

ANNUAL REVIEW

**10 YEAR
INFRASTRUCTURE PLAN
2018-2027**





Level 2



Mark II Building



Mark III Building

CONTENTS

Minister's Foreword	2	Sectors	16
Northern Territory Economic Environment	3	Cross Sector: Integrated Land Use and Infrastructure Planning	16
Population Growth Measures	5	Agribusiness, Fisheries and Aquaculture	22
Infrastructure Investments	6	Tourism	24
Roadmap to Renewables	7	Energy and Minerals	30
Development Levers	8	Defence and Related Industries	34
Sectors	9	Education and Training	38
Consultation Ideas	10	Electricity	44
Consultation Infrastructure Ideas	11	Water	48
		Transport and Logistics	52
		Public Safety and Justice	64
		Health	70
		Housing	80
		Art, Culture and Active Recreation	86
		Digital	93
		Bibliography	96
		Acknowledgements	96

How to navigate this document

Projects nominated by industry, business and the community for consideration in the Northern Territory's long term infrastructure planning are included on pages 11 to 15.

Planned and proposed infrastructure projects are provided in each Sector commencing from page 16.

^ Indicates projects that are captured across more than one sector.

Term 'the Plan' refers to the 10 Year Infrastructure Plan Annual Review 2018–2027.



MINISTER'S FOREWORD

Strategic infrastructure investment is a key enabler of economic development and the future growth of the Northern Territory.

Well planned and strategically timed infrastructure projects contribute to creating jobs, improved services and attract people to the Territory, which in turn increases economic activity, improves social outcomes and enhances liveability for Territorians.

Infrastructure investment decisions must be underpinned by a rigorous framework that supports a consistent and transparent project planning and implementation process. This provides the foundation for trust, certainty and confidence in the future growth of the Territory.

Government's infrastructure investment is at its highest level with projects continually being designed, tendered, awarded and construction started. Government has demonstrated a high level of commitment to support local industries and is delivering a record investment in government infrastructure projects and repairs and maintenance works. Targeted stimulus programs have provided much needed infrastructure investment for areas of industry most at need.

Maintaining the current levels of public infrastructure investment is not sustainable long term. The Northern Territory must plan for the future, ensuring a shared vision in long term decision making across all levels of government, industry and the community. The growth of private investment is critical to the Territory's future growth and projects that provide leverage for new opportunities will assist this sector to grow and develop to benefit the whole Territory.

Government's strategic iconic infrastructure and a steady pipeline of works will continue to support industry and economic growth in the Territory, while upcoming opportunities from the Department of Defence provide valuable infrastructure investment.

The Annual Review of the 10 Year Infrastructure Plan provides transparency in planning and prioritises projects for the Territory's future growth. The publication of project planning, investment opportunities and sectors linked to future projects creates a foundation for informed investment decisions, as well as certainty in business planning and workforce development.

The document is not an exhaustive list of all infrastructure opportunities and projects but a supplement to the economic framework to provide information on planning, prioritising and delivering future infrastructure. This document will continue to be reviewed annually and government welcomes ongoing contributions from Australian and local governments, private sector and community stakeholders to share information that supports proactive future planning for infrastructure.

The Plan should be read as a companion document to the Northern Territory Government's Economic Development Framework and Infrastructure Strategy.



NORTHERN TERRITORY ECONOMIC ENVIRONMENT

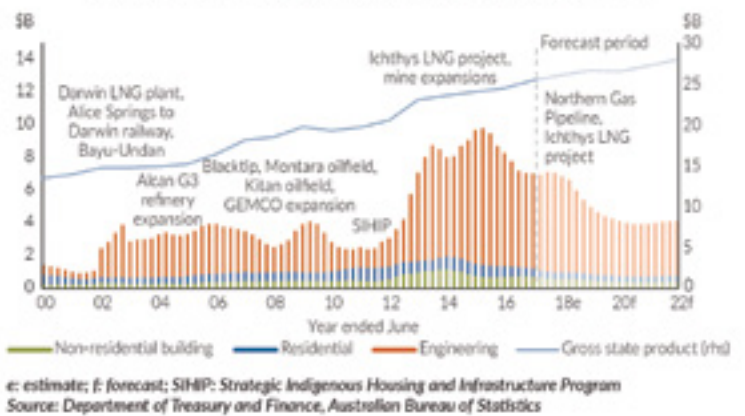
The structure of the Northern Territory economy is markedly different to the national economy, reflecting the degree of maturity of the local economy relative to other parts of Australia and the impact that major projects can have on small communities.

The Northern Territory economy has grown considerably over the past 10 years supported by a steady stream of major projects. Between 2007–08 and 2016–17, we have seen:

- gross state product (GSP) grow by 37.5 per cent, from \$18.5 billion to \$25.4 billion
- population increase by 12.9 per cent to more than 246 000 people
- workforce expand by about 26 300 to over 143 100 workers.

Major projects have played a significant role in the Territory economy over the past decade, with the total investment share of GSP expanding from 32.6 per cent in 2006–07 to 44.0 per cent in 2016–17. Over the five years from 2012–13, it is estimated there was an average \$4 billion per annum of additional investment in the Territory. This scale of investment is unprecedented in the Territory’s history and has had a substantial impact on the economy.

Economic Growth and Construction Work Done in the Territory



Although Territory exports are forecast to increase rapidly as the Ichthys LNG project commences production, on the ground economic activity is expected to moderate closer to pre-Ichthys project levels.

The Territory has a strong comparative advantage in industries that produce products of high demand in Asia, and there are promising opportunities to grow the international education sector, tourism, mineral, gas, petroleum, fisheries and agricultural resources.

NORTHERN TERRITORY INFRASTRUCTURE SNAPSHOT



\$1.45B Infrastructure Program Budget

Energy and Minerals contributes
12% of gross state
product contribution



\$7 Billion
of NT Government road and bridge assets

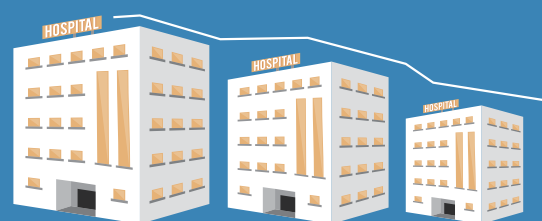
9089 tourist accommodation
rooms available



2108
full time NTPFES personnel



612 NT Emergency
Service volunteers



Health infrastructure valued at
\$1.376 billion
depreciating by \$38 million per year

\$697 million

Value of the agriculture, forestry and
fishing sector

Target

50%

of our electricity from
renewable sources



5 746 people

employed in the mining sector

Defence major capital projects

\$20 billion

in Defence construction projects in NT over 20 years

\$8 billion by 2016-25

\$12 billion by 2026-35

International
Education



contributed

\$88 million

to the NT economy

3.5 million

visitors to parks and reserves each year

POPULATION GROWTH MEASURES

The Northern Territory Economic Development Framework (EDF) released in June 2017 committed to developing a Population Plan and marketing strategy to promote the Northern Territory as a place to live, work, visit, study, invest, trade and do business. The Department of the Chief Minister (DCM) is working in partnership with the Department of Trade, Business and Innovation (as the responsible agency for EDF reporting) and the Department of Treasury and Finance to fulfil this commitment. This project involves developing a Population Strategy 2018 and Action Plan (to be updated yearly in line with the strategy). Implementation is expected at the beginning of the 2018–19 financial year.

Extensive stakeholder consultation has informed the strategy and action plan. A research report undertaken by Charles Darwin University, Synthesising Northern Territory Population Research, focusses on a number of key growth areas that were further developed by DCM for the strategy and action plan. The Northern Territory Government is committed to the strategy and action plan with funding being provided to progress.

Population growth is critical to the economic development of the Territory. A growing, skilled and diverse population and labour force are essential to achieving a healthy and sustainable economy and society. A growing population lifts demand for housing, goods and services, increases the tax and revenue base, builds the pool of skilled people, enhances economic growth, builds economic and social resilience, and underpins ongoing population growth and diversity.

The Northern Territory Population Strategy and Action Plan provide the framework for a range of actions by all levels of government, and by business and the community to attract people to the Territory and enable those already here to stay for the long term. The population strategy and action plan respond to community needs and are tailored to support local opportunities.

The activities set out in the strategy and action plan include broad-based population measures that work across population segments, and activities targeting priority population market segments, categorised as market initiatives and incentives.

Population Growth Measures	Market Initiatives and Incentives
<ol style="list-style-type: none"> 1. Building investment and creating jobs to attract people from interstate and overseas 2. Enhancing liveability to retain people at all stages of life for the long term 3. Moderating costs of living and costs to business to help attract people and investment 4. Embracing community diversity to create welcoming, thriving communities and deliver skills 5. Building the Territory brand to promote consistent and strong messages about the Northern Territory for Territorians, prospective residents and visitors 	<ol style="list-style-type: none"> 1. Engaging Northern Territory alumni 2. Attracting and retaining early career women 3. Attracting mid- and late-career workers and retaining Northern Territory retirees 4. Attracting more overseas migrants and students from key source markets 5. Targeting short-term workers for recruitment as Territory residents and facilitating local workforce participation in our regions

INFRASTRUCTURE INVESTMENTS

The Northern Territory has experienced a surge of infrastructure investment over the past five years, driven by large scale private sector major projects and supported by consistently strong public sector infrastructure investment. The pipeline of future projects are supported by the Economic Development Framework and 10 Year Infrastructure Plan.

Northern Australia Infrastructure Facility (NAIF)

The NAIF is a \$5 billion concessional loan facility established by the Australian Government to support the construction of economic infrastructure that provides the basis for long term expansion of industry and population in northern Australia.

Projects will need to demonstrate public benefit and a need for NAIF investment, involve constructing or enhancing economic infrastructure, have an Indigenous engagement strategy and effectively demonstrate the loan can be repaid.

The NAIF will consider a wide range of infrastructure, including airports, communications, energy, ports, rail and water. While loan sizes of more than \$50 million are preferred, the NAIF will consider smaller projects.

Northern Territory Infrastructure Development Fund (NTIDF)

The Northern Territory Government has committed \$200 million to establish the NTIDF.

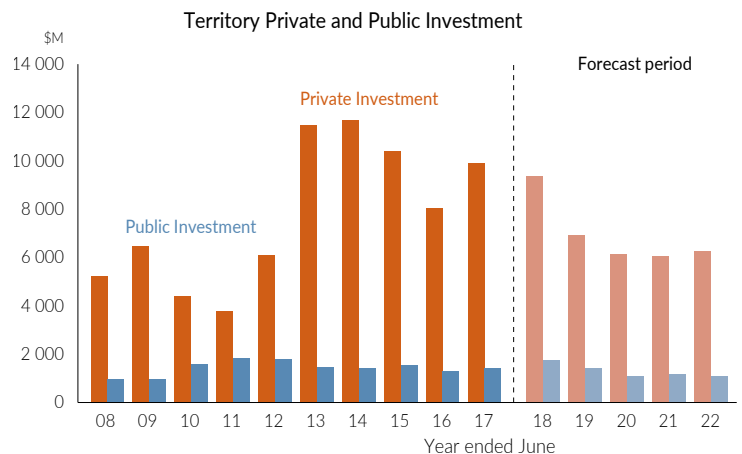
The key objectives of the NTIDF are to attract private investment, generate commercial rates of returns for investors and support the long term economic growth and development of the Territory by investing in appropriate infrastructure projects.

The NTIDF may invest in a wide variety of infrastructure. Projects under consideration span a range of industries, including renewable energy, resources, technology, manufacturing, transport and aviation.

GOVERNMENT STRATEGIES AND PLANS

In 2017, the government published the Economic Development Framework to provide an overarching structure for government plans, strategies and policies. The Infrastructure Strategy sits under the framework and is the blueprint for future infrastructure delivery. The 10 Year Infrastructure Plan provides an assessment of where sectors have prioritised and planned for infrastructure investment and projects over a 10 year horizon. The Annual Review of the 10 Year Infrastructure Plan provides opportunity to reassess infrastructure delivery to reflect economic growth and diversity of the Territory economy.

A Territory-wide Logistics Master Plan will be developed in consultation with industry, peak organisations, infrastructure managers and government stakeholders. The master plan will support the Economic Development Framework and increase freight and logistics connections and capacity.



Inflation adjusted.
Source: Department of Treasury and Finance, ABS Cat. No. 5220.0

ROADMAP TO RENEWABLES

In recent years, the demand for renewable energy and energy efficiency has increased significantly to address climate change and increasing electricity costs. In November 2017, the Northern Territory Government released the Roadmap to Renewables report – delivering on a major election commitment. The report, prepared by an independent panel, provides government with advice, options and recommendations on how to best achieve the 50 per cent renewable energy target by 2030. The government has considered the outcomes and recommendations of the report, and has supported or supported in-principle all 11 recommendations, noting further financial and economic modelling is required.

The renewable energy target refers to electricity consumed in 2030 from grid connected installations, including behind the meter generation and all Aboriginal communities supplied by Indigenous Essential Services. This excludes self-generating enterprises that generate electricity for their own use in their primary businesses. The Territory's electricity sector, including generation, transmission, distribution and retail, is dominated by government owned corporations (Jacana Energy, Territory Generation and Power and Water Corporation). Renewable energy contributes four per cent to the overall electricity generated, with the rest generated through natural gas or diesel.

The Territory has three regulated electricity network grids – Darwin-Katherine, Tennant Creek and Alice Springs. Renewables and implementing the renewables plan is dependent on the market design, which is yet to be determined. The consumer base in the Territory has a high proportion (40 per cent) of rental and government housing that has not taken up rooftop solar photovoltaic (PV) energy. This has resulted in a smaller uptake in Territory households (six per cent) that have solar PV installations, compared to the national average of 14 per cent.

The Northern Territory Government's Economic Development Framework (EDF) identified renewable energy as one of the key developing sectors in the Territory. Renewable energy could improve the competitive position of a broad range of businesses if it could be harnessed to deliver lower cost electricity than alternative fuel sources. The government is undertaking the necessary work to develop a pragmatic and robust implementation plan based on the principles of security, reliability and least-cost, which will be informed by the report.

Three high level focus areas were established from a desktop analysis of identified opportunities:

1. increasing uptake of renewable energy technology
2. research and development
3. promoting energy efficiency.

An Industry Development Strategy is being explored based on these focus areas.

GOVERNMENT DIRECTIONS

The government is committed to 50 per cent renewable energy by 2030 for generation of electricity supplied to Territory households and businesses, while at the same time ensuring secure and reliable electricity at least-cost to consumers and taxpayers.

An independent expert panel was commissioned to advise and provide a report on viable options to reach the renewable energy target, taking into consideration technical, financial, operational and economic issues.

The Roadmap to Renewables report provided 11 recommendations to guide government to achieve the target.

Substantial new private sector investment in renewable technologies and power plants is expected in the coming years.



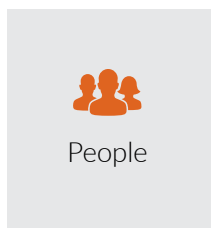
DEVELOPMENT LEVERS

Six development levers critical to economic and social development, investment and jobs growth in the Northern Territory were identified through the 2016–17 Economic Summits process.



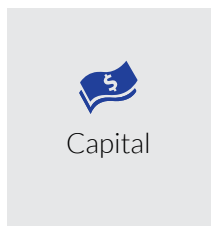
Natural resources includes the land, flora, fauna, soils, water, minerals, oil, gas, waterways, inshore fisheries, coastal areas, the entire biomass in the Northern Territory, and our knowledge about these things. These resources are integral to the Territory’s economic growth and underpin priority industries, in particular agriculture, energy, mining and tourism.

.....



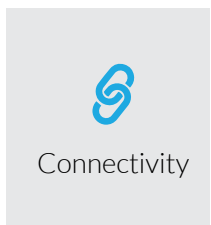
People have a two-fold impact on the economy – they are the consumers of goods and services and are the workforce that supplies labour and knowledge. For our economy to grow, we must increase our population and find ways to engage the future workforce. Helping people re-skill, upskill and reinvent their jobs will be essential.

.....



Capital refers to different types of funding for businesses to invest in required technology, education, plant and equipment that support future growth. Capital also includes investment in the infrastructure that helps the economy function – road, rail, marine and air transport, pipelines, poles and wires, energy, water, buildings and telecommunications networks.

.....



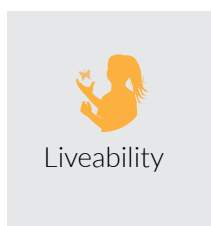
Better **connectivity** is critical to ongoing economic growth to strengthen our supply chains to improve the movement of people, goods and information, as well as connect with people who may exchange information, buy our products and services, or help us build relationships and partnerships to develop or reach markets.

.....



Enterprise and innovation occurs when entrepreneurs, universities and governments strive to improve the products and services they deliver. Innovative structures and management strategies can help unlock the latent economic potential of our economy.

.....



A constant focus on improving **liveability** is important to promote the Northern Territory as an attractive place to live, work, study, visit, research and raise families. Unless we can convince other people of this, we will find it difficult to sustain a workforce that can support business growth and grow our population. A small population limits the range of choices available to Territorians and affects the cost of living and the cost of doing business.

CROSS SECTORS



Integrated Land Use and Infrastructure Planning



Regional Economic Development

SECTORS

The growth and essential sectors in this document provide a snapshot of the challenges for infrastructure delivery, opportunities and investment needs.



Agribusiness



Tourism



Energy and Minerals



Defence and Related Industries



Education and Training



Electricity



Water



Transport and Logistics



Public Safety and Justice



Health



Housing



Art, Culture and Active Recreation



Digital

Each sector in this document provides a summary of the role infrastructure plays in meeting government objectives and industry and community needs. Sectors also provide a summary of the challenges that will impact future infrastructure provision and identify ways we can respond to these challenges.

Each sector includes a table of infrastructure projects identified by region and timeframe to sequence delivery.

Planned infrastructure projects are identified in the first two years of the 10 Year Infrastructure Plan (2018–19 and 2019–20).

Proposed infrastructure projects are identified in the:

- medium term (2020–21 to 2022–23) and
- longer term (2023–24 to 2027–28).

CONSULTATION IDEAS

Sustained economic growth and development is critical to the Northern Territory. Investment in government capital works alone is insufficient and will not generate enduring, game changing economic outcomes. Investment in economically transformational strategic infrastructure, particularly in partnership with the private sector, is vital.

The Northern Territory Government continues to work through the process of scoping, feasibility analysis and business case development to advance projects that deliver targeted outcomes.



CONSULTATION: INFRASTRUCTURE IDEAS



Cross Sector Integrated Land Use and Infrastructure Planning

- **Improve land access and land tenure to provide certainty and promote investment**

Streamline processes for leasing Aboriginal land

The Department of the Chief Minister is developing an Aboriginal Land and Sea Action Plan, which contains actions to improve land policies and administration, and access and tenure opportunities, on Aboriginal land and land subject to native title to provide certainty and promote investment.

- **Develop Water Sensitive Urban Design that suits the Territory**

Establishing design principles for managing stormwater quality from subdivisions is underway as part of the Subdivision Development Guidelines (SDG). The principles for water quality management in the SDG will inform the design of water treatment systems within private and government subdivisions. Constructing these subdivisions will include the principles as part of the overall subdivision works costs.

- **Build community halls in remote communities to provide for activity**

A number of multi-purpose facilities have been identified within the Art, Culture and Active Recreation sector.



Cross-Sector Regional Economic Development

- **Develop a Bush/Aboriginal University in an Aboriginal community**

The Batchelor Institute of Indigenous Tertiary Education is a dual sector tertiary education provider that provides services across the Territory, including many remote communities. Charles Darwin University is a multi-sector university that has a significant campus footprint across the Territory, and provides external study opportunities throughout Australia. There are a range of Aboriginal owned and controlled vocational education and training providers that provide courses and training opportunities in remote communities across the Territory.

- **Improve essential services in remote communities**

Services are provided to Aboriginal remote communities in accordance with the service standards set out in the Agreement for Provision for Essential Services to Nominated Indigenous Communities between the government and Indigenous Essential Services Pty Ltd. Funding for service delivery is provided under this agreement. Essential infrastructure assets are upgraded and maintained on a continuous basis within the funding provided. Both the Territory and Australian governments have committed substantial funding to support essential services in Aboriginal communities.

- **Further develop tourism drives, such as Savannah Way and Outback Way, and a Plenty Highway trail**

The Transport and Logistics sector of the Plan is supporting the development of these roads.

- **Revitalise the Alice Springs and Katherine CBDs**

Reactivate the Alice Springs CBD through options for inner city living

Revitalisation of the Katherine and Alice Springs CBDs will be undertaken, as detailed in the Art, Culture and Active Recreation sector.

- **Establish a Mining Hall of Fame in Tennant Creek**

The Department of Tourism and Culture supports the Battery Hill Mining Centre in Tennant Creek. The Department is working with the Centre to strengthen tourism outcomes.

- **Revitalise wayside inns and the CBDs of Timber Creek and Pine Creek**

Wayside Inns are eligible to apply for Department of Tourism and Culture grants to improve their visitor experience.

