads)

▼ CREATING LIVEABLE COMMUNITIES

Infrastructure must plan for liveable communities, enhance quality-of-life and provide for population growth to meet diverse and changing needs. Healthy, liveable communities are safe, inclusive, accessible and provide a sense-of-place and belonging that enable Queenslanders to thrive.

By delivering the right infrastructure we can ensure all Queenslanders have access to world-class health, education and training, housing and other community services. This means ensuring that priority infrastructure needs are met across Queensland.

With Queensland's population growing and ageing, demand for health services is expected to increase significantly. This presents challenges in providing equitable access to services across rural and remote communities and growing cities. The health sector is also experiencing unprecedented technological change with new service delivery approaches. For example, virtual care hubs are supporting the remote delivery of clinical services. Built infrastructure including hospitals, health and community centres and ambulance stations together with digital technologies will be critical enablers to deliver quality and convenient services.

All children deserve a great start with quality education facilities that instill life-long learning. The \$2.6 billion Building Future Schools Program is investing in new schools with world-class learning environments, with school upgrades also being rolled out under the \$1 billion Great Schools Great Future initiative.

This strategy includes actions to maximise the benefits of shared infrastructure and partnerships and improve access to health and community services. Better outcomes will be realised through investment in strategically-located mixed-use precincts that co-locate vital infrastructure such as health and education with residential and commercial facilities, and are integrated with public and active transport, green space and are designed to enhance safety.

The government is increasing the supply of social and affordable housing by almost 10,000 over the life of the *Queensland Housing Strategy 2017–2027*. Supporting this is the new *Queensland Housing and Homelessness Action Plan 2021–2025* backed by \$1.908 billion. We will continue to explore innovative approaches to funding, financing and service delivery, which is at the core of addressing social housing supply, accessibility, affordability and diversity challenges.

As our cities and regional areas have grown, our transport network has evolved and now passengers can move via busways, railways, ferries, cycleways and many other connections. This strategy enhances these established modes of transport but also prioritises emerging technologies and new service models, such as Mobility as a Service to further shape our transport system and meet growth in service demand.

Access to nature plays a crucial role in sustaining liveable communities with far-reaching health and wellbeing benefits that should not be underestimated. Integrated planning can ensure access to natural places is accommodated in strategies for managing demand, and service delivery approaches for existing and new health, education and training, and justice infrastructure.

Priorities that will help deliver services for liveable communities are also included in the health, education and training, justice and public safety, and transport chapters.



Adopt smarter approaches



Develop regions, places and precincts



BMX biking at Sleeman Sports Complex, Chandler (Source: Department of Tourism, Innovation and Sport)

■ BUILDING A 2032 GAMES LEGACY

The Brisbane 2032 Games present two decades of opportunities and benefits. With the right planning in place, we can also secure a vibrant and ongoing legacy, sustainable local supply chains, and new skills and knowledge in key sectors.

Securing the Brisbane 2032 Games provides a catalytic opportunity to deliver projects that meet the growth-induced, long-term needs for sporting infrastructure across South East Queensland.

While a significant majority (84 per cent) of Brisbane 2032 Games venues are international-standard existing facilities, the legacy-led Brisbane 2032 Games Master Plan includes six projects aligning with long-term development plans and anticipated growth patterns of the region. This includes four new indoor sports centres, the Redlands Whitewater Centre and the Brisbane Arena.

The four new indoor sports centres will be located across South East Queensland. Based on the highly successful and well-used Coomera Indoor Sports Centre which was constructed for the 2018 Commonwealth Games, these centres will function as 9-12 court community sporting facilities that will be used both before and after the Brisbane 2032 Games, providing a strong legacy for the region. The planned Redlands Whitewater Centre, incorporated into a broader adventure sports precinct with other activities, will provide a significant elite sport and community legacy for the region.

The Brisbane Arena will replace the ageing Brisbane Entertainment Centre, which will attract a greater variety of entertainment and international sporting events, improve Brisbane's tourism potential, align with long term plans for the city and stimulate renewal of the western edge of the city centre.

The Brisbane 2032 Games Master Plan was also developed in tandem with the Brisbane 2032 Games transport solution, placing particular emphasis on the alignment of the venue footprint with South East Queensland's existing and planned transport infrastructure. While transport infrastructure is not being built because of the Brisbane 2032 Games, the event provides an opportunity to look beyond traditional planning timeframes for the next decade and beyond. There are a number of transport projects identified in the Brisbane 2032 Games transport plan that are already funded over the next four years and a number of other projects that have been identified over the next decade that will have a dual benefit to meet both the growth of the region and transport connectivity requirements for the Brisbane 2032 Games.

Priorities that will build a 2032 Games legacy are also included in the transport and arts, culture recreation and tourism chapters.



Encourage jobs, growth and productivity



Adopt smarter approaches



Sunshine Coast Indoor Sports Centre (Source: Sunshine Coast Council)

▼ DRIVING INFRASTRUCTURE PERFORMANCE

Just as it is critical to prioritise what we build, it's equally important to examine the way we plan, fund, deliver and maintain those assets.

Investment in productive infrastructure will be a critical enabler to unlock the state's future success, delivering on the \$50 billion infrastructure guarantee whilst also making better use of the more than \$250 billion in existing state infrastructure.³⁶

The Queensland Government is continuing to drive performance of the infrastructure program through a suite of cross-government actions that will be embedded across all infrastructure classes and government portfolios. This is particularly important given the increasing value and complexity of our infrastructure portfolio.

This strategy builds on previous work to lift the quality of business case planning and improve project delivery. An example of this is the government's Infrastructure Proposal Development Policy that guides the assessment and assurance of proposals to ensure a rigorous approach is applied to infrastructure investment decisions. This strategy also prioritises actions to embed the use of data and digital tools across the infrastructure lifecycle – from the use of digital twins to enhanced use of data analytics and insights.

Good governance is critical to optimising investment. The government is lifting the profile of infrastructure through a new Infrastructure Cabinet Committee, providing renewed focus on infrastructure strategy and reform, as well as ensuring infrastructure delivery remains on target. Ongoing monitoring, analysis and reporting on capital planning and delivery performance will provide the committee with critical overviews of current and future commitments.

Priorities that will help drive infrastructure performance are included in the cross-government chapter.



Encourage jobs,
growth and productivity



Adopt smarter
approaches



Mining Equipment and Technology (METs) being manufactured in Mackay



CROSS- GOVERNMENT



CROSS- GOVERNMENT

OVERVIEW

Infrastructure planning and delivery is costly and complex, meaning it typically has a long lead time. To ensure this significant investment in time and resources is well spent, it is important that governments not only get it right, but have a focus on continuous improvement, coordinated planning and delivery, and appropriate engagement with partners and stakeholders. We should be continually raising the bar to drive and optimise the performance and outcomes of each infrastructure investment.

Governance, accountability, and transparency are integral when planning for major investments in long-life assets. Integration between land-use and infrastructure planning enables identification and planning for future needs, particularly in an increasingly complex and interconnected environment. The Queensland Government recognises that it is critical to continue to invest in and improve governance arrangements, including through the use of place-based

approaches and partnerships with industry and other levels of government. Harnessing the knowledge of local communities and industry partners will optimise infrastructure outcomes.

Increased use of digital and data analysis can improve the way we plan, design and operate infrastructure and related services. There is an opportunity to embed a ‘digital by default’ approach across the infrastructure lifecycle.

This chapter sets out the state government’s cross-sectoral priorities to improve the overall performance of its infrastructure program and the performance of its existing assets. It considers key themes common to the lifecycle of infrastructure development and across different asset classes.

It also considers the current and emerging trends described by Infrastructure Australia in both the *2021 Australian Infrastructure Plan* and the *2019 Australian Infrastructure Audit*, the interest in infrastructure and reform shared by both government and industry, and proposes an agenda of priority actions that is shaped by the current landscape of economic recovery, digitisation and climate change.



Port of Townsville

▼ CASE STUDY

Growth Areas Team

A Growth Areas Team has been established to respond to land supply, population growth and residential development challenges across South East Queensland. Its core remit is to work collaboratively with state agencies, local governments, utility providers and industry to better match the demands for land and affordable and diverse housing, with supply. The objectives of the Growth Areas Team are to unlock approvals in targeted local government areas, accelerate outcomes in known growth areas, plan for new growth corridors and identify and implement systemic changes to the state's planning framework.

The Growth Areas Team works to overcome barriers that constrain new development in growth areas, while excluding areas of national or state environmental significance, by facilitating development approvals, partnering to undertake structure and infrastructure planning and identifying and promoting reforms that will improve the long-term management of Queensland's growth.

The Growth Areas Team also focuses on forming partnerships and facilitating outcomes with infrastructure providers to better align planning, funding and delivery in active and emerging growth areas.



Growth area house under construction



CROSS- GOVERNMENT

CHALLENGES

Better infrastructure integration

As our economy continues to grow and our population expands and shifts, building and maintaining infrastructure will become even more interconnected and complex. Integrated land-use and infrastructure planning can help manage changes in our economy and communities, particularly in areas of strong population growth.

Collaboration and continuous improvement of governance approaches can optimise infrastructure investment across multiple portfolios and asset classes. This can result in more multi-purpose facilities that leverage investment, are well-used and deliver a range of complementary and integrated government services. Improving the integration of infrastructure, land-use planning and economic development will better realise regional economic outcomes.



Resilience and sustainability

Queensland is Australia's most disaster-affected state, with the frequency and scale of natural disasters increasing because of climate change. These disasters can have a significant and lasting impact on affected communities and the infrastructure they rely on. Understanding regional climate risks and integrating resilience and sustainability across the infrastructure lifecycle will be critical to managing the operational and maintenance cost of our growing asset base.



Portfolio planning and performance

The transition of Building Queensland into the Department of State Development, Infrastructure, Local Government and Planning, and new infrastructure proposal development arrangements, means that agencies have a more active role in developing business cases for major infrastructure. Building capability across state and local governments will maximise existing portfolio planning, proposal development and project delivery outcomes.



OPPORTUNITIES

Attracting private sector investment

Our industry partners are seeking opportunities to invest in Queensland and to collaborate on infrastructure projects. Private sector participation in infrastructure planning, financing and delivery can offset financing shortfalls and bring innovation and technical expertise to projects. By working collaboratively with industry and across government we can establish the right environment to attract more private sector infrastructure investment.



Adopting data driven approaches to infrastructure

Data analytics and use of technology are increasingly being adopted to help infrastructure perform better. Technological advances allow the collection – and analysis – of information about the way we use infrastructure and the services it supports.

Creating new data sets and utilising existing ones can improve all aspects of infrastructure service delivery: how we plan for it, develop it, build it, use it and maintain it over its lifespan. This can be further enhanced by increasing the adoption of digital approaches to infrastructure planning, delivery, and operations including going ‘digital by default’ for Queensland infrastructure projects.

Facilitating strategic precincts

Precincts can drive collaboration and growth. There is an increasing trend towards the use of integrated precincts to facilitate and deliver world-class health, knowledge, innovation and community services centred around universities, hospitals, or major industrial areas.

There is an opportunity to create places where businesses, workers and technology come together to build skills and innovate, access new market opportunities, and create jobs.



Increasing business confidence

Government is working with industry to develop mechanisms for greater transparency and certainty between governments and industry, including with a shared view of risk and innovation in infrastructure planning, delivery and operation.

Improving the prioritisation and sequencing of the government’s infrastructure pipeline and its visibility for local market participation, provides industry with confidence and clarity in the forward work program.



Better performing buildings

The state needs to make every infrastructure dollar count. The private sector is leading the way when it comes to the adoption of better building practices, delivering more efficient buildings with better thermal comfort, reducing the requirements for trunk infrastructure and increasing resilience to extreme weather. Infrastructure Australia and the Property Council of Australia have identified that such practices are critical to lifting the performance of government assets and reducing operational costs.

There is an opportunity to adopt proven practices, to ensure new government buildings from social housing to schools, perform better for Queenslanders in a changing climate, while also embedding long-term operational cost savings into our growing asset base. The government supports a more consistent methodology for projects to be planned with regard to Queensland Government’s *Best Practice Principles* for building construction.





CROSS- GOVERNMENT

PRIORITY ACTIONS



Encourage jobs, growth and productivity



Develop regions, places and precincts



Enhance sustainability and resilience



Adopt smarter approaches

WORKING WITH THE PRIVATE SECTOR

1 Our priorities for private investment (DSDILGP)



Identify and publish significant infrastructure opportunities that are suitable and would benefit from private investment. This will focus on opportunities that do not require government funding or long-term concessions.

2 Longer-term pipeline development (DSDILGP)



Progressively build a longer-term view of infrastructure proposals to inform the Queensland Government Infrastructure Pipeline, improve coordination and sustain regional jobs, and identify opportunities for early market engagement.

3 More collaborative approaches with industry (DSDILGP)



Piloting opportunities to embed more collaborative approaches with industry into infrastructure optioneering and delivery across Queensland Government, building on the best practice of other jurisdictions and international experience. For example, collaborative contracting and early market engagement.

ENHANCING GOVERNANCE

4 Performance through leadership (DSDILGP)



Chaired by the Infrastructure Minister, an Infrastructure Cabinet Committee (ICC) will provide a renewed focus on infrastructure strategy and reform, as well as ensure capital infrastructure delivery remains on target. The ICC is overseeing this strategy and the supporting Regional Infrastructure Plans to align longer-term investment across government.

5 Data-driven infrastructure planning for regions (DSDILGP, DRDMW)



Scope and progressively establish a data-driven baseline of infrastructure performance along with an understanding of future demand drivers across Queensland's regions and infrastructure portfolios. Analysing this data will help to improve asset utilisation, inform statewide priorities and the ongoing development of Regional Infrastructure Plans.

6 Post-delivery analysis and strategic infrastructure assessment (DSDILGP)



Continue to develop and embed tools such as benefits realisation and post-delivery assessment in strategic infrastructure planning and policies as a critical step in capturing and understanding the impact of infrastructure beyond its physical construction and direct utilisation.

EMBEDDING DIGITAL AND DATA INNOVATION

7 Data insights (DSDILGP)



Scoping new data approaches to determine how data analytics and data-driven insights can be used more effectively across the infrastructure lifecycle from policy and planning to asset decommissioning.

8 Digital Twin (DSDILGP, DoR)



Work across government on the phased introduction of a statewide digital workbench to help plan, predict and understand Queensland's infrastructure to inform better decision making through the use of data. Digital twins have been emerging as a leading tool to present a more comprehensive understanding of the real world.

9 Building Information Modelling (DSDILGP with other agencies)



Continue implementing the government's commitment to use Building Information Modelling on all government infrastructure projects by 2023. Also continue to increase capacity and skills across the public service to support this 'digital by default' approach to infrastructure development.

INFRASTRUCTURE PLANNING WITH A FOCUS ON PLACE

10 Regional Infrastructure Plans (DSDILGP, DRDMW)



Introduce a new place-based approach to infrastructure planning that better reflects the unique strengths and opportunities of each region. The progressive development of Regional Infrastructure Plans with regional stakeholders, will recognise the important role infrastructure plays in regional economic recovery, resilience, growth, and liveability.

11 Prioritising infrastructure planning for growth areas (DSDILGP)



Evaluate recent infrastructure planning approaches for high-growth communities, including Social Infrastructure Investment Strategies (piloted for a Priority Development Area) and Infrastructure Coordination Plans to inform a leading practice that ensures communities of highest need are adequately serviced and well-coordinated.

12 Precinct governance framework (DSDILGP)



Developing a framework to determine the appropriate governance mechanism to support the development or activation of a precinct, ensuring the interactions between institutions, private sector and government deliver desired outcomes.

13 Facilitating growth precincts to drive regional jobs (DSDILGP)



Facilitate place-based regional economic strategies through growth precincts that leverage regional competitive strengths. The coordinated delivery of programs and initiatives, investment facilitation and attraction services, and enabling infrastructure will be supported by a program management approach.

RESILIENCE AND SUSTAINABILITY

14 Better performing buildings (DSDILGP)



Determine the best application of nationally recognised building performance ratings across Queensland Government agencies to improve resilience and reduce the operational costs of new and existing assets.

15 Zero-net emissions infrastructure plan (DSDILGP)



Improve emissions from infrastructure through the release of a zero-net emissions infrastructure plan.



Gold Coast Light Rail (Source: Department of Transport and Main Roads)

TRANSPORT



TRANSPORT

OVERVIEW

How we move, and how efficiently we can do it, is key to ensuring productivity and quality of life.

Queensland's transport network spans 33,367 km of state-controlled roads, over 6,560 km of state managed heavy rail, 21 ports, over 20 km of light rail and 29 km of busways.³⁷ Our network has developed as our cities and regional areas have grown. Passengers and freight are now able to move via railways, busways, ports, airports, ferry connections, cycleways and many other connections.

Emerging technologies and new service models will enable us to further shape our transport system and meet growth in service demand. Innovations such as on-demand transport, cooperative and automated vehicles and Mobility as a Service can enhance the state's established modes and help us embrace new ways of transporting people and goods. Digitalisation of infrastructure and utilisation of smart transport systems will also provide opportunities to enhance the delivery, management and operations of the transport network.

These innovations complement how transport infrastructure can reduce emissions. Facilitating the shift to zero emission vehicles and promoting more efficient modes for people and goods, including greater use of buses and rail networks is underpinned by transport infrastructure. We will do this while ensuring our freight systems are resilient, safe and better integrated. The COVID-19 pandemic highlighted the importance of the supply chain and free-flowing movements, as the industry supported emergency responses. Integrated road, rail, air and port systems support Queensland's economic performance.

Queensland's transport network is vast and supports expansive regions and cities. Maintaining our transport infrastructure asset is a challenge, particularly given this scale as well as increasing user demands and disruptive weather impacts across the state. Investing in maintenance of our existing transport infrastructure is essential, not only to provide safe and efficient travel today, but to ensure the future economic sustainability of our state. This includes assets such as shipping channels, which are vital to the successful operation of our ports. The growing impact of climate change means that maintenance of our assets becomes even more critical.

Building-in resilient infrastructure assets can provide a greater level of protection so they remain accessible for transport networks in response to more frequent extreme climate events.

Providing access to employment and training, education, health, and essential services underpins the function of Queensland's passenger transport system. We work with our delivery partners to provide an accessible, integrated, and efficient network across rail, bus, tram, and ferry services, for all users.

Along with the Brisbane 2032 Games, the \$5.4 billion Cross River Rail project is the Queensland Government's highest priority infrastructure project. Together with new high-capacity signalling, Cross River Rail will revolutionise the South East Queensland rail network, paving the way for future rail and bus projects and expansions to the passenger transport network.

As Queensland's population grows, the increased demand on our transport network will need to be balanced with placemaking and the everyday activities that occur in and around our road network and infrastructure. This balance is essential for creating attractive, sustainable, and healthy places, where neighbourhoods are not isolated or disconnected from the services that enable them to flourish. The Queensland Government is working to support placemaking and to integrate land-use and transport planning.

Queenslanders are utilising active forms of transport such as walking and cycling more than ever before, in response to population growth pressures, a desire to reduce emissions and the health impacts of physical inactivity.³⁸ The Queensland Government is working with other levels of government and industry partners to ensure our communities are green, liveable and walkable.

Transport has a unique role in the state's ongoing economic recovery from the COVID-19 pandemic as it supports almost all social and economic activities. An accessible, sustainable, and efficient transport sector reduces the cost of doing business, which supports a stronger Queensland economy.

