

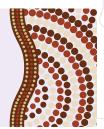
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Acronyms	Full form
ABS	Australian Bureau of Statistics
APP	Aboriginal Procurement Policy
BLIA	Buy Local Industry Advocate
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DIPL	Department of Infrastructure, Planning and Logistics
IA	Infrastructure Australia
IPoCPP	Indigenous Participation on Construction Projects Policy
MIDP	Maritime Industry Development Plan
NLT Act	National Land Transport Act 2014
NPA	National Partnership Agreement
NT	Northern Territory
REGP	Regional Economic Growth Plans
TERC	Territory Economic Reconstruction Commission

Acknowledgement of Country

Infrastructure NT acknowledges the Traditional Owners and Custodians across the Northern Territory and their connection to country.

We pay our respects to their communities and Elders – past, present and emerging.



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Preparing to Pivot

Achieving a \$40 billion economy by 2030 will enable the Territory Government to create more jobs and a higher standard of living for all Territorians. Providing the right infrastructure in the right place at the right time will underpin this ambition.

Investing in strategic infrastructure in the Territory builds on our natural strengths and comparative advantages. It is critical to attracting private sector investment, creating jobs, growing our capability and capacity for growth and boosting our skills and expertise. Government is pivotal to delivering well planned and co-ordinated infrastructure investment to accelerate economic development balanced with the social infrastructure needed to support growth.

Aligned with national competitive advantages and productivity goals, such as boosting sovereign capability, the Territory is primed and ready to build on its local strengths and strategic location. The right investment coupled with the Territory's reputation for flexibility, agility and 'making things happen' will turn the Territory's proximity to Asia into a step change reality.

The Territory Government is spending about \$1.4 billion on infrastructure each year. A well-considered infrastructure framework will guide future infrastructure investment with stronger integration and co-ordination to support economic growth balanced with social needs.

The Territory Government is preparing a new Infrastructure Framework which includes four pieces of work to prepare the Territory to pivot towards a \$40 billion economy by 2030 – an Infrastructure Strategy, Audit, Plan and a Pipeline. This position paper is the first step in developing the Infrastructure Framework and refocused Strategy and Plan.

So why do we need to develop another strategy, and how will it be different?

The challenge to get the right infrastructure in the right place at the right time is not new. It is about pivoting towards a focus on using existing infrastructure better, managing demand, prioritising and timing investment to enable economic and population growth. Strategic investment in infrastructure is a catalyst for industry – the flow on and multiplier effects give rise to so much more than the initial capital investment.

The rapidly evolving landscape requires us to rethink and refresh our approach. A number of new key influencers are impacting the Territory Government's strategy for infrastructure planning and delivery:

- Current Northern Territory Context
- Langoulant Report: A Plan for Budget Repair
- COVID-19 pandemic
- Territory Economic Reconstruction Commission (TERC) First and Final Reports

- formation of National Cabinet and Reform Committees
- Australian Government policy
- NT Infrastructure Policy and Regulatory Reform.

The new Infrastructure Strategy and Plan will maintain a continuum by aligning the actions required to support industry growth while responding to the COVID-19 pandemic and economic recovery at the same time. Having a strategy to pivot will help propel the Territory along the continuum with a sense of urgent purpose.

A central tenet of the Infrastructure Framework is about partnering with private sector led investment to invigorate the Territory's economic growth. That's where enabling infrastructure becomes a strategic priority.

This position paper and subsequent Strategy and Plan recognise that many of our goals interrelate with the national agenda – sovereign capability, water, fuel and food security, equity and access, resilience and sustainability. These goals all point to a more productive and prosperous Northern Territory. The refocused Northern Territory Infrastructure Framework will refocus investment in the Territory to stay ahead of the economic change curve to deliver prosperity across the regions and improve the lives of all Territorians.



The Territory Government is seeking contributions from industry and the community to develop the NT Infrastructure Strategy, Audit, Plan and Pipeline.

We encourage you to consider the questions on page 33 of this Position Paper. Responses to these questions are welcome or additional issues can be raised for consideration.

<u>Submissions can be made:</u>

online at haveyoursay.nt.gov.au

via email to Infrastructure.NT@nt.gov.au

or by post to Infrastructure Framework Position Paper, GPO Box 2520, Darwin, NT, 0801.

Alternatively if you would like to meet with us and share your views on any issues raised in this Position Paper, please contact us at Infrastructure.NT@nt.gov.au or phone (08) 8936 5696.

Submissions close on 18 March 2022.

Establishment of Infrastructure NT

The Territory Government established the inaugural Infrastructure NT and appointed an interim Commissioner in April 2021 to champion strategic infrastructure planning and development to meet infrastructure needs for industry and population growth.

Infrastructure NT will provide a strategic infrastructure planning and development focal point to drive a proactive, Territory-wide approach to social and economic infrastructure in collaboration with industry.

Figure 1 below summarises Infrastructure NT's mission, objective, function and key deliverables to achieve a \$40 billion economy by 2030.

Figure 1 – Infrastructure NT Mission, Objective, Functions and Key Deliverables

Mission

Collaborate to get the right infrastructure built, in the right place, at the right time to improve the quality of life for all Territorians, to have strong sustainable communities and to work with industry partners to achieve a \$40 billion economy by 2030

Objective

Strategic infrastructure planning and development that co-ordinates, advances and aligns infrastructure needs with industry and population growth

Functions

- Represent and advocate for the Territory's infrastructure interests nationally
 - Identify and champion opportunities for infrastructure investment and reform to drive the Territory's future growth
 - In partnership with responsible agencies, the Investment and Major Project Commissioners and Chair of the Gas Taskforce, identify, plan and enable the delivery of key strategic economic infrastructure
- Provide government-wide leadership to develop and deliver projects that analyse, prioritise and support justified government infrastructure investment

Key Deliverables

- Develop NT Infrastructure Strategy, Audit, Plan and Pipeline
- Lead Territory Government sponsored major infrastructure projects
- Establish and co-ordinate support for the NT Logistics Advisory Council
 - Participate in national forums relating to infrastructure
- Support the Minister for Infrastructure, Planning and Logistics in infrastructure and transport ministerial forums

The Northern Territory Government has a new strengthened strategy for winning private investment, bolstering major projects and growing the economy.

The Territory Investment Commissioner and Major Projects Commissioner have a broad investment mandate and are the key links between industry and government.

The Investment Commissioner will work with industry to find new investment opportunities in the Territory in target sectors such as advanced manufacturing, renewable energy and digital industries.

The Major Projects Commissioner will be the point of coordination for major projects and make it easier for businesses to navigate approvals and create Territory jobs.

Major Project Status is awarded by the Northern Territory Government to private sector initiated projects that are significant, complex and have strategic impact. Major projects are significant contributors to the economic development of the Northern Territory.

Infrastructure NT works closely with the Investment and Major Project Commissioners and the Chairman of the Gas Taskforce to identify the enabling infrastructure required to support private sector investment.

Infrastructure NT also represents the Northern Territory in national discussions to ensure our public infrastructure requirements have Australian Government and broader community support. Aligning the Northern Territory Infrastructure Framework with the Infrastructure Australia Framework will streamline the process for including major projects on the Infrastructure Australia Priority List.



Proposed NT Infrastructure Framework

The Territory Government has tasked Infrastructure NT to review and reform the current Infrastructure Strategy and Northern Territory Infrastructure Plan with a renewed focus on achieving government's goal of a \$40 billion economy by 2030.

Infrastructure NT has considered a range of factors in proposing an Infrastructure Framework for future strategic infrastructure planning and development.

The factors, considered in the development of this Position Paper, include, but are not limited to:

- the benefit in aligning with the Infrastructure Australia Framework
- prioritising the timely delivery of government-led economic enabling infrastructure to support the investment pipeline
- the economic and social inefficiencies experienced during construction peaks (boom-bust cycles)

- ensuring that governance structures provide strong wholeof-government coordination and leadership focused on delivery
- focusing on the industry sectors that will drive growth and the social sectors that underpin economic growth
- a focus on inclusive societies and providing opportunity for Aboriginal Territorians to economically benefit from a growth agenda
- government cannot meet the infrastructure needs on its own
- the scale of demand for skills and resources is highly likely to exceed the normal capacity increases expected in the construction sector
- place-based planning to unlock potential and reduce disadvantage
- value add processing will result in transformative change
- sustainable, resilient and agile infrastructure that can adapt to extreme weather events as well as shocks and stresses

The proposed Northern Territory Infrastructure Framework will provide clear direction and whole-of-government leadership for project development and delivery that analyses, prioritises and supports justified government infrastructure investment.

The proposed Infrastructure Framework includes a refocused Strategy, Plan, Pipeline and Audit.

Infrastructure NT will lead these four key pieces of work that underpin the Territory Government's investment in infrastructure.

Figure 2 below provides a summary of the four key pieces of work.

Figure 2-NT Infrastructure Framework

NT Infrastructure Strategy Vision, Purpose, Key Objectives, Priority Actions Reviewed every four years to align with election cycles NT Infrastructure Plan Series NT Infrastructure Audit Series NT Infrastructure Pipeline Series Enabling infrastructure roadmap Establish an infrastructure needs Funded Projects Major Projects, Priority Initiatives Review market capacity to control 'boom-Place-based planning integrated with ✓ Undertake a gap analysis of the baseline bust' cycle and control the pipeline flow infrastructure planning Reviewed annually to align with Sector Strategies budget cycle ✓ NT Project Development Framework and address challenges Reviewed annually to align with Reviewed every four years following the budget cycle NT Infrastructure Strategy

The NT Infrastructure Strategy will set the vision, purpose, key objectives and priority actions as a framework to prioritise and justify government investment in Territory infrastructure. The NT Infrastructure Strategy will need to be reviewed and updated every four years so it remains relevant to Territory priorities and the constantly changing national and international environment.

The NT Infrastructure Audit is proposed to test the Northern Territory's future infrastructure needs and examine future challenges and opportunities. The Audit will establish where we are and where we want to be. The Audit will be reviewed every four years to monitor progress and ensure it aligns with the NT Infrastructure Strategy and inform the Plan and Pipeline.

Infrastructure NT has reviewed the current Infrastructure Plan and recommends it be split into two key documents:

- NT Infrastructure Plan to provide a roadmap for infrastructure reform that responds to the challenges and opportunities identified in the NT Infrastructure Audit. The Plan will identify projects still under development and clarify the relationship to industry and sector strategies to help create a 'big picture' of infrastructure at a Territory, regional or precinct level.
- NT Infrastructure Pipeline informed by the Plan, articulates projects that need to be delivered in the short term to assist government to manage market capacity through the flow of work in the pipeline. It will enable industry to more effectively plan

resourcing and provide more certainty around the pipeline of short term projects as well as medium to longer term projects.

The Infrastructure Plan and Infrastructure Pipeline will be reviewed annually to ensure that Territory Government investment in infrastructure is agile enough to respond and support the Territory's future growth.

The proposed Infrastructure Strategy, Audit, Plan and Pipeline will be underpinned by cross-cutting objectives distilled into four key areas:

- Invest in the right infrastructure, in the right place, at the right time

 infrastructure that supports jobs, de-risks and secures investment and balances investment between social and economic infrastructure.
- Support growth, productivity and innovation – invest in enabling infrastructure that will increase the value of existing supply chains and grow capacity and capability.
- 3. Improve lifestyle and liveability place-based infrastructure planning integrated with local decision making and regional development strategies.
- Embed sustainability and resilience

 improve community sustainability
 and build trust by embedding the
 quadruple bottom line (economic,
 environmental, social, cultural
 and governance outcomes) in
 government decision making and
 assessment.

Two key Territory Government documents already complement the NT Infrastructure Framework – the NT Project Development Framework and the Market Led Proposal Policy.

The NT Project Development Framework applies to capital projects that are funded or supported by the Territory Government, including cash and noncash contributions of \$30 million and over towards the cost of the project. The framework ensures that these funded projects are developed, evaluated and progressed through a consistent framework to enhance transparency and public accountability, and maximise outcomes and public benefit of government expenditure.

The framework requires a detailed project assessment to inform the delivery options and investment decision for each project. It applies to projects funded by government capital works program or government facilitated strategic projects.

The Territory Government's Market Led Proposal Policy outlines the process for proponents approaching government with proposals that have tangible benefits for the Northern Territory and guides how proposals will be considered. The policy recognises that every proposal and proponent is different and gives the Territory Government the flexibility to progress proposals to deliver value-formoney for Territorians, while providing certainty and advice to the private sector to encourage good ideas to be developed early in the process.

Infrastructure Australia Framework

Infrastructure Australia, an independent statutory body, advises the Australian Government, industry and the community on the investments and reforms needed to deliver better infrastructure for all Australians. It provides guidelines for better infrastructure decision making to promote greater accountability and transparency around infrastructure projects. Figure 3 provides an outline of Infrastructure Australia's Framework.

The Australian Infrastructure Audit takes a forward-looking view to assessing our nation's infrastructure needs and examines future challenges and opportunities.