- **Implement the Gove Port Industry Development Strategy to drive fisheries, transport and logistics, marine services and tourism sector growth**

Nhulunbuy Port upgrades have been identified in the Plan within the Transport and Logistics sector. A project control group, led by the Department of the Chief Minister, has been established to develop the project.

- **Develop a co-op fabric printing factory for Aboriginal arts groups**

The Art, Culture and Active Recreation sector is supporting enhancement of community art galleries, art centres, museums, libraries and meeting places.

- **Develop a 'smart' and sustainable Aboriginal community supporting renewable energy, water, waste management, and smart lighting technology**

This idea captures a strategic project concept that Power and Water Corporation is developing to obtain funding to pursue. The 'smart community concept' may include smart metering, demand management, solar, integrated water and power control system infrastructure.



Agribusiness, Fisheries and Aquaculture

- **Improve infrastructure and supply chain for the cattle and buffalo industry**

This idea will be addressed in the Territory-Wide Logistics Master Plan, which is in development.

- **Increase cold transport storage options for the rail and port**

This idea will be addressed in the Agribusiness, Fisheries and Aquaculture sector and the Land Use and Infrastructure Planning cross sector as part of the inland port development project.

- **Develop a milling and refractant drying plant to process native products**

A detailed bush foods industry demand and supply analysis has been commissioned to help identify strategic development opportunities.

- **Construct an abattoir in Central Australia for the camel industry and donkey farming**

The Wamboden abattoir (north of Alice Springs) is being leased and upgraded to export standard to process donkeys and camels.

- **Establish an agricultural hub, land port and regional hub at Ti Tree**

Ti Tree Transport and Horticultural Hub has been identified in the Transport and Logistics sector of the Plan.

- **Construct a new fish handling facility at the Duck Pond in Frances Bay, Darwin**

The Plan identifies major upgrades at Frances Bay Mooring Basin in Integrated Land Use and Infrastructure Planning cross sector.

CONSULTATION: INFRASTRUCTURE IDEAS



Tourism

• Build more five star hotels

The Plan identifies a luxury hotel at the Waterfront Precinct. Construction of the new Westin luxury hotel at the Darwin Waterfront could potentially begin this dry season, with the hotel ready to open late 2020 or early 2021. Private consortiums have expressed interest in further developments.

• Develop the Alcoota fossil bed site

The Northern Territory Government has committed \$1.5 million to create a Megafauna Display Centre in the Todd Street Mall to showcase Central Australia's unique fossil heritage. The project is being delivered by the Department of Infrastructure, Planning and Logistics, on behalf of the Department of Tourism and Culture. The collection at Araluen Arts Centre will be relocated to this facility, during 2018–19.

• Support cruise ship home berth terminal

Upgrade cruise ship terminal to enable two ships to berth

Darwin Port has undertaken initial concept designs, and tested those designs, in ship handling simulations. Darwin Port is now undertaking work to determine the best approach to deliver the required facilities to service the emerging cruise ship requirements. The Department of Tourism and Culture continues activities to attract home berth ships within current capacity, (e.g. Ponant's L' Austral home ported in 2017), and turn-around servicing for larger cruise ships (e.g. Voyager of the Seas visit in April 2018).

• Construct an iconic water park in Darwin

An expression of interest followed Pico Play's completion of a detailed business case for the Darwin Water Theme Park. This project has previously been identified by Tourism NT as a key gap in the tourism product for Darwin and the Territory. The project aims to: improve the liveability of Darwin by providing a large scale family attraction and event destination; add to Darwin's competitive tourism strengths by providing a significant reason to visit and stay longer in the city; stimulate and support the local economy by attracting major investment and create substantial and enduring employment opportunities. The project is listed in the Tourism sector.

• Redevelop the old Darwin Hospital site

The old Darwin Hospital site, at Myilly Point, is an important link between the CBD, the Gardens and Mindil Beach. During the consultation process there was community support for a children's playground and landscaping improvements. Any longer-term plans for the remainder of the site will be developed with the community, including traditional owners and representatives of the Stolen Generation. This includes ensuring the history of the site is recognised.

• Improve connectivity between Cullen Bay, the Darwin Waterfront, Cruise Ship terminal, Smith Street Mall, Esplanade and Frances Bay

The Department of Infrastructure, Planning and Logistics is developing concepts for improved connectivity between the CBD and its peripheral areas.

• Create a tropical entrance to highlight our tropical climate

This will be undertaken as part of Barneson Boulevard and the Bagot Road Landscaping project.

• Construct Stage 2 for the Darwin Convention Centre

The convention centre expansion has been identified as a long term project.

• Improve wet season access to the south Kakadu National Park entry point

This is being considered in the Territory-Wide Logistics Master Plan. The tourism industry is invited to contribute to developing the Territory-Wide Logistics Master Plan.

• Develop a North Australian Rail Trail

Develop trails for tourists visiting the Darwin CBD

Develop a Rail Trail from Batchelor to Adelaide River (culture and heritage sites)

Develop a train journey from Adelaide River Rail Station to Snake Creek siding (culture and heritage sites)

Within the Tourism sector, these projects could be developed as either walking/cycling trails, then further developed to include a rail journey. The cost of a railway loop development (new or extensively restore the old railway), is likely to be over \$50 million (based on costs of the Tasmanian Strahan to Queenstown railway). Land tenure, tour operation and further investment in the cultural and heritage sites along such a trail need to be reviewed.

• Create a Darwin CBD lookout tower with 360 degree views

Darwin's position within the harbour is highly suited to a lookout tower that would provide panoramic views. This is an opportunity for a private sector developer or an existing building owner to incorporate a 360 degree viewing deck at the top of a new or refurbished building.

• Develop Frances Bay with a Fish Market and marina

The Plan identifies major upgrades at Frances Bay Mooring Basin in Integrated Land Use and Infrastructure Planning cross sector.

The Territory Planning Commission is preparing the Central Darwin Area Plan, which includes Frances Bay, to plan for the future of the area.

• Create destination resorts in Litchfield and Darwin

The Plan identifies a resort in or around Litchfield National Park. The private sector is encouraged to discuss their interest in developing a resort with the Department of Tourism and Culture.

• Develop infrastructure to support year round viewing at Jim Jim Falls

Achieving a year round viewing platform at Jim Jim requires support of the Board of Management of Kakadu National Park and the Traditional Owners of the area. The Australian Government is responsible for Kakadu National Park, which is managed by Parks Australia.

• Create tourism accommodation precincts from excess housing at Gove

Nhulunbuy has experienced strong population growth and housing demand over the past three years. All the 250 housing assets offered to Developing East Arnhem Limited by Rio Tinto during the refinery curtailment have been leased or committed and there is a housing shortage for industry and government needs. This project may become viable in the future as mining transitions to a diversified economy over the coming 10 years.

• Support private sector efforts to increase accommodation options for tourists visiting the Gove Peninsula and East Arnhem

The Department of Tourism and Culture provides various grant programs to achieve more accommodation in the region. In recent years funding was provided for a homeland visitor amenities project at Port Bradshaw, Dhuluwuy Bay campsite visitor amenities and six new accommodation units at Yirrkala. Funding was also provided to Outback Spirit to upgrade accommodation in Arnhem Land, to Lorella Springs, Seven Emu Station, Banubanu, Arnhem Land Coastal Camp and to upgrade the Urapunga Homestead. The private sector is encouraged to apply for the grants available.

• Develop a Gove Port Tourism Hub, including cruise ships, recreational fishing, leisure craft facilities

Nhulunbuy Port upgrades have been identified in the Plan within the Transport and Logistics sector. A project control group, led by the Department of the Chief Minister has been established to develop the project.

CONSULTATION: INFRASTRUCTURE IDEAS



Energy and Minerals

- **Develop a Centre of Excellence for mine rehabilitation**

The Department of Primary Industry and Resources is developing a strategy to inform future priorities.

- **Develop a centralised gold milling facility at Tennant Creek for use by explorers, small mines and prospectors**

Government is focussed on attracting private sector investment to progress mineral processing in Tennant Creek. The project has been identified in the Energy and Minerals sector.

- **Tennant Creek should become a mining service and supply chain**

A number of initiatives are underway to boost the presence of the mining industry in Tennant Creek, leading to increased investment, population growth and developing service and supply opportunities. These include investment in remediation of legacy mines, geoscientific programs to identify new mineral resources and potential private sector investment in ore treatment and milling.



Education and Training

- **Develop an Environmental Services Centre of Excellence**

Government is continuing to explore the Centre's feasibility and discussions remain ongoing between key stakeholders.

- **Develop an international standard tertiary education precinct and student accommodation precinct**

Charles Darwin University is developing a strategy for this action: <http://www.cdu.edu.au/sites/default/files/strategic-plan.pdf>

- **Establish a co-branded Charles Darwin University and other university education and research precinct**

Charles Darwin University has a number of partners, such as, Australasian Water Partnership and Menzies Research, for this purpose. CDU already partner with other universities to expand education outcomes such as Flinders University for Medicine, and the University of Bergen in Norway.

- **Share infrastructure and resources between the Charles Darwin University and the Northern Territory Government**

Government is engaging with Charles Darwin University to use their research expertise.

- **Establish another middle school in Darwin**

There are four government middle schools in the Darwin area, providing for more than 3100 students at optimal operating capacity. There are approximately 1900 students attending these schools. A number of non-government schools provide middle years educational options for parents and children in this age group. The Department of Education will continue to monitor and evaluate current and projected population and demographic trends to plan for a new middle school as and when the need arises.

- **Construct a quality boarding facility in Darwin**

The Haileybury Rendall School have commenced upgrading its boarding facilities. International boarding facilities are being considered by government.



Defence and Related Industries

- **Department of Defence to rehabilitate and hand back to the Territory at no cost the old Darwin Navy Tank Farm**

The Department of Infrastructure, Planning and Logistics is in discussions with the Department of Defence regarding acquisition of the old Darwin Navy Tank Farm site. There is no commitment from Defence to rehabilitate nor gift the site.



Electricity

- **Develop an innovative approach to solar for pumping and desalination**

Power and Water Corporation maintains a watching brief on this idea and regularly undertakes analysis of new technologies to reduce the cost of service provision.

- **Develop infrastructure to support renewable energy**
Develop multi-generational power supply and transmission

The Department of the Chief Minister is leading the development of an implementation plan to achieve the Renewable Energy 50% by 2030 Target. This includes considering infrastructure required to support renewable energy.

- **Improve reliability of electricity infrastructure**

Power and Water Corporation's networks are regulated to maintain network reliability and security in accordance with regulated standards. If there is an issue with those standards not being met, Power and Water Corporation works to rectify the issue. Similarly, generators are regulated to maintain reliability and security in accordance with prescribed standards and are directed to rectify any issues when they arise.

- **Develop a large scale solar facility in Alice Springs**

The Department of the Chief Minister is leading the development of an implementation plan to achieve the Renewable Energy 50% by 2030 Target. Any large scale solar development in Alice Springs would need to consider system security and integrity issues that need to be carefully managed as the solar contribution to supply is already high.

- **Build a power station in Central Australia to provide baseline power to other jurisdictions**

This project is not considered to be economically feasible at this time.

- **Extend the existing power line from Timber Creek to the Ord Hydro Power Station**

This project is not considered to be economically feasible at this time.

- **Work with regional stakeholders to provide a long term sustainable and expandable power supply for Gove Peninsula**

Power and Water Corporation welcomes the opportunity to work with stakeholders on a plan for the long term supply of electricity to Gove Peninsula.



Water

- **Increase dams and water supply infrastructure**

The Northern Territory Government, through the Power and Water Corporation, is undertaking work associated with the development of new water sources to support the urban water supply in Greater Darwin. It is a priority of government to continue to work with the Australian Government and private sector to progress the eventual expansion of the water supply to permit greater use of water to support the development of high-value agricultural products and alleviate impacts of groundwater extraction on residential users.

- **Demonstrate desalination of low quality water with solar energy**

Desalination of low quality water with solar energy using evaporation is technically possible and has been thoroughly demonstrated. Unfortunately, this technique is not yet economical on a utility scale in the Territory at this time.

- **Improve water supply in remote communities and provide a permanent mains water supply for Wagait**

Currently there is a low customer base in Wagait and on a commercial basis the revenue available from supplying water to customers would not cover the cost of headworks infrastructure to provide a reticulated supply. This has been identified as a long term project.

CONSULTATION: INFRASTRUCTURE IDEAS



Water (continued)

• Lake development on the northern outskirts in Tennant Creek with adjacent parkland

The hydrology (constrained water supply), topography, climate (evaporation rate) and cost of ground water extraction in Tennant Creek are obstacles to implement this idea at this time.



Transport and Logistics

• Make Darwin the Australian port of call and develop a crane that can lift a stack of containers instead of a single lift

Darwin Port services three international container shipping lines, with three existing mobile harbour cranes available to load and unload freight. At this time, lifts of multi-stack containers are not undertaken as part of normal containership operations elsewhere in the world.

• Research appropriate corridor for rail between Mt Isa and Tennant Creek and consider rail through to Port Hedland

The Mount Isa to Tennant Creek railway is already in the 10 Year Infrastructure Plan and is the focus for extending the Territory rail network. A rail spur line to northern Western Australia is considered a longer term prospect for development as activity grows in the region.

The Northern Territory, Queensland, and Australian governments have jointly funded preliminary investigations into the Mount Isa to Tennant Creek Railway through two work streams: a Strategic Options Paper to consider options to advance the railway, and a Technical Assessment Program to investigate and address engineering and environmental issues with developing the railway and establish a cost envelope for consideration.

The project is at an early phase in the development process, with a range of commercial and technical issues to be resolved before it is developed.

• Continue to seal and upgrade our roads, including the Tanami, Central Arnhem and key Beef Roads – Buntine, Tablelands and Carpentaria Highways

These key roads and highways have been identified within the Transport and Logistics sector of the Plan – works are underway.

• Improve river and floodplain crossing for Darwin/Alice Springs rail line

An enhanced weather warning system, which captures stream level details along the entire route, has been installed to prevent any significant impact of a future 1 in 500 flood event.

• Complete Mereenie and Litchfield loop roads

The Mereenie Inner Loop has been completed. Work on the Litchfield Park Road will begin construction in the 2018 dry season.

• Upgrade Arnhem Highway to all weather access

Upgrading the Arnhem Highway to all weather access has been identified within the Transport and Logistics sector of the Plan. A project to address the Adelaide River Floodplain is underway, with ground improvement works scheduled to commence in the 2018 dry season.

• Locate ferry terminals at the Darwin Waterfront and Palmerston

The Northern Territory Government is currently undertaking a feasibility study. However, the need for these terminals is not likely within the next 10 years.

• Dredge and widen Charles Point Patches to guarantee long term all tide access

Charles Point was dredged in 2013 to provide all tide access for vessels that regularly visit Darwin. Maintenance dredging is

scheduled for the 2018–19 financial year.

• Bridge the Elizabeth River, Darwin River and Fly Creek

Litchfield Council has identified each of these projects in the Plan, within the Transport and Logistics sector.

• Develop a new port at Gunn Point that could cater for navy fleet base ships

The Department of Defence has announced a \$500 million investment at Larrakeyah Barracks, including facilities to support northern naval operations.



Public Safety and Justice

• Increase the number of shelters for victims of domestic violence

Recommendations from the Royal Commission will be included in the Plan within the Public Safety and Justice sector.

• Build a new police facility at Milingimbi that will accommodate four police officers and provide one visiting officers' quarters.

The Plan review identifies a new police complex at Milingimbi to provide a permanent police presence and improve the coastal marine search and rescue network.



Health

• Investigate opportunities to establish research hubs in regional and remote locations

Developing research hubs in remote and regional locations could provide potential benefit to a range of institutes, service providers and community across a number of fields. Baker IDI, Menzies School of Health and Flinders University, through the Poche Centre for Indigenous Health and Wellbeing, operate in regional and remote areas of the Territory. The Department of Health is undertaking an intellectual property landscape review of the opportunity to develop an industry development plan for tropical health and research.

• Build a new hospital in Katherine with a Medical Centre of Excellence

The need for a new Katherine Hospital and associated services will be considered during development of the NT Health Infrastructure Plan, which will prioritise investment recommendations according to forecast clinical needs and infrastructure capabilities.

• Develop a regional health training hub in North East Arnhem to support Aboriginal employment in health, aged care and disability services

The Department of Health and Top End Health Service, have funded a pilot training program in Wadeye for Aboriginal staff. Developing further programs depends on resource availability.



Housing

• Identify a rolling 15-25 year land supply program to meet housing demand and identify adequate zoning and servicing

The 'Planning for a Vibrant Future' process is underway to provide a framework for infrastructure investment and managing sustainable and orderly growth. This process will establish the location and scale of future infrastructure requirements to support communities in an orderly sequence, and at a scale which generates the required economic viability for services, local jobs and supporting infrastructure.

• Make housing more affordable through tropical designed houses that don't need airconditioning

Energy efficiency initiatives are available and encouraged. Government will review the Building Codes to further strengthen and enable innovative tropical design.

CONSULTATION: INFRASTRUCTURE IDEAS

- **Develop a lifestyle village in Alice Springs**

A senior lifestyle resort is being actively progressed by the Department of Trade, Business and Innovation.

- **Develop aged accommodation in Batchelor and the Litchfield municipality**

Senior lifestyle resort projects are being actively progressed by the Department of Trade, Business and Innovation in Darwin and the Darwin rural areas.



Art, Culture and Active Recreation

- **Develop creative industry hubs in affordable shop-house style buildings**

This will be assessed at a future point in time.

- **Develop a second oval in Alice Springs to attract high performance athletes to train**

A new facility, including two ovals, is being considered to enable the potential redevelopment and re-purposing of Anzac Oval.

- **Extend existing mountain bike trails to connect the network**

The Department of Tourism and Culture has allocated \$12 million from the record \$103 million plan to Turbocharge Tourism to open up new adventure cycling tracks in the Alice Springs Region. The Red Centre Adventure Ride will provide more than 200 kilometres of tracks and will link the Alice Springs Desert Park to Glen Helen in Tjoritja/West MacDonnell National Park, creating a unique trail adventure for riders of all skill levels.

- **Develop a new drag strip in Alice Springs**

The existing drag strip has had investment over the past few years to improve the venue standard. Further enhancements can be applied for through the Department of Tourism and Culture grant processes.

- **Expand use of the Hidden Valley Motor Sports Complex**

The Motor Sports NT Strategic Plan provides information on the planned direction and future use.

- **Revitalise Mindil Beach and Bullocky Point**

Activate Vestey's Beach with a swimming pool and family friendly area

Surveys at Vestey's Reserve were conducted in 2006 and 2011. At the time, development of the Vestey's site met community opposition. Any future development must be in line with the current public open space and Vestey's Reserve be available to the community at all times. This area is managed by City of Darwin and consultation with the public may be undertaken in the future. Vestey's and Mindil Beach Reserves are subject to storm-surge, therefore any future infrastructure development is also limited to environmental considerations.

- **Construct a multi-purpose stadium on the Tank Farm site**

The Department of Infrastructure, Planning and Logistics is in discussions with the Department of Defence regarding the acquisition of the old Darwin Navy Tank Farm site, however there is currently no commitment from Defence to rehabilitate nor gift the site.

- **Continue a bike path network between Howard Springs, Coolalinga and Humpty Doo**

This project has been identified within the base data of the Plan. It is published within the Territory Wide project programs including strengthening and widening, Black Spot, road safety initiatives, landscaping and cycle paths, within the Transport and Logistics sector.

- **Move the Territory Wildlife Park adjacent to the CBD**

The NT Government has committed to developing a Territory Wildlife Park 10 year Master Plan, providing a road map for the future development of the Park.

- **Develop a sea side festival park**

Planning for the Darwin CBD revitalisation involves enhanced greenspace for festivals and events.

- **Construct a Singapore Tree type feature at Darwin Botanic Gardens or old Hospital site**

The Northern Territory Government has committed \$9.8 million to improve the visitor facilities at the Darwin Botanic Gardens, with the first stage of this funding providing an Integrated Visitor Facility. The remainder of the funding will provide for expanded visitor experiences with lessons learnt from the Singapore Marina Bay Sands projects.

- **Develop eco-style accommodation in Parks**

The Department of Tourism and Culture consults with stakeholders including land councils and Traditional Owners to identify opportunities and appropriate areas of land within the park estate suitable for eco-style accommodation.

- **Develop a Cultural Precinct at the Darwin Waterfront**

The Department of Trade, Business and Innovation is supporting the Larrakia Development Corporation to develop a Larrakia Community Cultural Centre near the Waterfront precinct.



Digital

- **Proposed optical fibre link from Guam to Darwin for high speed internet access**

The strategic need for the project is driven by the potential for US Defence to require secure fibre-optic communication links with Darwin. Should this occur, there may be opportunities for private operators to develop capacity on a commercial basis.

- **Trial telehealth models and develop to export systems**

All Northern Territory Government hospitals and remote health centres have telehealth equipment installed. Technical capacity depends on available data bandwidths. Workforce training in equipment use and developing telehealth clinical pathways is ongoing.