Current key initiatives

- ▼ The Transport Coordination Plan 2017–2027**
 Provides a framework for the coordinated planning and management of transport in Queensland.
- ▼ The Queensland Transport Strategy**
 Harnesses emerging transport trends to move people and products safely and efficiently.
- ▼ Queensland Road Safety Strategy**
 Delivers a more holistic approach to road safety.
- ▼ Regional Transport Plans**
 Defines priorities and actions for developing Queensland's transport system that will guide future investment over the next 15 years.
- ▼ The Queensland Freight Strategy**
 Sets a shared vision for the state's freight system, outlining commitments to guide policy, planning and investment decisions.
- ▼ Accessibility and Inclusion Strategy**
 Articulates the Department of Transport and Main Roads' (TMR's) commitment to become a world leader in the provision of accessible and inclusive transport services.
- ▼ Queensland Cycling Strategy 2017–2027**
 Sets the direction for encouraging more people to ride bikes, more often throughout Queensland.
- ▼ Queensland Walking Strategy**
 Recognises the critical role that walking plays as part of a single integrated transport system accessible to everyone and as part of a healthy, active lifestyle for all Queenslanders.
- ▼ Pacific Motorway M1 Upgrade Program**
 The upgrade and widening of the Pacific Motorway M1 is being delivered in strategic priority stages as funding becomes available, based on traffic volumes and best value for money.
- ▼ Cooperative and Automated Vehicle Initiative**
 The introduction of a Cooperative Intelligent Transport Systems (C-ITS) pilot on roads in and around Ipswich to build community engagement and public awareness about automation, and to grow the state government's technical readiness.



Houghton River Floodplain Upgrade Project (Source: Department of Transport and Main Roads)

HIGHLIGHTS



The
Bruce Highway Upgrade
program delivering
\$13 billion
of works over a 15-year period
from 2013–14 to 2027–28



**Queensland's
state-controlled
road network**

spans
33,367 km
and has a gross
replacement value of
\$78.15 B (as at
30 June 2020)³⁹



**Queensland
Rail**

is responsible for
6,560 km
of rail track across the state⁴⁰
while Aurizon operates
and manages
2,670 km of the Central
Queensland network⁴¹



**Passenger
transport services**

in Queensland
operate across
6,058 km of rail,
20.3 km of light rail,
29 km of dedicated
busways (SEQ)
and includes more than
32,600 park 'n' ride
spaces⁴²



Coal train, North Queensland

TRENDS



**1009 MILLION
TONNES OF FREIGHT**
was moved on the
transport network in 2019-
20⁴³, this is expected to
increase more than 20 per
cent over the next decade⁴⁴



**356.8 MILLION
TONNES OF CARGO**⁴⁵
valued at \$113.25
billion, moved through
Queensland's 21 ports
in 2019–20⁴⁶



**32 PER CENT
INCREASE IN
TRANSPORT
EMISSIONS**
between 2005-2019,
currently approximately
23.6MtCO₂-e⁴⁷



**MORE THAN
163 MILLION
PASSENGER
TRANSPORT TRIPS**
were provided
across Queensland
in 2019-20⁴⁸



**CYCLING 5 KM TO AND
FROM WORK EACH DAY**
instead of driving would save
about 720kg of greenhouse gas
emissions per year – 5 per cent of the
average Queensland household's
greenhouse emissions



**ALMOST HALF OF
QUEENSLANDERS WOULD
LIKE TO WALK MORE**⁴⁹
and 75 per cent of parents want
their kids to be more active⁵⁰



**31 QUEENSLAND ELECTRIC
SUPER HIGHWAY FAST
CHARGING LOCATIONS**
the majority of which are powered by
green energy, and saved between 455
and 534 tonnes in tailpipe emissions⁵¹

▼ CASE STUDY

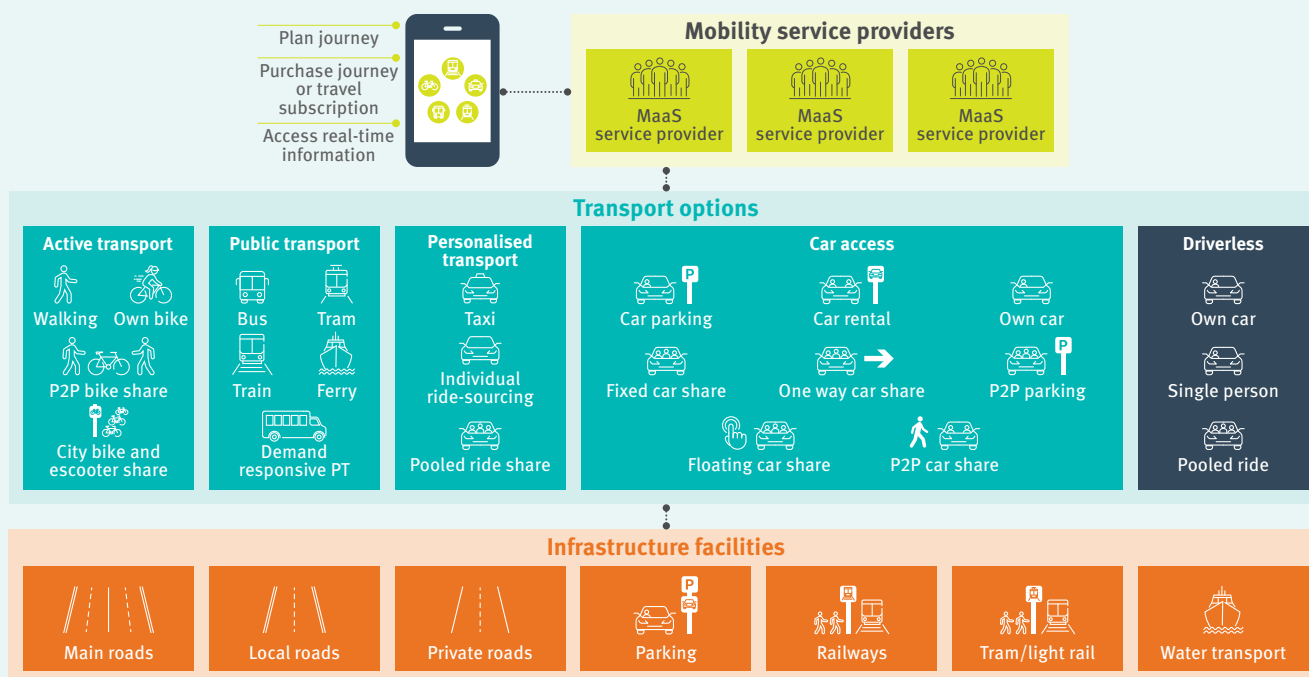
Mobility as a Service

New services and technologies provide exciting possibilities for innovative transport services and modes. TMR is exploring opportunities to harness emerging technologies and new service models to improve the use of existing roads and transport systems. Personalised transport services have grown in popularity due to the proliferation of smartphones and ready access to data. Mobility as a Service (MaaS) schemes that integrate public and private transport services into a single fare often as part of a subscription service are increasing in popularity and demand.⁵²

TMR and the University of Queensland (UQ) as part of an iMove Cooperative Research Centre program have commenced a joint proof of concept to explore how MaaS schemes can enhance personal mobility locally. The trial uses emerging technology to test elements of MaaS with a group of UQ staff and students.

The application of MaaS schemes has the potential to make certain modes more attractive for users in the face of competition from new and future transport modes that may adversely affect the transport system, primarily through increased congestion.

Options such as on-demand transport are a mode that can be included in MaaS. TMR's Demand Responsive Transport (DRT) trial in Logan is an example of an integrated public-private transport service, with local taxis connecting commuters to public transport services that is provided as an on-demand transport option. DRT Logan is a flexible shared transport option, designed to bring together people who live near one another and want to travel at the same time in places or at times when buses and trains aren't available. With DRT you can pre-book a vehicle to pick you up near your home and take you to selected local shopping and community facilities and transport hubs such as your local bus or train station.⁵³



Overview of Mobility as a Service (Source: Modified from MaaS Australia)



TRANSPORT

CHALLENGES

Network security and resilience

Queensland is Australia's most disaster-affected state exposed to the impacts of extreme weather and climate change. As the climate continues to warm, extreme weather events are likely to be more damaging and create greater disruption across the transport system. Queensland's transport network also needs to be secure and resilient to human induced threats, addressing disruptions and damage quickly and thoroughly. The transport system, like all areas of the Queensland economy, must plan, prepare and build in resilience so that when events do occur it can reopen faster and at least cost.



Freight on rail

Maximising rail freight use along strategic corridors can deliver improved economic, social and environmental benefits. The Queensland Government recognises that the freight task operates in a competitive and complex environment. Modal choice is determined by a variety of factors including reliability, price, timeliness, type of goods, geographic circumstance and other economic and social factors. Investing in efficient and effective rail access is particularly important in Queensland's regional areas – the source of our resource and agricultural products.



Road safety



Road safety is a public health issue and continues to be a complex challenge in Queensland. Every crash, serious injury, and fatality on the network has a ripple effect that impacts individuals, families and communities. The Queensland Government has a strong history of taking action to improve road safety. Over time, progress has been made through interventions such as the introduction of seatbelts, enforcement initiatives including the rollout of Australia-first cameras that detect if a driver is using their phone or not wearing a seatbelt, behavioural and cultural change programs, and improving roads and roadsides. However, to achieve our vision of zero road deaths and serious injuries we need to build on these foundations to implement a holistic approach to reducing road trauma. The challenge is to identify infrastructure and service solutions that can help us realise the vision of zero deaths and serious injuries across the transport network.



Journey times and freight efficiency

As our cities and regional centres grow, journey times and reliability can be affected. This impacts the entire network and the wider economy through increased freight costs and liveability as commuting times grow. The Queensland Government continues to proactively manage congestion and integrate the operations of the road transport network to improve journey reliability for customers. Knowledge-sharing about current and future system requirements across the freight supply chain could also provide insights into the day-to-day working of the freight system to better identify potential issues, innovative solutions and ensure investments are driven by need.



OPPORTUNITIES



Environmental sustainability

Transport infrastructure can directly reduce emissions through the use of low or zero carbon material, the increased use of recycled material and the sourcing of renewable energy to power our transport system. Supporting low and zero emission vehicles and vessels for personal, commercial and freight use, encouraging greater adoption of passenger transport services and active transport options, such as riding bicycles or e-bikes and walking will help reduce transport greenhouse emissions. As technology and new services such as shared connected and automated vehicles develop, the reduced number of vehicles on our roads and efficiency gains in service delivery can also help lower green house gas emissions. Long-term planning and improved environmental practices at ports are also assisting in securing the long-term health and resilience of the maritime environment including the Great Barrier Reef.



Increased connectivity and accessibility

Inclusive, active and healthy communities need employment and everyday services to be accessible for all. Improving digital connectivity can minimise the need to travel, while improving our integrated transport and land-use planning to support placemaking and applying universal design principles to our public spaces provides more opportunities for people to continue to use more active modes in their local neighbourhood. Enabling integrated journey planning, information and payments makes using public transport easier, while more on-demand, convenient and seamless interchanging will result in a world-class network that helps Queenslanders access services when and where they want.



Brisbane 2032 Games

The Brisbane 2032 Games provides a unique opportunity to deliver sustainable, accessible and inclusive transport infrastructure across the state, improving access across South East Queensland and other host cities and towns. There are opportunities to build on the benefits of Cross River Rail's legacy of increasing the region's rail capacity, reducing travel times for commuters and visitors and improving the passenger experience through more reliable and frequent services.

Delivery of an integrated, accessible and inclusive transport network (products, services, information and infrastructure) demonstrate Queensland's commitment to upholding everyone's human rights, creating a legacy of dignity for all.



Use technology to improve mobility

Introducing new services and technology will improve access and connectivity in our regional centres and cities across Queensland. More efficient-running and new technologies, such as drones, delivery bots and automated vehicles, can help make better use of existing road capacity, improve access, and reduce first and last-mile freight costs by up to 40 per cent.⁵⁴





TRANSPORT

PRIORITY ACTIONS



Encourage jobs, growth and productivity



Develop regions, places and precincts



Enhance sustainability and resilience



Adopt smarter approaches

1 Improved freight reliability and efficiency (DTMR)



Continue to work collaboratively to deliver an integrated, resilient, and safe freight system to support the Queensland economy and community which links communities, local industry, regions and Queensland to the rest of Australia and internationally. Optimise use of existing freight infrastructure and targeted investment, creating economic opportunities which advance customer, industry and government interests, now and into the future.

2 SEQ rail network and faster rail (DTMR, QR)



Continue to enhance and optimise the South East Queensland rail network to deliver faster, more efficient and reliable journey times across the network, as well as support faster rail outcomes along strategic corridors between Brisbane and the Gold Coast and Sunshine Coast. This will build on the benefits offered by Cross River Rail and help prepare the network for increased demand.

3 Incentivising low and zero emission Transport solutions (DTMR)



Provide appropriate policy and infrastructure to support greater uptake of zero-emission vehicles and shift to more efficient modes. Embrace innovative and new transport technologies, and combine research and development to build, strengthen and integrate Queensland's transport system. Reducing emissions in the transport sector will support new industries, skill development, and create more sustainable jobs.

4 Queensland Electric Super Highway (DTMR)



Continue to expand the Queensland Electric Super Highway across the state in partnership with local governments and industry to ensure increased access for Queenslanders to electric vehicle charging infrastructure.

5 Reduce transport emissions (DTMR, QR, Ports)



To reduce transport infrastructure's environmental impact and whole-of-life greenhouse gas emissions:

- Embed sustainability into decision making for project planning, design, construction and operation
- Undertake sustainability assessment for all infrastructure projects with budgets exceeding \$50 million
- Explore opportunities to re-use waste materials, such as for earthworks and drainage construction, as well as crumbed rubber in road construction.

6 Network security, resilience and sustainability (DTMR, QR, Ports)



Improve transport network security and resilience to the impacts of climate change and disruptions from all hazards, including natural disasters and human induced threats, to enable safe movement of people and goods. Research and invest in sustainable materials to improve recovery and reconstruction activities. Improve planning, design, delivery and operations to incorporate risk related to natural disasters and climate change impacts.

7 Movement and place framework (DTMR, DEPW)



Develop a movement and place framework in partnership with the Queensland Architect to guide a 'place-based' approach to the planning, design and operation of Queensland's transport network, alongside informing the delivery of transport precinct development outcomes.

8 Sustainable and healthy transport options (DTMR)



Support liveable and sustainable transport options through the implementation of the *Queensland Walking Strategy 2019–2029* and *Queensland Cycling Strategy 2017–2027*.

9 Coordinated transport and land use (DTMR, DSDILGP)



Leverage significant transport infrastructure projects such as Cross River Rail to develop transit-oriented developments around stations or road infrastructure that supports housing diversity, social inclusion, enhanced environmental outcomes and ensure that such projects can grow and adapt to evolving needs.

10 Improved road safety (DTMR, QPS)



Deliver innovative initiatives focused on the whole-of-life approach to transport safety to improve overall transport network safety. Employ new technologies that can improve safety including connected and automated vehicles or 'Hold the Red' an active collision prevention system.

11 Operational efficiency (DTMR)



Use technologies such as the next generation traffic signal controllers (NGTSC), Smart Motorways, and LED lighting to enhance operational efficiency, improve network capacity and reduce operating costs.

12 Seamless personalised journeys (DTMR)



Continue to partner with industry and other levels of government to investigate opportunities for seamless personalised travel using MaaS, increasing access to on-demand transport and improving transfers between different forms of transport across Queensland.

13 Rail network safety and efficiency (DTMR, QR, CRRDA)



Progressively deliver the European Train Control System (ETCS) to improve safety, capacity and efficiency of the rail network. The ETCS is an advanced signalling system that relays continuous information between the train and central Rail Management Centre via a radio system, trackside technology and onboard equipment.

14 Regional rail performance (DTMR, QR)



Continue to upgrade the North Coast Line to improve regional rail performance and enhance passenger and rail freight movements.

15 Cooperative and Automated Vehicles (DTMR)



Continue to prepare the technical foundations for the next generation of smart transport infrastructure to provide safety, mobility and environmental benefits on the transport network through the Cooperative and Automated Vehicle (CAVI) initiative.

16 Convenient and attractive active transport (DTMR)



To encourage active transport and other sustainable travel choices, deliver:

- ▶ safe and connected cycle paths and footpaths
- ▶ integrated public transport, walking, cycling and other networks
- ▶ networks that are accessible for people of all ages and abilities
- ▶ more inclusive, active and healthy communities.

17 Bruce Highway upgrades (DTMR)



Continue to improve safety, flood resilience and capacity along the Bruce Highway between Brisbane and Cairns by ongoing implementation of the Bruce Highway Upgrade Program.

18 Port network management (DTMR, Ports)



To further optimise the Queensland port network, facilitate trade and drive economic growth by:

- ▶ increasing the efficiency and effectiveness of port services and infrastructure
- ▶ improving connectivity and access to help our regions connect with the world
- ▶ driving safety, environmental best practice and sustainability of port operations and development to create a positive change in the communities where they operate.

19 Inland Rail (DTMR, QR)



Connect producers to market and create new opportunities to deliver freight to markets between Melbourne and Brisbane and beyond to global markets by continuing to work with the Australian Government to maximise the benefits of Inland Rail for Queensland.

20 Planning for the Brisbane 2032 Games (DTMR, 2032 Taskforce)



Plan to deliver sustainable transport infrastructure across the state which provides improved access across South East Queensland and other host cities and towns providing an ongoing legacy for the community.

21 Supporting Tourism (DTMR, DTIS)



Continue to incorporate evidence-based tourism priorities in the planning and investment of transport infrastructure and services to improve access and drive real growth in tourism opportunities and jobs.

22 Freight Rail (DTMR, QR)



Work with rail and supply chain stakeholders to increase the use of regional rail corridors (South West, Central West, Mt Isa and North Coast Lines) to improve road safety, reduce road transport emissions and reduce the road maintenance burden.

23 Decision making in an uncertain future (DTMR)



Continue to undertake and improve policy development and transport modelling capacity and capability to assess how new transport service models, such as shared vehicle use, can help achieve the desired strategic transport outcomes as new technologies such as autonomous vehicles become a reality.

24 Creating Better Connections for Queenslanders (DTMR)



Delivery of *Creating Better Connections for Queenslanders* – a 10-year plan for Queensland passenger transport focusing on providing reliable and frequent services to move large numbers of people quickly and easily on the busiest corridors in our towns and cities, delivering infrastructure, services, and technology improvements.



Kidston Solar Project (Source: Genex)



ENERGY



ENERGY

OVERVIEW

Secure, reliable and affordable energy is vital to Queensland communities and businesses. It underpins our economy and quality-of-life, with exciting new technologies paving the way for a sustainable future and creating more jobs in more industries.

Queensland enjoys an enviable energy supply that is supported by significant generation and network infrastructure. The state government plays a major role in the energy industry, owning the vast majority of the network infrastructure and a majority of generation capacity. This provides a strong foundation for delivering reliable and affordable energy, and the delivery of the 50 per cent renewable energy target by 2030.⁵⁵ With our globally significant renewable energy resources, Queensland has experienced a boom in infrastructure investment at both the household and industry level. This has been driven by falling costs, a skilled workforce and industry base, and the state government's stable investment environment, putting us on the path to becoming a renewables and hydrogen superpower.

Queensland reached a significant milestone at the end of 2020, using renewables to supply more than 20 per cent of our electricity demand. The government will continue to leverage its competitive advantage in renewables to support further investment and economic growth across the state, and achieve zero net carbon emissions by 2050.⁵⁶

Queensland's renewable energy zones will unlock the next wave of large investment, creating long-term, sustainable, and diversified employment opportunities, while further decarbonising our electricity network.

Cheap, reliable, and accessible renewable energy will also be an integral part of Queensland's rapidly developing hydrogen industry, which is another vital plank in the state's lower emissions future. Renewable hydrogen can be used to store energy as a transport fuel and as a complementary gas supply for industry.

Renewable energy is a key enabler for other sectors to reduce emissions. As the amount of renewable energy in the system increases, we could see demand rise through the electrification of industry and buildings with renewable power, the uptake of zero-emission vehicles (ZEVs) and the development of new industries, including hydrogen and green metals.

ZEV ownership is expected to grow exponentially over the next 10 years. This will significantly impact electricity consumption, and the requirement for energy infrastructure.

As the uptake of new technologies and renewable energy generation in Queensland continues to increase, we will need to modernise our infrastructure and augment it with storage and other system services. There is a need for both short-term storage – such as small and large-scale battery storage systems – and longer-duration storage – such as pumped hydro – to ensure that renewable energy is available when needed.