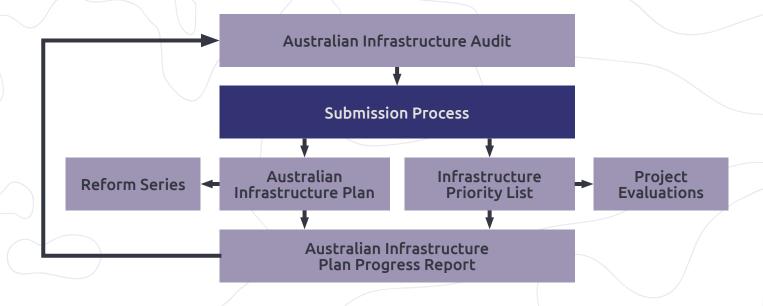
The Infrastructure Priority List provides decision makers with advice and guidance on specific infrastructure investments that have been rigorously assessed and will underpin Australia's continued prosperity. It draws on evidence from the Audit and proposals from proponents around Australia. The Northern Territory has eight projects on the National Infrastructure Priority List including:

- Tanami Road upgrade
- enabling infrastructure and essential services for the remote Northern Territory communities of Wadeye, Tiwi Islands and Jabiru
- Darwin region water supply infrastructure upgrades.

Five new infrastructure projects were added to the Priority List in 2021:

- enabling infrastructure to develop the Beetaloo Sub-Basin
- common user infrastructure at the Middle Arm Sustainable Development Precinct
- Northern Territory remote community power generation program
- Northern Territory large-scale solar generation (submitted by Sun Cable)
- Outback Way road access (submitted by Outback Highway Development Council).

Figure 3 – Infrastructure Australia's Framework



The Australian Infrastructure Plan provides a roadmap for infrastructure reform that responds to the challenges and opportunities identified in the Audit.

The 2021 Plan, released on 3 September 2021, is intended to deliver infrastructure for a stronger Australia, and support our national recovery from the still-unfolding COVID-19 pandemic, as well as bushfires, drought, floods and cyber-attacks.

This is the first time the Plan has included social infrastructure such as schools, hospitals, parks, community centres and social housing in acknowledgement of the critical role these physical spaces and assets play in supporting the nation's wellbeing and making Australia a great place to live.

Arts, culture and recreation facilities define our cultural identify. Along with public green and blue spaces (such as parks and waterways) they improve our wellbeing and make communities more liveable. Investing in cultural infrastructure contributes to community resilience and positive improvement.

In the 2021 Plan, Infrastructure Australia has introduced a strategic framework to qualitatively assess the potential impact and implementation challenges in its policy recommendations, with the aim to help inform, rather than replace, a quantitative assessment such as a business case or regulatory impact statement before a decision is made. This qualitative analysis is particularly important in the Northern Territory context of policy/project recommendations, where it is essential

to consider the impacts that are difficult or costly to monetise such as impacts related to social equity issues and service availability across rural remote regions.

On 13 October 2021, Infrastructure Australia released its first Infrastructure Market Capacity report reflecting a new capability to support decision makers to better understand the capacity of the market to deliver the forward infrastructure pipeline.

Australia is currently experiencing a record level of investment in infrastructure. The average annual growth rate to 33 per cent outstrips industry's confidence of their capacity to deliver on-time and on-budget.

Industry has a high confidence of delivering 10 – 15 per cent annual growth but has a low confidence in delivering growth over 18 per cent.

Shortages are expected in skills, labour and materials. The Northern Territory and other jurisdiction infrastructure sectors are already experiencing significant skills shortages and ever increasingly complex infrastructure projects to meet modern standards.

The Market Capacity Report identifies potential resource challenges and risks from estimated demands from the Major Public Infrastructure Pipeline. The Report discusses risk mitigation strategies and opportunities for reform.

Since the creation of Infrastructure Australia, all states and territories have established their own 'I-Bodies', with similar functions to provide advice and assistance to their respective governments on infrastructure planning, investment and delivery. Each is unique, reflecting the scope and complexity of infrastructure need, with a number of I-Bodies led by independent Boards.

Infrastructure Australia engages with the I-Bodies to support common reform agendas such as shared research, methodologies and data.

As the most recent I-Body, Infrastructure NT's Framework will mirror that of Infrastructure Australia and draw on the frameworks of other jurisdictions. This will promote national harmonisation, while responding to our regional context and infrastructure requirements.

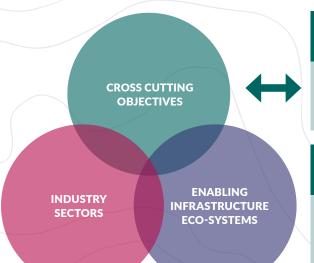
Infrastructure NT has been established as a Comission within the Department of Infrastructure, Planning and Logistics (DIPL) that enables close collaboration within the Territory Government's infrastructure delivery, land use planning and land development agency.

Infrastructure NT will be the link to Infrastructure Australia and drive the Territory's submissions for inclusion on the national Priority List. In the immediate future it will progress Stage 2 and 3 business cases for the 2022 Priority List – Middle Arm Sustainable Development Precinct, Beetaloo Sub-Basin and the Darwin Regional Water Supply.

For the full suite of documents visit www.infrastructureaustralia.gov.au/



Draft Northern Territory Infrastructure Strategy foundations



Invest in the right infrastructure, in the right place, at the right time

- Strategically plan new enabling infrastructure eco-systems to derisk and secure investment
- Balance investment in social and economic infrastructure

Improve liveability

- Integrate place-based planning with local decision making and regional development strategies
- Invest in green and blue infrastructure

Support increased growth, productivity and innovation

- Grow capacity and capability to lead and drive the development of Northern Australia
- Invest in infrastructure to increase the value of existing supply chains

Embed sustainability and resilience

- · Accelerate the development of sustainable development precincts
- Consider economic, environmental, social, cultural and governance sustainability and resilience in infrastructure decision making



Transport and Logistics

- Land transport -Rail, roads and
- Marine infrastructure
- Air transport
- Intermodal hubs
- Marine Industry Park
- Ship Lift

Utilities

- Power/Energy
- Water
- Digital and Telecommunications infrastructure
- Telecommunications
- Waste Management

Social Infrastructure

- **Education and Training**
- Justice and public safety
- Housing
- Sporting, Recreation, Lifestyle

Emerging Industries

- Manufacturing Gas industries
- Hydrogen
- Renewable Energy
- Space
- Aviation technology
- Electric vehicles
- Creative Industries
- Data centres

Agribusiness

- Aquaculture
- Horticulture
- Cotton

Tourism

- National Parks
- Festivals and Major Events
- Arts trail
- Cultural experiences
- Drive Market
- Heritage Trails
- Eco-tourism · Cruise Industry
- Super Yacht Industry

Land

- Infrastructure Corridors
- Residential subdivisions
- Industrial subdivisions
- Sustainable Development

- Youth facilities
- Retail

- Rare Earths
- On and off shore gas

- Fuel StorageRegional maintenance
- Training exercises

Recreation and Lifestyle

- Sports
- Parks and Reserves

Renewable Energy

Defence and Security

- Development and maintenance of facilities

Draft Northern Territory Infrastructure Audit foundations

Looking to the future, we face an unprecedented period of uncertainty with compounding issues of climate change, weather extremes and rapid technology changes which are shaping our day-to-day lives. The impact of the COVID-19 pandemic has changed the way the community, businesses and government think about health, travel, transport, work, education, retail, manufacturing, and digital connection.

This impacts how we plan our future infrastructure. We need a vision that adapts to change and manages risk.

The level of service provided by infrastructure has a direct relationship with maintaining quality of life and the economy. Infrastructure provides us with essential services we rely on from transport, energy, water and telecommunications, to social infrastructure such as hospitals and health centres, schools, policing and parks and access to goods, such as fresh food.

To achieve a \$40 billion economy by 2030 and support and sustain population growth, it is important to understand our current infrastructure assets and what is working well, what could be utilised more and what additional needs there might be to achieve outcomes.

The NT infrastructure Audit will undertake a needs assessment and gap analysis of the Territory's infrastructure to provide an evidence base to guide future infrastructure investment decision making and focus attention on the investments and reforms that will improve both our living standards and local and national productivity.

The Infrastructure Audit will establish where we are now and where we want to be. It will document the gaps and constraints to achieving the Northern Territory Government's goals as well as infrastructure needs in the context of future challenges and opportunities.

The NT Infrastructure Audit will:

- recognise infrastructure legacy issues
- provide a gap analysis of existing baseline infrastructure and service level standard
- identify reforms to harness opportunity and address challenges
- identify infrastructure that could unlock future growth and development, and improve quality of life or productivity beyond the status quo

- provide a mid-term (2030)
 understanding of the infrastructure
 requirements to deliver on the NT
 Government's goal of a \$40 billion
 economy by 2030 which includes a
 growing population and expectations
 of liveable and environmentally
 responsible communities
- provide a longer-term (2050)
 understanding of the infrastructure
 requirements to meet global and
 national emerging trends such
 as a net zero emissions future,
 and consideration of the impacts
 of climate change risks and
 opportunities such as the take
 up of electric vehicles.

The NT Infrastructure Audit is the start of how we can adapt existing networks to our changing needs. The Audit will cover transport and logistics, utilities, social and industry infrastructure across all regions in the Territory.





Draft Northern Territory Infrastructure Plan and Pipeline foundations

The current NT Infrastructure Plan is being refocussed into two new documents – the NT Infrastructure Plan and NT Infrastructure Pipeline. The key difference will be that the NT Infrastructure Plan will focus on the longer term and strategic priorities; whereas the NT Infrastructure Pipeline will include known funded projects to be delivered in the short term.

Infrastructure Australia used the 'Theory of change' to develop the Australian Infrastructure Plan 2021. The Theory of change is an outcomes-based approach which applies critical thinking to the design, implementation and evaluation of initiatives and programs intended to support change. Infrastructure Australia identified nine key areas for reform:

- 1 Place-based outcomes for communities unlocking the potential of every location
- 2 Sustainability and resilience
 balancing infrastructure
 outcomes in an uncertain future

- Industry productivity and innovation facilitating a step change in productivity
- Transport delivering an integrated network
- 5 Energy enabling an affordable transition to a net zero future
- 6 Water prioritising safety and security
- 7 Telecommunications and digital ensuring equity in an era of accelerating digitisation
- 8 Social infrastructure supporting economic prosperity and quality of life
- 9 Waste accelerating Australia's transition to a circular economy

Infrastructure NT will adopt a placebased approach as recommended in the Australian Infrastructure Plan 2021. Unlocking the potential of our regions is essential to facilitate a more diverse and productive economy by 2030. In taking a place-based approach, the NT Infrastructure Plan and Pipeline will recognise the diversity of the Northern Territory's regions. It will recognise the unique challenges, opportunities and contributions each of the regions makes to the overall growth of the Northern Territory and subsequently, the infrastructure eco-system. To ensure an outcomes-based approach, the Theory of change methodology will also be used.

The NT Infrastructure Plan will identify projects still under development and clarify the relationship between economic and social infrastructure as well as industry and sector strategies to help create a 'big picture' of infrastructure at a nationally significant, Territory significant and regional significance level.

The refocussed NT Infrastructure Plan will provide a roadmap to growth and enable the Infrastructure Strategy. To do this, the NT Infrastructure Plan will provide an analysis and consideration of the:

- total investment pipeline, which will drive economic growth;
- impacts of economic growth on population growth; and

 response required to address challenges and harness opportunities.

The NT Infrastructure Pipeline will assist Government and industry manage the current "boom and bust" cycle of the market's capacity through the flow of work in the pipeline. It will enable industry to more effectively plan further ahead for resourcing requirements and provide more certainty for business. The NT Infrastructure Pipeline will also provide for better co-ordination of delivery through visibility and analysis of the total infrastructure pipeline.





Common User Infrastructure at the Middle Arm Sustainable Development Precinct Enabling Infrastructure to Develop the Beetaloo Sub-basin **Darwin Region** Water Supply Infrastructure **Upgrades** Tanami Road Upgrade Darwin Ship Lift and Marine **Industry Park Regional Logistics** Hubs National Aboriginal Art Gallery and Central Australian **Tourism** Ord River Stage 3 Development Mt Isa to Tennant Creek Rail Connection Digital Connectivity Kakadu Infrastructure

Upgrades



Territory Wide significance

Beef Roads

Upgrades

Central Arnhem Road Upgrade Regional significance Police, Safety and

Justice

Specialist Health **Facilities**

Health Clinics

. **Cyclone Shelters**

Housing Supply

Schools

Early Childhood Facilities

Aerodromes

Renewable Energy

Water Security



Availability of Industrial Land

Availability of Residential Land

Vocational Education and **Training Facilities**

Higher Education Facilities

Boarding Facilities for Education

Hospital Infrastructure

.

Barge Landings

Diversification of Gove Port

.