- **Improve internet and mobile coverage outside populated areas of the Northern Territory**

This project is being progressed through a Telstra/NT Infrastructure and Sustainability Co-investment Agreement.

- **Operate the new Palmerston Regional Hospital as a fully digital model (electronic health records)**

Electronic medical records will be phased in at Palmerston Regional Hospital, and all other government health and hospital facilities, as the Core Clinical Systems Renewal Program is rolled out across all Northern Territory Government health services.

- **Maintain shortwave radio which is critical for regional and remote communities**

Despite representations from the NT Government, the ABC is not reinstating its shortwave radio service in the NT. The Senate Standing Committee on Environment and Communications has recommended that the proposed Bill to Restore the ABC Shortwave Radio Service not proceed.

- **Develop an Information Technology Data Centre for the backup and storage of other jurisdiction's core information**

Several factors make this project difficult to consider for the Territory, including the impact of weather events and communications connectivity vulnerabilities with southern states.

Cross Sector: Integrated Land Use and Infrastructure Planning



Strategic land use planning sets the direction for sustainable and orderly building and development to support the Northern Territory's continual growth.

Strategic land use plans guide the location and scale of infrastructure required, based on where people live, work and play.

The Northern Territory Planning Commission is an advisory body to the Minister for Infrastructure, Planning and Logistics, and under the *Planning Act*, is responsible for preparing Integrated Strategic Land Use Plans in the Territory. These plans outline how land should be used and developed now, and in the future. As part of the Integrated Strategic Land Use Plan, the *Planning Act* enables the Planning Commission to identify:

- transport corridors
- utility corridors and sites for essential service facilities
- other public and social infrastructure sites.

It is essential that these are considered, as land use often drives the demand for transport, utility and social infrastructure.

The *Planning Act* mandates that the Planning Commission consult with the community and industry to ensure their needs are factored into Integrated Strategic Land Use Plans.

Integrated land use and infrastructure planning unlocks land so enabling infrastructure can

be built to support commercial, industrial or residential land releases to provide housing and services, such as schools, hospitals, police stations and commercial centres.

To diversify and develop our economy, adequate time for land capability assessment, and land and infrastructure planning is critical to ensure the Territory is prepared for population growth. Without a steady supply of development ready land to meet the needs of the community and industry, the cost of living increases and economic development opportunities are lost to interstate competitors.

Investment in land use and infrastructure planning at the Regional, Sub-regional and District level underpins our future development and provides investment certainty by:

- identifying and planning for future growth areas such as at Weddell and Cox Peninsula
- supporting the implementation of land use plans by building critical headwork infrastructure to support development
- providing serviced land to meet the community and industry's need for commercial, industrial and residential land.

PRIORITY PROJECTS

Developing integrated land use and infrastructure plans across the Territory, including:

- Gunn/Glyde Point Sub-regional Land Use Plan
- Katherine East Area Plan
- Darwin Northern Suburbs Area Plan
- Darwin Employment Area Plan (along Stuart Highway)
- Weddell Sub-regional Land Use Plan

Delivering development projects across the Territory, including:

- Berrimah Transport Industry Precinct
- Katherine Logistics and Agribusiness Hub
- Katherine East Neighbourhood Centre
- Alice Springs Brewer Estate General Industry Precinct
- Berrimah North trunk infrastructure headworks
- Kalkarindji commercial and industrial developments
- Palmerston Health Precinct and Holtze residential area.

Key objectives

Coordinate land and enabling infrastructure planning to support sustainable and orderly development.

Provide creative and innovative infrastructure delivery options that demonstrate value for money and encourage private sector investment.

Deliver land to meet residential, commercial and industrial demand to support sustainable economic development.

Deliver an ongoing program of investment in infrastructure to service land to ensure development ready land is available in advance of acute demand.

Ensure effective management of natural resources for sustainable development and protect the Northern Territory's unique natural, heritage and cultural assets.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Territory Wide										
Support the development of land - planning - concept development - detailed design		✓		✓	55	4	5	•	•	  Support population growth
Land servicing for NT Police, Fire and Emergency Services		✓			14	4	1	•	•	  Upgrade site services to meet current standards
Regional waste management and recycling facilities	✓	✓	✓	✓	•		•	•		  Support improved waste management and recycling processes
Remote Indigenous Housing Land Servicing		✓			•	63	29	•	•	  Support land development and release to provide housing for a growing population and improving health outcomes
Central Australia										
Alice Springs - new infrastructure to mitigate flooding		✓			31	1		•	•	  Improve community safety and reduce the damage, disruption and costs associated with major flood events
Mt Johns Valley Area Plan - infrastructure plan and delivery		✓		✓	20			•	•	  Support population growth
Brewer Estate General Industry Development		✓			16			•	•	  Enable economic development
Arlparra - subdivision and community infrastructure	✓				16	10	6			  Support land development and release to provide housing for a growing population and improving health outcomes
Larapinta Area Plan - infrastructure plan and delivery		✓		✓	11				•	  Support population growth
Kilgariff Area Plan - infrastructure plan and delivery		✓		✓	10	1		•	•	  Support population growth
Ti-Tree land development		✓		✓	4			•		  Support population growth
Arumbera General Industry Subdivision	✓	✓			•				•	  Economic sustainability within remote communities






A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Barkly Region										
Tennant Creek Area Plan infrastructure plan and delivery - industrial - residential		✓		✓	12				•	  Support population growth
Elliott land development		✓		✓	4				•	  Support population growth
Katherine Region										
Katherine Logistics and Agribusiness hub (inland port) ^	✓	✓		✓	30+		30	•	•	  Support development of Katherine as an inland port
Katherine Region - new infrastructure to mitigate flooding		✓			25	10		•	•	  Improve community safety and reduce the damage, disruption and costs associated with major flood events
Katherine East Residential Area Plan - infrastructure plan and delivery	✓	✓	✓		22			•		  Support population growth
Katherine East Industrial Area Plan - infrastructure plan and delivery		✓		✓	10			•	•	  Enable economic development
Land development - Mataranka - Timber Creek - Pine Creek	✓	✓			10				•	  Support population growth
Borroloola - regional town development		✓		✓	7	3				  Support population growth
Kalkarindji commercial / industrial land development		✓		✓	4		4	•		  Support population growth
East Arnhem										
Numbulwar residential and community subdivision			✓		•			•		  Enable population growth
Top End Rural										
Batchelor Airport - provide serviced commercial allotments	✓	✓	✓		10	1	1	•	•	  Local economic development, satisfy existing and future industry demand
Infrastructure planning - Cox Peninsula - Weddell		✓		✓	•		•	•	•	  Enable population growth

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Palmerston and Litchfield										
The Heights Durack				✓	160	9	7	•	•	  Support population growth
Zuccoli Village - Stage 1 - a joint venture with a private developer to deliver lots for sale		✓		✓	80	10	10	•	•	  Support population growth
Zuccoli Mitchell Creek Green - Stage 2				✓	•	•	•	•	•	  Support population growth
Zuccoli Aspire - Stage 3, 4 and 5 - 1180 lots - neighbourhood centre				✓	150	20	20	•	•	  Support population growth
Infrastructure plan and delivery - Coolalinga - Howard Springs		✓		✓	42			•	•	  Support population growth
Holtze Area Plan - infrastructure plan and delivery		✓		✓	38			•	•	  Support population growth
Middle Arm Industrial Precinct		✓		✓	22			•	•	  Enable economic development
Defence Support Hub		✓			18	4		•	•	  Enable economic development
Palmerston East - headworks		✓		✓	8	8	•			  Support population growth
Palmerston/Litchfield Region - new infrastructure to mitigate flooding		✓			3	3				  Improve community safety and reduce the damage, disruption and costs associated with major flood events
Farrar West - future residential subdivision				✓	•		•	•		  Support population growth



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Darwin										
Transport Industry Precinct - a joint venture with a private developer to deliver lots for sale		✓		✓	115	9		•	•	 Enable economic development
East Arm (Marine Industry Park)	✓	✓		✓	100+	8		•	•	 Enable economic development
Berrimah North Area Plan - infrastructure plan and delivery		✓		✓	35	4	4	•	•	 Support population growth
Shoal Bay Waste Disposal Site - regional waste management			✓		31	5	5	•	•	 Support population growth
Frances Bay Mooring Basin upgrade		✓			30			•		 Support economic growth and improve safety
Darwin Inner Suburbs Area Plan - infrastructure plan and delivery		✓		✓	30			•	•	 Support population growth
Darwin Region - new infrastructure to mitigate flooding		✓			22	14	•			 Improve community safety and reduce the damage, disruption and costs associated with major flood events
Stormwater upgrades			✓		20	2	2	•	•	 Improve community safety and reduce the damage, disruption and costs associated with stormwater issues
Headworks infrastructure to support Westin luxury hotel at the Darwin Waterfront		✓		✓	10	10				 Enable economic development
Upgrade Kitchener Drive drainage system		✓		✓	5		2	•		 Improve safety and reduce the damage, disruption and costs associated with flood events
Extension of Ludmilla Creek and Kulaluk trunk drains		✓			3	3				 Improve safety and reduce the damage, disruption and costs associated with major flood events
Coastal Foreshore Erosion Mitigation			✓		2	1		•		 Mitigate and protect areas of the Darwin foreshore from erosion

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Darwin										
Greater Darwin Regional Waste Management Facility		✓	✓		•			•	•	 Support population growth
Northcrest Berrimah - headworks				✓	•	•	•	•		 Support population growth
Northcrest Berrimah - new residential subdivision - neighbourhood centre - school				✓	•	•	•	•	•	 Support population growth
Lee Point residential subdivision	✓			✓	•			•	•	 Support population growth
Muirhead stage 7 - Breezes - 1150 lots				✓	•	•				 Infrastructure to support suburban development



Agribusiness, Fisheries and Aquaculture



The Northern Territory boasts a wide range of primary industries – from traditional cattle and crops, to niche products from crocodiles farming and seafood harvest.

Our primary industries create jobs, link tourism interests and connect our Aboriginal communities.

Cattle production is our major agribusiness industry followed by horticulture crops, including mangoes and melons.

Recreational fishing contributes significantly to the economy, while commercial fisheries include barramundi, snapper, mud crab, prawns and trepang. The Territory now hosts the largest aquaculture barramundi farm in Australia and produces a diverse range of other aquaculture products.

Our large pastoral estate and Aboriginal land offer opportunities to diversify land use, where welcomed by land managers. Diversification requires access to suitable soils, water and transport infrastructure to enable reliable supply chains.

With a large land mass and dispersed production areas, the supply chain is challenged by long distance, cold store handling and capacity. Transport of agri-food products relies heavily on road transport to southern and eastern markets, and meat processing infrastructure in the Top End.

Our proximity to markets in Asia presents the opportunity to export fresh and frozen food and grow our live cattle export to Indonesia and South East Asia.

Improved telecommunications will support the implementation of on-farm technology, resulting in increased productivity and profitability.

Expanding the facilities at Darwin Port and developing a logistics hub in Katherine improves our capacity to transport products efficiently to market. Investment is needed to:

- develop the Katherine Logistics and Agribusiness Hub
- maintain and improve the regional road network to facilitate all-weather access
- develop processing, cold chain infrastructure and logistics support for key agricultural industries, particularly for mangoes, other fruit, fish and seafood.

PRIORITY PROJECTS

- **Katherine Logistics and Agribusiness Hub**
Create a hub to support the growth of agribusiness and logistics industries in the region.
- **Wildman River Agricultural Precinct**
Assess the potential to develop good quality agricultural land close to Darwin.
- **Gunn Point Precinct** – Develop a master plan to support planned aquaculture and agricultural development.

Key objectives

Work to establish a flourishing economy underpinned by profitable and sustainable resource-based industries.

Achieve optimal sustainable use of the Northern Territory's natural resources.

Work with our partners to stimulate and sustain agribusiness throughout the Territory.

Minimise establishment of exotic pests and diseases with an integrated biosecurity system that involves the community.

Increase the engagement of the regional Northern Territory workforce in primary industries.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Funding (\$m)		Indicative Sequencing		Key Drivers
	AG	NTG	LG	PRIV		2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Central Australia										
Provide infrastructure, including roads, to encourage horticulture development at Deep Well Station		✓		✓	40				•	 Support development of a horticultural industry
Arid Zone Research Institute (AZRI) - replace chiller and boiler - solar desalination for irrigation		✓		✓	3	1			•	 Provide a sustainable, reliable and fit for purpose water supply for horticultural research crops
Establish a joint bush foods and horticultural packing facility and cool rooms in Alice Springs		✓		✓	2				•	 Enable development of the bush food industry
Katherine Region										
Katherine Logistics and Agribusiness hub (inland port)^		✓		✓	30+		30	•	•	 Enable agribusiness, fisheries and aquaculture supply chains, processing and transport
East Arnhem										
Nhulunbuy Port - upgrades^		✓		✓	17+	2	•		•	 Enable long term economic growth
Top End Rural										
Project Sea Dragon - aquaculture farm for Legune Station	✓	✓		✓	2100	•	•	•		 Enable long term economic growth
Humpty Doo Barramundi farm expansion				✓	60	•	•	•		 Further develop and expand the fisheries export industry
Wildman River Agricultural Precinct – develop roads, three phase power and telecommunications		✓		✓	20				•	 Enable long term economic growth should land and water be sustainable
Tiwi Islands - develop greenfield sites for aquaculture, agriculture, tourism and industrial purposes		✓		✓	•			•	•	 Support the development of local industry and create a sustainable economy
Darwin										
Northern Territory Government Research Precinct - Berrimah Farm	✓	✓	✓	✓	34	19	•			 Increase research capacity and capability in the Territory
Darwin International Airport – Airport Freight, Cold Storage and Education Hub	✓			✓	11		11	•		 Enable long term economic growth by expanding export opportunities
Fisheries NT - offsite accommodation fitout		✓			3	2				 Improve service delivery
Berrimah Export Yards upgrade		✓		✓	•	1			•	 Further develop the livestock export industry
East Arm Logistics Precinct				✓	•	•	•			 Enable further economic development

A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.



Tourism is a driving force behind the Northern Territory's economy with holiday makers attracted to our natural landscapes, rich culture and unique visitor experiences.

Key enablers to support tourism include increasing aviation and road transport access, improving accommodation options, tourism products and infrastructure, which results in increasing the availability for job-ready Territorians.

Continued investment in infrastructure is essential to match the expectations of modern travellers, particularly markets like China.

The Territory can become Australia's leading centre for Aboriginal art and culture, with an National Indigenous Art Gallery in Alice Springs and a National Iconic Arts Trail linking art galleries across the Territory.

A new luxury hotel in Darwin will attract an international luxury visitor market and more short term commercial accommodation developments will increase room numbers Territory-wide.

A direct international air route from China to the Northern Territory commenced in May 2018.

In February 2018 the Northern Territory Government announced a record \$103 million Turbocharging Tourism stimulus package to attract more visitors and create local jobs, including an additional \$56.24 million for new tourism infrastructure.

Investment in infrastructure is crucial to support tourism by:





- considering visitor access in transport planning
- supporting the growth of sustainable cruise ship and aviation services
- ensuring accommodation supports and attracts growth in visitor demand
- supporting major and regional events and festivals to increase visitors and create jobs in local and regional communities.

PRIORITY PROJECTS

- **National Aboriginal Art Gallery** – in Alice Springs to house a national Aboriginal art collection.
- **National Indigenous Cultural Centre** – in Alice Springs.
- **National Iconic Arts Trail** – create a world-class arts trail linking Aboriginal arts and cultural centres – Katherine, Tennant Creek, Arnhem Land, regional and remote galleries.
- **Darwin CBD Revitalisation** – redevelop State Square, greening/cooling initiatives.
- **Westin Luxury Hotel** – \$200 million hotel at Darwin Waterfront.
- **Turbocharging Tourism** – \$56.24 million for new tourism infrastructure
 - » Top End – Litchfield Adventure Hub (East Reynolds)
 - » West MacDonnell National Park – adventure cycling track
 - » Nitmiluk National Park – walk/bike trails
 - » Darwin Botanic Gardens – multi-purpose visitor/event centre
 - » Tennant Creek – mining interpretive displays
 - » Hermannsburg Historical Precinct.













Key objectives

Grow tourism value by increasing the Territory's desirability as a travel destination to increase visitor numbers and length of stay.	Address supply constraints in accommodation, facilities and workforce to cater for visitor demand.	Consider visitor access when planning road, port and aviation infrastructure and services.	Improve visitor experience by developing new experiences that reflect the visitor needs, including active recreation.	Grow the visitor economy by building on authentic Aboriginal cultural experiences.
--	---	---	--	---

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Territory Wide										
Parks and Wildlife remote parks - waste management facilities - recycling - shade infrastructure		✓			48	5	5	•		 Improve amenity for community and visitors
Nature Parks - conservation management upgrades		✓		✓	8	4				 Conserve the natural, heritage, cultural, recreational and tourism value in parks
Regional and remote gallery enhancements connecting the National Iconic Arts Trail		✓			6	2	2	•		 Provide opportunity for increased visitor numbers and length of stay in the Territory
Eco-style tourism accommodation in parks				✓	•			•		 Enable further commercial opportunities and enhance visitor experience



A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Central Australia										
National Aboriginal Art Gallery ^	✓	✓			50+		50			 Exhibit and preserve Aboriginal art and culture
National Indigenous Cultural Centre^		✓		✓	20			•		 Exhibit and preserve Aboriginal art and culture
Alice Springs CBD Revitalisation ^ - meeting places - shading and water play area	✓	✓	✓		20	20	•			 Unlock business and industry development opportunities and create a safe and vibrant place for people to enjoy
Alice Springs Telegraph Station visitor experience development		✓			15				•	 Improve amenity for the community and visitors
Alice Springs Desert Park visitor experience development		✓			12			•	•	 Improve amenity for the community and visitors
Tjoritja/West MacDonnell National Park - Red Centre adventure cycling track^		✓			12	12				 Expand tourism product to develop the economy and increase liveability
Central Australia - new five-day walking track^		✓			6	6				 Expand tourism product to develop the economy and increase liveability
Hermannsburg Historical Precinct		✓			3	3				 Expand tourism product to develop the economy and increase liveability
Ellery Creek Big Hole upgrade and seal access road and car park		✓			1			•		 Improve access and the visitor experience
Expand visitor accommodation across the remote regions		✓	✓	✓	•			•		 Promote Aboriginal tourism
Alice Springs Airport - RPT apron improvements - runway 12/30 overlay				✓	•	•				 Improve airport capacity and safety
Alice Springs Tourism/Commercial Development		✓		✓	•	•	•			 Provide additional accommodation and tourism products in Alice Springs

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Barkly Region										
Tennant Creek Art Gallery extensions - connecting the National Iconic Arts Trail^		✓		✓	10	10				 Provide opportunity for increased visitor numbers and length of stay in the Territory 
Tennant Creek – new mining interpretive displays		✓			6	6				 Celebrate the Territory's history by establishing new gold rush and ore mining interpretive displays 
Tennant Creek tourism entry statements		✓			2	2				 Create a sense of place 
Barkly Streetscape Project		✓	✓		1	1				 Improve the visual amenity, lighting and security of Patterson Street 
Katherine Region										
New Riverside hotel		✓		✓	20	•	•	•		 Enable growth in the tourism and corporate markets and increase length of stay 
Nitmiluk National Park - day walking trails - bike trails - visitor experience upgrades		✓			15	8	3	•		 Improve amenity for the community and visitors and increase length of stay 
Katherine Art Gallery extensions - connecting the National Iconic Arts Trail^		✓		✓	10	10				 Provide opportunity for increased visitor numbers and length of stay in the Territory 
Katherine Railway Bridge Function Centre - restaurant - upgrade park surrounds		✓	✓	✓	10		•	•		 Enable economic development and enhanced visitor experience 
Pine Creek tourism facilities and walking trails		✓	✓		6			•	•	 Tourist attraction - potential to increase tourism for travellers 
Revitalise Katherine CBD - Develop green spaces - Wetlands on the Terrace - Cenotaph function site		✓	✓	✓	5	•	•	•	•	 Unlock business and industry development opportunities and create a safe and vibrant place for people to enjoy 
Eley National Park upgrades - shared trails and camping facilities		✓			3			•		 Enhance the visitor experience and increase length of stay in the Territory 
Borroloola combined government centre and tourist centre			✓		2			•		 Attract local and interstate tourists 

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
East Arnhem										
East Arnhem Art Gallery extensions - connecting the National Iconic Arts Trail^		✓		✓	10	10				 Provide opportunity for increased visitor numbers and length of stay in the Territory
Top End Rural										
Jabiru revitalisation	✓	✓		✓	446			•	•	 Exhibit and preserve Aboriginal art and culture, as the gateway to Kakadu
Butterfly George National Park development		✓			8	8				 Expand tourism product to develop the economy and increase liveability
Develop Northern Australian Rail Trail to encounter cultural and heritage sites between Adelaide River, Batchelor and Snake Creek siding		✓			4			•		 Expand tourism product to develop the economy and increase liveability
Garig Gunak Barlu National Park Walking Track		✓			2			•		 Improve accessibility and improve visitor experience in parks
Tiwi Island waterfront and parkland beautification	✓	✓			1	1				 Improve amenity for the community and visitors and increase liveability
Litchfield National Park - East Reynolds new adventure hub - Territory Must Do mountain bike trails - visitor experience upgrades - accommodation resort and transport hub		✓		✓	•	11		•	•	 Expand tourism product to develop the economy and increase liveability
Palmerston and Litchfield										
Territory Wildlife Park infrastructure upgrades		✓			•			•	•	 Improve amenity for the community and visitors



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Darwin										
Construct the Westin luxury hotel at the Darwin Waterfront Precinct		✓		✓	200	•	•			  Enable growth in the tourism, convention and corporate markets
Darwin CBD Revitalisation (part of City Deals*)^ - greening and cooling initiatives - State Square underground car park - connect Darwin Waterfront and Cullen Bay - activate laneways - Art Gallery at State Square - CDU city campus	✓	✓	✓	✓	100+	46	•	•		  Unlock business and industry development opportunities and create a safe and vibrant place for people to enjoy
Darwin Water Theme Park		✓		✓	30-50		•	•		  Develop an international standard water theme park
George Brown Darwin Botanic Gardens.^ - multi-purpose visitor and events centre - new plant display - ephemeral wetland with boardwalk - new entrance and car park		✓			26	5	5	•	•	  Expand tourism product to develop the economy and increase liveability
Larrakia Community Cultural Centre	✓			✓	•			•		  Exhibit and preserve Aboriginal art and culture
Skywalk between new Westin luxury hotel and The Esplanade		✓		✓	•		7	•		  Unlock business and industry development opportunities and create a safe and vibrant place for people to enjoy
Darwin International Airport upgrades				✓	5	•		•		  Improve the efficiency of the International Airport
Bagot Road entry statement and landscaping		✓			3	3				  Create a sense of place
Darwin International Airport Master Plan - light industrial complex - warehousing / logistics precinct - multi-level car park - terminal expansion - taxiway system enhancements				✓	•			•	•	  Respond to growth in the aviation sector

Energy and Minerals

The Northern Territory economy is dominated by the mining and energy resources sector, with several world class mineral resources and significant oil and gas potential.