Customers are increasing pressure on business and industry, with global investors and markets converting to renewables to reduce emissions. For Queensland industries to maintain and grow their global competitiveness, it is imperative there is support to transition to lower-emission sources of energy. We can achieve this by taking the opportunities presented by our plentiful and cheap renewable energy sector to grow existing and new industries.

The speed and scope of the transformation of the energy industry means there is a greater need for coordinated planning of infrastructure to ensure the system continues to meet the affordability, reliability, and security needs of Queensland customers. This role is being undertaken at a national level through the Integrated System Plan,⁵⁷ and at a state level through the *Powering Queensland Plan* and network businesses' planning reports.

Current key initiatives

Queensland Renewable Energy Zones

The government has committed \$145 million for three Renewable Energy Zones, located in the Northern, Central and Southern regions, as part of *Queensland's COVID-19 Economic Recovery Plan*.

Queensland Hydrogen Industry Strategy

The *Queensland Hydrogen Industry Strategy 2019-2024* released in 2019, sets the direction for sustainable hydrogen industry development, building on Queensland's competitive advantages.

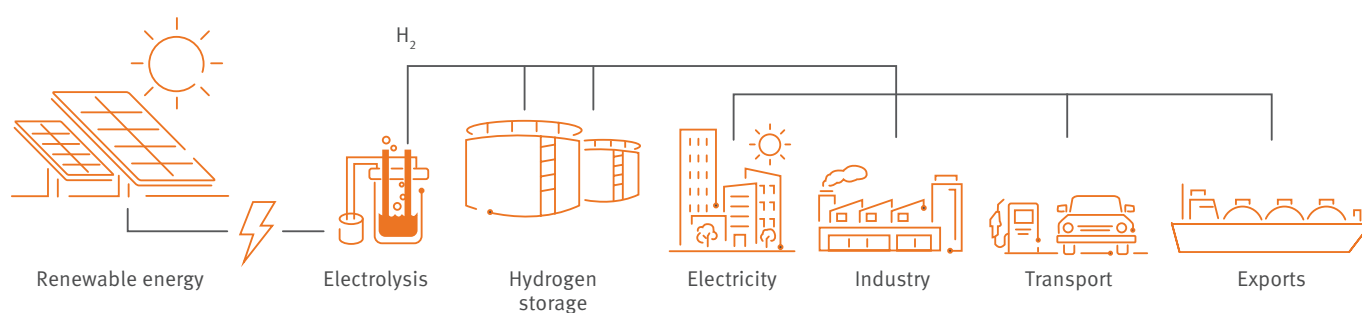
Queensland Renewable Energy and Hydrogen Jobs Fund

The government has established the \$2 billion Queensland Renewable Energy and

Hydrogen Jobs Fund to support Queensland's energy transformation, by supporting government-owned corporations (GOCs) to increase investment in commercial renewable energy and hydrogen projects, along with supporting infrastructure, including in partnership with the private sector.

Borumba Dam Pumped Hydro Study

The government has invested \$22 million from the Queensland Renewable Energy Zones to investigate the potential to construct a pumped hydro energy storage facility at Borumba Dam, near Gympie.



Renewable hydrogen and its uses (source: Adapted from Queensland Hydrogen Industry Strategy)

HIGHLIGHTS

The Australian Energy Market Operator (AEMO), responsible for overall National Electricity Market transmission planning, forecasts the generation mix evolving from one dominated by coal-fired generation, to a generation mix dominated by renewable generation supported by energy storage, transmission, hydro power, gas generation, and distributed energy resources.⁵⁸ AEMO also expects the future generation mix to be technologically and geographically diverse, with emerging and new technology costs reducing over time.

The Queensland electricity supply system includes:



Over **15,000 km** of transmission lines in our electricity network⁵⁹



About **207,000 km** of distribution lines in our electricity network⁶⁰



Over **15,000 MW** of existing and committed generation capacity⁶¹



*Solar energy on Lady Elliot Island
(Source: Tourism and Events Queensland)*

TRENDS



Combined with the growth in rooftop photovoltaic (PV), this increase in large-scale renewable energy has resulted in Queensland's share of renewable energy jumping from **7 PER CENT** in 2016 to **20 PER CENT** in 2020-21⁶²



Queensland has led the way with renewable generation. The state has gone from having no large-scale renewable energy projects in 2015, to **44 committed and operational projects in 2021**.⁶³ These projects contribute more than 5100MW, supporting approximately \$10 billion in investment and around **7000 CONSTRUCTION JOBS**.⁶⁴



The Australian Bureau of Statistics has estimated a **129 PER CENT INCREASE IN RENEWABLE ENERGY EMPLOYMENT** in Queensland to the 10 years to 2018-19⁶⁵

▼ CASE STUDY

Borumba Dam Pumped Hydro

Currently, 20 per cent of Queensland's energy is generated from renewable sources, including solar and wind energy. As the amount of renewable generation capacity in Queensland's energy system increases, the energy grid needs to integrate the variable output of technologies like wind and solar to ensure supply and demand are balanced at all times.

It is likely that large scale pumped hydro energy storage (pumped hydro) will play an important role in the future energy system, by providing the large storage volumes required to replace thermal generation.

Pumped hydro energy storage is a closed water system that moves between two large reservoirs constructed at different heights and uses reservoirs to store bulk energy over several days, weeks, or even seasonally. The ability to store energy in the upper reservoir of the system is why pumped hydro is often likened to a giant battery. Electricity can be generated almost immediately by releasing water back into the lower reservoir, giving pumped hydro fast and efficient ramping capabilities.

Borumba Dam is located approximately 70 km south-west of Noosa in the Sunshine Coast hinterland. With the potential to generate up to 1 GW and deliver 24 hours of continuous output, Borumba Dam has been selected as the first site for detailed cost and design analysis following a state-wide assessment of potential pumped hydro locations.

The site has been identified due to its proximity to the high-voltage transmission network, existing dam infrastructure, and location within the Southern Queensland Renewable Energy Zone (QREZ).

A detailed design and costing analysis will commence in the second half of 2021, incorporating engineering and design analysis, hydrological modelling and an assessment of environmental impacts. The analysis will be undertaken over 24 months, to determine the future development of a pumped hydro site at Borumba.



Lake Borumba (Source: Seqwater)

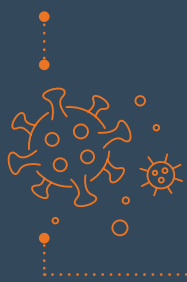


ENERGY

CHALLENGES

COVID-19 impacts

The pandemic has created key shifts in energy consumption and behaviour brought about from working from home, online shopping and consumer savings. The impact of these in the longer term is not yet clear.

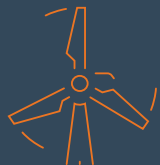


Energy security, reliability, and affordability

The increasing amount of renewable energy generation coming online, as well as changes in consumption and demand, have the potential to impact the reliability of the network, security of supply and the cost for end-users. Renewable generation, variable by nature, needs to be complemented by other technologies such as energy storage. This is being actively managed by Queensland's electricity networks, and the state government through various network, generation, and storage projects.

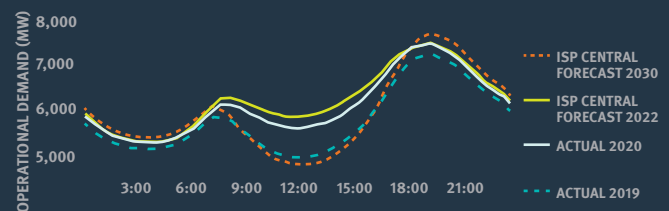


While energy affordability has been of concern across Australia, Queensland has seen consistent decreases in electricity prices each of the last four years, with typical household bills projected to reduce by 7.3 per cent in 2021-22.⁶⁷ Queensland's independent economic regulator, the Queensland Competition Authority, has attributed the general downward pressure on prices to an increase in the amount of renewable generation being supplied to the National Electricity Market, as well as lower domestic gas prices.⁶⁸ Maintaining energy affordability will continue to be a key focus for the Queensland Government into the future.



Managing disruption from new technology and decentralisation of the energy system

There are more than 689,000 solar PV systems installed in Queensland homes and businesses.⁶⁶ This form of distributed energy resource brings many benefits to customers, but it also presents new challenges for managing the system. Increasing solar uptake reduces load drawn from the grid in the middle of the day, when solar resources are at their highest, as demonstrated in the following graph:

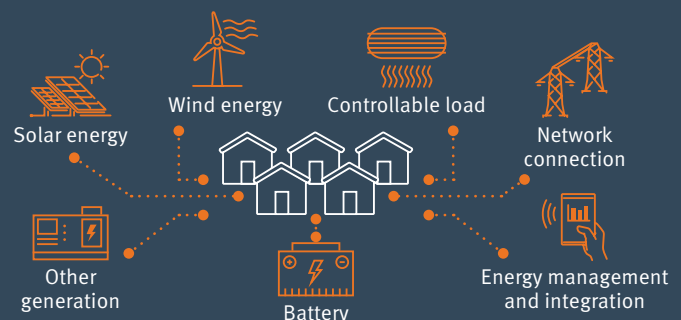


This low system load during the middle of the day, followed by a quick ramp up to meet peak load as the sun goes down, can make it more difficult to keep the system operating smoothly. Work is underway at national and state levels to ensure issues relating to this phenomenon, such as maintaining system strength services and balancing supply and demand in emergencies, are addressed to ensure the system continues to allow greater amounts of distributed energy resources.



Energy in remote communities

Energy supply in remote communities is logistically difficult and can be expensive. These communities are too far from the national energy grid to be connected easily and need to rely on either diesel generators, small-scale distributed generation (e.g. solar, wind, geothermal) or nearby large companies. Nonetheless, Ergon Energy retail customers in these communities pay the same electricity prices as other customers across regional Queensland, due to the Australian Government's Uniform Tariff Policy and Community Service Obligation payment of about \$450-\$500 million per year.⁶⁹

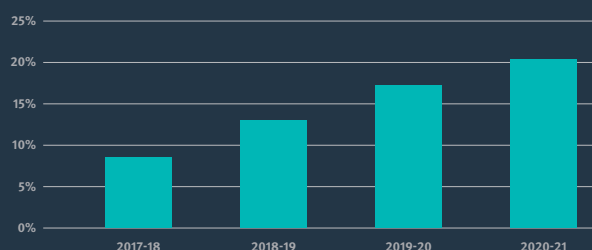


Stand alone power system (SAPS) adapted from Energy Networks Australia⁷⁰

OPPORTUNITIES

Global push towards renewable energy

The Queensland Government is committed to transitioning to a low-carbon energy future by achieving zero net emissions by 2050.⁷¹ An interim target is to reach a 30 per cent reduction below 2005 levels by 2030, while improving affordability and energy security. The state is on track to achieve this, with renewable energy generation increasing its overall share.



The state government will continue to support renewable developers through large-scale project facilitation and planning and network connection assistance. It will also continue to advocate for stable and integrated national climate and energy policies.

Industrial decarbonisation

There is scope to reduce the emissions intensity of key industries through demonstrated and mature solutions (e.g. electrification and greater adoption/use of renewables). In the future, emerging solutions such as high-grade heat electrification, solar thermal and hydrogen have the potential to achieve deeper emissions cuts.

Supply chain development

Renewable energy and hydrogen present an opportunity to grow local manufacturing in Queensland and develop a true value chain to become a renewable and hydrogen superpower. The government is supporting the development of locally made renewable and hydrogen production components, providing certainty to manufacturers to set up operations in Queensland through a guaranteed pipeline of work.



Emerging renewable energy enabled industrial hubs

Co-locating industrial hubs, such as renewable hydrogen and ammonia production, metal refining and advanced manufacturing, can be facilitated as renewable energy becomes more readily accessible. Strategic planning will be required to ensure we capitalise on these opportunities.



Future energy mix

As the state moves towards a more renewable future with greater renewable energy generation, the role of gas, coal, petroleum, biofuels and hydrogen will change. This will provide new opportunities for the gas and coal sectors and develop new ones in industries such as hydrogen and biofuels.

It will also provide opportunities for innovative technologies to enter the market to help address the challenges associated with integration of greater levels of renewables and DER. For example, utility-scale energy storage and pumped hydro can act as a solar soaker to use excess solar PV generation.





ENERGY

PRIORITY ACTIONS



Encourage jobs, growth and productivity



Develop regions, places and precincts



Enhance sustainability and resilience



Adopt smarter approaches

1 50 per cent renewable energy target (DEPW)



Queensland has committed to a 50 per cent renewable energy target by 2030 while improving affordability and security during the transition. This target will assist in achieving zero net emissions by 2050.

2 Developing a 10-year energy plan (DEPW)



The energy plan will position the government to play a strategic and decisive role in Queensland's long-term energy transformation, establishing a pathway to 2030 and beyond to achieve the Government's 50 per cent renewable energy target by 2030 and zero net emissions by 2050. The energy plan will support the reindustrialisation of our state by delivering cheaper, cleaner energy, thus ensuring Queensland is creating jobs for a sustainable and affordable energy future, one that benefits Queensland communities, workers and our economy.

3 Develop Queensland's Hydrogen Industry (DEPW, DSDILGP)



Implement the *Queensland Hydrogen Industry Strategy 2019–2024* so there is a framework for working with private enterprise and government to sustainably develop the industry.

4 Queensland Renewable Energy and Hydrogen Jobs Fund (Queensland Treasury)



Ensure the state capitalises on economic development opportunities for more jobs and more industries through cheaper, cleaner energy. The \$2 billion Queensland Renewable Energy and Hydrogen Jobs Fund will do this as well as power more jobs, more industries and supercharge our resources sector.

5 Energy Storage (DEPW)



Growing Queensland's energy storage through batteries, pumped hydro and hydrogen is key to fully realising our renewable energy opportunities. A detailed study is investigating Borumba Dam as a potential pumped hydro site.

Five locations across regional Queensland will host a large-scale, network-connected battery trial aimed at supporting the state's continual uptake of renewable energy.

The government is also investing in Genex's 250 megawatt Kidston Pumped Storage Hydro Project in north Queensland.

6 Northern QREZ (DEPW)



Unlocking renewable wind energy development in this region has been a logistical challenge due to its location and distance from load centres. Development of the northern QREZ has the potential to resolve some of these challenges, while providing an economic stimulus in sustainable and diversified employment opportunities.

7 Capturing the benefits of Queensland's renewables and hydrogen transformation (DEPW)



As the global economy decarbonises, Queensland's renewable and hydrogen sectors will support the decarbonisation of existing industry and attract new industry powered by low-cost, reliable, clean energy. We will:

- unlock opportunities to match renewable energy with economic opportunities
- work with industry in strategic locations to deliver access to cheap energy, including renewable hydrogen and achieving economies of scale for investment and jobs
- support the establishment of new industries and decarbonisation of existing ones.

9 Central QREZ (DEPW)



Development of the central QREZ will facilitate growth in green manufacturing industries, creating a thriving export economy from the Port of Gladstone. Prospective new industries could include hydrogen production, hydroxide, chlorine polyvinyl chloride, hydrochloric acid, green aluminium and ammonia, new economy minerals and other manufacturing.

10 Southern QREZ (DEPW)



Development of the southern QREZ in the Darling Downs and south west will take advantage of an existing strong network that has spare capacity and good quality wind resources. Renewable energy development will support growth in local agribusiness by diversifying electricity used in agricultural processing facilities, as well as in other industries due to its proximity to the South East Queensland load centre.

11 Stand-alone powers systems (DEPW)



Work is underway to identify strategic pathways that will deliver improved electricity services to customers in regional and remote areas of the grid. This includes supplying customers on the fringes with standalone power systems.

12 Distributed energy resources (DEPW)



Give customers the opportunity to access new value streams from their investment in distributed energy resources, such as rooftop solar, batteries, EVs and demand management using incentives to change behaviours and move to active participation, which in turn enables greater levels of DER to be safely integrated into the energy system.

13 Future energy needs for the North West Minerals Province (DEPW)



Options to reduce the cost of energy in the North West Minerals Province are being explored. This will open up development of new earth and rare earth minerals, providing the cobalt, copper, scandium, nickel, vanadium, and other minerals needed for batteries, zero-emission vehicles and solar panels.

14 Represent Queensland's interests (DEPW)



In the absence of a national energy policy, the Queensland Government continues to work with its state counterparts and the National Energy Market to ensure its renewable energy aspirations are supported.



Ross River Solar Farm, Townsville



Barron Falls, Kuranda (Source: Tourism and Events Queensland)

WATER



WATER

OVERVIEW

Queensland's water resources are precious and must be sustainably and efficiently managed to meet our growing population, industry demand, and to ensure a secure supply for future generations.

As well as being essential for life, water is a vital part of our economy. It supports our traditional agriculture and resource sectors, and is critical in supporting emerging regional industries.

Providing affordable infrastructure that delivers a safe, secure, and accessible water supply helps maximise Queensland's economic potential, while helping to make our communities more resilient, in the face of climate change and increasing weather extremes.

Effective water supply planning, and viable funding models, are essential to the provision of appropriate long-term solutions. It also ensures traditional water sources, such as rivers, lakes and springs, are sustainably managed to safeguard supplies and protect ecological systems.

Ensuring all Queenslanders have access to safe and secure drinking water is a critical priority. The Queensland Government works in partnership with local governments to ensure that communities have water and wastewater systems in place, and that these assets are sustainably managed, through good planning, proactive maintenance, and an appropriately skilled workforce.

Queensland's water supply has supported the growth of several of the state's key export industries, especially agriculture. Ensuring it remains secure and affordable will also contribute to the expansion and diversification of industries, including hydrogen and renewables.

As climate change challenges us to meet increasing demand amidst an uncertain environment, alternatives to traditional bulk water sources – including recycled and desalination – will need to be explored to increase water security. This will include seeking out fit-for-purpose solutions for smaller Queensland towns and cities.



Burnett River (Source: Tourism and Events Queensland)

The *Queensland Bulk Water Opportunities Statement* (QBWOS) outlines the state's strategic framework for maximising the utilisation and efficiency of existing water supply infrastructure, optimising investment into new infrastructure to support economic development, and protecting water security. The QBWOS outlines four strategic objectives that guide the state's approach to bulk water supply:

- ▶ ensure safety and reliability of dams and urban water supply.
- ▶ optimise utilisation and efficiency of existing infrastructure.
- ▶ support infrastructure development that provides a commercial return to the state and publicly-owned bulk water entities.
- ▶ consider projects that will provide regional economic benefits.

Current key initiatives

National Water Infrastructure Development Fund and National Water Grid Construction Program fund

Accelerate the assessment of water infrastructure projects in partnership with the Australian Government through the National Water Grid Fund, and the continued delivery of projects funded through the National Water Infrastructure Development fund.

The Queensland Bulk Water Opportunities Statement

The strategic framework outlining the state's approach to bulk water infrastructure.

Regional Water Assessment Program

Assessments of local water needs and potential gaps for regional 'food bowls'.

Rookwood Weir

\$140 million in 2021-22 and \$367.2 million in total for the provision of 86,000 megalitres of water for the agricultural development and security of urban and industrial areas in Central Queensland.

Round 6 of Building our Regions

\$70 million over three years for local governments to improve water supply and sewerage systems.