Mereenie Loop Upgrade to Sealed Standard



Swimming Pools

Arts Centres

Sports Facilities

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Boat Ramps

Retail

Cycle Paths

Bus Stops

Local Parks and Recreation

Note: Territory Wide projects may also meet the National significance threshold for the Australian Government

Achieving a \$40 billion economy by 2030

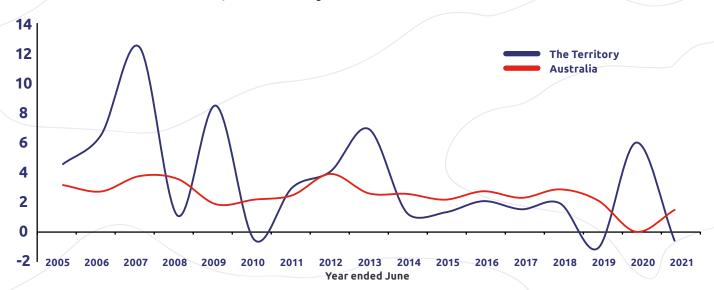
The Territory's economy has been characterised historically by a 'boom-bust' cycle with the peaks driven by a series of major project investments over the past 20 years, starting with the Adelaide to Darwin railway and most recently the INPEX Ichthys LNG project. This has been recognised in a number of leading reports including the Langoulant Report – A

Plan for Budget Repair discussed further in this paper. Figure 5 below compares the Territory's 'boom-bust' cycles, which can create economic inefficiencies during construction peaks and lead to:

- workforce and skills shortages
- prices growth (wages, consumer price index [CPI], real estate)
- impacts on consumer and business confidence
- deferred investment
- vulnerability to commodity prices that impact investment and economic growth.

Figure 5– The Territory's traditional 'boom-bust' economic cycle

NT GSP and Australian GDP, inflation adjusted



Before COVID-19, the Territory economy was coming down from a record construction project investment to establish the INPEX Ichthys LNG project in Darwin. In response to the broader softening of the economy, the Territory Government produced the Langoulant Report: A Plan for Budget Repair. To further support the economy, the Territory Government has stimulated the economy with up to \$1.4 billion in capital works programs per year.

This is not sustainable in the long term unless population growth and gross state product (GSP) grow at the same pace to create demand for new economic enabling and social infrastructure. Securing investment to create jobs and achieve a

\$40 billion economy requires a sustained and co-ordinated effort across the Territory Government and the private sector. This requires a transformational change for the Territory that builds on successes like the INPEX Ichthys LNG project, which created sustainable, long term jobs beyond construction and growth in exports.

To capitalise on the 'boom' that comes with new investment and mitigate the 'bust' in the cycle, land use, transport and infrastructure planning need to align with population growth and the Territory Government's objectives for economic growth. This will create a roadmap for the Territory to reach its destination by 2030 and beyond.

In recent years, the Territory has outperformed the other states and territories in terms of per capita economic value.

Northern Territory GSP fell 0.6 per cent in 2020-21 following an increase of 6.0 per cent in the previous year. The decline was driven by mining GVA which recorded a fall of 12.1 per cent. The fall was driven by oil and gas extraction where production volumes reduced in response to the falling commodity price.

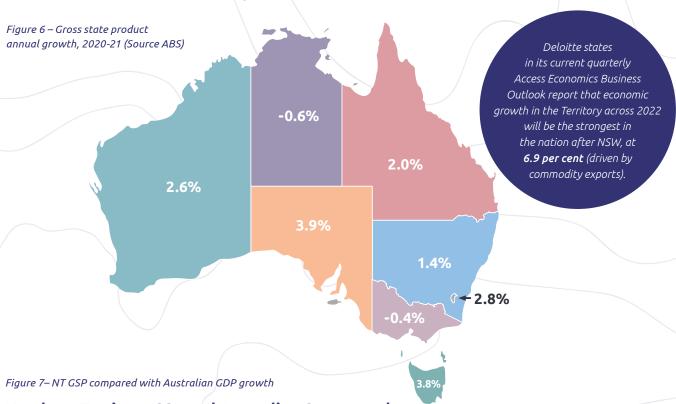
While the Territory makes up 17.5 per cent of Australia's land mass, it is home to just one per cent of the population. The Territory's economy in 2021–22 was estimated to be \$26.2 billion – contributing to 1.34 per cent of the national gross domestic product (GDP) of \$1.94 trillion.

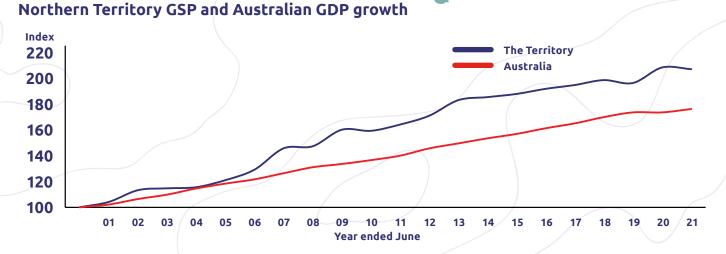
A substantial and sustained increase in private investment is critical to the Territory's economic recovery and growth. Actively de-risking investment and positioning the Territory to be better than its competition will attract investor interest.

Figure 6 – Gross state product annual growth, 2020-21 (Source ABS)

Prioritising the timely delivery of government-led economic enabling infrastructure will support investment decisions.

A key consideration for the Territory Government is how to balance the competing needs for infrastructure to stimulate and enable private investment and economic activity (generally economic in nature) with developmental infrastructure (often social in nature) in regional and remote areas).





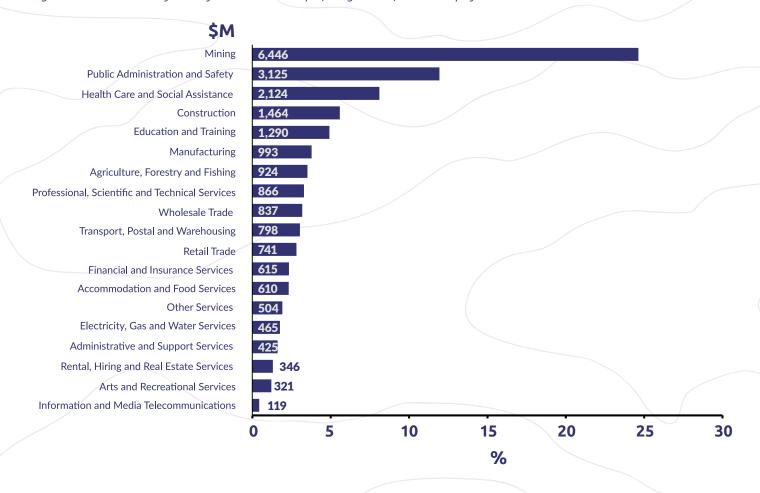
Source (Figure 5, 6 and 7): ABS cat no 5220.0 https://www.abs.gov.au/statistics/economy/national-accounts/australian-national-accounts-state-accounts/latest-release

Figure 8 below highlights the value of mining (minerals and gas) as the largest industry in the Territory contributing about 25 per cent of total GSP in 2020–21. Public administration and safety was the second largest industry (about 12 per cent), followed by health care and social assistance (8 per cent).

The Australian Government investment remains strong off the back of its commitment to \$8 billion in defence capital works over the next decade.

Diversifying the economy will capitalise on the Territory's comparative advantages. Global growth opportunities, combined with our proximity to Asia, position the Territory to lead in new ways, particularly in agribusiness, health and social assistance, information, communication and technology (ICT), manufacturing, education and training and the creative industries.

Figure 8 – Northern Territory Industry contribution to output, and growth in, GSP and employment 2020-21



The Territory Government has a clear vision to achieve a \$40 billion economy by 2030. So what does achieving a \$40 billion economy look like? What role does infrastructure play in achieving that vision?

In 2019–20, the Northern Territory economy's gross state product (GSP) was valued at \$26.2 billion. To achieve a \$40 billion economy requires an economic growth of \$13.8 billion or an average annual growth rate of 3.9 per cent across the next decade.

If the Northern Territory continues to grow at the historic average economic growth, this will only achieve a third of the growth required. If the Northern Territory Government implements all of the TERC recommendations, this increases that growth by another third.

Infrastructure underpins a thriving economy. It is critical to creating jobs, addressing disadvantage, enhancing the liveability of communities and preparing for the future needs of the Territory with better logistics, utilities and essential services, social services and community facilities.

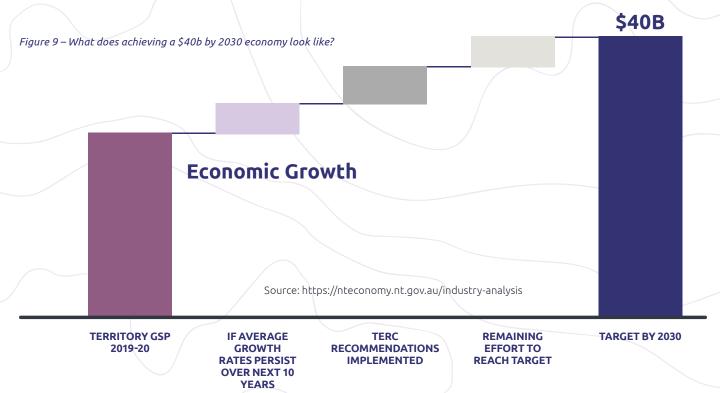
delivering supporting public investment. To support transformational growth we need to identify investment opportunities for the right infrastructure, delivered at the right time and in the right place to grow the Northern Territory's productivity, economic growth and sustainability.

the right conditions for achieving a step

change in private investment as well as

Infrastructure that is staged through future years to support key industry needs, including gas, renewables, manufacturing, agribusiness, resources, maritime and tourism will support the Territory in reaching the \$40 billion goal.

Investment in the right economic enabling infrastructure is a cornerstone to set



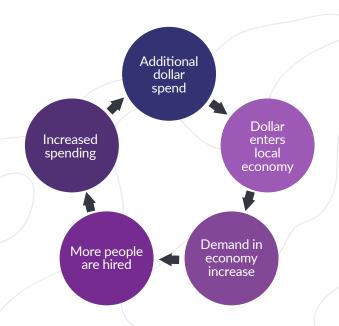
Tourism figures are for 2018–19 and defence contribution to GDP figures are for 2018–19 and defence employment figures are for 2019–20.

That leaves a remaining third of the necessary economic growth that will require an economic step change – a transformational change – and all Territorians must play their part.

To understand how infrastructure spending supports economic growth, we need to consider both the initial (direct) and flow-on (indirect) impacts of infrastructure spending – known as economic multipliers.

Typical direct impacts of new infrastructure includes increased productivity (i.e. infrastructure enables more efficient production), spending with local businesses and jobs growth. Additional (indirect) economic benefits are realised to the extent that new employees' wages and business earnings are spent locally. This in turn drives subsequent economic activity.

This can be demonstrated by the examples provided at Appendix A.





Airports

- Joint military and civil use aerodrome (Darwin International Airport and the RAAF Base Darwin) located only six km northeast of Darwin city
- Two sealed runways with larger runways 3354m long and 60m wide
- Alice Springs Airport located in arid desert climate suitable for aircraft storage

Rail

- Adelaide to Darwin railway
- Four major freight hubs in Darwin, Katherine, Tennant Creek and Alice Springs
- Provides connection to the national rail network and growing economies of Asia through the Port of Darwin

Roads

- \$7 billion of Territory Government road and bridge assets
- Over 36 000km of roads, more than 220 bridges and thousands of river and creek crossings
- World-class mineral deposits, including critical minerals necessary for modern life often close to critical transportation links and or the ability to connect to intermodal opportunities

Onshore gas resources

Highly prospective world scale onshore gas resources and proven offshore gas reserves

Solar resources

• A quality solar resource spread across a wide area with significant tracts of land with high solar irradiance

Defence capability and presence

• Strategic defence locations across the Territory and permanent presence of Navy, RAAF and Army

Emergency resilience and crisis capability

Headquarters and logistics base for Australia's National Critical Care and Trauma Response Centre

Unique Perspectives

- The Territory's population is culturally and linguistically diverse with one of the world's oldest living cultures representing 30 per cent of the population
- 20 per cent of the population is born overseas providing rich multi-cultural connections
- Australia's youngest population bringing natural curiosity and ingenuity

Infrastructure Planning in the NT – Key Influencers

The new infrastructure Strategy, Audit, Plan and Pipeline are being developed in an evolving landscape. The following captures the key influencers that will shape and guide government's investment in, and partnering arrangements for, infrastructure planning and delivery. There are global forces which we must respond to, national opportunities we must embrace and local, place-based responses to consider in terms of the Territory's context, discussed further in this paper.

CURRENT NT CONTEXT

Major projects and the flow on effect for economic development have driven population growth in the Territory. Based on 2016 Australian Bureau of Statistics (ABS) Census data, which will be refreshed following Census 2021, the Northern Territory Department of Treasury and Finance predicted the Territory's population to grow from 245 678 in 2016 to 351 607 in 2046, which equates to an annual average growth rate of 1.2 per cent. During 2016–21 the Territory's population was projected to grow annually at a rate of 0.5 per cent, reflecting the Territory's current below-trend population growth. The annual growth rate is then projected to increase over time, reaching 1.4 per cent by 2026–31, which represents a return to the Territory's long term growth rate (the 20 year annual average growth rate).

These indicative projections are the outcome of several simplifying assumptions, including old (2016 ABS) census data and challenges inherent with small populations. The smallest populations tend to experience the greatest volatility with trends, swinging unexpectedly up or down from one year to the next.