The Territory has extensive deposits of bauxite, uranium, zinc, lead, copper, phosphate, manganese, gold, silver, diamonds and rare earths, it currently has six major mines and five smaller mines operating with 16 projects in approvals processes and 20 potential mines being evaluated.

The Territory presents opportunities for downstream processing and manufacturing, and moving away from exporting commodities for overseas processing, with a consequent increase in revenue base for the Territory.

The Territory has access to more than 30 trillion cubic feet of offshore gas reserves and large potential onshore oil and gas resources.

In 2016, the Northern Territory Government announced a moratorium on hydraulic fracturing of onshore unconventional gas reservoirs and established an Independent Scientific Inquiry. Following the Inquiry's final report the moratorium was lifted on 17 April 2018, on the basis that it is carefully regulated, adopting and implementing the report's recommendations.

Mining and resources investments in the Territory fluctuate in response to changing global commodity prices. High commodity prices prompt new exploration, while during low commodity price cycles it is hard to attract investment and prices can make producing mines uneconomic.

The mining sector is capital intensive and is heavily reliant on road, rail, port, electricity, water and telecommunications infrastructure. The majority of the Territory's current mines and potential projects are in remote locations. The economics of operating in those remote locations are influenced by factors including that more than 70 per cent of the Territory's

roads are unsealed and the main port infrastructure is in Darwin.

Shorter shipping times due to our proximity to Asia, bulk handling facilities at Darwin Port and the national rail line running the length of the Territory, create an opportunity to expand the mineral and energy sector. Infrastructure expansion through private/public partnerships and investment in port and rail infrastructure will give the energy and mineral sector more cost effective alternatives to road transport. Equally, industry development of pipelines from gas deposits to connect with the Amadeus and/or the Northern gas pipeline is a critical requirement to enable gas export from the fields to gas markets.

A future rail line between Queensland and Tennant Creek, railway sidings near mining activities, and rail spurs to connect regional centres, will provide better access and attract more business and industry development.

The energy and mineral resources sector needs ongoing infrastructure investment to:

- improve rail, road and port infrastructure to improve cost efficiencies and viability
- improve bulk handling infrastructure and expand rail access at the East Arm Port to decrease transport costs
- facilitate major minerals and energy projects and encourage downstream processing of products in the Territory
- establish a supply hub that is critical to develop an onshore gas industry.

For further information on mining developments in the Northern Territory visit www.core.nt.gov.au

PRIORITY PROJECTS

- **New commodity projects** – copper (Jervois), rare earths (Nolans), vanadium and titanium (Mount Peake), salt and salt products (Chandler), and phosphate (Ammaroo).
- **Tennant Creek gold ore common use processing facility** to boost mining operations in the region.

Key objectives

Make the Territory the preferred destination for resource investment and development.

Regulate and administer tenure and land access for exploration, mining and production of minerals and petroleum.

Enhance the Territory's wealth through responsible stewardship of its minerals and energy resources.

Attract local and international business investment partnerships for the mining and resources sector.





























Support economic development and participation for Aboriginal Territorians.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Central Australia										
Nolans Mine - open cut mine, on-site preliminary processing to produce rare earths concentrate for off-site final processing plant				✓	895		•	•		 Meet global demand for minerals
Newmont Tanami - pipeline and power stations - Tanami expansion 2				✓	800+	225		•	•	 Improve reliability of power, while reducing costs and carbon emissions
Chandler Salt Mine - develop underground mine, on-site salt and fertiliser processing plant and underground storage facilities				✓	676			•	•	 Meet global demand for minerals
Mt Peake Mine (stage 1) - develop new open pit mining and processing operation, including mine camp, power station and rail siding				✓	236		•	•		 Meet global demand for minerals
Jervois Mine (KGL Resources Ltd) - re-open old mine with open cut pits, underground mining and on-site processing				✓	190	•	•	•		 Meet global demand for minerals
Mt Peake Mine (stage 2) - mine expansion				✓	136				•	 Expand production to meet global demand for minerals
Molyhil Mine - develop underground mine and on-site processing plant				✓	64			•	•	 Meet global demand for minerals
Central Petroleum Mereenie facilities upgrade				✓	12	•	•			 Improve efficiencies to meet demand
Ti Tree Airstrip upgrade and new terminal supporting Mt Peake Mine		✓		✓	2		•			 Meet global demand for minerals

A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Barkly Region										
Pangaea - Beetaloo Basin development (The NT Way)				✓	1000+			•	•	 Enable economic development
Origin - Beetaloo joint venture development project				✓	1000+			•	•	 Enable economic development
Northern Gas Pipeline between Tennant Creek and Mt Isa				✓	800	•				 Connect the Northern Territory to the east coast gas market
Ammaroo Phosphate Mine (stage 1) - new mine with open cut pits, crushing and processing plant for direct shipping ore				✓	368	•	•			 Meet global demand for minerals
Wonarah Phosphate Mine - Stage 1 - open cut mine and on-site superphosphate processing				✓	350+				•	 Meet global demand for minerals
Ammaroo Phosphate Mine (stage 2) - mine expansion to double production				✓	200				•	 Expand production to meet global demand for minerals
Tennant Creek gold ore processing facility				✓	•		•			 Develop a common user mine processing facility to support small scale high value mines in the region
Tennant Creek multi-modal facility		✓			•			•	•	 Further develop the sector; subject to outcomes of feasibility studies



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Katherine Region										
Mt Todd Mine - re-open open cut pit with new on-site processing plant and power station				✓	1005		•	•		  Meet global demand for minerals
Santos - McArthur Basin project				✓	1000+			•	•	  Enable economic development
Roper Valley Iron Ore Project - open cut iron ore mining, on-site processing and direct shipping ore				✓	•			•	•	  Meet global demand for minerals
Sill 80 Ilmenite project - upgrade process plant and water supply				✓	•	•	•			  Meet global demand for minerals
East Arnhem										
Groote Eylandt - South 32 - GEMCO - establish new quarries on eastern leases				✓	160			•		  Enable access to additional ore to meet global demand for minerals
Top End Rural										
Ranger mine rehabilitation				✓	1000			•	•	  Rehabilitation of the Ranger mine in consultation with stakeholders
Mt Bundy Gold Project - Rustlers Roost open pit mine and Quest 29 deposits				✓	150		•			  Meet global demand for minerals
Hayes Creek Project - PNX Metals - re-open Mt Bonnie and Ironblow mines, new processing facility at Fountain Head mine				✓	58		58			  Meet global demand for minerals
Toms Gully - re-open underground mine and on-site processing plant				✓	26		26			  Meet global demand for minerals
Rum Jungle Creek South - repair cover system and drainage structures		✓			5	5				  Maintenance of existing infrastructure
Kilimiraka - new mineral sands mine and processing plant - south west corner of Bathurst Island				✓	•				•	  Meet global demand for minerals
Finniss Lithium Project - open cut mine with onsite processing for direct shipping ore				✓	•			•		  Meet global demand for minerals
Palmerston and Litchfield										
Middle Arm Metals Processing Facility (stage 1) - develop processing facility				✓	614			•	•	  Enable production of high purity titanium, vanadium and iron products to meet global demand for minerals
Middle Arm Metals Processing Facility (stage 2) - process plant				✓	833				•	  Expand production to meet global demand for minerals

Defence and Related Industries



Northern Australia is at the frontline of Australia's national security, including energy, mining, maritime, biosecurity, economic and trade, immigration, military and border security.

Darwin is the regional hub for Australia's international engagement in the Indo-Pacific Region. Defence contributes significantly to our economy by creating direct and indirect jobs, building infrastructure and generating demand for local goods and services.

Defence spending reached \$1.88 billion in the Territory in 2016–17 and accounted for 7.3 per cent of the gross state product.

Major defence sites include RAAF Base Darwin, Larrakeyah Barracks and HMAS Coonawarra in Darwin, Robertson Barracks in Palmerston, RAAF Base Tindal near Katherine, Joint Defence Facility Pine Gap near Alice Springs and four training areas.

Quality infrastructure for hospitals, health centres, schools and sport and recreational facilities are crucial to recruit and retain defence personnel to live and work in the Territory.

Adequate defence and civil facilities and infrastructure with transport links between bases are necessary to achieve success in military and humanitarian operations in our region.

Defence relies on airport, port and road infrastructure to improve its efficiency and capability in the Territory and with our international partners.

To help defence sustain, maintain and protect the Australian Defence Force and our allies in the Asia Pacific Region, the Territory needs to maintain and expand infrastructure and industrial capacity, including new and improved infrastructure to support the United States Force Posture Initiative agreement.

Joint user infrastructure benefits other sectors and the current and projected growth of defence projects, such as the multi-user barge ramp facility and ship lift facility in Darwin.

Investment in infrastructure for defence is vital to:

- expand the capability of defence bases to cater for new platforms, including the F-35A Lightning, Offshore Patrol Vessel and Triton unmanned aircraft system
- maximise the economic benefit of defence opportunities
- create critical mass to support infrastructure for other projects and industries, including construction, energy, mining and agriculture.

PRIORITY PROJECTS

- **Larrakeyah Barracks and HMAS Coonawarra upgrade** – upgrade to dock larger visiting naval ships.
- **Common User Ship Lift Facility** – construct the facility to support defence and other industries.
- **RAAF Base Tindal Air Combat Facilities Project** – F-35A Joint Strike Fighter infrastructure.
- **RAAF Bases Darwin and Tindal** – pavement maintenance program.

Key objectives

<p>Maximise the economic benefit from defence opportunities in the Territory.</p>	<p>Use local industry in the supply chain for defence infrastructure projects.</p>	<p>Attract Defence Industry Corporations to establish national and regional headquarters in Darwin.</p>	<p>Support local jobs and industry while achieving value for money for defence projects.</p>	<p>Increase defence capacity and capability in northern Australia for defence and security cooperation in the Indo-Pacific region.</p>
--	---	--	---	---

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Territory Wide										
RAAF Base Darwin and Tindal - support new air combat capability joint strike fighter (JSF35)	✓				538	•	•	•	•	  Enhance defence capability
RAAF Base Darwin and Tindal - Air 5431 - air traffic control - construct new multi-level facilities and sensor equipment buildings	✓				86	•	•	•		  New infrastructure to support introduction of new air traffic control system
National Aircraft Pavement Maintenance Program - RAAF Base Darwin, Tindal and Robertson Barracks	✓				50	•	•	•	•	  Maintenance to maximise existing infrastructure
Phase 3 Defence Terrestrial Communications Network Facilities upgrades	✓				•				•	  Improve communications
Katherine Region										
RAAF Base Tindal - KC 30 extend, strengthen and widen runway and taxi ways	✓				521		•	•		  Upgrade infrastructure to enhance defence operations
RAAF Base Tindal - Project Growler - Delamere Range - communications and guidance	✓				130	•	•			  New weapon system to replace current system to enhance defence operations
RAAF Base Tindal - J0088 aviation refuelling vehicle facilities (JP1571-AZ5922)	✓				3	•				  Support defence operations

A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	Total Estimated Cost (\$m)	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	Key Drivers
Palmerston and Litchfield										
Robertson Barracks 25/100 metre range	✓				6	•				Support defence operations
Robertson Barracks - Land 200 Battlefield communications systems	✓				5	•	•		•	Support defence operations
Robertson Barracks - Land 17 - 1B/1C Land Force artillery simulator replacement, including new hangers and simulator facility	✓				4	•				Redevelop infrastructure to support defence operations
Robertson Barracks - A9009 - Land 136 - Phase 1 Force mortar replacement	✓				2	•				Redevelop infrastructure to support defence operations



	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	Total Estimated Cost (\$m)	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	Key Drivers
Darwin										
Larrakeyah Barracks and HMAS Coonawarra J0109/ N2238 - new outer wharf, infrastructure upgrades, NORFORCE redevelopment	✓				472	•	•	•	•	  Enhance infrastructure to support redevelopments
HMAS Coonawarra N2263 - Sea1180 facilities and infrastructure to support the service and sustainment of the Offshore Patrol Vessel (OPV)	✓				311			•	•	  Enhance defence capability to handle larger vessels
RAAF Base Darwin - AIR7000 - new facilities for P8 aircraft	✓				161	•	•	•		  Enhance defence capability
Ship Lift Facility^		✓		✓	100+	•	•	•		  Provide a common user facility for the general maritime sector and Department of Defence
Larrakeyah Barracks and Robertson Barracks - new and upgraded health centre	✓				31	•	•			  Enhance facilities for defence personnel
RAAF Base Darwin - J0056 Explosives Ordnance Logistics Reform Program - new administration office, bulk storage and road upgrade	✓				21	•	•			  Redevelop infrastructure to support defence operations
RAAF Base Darwin J0088 aviation refuelling vehicle facilities	✓				2	•				  Support defence operations
RAAF Base Darwin - base redevelopment - in ground infrastructure	✓				•	•	•	•	•	  Support defence operations

Education and Training



Every child in the Northern Territory needs the best start in life and, through early learning and school education, gain a bright future.

Territory children can access high quality education services through government, non-government, homeland and distance learning centres, higher education, special school and early childhood and family centres.

Education is linked to housing, health and social infrastructure and requires a system-wide approach. With a solid education, our children can learn the skills needed to get a job and contribute to building our economy.

Multi-faceted education delivery requires new infrastructure, including child and family centres, international boarding facilities, middle years schooling and trade training centres. The Territory needs to upgrade university infrastructure to international standards to remain competitive and attract academics, international and domestic students and industry partners.

With a large percentage of Territory schools more than 30 years old, existing school infrastructure needs to be brought up to current Australian standards.

New infrastructure to cater for children with special needs or who live with a disability provides a level playing field for children to learn. Child and family centres combine education and health services in one place, including early childhood care, child and maternal health, family support and adult education services. Part time teaching services in homelands help children learn in their own communities.

Facilities supporting science, technology, engineering, arts and maths are needed for the digital jobs of the future.

Expanding vocational education and training opportunities creates job-ready Territorians

with the skills to meet the industry and major project needs.

Increasing purpose built student accommodation and private rental market properties will encourage students and investment opportunities and grow our international education sector.

New and improved school infrastructure create and enhance new learning environments for our children.

Every child needs the opportunity to engage, grow and achieve through a strong education system.

Investment in infrastructure is needed to:

- provide integrated child and family services at schools to support school transition and strengthen parent engagement in learning
- support infrastructure for special schools, distance learning and international education
- replace ageing infrastructure and upgrade existing infrastructure to Australian standards
- provide new and expanded schools to cater for population and enrolment growth in urban and remote communities.

PRIORITY PROJECTS

- **Tennant Creek** – early childhood integrated learning hub.
- **Darwin High School** – Science, Technology, Engineering, Arts and Mathematics centre.
- **Building Better Schools** to provide funding for every Territory school for refurbishments and upgrades.
- **Homeland Schools** – repairs and maintenance.
- **Zuccoli Primary School** – government school.

Key objectives

Every child has the opportunity to engage, grow and achieve.	Quality teaching through coaching and mentoring to build teacher and school leader capability.	Empower communities to be involved in the education of children.	Establish quality standards for school performance to foster child and student learning and growth.	Target investment to develop and implement school improvement methodology and service delivery models.	Deliver services to children to maximise their educational outcomes and wellbeing from early to senior school years.
---	---	---	--	---	---

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Territory Wide										
Various schools - increase number of transportable (relocatable) classrooms		✓			8	6				 Enable the continued delivery of quality education and support student enrolments
Child care centre upgrade program		✓			7			•	•	 Maintain ageing infrastructure to enable the continued delivery of quality child care
Homeland schools repairs		✓			5	1	1	•		 Enable the continued delivery of quality education and support student enrolments
Rooftop Photovoltaics for Territory schools ^		✓			5	2	2	•		 Decrease dependency on traditional energy sources and link to renewable energy programs
Central Australia										
New preschool and primary school for 500 enrolments in Kilgariff		✓		✓	50				•	 New infrastructure required to support educational programs and services
Upgrade school infrastructure - Ampilatwatja, Atitjere, Bradshaw, Braitling, Engawala, Haasts Bluff, Imanpa, Mt Liebig, Mutitjulu, Ntaria, Nyirripi, Papunya, Ross Park, Titjikala, Wallace Rockhole, Willowra, Wilora, Yuelamu and Yuendumu		✓			21	2		•	•	 Improve infrastructure to support student enrolments
International Aviation Academy		✓		✓	20		•			 World class academy for national and international aviation students
Centralian Senior College - Science, Technology, Engineering, Arts, Maths centre (STEAM)		✓			10			•		 Provide new infrastructure to support educational programs and services
Acacia Hill School new administration building and classrooms		✓			7	6				 Enable the continued delivery of quality education and support student enrolments
Ti Tree School - integrated early learning facility		✓			3			•		 Improve the built environment to support student enrolments
Centralian Middle School upgrade gymnasium		✓			1	1				 Enable the continued delivery of quality education and support student enrolments

A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.














Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Barkly Region										
Upgrade school infrastructure - Ali Curung, Alpururulam, Canteen Creek, Mulga Bore and Wutunugurra		✓			12			•	•	 Improve infrastructure to support student enrolments
Tennant Creek Primary School - new integrated pre-school centre - new upper years classroom block		✓			12	6		•		 New infrastructure to support improved education outcomes
Ali Curung School - new administration and reception facility	✓	✓			3		3			 Improve infrastructure to support student enrolments
Tennant Creek Training Centre		✓			2			•		 Improve infrastructure to support student enrolments
Tennant Creek High School - Clontarf Academy and Stars	✓	✓		✓	2		2			 New infrastructure to support improved education outcomes
Katherine Region										
Upgrade school infrastructure - Barunga, Borrooloola, Bulla, Clyde Fenton, Jilkminggan, Kalkarindji, Kintore Street, Robinson River, Timber Creek and Wugularr		✓			27			•	•	 Improve infrastructure to support student enrolments
Katherine High School - Science, Technology, Engineering, Arts, Maths centre (STEAM) - major classroom refurbishment		✓			11			•		 Provide new and improved infrastructure to support educational programs and services
Katherine East Neighbourhood Centre - education facilities - child care centre		✓	✓	✓	7	•	•	•		 Support education options within the local area
Wugularr School (Beswick) - secondary education		✓			3			•		 Improve infrastructure to support student enrolments
Barunga - vocational child care facility	✓			✓	3			•		 Enable delivery of quality child care services
Child care centres		✓	✓	✓	2		•	•		 Improve educational outcomes

	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	Total Estimated Cost (\$m)	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	Key Drivers
East Arnhem										
Upgrade school infrastructure - Alyangula, Gapuwiyak, Milingimbi, Numbulwar, Ramingining, and Yirrkala		✓			30	•		•	•	 Improve infrastructure to support student enrolments
Shepherdson College - replace elevated classrooms and canteen		✓			25			•		 Enable the continued delivery of quality education and support student enrolments
Milingimbi School - integrated early learning facility		✓			6			•		 Improve infrastructure to support children and families
Top End Rural										
Woolianna School - new school - teacher housing in Daly River		✓			15			•		 Enable the continued delivery of quality education and support student enrolments
Upgrade school infrastructure - Gunbalanya, Maningrida, Nganmarriyanga, Peppimenarti and Warruwi		✓			12	1		•	•	 Improve infrastructure to support student enrolments
Maningrida School - new classrooms and specialist areas for secondary education		✓			5			•		 Enable the continued delivery of quality education and support student enrolments
Batchelor Outdoor Education - rejuvenate amenities and accommodation upgrades to single persons quarters and cycle tracks		✓	✓	✓	4	2	1	•		 Rejuvenate facilities available to all schools for outdoor education
Nganmarriyanga School - integrated early learning facility		✓			3			•		 Improve infrastructure to support children and families
Adelaide River joint school/community library space upgrade/emergency community recovery centre			✓		1	1				 Provide multi-purpose community infrastructure



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Palmerston and Litchfield										
Zuccoli Primary School - government preschool and primary school - shared facilities		✓		✓	47	15	•	•		 Provide new infrastructure to support educational programs and services
Humpty Doo School - replace preschool with new facilities and early childhood classrooms - replace aged classrooms and administration		✓			27				•	 Provide new infrastructure to support educational programs and services
Taminmin College - refurbish science and art block - multi-purpose hall		✓			18	3		•		 Improve infrastructure to support student enrolments
Palmerston College Rosebery campus - new science lab - new multi-purpose centre		✓			12		1	•	•	 Improve infrastructure to support student enrolments
Bees Creek School - new classroom block		✓			3				•	 Improve infrastructure to support student enrolments
Berry Springs - child care centre		✓	✓	✓	3		•			 New infrastructure to support children and families
Girraween Primary School - new classroom block		✓			•	•				 Enable the continued delivery of quality education and support student enrolments



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Darwin										
Berrimah - new preschool and primary school for 500 enrolments		✓		✓	50				•	 New infrastructure required to support educational programs and services
Muirhead North - new preschool and primary school for 450 enrolments		✓		✓	50			•		 Provide new infrastructure to support educational programs and services
Upgrade school infrastructure - Larrakeyah, Moil, Nakara, Parap, Stuart Park, Wagaman and Wulagi		✓			40	•		•	•	 Improve infrastructure to support student enrolments
Ludmilla Primary School - redevelop and include an integrated early childhood facility		✓			21	6		•		 Provide new infrastructure to support educational programs and services
Casuarina Senior College - upgrade classrooms - new multi-purpose enclosed pavilion		✓			20			•		 Provide new infrastructure to support educational programs and services
Darwin High School - new leading Science, Technology, Engineering, Arts, Maths centre (STEAM)		✓			18	18				 New infrastructure to enable the continued delivery of quality secondary education
Darwin Middle School new performing arts and multi-purpose enclosed pavilion		✓			16	16				 Provide new infrastructure to support educational programs and services
Leanyer Primary School - early years and community hub - new science facility		✓			14			•	•	 Improve infrastructure to support student enrolments
Stuart Park Primary School - expansion		✓			10			•		 Enable the continued delivery of quality education and support student enrolments
Haileybury Rendall School - international boarding school facility	✓			✓	•	•	•			 New infrastructure to support student enrolments and educational outcomes
Nightcliff Middle School - replace air-conditioning system - Science, Technology, Engineering, Arts, Maths centre (STEAM)		✓			6	1		•		 New and improved infrastructure to support educational programs and services
O'Loughlin College - undercover sports and recreation area		✓		✓	2	1				 Improve infrastructure to support student enrolments
Anula Primary School - refurbish student toilet facilities		✓			1	1				 Improve infrastructure to support student attendance

Electricity



Access to affordable electricity is critical to driving economic growth in the Northern Territory.

Electricity supplied to Darwin, Katherine, Tennant Creek and Alice Springs is predominantly generated from natural gas. Electricity for remote communities is generated by isolated power stations using diesel, diesel-solar, gas energy sources or from a major electricity network.

The Territory's electricity generation sector sources most of its natural gas to generate electricity from the Blacktip gas field in the Joseph Bonaparte Gulf.

The transition to a renewable energy future is a key challenge, with a Northern Territory Government target for 50 per cent of our electricity to be from renewable sources by 2030.

Providing essential services to geographically isolated communities in tropical and arid environments is challenging. Good electricity infrastructure, which can be impacted by weather, is crucial to maintaining a safe and reliable electricity supply. Remote and regional communities not connected to major gas-fired electricity networks depend heavily on expensive diesel for electricity generation.

Gas pipeline infrastructure extending from Darwin to Alice Springs connects economic gas resources for electricity generation. Gas exports provide considerable revenue potential to boost the Territory economy and the Northern Gas Pipeline will connect Territory gas fields to eastern markets.

Solar uptake in the Territory is increasing, requiring electricity grids and market arrangements that can support the transition to renewable energy while maintaining security of supply.

The Northern Territory Government is a signatory to the Council of Australian Governments' Australian Energy Market Agreement. The government is transitioning to the National Electricity Rules administered by the Australian Energy Regulator. Power and Water will begin full operation under the new regime in mid-2019 and is committed to long term efficient investment in electricity networks and delivering energy services in the interests of consumers.

The electricity networks capital investment program aims to meet prescribed service standards such as growing local demand and asset replacement to maintain current services standards.

PRIORITY PROJECTS

- **Substation works**
 - » Berrimah Zone replacement
 - » Pine Creek 66kV replacement
 - » Wishart Zone Construction.
- **Alice Springs**
 - » Distribution pole replacement program
 - » Install new Sadadeen 11kV switchboard.
- **Solar SETuP Program** – roll out of 10MW solar across about 30 remote communities.
- **Tiwi Island** – grid connection initiative between communities and regional power station.
- **Wadeye** – grid connection between communities – Palumpa and Peppimenarti.
- **Yuendumu** – gas off-take facilities with metering assets to interface with a pipeline serving mining operations in the Tanami.

Key objectives

Plan, build and maintain safe, cost efficient and reliable electricity infrastructure to provide services.	Target 50 per cent of our electricity from renewable sources by 2030 and reduce greenhouse gas emissions.	Manage the purchase, transport and sale of gas to electricity generators and other major gas users.	Future proof the Northern Territory by planning for and building electricity infrastructure to meet future supply demand.
---	--	--	--

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Territory Wide										
Power Networks - repairs and maintenance		✓			330	34	34	•	•	Compliance, asset renewal and service efficiency improvement
Power Networks - minor new works projects		✓			285	22	24	•	•	Growth in demand and efficiency improvements
Indigenous Essential Services - minor works projects		✓			99	9	9	•	•	Growth in demand, compliance, asset renewal and improve service efficiency
Solar Energy Transformation Program (SETuP)	✓	✓			59	15				Support renewable energy roadmap and reduce diesel fuel dependency
Solar Hospitals Program - including energy efficiency upgrades		✓			20			•	•	Contribute to Northern Territory Government renewables target and reduce operating costs
Minor works in minor centres		✓			11	1	1	•	•	Growth in demand, compliance, asset renewal and improve service efficiency
Power Quality Improvement Program		✓			6		1	•	•	Growth in demand and efficiency improvements
Rooftop Photovoltaics on Territory Schools ^		✓			5	2	2	•		Decrease dependency on traditional energy sources and link to renewable education programs
Outage Management System		✓			5	•		•		Compliance, asset renewal and service efficiency improvement
Land mobile radio 400MH2 band relocation		✓			4	•				Compliance, asset renewal and service efficiency improvement
Power Station hazardous area electrical compliance and Type B gas compliance		✓			3	1				Compliance, asset renewal and service efficiency improvement

A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Central Australia										
Owen Springs Power Station expansion and Tennant Creek Power Station upgrade		✓			96	3				Growth in demand and improve efficiency
Power Network corroded poles replacement, transformers and switching station upgrades		✓			35	6	3	•	•	Enhance liveability through improved electrical systems
Yulara Power Station - various engine replacement / alternative		✓			5	1	1	•		Compliance, asset renewal and service efficiency improvement
Ron Goodin Power Station decommission, disposal and rehabilitation		✓			5	3	2			Site rehabilitation
Kings Canyon Power Station diesel and control system upgrade		✓			1	1				Growth in demand, compliance, asset renewal and improve service efficiency
Barkly Region										
Tennant Creek Power Station engine exchange and alternator replacement		✓			5	2	2	•	•	Growth in demand, compliance, asset renewal and improve service efficiency
Katherine Region										
Katherine Power Station - engine exchange, asset replacement and fire system upgrade		✓			20	3		•	•	Compliance, asset renewal and service efficiency improvement
Power Network and Zone Substation upgrades		✓			9	3	2	•		Growth in demand and efficiency improvements
Top End Rural										
Solar farms – Batchelor and Manton Dam				✓	40+	•	•			Support energy efficiency by increasing renewable energy
Wagait - replace centre yard zone substation and undersea cable		✓			16			•	•	Compliance, asset renewal and service efficiency improvement
Tiwi Interconnect		✓			10		7			Growth in demand, compliance, asset renewal and improve service efficiency
Peppimenarti Interconnect		✓			5		5			Growth in demand, compliance, asset renewal and improve service efficiency
Power Network transformer upgrade - Cosmo Howley		✓			3			•		Compliance, asset renewal and service efficiency improvement

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Palmerston and Litchfield										
Channel Island Power Station upgrades – asset overhaul or replacements, large scale energy storage and new gas pipeline		✓			305	64	31	•	•	 Compliance, asset renewal and service efficiency improvement
Power Network and Substation upgrades - Palmerston, Archer and Weddell		✓			50			•	•	 Growth in demand and efficiency improvements
Weddell Power Station - major overhaul and hot section exchange		✓			25	6		•	•	 Growth in demand, compliance, asset renewal and improve service efficiency
Darwin										
Undergrounding power in Darwin suburbs		✓			290	10	10	•	•	 Build a resilient power network, against cyclones and monsoons, for businesses, schools and homes
Power Network and Substation upgrades - Berrimah, Casuarina, Darwin and Hudson Creek		✓			144	11	11	•	•	 Growth in demand and efficiency improvements
Darwin International Airport precinct - major expansion of the solar array				✓	100	•	•			 Support energy efficiency by increasing renewable energy
Wishart – new Power Station including five gas-fired generators and ancillary structures, administration building and warehouse				✓	25	25				 Growth in demand and efficiency improvements
Lithium Ion Battery Facility				✓	•	•				 Support the renewable energy sector providing battery storage options using Australian ores



Water



A safe and secure water supply is critical to supporting how and where we live, do business and grow our industries in the Northern Territory.

Surface water sources in Darwin and Katherine provide more than half of the Territory's potable water supply, while groundwater is the primary water source for the remaining centres. It is critical to use water efficiently to preserve this precious natural resource and ensure a sufficient supply for community and industry development.

Access to water dictates where we build houses, develop business and expand industries, while urban and industrial developments require water for construction, operation and maintenance. How Territorians use and conserve water dictates how much is available for drinking, bathing, cleaning and growing food.

Recent rapid growth in the Territory has put pressure on delivering water and sewerage services efficiently and economically, with greater demand on existing water sources, storage, treatment and delivery infrastructure. Even with reduced water consumption, the Darwin region's water source and treatment infrastructure may need to be augmented within 10 years to meet projected demand.

The Territory's water supply and demand is influenced by climate and variable yearly rainfall.

The age, condition and performance of water infrastructure, including dams, reservoirs, bores, treatment plants, pumps, mains, water tanks and meters, impact on water supply service delivery and reliability.

The Territory is delivering increased water supply capacity, quality and improving assets to increase water supply reliability. Water quality assurance is being strengthened through enhanced drinking water quality management.

Remote housing developments will expand water and sewerage infrastructure in remote communities and investment is needed to expand and increase infrastructure to ensure safe and reliable water and sewerage services across the Territory.

PRIORITY PROJECTS

- **Katherine Water Supply Source Augmentation**
 - » deliver safe and reliable water supply.
- **Darwin Region Water Supply Strategy**
 - » future water source and treatment options
 - » Berrimah Farm (Northcrest) water pressure and supply requirements.
- **Remote Communities**
 - » safe and reliable water and sewerage services.
- **Tennant Creek Borefield Upgrade** – a multi-year project to ensure ongoing supply reliability.
- **Sewerage Projects**
 - » Palmerston East trunk sewer
 - » Leanyer Sanderson Wastewater Treatment Plant (odour mitigation) and Waste Stabilisation Ponds (inlet works).

Key objectives

<p>Provide good quality drinking water by enhancing capability in line with Australian Drinking Water Guidelines.</p>	<p>Manage water supply sustainability in line with demand.</p>	<p>Plan for future sewerage infrastructure to continue to treat and dispose of sewage.</p>	<p>Plan, build and maintain safe, cost efficient and reliable water and sewerage infrastructure to provide services.</p>
--	---	---	---

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Territory Wide										
Indigenous Essential Services - minor works projects		✓			99	9	9	•	•	 Growth in demand, compliance, asset renewal and improve service efficiency
Water Asset Replacement Program		✓			68	5	7	•	•	 Asset renewal and improve service efficiency
All Regions - water reticulation and treatment upgrades		✓			34	6	7	•	•	 Compliance, asset renewal and service efficiency improvement
All Regions - sewer de-sludging, relining and reticulation augmentation		✓			17	1	1	•	•	 Compliance, asset renewal and service efficiency improvement
Upgrade disinfection systems - Darwin and Katherine regions		✓			8	2	4	•		 Growth in demand, compliance, asset renewal and improve service efficiency
Central Australia										
Water source and reticulation upgrades		✓			60	4	3	•	•	 Growth in demand, compliance, asset renewal and improve service efficiency
Water storage and transmission upgrades		✓			43	1	3	•	•	 Compliance, asset renewal and service efficiency improvement
Sewerage treatment and reticulation upgrades		✓			42	1	1	•	•	 Compliance, asset renewal and service efficiency improvement
Yulara augment sewerage treatment plant, rising mains and pumping station		✓			5			•	•	 Compliance, asset renewal and service efficiency improvement
Papunya sewer upgrade		✓			1	1				 Growth in demand, compliance, asset renewal and improve service efficiency

A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Barkly Region										
Water source and reticulation upgrades		✓			19	2	2	•	•	 Growth in demand, compliance, asset renewal and improve service efficiency
Tennant Creek evaporation ponds stabilise embankments		✓			3			•	•	 Compliance, asset renewal and service efficiency improvement
Tennant Creek sewer ventilation		✓			1			•	•	 Compliance, asset renewal and service efficiency improvement
Katherine Region										
Water source and reticulation upgrades		✓			130	4	15	•	•	 Compliance, asset renewal and service efficiency improvement
Water storage and transmission upgrades		✓			15	1	1	•	•	 Growth in demand, compliance, asset renewal and improve service efficiency
Sewerage pump station, treatment and reticulation upgrades		✓			11	•	•	•	•	 Compliance, asset renewal and service efficiency improvement
East Arnhem										
Angurugu Sewer reticulation upgrade Stage 1		✓			6	6				 Asset renewal and compliance
Numbulwar water storage upgrade Stage 1		✓			5	•				 Growth in demand, compliance, asset renewal and improve service efficiency
Angurugu – infiltration basin emergency overflow		✓			1			•		 Growth in demand, compliance, asset renewal and improve service efficiency
Top End Rural										
Water source and reticulation upgrades		✓			25	3	5	•	•	 Growth in demand, compliance, asset renewal and improve service efficiency
Fogg Dam Conservation Reserve - works to dam wall		✓			4			•	•	 Maintenance to maximise existing infrastructure
Naiyiu - upgrade sewerage treatment		✓			2			•		 Growth in demand, compliance, asset renewal and improve service efficiency
Water storage and transmission upgrades		✓			2	2				 Growth in demand, compliance, asset renewal and improve service efficiency

	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	Total Estimated Cost (\$m)	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	Key Drivers
Palmerston and Litchfield										
Sewerage pump station, treatment, reticulation upgrades		✓			59	5		•	•	 Compliance, asset renewal and service efficiency improvement
Water storage and transmission upgrades		✓			39			•	•	 Compliance, asset renewal and service efficiency improvement
Water source and reticulation upgrades		✓			11	1		•	•	 Compliance, asset renewal and service efficiency improvement
Darwin										
Darwin Region water supply source augmentation		✓			402	1	1	•	•	 Compliance, asset renewal and service efficiency improvement
Sewerage re-use, treatment and reticulation upgrades including Leanyer-Sanderson Water Treatment Plant upgrade and East Point outfall extension		✓			147	11	8	•	•	 Compliance, asset renewal and service efficiency improvement
Water source and reticulation upgrades		✓			123	7	5	•	•	 Compliance, asset renewal and service efficiency improvement
Water storage and transmission upgrades		✓			99	3	3	•	•	 Compliance, asset renewal and service efficiency improvement



Transport and Logistics



CONTENT

Transport and logistics networks are the life blood of the Northern Territory. They provide a vital link to the rest of Australia and form the nation's strategic supply chain to the rapidly expanding economies of Asia.

Transport and logistics networks are a key enabler of the Territory's economic growth. Private and publicly owned roads, ports, barge landings, airports, aerodromes, pipelines, railways and freight hubs support the viability and productivity of our major industries including the agribusiness, energy and minerals, tourism and defence sectors.

These networks also contribute to social development for Territorians by providing access to essential welfare, health and education services and recreational, business and job opportunities.

The transport network must be developed to keep pace with our growing and diversifying economy to enhance linkages to key domestic and international markets and provide improved equitable access for Territorians living in remote and regional areas.

PRIORITY PROJECTS

- **Sealing Tanami Highway** – providing a nationally significant road connection from south-eastern Australia to the Western Australia Kimberley region.
- **Central Arnhem Road** – providing a sealed link from the national highway network to Arnhem Land and Nhulunbuy.
- **Improving Beef Roads** – progressively upgrading cattle roads will increase reliability and subsequently economic development and productivity for the pastoral industry.
- **Mt Isa to Tennant Creek Railway** – undertaking feasibility studies to understand the requirements for any future development.
- **Develop Katherine** as an inland port; Katherine Logistics and Agribusiness Hub.

Key objectives

Drive economic growth by providing efficient freight networks that meet industry needs and support increased productivity and reduced costs.

Improve transport safety by maintaining and upgrading existing infrastructure and consider user and operator safety when developing new transport and logistics infrastructure.

Provide improved connectivity to support equitable access for Territorians in regional and remote areas to support social inclusion, development and enable service delivery.

Enhance asset management by maintaining and rehabilitating infrastructure to improve network resilience and reduce whole of life costs.

Integrate land and transport planning to protect corridors for the future and ensure planning provides for effective connection to transport hubs and major activity centres.















	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	Total Estimated Cost (\$m)	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	Key Drivers
Territory Wide										
National Network										
Programs including flood immunity improvements, road safety initiatives, strengthening and widening	✓				474	21	•	•	•	 Economic enabler and key interstate freight route 
Stuart Highway - new works and upgrades, including Pinelands Industrial Precinct access	✓	✓			215	6	•	•	•	 Economic enabler and key national freight route and the only road transport supply line to Darwin 
Territory Roads										
Programs including strengthening and widening, Black Spot, road safety initiatives, landscaping, cycle paths	✓	✓	✓		567	39	•	•	•	 Support connectivity and regional development through improved key arterial and secondary roads 
Beef Road - upgrade secondary local roads not listed separately		✓			72	•	•		•	 Support economic development of the cattle industry and improve community connectivity 
Local fishing and tourist road new works and upgrades		✓			64	•	•	•	•	 Support recreational and tourism activities 
Regional Roads Productivity Package	✓	✓			36	14	•			 Support delivery of essential services to regional and remote communities 
Local Government Roads										
Access roads to barge landings and aerodromes	✓	✓	✓	✓	100	13	•	•	•	 Improve all weather access to support growth and improve community safety 



A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.















Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers	
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)		
					2018-19	2019-20					
Territory Wide											
Transport Assets											
Marine - barge landing and jetty upgrades		✓			136	6	•	•	•		Support economic development by improving all weather access and goods handling facilities
Aerodrome and airstrip upgrades	✓	✓			68	9	•	•	•		Improve all weather access to support future growth
Public Transport - upgrade bus stops, bus interchanges and CCTV		✓			38	•	•	•	•		Improve community safety
Level crossing upgrades	✓	✓			15			•	•		Improve road safety
Driverless Bus Project		✓			1			•			Enhance safety, accessibility, connectivity and amenity
Mount Isa to Tennant Creek railway - investigations	✓	✓		✓	•			•	•		Connect the Alice Springs to Darwin railway with the line between Mount Isa and Townsville



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Central Australia										
Territory Roads										
Tanami Road - upgrade to a sealed standard (including WA section)	✓	✓		✓	680	3	•	•	•	 Support economic development of the mining industry
Plenty Highway (Outback Way) - reconstruct various sections and widen single lane to two lane seal	✓	✓			330	31	•	•	•	 Enable mining, pastoral, cattle and tourism growth by connecting Queensland, through the Territory, to Western Australia
Maryvale Road - improve the road standard	✓	✓		✓	130	1	5	•	•	 Support delivery of essential services to regional and remote communities
Sandover Highway - sealing selected sections		✓			100	3		•	•	 Improve community access and support the cattle industry
Santa Teresa - sealing selected sections		✓			50			•	•	 Support delivery of essential services to regional and remote communities
Larapinta Drive - capacity improvements and upgrades including completion of Mereenie Inner Loop	✓	✓			36			•	•	 Improve road safety and visitor experience
Lasseter Highway - improve the road standard	✓	✓			34			•	•	 Support economic development of the tourism, cattle and resource industries
Sadadeen Road connector	✓	✓			27			•	•	 Improve flood immunity in the Mount Johns Valley and Desert Springs areas
Tjukaruru Road (Outback Way) - improve the road standard	✓	✓			25	7	•	•	•	 Economic enabler for the mining, pastoral, cattle and tourism industries
Luritja Road - improve flood immunity		✓			8			•		 Support tourism and local cattle industry
Extend the seal on access road from Ross Highway to Trephina Gorge		✓			2			•	•	 Improve access to support the tourism industry
Seal access into Redbank Gorge from Namatjira Drive		✓			1			•		 Improve access to support the tourism industry
Local Government Roads										
Ilparpa Road including path		✓	✓		8	5				 Improve safety
Transport Assets										
Ti Tree Transport and Horticultural Hub	✓	✓		✓	•			•		 Support service delivery within region. Support development of the horticultural sector

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Barkly Region										
National Network										
Barkly Highway upgrades	✓	✓			8		•	•	•	 Economic enabler and key national freight route between the Territory and Queensland
Territory Roads										
Barkly Stock Route - improve the road standard	✓	✓			230	12	•	•	•	 Support economic development of the cattle industry
Tablelands Highway - improve the road standard - bridge upgrade	✓	✓			100	36	•	•	•	 Support economic development of the cattle industry
Seal access to Devils Pebbles		✓			2				•	 Improve access to support the tourism industry
Katherine Region										
National Network										
Victoria Highway - Little Horse Creek and Big Horse Creek upgrades	✓	✓			35	28				 Improve flood immunity
Truck Bay on Victoria Highway opposite CBD		✓			2			•	•	 Increase capacity for commercial transport



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Katherine Region										
Territory Roads										
Buntine Highway - improve the road standard	✓	✓			250	38	•	•	•	 Support economic development of the cattle and tourism industries
Roper Highway (Savannah Way) - sealing selected sections	✓	✓			202	3	•	•	•	 Support economic development of the cattle, mining and mineral exploration industries
Wollogorang Road - improve the road standard		✓			25	4	•	•	•	 Support economic development of the cattle industry
Carpentaria Highway (Savannah Way) - progressively widen, seal from one lane to two lanes and improve flood immunity		✓			25			•	•	 Support economic development of the mining, cattle, and tourism industries and improve community access
Lajamanu Road - capacity improvements and upgrades		✓			13	3		•	•	 Support delivery of essential services to regional and remote communities
Nathan River Road - improve flood immunity		✓			10			•	•	 Improve access to support the tourism industry
Katherine East Arterial - extending Chambers Drive to Bicentennial Drive		✓			6			•		 Support economic development through future land development
Gorge Road - upgrade Maud Creek Crossing		✓			6			•		 Improve access to support the tourism industry
Local Government Roads										
Douglas Daly Connector Road	✓	✓			60			•	•	 Support agriculture, tourism and the community
Victoria Daly - improve internal Council roads			✓		18	•	•	•	•	 Safe community
Borroloola - Rocky Creek - replace culverts		✓	✓	✓	4	4	•			 Improve all weather access between north and south Borroloola
Emungalan Road Leigh Creek Bridge construction	✓	✓	✓		3		•			 Improve flood immunity
Transport Assets										
Katherine - service station with café and truckers lounge				✓	7	7				 Improve road safety by helping drivers manage fatigue
Katherine Civilian Airport upgrades to the apron and terminal		✓	✓	✓	2		•	•		 Support agricultural and transport industries

































Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
East Arnhem										
Territory Roads										
Provide a sealed connection to Gove as the regional service centre to develop Arnhem Land	✓	✓			612	5	•	•	•	Improve regional and remote connectivity, safety and accessibility to support the cattle and tourism industries
Numbulwar Road - improve the road standard including Phelps River crossing		✓			10				•	Support delivery of essential services to regional and remote communities
Local Government Roads										
Milyakburra Roads Upgrade - drainage, earthworks and bitumen seal	✓		✓		3	•			•	Improved community safety and connectivity
Umbakumba - road re-seal and stormwater project	✓		✓		2	•			•	Improved community safety and connectivity
Transport Assets										
Nhulunbuy Port upgrades ^		✓		✓	17+	2	•		•	Underpin the development of industries servicing the community and export markets
Arnhem Space Centre				✓	•	•	•	•	•	Provide access to space for commercial, research and government organisations
Top End Rural										
Territory Roads										
Arnhem Link Road (Top Road or West Arnhem Road) improve road standard	✓	✓			290		•	•	•	Improve regional and remote community connectivity with an alternate route to Nhulunbuy
Port Keats Road upgrades - Yellow Creek and Saddle Rail Creek crossings, improved community connections between Wadeye, Palumpa and Peppimenarti	✓	✓			180	4	•	•	•	Support economic development of the tourism and potential cattle and gas industries and improve community access
Kakadu Roads - improve access to Kadadu National Park during the wet season		✓			175	5			•	Improve access to support the tourism industry
Arnhem Highway - upgrades (other than Adelaide River Floodplain)	✓	✓			109			•	•	Support economic development of the tourism, defence, mining, extractive and livestock industries
Keep River Plains Road upgrade	✓	✓			87	49	•			Support Project Sea Dragon (proposed aquaculture farm at Legune station) and Ord River Stage 3 project



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Top End Rural										
Territory Roads										
Arnhem Highway Adelaide River Floodplain	✓	✓			78	76	•			 Improve flood immunity at the Adelaide River crossing 
Douglas - Daly Roads - new works and upgrades	✓	✓			58			•	•	 Support economic development of agribusiness, fisheries and aquaculture industries 
Litchfield Park Road - including constructing the Lower Finnis River bridge	✓	✓			27	24	•			 Improve access to support the tourism industry 
Bynoe Harbour - provide sealed access to the Project Sea Dragon Facility at Point Ceylon	✓				15	15				 Support recreational, tourism and aquacultural activities 
Cox Peninsula Road - upgrade intersections to improve capacity and safety		✓			10				•	 Support extractive industry development 
Improve access to Sandy Creek (Litchfield National Park)		✓			2			•		 Improve access to support the tourism industry 
Tiwi Island Road Upgrades	✓	✓	✓		•	5	•	•	•	 Enhance safety, accessibility, connectivity and amenity 



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Top End Rural										
Local Government Roads										
17 Mile Road Upgrade - Melville	✓	✓			15			•		 Enable economic development and improve visitor experience
West Arnhem Regional Council infrastructure - sealing roads - LED street lighting	✓	✓	✓		14	2	1	•		 Improve road infrastructure to ensure a safe community
Murganella Road upgrade including drainage upgrade		✓			9	1	1	•	•	 Generate local jobs and skills training to enhance liveability, health and community outcomes
Mandorah Bikepaths - new and upgrade beach access		✓			4			•		 Enhance infrastructure to support development
Transport Assets										
Mandorah jetty and ferry terminal		✓			60				•	 Improved safety for ferry passengers and enable service to grow to meet demand



	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	Total Estimated Cost (\$m)	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	Key Drivers
Palmerston and Litchfield										
Territory Roads										
Chung Wah Terrace - capacity improvements and upgrades		✓	✓		44			•	•	 Improve network capacity 
Construct new two lane link from Tiger Brennan Drive to Kirkland Road	✓	✓			40			•	•	 Support future land development 
Gunn Point Road - upgrade and seal		✓			34	34				 Improve connectivity and unlock the potential for future development 
Elrundie Avenue - capacity improvements and upgrades		✓			27			•	•	 Improve connection between gas plants, Middle Arm and East Arm Port 
University Avenue - capacity improvements and upgrades		✓			18				•	 Improved network connection 
Coolalinga traffic management	✓	✓			17	12	•	•		 Improve safety and connectivity in and around the Coolalinga commercial precinct 
Lambrick Avenue - capacity improvements and upgrades		✓			10				•	 Improved network connection 
Upgrade Kirkland Road and Woodlake Boulevard intersection		✓			10	10		•		 Enhance safety, accessibility, connectivity and amenity 
Roystonea Avenue - capacity improvements and upgrades		✓			7			•	•	 Provide increased north-south capacity to cater for residential development 
Stuart Highway - Tulagi Road intersection upgrade		✓			•	•				 Enhance safety, accessibility, connectivity and amenity 
Local Government Roads										
Sealing key roads that are used by primary producers such as mango orchards	✓			✓	20		•	•		 Support primary production areas such as mango farms and reduce fruit damage 
Finn Road upgrade		✓			5	1		•		 Support extractive industry development 
Bridging Darwin River on Old Bynoe Road	✓	✓	✓		4				•	 Improve all weather access 
Bridging Fly Creek on Old Bynoe Road	✓	✓	✓		4				•	 Improve all weather access 
Bridge over Wells Creek on Virginia Road		✓	✓	✓	1				•	 Improve vehicle access 
Bridging Elizabeth River on Elizabeth Valley Road	✓		✓		1				•	 Improve all weather access 

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Darwin										
Territory Roads										
McMillans Road - capacity improvements and upgrades	✓	✓			136			•	•	 Improved network connection
Berrimah Road - capacity improvements	✓	✓			100			•	•	 Improve network capacity and safety for increased traffic into the port
Tiger Brennan Drive - Woolner Road intersection overpass	✓	✓			89			•	•	 Improved network connection
Snell Street extension to Tiger Brennan Drive	✓	✓			69				•	 Improved network connection
Barneson Boulevard Link - duplication Tiger Brennan Drive, McMinn Street to Dinah Beach	✓	✓	✓		45	45	•			 Provide commuters with a new option to enter/exit the Darwin CBD
Vanderlin Drive - capacity improvements and upgrades		✓			37			•		 Provide north-south capacity improvement for access from the northern suburbs
McMinn Street - duplication from Daly Street to Bennett Street		✓			30			•		 Provide capacity improvements for Darwin CBD circulation and relieve congestion
Amy Johnson Avenue - begin progressive duplication		✓			28			•		 Provide commuters with an alternative connector from northern suburbs to Darwin CBD
Bagot Road - capacity improvements and upgrades		✓			26			•	•	 Improved network connection
Darwin Business Park North including headworks for Amy Johnson connector road		✓		✓	12	5				 Improve connectivity and unlock the potential for future development
Trower Road - capacity improvements and upgrades		✓			10			•		 Improved network connection
Abala Road revitalisation		✓			10			•	•	 Enhance liveability through improved access to sports facilities
Export Drive - improve flood immunity		✓			2			•		 Improve safety and access associated with flooding

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Darwin										
Local Government Roads										
Council road resurfacing and renewal			✓		24	2	2	•	•	Network improvement and improve road safety
Stormwater upgrades and reconstruction			✓		16	1	1	•	•	Enhance the amenity of local streets
Street and public lighting			✓		15	4	2	•	•	Enhance the amenity of local streets
Footpath Program			✓		9	1	1	•	•	Enhance safety, accessibility and connectivity for people of all ages and abilities
Pathway Program			✓		8	1	1	•	•	Provide safe and clear pathways for pedestrians and bike riders
Boulter Road urban cross section upgrade			✓		6			•		Network capacity improvement and improve road safety
Lee Point Road upgrade			✓		5	•	2	•		Network improvement and improve road safety
Driveway Program			✓		3	•	•	•	•	Enhance the amenity of local streets
Cavenagh Street reconstruction			✓		3		2			Network capacity improvement
Dinah Beach Road - upgrade to urban cross section			✓		3		2	•		Network capacity improvement and improve road safety
Dickward Drive and Kurringal Court intersection			✓		2		•	•		Enhance the amenity of local streets
Chin Quan Avenue upgrades			✓		2			•		Network capacity improvement and improve road safety
Transport Assets										
Ship Lift Facility^		✓		✓	100+	•	•	•		Provide a common user maritime facility
Transport Industry Precinct - Darwin Regional Road Train assembly area and heavy vehicle station - Motor Vehicle Registry	✓	✓			20	18				Enhance safety, accessibility, and connectivity
Darwin bus interchange relocation		✓			•		•			Contribute to Darwin CBD revitalisation and State Square redevelopment

Public Safety and Justice



The Northern Territory Government protects and works in partnership with the community to ensure Territorians are safe and resilient.

Severe weather events predicted in the future will put pressure on our emergency services, family welfare workers and infrastructure to ensure adequate emergency response and recovery.

The Territory is covered by a large network of infrastructure to provide public safety, child protection and justice services for more than 246 000 Territorians. Demand on child protection, family welfare, police and emergency services is changing, with increasing family violence, substance abuse and mental illness.

Territory police, justice services staff and the court system work to protect and promote the rights of victims of crime and the vulnerable and disadvantaged across a large geographical area. In 2017, legislation was passed to enable police officers to gather audio and video from victims of, and witnesses to, domestic and family violence to use as evidence in court.

Integrated child and family centres support our children and families to keep them healthy and safe from family violence. Regional child care centres help vulnerable children remain connected to their community and family as a short term residential care option, while longer term care plans are arranged.

Infrastructure for court support services in regional and remote communities enable vulnerable witnesses to give evidence in court proceedings without leaving their community and support networks.

Youth justice facilities focus on rehabilitation, training and a restorative approach instead of incarceration and punishment and provide community cottage industries in line with the Royal Commission. These facilities need

to achieve an affordable balance between security, safety, opportunity for rehabilitation and reintegration, response to gender, cultural and individual needs of young people, as well as providing appropriate health, mental health and education programs.

Extensive investment is needed to:

- provide youth-focussed infrastructure focussing on diversionary programs, creating after hours youth activities and reintegrating young people back into the community
- explore private sector investment opportunities for infrastructure to support children, families, the justice system and our police, fire and emergency services
- keep the community safe through frontline police services and crime reduction initiatives
- provide effective and efficient emergency response to minimise the impact of disasters on the community.

PRIORITY PROJECTS

- **New Police Stations**
 - » Nightcliff and Palmerston
 - » Angurugu, Maningrida and Ngukurr.
- **Youth Justice Training Facilities** – replace ageing facilities in Darwin and Alice Springs.
- **Women's Shelter** – new support infrastructure in Alice Springs.
- **Alice Springs Local Court** – refurbish to cater for domestic violence cases.
- **Katherine** – new Fire Station.
- **Tennant Creek** – early childhood integrated learning hub.
- **Galiwinku** – safe house.

Key objectives

<p>Ensure a safe and resilient community by supporting the vulnerable and disadvantaged, and protecting children from harm.</p>	<p>Provide a strong, responsive, contemporary justice system to ensure everyone has access to opportunities and resources to participate in society.</p>	<p>Prevent crime by reducing domestic and family violence, focus on youth crime and target the drivers of crime including alcohol and other drugs.</p>	<p>Achieve an affordable balance between security, safety, opportunity for rehabilitation and reintegration with youth-focussed infrastructure.</p>	<p>Enhance the resilience and response capability of our emergency services.</p>
--	---	---	--	---

Project	Prospective Contribution				Total Estimated Cost (\$m)	Funding (\$m)		Indicative Sequencing		Key Drivers
	AG	NTG	LG	PRIV		2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Territory Wide										
Remove asbestos to enable infrastructure upgrades		✓			200	20	20	•	•	 System wide removal of asbestos in government assets
Bail support accommodation including Darwin and Alice Springs		✓			15	14				 Improve outcomes for young people at risk
Relocate Director of Public Prosecutions offices in Alice Springs, Darwin and Katherine		✓			6			•	•	 Increase in service requirements and improve proximity to courts
New facilities for the Northern Territory Civil and Administrative Tribunal in Darwin and Alice Springs		✓			6			•	•	 Increase in service requirements
Upgrade women's shelters		✓			6			•		 Improve support for victims of domestic violence
Separate purpose built facilities for women in prison		✓			•		•			 Address recommendations of the Ombudsman's report
Community based alternative custody to prisons		✓			•	•				 Address recommendations of the Ombudsman's report

A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Central Australia										
Youth Justice Training Facilities in Alice Springs	✓	✓			40			•		  Improve outcomes for young people in detention
New Police Stations - Finke, Haasts Bluff, Hermannsburg, Nyirripi, Santa Teresa, Willowra and Yulara		✓			39			•		  Improve service delivery for safety outcomes and support population growth
Alice Springs Correctional Centre - security upgrade - relocate female prisoners		✓			13	5	3	•		  Address safety and security issues and increase in capacity
New Emergency Services Facilities - Alice Springs, Harts Range, Hermannsburg, Kintore and Yuendumu		✓			12			•		  Improve service delivery for safety outcomes and support population growth
Local court refurbishment for - youth justice - domestic violence court		✓			10	7	•			  Increase in service requirements
Police Visiting Officers Quarters (VOQ) - Alice Springs and Titjikala		✓			8			•	•	  Upgrade site services to meet current standards
New women's shelter		✓	✓	✓	6	3				  Improve support for victims of domestic violence
Barkly Region										
New Police Stations - Alpururulam and Elliott	✓				19		10	•		  Increase in service requirements and improve community safety



	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)		
Katherine Region										
New Police Stations - Bulman/Weemol, Kalkarindji, Lajamanu, Mataranka, Maranboy, Minyerri and Timber Creek	✓				54			•	•	  Improve service delivery for safety outcomes and support population growth
Katherine - upgrade police station	✓	✓			36				•	  Improve service delivery for safety outcomes and support population growth
Ngukurr - new Police complex with additional housing	✓	✓			12	11				  Improve service delivery for safety outcomes and support population growth
Katherine - New Fire Station	✓				9	8				  Provide effective emergency response and improve community safety
Purpose Built Structure for NT Emergency Services - Daly River, Lajamanu, Timber Creek and Wadeye		✓			6			•		  Upgrade site services to meet current standards
Katherine - relocated NT Emergency Services	✓				5	5				  Upgrade station to meet current standards
Katherine - relocated Fire Rescue Services	✓				4	4				  Upgrade station to meet current standards
Katherine Court House additional court room		✓			2			•		  Increase in service requirements



	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	Total Estimated Cost (\$m)	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	Key Drivers
East Arnhem										
Milingimbi - new Police complex to provide permanent police presence and improve coastal marine search and rescue network		✓			22		•	•		  Increase in service requirements and improve community safety
New Police Stations - Nhulunbuy and Numbulwar		✓			11			•	•	  Increase in service requirements and improve community safety
Angurugu - construct a new permanent police post including a multi-function area	✓			✓	11	11	•			  Increase in demand
Purpose Built Structure for NT Emergency Services - Galiwinku, Gapuwiyak, Gunbalanya, Numbulwar and Ramingining		✓			7			•	•	  Improve emergency services to ensure community safety
Nhulunbuy Fire station upgrade		✓			4			•		  Upgrade station to meet current standards
Galiwinku safe house		✓			1	1				  Improve support for victims of domestic violence
Nhulunbuy Courthouse additional ablution facility		✓			1		•			  Address work, health and safety issues
Top End Rural										
New Police Stations - Minjilang, Peppimenarti, Warruwi and Wurrumiyanga		✓			22		3	•		  Increase in service requirements and improve community safety
Maningrida - new police complex with additional housing	✓	✓			16	15	•			  Increase in service requirements and improve community safety
Asbestos removal in Council buildings	✓	✓	✓		5			•	•	  Removal of asbestos in Council assets
Purpose Built Structure for NT Emergency Services - Cox Peninsula, Maningrida and Pirlangimpi		✓			4			•		  Improve emergency services to ensure community safety

	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project					2018-19	2019-20				
Palmerston and Litchfield										
New Youth Justice Training Facility		✓			70	70	•			  Improve outcomes for young people in detention
Palmerston new Police Station - watchhouse, regional emergency operations centre, and community hall		✓			30	28				  Increase service requirements and improve community safety
Palmerston Fire Station relocate and upgrade		✓			11			•		  Provide effective emergency response and improve community safety
New Bushfires NT headquarters at Livingstone in the Darwin rural area		✓			5	5				  Provide effective emergency response and improve community safety
Coolalinga new fire station		✓			5			•		  Provide effective emergency response and improve community safety
Palmerston Court		✓			•			•		  Provide effective judicial response and improve community safety
Darwin										
John Stokes Square Redevelopment ^ - Nightcliff Police Station - public housing - multi-agency hub		✓			45		45	•		  Redevelop infrastructure to improve services
New Water Police Complex		✓			40			•		  Upgrade site services to meet current standards
Peter McAulay Centre - upgrades and additions - chiller replacement - conference room - college accommodation - forensic laboratory extension		✓			36	3		•	•	  Increase in service requirements and improve community safety
Berrimah Fire Rescue and Emergency Services training facility		✓			6			•		  Meet current standards
Don Dale Youth Detention Centre rectification works		✓			4	3				  Improve outcomes for young people in detention



An accessible and equitable health system is critical to achieving quality of life in the Northern Territory.

The Northern Territory Government works in partnership with Aboriginal organisations and private enterprises to increase health services to all patients. Digital health delivery will be increased to improve health outcomes, reduce patient travel and reduce the length of hospital stays.