Dam improvement program

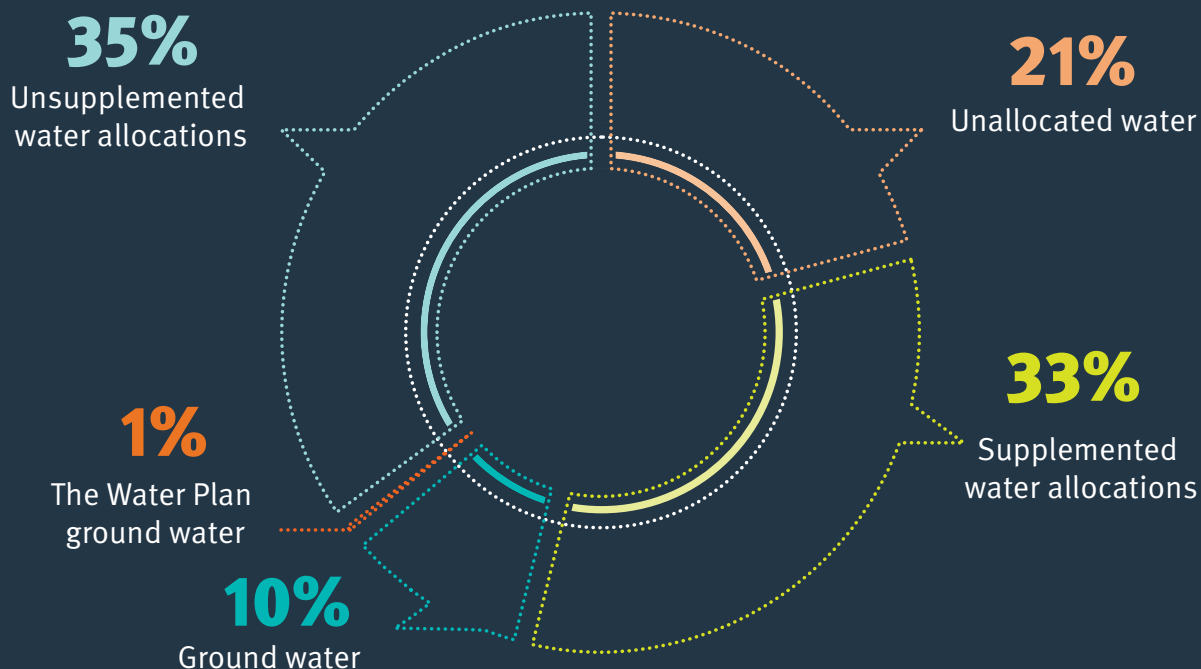
This program assesses and upgrades Queensland's dams, commensurate with their risk.



Rookwood Weir, Central Queensland (Source: Sunwater)

HIGHLIGHTS

The figure below shows existing unallocated water across the state, as a percentage of total entitlement volumes.⁷³



TRENDS

5 RESERVOIRS AND STORAGE TANKS

MOUNT ISA WATER BOARD

- \$133 M in assets
- 8 pump stations
- 88 km of pipelines
- 2 water treatment plants

19 MAJOR DAMS

SUNWATER

- \$13 B in assets
- 64 weirs and barrages
- 79 major pumping stations
- 1888 km of pipelines and channels
- 10 water treatment plants

13 WATER RESERVOIRS

GLADSTONE AREA WATER BOARD

- \$665 M of assets
- Awoonga Dam and offline water storage facility
- 2 water treatment plants
- 9 water pumping stations
- 225 km of pipelines

26 DAMS

SEQWATER

- \$11 B of assets
- 51 weirs
- 36 water treatment plants
- 646 km of supply pipelines
- Gold Coast desalination plant
- Western corridor recycled water scheme

Queensland Government's bulk water supply assets.⁷⁴

▼ CASE STUDY

CASE STUDY Queensland Water Markets Optimisation (QWMO)

Queensland's water resources are managed by water plans. Established under the *Water Act 2000*, they determine the total volume of water allocations that can be made available to the market, while balancing environmental impacts and the needs of different users. A water allocation provides authority to the title holder to access water from a particular source. It is a tradable asset that can be sold or leased.

In a perfect water market, surplus water held by some users is traded to other users to minimise supply shortfalls, and maximise market efficiency and productivity. Water trading is only possible in areas where trading rules have been established, so water plans provide an important framework and regulatory instrument for driving the efficient use of water resources and supporting economic growth.

In 2019, the then Department of Natural Resources, Mines and Energy launched the Underutilised Water Partnership Project to identify market inefficiencies that lead to the underutilisation of existing allocations. The assessment found across the state's 42 water supply schemes, more than 30 per cent of all supplemented water (meaning water supplied using infrastructure) had remained unused, even in dry times, over the past 10 years.

Several factors were found to contribute to this volume of unused water, including water trading complexities, information deficiencies and incentive structures. Specifically, buyers and sellers had found it difficult to identify one another, there was a lack of information on where and how much water was available, and a lack of price transparency on completed trades.

Addressing these market inefficiencies is one of the most cost-effective ways to increase water access for existing users, while expanding the market for new investors and industries, optimising the productivity of existing infrastructure and still protecting our rivers and streams.

To develop a pathway toward efficient water trading markets and address the issues identified in the Underutilised Water Partnership Project, the *Queensland Water Markets Optimisation Action Plan* was published in early 2021.

This plan sets out the following key actions:

- ▼ encourage holders of underutilised water to use the temporary trading market
- ▼ provide information on what water markets need to develop and grow
- ▼ help water users connect with brokerage
- ▼ help investors find water for development or expansion.

Efficient markets will maximise the opportunities available from our water resources and water supply infrastructure now and into the future.



Bjelke-Petersen Dam (Source: Tourism and Events Queensland)



WATER

CHALLENGES

Improving utilisation

More than 30 per cent of Queensland supplemented water entitlements are underutilised so there is a significant opportunity to achieve better outcomes with existing infrastructure. This can be achieved through improving market access and trading opportunities.



Achieving greater efficiency and reducing wastage

There are opportunities to improve the efficiency of existing infrastructure by reducing losses, so that more water can be made available to the market under existing water plans. The benefit of these opportunities is that the state's water supply can effectively be increased through technology or other measures and without costly new infrastructure investment.



Regional Queensland water security

In regional Queensland, the state partners with local governments to undertake urban water supply security assessments, monitor risks to security and continuity of supply and provides assistance when needed.



South East Queensland water security

South East Queensland's population is expected to increase to at least 5 million over the next 20 years.⁷⁵ While current water security is provided by the South East Queensland Water Grid, new infrastructure will be required to support the region's growing population. Seqwater's Water Security Program 'Water for Life' summarises the planning undertaken to ensure the region's future water needs are met.



Climate change

Queensland has a dynamic climate, from dry and hot conditions in the west, to tropical hot and wet conditions in the north, with some of the highest and lowest rainfalls in the country. Climate change may potentially cause more extreme weather events in the near future, from extended periods of drought through to changes in rainfall patterns and severe flooding. This is being embedded in our planning, to help ensure we plan and deliver resilient infrastructure that is appropriate, affordable and embraced by the communities it services.

OPPORTUNITIES

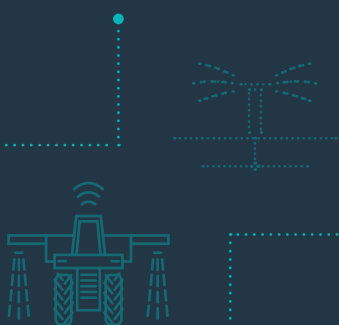
Making the most of existing infrastructure

The Queensland Government is entrusted with making strategic choices about the use of the state's resources, and difficult investment decisions must be made. Its commitment to finding innovative ways to use and re-use existing infrastructure means building new is not always necessary.



Aligning water infrastructure planning with regional economic strategies

Water is a critical enabler for regional industries. Planning for water infrastructure can be enhanced through closer integration with land-use and economic and industry development strategies. Providing greater certainty to industry in regional growth precincts about water and other economic infrastructure sequencing and delivery timeframes, will support proponents in making investment decisions.



Working in partnership

A national approach to water security will help ensure the Australian, Queensland and local governments develop a shared list of priority projects, and a shared framework for the development and assessment of water infrastructure proposals. Once in place, this will allow decision-makers to focus on achieving these outcomes as opposed to advocating for specific projects.



Improving water trading and optimising markets

The state is working hard to ensure water can be allocated to where it is most needed through efficient water trading. This mechanism also helps to meet demand for water supply without building new infrastructure.



Embracing alternative water supplies

The Queensland Government is well placed to respond to increasing water security challenges, using infrastructure built during the millennium drought and South East Queensland Water Grid's ability to move drinking water around the region. There are also opportunities to diversify the water network through stormwater harvesting and recycled water, which is currently being used to supply industry. Innovation will play a key role in ensuring solutions are fit-for-purpose, and reflect community needs.





WATER

PRIORITY ACTIONS



Encourage jobs, growth and productivity



Develop regions, places and precincts



Enhance sustainability and resilience



Adopt smarter approaches

1 Robust consideration of bulk water infrastructure (DRDMW)



Continue to undertake appropriate due diligence through robust consideration of potential bulk water needs consistent with the principles and framework for assessment, prioritisation and development of proposals outlined in QBWOS.

2 Safe and secure water supply for all communities (DRDMW)



The Queensland Government will support local governments to provide safe, secure and resilient water supply for their communities.

3 Water to catalyse regional economic development (DRDMW)



Water is a critical enabler for emerging regional industries including hydrogen and advanced manufacturing and for the international competitiveness of the agricultural, food and beverage manufacturing and mining sectors. Infrastructure investment decisions will consider future market demand and emerging industries.

4 Identifying regulatory and other reforms to improve access (DRDMW)



Identify opportunities to improve and streamline the regulatory regime for water licences, including providing access to reserves allocated to delayed infrastructure.

5 Best practice catchment analysis and water planning (DRDMW)



Continue to incorporate new technologies and the best, most contemporary science in the development of water plans, and to communicate this to industry, to help support and reduce risk in their investment decisions.

6 Embedding climate change risk and analysis (DRDMW)



Improve water planning and catchment analysis by embedding the impact of climate change on water availability.

7 Engagement with the Australian Government (DRDMW)



Engage with the Australian Government and its agencies to identify shared priorities and joint investment opportunities.

8 Achieving water security through innovation (DRDMW)



The state government will continue to develop innovative approaches to securing water supply for our communities. This will include a focus on cost effectiveness.

9 Communicating the benefits of water efficiency (DRDMW, DAF)



Encourage the adoption of efficient water use and modern irrigation practices for agriculture, business and communities, to reduce water usage.

10 Dam improvement (DRDMW)



Continue to upgrade dams commensurate with risk to ensure that communities remain safe during extreme weather events. Through this process, opportunities to increase water supply and improve flood mitigation may also be investigated.

11 Considering the full range of water infrastructure options (DRDMW)



Through its water infrastructure assessment, the state will consider the broad spectrum of assets that can improve water supply and reduce demand on existing water assets. This may include options such as off-stream storage, pipelines, and water recycling. This will include communicating the benefits of recycled water and supporting public and private investment in waste water.

12 Queensland Water Market Optimisation (DRDMW)



Continue to support the development of more mature, efficient and available water trading markets, to help ensure that water can be allocated towards its highest value purpose and priority industries.

13 Preserving our natural assets (DRDMW)



The state will continue to consider the health of our waterways, catchments and associated systems when assessing water supply and infrastructure proposals.



Chinamen Creek Dam, Cloncurry (Source: Tourism and Events Queensland)



Gold Coast University Hospital (Queensland Health)



HEALTH



HEALTH

OVERVIEW

Thanks to Queenslanders' united efforts, our response to the COVID-19 pandemic has been outstanding.

We demonstrated how Queensland's health system ranks among the best in the world. With the state's population growing and rates of chronic disease increasing, demand for health services is expected to increase significantly. The government is working to ensure Queenslanders will be among the healthiest people in the world by 2026 by providing more equitable access to high-quality healthcare. To achieve this, all service areas across our entire health system aim to provide relevant and timely care in the most appropriate locations possible.

The geographic distribution of Queensland's population creates challenges to providing equitable access to health services for rural and remote communities. In addition to this, pressure in responding to large-scale public health events like COVID-19, requires innovative approaches to deliver improved value, promote partnerships, and support affordability and sustainability.

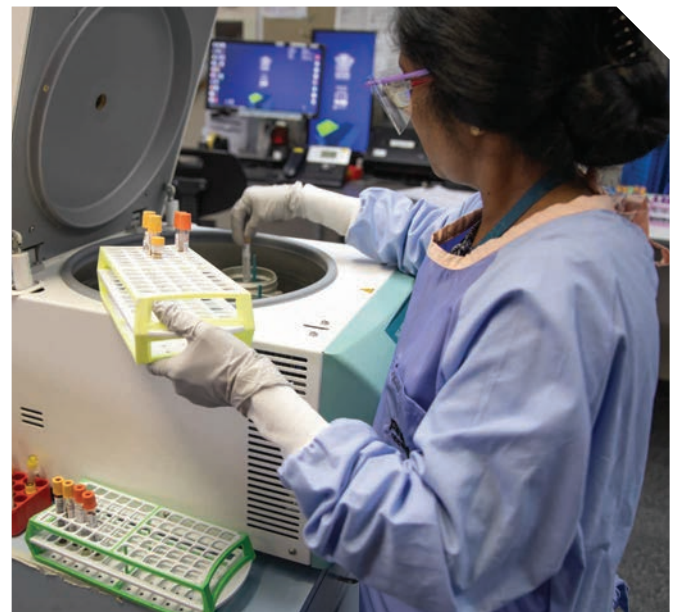
The health sector's response to these challenges and opportunities is system wide, including how infrastructure is planned, delivered and maintained. Working together to integrate our efforts, we can optimise our health care system to make better use of existing infrastructure, transform how care is delivered and sustainably grow the health system to support all Queenslanders to live healthier lives.

Queensland's healthcare system is in an era of unprecedented technological change. Exciting advances in medical science enable medicine to be tailored to individuals. Technologies like artificial intelligence, robotics, and virtual and augmented reality are transforming the way the healthcare system operates, providing targeted services within the community and in the home, taking pressure off existing health facilities. Built infrastructure including hospitals, residential care, health and community centres, and ambulance stations, together with digital technologies will be critical enablers, delivering quality health and community services to Queenslanders. This will need to be supported by enhanced digital literacy for both patients and the health workforce.

Even with innovation and improvement in the models of care, increased service demand ultimately drives a need for infrastructure investment. This may include accommodating growth in services, renewing or repurposing older assets to extend their life, or adapting them to support the delivery of contemporary health services. Smarter infrastructure investment that considers equitable, efficient and effective person-centred care in alternate settings and encourages partnerships across industries, research and other sectors is critical. Co-locating health with other social infrastructure and the maturing of precincts that foster health and knowledge are a few examples of how Queensland can continue to deliver world-leading healthcare and maintain a highly skilled and robust workforce.



Rooftop solar used by Group Linen Services, Chermide
(Source: Planet Ark)



Pathology worker loads samples into centrifuge
(Source: Queensland Health)

Current key initiatives

- Keeping Queensland Healthy**
 Keeping Queenslanders healthy with a record health investment of \$22.2 billion in 2021-22.⁷⁶
- Hospital Building Fund**
 A \$2 billion allocation to deliver hospital upgrades and expansions, including the Toowoomba Day Surgery, to purchase additional services from Mater Springfield Hospital, and uplift Queensland Health's base capital program.
- Partnering for the future: advancing Queensland's community services**
 The government is working with neighbourhood and community centres and other stakeholders across the state to co-design a strategic framework that will improve capacity to meet community needs, increase well-being, impede disadvantage and avoid increasing costs for services.
- Healthy ageing: A strategy for older Queenslanders**
 Supporting the healthy ageing of older Queenslanders to stay well for longer, adopt person-centred care for older Queenslanders and integrate health and other support services.
- Virtual Health Strategy**
 Developed to ensure that the right care is provided to all Queenslanders, regardless of their location.
- The Digital Strategy for Rural and Remote Healthcare**
 Aims to address the inequity in access to, and participation in healthcare services in rural and remote Queensland.
- Closing the Gap signatory**
 Queensland is a signatory and proud supporter of Closing the Gap to achieve better outcomes for First Nations peoples.
- Healthy Places, Healthy People Framework**
 Joint initiative between Queensland Health and the Queensland Government Architect to integrate health considerations in infrastructure planning and delivery to support all Queenslanders to live healthier lives.

HIGHLIGHTS



\$30 million

Solar Panel and Energy Efficiency Program, including solar panels at 50 public hospital sites⁷⁷



Health expenditure

grew from
\$28.4 billion
in 2008–09 to
\$40.0 billion
in 2018–19 (government
and non-government)⁷⁸



**119 acute
public
hospitals**⁷⁹



The **\$1.1 billion** transformation of Herston Quarter will result in a mixed-use community hub that will cater for **world-class health research**, residential, commercial and retail facilities



Roma Hospital (Source: Queensland Health)

TRENDS



EMERGENCY DEPARTMENT PRESENTATIONS are projected to **INCREASE BY 52 PER CENT** from 1.6 million in 2018–19 to 3.1 million in 2031–32⁸⁰



275 PER CENT INCREASE in use of **TELEHEALTH EVENTS** by Queensland Health from 2017–20 (82,153 in 2017, 226,555 in 2020)⁸¹



Well-designed neighbourhoods that provide access to mixed-use destinations and services are associated with an average of **\$14.65 in HEALTH-RELATED BENEFITS PER ADULT ANNUALLY**. The health-related economic benefits for investing in healthy built environments are significant at a population level.⁸²

▼ CASE STUDY

Queensland Health's Virtual Healthcare Strategy – Virtual Care Hubs

Virtual care provides an opportunity to connect healthcare across multi-disciplinary teams, working with the patient, communicating and easily exchanging information to deliver consistent, safer and quality care that leverages digital technologies.

As seen during the health response to COVID-19, virtual health care, including telehealth, has risen significantly and continues to transform the way services are delivered. An agile and digitally responsive health system frees up hospitals and clinics, supporting some of our most at-risk patients to receive quality care closer to home without entering hospital environments. Growing consumer demand for healthcare requires a new approach to ensure we can deliver the full range of services for all Queenslanders and to ensure the future sustainability of the Queensland health system.

Under the proposed Queensland Health's Virtual Healthcare Strategy, the future strategic direction for virtual healthcare, including telehealth, is to build a system that empowers Queenslanders with virtual and in-person health services that are fully integrated, regardless of their location. This supports our health workforce to deliver the right care, in the right place, at the right time, assisted with virtually enabled models of care including the expansion of virtual care hubs.

These hubs will network regional healthcare providers to facilitate the remote delivery, assessment and coordination of clinical services. They will leverage existing virtual care initiatives, including those developed during COVID-19, and grow capabilities with the use of remote monitoring and integrated electronic medical records with primary and specialist care providers. The convenience and holistic approach enables a person's healthcare journey to be enhanced by technology in the community. An example of this growing area servicing rural communities is the collaborative Virtual Integrated Pain Centre, which provides patients in rural and remote Queensland with access to specialist allied health persistent pain services in local facilities.

Metro North Hospital and Health Service is embarking on establishing a coordinated, innovative and sustainable model for a central intake, information and intervention hub to improve patient flow and support coordination and integration. The Clinical Care and Coordination Hub will include a range of co-located virtual health care and coordination services, enabled by interoperable digital systems designed to improve patient flow and maximise synergies across services.



Australian Institute of Tropical Health and Medicine, Townsville (Source: James Cook University)



HEALTH

CHALLENGES

Keeping pace with shifting consumer needs

There is a growing preference for care and services to adopt more place-based, preventive and collaborative partnership approaches, as well as virtual and digitally-enabled health care options, informed by consumer needs.



Growing and ageing population and unhealthy environments

Population changes, unhealthy lifestyle choices and modern environments that do not enable healthy living are contributing to increasing rates of obesity and chronic health conditions such as cancer, heart disease and diabetes. The rise in chronic health conditions continues to place pressure on our health system and supporting infrastructure.



Expanding pressure on health budgets

There is pressure to deliver more effectively with finite funding. It is important that the government's investment in health is financially sustainable and makes best use of available resources for the benefit of all Queenslanders, while also considering alternative finance models with private and non-government organisations.



Climate change impacts on health infrastructure

Climate change requires infrastructure to be designed and built with increased resilience, to support the community-wide transition to a zero-net emissions economy, as well as waste reduction and sustainability practices. This may challenge the way health infrastructure has traditionally been planned, designed, delivered and operated.



Health equity for all Queenslanders

Aboriginal and Torres Strait Islander peoples, people with a disability, socio-economically disadvantaged people and those living in rural communities generally experience poorer health outcomes than the rest of the population. Health infrastructure needs to be designed and supported to close the gap in health outcomes for these people.