From a strategic infrastructure perspective, population projections and growth targets will require careful place-based planning to build the required social and economic infrastructure to meet timely service demand.

Projections are not targets, nor do they reflect the effects of current or future policies, future developments such as land releases or major projects. Reaching a \$40 billion economy is expected to amplify population growth, noting that there is much work to do to reach this target.

REGIONS SNAPSHOT

Planning for sustainable and resilient regions is important to provide better quality of life outcomes that enable greater participation in the economy and wealth creation.

The Territory Government is proactively planning land releases, land development and town planning with a place-based approach across the Territory, aligned with population projections, to ensure social and economic infrastructure and affordable housing is available to stay ahead of the demand curve.

The Territory has six regions

- Top End 17 900 people live in the region (encompasses most of the Daly-Tiwi-West Arnhem region)
- Greater Darwin (includes the cities of Darwin, Palmerston and Litchfield)
 home to about 147 200 people, around 60 per cent of the Territory's population
- East Arnhem home to about 14 600 people
- Big Rivers second largest region and is home to about 20 900 people
- Barkly third largest region with a population of around 6100 people
- Central Australia the largest region, covering 42 per cent of the total land area and home to about 39 400 people.

The key growth areas in the Northern Territory include:

Darwin – a residential, commercial, civic, tourist and industrial precinct

Palmerston – providing health, residential, retail, education, police and defence

services, and strategic light and general industrial development at the Middle Arm Sustainable Development Precinct

Darwin's rural area – providing unique rural residential, recreational, commercial, extractive mineral sites and potential industrial land sites at Glyde Point

Weddell – a blank canvas for a new tropical city to support long term urban growth close to Middle Arm

Cox Peninsula – a strategic location, currently sparsely populated, providing a rare opportunity for long term development with land uses ranging from residential, commercial to industrial uses with access to deep water

Katherine – a logistics and agribusiness hub buoyed by the town's position at the junction of the two major highways and rail line, surrounded by productive pastoral and horticultural land with diverse industries including defence, mining, health and tourism. A central point between Western Australia and Queensland

Tennant Creek – strategically positioned to become an important services hub to support mining and pastoral industries

Alice Springs – the inland capital of Australia with rich cultural heritage, a gateway to iconic tourist destinations, home to iconic sporting events, with agribusiness including the cattle industry and potential to grow its horticultural industry

Nhulunbuy – the capital of the East Arnhem region, with rich cultural and natural values with significant growth potential in tourism, arts, fisheries and aquaculture, and primary industries and resources

Regional and remote – these areas are continuing to grow and develop and contribute substantially to growth and prosperity throughout the Northern Territory with industries including energy, minerals, agriculture and tourism.

Prioritising expansion opportunities close to existing growth areas will allow future development to follow an orderly sequence and at a scale that generates the required economic viability for services, local jobs and supporting infrastructure.

Strategic land use planning plays a central role in managing sustainable and orderly growth. It harnesses economic opportunities and establishes the location and scale of future infrastructure requirements to support communities.

PLANNING AND DELIVERING INFRASTRUCTURE TO A DISPERSED POPULATION

The Northern Territory is vast, covering over 1.3m km² with most of its 245 000 people concentrated in its main urban centres. There are 73 remote communities, 43 town camps and over 500 homelands and outstations across the Northern Territory.

Aboriginal people are significant land owners and custodians of our land and coastline and we recognise their spiritual and cultural connection with this land. Ensuring people in regional and remote areas have access to services that

are available in comparable towns in Australia will deliver improved prosperity and liveability.

Providing infrastructure that allows businesses to develop and grow is critical to growing employment and private sector capacity in regional remote communities. Combining social services and economic opportunity is essential to maintain liveability in regional and remote areas.

The Northern Territory Government has typically led the delivery of infrastructure to develop and expand key industries and improve the liveability of regional and remote areas. This infrastructure has a mix of social and economic benefits for communities. For example, all-weather access lowers the cost of trading goods and services, while providing easier and faster access to health, education and other social services.

One of the key issues facing development in regional and remote areas is the higher cost of investing and maintaining infrastructure compared to urban areas. Infrastructure needs to be targeted to the varying conditions and dynamics across regional and remote Northern

Territory. Most regional areas have a sparse population and dispersed industry, making it more difficult to deliver good quality infrastructure services.

There is widespread recognition that infrastructure can help accelerate growth across northern Australia and unlock development across a range of industries. Improving the resilience, reliability and efficiency of northern infrastructure could help capitalise on the immense potential of northern regions, improving the productivity, quality of life and competitiveness of its people and businesses. This was a key finding of the 2019 Australian Infrastructure Audit. However, fluctuations in economic activity in regional industries make it difficult for infrastructure to efficiently and sustainably underpin long term growth and development.

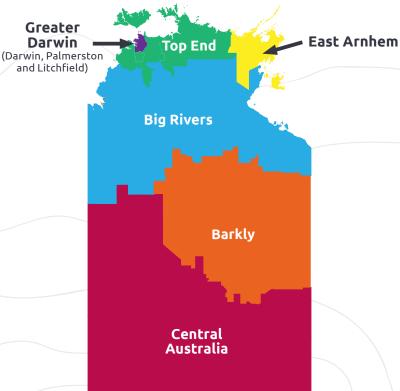
The audit highlighted that shortfalls in infrastructure service disproportionately affected Aboriginal and Torres Strait Islander people, reinforcing existing disadvantage. As a result, the social and economic benefits of roads, corridors and digital connectivity, along with activating sustainable development precincts on productive land, cannot be considered in isolation but rather as a 'system' of opportunity.

Each region within the Territory has a diverse mix of people, natural values, cultural identity and established infrastructure. Solutions and priorities for each region will come from local leadership and ownership. A new Regional Development Framework is being developed to:

- support effective regional economic planning
- develop Regional Economic Growth Plans to inform investment priorities
- establish clear and well-integrated governance and engagement arrangements to provide stakeholders with a clear pathway for engagement, input and information.

The objectives of this position paper intentionally build on regional, sector and industry strategies to ensure the right infrastructure is timely and placebased, connecting the synergies and

Figure 10 – Northern Territory Regions



interdependencies of social-cultural and economic infrastructure.

Due to competing demands government procured and publicly funded infrastructure requires engagement and debate around sustainable investment, including the regional needs for connectivity and equality of infrastructure. This will be the work of the Infrastructure Audit, Plan and Pipeline.

LANGOULANT REPORT – A PLAN FOR BUDGET REPAIR

Prior to the global pandemic and its devastating impact on lives and economy, A Plan for Budget Repair - Final Report heralded the need for a concerted effort across the Territory to attract private investment to speed up major projects and stimulate economic growth more broadly. The Territory entered the world stage of a one in a hundred year health crisis with sharply deteriorating economic conditions following the completion of the construction phase of the largest project in the Territory's history – the INPEX Ichthys LNG project. The budget repair plan provided an overview of the opportunities and challenges faced by the Territory, which continue to resonate today:

"The Territory has abundant land space, water and mineral resources and is an export oriented economy, with an advantageous geographic location in relation to Asia. The Territory is also a major strategic location for defence, which makes a substantial contribution to the Territory economy through direct and indirect employment and demand for local goods and services."

"The Territory's advantages are tempered by a number of complexities in regards to achieving its full economic potential and its competitiveness in attracting mobile capital. These complexities include a deficit of enabling infrastructure inherited at self-government, limited exploration and understanding of land and water resources, remoteness and diseconomies of scale, and land tenure ... associated with Native Title and the Aboriginal Land Rights Act 1976."

COVID-19 PANDEMIC

On 18 March 2020, a public health emergency was declared under section 48 of the *Public and Environmental Health Act 2011*. Momentarily, COVID-19 was experienced as a local and global disruption to everyday movement and travel. As months went by and communities and businesses adapted quickly to survive the economic shock, planning began for recovery from what was thought to be, the worst of the crisis.

Roll forward to late 2021, the national impact, like shifting tectonic plates, continues to be felt in waves, with the effect on the economy, productivity, lifestyle and well-being is expected to leave a lasting imprint.

The pandemic has changed the way the community, businesses and government think about health, travel, transport, work, education, retail, manufacturing, and digital connection. Research and studies have been conducted by a number of institutions, with some of the key findings below further amplified by the enduring nature of the pandemic:

- In May 2020, McKinsey reported that five years' worth of consumer and business digital adoption occurred in the first few months of the pandemic.
- In June 2020, CSIRO undertook a pulse survey revealing that 76 per cent of people were worried about small business and 70 per cent of people were concerned about movement.
- In July 2020, only a few months into the pandemic, the Australian Government Institute of Family Studies found that the number of people working from home rose from seven per cent to 60 per cent.
- In September 2020, the Australia Bureau of Statistics (ABS) found that almost one third of businesses expect that modifications put in place to manage the impacts of COVID-19 will be kept long term and that two in five employing businesses had staff teleworking.
- In June 2021, almost a year later in the same survey, the ABS found that staff shortages was the key concern with 27 per cent of businesses reporting difficulty finding suitable staff to fill jobs. Almost one in five (19 per cent) businesses reported

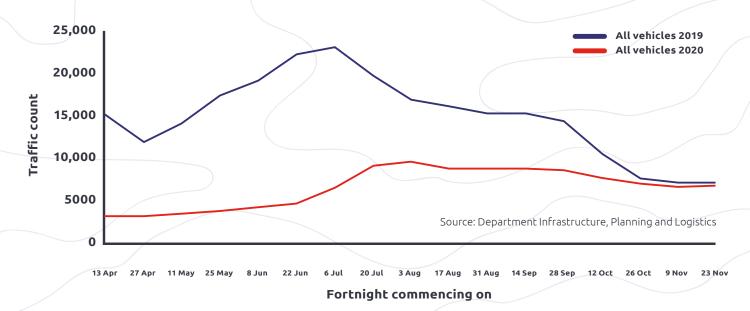
- that they did not have enough staff based on current operations and that nearly one quarter (23 per cent) of businesses expected to increase staff numbers over the next three months.
- The 2020–21 Australian Budget forecasted Australia's population growth to slow to its lowest rate in over 100 years falling from 1.2 per cent in 2019–20 to 0.2 per cent in 2020–21 and 0.4 per cent in 2021–22.

While it is too early to tell the long term impacts of COVID-19 in the Territory, the changes to where people choose to live and work may persist. The Infrastructure Strategy will consider the interplay between economic growth, national policy, population growth and the need for place-based strategic planning, underpinned by sustainability and resilience building infrastructure.

Transport, particularly the movement of people, has been a key indication of changing behaviours during the COVID-19 pandemic. Public transport patronage across the country has been heavily affected. Darwin alone experienced a significant drop in patronage of about 55 000 passengers per day (61.6 per cent) between 2 March 2020 and 23 March 2020 – the day the border closure was announced. Patronage levels increased in the Territory as the border restrictions were removed but have still not fully recovered.

At the start of the pandemic in Australia, the Northern Territory was one of the first jurisdictions to restrict people's movements within Australia through interstate and intrastate border restrictions. The following graph provides a comparison of the interstate border traffic volumes from 13 April 2020 to 23 November 2020. These show that even though the Northern Territory borders opened on 15 June 2020, traffic volumes never fully recovered for the remainder of the 2020 calendar year.





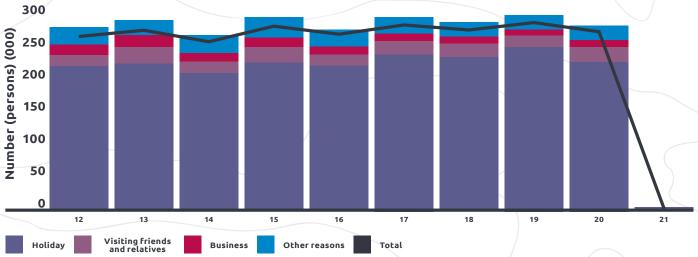
Due to the Territory's effective health response to the COVID-19 pandemic, most Territory businesses continued to operate with fewer trading restrictions compared with other jurisdictions, although the tourism sector remains affected by the absence of international visitors and disrupted interstate travel.

To deal with the devastating impact COVID-19 had on the tourism industry, and to support tourism operators and local jobs, the Territory Government provided an incentive for Territorians to see more of their own backyard with the release of four tourism voucher schemes. More than \$26 million in bookings have

been made as a result of the first three voucher rounds.

In the year to March 2021, international visitor numbers to the Territory decreased by 99 per cent to an estimate of 2 000 visitors due to restrictions on inbound tourism.

Figure 12 – Number of international visitors to the Northern Territory by purpose of travel 300



Source: Department of Treasury and Finance; Tourism Research Australia, International Visitors in Australia

In the year to March 2021, 897 000 interstate and intrastate overnight visitors travelled to and within the Territory, a decrease of 47 per cent. Territory domestic visitors make up about 1.2 per cent of national domestic visitors.

The decline in domestic visitors reflects decreases in holiday and leisure (down 40 per cent to 445 000 visitors), business (down 55 per cent to 314 000), visiting friends and family (down 54 per cent to 89 000) and other purposes of travel (down 39 per cent to 65 000) over this period.