Delivering health services to 246 000 people over 1.3 million square kilometres is resource intensive, requiring good transport links and reliable infrastructure.

As our population ages, demand for our health services grows while new technologies, service expansion and innovation is required. Territorians are living longer and remaining in the Territory, increasing the need for specialised palliative, aged care, hospital and primary care services.

Thirty per cent of the Territory population and more than half of Aboriginal Territorians live in remote areas, which puts pressure on our remote health centres, health care staff housing and aviation infrastructure to support health services. The Territory's health infrastructure, including remote clinics, primary health care centres and seven hospitals, is ageing.

Changing chronic health needs caused by harmful levels of smoking, drinking alcohol, poor diet and inadequate exercise increases demand for health infrastructure and services. Chronic health issues and advances in medicine, surgery and imaging technology require specialised infrastructure.

Improving early childhood development is critical for vulnerable children. Child and family centres combine health and education

services in one place to work in partnership with children and families, while remote health centres require culturally appropriate design to accommodate men and women.

A health infrastructure audit is being matched with the forecast clinical needs of Territorians to develop a Territory Health Strategic Infrastructure Plan. The 116-bed Palmerston Regional Hospital opened in August 2018 and significant renovations continue at the Royal Darwin Hospital and Alice Springs Hospital.

Our health sector requires significant investment to:







- upgrade or replace ageing health infrastructure to meet future needs
- support new technology to increase access to state-of-the-art medical facilities
- improve services to cater for our ageing population and our children
- improve health care services for Aboriginal people living in urban and remote areas.

PRIORITY PROJECTS

- **Royal Darwin Hospital**
 - » PET scanner and Cyclotron
 - » Multi-storey car park.
- **Alan Walker Cancer Care**
 - » 12 Chemotherapy chairs.
- **Nightcliff Renal Facility**
 - » Refurbish and expansion of chairs.
- **Alice Springs hospital**
 - » New oncology/cardiology area.
- **Nhulunbuy** – residential aged care centre.
- **Health** new office accommodation.











Key objectives

<p>Prevent illness by having an integrated focus on primary prevention across the life span.</p>	<p>Focus on each person to provide consistent care delivery that is person-centred, culturally appropriate and safe and effective.</p>	<p>Redesign to improve access and enable closer to home services in a timely manner.</p>	<p>Lift performance towards excellence by building capacity to deliver innovative sustainable services.</p>	<p>Embed research in integrated service delivery.</p>	<p>Systematise effectiveness and efficiency through robust systems.</p>
---	---	---	--	--	--

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Territory Wide										
Remote Morgue replacements - Ali Curung, Alyangula, Borroloola, Elliott, Gunbalanya, Jabiru, Kintore, Lajamanu, Nyirripi, Papunya, Wadeye and Yuendumu		✓			23			•	•	 Improve service delivery 
Remote Area satellite renal rooms (renal-ready rooms)		✓			•	1		•	•	 Deliver renal services to improve health outcomes 
Alcohol and other drugs rehabilitation facilities - Ali Curung, Elliott, Kaltukatjara, Ti Tree, Titjikala, Yuendumu and others to be determined		✓			•			•	•	 Improve delivery of rehabilitation services 



A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Central Australia										
New Health Centres - Alcoota, Bonya, Finke, Haasts Bluff, Imanpa, Mt Liebig, Nyirripi, Santa Teresa, Ti Tree and Yuendumu	✓	✓			80			•	•	 Improve service delivery, health outcomes and support population growth
Refurbish health centres - Areyonga, Harts Range, Kings Canyon (Watarrka), Laramba (Napperby), Mt Allan (Yuelamu), Pmara Jutunta, Wallace Rock Hole, Willowra and Wilora		✓			40	•	•	•	•	 Improve service delivery, health outcomes and support population growth
Alice Springs - new 64 chair renal facility		✓			33			•		 Deliver renal services to improve health outcomes
Alice Springs Hospital Infection Protection - refit and redesign central sterile service - redesign Day Procedure Unit Scope room - install reverse osmosis water to all sanitisers		✓			26			•		 Improve service delivery, health outcomes and support population growth
Alice Springs Hospital - Allied Health Building - demolish and replace with 3 storey purpose built facility - expand Allied Health and birthing suite - additional space for growth services		✓			24			•		 Improve service delivery, health outcomes and support population growth
Alice Springs Hospital - rebuild Liebig building to relocate pathology/ mortuary		✓			18			•		 Improved hospital facilities to support service delivery, compliance and health outcomes
New dental clinics for health centres - Canteen Creek, Epenarra, Finke, Harts Range, Laramba, Mt Liebig, Willowra and Yuelamu		✓			3			•		 Improve service delivery, health outcomes and support population growth
Alice Springs Hospital - asbestos removal		✓			2	2				 Asbestos removal from government buildings
Oral Health Services - new permanent and expanded staff building		✓			1			•		 Improve service delivery, health outcomes and support population growth
Construct two additional consulting rooms and pharmacy store at Ti Tree		✓		✓	1			•		 Improve service delivery, health outcomes and support population growth

	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)		
Central Australia										
Alice Springs Hospital clinical area refurbishment/ upgrades - Neonatal Unit extension, wards, oncology/cardiology, inpatient wing, cognitive care facility and ward wet areas		✓			•	8		•	•	 Upgrade hospital facilities to improve service delivery, health outcomes and support population growth 
Alice Springs Hospital support services refurbishment/upgrades - services building wells and fire, services block and maintenance workshop, laundry area, accommodation, chillers and boilers, rationalise car parking, medi-hotel, additional cold storage, emergency power and electrical systems, fire remediation, services building fire remediation and electrical riser critical repair	✓	✓			•		•	•	•	 Upgrade hospital facilities to improve service delivery and health outcomes 
Hermannsburg (Ntaria) - renal facilities		✓			•			•		 Deliver renal services to improve health outcomes 
Flynn Drive Medical Facility major refurbishment		✓			•		•	•		 Improve service delivery, health outcomes and support population growth 
Mt Liebig Clinic refurbishment		✓			•	•				 Improve health outcomes for the community through facility improvements 



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Barkly Region										
New health centres - Ali Curung, Lake Nash (Alpurrurulam), Epenarra (Wutunugurra)	✓	✓			32			•	•	 Improve service delivery, health outcomes and support population growth
Tennant Creek – residential rehabilitation and treatment centre		✓		✓	5	5	•			 Improve health outcomes for the community through delivery of rehabilitation services
Tennant Creek Hospital clinical area refurbishments/ upgrades - telehealth, outpatient clinic area and primary health care corridor, general practice, hearing health, physio room, training room, ADSCA and mental health, theatre complex, renal extensions, wards and Emergency Department (discreet birthing/SARC/ Women’s Health Unit)		✓			•	1	•	•	•	 Improve health infrastructure to support health services
Tennant Creek Hospital support services refurbishments/ upgrades and expansion - kitchen, chillers, building management system, expand accommodation block, night safe car park and stores room expansion		✓			•	•	•	•	•	 Upgrade hospital facilities to improve service delivery, health outcomes and support population growth
New health education facility and temporary staff accommodation in Ali Curung, Elliott and Alpurrurulam (Lake Nash)		✓			•			•	•	 Provide housing and training opportunities for government employees who deliver health services in remote communities
Refurbish health centres - Corella Creek, Illeuwurru and Tara (Neutral Junction)		✓			•				•	 Improve service delivery, health outcomes and support population growth



	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	Total Estimated Cost (\$m)	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	Key Drivers
Katherine Region										
New health centres - Beswick, Binjari, Bulman, Jilkminggan, Kalkarindji, Pigeon Hole, Pine Creek, Timber Creek and Urapunga (Rittarangu)	✓	✓			80			•	•	 Improve service delivery, health outcomes and support population growth
Refurbish health centres - Amanbidji, Barunga, Borrooloola, Bulla, Lajamanu (Hooker Creek), Mataranka and Minyerri		✓			44	•		•	•	 Improve service delivery, health outcomes and support population growth
Seniors Village and aged care facilities		✓	✓	✓	11			•		 Improve service delivery and health outcomes
PFAS Mitigation works	✓	✓	✓	✓	•	•	•	•	•	 Ensure economic sustainability of the region
Mataranka - aged care facility and child care centre			✓		•				•	 Provide specific aged care services to improve health outcomes and enable people to remain in their community
Katherine Hospital refurbishments/ upgrades - computed tomography (CT) room, air-conditioning and vapour barrier rectification, ward refurbishments, staff accommodation refurbishment and medi-hotel		✓			•	•	•	•		 Upgrade hospital facilities to improve service delivery, health outcomes and support population growth
Roper Gulf region - aged care services	✓				•			•		 Provide specific aged care services to improve health outcomes and enable people to remain in their community



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
East Arnhem										
New health centres in Alyangula, Angurugu, Gapuwiyak, Numbulwar and Ramingining	✓	✓			40			•	•	 Improve service delivery, health outcomes and support population growth
Nhulunbuy residential aged care centre	✓				10+	10	•			 Provide a quality aged care facility in Nhulunbuy to service East Arnhem communities
Gove District Hospital refurbishments/ upgrades - fire safety systems, ward building, generator, main switchboard and chilled water air handling unit	✓	✓			•	6		•	•	 Upgrade hospital facilities to improve service delivery, health outcomes and support population growth
Refurbish health centre - Milyakburra (Bickerton Island)		✓			•				•	 Improve service delivery, health outcomes and support population growth
Top End Rural										
New health centres at Adelaide River, Batchelor, Belyuen, Gunbalanya, Jabiru, Palumpa (Nganmariyanga) and Pirlangimpi	✓	✓			56			•	•	 Improve service delivery, health outcomes and support population growth
Batchelor - aged accommodation facility		✓			10		1	•	•	 Provide specific aged care services to improve health outcomes and enable people to remain in their community
Health centre expansion at Maningrida and Peppimenarti		✓			•			•	•	 Improve service delivery, health outcomes and support population growth
Refurbish health centres at Julanimawu (Nguiu), Nauiyu, Milikapiti, Minjilang, Wadeye (Port Keats), Warruwi, Woodicupaldiya		✓			•			•	•	 Improve service delivery, health outcomes and support population growth
Nguiu - renal unit expansion and refurbishment		✓			•			•		 Deliver renal services to improve health outcomes

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Palmerston and Litchfield										
Palmerston Renal Services expansion - 30 bed renal patient accommodation unit		✓			•		•	•		 Deliver renal services to improve health outcomes 
Palmerston new ambulance station		✓			•		•	•		 Improve service delivery, health outcomes and support population growth 
Palmerston expand oral health services		✓		✓	4			•		 Improve service delivery, health outcomes and support population growth 
Palmerston Regional Hospital hydrotherapy pool		✓			3	3				 Improve service delivery and health outcomes 
Palmerston Super Clinic - upgrade air-conditioning and refurbishment		✓			•			•		 Improve service delivery, health outcomes 



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Darwin										
New Health Office Accommodation - new multi-storey office building - office fitout - child care centre - multi-storey car park		✓		✓	75	25	25	•		 Facilitate the co-location of Territory Health staff
Royal Darwin Hospital - Positron emission tomography (PET) scanner and cyclotron	✓	✓			18	9				 Enable Territory cancer patients to undertake detection and treatment services closer to home
Royal Darwin Hospital multi-storey car park		✓			12	3				 Improve access to the hospital for patients, carers and staff
Nightcliff Renal Facility - refurbish and increase number of chairs		✓			10	9				 Deliver renal services to improve health outcomes
Royal Darwin Hospital - Alan Walker Cancer Care Centre - 12 chemotherapy chair expansion		✓			5	•				 Improve service delivery, health outcomes and support population growth
Darwin and Palmerston renal services expansion - Home Therapies Unit		✓			4			•		 Consolidate existing functions to deliver renal services to improve health outcomes
Royal Darwin Hospital clinical area refurbishments/upgrades - wards - intensive care - theatres		✓			•			•		 Upgrade hospital facilities to improve service delivery and health outcomes
Royal Darwin Hospital support services refurbishments/upgrades - patient and staff lift refurbishment, fire doors, pharmacy, biomedical, loading dock, waste handling, chilled water reticulation, electrical distribution boards, engineering services, medical imaging, kitchen, medical records, equipment stores and steam system		✓			•			•	•	 Upgrade hospital facilities to improve service delivery and health outcomes

	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project					2018-19	2019-20				
Darwin										
Royal Darwin Hospital - review and refurbish or replace hospital campus outer buildings: - critical medical systems server building - pathology - mortuary and bereavement centre - mental health inpatient ward - drug and alcohol rehabilitation - centre for disease control - tuberculosis clinic - staff accommodation	✓	✓			•			•	•	 Upgrade hospital facilities to improve service delivery and health outcomes
Royal Darwin Hospital new facilities - 36 bed cognitive care facility - medi-hotel expansion		✓			•		•	•		 Replace hospital facilities to improve service delivery and health outcomes
Refurbishments - Alan Walker Cancer Care Centre - Barbara James House		✓			•		•	•	•	 Deliver quality care services for cancer patients
Replacement of Tamarind Centre		✓			•		•	•		 Improve service delivery, health outcomes and support population growth



Housing



Having a good home leads to good education, good health and positive outcomes for the community.

Unlocking the housing market so people will invest in the Territory and call it home is critical to our economy.

Planning to ensure suitable land is ready for future residential development is vital to growing our community. Increasing housing choices, including higher density, compact urban residential lots and different rural lifestyle lots, will boost the economy.

We need to plan in urban and remote areas across the housing continuum from homelessness, transient support and crisis accommodation to social housing, affordable rentals and home ownership options.

The Northern Territory Government manages 12 000 dwellings for public housing and funds the non-government sector to support a range of crisis, short term, transitional and long term accommodation options.

The distance of the Territory's 73 remote communities, 43 town camps and 500 homelands from regional centres provides a challenge to build housing infrastructure with increased freight costs and transport access.

The Territory has the highest homelessness rate in the nation, which places a strain on other social services.

Homelessness ranges from people living in overcrowded dwellings, particularly in remote areas, to people in urban centres sleeping rough. Overcrowding impacts on the health of people in remote and regional communities.

The Northern Territory Government's 10 year, \$1.1 billion remote housing program will build new homes, focus on repairs and maintenance and fund new living spaces in existing homes to reduce overcrowding and create local jobs. This housing needs to reflect the cultural and physical needs of the community.

Providing a range of housing types close to transport networks, community and commercial facilities increases efficiencies through compact urban and infill residential development.

Significant investment in infrastructure is needed in the housing sector to:

- reduce homelessness
- provide public and affordable housing in urban and remote areas
- add housing stock to the rental and first home buyer housing market
- provide homes for people living in remote communities
- deliver programs to manage and maintain the public housing assets.

PRIORITY PROJECTS

- **\$1.1 billion remote housing program** over 10 years to deliver:
 - » Room to Breathe program to extend living spaces.
 - » HomeBuildNT program to build new houses in remote communities.
 - » Repairs and maintenance on existing houses in remote communities.
 - » Additional Government Employee Housing, including for locally recruited employees, to support service delivery.
- **Homelands Extra Allowance Program** – \$12 million over 2 years to assist with repairs and upgrades to homes for Aboriginal people permanently living on homelands.
- **Town Camps** – \$24 million for urgent housing and infrastructure works.

Key objectives

<p>Sustainable housing supply, considering affordability, to meet the needs of Territorians now and in the future.</p>	<p>Sustainable communities where the housing system supports communities to grow and prosper.</p>	<p>Sustained wellbeing for people with a housing system that supplies the right options to the right people at the right time.</p>	<p>Offer an affordable and accessible housing system for eligible Territorians.</p>
---	--	---	--

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Territory Wide										
\$1.1 billion Remote Indigenous Housing program - \$500 million HomeBuild NT - \$200 million Room to Breathe - \$200 million Government Employee Housing - \$200 million Repairs and Maintenance		✓			1100	124	90	•	•	 Reduce overcrowding, improve housing conditions and health outcomes for people in remote communities
Urban Public Housing rolling program		✓			200	10	20	•	•	 Provide safe, secure and affordable housing for people on low incomes
Town camps - urgent housing and infrastructure works		✓			24	9	•	•		 Reduce overcrowding and provide employment and training opportunities to local Aboriginal people
Employment and Education Housing - Gnyangara, Mutitjulu, Wurrumiyanga and Yarralin	✓				19	10				 Provide safe and secure housing to support population growth and improve health outcomes
Homelands Extra Allowance Program over 2 years to assist with repairs and upgrades		✓			12	6	6			 Improve housing conditions and health outcomes for Aboriginal people permanently living on homelands
Transitional accommodation facilities	✓				9	9				 Provide safe and secure temporary accommodation
Seniors lifestyle accommodation		✓		✓	•	•	•	•		 Increase the quantity and range of accommodation opportunities

A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Central Australia										
Arlparra Remote Housing - new and upgrades	✓				11	7	2			 Provide safe and secure housing to support population growth and improve health outcomes
Room to Breathe Program - Areyonga, Finke, Kaltukatjara, Laramba, Mt Liebig, Nturiya, Nyirripi, Papunya, Pmara Jutunta and Willowra		✓			8	8				 Improve living conditions by reducing overcrowding
Alice Springs - Urban Public Housing - new builds and redevelopment program		✓			6	6				 Provide housing for a growing population and improving health outcomes
HomeBuild NT - Hermannsburg, Kintore and Santa Teresa		✓			5	5				 Provide safe and secure housing to support population growth and improve health outcomes
Government Employee Housing - Engawala and Yuendumu		✓			1	1				 Provide housing for a growing population and improving health outcomes
Construct new defence houses and upgrade existing defence houses	✓				•	•				 Provide supportive housing for defence personnel and their families
Alice Springs - Taylor Street - 4 by 1 bedroom and 2 by 2 bedroom dwellings				✓	•	•				 Provide housing for a growing population
Alice Springs - Hawkins Court - 3 by 2 bedroom dwellings				✓	•	•				 Provide housing for a growing population
Barkly Region										
Remote Housing - new houses - Ampilawatja and Wutunugurra		✓			8	1				 Provide housing for a growing population and improving health outcomes
Tennant Creek - Urban Public Housing - new builds and redevelopment program		✓			4	4				 Improve public housing stock
Room to Breathe Program - Ali Curung, Canteen Creek and Tara		✓			3	3				 Improve living conditions by reducing overcrowding
Borroloola - Government Employee Housing		✓			1	1				 Provide housing for a growing population and improving health outcomes

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Katherine										
Remote Housing - new and upgrades - Amanbidji, Binjari, Minyerri, Ngukurr, Rittarangu and Robinson River	✓				45	16				 Provide safe and secure housing to support population growth and improve health outcomes
Katherine East Neighbourhood Centre - retail and commercial precinct - short term accommodation - lifestyle or retirement village		✓	✓	✓	23	•	•	•		 Support housing options within Katherine
HomeBuild NT - Barunga, Bulman, Lajamanu, Manyallaluk, Ngukurr, Pigeon Hole and Rittarangu		✓			12	12				 Provide safe and secure housing to support population growth and improve health outcomes
Roper Gulf staff housing for local government employees			✓	✓	10			•		 Provide housing for government employees who deliver government programs in remote communities
Katherine East - 16 by 2 bedroom dwellings				✓	4	4				 Provide housing for a growing population
Room to Breathe Program - Kybrook Farm and Weemol		✓			2	2				 Improve living conditions by reducing overcrowding
Katherine - Urban Public Housing - new builds and redevelopment program		✓			2	2				 Improve public housing stock
Government Employee Housing - Lajamanu and Mataranka		✓			2	2				 Provide safe and secure housing to support population growth and improve health outcomes
Construct new defence houses	✓				•	•				 Provide supportive housing for defence personnel and their families



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
East Arnhem										
Galiwinku Cyclone Lam rebuild	✓	✓			52	9	9	•		Cyclone disaster housing recovery
HomeBuild NT – Angurugu, Galiwinku and Yirrkala		✓			6	6				Provide safe and secure housing to support population growth and improve health outcomes
Government Employee Housing - Milingimbi and Numbulwar	✓	✓			6	4				Provide safe and secure housing to support population growth and improve health outcomes
Remote Housing - new and upgrades - Gapuwiyak, Ramingining, Umbakumba and Yirrkala	✓				5	4				Provide safe and secure housing to support population growth and improve health outcomes
Room to Breathe Program - Milingimbi and Milyakburra		✓			2	2				Improve living conditions by reducing overcrowding
Nhulunbuy - Urban Public Housing - new builds and redevelopment program		✓			1	1				Improve public housing stock
Top End Rural										
Remote Housing - new and upgrades - Pirlangimpi and Wadeye	✓				33	8				Provide housing for a growing population and improving health outcomes
Additional housing for council staff	✓	✓	✓		5	•		•		Provide housing to Council employees who deliver quality council services in remote communities
Room to Breathe Program - Belyuen, Minjilang, Nauiyu, Warruwi and Wurrumiyanga		✓			3	3				Improve living conditions by reducing overcrowding
Nganmarriyanga - Government Employee Housing		✓			1	1				Provide safe and secure housing to support population growth and improve health outcomes
Palmerston and Litchfield										
Palmerston CBD - The Boulevard - 15 storey multiple use development in 3 towers (in 3 stages)				✓	150	•	•	•	•	Infrastructure to support suburban development
Palmerston - Urban Public Housing - new builds and redevelopment program		✓			5	5				Improve public housing stock
Johnston - Camm Street - 3 by 3 bedroom dwellings				✓	•	•				Provide housing for a growing population

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Darwin										
John Stokes Square Redevelopment^ - Nightcliff Police Station - public housing - multi-agency hub		✓			45		45	•		 Redevelop infrastructure to improve services
Larrakeyah - Packard Place - 125 apartments				✓	40	•	•			 Provide housing for a growing population
Fannie Bay, 7 Waratah Crescent - residential redevelopment		✓		✓	30		10	•		 Provide innovative medium density housing options
Darwin CBD - Daly Street - mixed use residential and motel complex				✓	24	•	•			 Provide housing for a growing population and short term accommodation for visitors
Larrakeyah - Houston Street - 16 apartments				✓	9	8	1			 Provide housing for a growing population
Casuarina - Urban Public Housing - new builds and redevelopment program		✓			3	3				 Improve public housing stock
Darwin - Urban Public Housing - new builds and redevelopment program		✓			2	2				 Improve public housing stock
New Defence houses - RAAF Darwin, Lee Point and Muirhead North	✓				•	•		•		 Provide supportive housing for defence personnel and their families



Art, Culture and Active Recreation



The Northern Territory has a thriving, imaginative and innovative creative economy and our arts, heritage, culture and recreational lifestyle are some of our best assets.