Increased and more complex demand for ambulance services

Existing assets need to be maintained and improved to accommodate current and future service capability requirements. Early and coordinated planning is needed to secure land and facilities in areas of high growth early in new developments.



Improving access to virtual healthcare

Remote and very remote locations often lack the digital capacity to increase bandwidth and suffer from extended ICT outages.¹²¹ Queensland Health's virtual healthcare agenda focuses on the consideration and resolution of connectivity challenges to transform service delivery models.



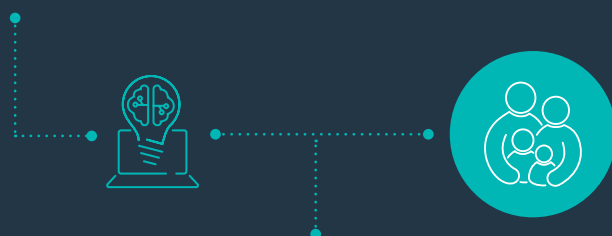
A responsive and adaptable health system in a world of increasing complexity

Queensland's economic and social prosperity relies on the health of all Queenslanders. While the state's healthcare system ranks among the best in the world, we are not immune to future challenges that may threaten the health of Queenslanders, including pandemics, natural disasters, or other significant disruptions.

OPPORTUNITIES

Providing more jobs and growing our health knowledge economy

The health care and social assistance industry was the largest industry by employment type in the 2016 census.⁸³ Queensland's future as a leader in health research was shown throughout COVID-19 and continues to evolve through centres of excellence such as the Translational Research Institute in Brisbane, The Gold Coast Health and Knowledge Precinct and the TropiQ – Townsville Tropical Intelligence and Health Precinct. There is growing potential to expand Queensland's capacity in biomedical research and manufacturing, partner with industry, and build our knowledge-based economy.



Co-locate health, community, disability, and housing services

We can improve access and support for the community by delivering public, private and not-for-profit services in the one location. By maximising the benefits of shared infrastructure and partnerships, we can add value that is not realised when planned separately.

This can include connections with public transport, employment and training opportunities, and shared use of new and existing resources. Examples include community centres that provide a soft entry point for crisis services, through to the planned Meadowbrook Health and Wellbeing Precinct in Logan.



Unprecedented and continuous technological change in healthcare

Digitally-enabled models of care are changing our existing infrastructure requirements (including its workforce), providing opportunities to personalise healthcare, overcome Queensland's vast distances and improve efficiencies and health outcomes.

16 Queensland Health facilities covering 50 per cent of all public hospital activity with 'advanced' integrated electronic medical record solutions that link the entire patient care journey electronically, for safer and more efficient care.

Largest digital portfolio in Queensland Government representing nearly 50 per cent of ICT projects reported.

Queensland Health has 54 digital initiatives, costing \$711.8 million.⁸⁴

Health workforce for the future

Working together with strong education, training and research sectors, we can build a health workforce for the future by developing education, training and employment pathways, connected and integrated into a range of settings. For example, the recently announced Satellite Hospitals will provide integrated out-of-hospital community-based care.



Consumer engagement

The community's desire for fast, reliable access to knowledge is contributing to a role shift from 'passenger' to 'driver' of their own healthcare and greater access to community services. For example, one in 20 Google searches involve a request for health information.⁸⁵ Consumer engagement and insight into community needs, backed by data and growth trends, enables informed investment in new neighbourhood, community centres and health services.



Building infrastructure that supports health and wellbeing

Queensland's *COVID-19 Economic Recovery Plan* prioritises the building of infrastructure to protect and safeguard the health and wellbeing of our diverse communities. Certain attributes of built environments are proven to support both physical and mental health and wellbeing. Embedding health and wellbeing outcomes and placing an emphasis on disease prevention is an opportunity to lessen the growing burden on our health system and enables thriving communities that promote healthy living.





HEALTH

PRIORITY ACTIONS



Encourage jobs, growth and productivity



Develop regions, places and precincts



Enhance sustainability and resilience



Adopt smarter approaches

1 Co-location and shared services (QH, DCHDE, DSDATSIP)



Consider options for co-location across community, health and disability services, and government housing services, with private and non-government sectors to improve access and efficiencies. This can include culturally appropriate integrated care for Aboriginal and Torres Strait Islander and culturally diverse communities.

2 Health and knowledge precincts (QH, DTIS, DSDILGP)



Partner with well-established institutions such as hospitals, universities and research organisations to support an environment of knowledge transfer that nurtures the start-up, incubation, and development of innovation-led, high-growth, knowledge-based organisations.

3 Increase hospital beds and services (QH)



Investment in key hospitals in high-growth areas, including the Building Better Hospitals initiative.

4 Meet growing demand for health services (QH)



Encourage a networked health system and a range of demand management initiatives including Satellite Hospitals, which are designed to take pressure off nearby emergency departments and acute service facilities and provide quality care closer to home.

5 Health service resilience and surety of supply (QH)



Build better resilience across the health system to respond to COVID-19, natural disasters, and other impacts such as climate change. This includes improvements to the supply chain such as the Queensland Government Critical Supply Reserve, and digital infrastructure.

6 Partnering with key private sector and non-government providers (QH)



To deliver additional capacity and service through innovative delivery models, including utilising the private sector to manage health service demand pressures. For example, \$177 million has been committed to purchase additional services from Mater Health Service.

7 Engage with all levels of government and industry partners (QH, DCHDE, DSDILGP)



Plan for and secure future health and ambulance services, aged care, community and neighbourhood centres, with a coordinated approach such as through Priority Development Area processes, strategic land acquisition in growth areas and co-location strategies.

8 Improve healthcare services in rural and remote areas (QH)



Apply innovative and flexible facility design and construction methods such as modularised buildings that deliver more affordable and faster to build facilities, including for staff accommodation, Primary Health Care Centres, Multi-Purpose Health Services, residential aged care and rural hospitals.

9 Grow our rural and remote digital infrastructure and technology (QH)



Transform rural and remote health services from their current state to being fully digitised to enable the delivery of integrated health services to all Queenslanders regardless of their location to address the unique challenges faced by rural and remote facilities.

10 Achieve the Queensland Government's zero net emissions by 2050 target (QH)



Lead health sector efforts to improving the environmental performance of existing and new health facilities, through the establishment of a new Office of Hospital Sustainability and local responses such as *Green Metro North Sustainability Strategy*.

11 First Nation Health Equity strategies (DSDSATSIP, QH)



Implement strategies and master plans to provide equitable access to culturally compatible community and healthcare services for Aboriginal and Torres Strait Island communities in local health systems, and health and community infrastructure across Queensland.

12 Mental health and wellbeing of Queenslanders (QH)



Continue to provide high quality and accessible mental health, alcohol and other drug services, increased investment in community mental health, suicide prevention, community resilience programs and planning and delivering priority infrastructure projects to improve mental health facilities.

13 Preventive health measures to improve population health (QH)



Lessen the burden of disease through initiatives and infrastructure that can support Queenslanders to make healthy lifestyle choices and enjoy better health.

14 Promote and implement the Healthy Places, Healthy People Framework (QH)



Embed health considerations into infrastructure planning and delivery. This includes smart investment solutions that prioritise healthier living in well-designed places.

15 Queensland Ambulance Service infrastructure planning (QH)



Early planning and investment to meet community needs for services in areas expecting growth and changing demand.

16 Funding and financing strategy for healthcare infrastructure (QH)



Develop a sustainable strategy that involves a range of initiatives aimed at addressing the growing gap between supply and demand for infrastructure funding required to support growth and renewal in the asset base of the health system.

17 The health workforce of the future (QH)



Continue to invest in health education, training and employment pathways through supporting education and training infrastructure to ensure sustainable healthcare capabilities across the state.

18 Community and consumer engagement (QH)



Promote active and meaningful engagement and participation of consumers and their family/carers in their journeys across the health system, through collaboration in the planning, design, delivery, monitoring and evaluation of health services for improved health outcomes for all.



Race Changes PERIOD 3 - 11:40-12:50
SER2 WFK102JA - STEWIE SMO2
SER7 MY2112E - COLLEU SMO5
SMY2 MY2112K MY2112K MY2112K
MARSA PRUCPE BUTLER SPOT
SS26 MY2112K - JOHNEI SS02

EDUCATION AND TRAINING



EDUCATION AND TRAINING

OVERVIEW

Our education and training system enhances quality-of-life by giving all children a great start and shaping the skills of the future to drive ongoing prosperity. To support this, the government is committed to ensuring all Queenslanders have access to contemporary, high-quality education and training facilities, no matter where they live.

With Queensland's population growing, demand for education and training services is expected to increase significantly. While the impacts of the COVID-19 pandemic on school enrolments are still unfolding, over the decade to 2031 around 10,300 additional students each year are expected, with around two-thirds or some 6,800 students each year expected to enrol in Queensland state schools.⁸⁶ Industry skills requirements and the skill levels of the workforce are also changing to support emerging industries and the jobs of the future.

Significant investment in the education sector has increased kindergarten participation as well as year 12 completion rates. The compulsory Prep grade has also engaged more young people in learning.

Queensland currently has 1,254 state schools, 178 early learning centres and over 70 sites owned or leased for the delivery of state-run vocational training and education.⁸⁷ Vocational education and training (VET) courses are delivered by TAFE Queensland and through Central Queensland University campuses as the state's largest public providers.

The private sector has a significant role to play in this sector, with non-government primary and secondary schools providing education for 289,466 students (in 2021)⁸⁸ and 939 private registered training organisations (in 2020) delivering VET in Queensland.⁸⁹

The government will continue to improve school facilities by:

- renewing schools across the state to ensure they meet contemporary learning needs
- ensuring our schools are places where children can learn, and teachers can educate, in comfortable, healthy and energy-efficient environments
- delivering contemporary IT solutions and digital-rich learning spaces aligned with educational requirements
- providing accessible and inclusive learning environments so that every student can access a world-class education.

Schools and training facilities will be better integrated, acting as local hubs around which communities flourish. Benefits will be multiplied through co-location and multi-use facilities that provide collaborative, place-based responses to community needs.

The increasingly dynamic labour market requires a different approach to delivering training services. Industry-centric training facilities are required that support innovative and technology-driven employment pathways and help to reorientate the economy following COVID-19. Investment will focus on enabling adaptable, flexible and well-located training facilities that respond to the needs of fast-changing industries, support job-ready students and grow the productivity of the state's workforce.

Current key initiatives

Building Future Schools

\$2.6 billion to deliver world-class learning environments, opening a further 14 new schools by 2024, predominantly in emerging, fast-growing communities across Queensland.⁹⁰

Great Schools Great Future

\$1 billion to provide new classrooms, halls and performing arts centres, planning for future new schools and the refurbishment of school facilities across the state.⁹¹ This initiative also invests in infrastructure for Catholic and Independent schools.

Local Skills Local Jobs

\$45 million to build and upgrade training facilities in schools across the state, including in our regions.⁹²

Revitalising training facilities

Building on previous investments, \$100 million under the Equipping TAFE for Our Future Program will support Queensland's communities to access revitalised training facilities that incorporate technological advancements and adapt to the emerging needs of students and industry.⁹³ In many cases, an opportunity may exist to explore the co-location of government services to create more vibrant community hubs and improved accessibility.



Fortitude Valley State Secondary College
(Source: Department of Education)



Calliope State High School (Source: Department of Education)

HIGHLIGHTS



1,254
state schools
across
Queensland⁹⁴



2021–22 capital
budget of
\$1.5 billion⁹⁵



over **580,000**
full-time enrolments⁹⁶



45
state-owned training
infrastructure sites⁹⁷



129,000
TAFE Queensland
students in
2020–21⁹⁸



Opened 26 schools
since 2015.
18 traditionally delivered,
and **8** delivered through a
Public Private Partnership
arrangement



Over
12,000
school-based
apprenticeships and
traineeships as at
30 June 2021⁹⁹

*Gainsborough State
School, Pimpama
(Source: Department
of Education)*

TRENDS



From 2021–31, the
Queensland school-age
population is forecast to
**GROW BY 11.6
PER CENT**
(102,600 students)



NINE out of **10** future jobs are projected to be
supported by the **ATTAINMENT OF A VET
QUALIFICATION**¹⁰⁰

▼ CASE STUDY

Brighter future for youth education and training at the Pimlico TAFE campus

Between 2017 to 2020 the state invested \$32.9 million to consolidate the extensive footprint of the 11-hectare Pimlico TAFE campus into a single, two-storey building with an extension. This was the largest capital investment made to the site in more than 40 years. The new campus opened in Semester 1, 2020 providing engaging, vibrant and interactive spaces to improve learning experiences and outcomes and collaboration between students, teachers and the general community. It can accommodate up to 900 full-time equivalent students and supports 20 per cent future growth in student numbers over time.

The project consolidated TAFE Queensland's training delivery which had become increasingly dispersed across many aged and underutilised buildings, and has enabled the Townsville community to access a dedicated non-trades training facility for nursing, hospitality, hair and beauty. The Pimlico campus complements the world-class Bohle Trades Training campus located less than 10 km away within the industrial hub of Townsville.

The redevelopment of the campus created 100 full time jobs during construction, including 30 apprentice and trainee jobs. Upgrades to the campus included energy efficiency measures with the introduction of solar power, and building construction designed to reduce power consumption.

Over recent years, sections of the Pimlico campus have been repurposed with the establishment of the NRL Cowboys House for boys and girls. Together these facilities provide accommodation for Aboriginal and Torres Strait Islander young people seeking to expand their sporting careers by simultaneously engaging in education and training courses onsite.

The Queensland Government plans to reuse other parts of the Pimlico campus grounds to accommodate additional government services such as the proposed construction of a Youth Foyer by the Department of Communities, Housing and the Digital Economy.



Pimlico TAFE (Source: Wilson Architects)



EDUCATION AND TRAINING

CHALLENGES

Population growth in the south east corner

Growth in the south east region is putting pressure on existing education and training facilities, requiring the expansion of already constrained sites with the majority of the 'easy to access' building platforms already exhausted. Projects often require accompanying expansions to administration blocks, amenities blocks, car parking and upgrades to site services.

Since early 2020, the COVID-19 pandemic has impacted population growth in Queensland. While net overseas migration has declined to zero or negative levels, net interstate migration has increased. While the impact on school enrolments in the short and medium-term is still unfolding, it also serves as great evidence that Queensland is the state Australians want to move to.



State schooling capacity in emerging communities

Responding to the rapidly changing development environment, and planning far enough in advance to ensure the department secures quality, well-located school and training locations in emerging, but fast growing greenfield areas is an ongoing challenge.



Maintaining and renewing an ageing infrastructure base

The state's \$24 billion schooling infrastructure asset base requires significant maintenance and renewal investment to ensure learning spaces remain fit-for-purpose – particularly in regions that may not be seeing the same level of growth in enrolments as the south east corner. Renewing state schools to meet diverse and contemporary teaching and learning needs is a key priority.

The majority of the state's training infrastructure was typically developed on large parcels of land to accommodate both trade and non-trade training delivery. A range of factors including changing industry and employer needs now demands the renewal of facilities to deliver contemporary training products that incorporate cutting edge technology.



Urban densification

As Brisbane's inner city densifies, an increasing school-age population drives the need to establish new schools within constrained physical spaces.



OPPORTUNITIES

Investing in fit-for-purpose infrastructure and services



Modular buildings, vertical schools and integrated educational facilities that provide universal access are all ways of providing more adaptable and functional facilities that can be delivered in shorter timeframes to keep pace with demand.

Co-locating, sharing and using educational facilities for wider service provision creates more liveable and connected communities and leverages investment across multiple providers. An example of this is the planned Yarrabilba Hive that will provide vital community, health, wellbeing and employment services for the growing community. These approaches improve the accessibility, quality and efficiency of infrastructure and services.



Aligning training infrastructure renewal with contemporary industry and workplace needs

Emerging industries and a transforming economy require an appropriately skilled workforce. To maximise the state's economic potential, training infrastructure will need to be flexible and fit-for-purpose to support the ongoing delivery of quality training services by public training providers. Training campuses must be able to meet changing training needs over time. To achieve an appropriate scale of easily accessible and adaptable facilities, it may be necessary to consider innovative and flexible training approaches to support high demand population centres.

In some cases, the revitalisation of training facilities and connectivity for communities will mean there is greater opportunity to co-locate training services with other government and community services, such as health, secondary and higher education, youth accommodation, transport and more.



Leveraging new technologies to advance learning, teaching and working

The current generation of students are among the first to grow up in a digitally-enabled world. Students are now able to access, process and use information differently to all previous generations. The COVID-19 pandemic accelerated the trend towards technology-led teaching and training which will continue to influence our requirements for enabling infrastructure to support the skills of the future.





EDUCATION AND TRAINING

PRIORITY ACTIONS



Encourage jobs, growth and productivity



Develop regions, places and precincts



Enhance sustainability and resilience



Adopt smarter approaches

1 Leveraging new technologies to advance learning, teaching and working (TAFE Qld, DoE)



COVID-19 has accelerated the pivot to eLearning and supporting learning or teaching at home through digital technologies and tools. Keeping digital strategies and plans for technology infrastructure updated will be vital to support digital learning.

2 Building future schools (DoE)



Delivery and expansion of schools in response to forecast growth will be essential along with innovative solutions that support growing communities. The \$2.6 billion Building Future Schools program delivers world-class learning environments for Queensland students by providing new state schools and expanding existing schools in growth areas.

3 Planning for growth (DESBT, DoE)



Undertaking strategic planning and looking at early acquisition of well-located land for schools and training facilities will be critical in growing communities to support effective investment and delivery.

4 Sustainable, efficient buildings and facilities (DESBT, DoE)



The Queensland Government has set a target of zero-net emissions by 2050. Education and training is contributing to this by building energy efficient buildings, installing renewable energy and rolling out energy efficiency programs in schools.

5 Upgrading or expanding existing schools (DoE)



As schools grow, they may require new classrooms, halls and performing arts centres. In addition, ageing schools may require expansions and refurbishments and improved accessibility for students. This will be delivered under the \$1 billion Great Schools, Great Future commitment.

6 Local Skills, Local Jobs (DESBT, DoE)



Invest in training facilities in schools across the state to prepare students with the skills to secure well-paid, secure jobs in their region, setting them up for a solid future. Examples of this are the hydrogen industry in Gladstone and the aquaculture industry in Rockhampton.

7 Remote kindergarten (DoE)



Provide opportunities for children in some rural and remote areas to attend a kindergarten program in a face-to-face environment.

8 Partnering with the non-government education sector (DoE)



Work collaboratively with the non-government sector (Catholic and Independent Schools) to assess the impact of population growth and inform planning of new schools in Queensland.

9 Partnering with industry (DESBT)



Partnering with industry to deliver cutting-edge training facilities built and operated by industry e.g. Queensland Apprenticeships Centre in Beenleigh to include a new Hydrogen Training Centre of Excellence.

10 Enabling contemporary training facilities (DESBT)



Ensuring that the renewal of training infrastructure is aligned with contemporary industry and workplace needs e.g. industry skills in demand, anticipated student volumes, adaptable campuses/buildings to support alternative training and delivery methods.

11 Co-locating training and community facilities (DESBT)



In modernising training facilities there are opportunities to explore the co-location of training services with other government and community services such as health, secondary and higher education, youth accommodation, transport and more.

This may create more accessible spaces where people can meet, exchange ideas and information both formally (through TAFE Queensland training) and informally through social peer learning and workplace-based interactions.

12 Harnessing innovative infrastructure (DESBT)



Providing innovative infrastructure to support training within new and traditional industries e.g. a dedicated Rural Centre of Excellence at Toowoomba (agricultural innovation), and a Renewable Energy Training Facility with Electro Training Group (world class training in solar and renewables).

13 Delivering greener buildings (DESBT)



New and renovated training facilities will be designed and constructed for a 4–6 Green Star rating or similar standard. This will create opportunities for industry to become familiar with green building construction materials and practices and use that knowledge on other local projects.

14 Investigating more cost-efficient delivery and innovative design and construction models (DoE)



Investigate the use of bespoke, pre-fabricated modular buildings and vertical schools and training facilities to provide high quality education facilities on increasingly constrained sites and in shorter timeframes.