Domestic visitation by all purposes of travel decreased by 45 per cent to 651 000

visitors to the Top End, and visitors to Central Australia decreased by 53 per cent to 272 000 visitors over the period.

The Territory Government has increased construction activity through various economic strategies, infrastructure programs and incentives, during the COVID-19 pandemic to support the economy.

In 2021, the total value of building work done in the Territory increased by 12.7 per cent to \$844 million.

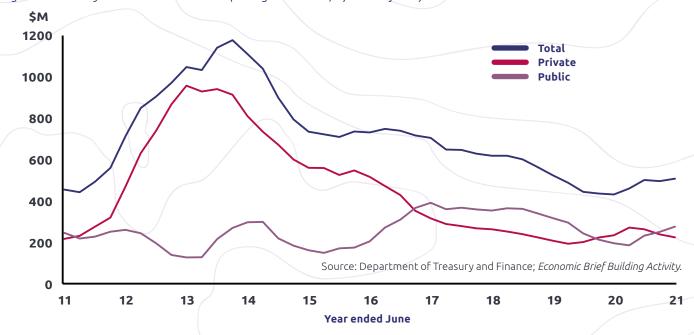
The Territory recorded the largest increase in the value of building work done of all the jurisdictions, which

otherwise ranged from an 8.8 per cent decrease in the Australian Capital Territory to a 6.5 per cent increase in South Australia.

Nationally, the value of building activity work done decreased by 1.9 per cent to \$119.5 billion over the same period.

Non-residential building activity in the Territory increased by 14.7 per cent to \$494 million, reflecting a 5 per cent increase in private work done and a 37.5 per cent increase in public work done.

Figure 13 – Territory non-residential work done (moving annual total, inflation adjusted)



Residential building activity increased by 9.3 per cent to \$345 million, reflecting an 11.6 per cent increase in private sector activity, coupled with a 4.4 per cent increase in public sector activity.

For residential building activity, there was a 12.5 per cent increase to \$137 million in alterations and additions work done, a 14.7 per cent increase in new houses work done to \$174 million and a 20.1 per cent decrease in new units work done to \$33 million.

In the year to July 2021, the value of residential building approvals in the Territory increased by 23.8 per cent to

\$418 million, compared with an increase of 30.4 per cent to \$86 billion nationally.

The big question for government and infrastructure planning is what will 'stick' in terms of human behaviours and patterns, influencing the way we participate in the economy, public life, culture and sports. Some of the larger cities are seeing a migration from dense urban living – so what does this mean for regional settings, population and lands planning and infrastructure requirements?

There are other burning questions around the way we use infrastructure. What

impact will be felt on the confidence of public transport for example? What is the future of the drive market and tourism? Where did the gaps impact most, such as digitisation of schooling and access? And with all these questions, where do these changes and patterns sit on the intersection of climate change, energy and innovation?

These rapidly changing conditions will have an effect on the way we use and invest in infrastructure and will make it less predictable for longer term infrastructure planning considerations.

TERRITORY ECONOMIC **RECONSTRUCTION COMMISSION**

In 2020, and at the height of the global COVID-19 pandemic, the Territory Government commissioned an expert panel of Australians to provide independent advice to accelerate economic recovery and position the Territory for growth.

The advice was based on consultation with Team Territory, Tourism Rebound Taskforce, government agencies, all Regional Reconstruction Committees and industry and advocacy groups through briefings and submissions. A public submission process was used to elicit ideas, vision and expertise on how to put the Territory in a strong position to rebound from the COVID-19 induced economic crisis.

TERC received a total of 170 submissions that included 956 recommendations. A total of 300 infrastructure projects were identified by stakeholders.

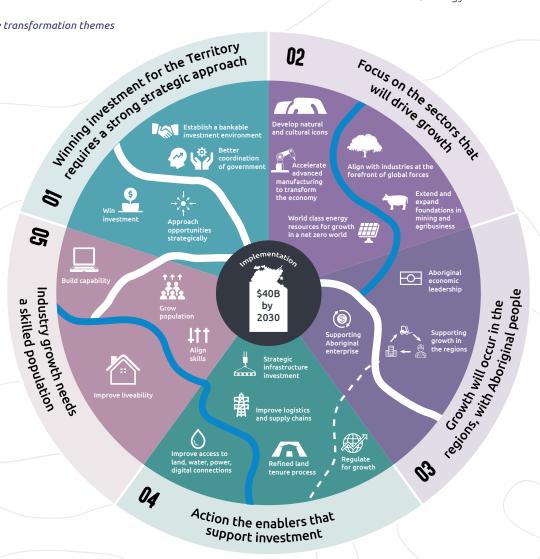
The Territory Economic Reconstruction Commission (TERC) provided a number of reports and briefings to government and its agencies to consider releasing a Final Report – A Step Change to Win Investment and Create Jobs – in December 2020. Using this strategic advice, the Territory Government is implementing a blueprint to set the right economic conditions for industry growth through:

- sustainable use of resources
- targeting enabling infrastructure
- permeating a Territory-wide investor-focused economic culture.

A system was devised to transform the Territory economy and drive it upwards to achieve a \$40 billion economy by 2030. This will attract private sector investment to set the right economic conditions for industry growth. Public funding plus reform, such as reducing red tape, should unlock private investment and or innovation, multiplying the dollar for dollar input.

Developing sustainable and resilient infrastructure will improve the lives of Territorians and this strategy reflects the Territory's five transformation themes. Figure 14 below details the five transformation themes underpinning this Strategy.

Figure 14 – Five transformation themes



Following the TERC recommendations, the Territory Government established the Commissioners for Investment, Major Projects and Infrastructure, including the new 'I-Body' Infrastructure NT. This will strategically target investment in the right infrastructure, in the right place, at the right time to enable economic development. Infrastructure NT will plan for, coordinate and align infrastructure needs with industry and population growth.

Infrastructure NT has analysed the summary of past public and industry submissions to inform the Infrastructure Strategy and Plan and identify 'investment-worthy' proposals or projects.

Appendix B provides a snapshot of the infrastructure, logistics and reform related submissions received in 2020, highlighting some of the key issues and ideas from stakeholders.

NATIONAL CABINET AND REFORM COMMITTEES

The Prime Minister and heads of all states and territories formed National Cabinet to coordinate Australia's response to the COVID-19 global pandemic. This new method of federal and state relations has led to further reforms.

Prime Minister, the Hon Scott Morrison MP, announced a new National Federation Reform Council to replace Council of Australian Governments meetings, with National Cabinet to remain at the centre of the National Federation Reform Council from June 2020. The National Federation Reform Council has been agreed to by Premiers, Chief Ministers and the Prime Minister.

A series of reform committees have been established under National Cabinet including the Council on Federal Financial Relations, consisting of Treasurers and the National Cabinet Reform Committee on Infrastructure and Transport. The new model plans to streamline processes, enabling improved collaboration, communication and effectiveness.

AUSTRALIAN GOVERNMENT POLICY

Developing the North

Developing the North gives northern communities an even bigger role in Australia's prosperity and economic resilience. Australian, state and territory governments are prioritising development, economic infrastructure, economic growth and creating new jobs in northern Australia. The untapped potential, abundant resources and increasingly diverse population of northern Australia makes Developing the North a critical nation-building agenda. Australia thrives when northern communities, businesses and industries are vibrant, growing and increasingly engaged with each other and the broader Indo-Pacific region.

Northern Australia contains only about 5.3 per cent of Australia's population (ABS, Regional Growth, Australia, 2017–18), but already has strong momentum, contributing up to 10.7 per cent of Australia's economic activity over the same period.

The Our North, Our Future: White Paper on Developing Northern Australia released in 2015 recognises that a strong and prosperous northern Australia is critical to Australia's economic future.

The Australian Government's White Paper sets out the priorities to drive growth in Australia's north. It is a 20-year plan for investment and collaborative support to grow the north through:

- simpler land arrangements to support investment
- developing the north's water resources
- business, trade and investment
- infrastructure to support growth
- the northern workforce
- good governance.

The Northern Territory is a strong leader and advocate of the northern Australia policy agenda.

Northern Territory Defence

The Northern Territory is a strategic location for defence in an important part of the Indo-Pacific region from an economic and regional stability

standpoint. With a significant army, navy and air force presence in the Territory, defence continues to be a consistent contributor to economic activity, providing stimulus to local businesses and supporting regional employment.

The 2020 Defence Strategic Update and the 2020 Force Structure Plan reinforces the importance of the Territory to Australia's national security, with over \$8 billion in infrastructure to be invested in the Territory over the next decade.

The 2020 Defence Strategic Update sets out the challenges in Australia's strategic environment and their implications for defence planning. It provides a new strategic policy framework to ensure Australia is able – and is understood as willing – to deploy military power to shape our environment, deter actions against our interests and, when required, respond with military force.

The 2020 Force Structure Plan details the Australian Government's intentions for new and adjusted Australian Defence Force (ADF) capability investments to implement the new strategic objectives in the 2020 Defence Strategic Update.

A number of key projects are on track for immediate delivery to bolster the defence capabilities in the Territory:

- Larrakeyah Defence Precinct Redevelopment Program
- United States Forces Posture Initiative Northern Territory Training Areas and Ranges Project
- RAAF Base Tindal Redevelopment
- Infrastructure investment at HMAS
 Coonawarra to support the SEA
 1180 Phase 1 Offshore Patrol
 Vessels.

Defence expenditure in the Territory reached \$2.2 billion in 2019–20, or 8.8 per cent of the Territory's gross state product. This represents a 7 per cent increase compared to the previous year, mainly reflecting a rise in operational expenses, partly offset by a decline in investment spending.

Defence expenditure in the Territory as a proportion of total national defence expenditure represented 4.8 per cent in 2019–20. National defence expenditure accounted for 2.4 per cent of Australia's gross domestic product.

The local Defence population (including personnel and their families) is estimated at about 12 000 people. Defence personnel generally move to the Territory on a two to three year posting, many with their partners and children, thus contributing to regular population turnover in the Territory.

Closing the Gap

Closing the Gap is an agreement between the Coalition of Aboriginal and Torres Strait Islander Peak Organisations (the Coalition of Peaks) and all Australian Governments. The first of its kind.

The agreement has four priority reform areas and 17 socio-economic targets in areas including education, employment, health and well-being, justice, safety, housing, land and waters, and Aboriginal and Torres Strait Islander languages. These targets have been developed through a co-design process to meet the aspirations of Aboriginal people to improve life outcomes.

The Priority Reforms are:

- Developing and strengthening structures to ensure the full involvement of Aboriginal and Torres Strait Islander peoples in shared decision making at the national, state and local or regional level and embedding their ownership, responsibility and expertise to close the gap.
- Building the formal Aboriginal and Torres Strait Islander communitycontrolled services sector to deliver Closing the Gap services and programs in agreed focus areas.
- Ensuring all mainstream
 government agencies and
 institutions undertake systemic
 and structural transformation to
 contribute to Closing the Gap,
 improve accountability and respond
 to the needs of Aboriginal and
 Torres Strait Islander people.
- Ensuring Aboriginal and Torres
 Strait Islander people have access
 to, and the capability to use, locally
 relevant data and information to
 monitor the implementation of
 the Priority Reforms, the Closing

the Gap targets and drive local priorities.

The NT Government, Aboriginal Peak Organisations NT and the Local Government Association of the NT have developed the first NT Closing the Gap Implementation Plan.

The Plan focuses on key actions to address the priority reforms and establishing the ongoing framework for oversight and governance of Closing the Gap in the Northern Territory.

National Partnership Agreement Housing

On 30 March 2019 the Northern Territory and Australian governments signed the National Partnership for Remote Housing NT, securing \$550 million in Australian Government funding from 1 July 2018 – 30 June 2023. The program will be delivered using the principles of Our Community. Our Future. Our Homes. which is the Northern Territory Government's program to improve Aboriginal housing in remote communities by investing \$1.1 billion from 2017–2018 to 2026–2027 that focuses on:

 reducing overcrowding and improving living conditions

- local decision making and engagement with communities
- developing Aboriginal Business Enterprises
- sustainable local employment and economic development.

Critical to the implementation of the Housing National Partnership Agreement (NPA) is the delivery of the Indigenous Essential Services Program and allocation for land servicing and head works.

Working together on social infrastructure

The Australian Government has made a positive contribution to building much needed support for the delivery of education, safety and security and health services, particularly for remote communities. Moving forward, partnerships between the Australian and Territory Governments will focus on targeting better outcomes for regions with investment in infrastructure including telecommunications that contribute to community resilience and enables people to focus on positive improvement.

National Partnership Agreements - Infrastructure and Transport

On 1 July 2019 the Australian Government and state and territory



governments entered into a NPA.

The NPA supports the delivery of infrastructure projects and sets out how the Australian Government and states will work together to deliver infrastructure projects for the benefit and well-being of Australians.

The NPA covers projects administered under the *National Land Transport Act 2014* (NLT Act). Each state and territory has a separately agreed schedule with the NPA that indicate funding levels the Australian Government will provide for land transport infrastructure investments. These schedules are updated following the Federal Budget each year.