Aboriginal people, their culture and relationship to the land are key to our cultural identity and economy.

Art and cultural activities deliver cultural, social and economic value to the Territory and our heritage, sports, fishing and outdoor lifestyle attract new Territorians and tourists alike.

Our ample parks and reserves enable Territorians and visitors to immerse themselves in nature, experience culture, value our wildlife and enjoy our natural environment.

Infrastructure hosting our arts, heritage and cultural activities is outgrowing its use and requires more upkeep. There is increasing pressure for our sporting arenas and facilities to meet higher national and international standards and small volunteer-based clubs have limited resources.

As our population and visitor numbers grow, so does the pressure on the capacity and infrastructure at our parks and reserves.

Our Aboriginal heritage is central to the cultural stories of the Territory. Linking these stories through art galleries, museums, cultural centres and arts trails will showcase one of

our oldest cultures to the world while stimulating local economies.

Prioritising investment in cultural infrastructure provides new tourism offerings, increases tourism numbers and boosts the economy through construction and tourism revenue.

New and upgraded sporting facilities for local, national and international sports will support the Arafura Games in Darwin and Masters Games in Alice Springs, attract high profile sporting events and support our local sporting clubs.

Investment in infrastructure is needed to:

- provide national and international standard sporting infrastructure to develop the local sporting community
- upgrade infrastructure and roads to our parks and reserves to increase visitor access and numbers
- develop state-of-the-art and innovative arts and cultural venues and facilities, informed by industry and community needs
- develop shared multi-purpose facilities to maximise use and share costs.

PRIORITY PROJECTS

- **National Aboriginal Art Gallery** to enhance Alice Springs' reputation as the inland capital of Australia and attract thousands of visitors.
- **National Iconic Arts Trail** – \$10 million each for art galleries in Katherine, Tennant Creek and Arnhem Land and \$6 million for regional and remote gallery enhancements.
- **Warren Park Redevelopment** – develop a new sporting complex as the home of rugby league at Warren Park, Marrara.
- **Netball Stadium** – expand Marrara Sporting Complex to build a new indoor stadium for year round competition.
- **Recreational fishing infrastructure program** \$50 million to deliver boat ramp, car park, CCTV and toilet facilities at fishing destinations across the Territory.
- **George Brown Darwin Botanic Gardens** multi-purpose visitor and events centre

Key objectives

Recognise the value and benefit of arts and culture, particularly Aboriginal art and culture.	Embrace diversity and access for everyone.	Develop a coordinated approach to facility investment and planning.	Expand opportunities for recreation in parks and reserves while protecting their natural and cultural value and assets.	Improve facility and space planning, provision and sharing to maximise the benefits of sport and recreation events.
--	---	--	--	--

Project	Prospective Contribution				Total Estimated Cost (\$m)	Funding (\$m)		Indicative Sequencing		Key Drivers
	AG	NTG	LG	PRIV		2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Territory Wide										
Enhance government assets - Sport and Recreation - Arts and Museums - Heritage - Parks and Wildlife	✓	✓	✓		140	15	13	●	●	 Enhance liveability through improving community, sporting and recreational facilities 
Arts and Museum collection storage expansion		✓			55				●	 Preservation, protection and accessibility of the collections 
Recreational fishing infrastructure program including: Corroboree Billabong, Dundee Beach, Middle Arm, Channel Island, Manton Dam, Nightcliff and Shady Camp		✓			50	15	10	●		 Enhance recreational fishing and the Territory's reputation as a world class fishing destination 
Oval upgrades, including lighting in urban, regional and remote areas		✓	✓		27	9	6	●		 Enhance liveability through improved recreation facilities 
Motor Sports infrastructure upgrades across the Territory		✓			23	2	●	●	●	 Provide safe and functional environments for sporting participants and attendees 
Regional towns and remote community local projects - reseal internal roads and improve street lighting - enhance tourism and playground facilities - develop walking trails and camp sites - cemetery upgrades		✓	✓		●	●		●	●	 Support the development of localised industries and create a sustainable community economy 
Enhance community art galleries, art centres, museums, libraries and meeting places		✓			●	●	●	●		 Enhance liveability through improved community facilities 
New civic centres across the regions		✓	✓		●			●		 Enhance delivery of local community services 

A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Central Australia										
National Aboriginal Art Gallery^	✓	✓			50+		50			Exhibit and preserve Aboriginal art and culture
Neville Shute Public Library development	✓	✓	✓		22				•	Improved access to quality education and cultural experiences for the community
Alice Springs CBD Revitalisation ^ - meeting places - shading and water play area	✓	✓	✓		20	20	•			Unlock business and industry development opportunities and create a safe and vibrant place for people to enjoy
National Indigenous Cultural Centre^		✓		✓	20				•	Exhibit and preserve Aboriginal art and culture
Sporting facilities - upgrade Jim McConville oval - upgrade Traeger Park - new at Kilgariff		✓	✓		16	6			•	Enhance liveability through improved sporting facilities
Tjoritja/West MacDonnell National Park - Red Centre adventure cycling track^		✓			12	12				Expand tourism product to develop the economy and improve liveability
Central Australian - new five-day walking track^		✓			6	6				Expand tourism product to develop the economy and improve liveability
Arunga Park Speedway upgrades		✓			2	2				Enhance liveability through improved motor sports facilities
Newland Park improvements - 3 new BMX tracks, skate park, playground, BBQ facilities and shade		✓	✓		2	2				Provide facilities for younger people to play and engage and improve services
Alice Springs Aquatic and Leisure Centre upgrades			✓		1				•	Enhance liveability through improved recreation facilities
Barkly Region										
Tennant Creek Art Gallery extensions - connect the National Iconic Arts Trail^		✓		✓	10	10				Provide opportunity for increased visitor numbers and length of stay in the Territory
Purkiss Sporting Reserve upgrades		✓	✓	✓	5	•				Improve amenity for sporting participants and attendees

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Katherine Region										
Victoria Daly - improve Council infrastructure			✓		23	•	•	•	•	Enhance liveability through improved community facilities
Katherine Art Gallery extensions - connect the National Iconic Arts Trail^		✓		✓	10	10				Provide opportunity for increased visitor numbers and length of stay in the Territory
Ngukurr multi-purpose sporting and community complex			✓		8	•			•	Enhance delivery of local community and sporting services
Katherine Sports Master Plan Implementation		✓	✓		7	4		•		Enhance liveability through improved sports facilities
Integrated Community Hub - new age interactive library - youth employment centre		✓	✓	✓	6			•	•	Improve access to recreational activities for youth
Katherine Showgrounds upgrade		✓	✓		2	2				Enhance liveability through improved community facilities
Revitalisation of Katherine Hot Springs		✓	✓		2	•	•	•	•	Expand tourism product to develop the economy and increase liveability
Borroloola multi-purpose sporting complex upgrade			✓		2	•				Provide safe and functional environments for sporting participants and attendees
Beswick water park			✓		1			•		Enhance liveability through improved recreation facilities
East Arnhem										
East Arnhem Art Gallery extensions - connect the National Iconic Arts Trail^		✓		✓	10	10				Provide opportunity for increased visitor numbers and length of stay in the Territory
Oval lighting towers - Galiwinku, Gapuwiyak, Milingimbi and Ramingining	✓		✓		2	•	•			Enhance liveability through improved recreation facilities
Solid Basketball court cover for Galiwinku and Milingimbi	✓		✓		1	•				Enhance liveability through improved recreation facilities
Numbulwar combined business centre			✓	✓	1			•		Economic development
Numbulwar art and craft centre				✓	1			•		Enhance liveability through improved community facilities

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Top End Rural										
Batchelor Town Centre revitalisation - recreation hub and swimming pool - bowling greens - basketball and tennis courts - night lighting		✓	✓		5	2	3			 Enhance liveability through improved community facilities
Council workshop renovations - Milikapiti Pirlangimpi and Wurrumiyanga	✓	✓	✓		3	•				 Support council operations and generate local jobs and skills training
Palmerston and Litchfield										
Freds Pass Reserve Master Plan		✓	✓		71	6	7	•	•	 Enhance liveability through improved community facilities
Litchfield new municipal infrastructure - community hall / performing arts centre - aquatic centre - library	✓	✓	✓		25		•	•		 Enhance liveability through improved recreation facilities
Palmerston new infrastructure - swimming pool - arts and cultural performing arts centre		✓	✓		19			•		 Enhance liveability through improved recreation facilities
Rosebery Sporting Hub - hockey and basketball facilities - car park expansion		✓			10				•	 Enhance liveability through improved sports facilities
Mickett Creek Shooting Range upgrade		✓			4			•	•	 Enhance liveability through improved recreation facilities



Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Darwin										
Darwin CBD Revitalisation (part of City Deals*) ^ - greening and cooling initiatives - State Square underground car park - connect Darwin Waterfront and Cullen Bay - activate laneways - Art Gallery at State Square - CDU city campus	✓	✓	✓	✓	100+	46	•	•		  Unlock business and industry development opportunities and create a safe and vibrant place for people to enjoy
Darwin CBD multi-storey car park			✓		44			•	•	  Enhance the amenity of local streets and reduce hotspots
George Brown Darwin Botanic Gardens^ - multi-purpose visitor and events centre - new plant display - visitor centre with gallery - ephemeral wetland with boardwalk - new entrance and car park		✓			26	5	5	•	•	  Expand tourism product to develop the economy and increase liveability
Warren Park - new Rugby League facility		✓			25	18				  Provide facilities for the growth of Rugby League
Marrara indoor multi-use facility expansion		✓			20			•		  Enhance liveability through improved sports facilities
Marrara Indoor Netball Stadium	✓	✓			20	11				  Enhance facilities to have capability to host international and national netball fixtures, with the added flexibility to host other events
Hidden Valley motorsports complex - upgrade reticulation and fuel bund - new Motorsports House		✓			14	11	•	•		  Enhance liveability through improved motorsports facilities
Casuarina Coastal Reserve upgrades		✓			12	1		•	•	  Enhance liveability through improved park facilities
Fannie Bay Gaol conservation, visitor centre and arts hub		✓			11	1			•	  Enhance historical facilities

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
					2018-19	2019-20				
Darwin										
TIO Stadium upgrades		✓			6	2				  Improve facilities for the growth of AFL
Museum and Art Gallery of the Northern Territory upgrades		✓			5	2		•	•	  Provide for the preservation and exhibition of the Territory's art and cultural history
Richardson Park - access road extension - other works		✓			•	2	•			  Provide safe access to Ludmilla Primary School and Richardson Park, and other works to be agreed with the community
Government House remedial works		✓			4	4				  Ensure stabilisation of slope and building
Culture and recreational precinct at Myilly Point - landscaping and playground		✓			3	3				  Create a safe and vibrant place for people to enjoy
Darwin Velodrome track upgrade		✓	✓		2	2				  Provide a standardised track to enhance the sporting experience of participants and attendees
Darwin Entertainment Centre – technical upgrades		✓	✓		1	1				  Enhance orchestral and operatic performances
Leanyer Recreation Park upgrades to car park and play areas		✓			•			•		  Enhance liveability through improved recreation facilities
Darwin International Airport - Darwin Airport Central - Bagot Road retail development - Osgood West Village - Neale Street fast food precinct				✓	•	•		•		  Enhance the airport precinct to cater for locals and visitors
NT Rugby Union facility upgrade		✓			•			•		  Provide a safe and functional environment for sporting participants and attendees





Whether it is in an urban area, remote community, cattle station, mine or tourist site, telecommunications and digital technology connects the Northern Territory to the world.

Once connected, all Territorians can take advantage of online services such as education and health, generate business, connect socially and become part of the Territory's and the global economy.

Telecommunications are an essential service and digital technologies are critical and life changing for people living in remote communities who can access government services online, including telehealth, distance education, welfare, licensing and motor vehicle services.

The Australian Government directly supports telecommunications services nationally through Telstra's universal service obligation.

Keeping pace with changing technology is a shared challenge, and a great opportunity to deliver digital services that meet the user's needs at an affordable price. Urban areas are generally well serviced through commercial markets. Beyond urban settings, industry and governments need to work together to provide telecommunications infrastructure in remote locations.

High quality reliable telecommunications services help close the gap of Aboriginal disadvantage by inspiring innovation and global connectivity, creating opportunities for job creation and small business, reducing the need for long distance travel, connecting communities when travel is not possible,

improving safety and expanding the social networks of communities.

Investment in digital technology is needed to:

- improve telecommunications access for Territorians, particularly in rural and remote communities
- close the gap between Aboriginal and non-Aboriginal Territorians
- encourage technology innovation from the private sector
- connect Territory businesses, regardless of location, to local, interstate and global markets.

PRIORITY PROJECTS

- **Telstra and Northern Territory Government remote telecommunications co-investment program** – continue to fund telecommunications infrastructure roll out to selected remote communities.
- **Mobile hotspots program** – explore opportunities to continue to improve mobile access by leveraging existing mobile telecommunications infrastructure to extend coverage.
- **Radio communications** – upgrade and modernise radio transmission infrastructure in the Territory to support emergency and other frontline services.

Key objectives

Telecommunications that deliver long term benefits to urban, rural and remote communities across the Territory.

Realising the value of government data holdings by progressing plans to share a broader range of data with industry and community to develop new business and services.

Fostering investment, innovation and digital skills through agile responses to new technology and market opportunities.

Integrating online and over the counter services to make it cheaper and easier for community and businesses to interact with government.

Project	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
						2018-19	2019-20			
Territory Wide										
Mobile and/or broadband services (possible joint funding co-investment program)		✓		✓	30				•	 Expand mobile services to improve connectivity
Mobile and/or broadband services (joint funding co-investment program)		✓		✓	28	4	8	•		 Expand mobile services to improve connectivity
Police, Fire and Emergency Services radio network upgrade		✓			14	1	1			 Achieve compliance with the Australian Communications and Media Authority legislative changes that require a move to new radio frequencies
All Sites Territory Generation - ICT Server infrastructure, ICT Intranet Decouple, New WAN, auto black start and improved security		✓			11	1	•			 Improve connectivity for essential services
ICT cabling upgrades in schools		✓			8	8				 Improve education outcomes through better connectivity
Mobile hotspot installations	✓	✓			1		•	•		 Improve regional and remote connectivity
Central Australia										
Mobile and Broadband services: Atitjere, Kintore and Santa Teresa (joint funding Telstra/NTG co-investment program)		✓		✓	15		•			 Expand mobile services to improve regional and remote connectivity
Katherine Region										
Mobile and/or Broadband services: Barunga, Bulman, Manyallaluk, Minyerri, Weemol and Yarralin (joint funding Telstra/NTG co-investment program)		✓		✓	12		•			 Expand mobile services to improve regional and remote connectivity

	Prospective Contribution				Total Estimated Cost (\$m)	Indicative Sequencing				Key Drivers
	AG	NTG	LG	PRIV		Funding (\$m)		Medium Term (3-5 Years)	Longer Term (6-10 Years)	
Project	AG	NTG	LG	PRIV	Total Estimated Cost (\$m)	2018-19	2019-20	Medium Term (3-5 Years)	Longer Term (6-10 Years)	Key Drivers
Top End Rural										
Remote communication connectivity in the Tiwi Islands		✓		✓	9	3	6			 Improve regional and remote connectivity 
Palmerston and Litchfield										
Smart Cities Technology - adopt intelligent IT systems		✓	✓		2	2				 Improve interface between local government and the community 
Darwin										
State Square redevelopment - relocate NT Data Centre		✓			13	6	7			 Enhance data collection, storage and distribution 
Switching on Darwin - city-scale smart infrastructure - smart services (lighting, parking, wifi)	✓		✓		10	10	•			 Smart technology to contribute to city rejuvenation, and together with open data, help stimulate new partnerships and business growth 

A lesser figure in the 2018-19 and 2019-20 columns than in the Total Estimate column indicates either previous year expenditure or expenditure in outer years, in some instances beyond the 10 year term.

BIBLIOGRAPHY

Charles Darwin University research report – *Synthesising Northern Territory Population Research: A report to the Northern Territory Chief Minister 2017*

Darwin International Airport Master Plan 2017

Darwin Port – Port Development Plan 2016

Department of Education *Strategic Framework 2018–2022*

Department of Health, *Northern Territory Health Strategic Plan 2018–2022*

Department of Treasury and Finance – *all statistical data*

Katherine Town Council – *Katherine Great 8 2018*

Northern Territory Police, Fire and Emergency Services *2016–17 Annual Report*

Northern Territory Roadmap to Renewables September 2017

NT Budget 2018 – *The Infrastructure Program*

Office of the Commissioner for Public Employment – *State of the Service Report 2016–17*

Tourism NT, *2016–17 Tourism Vision 2020 Progress Summary*

Tourism NT, *Hermannsburg Master Plan May 2017*

Tourism NT, *Turbocharging Tourism 2018*

ACKNOWLEDGEMENTS

The Darwin CBD image on pages 2 and 3 captured by David Silva – Silva Photographics.

Shady Camp Boat Ramp image on page 24 provided by Alex Julius, Managing Editor, National Australian Fishing Annual Publications.

Resource images on pages 30 and 32 provided by Gina Wilson, Community Relations Manager Northern Gas Pipeline Jemena.

Defence images on pages 34, 36 and back cover © Commonwealth of Australia, Department of Defence.

Powerlines image on page 47 captured by Geoff Whalan Cyclone Marcus March 2018.

Katherine Ambulance Centre image on page 67 provided by St John Ambulance NT.

BMX track image on page 86 provided by Satellite City BMX Club.

The remaining images in this publication are reproduced with the kind permission of the Land Development Corporation, Power and Water Corporation, Northern Territory Police, Fire and Emergency Services, Department of Primary Industry and Resources, Department of Tourism and Culture, and Department of Infrastructure, Planning and Logistics.

The Department of Infrastructure Planning and Logistics would like to thank the following private sector and local government organisations that provided input into the information contained within sections of the plan.

Alice Springs Town Council

APPEA Limited

AustralAsia Railway Corporation

Central Desert Regional Council

City of Darwin

City of Palmerston

Coomalie Regional Council

Costojic (Zuccoli Aspire)

Darwin Major Business Group

Darwin Port

Defence Housing Association

East Arnhem Regional Council

Haileybury Rendall School

Halikos Group (Northcrest)

Katherine Town Council

Litchfield Council

Northern Territory Airports

Northern Territory Cattlemen's Association

PEET (Durack Heights)

Planning Institute of Australia

Roper Gulf Regional Council

Tiwi Island Regional Council

URBEX (Zuccoli Village)

Victoria Daly Regional Council

Wagait Shire Council

West Arnhem Regional Council





Published by the Department of Infrastructure, Planning and Logistics

© Northern Territory Government 2018

E: infrastructureplan.NTG@nt.gov.au

T: +61 8 8999 4743

Web page: <https://dipl.nt.gov.au/publications>

Address: PO Box 61, Palmerston NT 0831

This work is available for your use under a Creative Commons CC BY 4.0 International Licence, with the exception of the Northern Territory Government logo and images. Creative Commons Attribution 4.0 International Licence is a standard form licence agreement that allows you to copy, communicate and adapt this work provided that you attribute the work to the Northern Territory Government (Department of Infrastructure, Planning and Logistics) and abide by the other licence terms <https://creativecommons.org/licenses/by/4.0/>

ISBN: 978-0-9946294-3-2



The material contained in this document is made available for your use, but the Northern Territory Government and its employees do not guarantee that the document is without flaw of any kind and therefore disclaims all liability for any error, loss or other consequence that may arise from your use. The document is made available on the understanding that the Northern Territory Government is not providing professional advice, and that users exercise their own skill and care with respect to its use, and seek independent advice as necessary.