15 Co-located, integrated and shared education facilities (DoE)



Greater integration of school facilities into communities utilising place-based responses through the collaborative efforts of community, industry and government stakeholders. Examples include the provision of community, health and wellbeing and employment services e.g. FamilyLinQ model and Yarrabilba Hive.

16 Making better use of existing facilities (DoE, DESBT)



Employ non-infrastructure solutions (e.g. Enrolment Management Plans) to maximise the utilisation of the existing school network. This will include a proactive renewal and maintenance program to get more from existing assets.

17 Encouraging alternative capital investment mechanisms (DESBT, TAFE Qld)



Encourage and utilise alternative capital investment mechanisms (e.g. construct and lease spaces) to support growth and meet service demand where it is occurring in the education and training sector.

18 Developing contemporary IT solutions and digital-rich learning spaces (DoE, TAFE Qld)



Support schools and TAFEs with contemporary IT solutions and digital-rich learning spaces to develop sophisticated digital pedagogies that enable:

- ▶ an integrated curriculum with students learning both about and through digital technologies across all learning areas
- ▶ personalised, collaborative, and integrated learning through online and blended modes of delivery to meet the needs of every student.



Workshop at Pimlico TAFE (Source: Wilson Architects)



Cable laying at sea to link to Cable Landing Station at Maroochydore (Source: RTI Cable)

▶ DIGITAL



DIGITAL

OVERVIEW

The world is becoming increasingly interconnected as technology transforms traditional business models and how we access goods and services. With this change there is an increasing need for faster, more reliable digital infrastructure.

Digital infrastructure is the physical technology that connects people, businesses and communities to a variety of online products and services. It includes mobile networks, fixed lines and satellite broadband services.

Queensland's industries are embracing digital technology (described as a 'new industrial revolution') to advance the economy, create new jobs and improve our lifestyle. For example, there has been a surge in the uptake of AgTech solutions that will modernise practices and add value to the sector. In particular, building digital capability and capacity will help small businesses harness new and existing economic opportunities, especially in regional parts of the state.

The vibrancy of future communities and businesses, economic development, innovation and the effectiveness of education and training, healthcare, public safety and other services, directly depends on our ability to establish infrastructure that will bridge the digital divide. Action led by the Australian Government and NBN Co over the coming years will be critical to avoid the digital divide widening in Queensland. The Queensland Government wants to work with responsible parties to ensure rural and regional Queenslanders aren't left behind as speeds in metropolitan areas accelerate at a much faster rate than the rest of Queensland.

COVID-19 and seasonal weather events have had a significant impact on the way Queenslanders engage with digital technologies. Industry, small businesses and households have embraced new ways of working, which will be key to our future success. Digital technologies have been leveraged to change service delivery and consumption models, enable business continuity and extend the use of e-commerce. People have also worked more from home and discovered new means of social engagement. Digital infrastructure plays a vital role in keeping residents and emergency service workers safe during natural disasters and assisting with the response, recovery and reconstruction phases.

While telecommunications networks are regulated by the Australian Government and delivered largely by NBN Co and commercial providers, the Queensland Government continues to:

- ▶ use its influence with the Australian Government and work with other jurisdictions
- ▶ leverage government telecommunications expenditure
- ▶ leverage state government-owned investments and programs
- ▶ leverage state planning frameworks
- ▶ make strategic investments.

The Queensland Government is a strong advocate for improving digital infrastructure, as it is a critical building block for future prosperity. It is also working to provide the community with new and improved digital services. These future services will rely on continual improvements to the underlying digital infrastructure – particularly in regional and remote areas.

In a decentralised state such as Queensland, there is enormous potential to improve service delivery through the optimisation of existing digital infrastructure and technology. Digital capacity needs to be built into all infrastructure to future-proof investments and assets, and capitalise on capabilities. It needs to be considered during the design phase of an infrastructure project and fully specified within the scope.

The Queensland Government's *Digital1st: Advancing our digital future* strategy focuses on the potential of digital services by thinking primarily about the customer. In parallel to this service-based strategy is a need for a focus on the underpinning infrastructure. The Digital Infrastructure Plan, once developed, will set out priorities to help bridge the digital divide to enhance network coverage, speed and reliability.

CURRENT KEY INITIATIVES

- ▼ **QCN Fibre**
Unlocking thousands of kilometres of optical fibre to deliver better internet for regional Queensland.
- ▼ **Digital1st: Advancing our digital future**
Positioning Queensland as a leader in digital government now and into the future.

HIGHLIGHTS



COVID-19 forced Queenslanders to rapidly turn to **online services** such as **telehealth** with virtual doctors and digital scripts, children doing online learning, and business moving online. Now accustomed to this, we are **continuing to do more online** than we did before the pandemic



There has been a significant **increase** in the proportion of **older Australians using the internet** to bank, shop, watch videos, listen to audio, and access telehealth services¹⁰¹



Australians consumed **subscription TV services** at an astonishing rate of **82.1 per cent in 2020** – an **increase of 16.2 per cent** since 2019¹⁰²



Internet demand is increasing on the NBN with a **70 per cent upstream increase** during business hours from **pre-COVID-19 to June 2020**¹⁰³

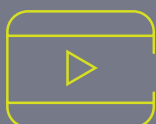
Sailing the Whitsundays
(Source: Tourism and Events Queensland)

TRENDS



According to the Australian Communications and Media Authority, **IN 2020 AUSTRALIANS WERE GOING ONLINE AND USING MOBILES MORE**.¹⁰⁴

SMART TVS use is up from **14 PER CENT** in 2017 to **48 PER CENT** in 2020



For older Australians:



93 PER CENT of older Australians now have **INTERNET IN THEIR HOME**

80 PER CENT felt technology is **CHANGING TOO FAST** for them to keep up

For younger Australians: almost half use **FIVE OR MORE TYPES OF DEVICES** to go online

78 PER CENT are now **MOBILE-ONLY FOR CALLS** (up from 59 per cent in 2017)

18 PER CENT have gone **MOBILE-ONLY** for home **INTERNET ACCESS**



Australians went online using:
Mobile devices – **78 PER CENT**
Tablets – **59 PER CENT**
Laptops – **58 PER CENT**



The **LIKELIHOOD OF SEVERE CYBER-ATTACKS** is increasing due to our growing dependence on new technology, interconnected equipment and systems like Internet of things devices. New thinking is needed to safely use all these rapidly evolving technologies.

▼ CASE STUDY

Queensland Capacity Network

Queensland Capacity Network (QCN) Fibre is the state government's telecommunications carrier. It was established to boost internet connectivity and potentially lower prices for businesses and households in regional parts of the state. The optical fibre network stretches west from Brisbane to Toowoomba and north, through regional townships, to Cairns. Improving the availability, affordability and performance of digital infrastructure can help local businesses be better connected, allowing them to expand and support more jobs in regional areas.

QCN Fibre is jointly owned by Powerlink and Energy Queensland. QCN Fibre leverages Powerlink's spare telecommunications network capacity to improve digital and data services for customers in regional communities. Powerlink provides telecommunications expertise to QCN Fibre, including operation and maintenance services for all QCN Fibre customers.

Powerlink is supporting QCN Fibre to connect to strategically important data centres in regional areas, including the Pulse Data Centre in Toowoomba, the North Queensland Regional Data Centre in Townsville and the new submarine link at the Sunshine Coast Cable Landing Station. It is also providing connectivity to Cairns, Mackay, Rockhampton, Gin Gin and Warwick.

The Australian Government Regional Connectivity Program has funded QCN Fibre to deliver fixed wireless networks to the Central Highlands towns of Bluff Dingo and Duaringa. These projects will extend high-speed broadband connectivity, benefiting local community facilities, small businesses and residents.

More competition in regional telecommunications will improve access to essential online services such as telehealth, e-commerce, online education and training, agtech and cloud-based solutions, which are currently not viable in many regional areas.



Laying cable (Source: Queensland Capacity Network Pty Ltd, trading as QCN Fibre)





DIGITAL

CHALLENGES

Tyranny of distance

Queensland has Australia's most decentralised population. This higher proportion of regional and rural households means more limited optical fibre connections, longer distances between telecommunications towers, a higher dependency on satellite services and higher connection costs per customer.



Digital literacy

Addressing digital literacy and increasing familiarity with digital service delivery is a key challenge. While improving services and access is important, informed and savvy consumers are key to getting the most out of digital opportunities.



Great digital divide

The digital divide between our cities and smaller communities can be a barrier to people accessing online services for business, education and training, health, diminishing their ability to effectively participate in a modern society.



Increasing reliance

Reliability of digital services is increasingly important for the success of Queensland's economy and the safety of its residents. Service outages can be life-threatening and inflict serious damage on the economy (e.g. payment systems). Queensland is also Australia's most disaster-prone state, with community safety and recovery dependent on digital infrastructure.



Ability to influence

While the Queensland Government is a strong advocate for improved digital infrastructure to grow the economy and provide more digital services, the Australian Government and the private sector are responsible for the majority of infrastructure.



OPPORTUNITIES



Partnering for success

The Queensland Government will continue to work with the telecommunications sector and Australian Government, to represent Queenslanders' interests to improve digital infrastructure and provide better online government services.



Enabling market competition

Explore a variety of avenues to increase market competition, encourage further network investment, drive down service costs and improve service availability, for example, by enabling more shared infrastructure.



Enabling the digital economy

Our digital infrastructure can be leveraged to enable and grow the digital economy. An example of this is the Sunshine Coast international broadband submarine cable. It is the first undersea fibre-optic cable on Australia's east coast outside Sydney, and provides a critical link to global markets.



Leveraging existing investment

Leverage existing state government expenditure, assets or other investments to help reduce provider costs and facilitate greater investment to improve regional connectivity.





DIGITAL

HAVE
YOUR
SAY



PRIORITY ACTIONS



Encourage jobs,
growth and
productivity



Develop
regions, places
and precincts



Enhance
sustainability
and resilience



Adopt
smarter
approaches

1 Championing digital infrastructure (DCHDE)



Provide a single point of coordination and collaboration for the development of Queensland's digital infrastructure. This centralised coordination unit will work with local governments, the private sector, the Australian Government and government-owned corporations to advocate in a coordinated manner to align interests for the benefit of the state. It will also develop the Digital Infrastructure Plan to document and focus the collaborative efforts and investments required to bridge the digital divide.

2 Bridging the digital divide (DCHDE)



Work with digital infrastructure providers to better understand and address the growing digital divide between cities and regional communities (including optimum NBN cover). Improvements are critical for the future of essential services such as e-health that need improved reliability, capacity and coverage.

3 Leveraging government expenditure (DCHDE and other agencies)



Assess opportunities to improve connectivity across the state by leveraging the Queensland Government's digital purchasing power and telecommunications expenditure. Improved connectivity will help drive more digitally connected regions and enable the delivery of government digital services.

4 Leveraging government fibre (DCHDE, QCN Fibre)



Continue to explore opportunities for QCN Fibre to leverage existing and future investments in the networks of government-owned corporations, to boost internet connectivity and potentially lower prices for regional Queensland households and businesses.

5 Improving network redundancy (DCHDE)



Work with the Australian Government and industry to strategically improve redundancy across digital infrastructure networks, particularly in remote areas (e.g. Cape York) where network outages have single points of failure that affect stability and uptime.

6 Addressing mobile blackspots (DCHDE, TMR)



Continue to work with the Australian Government and mobile service providers to advocate and facilitate network upgrades in rural and regional Queensland, to address blackspots in key communities and transport corridors.

7 Sharing mobile infrastructure (DCHDE with DSDILGP)



In partnership with local governments and industry, explore policy and planning provisions to optimise the 5G rollout and reduce duplication of investment through shared infrastructure. Mobile carriers could share towers and equipment spaces through neutral host models and even network functionality through radio access network sharing, to reduce costs.

8 Increasing public safety communications (DCHDE)



Public safety agencies are preparing a long-term Public Safety Communications strategy. It will provide departments with shared direction and capability targets to enhance operations, resulting in better and safer outcomes for the community.

JUSTICE AND PUBLIC SAFETY



JUSTICE AND PUBLIC SAFETY

OVERVIEW

The safety and wellbeing of Queenslanders is a fundamental priority for the state government. It invests in essential police, fire, emergency and disaster management services, courthouses, and secure youth detention centres and correctional facilities to ensure safety and justice is delivered fairly.

Issues within the justice system are becoming more complex and often have broader economic, environmental and societal interdependencies. As services continue to evolve, digital transformation is impacting all areas of the sector. For the community and frontline staff, the increased use of technology will help improve safety, efficiency and more effective delivery these essential services.

Queensland Courts continue to adapt to technology advances and changing community expectations that challenge the traditional delivery of justice. Unprecedented and persistent increases in demand is placing additional strain on the capacity of the state's existing courthouse portfolio. It is critical courthouses are responsibly and sustainably managed, maintained and invested in to meet future need.

Youth detention centres are secure places for people aged 10 to 18. They exist to protect the safety of the community, provide consequences for offending, and prepare detained young people to live productively in the community.

Queensland Corrective Services (QCS) plays an integral role in the criminal justice system, by ensuring prisoners and offenders are less likely to return to crime. QCS manages more than \$4 billion in assets, including 11 high- and six low-security correctional centres, 36 Community Corrections District Offices and more than 150 reporting centres throughout Queensland. Unfortunately, prisoner numbers are continuing to increase, adding pressure to already strained infrastructure. This is further exacerbated by challenging prisoner profiles, including those with complex mental health issues, substance misuse and disabilities that require purpose-built accommodation. To support its 2028 projections, QCS has developed a 10-year capital acquisition plan to help guide future investment.

Our police provide effective, high-quality services, working with community, government and private sector partners to make Queensland safe. Advancements in technology and the scale and diversity of the state's natural landscape has also resulted in a shift to a more mobile policing model.

Queensland's emergency services teams already work collaboratively, however as their service models evolve, the way we plan and provide the supporting infrastructure must also adapt. There is a significant opportunity to co-locate complimentary justice and public safety services, such as courts and police services, as well as explore different delivery models.



Police Officers (Source: Queensland Police Service)

Current key initiatives

- Replacement of police facilities**
 \$12.9 million to complete the replacement of police facilities at Beaudesert, Biloela, Burketown, Nambour and Pormpuraaw.
- Justice system audio-visual capacity upgrade**
 \$7.4 million to expand and upgrade existing audio-visual capacity in the justice system, including video conferencing and in-custody court appearances.
- Southern Queensland Correctional Precinct Part 2**
 \$654 million to deliver a correctional precinct emphasising health, wellbeing and rehabilitation to reduce reoffending. The precinct will create over 500 permanent jobs and support local businesses.
- West Moreton Youth Detention Centre**
 \$150 million to complete the construction of the West Moreton Youth Detention Centre, a new 32-bed facility at Wacol.
- Maryborough Queensland Fire and Emergency Services headquarters replacement**
 \$12.1 million to complete the replacement of the Maryborough regional Queensland Fire and Emergency Services (QFES) headquarters and auxiliary fire and rescue station.



Rockhampton Fire and Rescue Station (Queensland Fire and Emergency Services)

HIGHLIGHTS



With **87 courthouses** across Queensland, magistrates courts can hear cases in **131 locations** throughout the state, while the supreme and district courts sit in 11 and 38 locations respectively



Police infrastructure – **339** police stations, **58** police watchhouses, **83** neighbourhood beats and shopfronts, **14** communication centres, **2** police academies¹⁰⁵



Three youth detention centres – located at Brisbane, West Moreton and Cleveland (Townsville)



QCS manages more than **\$4 billion** in assets with 11 high security and 6 low security correctional centres¹⁰⁶



Roma Court House (Source: Tourism and Events Queensland)

TRENDS



QFES has over **650 INFRASTRUCTURE SITES** located in all seven state Infrastructure regions with the greatest number located in the Wide Bay Burnett.



A **SHIFT TO MORE MOBILE POLICING** is reducing demand on facilities in smaller communities



There is an overall decline in structural fire events but an increase in the number and intensity of severe weather or other natural hazard events such as bush fires



Total **PRISONER NUMBERS** continue to increase leading to ongoing capacity utilisation issues¹⁰⁷



Regional distribution of QFES sites

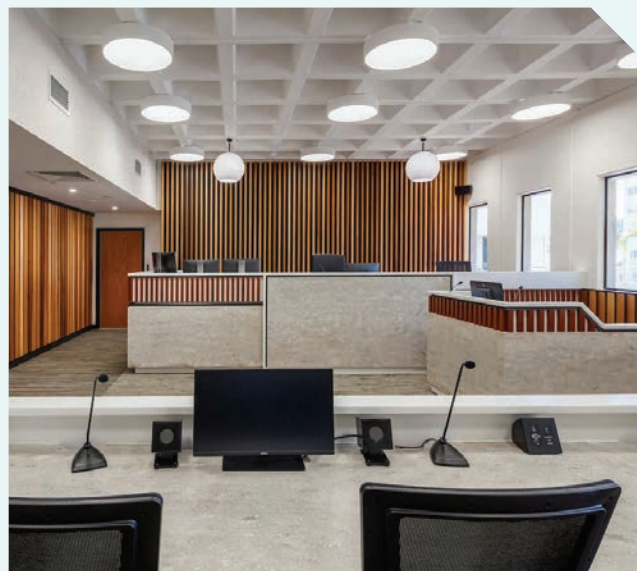
▼ CASE STUDY

Specialist Domestic and Family Violence Court Program

The Specialist Domestic and Family Violence (DFV) Court Program is a multi-agency approach committed to the continuous improvement of the justice and service system response to this growing societal issue. This remains a priority of the DFV justice reforms.

Specialist DFV courts operate out of five locations across the state: Southport, Beenleigh, Townsville, Mount Isa and Palm Island.

Dedicated magistrates are supported by specially trained registry staff, specialist duty lawyers and wrap around support services for all parties involved in DFV proceedings.



Townsville DFV Courtroom (Source: Department of Justice and Attorney General)



Queensland Fire and Emergency Services State Deployment Centre, Morningside (Source: Queensland Fire and Emergency Services)



JUSTICE AND PUBLIC SAFETY

CHALLENGES

Shifting demand for service delivery

The delivery of emergency services continues to be challenged by a number of growing and shifting demands, including high population growth in several locations, changing risk profiles, an ageing population, increased cultural diversity, changing community expectations, and the operational responses required for significant events such as the ongoing COVID-19 pandemic.



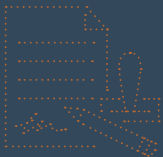
Regional service delivery

As almost 30 per cent of Queensland's population live outside South East Queensland, it is important that the state continues to strongly consider regional service delivery needs across justice and public safety agencies.



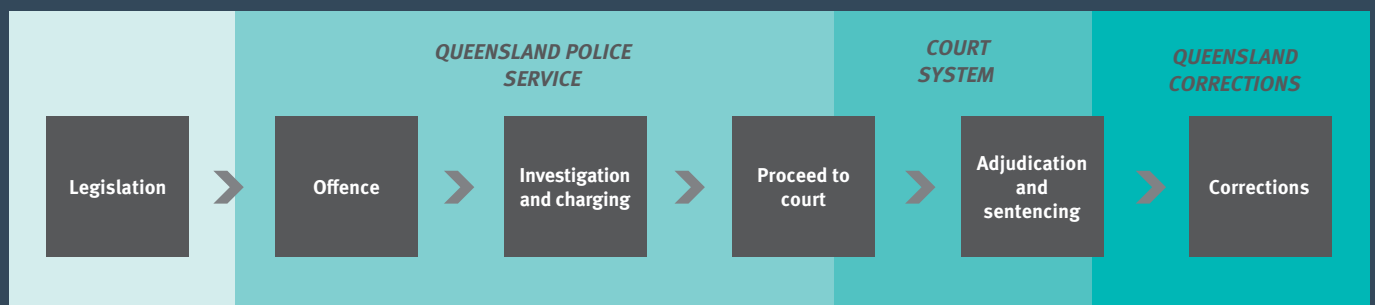
Ageing assets, maintenance and changing needs

Ageing and geographically dispersed facilities, present challenges for all justice and safety infrastructure, with an increase in maintenance needs exacerbated by harsh tropical climates and increasing frequency of natural disasters. Many of Queensland's courthouses are either heritage listed or hold historical significance in the community. Older facilities also present challenges with maintenance and in continuing to meet modern expectations and service needs (e.g. safe spaces in courts for DFV matters). Safely maintaining aged correctional facilities is also challenging where there isn't capacity to temporarily relocate prisoners.