Current national partnership and project agreements include:

Land Transport Infrastructure Projects (2019–2024)

This agreement governs Australian Government funding for land transport infrastructure projects administered under the NLT Act through the Australian Government's Infrastructure Investment Program. This agreement is crucial to better connect our regions, improve safety on our roads and meet our national freight challenge. These include:

- Black Spot Projects
- Bridges to Renewal Program
- Developing Northern Australia
 Northern Australia Beef Roads
 Program
- rail investment
- road investment
- road safety funding
- roads maintenance funding
- Roads of Strategic Importance
- Roads to Recovery.

National Partnership for Streamlined Agreement

This agreement provides a consolidated framework to facilitate low value and/ or low risk projects across sectors. These projects are simple in nature, bilateral or multilateral, outputs-focused and do not include aspirational objectives. Initiatives eligible for Australian Government funding must be straightforward and under \$100 million over the life of the project.

Northern Territory Project Agreement This agreement is for infrastructure

This agreement is for infrastructure projects in the Northern Territory and includes:

- Darwin City Deal: Education and Community Precinct
- Barkly Regional Deal.

Aboriginal employment supplier-use framework

The Australian Government has introduced an Indigenous Participation Framework that will apply to new road and rail construction projects as part of the new NPA. The Framework sets out a government-wide approach to increase opportunities for Indigenous job seekers and businesses to deliver government-funded land transport infrastructure projects.

The Australian Government identified land transport infrastructure as an area that can help increase Indigenous economic participation, due to the scale of opportunities to enhance employment and business capability in urban and regional Australia.

Government policies, including construction related procurement, consider a range of factors including Indigenous populations and labour force within a defined region, and important socio-economic and cultural issues that face local Indigenous communities in their respective jurisdictions. The Framework builds on the different approaches already in place at the state and territory level.

Northern Australia Infrastructure Facility

The Northern Australia Infrastructure Facility (NAIF) is a development financier with a \$5 billion lending facility provided by the Australian Government that provides loans to infrastructure projects and businesses across northern Australia.

NAIF's primary purpose is to accelerate infrastructure development and thereby drive transformational growth in northern Australia by innovative financing that:

- generates public benefit including that outside of what is captured by the project proponent
- encourages longer term growth in the economy and population of northern Australia
- encourages private sector participation in financing northern Australia's infrastructure needs;
- facilitates sustainable Indigenous participation, procurement and employment outcomes.



National Water Grid

The National Water Grid (Grid) is the Australian Government's plan for a secure water future. The Grid will be a series of region-specific water storage and distribution solutions that will secure predictable supplies of water now and into the future.

The Grid will help provide water infrastructure that is tailored to the needs of our regions. It will help grow Australia's agricultural output and build resilience in our regions.

Water infrastructure projects under the Northern Territory Connections package include:

- Katherine Logistics and Agribusiness Hub Water Supply
- Emerging Agribusiness Precinct

 Gunn Point Peninsula (a pilot project to conduct crop trialling on three lots of 100 hectare leased sites).

NT POLICY AND REGULATORY REFORM

Streamlining Regulatory Processes

Cutting red and beige tape is a priority for governments. An integrated risk-based, regulatory system that provides a seamless experience for investors will underpin and support economic growth and have flow on effects for everyone living in the Territory. This doesn't mean short cuts, it means efficiency, transparency and moving toward greater digitalisation. Improving the investor experience in the regulatory process is key to being nationally and globally competitive.

The Territory Government is streamlining regulatory processes to make it easy to do business in the Northern Territory and increase our competitiveness.

The first of two Statute Law Amendment (Territory Economic Reconstruction) Bills was passed in the Legislative Assembly in August 2021. Omnibus 1 proposes to make a large number of amendments across 22 separate Acts and Regulations in support of the TERC recommendations. The second Omnibus Bill is progressing.

Planning Reform

Prior to COVID-19 the Territory Government was reviewing the Northern Territory's Planning System in response to calls from industry and the community to deliver better planning outcomes for Territorians. The reform focused on updating the planning system to deliver a best practice, balanced and transparent decision-making framework to foster community and industry confidence and encourage new investment. A good planning system that is integrated with infrastructure provision, supports economic growth and development and attracts investment at every scale. Effective land use planning and incorporating strategic and statutory planning underpins the economic and social development to advance a community.

A three year reform program underpinned by a collaborative approach to the planning review has culminated in a new planning system that transforms planning in the Territory from a rule based system to a system that considers the overarching objectives that contribute to sustainable development and improved development outcomes.

The legislative and statutory changes associated with the planning reform project came into effect on 31 July 2020. These improvements are already delivering enhanced development outcomes and administrative efficiencies including:

- simpler assessment pathways for simpler developments by introducing merit and impact assessable development
- clearer guidance in the NT Planning Scheme about variations to development requirements
- upgrading the Development Applications Online system to allow:
 - all planning applications to be lodged and paid for online
 - the public to sign up to online notifications of exhibited applications
- clearer information about processes available on new planning webpages on nt.gov.au
- applying new timeframes for key decisions to ensure assessment

and decision-making processes progress in a timely manner to support ongoing investment in the Northern Territory.

Bringing Land to Market

With a total land area of 1.3m km², land is an abundant resource in the Northern Territory. However, without the appropriate strategic planning, zoning and investment in infrastructure to facilitate development of strategically located land, economic development and population growth is constrained by a lack of serviced land for residential, commercial and industrial land uses.

In May 2021, the Territory Government announced an independent review of the land development process, recognising the importance of the land development industry to the sustainability of the Territory's economy.

The end to end planning and development process has been reviewed with contributions from a wide range of stakeholders including development, builders, contractors, real estate professionals, conveyancers, valuers, financiers, planning consultants, engineering consultants, environmental consultants and authorities.

The final report – Bringing Land to Market: An Independent Review of the Land Development Processes, Land Under Development and Titled Land was released in February 2022. The report makes recommendations on how to deliver more titled land to market and to keep pace with anticipated demand for new housing in regional areas.

A cross-agency effort is already underway to progress the 23 recommendations of the report, including:

- planning for future demand across the Territory – so land and infrastructure can be delivered where it is needed and at the right time
- making processes to bring land to market as efficient and as easy as possible – providing more certainty to Territorians and local business
- continuing to work with stakeholders to deliver affordable and accessible housing.

Environmental Reform

The Territory Government is reviewing and reforming the current environmental regulatory system. Reforms are critical to achieving a robust regulatory system that the community will trust while encouraging industry investment and economic growth.

A single piece of legislation was developed to implement a reformed environmental management regulatory framework – the *Environment Protection Act 2019* that commenced on 29 June 2020.

The Act:

- establishes requirements for an improved environmental impact assessment system
- introduces a new environmental approval granted by the Minister for Environment at the completion of the assessment process, or refusal where there is likely to be unacceptable impact
- contains a range of tools designed to promote compliance and enable enforcement.

Regulations that describe the environmental impact assessment process commenced in June 2020 to support the Act.

The next stage of the reform program will see improvements to the way the

Territory manages wastes, pollution, land clearing and the environmental impacts of mining activities.

Reforms are currently focusing on improving the management of the environmental impacts of mining activities, with the general waste, pollution and land clearing reforms to follow. These stages of the reform program will include introducing general environmental duties, placing responsibility on the person undertaking an activity to ensure that their actions are undertaken in a manner that prevents and minimises impacts on the environment, as well as environmental licensing and registration schemes for specific activities.

Global forces, local action and supporting long-term targets

There are a number of cross-cutting strategic themes that are woven through the various strategies across the Territory Government, from Investment Territory through to service delivery agency strategies. They are intrinsic to sectors and industry strategies, and are captured in the cross-cutting objectives and enabling eco-systems of the Infrastructure Strategy including:

 national sovereign capability; self- sufficiency in supply chains

- and manufacturing capacity; value adding to what we grow, sow and extract in the Territory; security of our resources
- decarbonisation, enabling an affordable transition to a net zero future, making climate change risk and opportunity a consideration in all infrastructure assessment, planning and decision making processes
- digitalisation and the 'Industrial Revolution 4.0', in which the reorganisation of supply chains using advanced technologies, such as big data analytics and autonomous robotics, is transforming the model of supply chain management to a consumer centric integrated model where information flows in multidirections.

Many assets built or retrofitted today will be used for decades to come. Investment decisions therefore require a thorough understanding of their operational life, benefits and costs. It is critical their planning and delivery aligns with a trajectory that will achieve long-term net zero emissions targets, and considers the potential impacts of climate change.



Buy Local Plan

In 2016, the Buy Local Plan was introduced to maximise opportunities for local businesses to tender for and win government work. An independent Buy Local Industry Advocate (BLIA) was appointed by the Northern Territory Government to review procurements for compliance against the Buy Local Plan and procurement framework. The advocate reports directly to the Territory Government on agency compliance throughout the year and annually through the publication of a BLIA Report.

Territory Benefit Policy

The Territory Benefit Policy outlines the Territory Government's expectations for private sector projects developing a Territory benefit plan. The Territory Benefit Policy encourages project proponents to understand the capabilities of the local industry and workforce early in the planning phase. The policy challenges proponents to consider what strategies they can adopt to enhance the local benefit outcomes their project delivers, while realising the long term advantages of having locally-based, capable suppliers and labour.

Project proponents achieve their social licence to operate by engaging with the local community, building trust and relationships to seek the community's acceptance of the project. Developing and implementing a Territory benefit plan assists a project proponent to earn and maintain their social licence in the local community.

Aboriginal Economic Participation Framework

A new Northern Territory Aboriginal Economic Participation Framework and Aboriginal Procurement Policy are being developed. The DIPL has an Indigenous Participation on Construction Projects Policy (IPoCPP) to provide employment opportunities and build the capacity of Indigenous businesses to participate in construction projects in the Northern Territory. The DIPL aims to improve opportunities for Indigenous wealth creation by maximising employment and business opportunities for Indigenous people.

These regulatory reforms will improve the investor experience in the regulatory process in the Northern Territory, encouraging infrastructure development to increase the economic curve.

Working with the local government sector

Regional economic growth relies on the partnership between the Northern Territory Government, Australian Government, the local government sector and private investment.

Across the Northern Territory, the local government sector contributes over \$500 million to local economies and manages key infrastructure assets including over 13 000 km of the Territory road network.

There are 13 regional councils in the Northern Territory. Within these regional councils, there are 63 local authorities in remote communities in the Territory.

Regional councils and local authorities give people in regional and remote areas of the Northern Territory a strong voice in local government.

The Northern Territory, Australian and local governments are working together on both the Darwin City Deal and Barkly Regional Deal.



In conclusion

The Territory Government established Infrastructure NT to champion strategic infrastructure planning and development to meet infrastructure needs for industry and population growth.

Infrastructure NT has developed an Infrastructure Framework that will provide clear direction and whole of government leadership for project development and delivery that analyses, prioritises and supports justified government infrastructure investment.

Infrastructure NT is also developing an Infrastructure Strategy, Audit, Plan and Pipeline with a renewed focus on achieving Government's goal of a \$40 billion economy by 2030.

This suite of documents will support Government's objective of accelerating the Territory's economic growth to:

create jobs in the near, medium and long term

- attract private investment
- support current and emerging industries
- build on the Territory's competitive advantages
- unlock the potential of the Territory's regions.

This position paper presents the refocused Infrastructure Framework for the Northern Territory, the key influencers for developing a new Infrastructure Strategy, Audit, Plan and Pipeline, the outcomes of previous consultation, and the proposed Strategy, Audit, Plan and Pipeline foundations.

The position paper, refocused Infrastructure Framework and proposed Strategy, Audit, Plan and Pipeline foundations will inform consultation and become the first step in developing a Northern Territory Infrastructure Strategy, Audit, Plan and Pipeline.



The Territory Government is seeking contributions from industry and the community to develop the NT Infrastructure Strategy, Audit, Plan and Pipeline.

We encourage you to consider the following questions. Responses to these questions are welcome or additional issues can be raised for consideration.

- Are there any additional key influencers or emerging trends that should guide the development of the Infrastructure Strategy, Audit, Plan or Pipeline?
- Are there any other cross cutting objectives that should form part of the Infrastructure Strategy?
- Are there any other enabling infrastructure eco-systems that should be included?
- Are there any other industry sectors that should be considered?

Submissions can be made:

- online at haveyoursay.nt.gov.au
- via email to Infrastructure.NT@ nt.gov.au
- or by post to Infrastructure Framework Position Paper, GPO Box 2520, Darwin, NT, 0801.

Alternatively if you would like to meet with us and share your views on any issues raised in this Position Paper, please contact us at Infrastructure.NT@nt.gov.au or phone (08) 8936 5696.

Submissions close on 18 March 2022.



Appendix A | Examples of economic multipliers and value adding to leverage growth

Food and future infrastructure

The Territory is a growing contributor to the integration of food into public health policy and national productivity. The National Farmers' Federation has laid down a bold vision for the industry to exceed \$100 billion in farm gate output by 2030, while the agribusiness sector is working to transform food systems for the public benefit and the sustainability of the planet.

As customers become increasingly focussed on where their food and fibres come from, and how it's produced, The Territory can build on its current competitive advantage in growing food, by adding to the value chain. With the use of technology and infrastructure innovation, there is an opportunity to process home grown

produce such as fruit and fish, while efficiently moving goods from farm to market with real-time supply chain management to underpin productivity, food quality and exports.

For example, local processing could value-add through a secondary industry, such as juicing mango 'seconds', while it's worth to the economy is an unrealised \$20 million of otherwise rejected and wasted fruit. Likewise the potential value-add processing of seafood in the Territory could realise more export opportunities to Asia, particularly for the high quality high value seafood products.

Purpose built facilities and enabling infrastructure are part of the value

chain as well as an economic multiplier through construction; from roads required to safely move produce, to the logistics of cold stores and warehousing.

This along with air and sea ports for efficient freight movement and digital technology to trace the journey of our fish and fruit, are part of the story that will inform the Infrastructure Strategy including the future audit. The strategy captures the future directions of sectors such as agribusiness diversification, while the audit will benchmark the needs of the regions and assess the infrastructure gaps to reach the Territory's transformational goals.



Developing new value chains

Empty shelves were the hallmark of disrupted supply chains nationally and internationally for the Northern Territory in 2020 as we dealt with the impacts of COVID-19.

These empty shelves highlighted the need for Australia to move beyond traditional comparative advantage and mitigate sovereign risk, especially in areas like fuel, energy and food security, along with reestablishing a broader, more advanced manufacturing base and strengthened supply chains.

The Territory has an opportunity to share in wealth created by increasing manufacturing in Australia. The Australian Government released its Modern Manufacturing Strategy in October 2020. The Infrastructure Strategy vision is: "For Australia to

be recognised as a high-quality and sustainable manufacturing nation that helps to deliver a strong, modern and resilient economy for all Australians." The Australian Government will do this by:

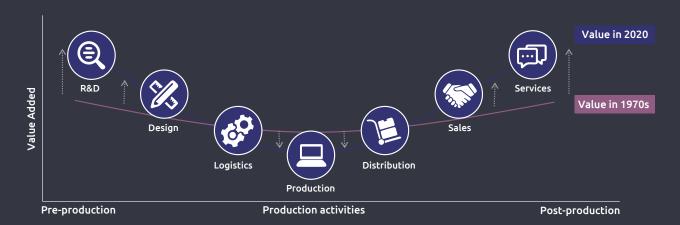
- getting the economic conditions right for business
- making science and technology work for industry
- focusing on areas of advantage
- building national resilience for a strong economy.

The Modern Manufacturing Strategy prioritises six key areas for increasing manufacturing capabilities in Australia including Space, Medical Products, Resourcing Technology and Critical Minerals Processing, Food and Beverage, Defence and Recycling and Clean Energy.

This gives the Territory opportunities to value-add to the production of goods such as renewable hydrogen, mineral processing, petrochemicals, food, defence, space, construction, fabrication and recycling. It enables the Territory to grow the skills and workforce in the continuum of services, from research at our higher education institutions to distribution, sales and exports into new markets.

To create these new supply chains, government and industry need to focus and collaborate on getting the right infrastructure in the right place at the right time. This includes the planning, hubs, warehousing, intermodal connections, required services and digital facilitation of information.

Figure 15 – Advanced manufacturing enables competition on value and not price alone, and includes the creation of jobs along the value chain continuum



Source: Make it Happen - The Australian Government's Modern Manufacturing Strategy

The Territory-wide Logistics Master Plan released in mid-2020 has four priority focus areas – each area contains about 12 actions covering:

- targeted infrastructure investment that the Territory Government can influence
- integrated logistics and land use planning with the Territory Government connecting between industry and across agencies
- supply chain positioning with the Territory Government facilitating partnerships
- improving regulation and safety, with the Territory Government playing a key role.

Understanding how disruption to production and supply chains influence and impact the Territory's productivity is part of the COVID-19 recovery strategy.

Critical materials, such as steel for example, are likely to impact on construction costs due to supply disruptions and demand increases as the country 'builds' toward economic recovery and growth. Infrastructure NT will work closely with Infrastructure Australia to monitor market capacity and constraints, including skills, material and risk.

Capturing additional value from critical raw materials

Generating more value from our critical mineral resources relies on processing ores onshore rather than overseas. There is an opportunity to capture significant additional value by undertaking more advanced processing in Australia.

For example, an analysis by CSIRO shows that while Australia's lithium exports in 2017 were worth \$1.1 billion, it represented less than 1 per cent of the global battery value chain. While in recent years, Australia has been successful in attracting a number of downstream processing and manufacturing opportunities the benefits generated from this value chain is still very small.

Exponential economic benefits can be realised if industry moves across the value chain at a time when demand is set to skyrocket. Recent forecasts suggest demand for lithium for electric vehicles alone will grow from 25 000 tonnes in 2020, to 425 000 tonnes in 2030.

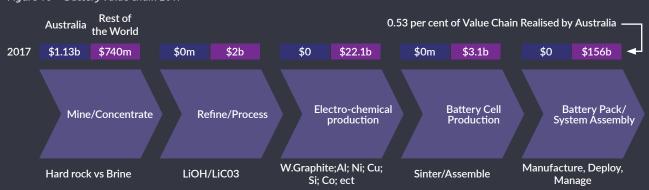
Figure 16 below demonstrates that very little of the value incorporated into lithium ion batteries is retained in Australia. From left to right the diagram shows the value chain in 2017:

- Mine/Concentrate phase (hard rock vs brine) is worth \$1.13 billion in Australia and \$740 million to the rest of the world
- Refine/Process phase (LiOH/ Li2CO3) is worth \$2 billion to the rest of the world with no economic benefit to Australia

- Electro-chemical production phase (W.Graphite; Al; Ni; Cu; Si; Co; etc.) is worth \$22.1 billion to the rest of the world with no economic benefit to Australia
- Battery Cell production phase
 (Sinter/Assemble) is worth
 \$3.1 billion to the rest of the world
 with no economic benefit to
 Australia
- Battery Pack/System Assembly phase (Manufacture, Deploy, Manage) is worth \$156 billion to the rest of the world with no economic benefit to Australia.

This means that only 0.53 per cent of the battery value chain is realised in Australia.

Figure 16 – Battery value chain 2017



Source: Department of Industry, Science, Energy and Resources; Resources Technology and Critical Minerals Processing

Economies of scale can be built where minerals processing and associated manufacturing occurs at or near the mine site, or near the end-use customer.

Moving beyond the quarry to valueadded processing is planned by the Arafura Resources Limited Nolans Project in the Northern Territory.

The Nolans Project is a shovel-ready, long life rare earth mine, beneficiation plant and refinery providing advanced manufacturing onsite. Rare earths are essential to the digital and energy transformation and economic wellbeing

of the world's major and emerging economies, such as electric vehicles and wind turbines.

Nolans is the only NdPr (Neodymium and Praseodymium) focused project in Australia with all approvals that plans to mine and process ore to oxide at a single site.

The Nolans Project will produce a range of rare earth oxide onsite as well as by-product phosphoric acid (used in fertiliser manufacture) - taking the product from the ore from which it is contained all the way through to highly

refined rare earth oxides.

Nolans' single site processing will realise the full value of mineral resources, and provide for increased job and regional business opportunities, local Indigenous employment and training, traceable product through the entire supply chain, a secure supply chain, waste management certainty and economic benefit.

Final Investment Decision is targeted for 2022 with first production targeted in late 2024 subject to outcomes with offtake and financing.

Appendix B | What you have told us Infrastructure themes that matter to you

From the original Economic Summits to the TERC submission process, there has been a continuum of strategies, ideas and project proposals beginning to synthesise into a system of opportunities and interrelated themes that will inform the drafting of a new Infrastructure Strategy. Building on what the Territory Government has already heard to date, a new Infrastructure Strategy is needed to contemporise infrastructure policy, consider the more recent influences

and drivers, while building on the achievements arising from great ideas and industry collaborations.

Following is a snapshot of the infrastructure, logistics and reform submissions received in 2020. This forward thinking analysis highlights the social and economic climate of the Territory's operational environment and the key issues and ideas recognised by stakeholders.

Note that the themes below do not necessarily capture all projects that have existing major projects status and that some themes cut across social and economic infrastructure.

INFRASTRUCTURE REGULATORY AND STRUCTURAL REFORM

Submissions mapped to the notion of reform were clustered around four central ideas around the need to:

- advocate for and influence the Territory's standing, particularly in relation to infrastructure funding
- leverage the Territory's comparative advantages
- contribute to the nation's productivity, sovereign capability and economic recovery
- provide robust governance to assess, prioritise and plan for future projects and capital works programs.

Structural reforms are necessary to disrupt the status quo and transition the Territory's narrative from its historical infrastructure deficit, uncompetitive freight costs and tyranny of distance to focus on our proximity to Asia and export opportunities.

Regulatory reforms to cut production costs and increase international competitiveness

Timely release of land

Increase enabling infrastructure investment

Better forward planning Credible major projects

Infrastructure reform

Commit to a pipeline of projects as a proportion of GDP

Tax incentives to build infrastructure

'First Pass' approvals for large development proposals and improve the regulatory environment NT Representative Office in Canberra

Infrastructure Commissioner

Government grants/incentives and regulatory changes for the building industry Public-private collaboration

INDUSTRY – ENERGY, GAS AND MANUFACTURING

Submissions received from within and outside of the Northern Territory highlighted how we could benefit from technological innovations in renewable and traditional energy sources and value add with manufacturing.

Submissions suggested a range of innovations for renewable energy from battery storage through to producing hydrogen, which are progressing rapidly to become more commercial, reducing the dependency on other forms of energy.

Development of large-scale solar generation and prospective new sources of onshore and offshore gas create an opportunity for the Territory to become a low emissions advanced manufacturing hub.

Submissions highlighted the opportunity to support studies into manufacturing opportunities. The Advanced Manufacturing Growth Centre provided an invitation to develop partnerships and to work with Territory businesses to develop new value adding opportunities.

The Territory Government is working with industry and the Australian Government to accelerate developing the Middle

Arm Sustainable Development Precinct into a globally competitive, sustainable development precinct for low emission petrochemicals, renewable hydrogen, carbon capture storage and minerals processing.

The precinct is already home to the Santos Darwin LNG and the INPEX Ichthys LNG processing facilities. It has an extensive product corridor network to efficiently transmit utilities, gas, feedstock and products in close proximity to Darwin International Airport, Darwin Port, the Darwin to Adelaide railway and freight terminal and the road network.

Solar communities Large scale solar manufacturing

Enabling infrastructure for Beetaloo

Hydrogen Industry

Increase our value chain with manufacturing SunCable

Infrastructure corridors
Undertake strategic studies



LOGISTICS AND SUPPLY CHAINS

The Territory's close proximity to Asia was emphasised as a strong comparative advantage by stakeholders in their submissions, particularly from industry sectors where logistics and supply chains were an enabler not a driver for infrastructure projects.

The Territory's small population stretched over regional and remote areas, a low infrastructure base and extreme climatic and geographic conditions challenge our logistics and supply chains. There are diverse opinions among sectors about these hot and constraining issues, but a common need to develop strong effective supply chains, logistics infrastructure and networks to develop the Territory.

The Northern Territory must respond to the rapid changes in consumer and natural resource environments and technology advancements to be competitive and productive. Changes and advancements include digitisation in areas such as 4.0 and the 'internet of things' for biosecurity, tracing and origin. Current gaps in governance and the lack of a collective strategy are holding back collaboration, including information sharing, planning and execution.

Investors and project proponents in energy and future technologies expect zero emissions whole-of-life supply chains for their products and services in the future.

The transport and logistics sector emphasised the need to synchronise public and private investment to ensure different modes of transport and shared infrastructure, such as for tourism or infrastructure and services corridors, are ready for the next step change across all sectors in collaboration with government.

An inaugural NT Logistics Advisory Council will be established as an advisory body to the Territory Government to provide a mechanism for collaboration to improve the Territory's transport and logistics supply chain.

Supply chain and logistics coordination in consultation with industry

Freight equalisation scheme

Local processing plants

Value adding manufacturing

Trade and Asia links

Logistics Improved supply chains

Cut production costs
Increase international competitiveness



MARINE AND MARITIME INFRASTRUCTURE

Submissions were well aligned and focused on multi-sectoral opportunities relating to marine infrastructure that offered positive flow on effects for local businesses, such as increased provedoring fresh produce and supplies.

Public and private sector infrastructure investment partnerships that drive

improved efficiencies and increased profitability for the seafood sector across the Top End to Arnhem Land and Groote Eylandt are enablers for industry and contribute to tourism by boosting the Territory's 'foodie' reputation.

Territory Government agencies are working with industry to develop and implement a Maritime Industry Development Plan to grow the maritime industry, including activating the Darwin

Ship Lift facility and surrounding Marine Industry Park. The Plan will analyse the potential for industry growth, including workforce, skills, infrastructure, logistics and supply chains and actions required to be successful in the medium and long term.