Increased demand on the justice system

Queensland's criminal justice system is large and complex, and demand is increasing. Operations or changes in one area can have consequential impacts on other sectors of the system. No single agency has the capacity to address the complex causes of offending, or manage demand pressures on the system. For example, legislative changes or an increase in police officers can drive an increase in policing interactions, increasing the complexity and time of matters before court, and prisoner numbers where youth detention or correctional facility capacity is limited.



Justice System Flow Diagram (adapted from NSW Infrastructure Strategy)

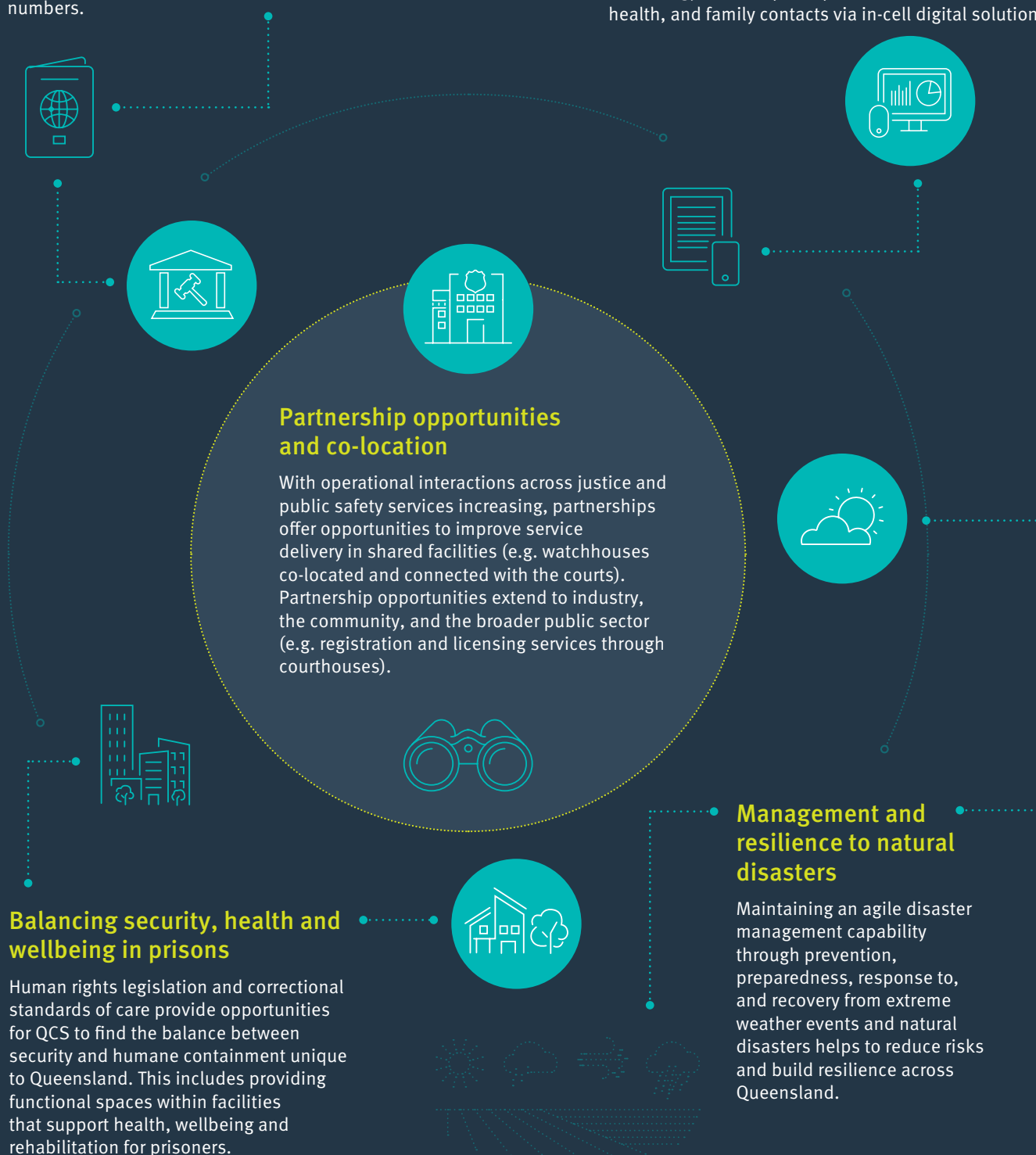
▼ OPPORTUNITIES

Whole of justice system approach

Policing, courts, youth justice and corrections form a closely interrelated criminal justice system that works well when the system as a whole is well positioned to respond to demand. There are opportunities to better manage the system to address unintended impacts and bottlenecks as a consequence of increases in police interactions, court time and prisoner numbers.

Continue to optimise operations through technology

E-lodgement capability exists in a limited form and presents a significant opportunity to improve court efficiency and optimise court utilisation by enabling the use of electronic files. The broader application of digital technology could improve prisoner access to education, health, and family contacts via in-cell digital solutions.





JUSTICE AND PUBLIC SAFETY

**HAVE
YOUR
SAY**



PRIORITY ACTIONS



Encourage jobs, growth and productivity



Develop regions, places and precincts



Enhance sustainability and resilience



Adopt smarter approaches

1 Adopting a whole of justice system approach (DJAG, QPS, QCS, DCYJMA)



Build a better understanding of demand and balance investments across the justice system as a whole to mitigate the unintended impacts that reforms, policing or court processing can have on other parts of the system including the capacity of correctional facilities and the capacity of the courts.

2 Digitisation of justice services (DJAG, QPS, QCS)



Increase the use of technology to optimise court efficiency, support prisoners via kiosks and video conferencing to maintain access to their families, legal representatives, the courts, health services, disability support services, rehabilitation and education programs and deliver efficient and effective supervision services for offenders in the community.

3 Exploring in-cell technology (QCS)



In-cell technology may provide an opportunity for greater access to family and friend support, rehabilitation and education programs and support services in preparation for re-entry to society.

4 Applying next generation public safety (QFES, QPS)



Continue to work with industry and frontline responders to design, test and apply new and emerging technologies to improve emergency responses, service delivery and make smarter, safer decisions, supporting more mobile policing services and helping firefighters detect and respond to bushfires

5 Adopting digital engineering and asset management (DJAG, QPS, QFES, QCS, DCYJMA)



Adopt a more integrated approach to strategic asset planning, performance and management practices for infrastructure investment by adopting digital engineering principles and software systems, such as the use of BIM for large scale projects.

6 Exploring opportunities for disused land (QCS)



Explore opportunities to re-use land holdings not essential for current or planned operational service delivery.

7 Modernisation and DFV support (DJAG)



Investing in the modernisation of justice and public safety buildings to cater for the safety, accessibility and confidential needs of all customers including additional meeting rooms and safe spaces for DFV.

8 Improving prisoner health outcomes (QCS, QH)



Improve health outcomes for prisoners by designing correctional facilities with features and functional spaces that support health and wellbeing, and rehabilitative outcomes for prisoners.

9 Adopting innovation and interoperability in design (QPS, QFES, DJAG, QCS, DCYJMA)



Improve the functionality and cost-efficiency through design innovation providing facilities with greater interoperability between public safety agencies without compromise to the required level of complexity and security for justice facilities.

10 Exploring public safety co-location and interoperability (QPS, QFES, DJAG, QCS)



Planning for growth and continuing to explore opportunities for joint facilities or co-location of justice and emergency services that support response and operational requirements for public safety agencies. For example, courts with police services, but also correctional facilities with health or training facilities onsite to support prisoner rehabilitation.

11 Increasing custodial capacity across Queensland (QCS, DCYJMA)



Explore opportunities to increase custodial capacity across Queensland recognising the importance of placing youth and adult offenders as close as practicable to their families by prioritising locations that meet the needs of geographically dispersed communities, and prisoners with a disability.

Any increase in custodial capacity within youth detention centres will also support the movement of young people out of police watch houses.

12 Repurposing or reallocating based on need (QFES, QPS)



Respond to changing local operating environments with an evidence-based infrastructure operating model that better anticipates and responds to future change. Preference should be given to non-investment solutions such as repurposing and relocating facilities/equipment to areas of higher need.

ARTS, CULTURE, RECREATION AND TOURISM



ARTS, CULTURE, RECREATION AND TOURISM

OVERVIEW

Arts, culture, sport, recreation and tourism are crucially important contributors to the Queensland community, bringing people together and providing opportunities to enjoy the great range of experiences that the state offers.

For Queenslanders, engaging with artistic, cultural, sporting, and recreational activities helps build a sense of community, and enriches our character and culture. We have great places to holiday, relax and play, all of which is supported by infrastructure that underpins regional development and creates jobs to support the local and visitor economy.

Arts, culture, sport and recreation infrastructure, as well as the state's natural assets, are drawcards for the visitor economy and will continue to be as Queensland hosts the Brisbane 2032 Games. Our stadiums host national and international sporting events and concerts, while our galleries and performing arts venues contribute to our cultural landscape. Tourism infrastructure must continue to be modern and high-quality to provide an excellent experience, as well as resilient to severe weather events that are common in Queensland. The Queensland Government is committed to driving the recovery and growth of the visitor economy, by amplifying tourism investment to sustain and create Queensland jobs and realise the state's economic potential.

Over the past 200 years, Queensland has experienced rapid change due to migration and shifting patterns of settlement, which are recorded in our diverse and unique rural and urban landscapes. Historic townships, railways, mining landscapes and unique 'Queenslander' houses are important drawcards for domestic and international tourists.

COVID-19 has highlighted the importance of accessing green infrastructure (natural and built landscape assets that incorporate natural vegetation) and blue infrastructure (beaches and waterways and the facilities that support them) for our urban populations. Parks, walking and cycling tracks, street trees, and our iconic beaches and rivers provide a range of health and other benefits. Recreation infrastructure includes natural and built environmental spaces where people can be more physically active and better connected to their local communities.

Queensland is also home to significant natural assets of cultural value, including World Heritage sites like the Great Barrier Reef and national parks. These protected areas provide a focal point for the tourism industry with many local economies relying on business generated by visitors. It is a priority of the state to protect the environmental and cultural values of these assets in any consideration of development within them.

The Queensland Government has also recognised the global trend for authentic and engaging First Nations arts and cultural experiences and is in a unique position of being home to both Aboriginal and Torres Strait Islander cultures. The refurbished Bulmba-ja arts centre in Cairns, for example, provides important stories of Queensland's Aboriginal and Torres Strait Islander peoples.

Queensland's significant arts and cultural infrastructure, including its museums, art galleries, theatres and performance spaces, enhances the lives of Queenslanders and ensures the state competes globally through its range of events, productions, performances, and exhibitions. The state government is investing and partnering in new, innovative and revitalised infrastructure to enrich cultural experiences that support local creative artists and industries and increase creative community engagement, as well as attract visitation.

Alongside publicly delivered infrastructure, commissionable attractions, events and experiences that unlock private sector investment and visitor expenditure are an important part of Queensland's cultural and tourism landscape. To grow the diversity and impact of our tourism experiences, Queensland supports private sector-led infrastructure projects, recognising that without government intervention, many projects that drive visitor demand could not progress.

Current key initiatives

- ▶ Activate! Queensland 2019–29**
 \$1.3 billion, 10-year strategy to inspire activity with places and spaces that invite an active lifestyle.
- ▶ Creative Together 2020–30: A 10-year roadmap for arts, culture and creativity in Queensland**
 10-year vision to cement Queensland's arts, cultural and creative sectors as key contributors to our social, cultural and economic future.
- ▶ Queensland's Protected Area Strategy 2020–30**
 Establishes the vision and strategic direction for the state's national parks and other protected areas, providing world class visitor facilities that support recreation and nature tourism.
- ▶ Queensland Performing Arts Centre new theatre**
 Building a new \$175 million theatre at the Queensland Performing Arts Centre (QPAC).
- ▶ Rockhampton Museum of Art**
 A new art gallery for Rockhampton is under construction and due to open in early 2022.
- ▶ Queensland Country Bank Stadium**
 Commenced operations in Townsville in February 2020 and hosted its first State of Origin match in June 2021.
- ▶ Tourism support**
 A \$74 million economic recovery and rebuild package to support the tourism sector. The Action Plan for Tourism Recovery, to be released in 2022, includes medium to longer term actions to position Queensland's visitor economy for success.
- ▶ Support for the arts, cultural and creativity sector**
 \$22.5 million COVID-19 – Arts and Cultural Recovery Package, with a further \$7 million for live music support.
- ▶ Year of Indigenous Tourism 2020–2021**
 A Queensland Government-led initiative to grow Indigenous tourism businesses, experiences and products.

HIGHLIGHTS



80 per cent of Queenslanders participate in sport or physical activity at least **once per week**¹⁰⁸



Physical inactivity costs Australia's economy **\$13.8 billion** annually in terms of healthcare, lost productivity and mortality¹⁰⁹



Queensland is home to more than 1000 national parks, forests and other protected areas, including five UNESCO World Heritage areas. Queensland's National Parks generate **\$2.6 billion** in spending each year, helping to support **17,240 jobs**¹¹⁰



Queensland's protected area network covers more than **14.2 million hectares** (8.26 per cent) of Queensland – more than twice the size of Tasmania¹¹¹



At its high point in 2018-19, the **tourism** industry directly and indirectly **employed 234,000** Queenslanders – or 1 in 11 of all people employed in Queensland¹¹²



Queensland's arts, cultural and creative sector contributes **\$8.5 billion** to the Queensland economy annually and supports more than **92,000 jobs** for Queenslanders¹¹³



More than **22 million** domestic and international overnight **visitors** came to **Queensland** in the year ending June 2020¹¹⁴



98 per cent of Queenslanders engage with the arts¹¹⁵



Suncorp Stadium (Source: Tourism and Events Queensland)

TRENDS

Visitors are increasingly preferring more **IMMERSIVE, AUTHENTIC, ADVENTURE** and experience-based travel. Millennials are expected to become the largest age-based category of travellers, and the use of **TECHNOLOGY AND DIGITAL INNOVATION** will be key to unlocking tourism potential and meeting visitor expectations.¹¹⁶



ACCESS to arts, recreational facilities and services is important for many in **DECIDING WHERE TO LIVE**¹¹⁷



SPORT PARTICIPATION RATES for boys and girls are similar, but girls are more likely to participate in non-sport related physical activity than boys, and boys across all age groups are more likely to participate in sport-related physical activity and club sports¹¹⁸



The number of day trippers and domestic overnight **VISITORS TO NATIONAL OR STATE PARKS** in Queensland **DOUBLED** between 2009 and 2018¹¹⁹

▼ CASE STUDY

Bulmba-ja Cairns

The \$5.9 million refurbishment of the Centre of Contemporary Arts Cairns resulted in the cultural facility re-opening in January 2020 with the new name, Bulmba-ja, along with a new vision to support Far North Queensland's cultural scene, with a focus on Aboriginal and Torres Strait Islander performing arts.

Pronounced 'bull-im-baa-jar', the name has a shared meaning of 'house' or 'place' in Yidinji and Yirrganydji languages.

Bulmba-ja houses a theatre, gallery and creative development space that plays a vital role in the thriving Cairns arts scene. The arts centre provides a distinctive cultural destination for locals, visitors and tourists, and strengthens the business of its partners, tenants and participants.

Bulmba-ja supports the development and presentation of diverse arts practices, with a strong focus on Indigenous performing arts that showcases the unique stories of Aboriginal and Torres Strait Islander peoples.



Pryce Centre's guest performers, Kaiyn Kuap – Cairns-based Boigu Island Dancers (Source: Mark McCormack)



Queensland Art Gallery



ARTS, CULTURE, RECREATION AND TOURISM

CHALLENGES

Maintenance

Regional infrastructure is often fragmented across multiple assets and expensive to maintain. High maintenance costs, particularly for heritage assets, can create challenges to deliver quality and accessible infrastructure to support communities.



Climate change and natural disasters

Climate change poses an increasing threat to Queensland's multi-billion dollar tourism industry requiring the state to adapt and develop climate resilient products and infrastructure.

Major natural disasters, which are anticipated to increase due to climate change, and uncontrollable events may cause a sustained downturn in visitation and investment attraction, impeding on sport participation and active recreation.

Investment prioritisation, planning and governance

With our increasing population, there is greater demand for inclusive and accessible arts, cultural, recreational and sporting infrastructure. When it comes to the tourism sector, as tourists are rarely the primary user of infrastructure their needs can be overlooked resulting in a disjointed visitor experience. Planning and delivery of this infrastructure class could be better integrated across the different levels of government to ensure a streamlined planning and decision making process.



Access

A lack of airline access, routes and the establishment of new ones to priority markets in the wake of COVID-19, along with the high cost of regional airfares, are all impacting our tourism sector. Investment in roads and supporting infrastructure to ensure access networks are efficient and well maintained to cater for increased tourism, will be vital.

For sport and recreation, there is a need to provide conveniently-located and accessible services including multi-purpose facilities and mixed-use precincts and to maximise the uses and the number of users of infrastructure for each place.



Regulatory requirements

Regulatory and other administrative requirements can be a barrier to attracting new investment and infrastructure delivery as some assets are owned, delivered and operated by the private sector and community or volunteer organisations.



OPPORTUNITIES



Strengthen partnerships



Partnerships and co-investments with other levels of government and the private sector can enhance the infrastructure delivery, operation, inclusion and resilience of our arts, culture, recreation and tourism sectors. Examples of this include collaborative investment in shared community hubs and spaces, refurbishing existing spaces and facilities, providing multipurpose spaces for arts and cultural organisations and tourism providers, as well as walking paths and trails, bike paths, national parks, state forests, marine parks and recreation areas.

Opportunities also exist to collaborate with regional stakeholders, including local governments to ensure infrastructure in growth areas and across discrete Aboriginal and Torres Strait Islander communities is well planned.

High-quality, equitable places, spaces and facilities

The design and delivery of high-quality places, spaces and facilities should apply universal design principles to provide equitable access for all users and implement best-practice construction. This will result in welcoming environments that are fit-for-purpose, well-planned and managed, and designed to meet evolving needs. Connecting places, spaces and facilities with other infrastructure, such as bikeways and walking tracks, will also encourage collaboration and shared use. In growth areas and across discrete Aboriginal and Torres Strait Islander communities is well planned.

Increase access to arts and cultural infrastructure



Digital technology provides new ways to access Queensland's arts and cultural infrastructure, particularly for rural and remote communities. Similarly, integrating arts and cultural infrastructure into other assets such as public transport and buildings, increases access and enhances the liveability and vibrancy of our cities. Digital technology can also activate and enliven cultural spaces.

Embedding arts and culture into land use and infrastructure planning provides opportunities for locals and tourists to increase creative engagement with inclusive public places, again making art and culture more accessible.

Develop eco and cultural tourism



Experiencing nature and authentic cultural experiences are primary motivators for Australia's domestic and international visitors. Queensland has a natural competitive advantage to attract visitors with high-quality eco, agricultural and cultural tourism experiences. These experiences are based on our world-class national and marine parks, five UNESCO World Heritage List areas, huge diversity of unique and unrivalled rural and natural landscapes, iconic wildlife, historic towns and rich cultural offerings. COVID-19 has driven an increase in domestic tourism spend in regional areas¹²⁰, which presents an opportunity to further develop new sustainable infrastructure to support and grow this market sector.

Catalyse major sporting events

Queensland will host the Brisbane 2032 Games, providing us an opportunity to catalyse long-lasting economic benefits, including by boosting tourism, trade and the extended supply chain. Beyond the sports field, the Brisbane 2032 Games also provides an opportunity to celebrate Queensland's rich artistic and cultural heritage, and open our state up to the world.