Ship Lift - Include vessel maintenance and storage facilities
Gove Port and marine infrastructure

Marine services and technology

Super yachts
Seafood industry facilities in Darwin and Gove

Marine infrastructure

Master plan all maritime industries

Fuels storage Gove Bing Bong Port extension

Fuel storage

Port of choice for cruise ship industry including boutique cruise sector

Cruise ship taskforce

AVIATION AND AEROSPACE

While the submissions highlighted the need for skills training and specialist academies, a need to consider infrastructure planning requirements post COVID-19 was identified to cater for a return of tourism and international travellers.

Examples of this future infrastructure need includes expanding and upgrading the Alice Springs airport to become

a 'first port of call' to coincide with delivering and opening the National Aboriginal Art Gallery. In the longer term Kakadu may require a new airstrip to provide for larger fixed wing carriers arriving directly from international ports, while airports in Darwin and Katherine will continue to play a dual role – supporting tourism and a highly strategic defence role in Australia.

The Territory Government has released the draft Territory Space Strategy

for 2021–25. The draft Strategy will capitalise on our strategic advantages to attract investment and create local jobs, while establishing a vision for the Territory's involvement in the space industry in Australia. Central to this vision is for the Territory to be recognised as the home of high altitude pseudo-satellites in the Indo-Pacific region, Australia's premier space launch location and a leading regional centre for ground station facilities.

Alice Springs Airport upgrade for First Point of Entry for internationals

Freight opportunities Aviation and Aerospace Facilities for an aviation and aerospace academy

Aviation and space-based technology

New airport opportunity for Kakadu access

AGRIBUSINESS

Submissions acknowledged that sustainable and targeted investment in agribusiness – from food to fibre – can generate additional income, serve new and predominantly Asian export markets and benefit local communities, investors, farmers and entrepreneurs. COVID-19 has disrupted the way Australians rely on global supply chain and systems for production. At the same time the world's social and economic landscape has been flipped with green, clean, virus-free,

whole, raw and value-added products to transform future production.

The National Farmer's Federation has set an ambitious goal to become a \$100 billion industry by 2030. The Territory's growers and graziers provided significant advice on the opportunity, with the industry's provenance well established and desire to partner with traditional land owners to diversify agribusiness opportunities. The industry is set to overcome the challenges of distance to markets, legacy infrastructure

deficits and constraints in harnessing 21st century technology on the farm with the lack of high speed coverage across such a large and mostly remote land mass that takes up 17.5 per cent of Australia.

Recognising agribusiness is ready to develop at scale, the Territory Government is working with the land councils, plant, fisheries and livestock industries to develop an Agribusiness Strategy, focusing on new integrated commercialisation opportunities across the supply chain.

Support through land provision

Roads to connect and grow

Food processing and common user facilities

Trade and Asia links Agribusiness Supply chain development and security

Cotton processing facility

Agribusiness hub with connections to supply chains

WATER SECURITY

Increasing water supply is vital for the Territory's population and industry growth, counterbalanced by the critical need for demand management. As an endlessly reusable resource, the importance of reusing and storing water were recognised in submissions and presentations by government experts. Future water security is necessary for economic growth to support vibrant, healthy communities and maintain the liveability of the

Territory as a great place to be. This is just as important in our regions as it is to support the future growth of Darwin as Australia's northern capital.

This will require substantial future investment for water storage as well as community education and engagement to own and exercise water efficiency, water efficient behaviour and form sustainable water saving habits.

Darwin Region Water Supply Upgrades are included in the Infrastructure

Australia Priority List 2021. The Northern Territory Government is currently investigating options to respond to the expected forecast urban, industrial, and agricultural demand and will consider the timing and size of infrastructure investment required to meet the future water needs of the Darwin region.

Underground water resources studies

Surface water storage projects to enable new agriculture and for communities

Improve water security

Reliable water supply for dryland and irrigated farming investors

Water

Access to water and land

Water recycling and managed aquifer recharge

Adelaide River Off-stream Water Storage (AROWS)

TOURISM

The economic potential of tourism and creative industries remains largely untapped. Arts and culture flourish in the Territory and generate substantial economic returns. Submissions and presentations, including the Tourism Taskforce Strategy, offered step changes to recovery and reinforce the need to be prepared for the return of international tourism over the next 12 to 18 months.

Strong central themes include improving infrastructure and amenities for the drive market, capitalising on our natural assets and significant national parks, and fast-tracking delivering iconic infrastructure to support Aboriginal and cultural tourism through partnerships. The top icons seen as creating a competitive

advantage to attract the international tourists when borders open, include:

- National Aboriginal Art Gallery in Mparntwe (Alice Springs)
- Larrakia Cultural Centre, Stokes Hill Wharf, Darwin CBD
- National Indigenous Cultural Centre in Alice Springs
- Hermannsburg Namatjira Gallery
- Uluru-Kata Tjuta National Park Visitor Centre
- Kakadu World Heritage Visitor Centre.

Infrastructure NT will conduct an audit of economic infrastructure to ensure the benefits from infrastructure improvements are quickly realised, including key roads that:

- support the tourism drive market
- benefit multiple industries,

including mining and agribusiness improve access to communities.

The Infrastructure Audit will also look at drive market key destinations, such as national parks, and the constraints to growing visitor nights in the Territory. For example, gaps in roofed accommodation as well as expansion of places needed to support the growth in recreation vehicles (RVs).

The Infrastructure Plan brings together the elements needed to support growth through the lens of a tourism eco-system, identifying the current and future infrastructure investment needs in national parks to support attraction and sustainability.

New visitor information centres in Alice springs and at Uluru/Yulara Charging stations for electric vehicles

Arts Trail funds for CBD projects National Indigenous Cultural Central

National Aboriginal Art Gallery

Roads for drive market

Position Darwin as a tropical tourist destination

Deficit in tourism infrastructure

Telecommunications Caravan Parks Mining interpretations

Marine tourism OUTISM

Accessible tourism for disabilities

Arts Trail **National Parks**

Youth Facilities

Heritage trails Tourist facilities upgrade

Aboriginal tourism Major events

Larrakia Cultural Centre

Develop eco-tourism ventures Wet season access with roads

Case study

The drive market will rebound faster than other areas of the visitor economy, according to Tourism NT.

Drive holidays through the Territory's wide-open spaces appeal to multiple market segments, including the busy fly-drive, the long self-drive and grey nomad market and youth.

Responding to this advice and anticipated upswing in demand, the Territory Government announced the \$8m Roadhouse to Recovery grant program to assist wayside inns, roadhouses and remote caravan park operators to improve their visitor experience using co-contribution

grants to improve infrastructure. This had dual benefits including more work for contractors and tradies as part of the broader stimulus programs.

The drive market is crucial to accessing the Northern Territory's unique visitor experiences that are dispersed across the regions. Improving amenities and experiences at remote roadhouses will encourage self-drive tourists to stay additional nights in the Territory and enjoy short stops with local hospitality.

This partnership recognises the return on investment to regions by putting the value of the visitor experience at the centre of economic infrastructure planning, while investing in improvements that will have social and sustainable benefits in the regions.

Submissions identified new emerging technologies at the intersection of climate change, renewables, tourism and the drive market, recognising the future need to provide for electric vehicles. In response, the Territory Government has developed a strategy focusing on battery electric vehicles and plug-in hybrid electric vehicles.

ARTS AND CULTURE

Closely related to tourism, creative industries is a highly diverse yet interrelated sector that has broad economic and social impacts that enrich lives and communities. Often supporting tourism and retaining population, the creative industry refers to jobs and social participation ranging from music, visual arts and digital design, to screen production and broadcasting. The visual arts and crafts industry is the largest contributor to the Creative Industries sector (2018), with important impacts on innovation and social development.

Submissions emphasised that creative industries have broad impacts across the economy by improving liveability and lifting visitor attraction and experiences.

In its 2019 Audit of Northern Australia, Infrastructure Australia identified key opportunities to improve quality of life outcomes for Indigenous Australians. Arts and culture play a crucial role in strengthening social inclusion and identity for Australian communities to deliver economic improvement.

Creative industries are key drivers of increased workforce participation and

business development opportunities for Aboriginal Territorians, with high levels of participation in art centres in remote communities. Aboriginal art centres are sources of real revenue and employment in remote communities that can drive economic, cultural and social outcomes for Aboriginal communities.

The diversity of ideas ranged from creative industry hubs in regional centres to developing a Territory textile printing and manufacturing hub to produce Aboriginal art and fashion at scale.

Aboriginal cultural tourism

Screen industry and production studio

Creative Centre in Darwin CBD akin to Federation Square CBD activation with secondary education

Creative industries

Skill and training

Studio for production to support a pipeline of Screen Industry works **E-sports**

Establish a CBD Aboriginal art hub Creative industry hub

Develop a Territory textile printing and manufacturing hub (Aboriginal art and fashion)



SOCIAL, SAFETY, RECREATIONAL AND LIFESTYLE INFRASTRUCTURE

Historically social infrastructure is viewed as an important investment by governments that provides social benefits and improved life outcomes, such as health and education. It is closely related to a spectrum of infrastructure ranging from safety to liveability infrastructure.

The benefits of social infrastructure are often not accurately measured using traditional economic tools that compare

the cost of government input to the benefits for individuals and communities.

Many submissions highlighted the need for continuous investment to enhance liveability in the Territory, while also making the important connection to the flow on effects for tourism and the visitor experience. It was highlighted that a great place to work and live attracts the visitors to come, see and play.

The Territory's national parks are an example of important and invaluable assets that form part of the unique

outdoor lifestyle enjoyed by Territorians and visitors. Submissions highlight that investing in and developing the national parks estate could provide significant economic and social benefits to the Territory.

Sustainability, waste management, social housing, preserving green space and safer and more accessible infrastructure, including digital access, were consistent themes intertwined with lifestyle and tourism.

Community hubs

Remote housing reforms

Increase intake of refugees

Access to finance for education

Waste management strategy

Social City making projects

Rural aquatic centre

Roads and Transport A new lake

Sporting facilities Health and well-being

People-centred soft infrastructure

Recreation

Emergency and resilience building

All-weather roads to Arnhem Land

Safe clean parks Retirement related

City baths and swimming

Telecommunications

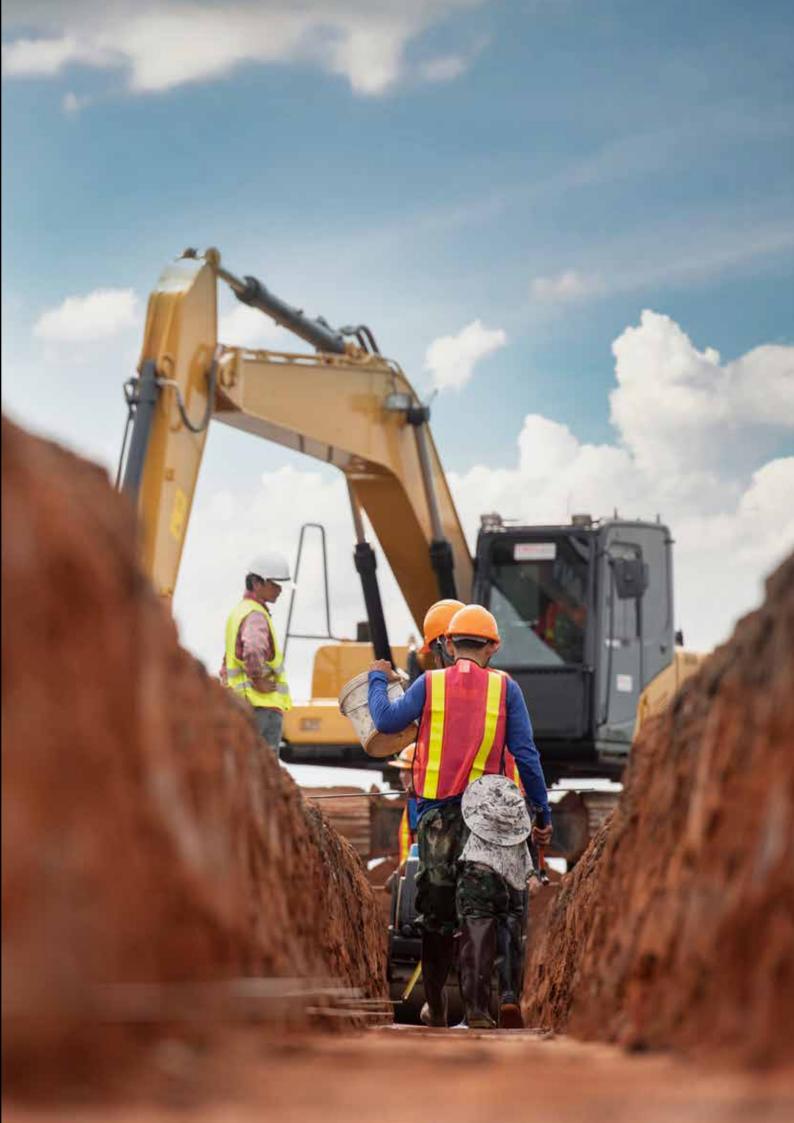
More international students Mountain bike trails

Lifestyle
Social housing Recycling

School infrastructure

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