Flexibility

We are transitioning to a more sustainable and renewable future, including one with more flexibility, to meet changing needs. This includes partnering with schools, local governments and clubs to maximise the use of funding to ensure sports infrastructure on school grounds has built-in, future expansion opportunities. This also includes embracing the opportunity to focus on multi-use places and spaces, and mixed-use precincts, for local communities to utilise.





ARTS, CULTURE, RECREATION AND TOURISM

PRIORITY ACTIONS



Encourage jobs, growth and productivity



Develop regions, places and precincts



Enhance sustainability and resilience



Adopt smarter approaches

1 Optimising Brisbane 2032 Games infrastructure and legacy (2032 Taskforce)



Leverage opportunities provided by the Brisbane 2032 Games for all Queenslanders over the next decade and beyond. Partner with industry and other government agencies to facilitate investment in community-based, legacy sporting infrastructure, and planning for precincts and experiences. The Brisbane 2032 Games bring the chance to inspire state and national pride and, importantly, the next generation of champions through medal winning performances.

2 Developing partnerships for active places and spaces (DTIS)



Partner with schools, local governments and clubs to enable community access and leverage investments for sport and recreation and delivering flexible and active mixed-use precincts and multi-use places and space (e.g. school/sports halls) or future provisions. Ensure schools, students and the broader community have access to a wide range of sport and active recreation opportunities.

3 Enabling smarter sporting venues (DTIS)



Embrace smarter community sporting infrastructure to better utilise sporting places and spaces. Use innovation, technology and new processes (such as prefabricated buildings and e-Switch technology to deliver cost-efficient lighting systems) to support better utilisation.

4 Embedding arts and culture (DCHDE)



Embed opportunities for arts and culture into infrastructure planning and design projects to increase the accessibility of art to the community and support collaborations between infrastructure providers and artists.

5 Partnering on our cultural experiences (DCHDE)



Partnering with communities and all levels of government to support new and revitalised infrastructure that enhances community engagement in cultural experiences, supports artists and creative industries, and delivers economic and social outcomes for communities across the state.

6 Valuing arts, cultural, and recreation (DCHDE)



Communicate the economic, social and cultural value of arts, cultural and recreational infrastructure investments in Queensland and the broader contribution these provide to the community.

7 Encouraging better use of public facilities (DTIS)



Work across agencies to ensure systems encourage better use of public facilities, such as schools, to encourage and maximise the use of facilities outside hours of operation to promote physical activity and enable students and the community to connect with arts and cultural organisations that provide benefits through work experience, and to organisations by providing access to performing arts infrastructure, rehearsal, exhibition and performance spaces.

8 Using digital technology to grow and engage audiences (DCHDE)



Continue to grow engagement with arts and cultural experiences through new technologies.

9 Increasing sustainability offsets and energy reduction (DTIS)



Continue to undertake sustainability initiatives to offset rising energy costs, improve energy performance, and reduce energy consumption for arts, cultural, sporting and recreation infrastructure assets.

10 Planning in discrete communities (DSDSATSIP)



Through a community-led partnership approach, develop arts/culture/tourism and sporting/recreational precinct plans for discrete Aboriginal and Torres Strait Islander communities, coordinating the delivery of well-integrated infrastructure and developing new indigenous tourism opportunities

11 Developing an Action Plan for Tourism Recovery (DTIS)



Identify recovery opportunities that position Queensland's tourism industry for success after COVID-19, through an industry reference panel and consultation.

12 Rebuilding aviation connectivity (DTIS)



Following improved national and international COVID-19 conditions, activate aviation access and capacity to support aviation rebuild through tourism, education, freight, export, and business travel opportunities.

**13 Attracting private sector investment
(DTIS)**


Stimulate private sector investment in tourism attractions by providing certainty and approval pathways, leveraging government assets, unlocking contemporary funding models or through more direct measures including enabling infrastructure or incentives.

**14 Revitalising National Parks
(DES)**


Revitalise high-quality visitor infrastructure and experiences across Queensland's National Parks including supporting ecotourism opportunities and active nature-based recreation, in line with Queensland's Protected Area Strategy.

**15 Supporting nature-based tourism
(DES and DTIS)**


Continue to support the development of innovative ecotourism experiences in partnership with private industry to showcase Queensland's world-renowned protected areas, and to ensure visitor experiences foster genuine appreciation of the natural environment.

Create new nature-based tourism opportunities through the national park network, and in surrounding natural areas including recreation activities in protected areas.

**16 Expanding the protected area system
through implementing Queensland's
Protected Area Strategy 2020-2030
(DES)**


Accelerate growth of the protected area system to further protect natural, cultural and heritage values in balance with delivery of world-class visitor experiences.

**17 Enabling Queensland Active Precincts
(DTIS)**


Deliver a targeted capital works program to support the transition of regionally significant venues owned and operated by government into active precincts, which will inspire Queenslanders to be more physically active and achieve a range of health and social benefits.

**18 Integrating First Nations arts and
cultures into infrastructure projects
(DSDSATSIP, DCHDE, QH, DoE, TMR)**


Collaborate with Aboriginal and Torres Strait Islanders communities to integrate place-based art and culture into infrastructure projects by incorporating local indigenous names, histories and song lines.

**19 Promoting cultural tourism
(DSDSATSIP, DTIS)**


In partnership with Aboriginal and Torres Strait Islander communities, promote and celebrate Aboriginal and Torres Strait Islander culture by delivering the supporting infrastructure that will help deliver coordinated tourism events and activities within the communities.



Social housing, Mount Warren Park (Source: Department of Communities, Housing and Digital Economy)



SOCIAL HOUSING



SOCIAL HOUSING

OVERVIEW

Social and affordable housing is an important part of our communities, as it provides a safe and secure home for many Queenslanders.

Demand for this valuable asset is increasing due to a range of market influences, including higher interstate migration, record low interest rates, rising property and private rental prices, and growing demand in the private market. These market conditions expand beyond the usual boundaries of South East Queensland. There is increasing demand in regional areas, both along the coast and inland, due to intrastate migration and the slow construction of new homes as a result of materials and labour shortages.

Queensland's state owned, and the community housing provider owned and managed social housing portfolio exceeds 74,000 properties.¹²¹ With more than 64,500 of these under state ownership this makes the government the largest residential lessor in the state. Social housing dwellings are managed directly by the government (public housing) or by community housing providers and specialist homelessness services. Government-owned properties are also leased to specialist homelessness service providers and used to deliver a suite of other services.

Public housing, community housing and specialist homelessness service providers respond to the specific needs of a range of vulnerable people, including:

- ▶ people requiring crisis support
- ▶ older people or young people experiencing or at risk of homelessness
- ▶ people with a disability
- ▶ women and families experiencing or at risk of domestic and family violence
- ▶ Aboriginal and Torres Strait Islander Communities.

The *Queensland Housing Strategy 2017–2027* seeks to ensure that every Queenslander has access to a safe, secure and affordable home that meets their needs and enables participation in social and economic life. The *Housing and Homelessness Action Plan 2021–2025* (the second action plan under the strategy) supports the next delivery phase of the housing strategy. The action plan is backed by \$1.908 billion in funding over four years, which includes annual returns from the new \$1 billion Housing Investment Fund established to support ongoing housing supply.

The housing strategy is also implemented through the *Aboriginal and Torres Strait Islander Housing Action Plan 2019–2023*, which includes funding of \$67.1 million over four years and is focussed on improving housing outcomes for Aboriginal and Torres Strait Islander people. This investment will support community-led decision-making, enhance sector capability, and deliver responsive housing across the state.

The government is increasing the supply of social and affordable housing by almost 10,000 over the life of the housing strategy. This includes 6,365 new social housing commencements over the next four years (by 30 June 2025) as part of the Queensland Housing Investment Growth Initiative (QHIGI), under the new *Queensland Housing and Homelessness Action Plan 2021–2025*.¹²² The strategy also commits to constructing a minimum of 50 per cent of new public housing properties to gold and platinum Liveable Housing Design Guidelines standards, to increase the supply of accessible and adaptable housing, respond to individual needs and enable tenants to more readily age in place.

Delivery of new, innovative and sustainable social housing solutions requires strong partnerships with the community housing sector, industry bodies, local government and the private sector. The Queensland Government continues to work closely with, and build the capability of, these partners to meet the needs of our communities today and into the future.



Improving housing outcomes (Source: Department of Communities, Housing and Digital Economy)

Current key initiatives

Queensland Housing Strategy 2017–2027

A 10-year plan to deliver more social and affordable homes and to transform the way housing services are delivered.

Delivered through:

- Aboriginal and Torres Strait Islander *Housing Action Plan 2019–2023* – Improving housing outcomes for Aboriginal and Torres Strait Islander Queenslanders by working together with local communities and the housing sector
- *Housing and Homelessness Action Plan 2021–2025* – to improve housing outcomes and future-proof the service system
- Queensland Housing Investment Growth Initiative – delivering new homes through a coordinated and integrated capital program.



New social housing, Cairns (Source: Department of Communities, Housing and Digital Economy)

HIGHLIGHTS



\$1.908 billion investment in **social and affordable housing** over four years through the *Housing and Homelessness Action Plan 2021–2025*



Almost 10,000 social and affordable homes over the life of the *Queensland Housing Strategy 2017–2027*



Tenant profiles:¹²³

Single household – **17 per cent**
Single parents – **29 per cent**
Seniors (over 55) – **41 per cent**
Couple family – **7 per cent**



Almost half of applications for social housing are for households with at least one **person with disability**¹²⁴



Our **ageing population** is creating more 1-2 person households and **greater need** for **smaller homes**



Yarrabilba, master planned community

TRENDS



The **RENTAL MARKET** is **TIGHTENING** and prices are rising as proportionately **FEWER PEOPLE** enter or retain home ownership¹²⁵



Increasingly there is **LIMITED HOUSING** available in many **REGIONAL COMMUNITIES**¹²⁶



People on low and **MODERATE INCOMES** are finding it harder to afford to **LIVE IN** their **COMMUNITY** or near their work¹²⁷



HOUSE PRICES continue to **INCREASE**, creating **CHALLENGES** for first home buyers and people seeking to re-enter the market¹²⁸

▼ CASE STUDY

Queensland Housing Investment Growth Initiative

Through the *Housing and Homelessness Action Plan 2021–2025*, the Queensland Housing Investment Growth Initiative (QHIGI) was introduced to tackle current and future challenges in social housing delivery with strong capital investment and a state-wide focus. The initiative includes:

- ▼ Establishing the Housing Investment Fund through a \$1 billion investment to deliver 3,600 social housing commencements over four years. The total value of the fund will be maintained over time with returns used to fund new housing supply.
- ▼ Accelerated social housing construction through QuickStarts Qld, a \$1.813 billion investment to deliver 2,765 new social housing commencements across the state, including in the regions and in Aboriginal and Torres Strait Islander communities where homes will be delivered through local housing plans.
- ▼ Help to Home, which will priority source 1,000 private leases through a \$40 million investment over two years to respond to emerging and specific local need.

The three programs of the QHIGI each support specific elements of market need or respond to current or anticipated market challenges.

Housing Investment Fund

The Housing Investment Fund will facilitate a range of new opportunities for strategic partnerships between the state and community housing providers, private developers and institutional investors on an individual or consortia basis. The fund provides greater flexibility to deliver a mix of projects, including public, community and subsidised housing, homeless accommodation, and mixed-use developments that capture site specific opportunities.

It also provides a vehicle for co-investment in projects with consortia to leverage development opportunities and maximise funding and financing opportunities. This may be through shared financing, land contributions or other appropriate arrangements based on project need.

QuickStarts Qld

Investment through QuickStarts Qld accelerates planned capital investment to commence construction of social housing sooner in order to support evolving need across the state. A four-year pipeline of work will result in a mix of developments, from single family homes to multi-dwelling complexes. The investment may include strategic land or property purchases, and will help manage demand for homes in major population areas as well as support changing housing needs in regional cities and towns. The construction program will be delivered through partnerships with community housing providers and capital build projects delivered by the state government.

Help to Home

Help to Home provides housing stock to support immediate or emergent needs while other social housing options are developed. Through headleasing arrangements, the Queensland Government seeks to lease privately-owned properties that may be new to market or not previously available, which can then be sublet to people in need. Supportive tenancy management by the state or community housing providers assists tenants to sustain their tenancies while a longer-term housing plan is developed.



Social housing, Brisbane (Source: Department of Communities, Housing and Digital Economy)



SOCIAL HOUSING

CHALLENGES

Demand for social housing continues to grow

Demand for social housing continues to increase as Queensland's population grows and the private housing market becomes more competitive and less affordable. Home values are increasing across much of the state, putting home purchases out of reach of low- and moderate - income earners, while private rental prices are rising and vacancy rates are at all-time lows.¹²⁹ These conditions put pressure on social housing as people who struggle to find a home seek state support.



Competition with the private market

Delivering new social housing of the right type, in the right location, and at the right price is a challenge. Demand for land and builders is high, accelerated by COVID-19 recovery stimulus for the construction industry, and in some regional markets the construction and labour markets are small or more remotely located.



Many people seeking housing assistance have other needs

Many Queenslanders seeking housing assistance have complex circumstances and engage with multiple human and health services and providers. For example, almost half of applicants for social housing have at least one person in the household with a disability, and one in 10 have experienced domestic and family violence.



Meeting contemporary housing needs

A historical legacy since the late 1940s of building social housing to assist families means current housing stock does not always respond well to the diverse needs of other cohorts. For example, this could include single households seeking smaller homes or people with a disability seeking to live independently who require an accessible home.

▼ OPPORTUNITIES



Maximising benefit from national, state and local initiatives

Queensland uses initiatives at all levels of government to advance its social housing policy objectives. This includes through local government planning schemes, state planning mechanisms (such as regional plans), key strategic agreements such as City Deals, and major infrastructure developments, such as urban renewal sites and new community growth areas.



Expand the range of alternative assistance options

Innovative delivery of affordable housing includes the Build to Rent pilot project, where government partners with the private sector to deliver affordable homes for rent at a discounted rate as a component of large-scale developments. Almost one-third of 750 new apartments across two Brisbane developments will be offered at a discounted rent, helping key workers to live close to their work.



Strengthen the community housing sector

The Queensland Government is committed to supporting the capability and capacity of community housing providers, through innovative funding opportunities and partnerships across government and private industry. This will assist community housing providers to deliver new and innovative housing support that is person-centred and place-based.



Significant investment in new social housing supply

The Queensland Housing Strategy 2017–2027 commits to increasing social housing supply across the state to meet demand in areas of high need. The strategy's *Housing and Homelessness Action Plan 2021–25* will deliver new housing supply and upgrades to existing properties. This investment also provides opportunities to better align the portfolio to respond to the specific needs of vulnerable Queenslanders and will create jobs for tradespeople.



SOCIAL HOUSING



PRIORITY ACTIONS



Encourage jobs, growth and productivity



Develop regions, places and precincts



Enhance sustainability and resilience



Adopt smarter approaches

1 Increasing social housing supply (DCHDE, DEPW, QT)



Deliver a coordinated program of capital works and capital grants that:

- optimises the use of public housing assets
- revitalises social housing precincts
- redevelops high-value sites to maximise yield
- promotes a range of housing support options to meet the varying needs of communities and cohorts.

2 Lease and purchase properties from the private housing market to meet emergent need (DCHDE)



Access properties from the private market through leasing and spot purchases.

3 Supporting growth, sustainability and innovation in the community housing sector (DCHDE)



Work in partnership with community housing peak and industry bodies to promote growth, sustainability and innovation of person-centred and place-based responses.

4 Make use of state planning and economic development tools (DSDILGP, DCHDE)



Use state planning and economic development mechanisms to explore new opportunities to deliver social and affordable housing.

5 Facilitating innovative funding, financing and service delivery options (QT, DCHDE)



Drive strategic partnerships between the state and a wide range of potential participants such as the Australian Government, local governments, community housing providers, private developers, institutional investors, and not-for-profit partners, either individually or as consortia.

6 Working with regional councils to increase and diversify regional housing supply (DCHDE, DEPW)



Explore opportunities for government and non-government investment and incentives for housing that responds to community needs.

7 Strengthening housing outcomes for Aboriginal and Torres Strait Islander peoples (DCHDE, DSDSATSIP)



In partnership with Aboriginal and Torres Strait Islander communities, develop place-based, community led responses to local housing challenges and priorities through local housing plans, delivering new housing as agreed with communities.

Explore opportunities to increase land supply for social housing.

MEASURING SUCCESS

▼ HOW WILL WE MEASURE OUR SUCCESS?

Together, government, private sector and community collaboration to deliver infrastructure will build a better Queensland.

If we deliver on this strategy successfully, tomorrow's Queensland will be one where the people who call our state home continue to thrive and reap the rewards of our extensive forward planning. A Queensland becoming a renewable energy and hydrogen superpower, with connected regions, characterised by liveable communities, and high performing infrastructure.

As we face decades of opportunity ahead of us, we now have a chance to seize these benefits for Queenslanders.

This strategy contributes to the Queensland economy and our communities by outlining how we plan, deliver and fund infrastructure that enables economic growth and builds resilient communities. It does this by delivering on our objectives and implementing priorities for cross-government and nine asset classes.

The impact of the final State Infrastructure Strategy will be assessed against the four key objectives:

- ▼ **Encourage jobs, productivity and growth**
Our infrastructure program will create jobs, and help support industry growth, from traditional activities such as agriculture and mining to cutting-edge technological endeavours such as hydrogen and aerospace. Productivity is at the heart of our success.
- ▼ **Enhance sustainability and resilience**
Our infrastructure plans, programs and strategies help us embrace the challenges of climate change, natural disasters and less predictable weather patterns. Resilience is vital to our success.
- ▼ **Develop regions, places and precincts**
We will plan and deliver great places to live with quality public services and support jobs and economic development through sequenced, strategic infrastructure delivery. Delivering for our diverse communities is central to our success.
- ▼ **Adopt smarter approaches**
We embrace better practices and services delivery to provide better infrastructure for Queenslanders and their communities. Innovation and digital connectivity will be critical to our success.

MONITORING AND REPORTING

The monitoring and review of the final strategy will be ongoing. The strategy will directly inform the progressive development of seven Regional Infrastructure Plans from 2021 and into 2022, and inform investment priorities for the annual QGIP.

The importance of infrastructure assets to upstream and downstream users means there is significant interest in infrastructure being constructed in a timely fashion and meeting the needs of the community. The ongoing development of Regional Infrastructure Plans will provide an opportunity to continually adjust priorities across all communities.

The QGIP provides annually updated details of the Queensland Government's infrastructure planning and investment and provides the private sector and all levels of government with clear direction and confidence to invest. It reflects our infrastructure investment priorities across regions, industry and community – creating the right conditions to unlock private investment, economic growth, jobs and prosperity now and into the future.

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Acronym	Government Agency or Government Owned Corporation
CRRDA	Cross River Rail Delivery Authority
DAF	Department of Agriculture and Fisheries
DCYJMA	Department of Children, Youth Justice and Multicultural Affairs
DCHDE	Department of Communities, Housing and Digital Economy
DoE	Department of Education
DESBT	Department of Employment, Small Business and Training
DEPW	Department of Energy and Public Works
DES	Department of Environment and Science
DJAG	Department of Justice and Attorney-General
DRDMW	Department of Regional Development, Manufacturing and Water
DoR	Department of Resources
DSDATSIP	Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships
DSDILGP	Department of State Development, Infrastructure, Local Government and Planning
DTIS	Department of Tourism, Innovation and Sport
DTMR	Department of Transport and Main Roads
Ports	North Queensland Bulk Ports Corporation
	Port of Townsville Limited
	Gladstone Ports Corporation
	Far North Queensland Ports Corporation Limited (Ports North)
QAS	Queensland Ambulance Service
QCS	Queensland Corrective Services
QFES	Queensland Fire and Emergency Services
QH	Queensland Health
QPS	Queensland Police Service
QR	Queensland Rail
QT	Queensland Treasury
TAFE Qld	TAFE Queensland
2032 Taskforce	2032 Taskforce, Department of Premier and Cabinet



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