



NORTHERN TERRITORY

BUDGET 2022-23

NORTHERN TERRITORY ECONOMY

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Overview

This 2022-23 *Northern Territory Economy* summarises the outlook for the Territory economy across a range of key economic indicators, with headline forecasts detailed in Table i. Additional commentary on current and historical macroeconomic conditions is available at the Territory Economy website, nteconomy.nt.gov.au.

Table i: Key economic indicator forecasts (%)

	2020-21a	2021-22e	2022-23f	2023-24f	2024-25f	2025-26f
Gross state product ¹	- 0.6	4.4	3.7	- 0.7	4.3	2.9
State final demand ¹	6.1	8.8	5.4	0.3	- 2.5	- 1.8
Population ²	- 0.1	0.1	0.6	0.8	0.9	0.9
Employment ¹	- 1.7	1.1	2.3	0.9	1.4	1.7
Unemployment rate ³	5.2	3.9	4.2	4.4	4.4	4.4
Consumer price index ¹	2.0	5.7	3.1	1.0	1.3	1.7
Wage price index ¹	1.7	1.9	1.6	2.2	2.4	3.0

a: actual; e: estimate; f: forecast

1 Year-on-year percentage change.

2 June quarter compared with June quarter the previous year.

3 Year average.

Source: Department of Treasury and Finance; ABS

COVID-19

It has been more than two years since COVID-19 first emerged, sparking a significant health crisis but also creating wide ranging social and economic effects in Australia and globally. In late 2021, the Territory, along with most other jurisdictions, eased travel restrictions including removing quarantine requirements for vaccinated travellers, signifying a successful vaccine rollout and 'opening up' to all of Australia. Nonetheless, some level of community transmission is unavoidable as the transition to endemic takes place.

The economic impacts of COVID-19 remain varied across regions and industries, with tourism and hospitality businesses, particularly in Central Australia, more negatively affected due to the lack of international tourists. While Australia's international border opened up in early 2022, the resumption of travel is expected to be gradual and will be contingent on reciprocated border access and consumer confidence abroad. Closed borders have also affected access to labour for industries that rely on both overseas and interstate migration for workers, such as tourism, agriculture and construction. COVID-19 cases have also affected worker availability, further detracting from output in some industries.

In 2020-21, demand in the Territory recovered, led by the Territory's successful response to COVID-19, unprecedented levels of government support at both the Territory and national levels, and a strong rebound in household consumption. This was largely due to Territory retailers being able to continue to operate unabated with minimal lockdowns and trading restrictions.

In 2021-22, consumption remains strong and the Territory has seen an increase in private investment, including the commencement of construction associated with the Finniss lithium project and the United States (US) defence fuel storage facility. These investments are indicative of investor confidence and a transition away from COVID-19-related uncertainty to more historical investment patterns going forward.

Past economic trends

Over the past 20 years, the Territory economy has expanded from a succession of major projects, with the most recent being the globally significant Ichthys liquefied natural gas (LNG) project, which generated significant construction activity and direct local employment. Major projects also generate investment in the broader economy through industries in the supply chain and contribute to population growth, which in turn creates demand for housing and supports industries relying on household spending.

As production from the Ichthys LNG plant approached full capacity in 2019-20, the value of the Territory's total exports increased by more than 85% compared with 2016-17. This was a significant contributor to economic growth at the time, while the onshore domestic economy was recalibrating following completion of the construction phase of the project in 2018. The economy was showing early signs of recovery when COVID-19 arrived in early 2020.

The Territory's gross state product (GSP) increased by a nation-leading 6% in 2019-20, driven by the increase in LNG exports, while in the domestic economy, state final demand (SFD) fell by 5.4% as consumption weakened on the back of declining employment and population growth, and investment declined following the Ichthys construction phase. Conversely, in 2020-21 GSP declined by 0.6% due to weaker net exports, while SFD grew by 6.1% as household consumption and private investment returned to growth.

Economic outlook

GSP is estimated to increase by 4.4% in 2021-22 and SFD by 8.8% as an increase in private investment is partially offset by an increase in imports associated with large engineering and construction projects. Economic growth is forecast to average 2.9% over the five years to 2025-26, and is expected to be heavily influenced by the Barossa Project – a large scale offshore LNG facility and upgraded onshore processing plant.

Household consumption is forecast to provide a modest contribution to economic growth over the outlook period, supported by employment and population growth. The Territory's population is projected to strengthen over the forecast period as project-driven employment opportunities support interstate migration and easing of COVID-19 restrictions enables the return of overseas migration.

Private sector investment is estimated to increase by 36.6% in 2021-22, and forecast to increase by 24.3% in 2022-23. This is largely attributable to the US\$3.6 billion offshore construction of the Barossa Project contributing to elevated levels of business investment. The related US\$600 million onshore upgrade to extend the life of the Darwin LNG plant will also support business investment, with a much greater use of local content and employment than the project's offshore component.

Economic growth in 2022-23 is forecast to be 3.7% as strengthened private investment is again partially offset by an associated increase in imports. A planned pause in production at the Darwin LNG plant in 2023-24 reflects the transition to the Barossa field as its new source of gas, and economic growth in 2023-24 is forecast to decline as this temporary halt in production detracts from net exports. As Barossa comes online in early 2025, exports are expected to increase, contributing to a forecast return to GSP growth in 2024-25 and 2025-26, but is partially offset by weaker private investment (based on projects not having reached final investment decision at the time of forecasting) following the completion of all the related construction works. Therefore, SFD is forecast to contract in the outer years of the outlook, tapering off from the significantly elevated levels of business investment through 2023-24.

The Barossa Project will make a significant contribution to private investment, however the use of local content and employment for the offshore construction phase is likely to be minimal. As such, the projected declines in the outer years for private investment and, consequently, SFD, are not expected to negatively affect employment. Over the outlook, employment outcomes will be tied to onshore project and industry activity more broadly, as well as improved population growth.

There is a range of major projects proposed that are not included in the forecasts as they are yet to reach final investment decision which, if they proceed during the outlook period, will contribute to stronger economic growth. Chapter 2 *Major projects and investment opportunities* provides additional detail on this pipeline of projects. Similarly, the Commonwealth's announced \$2.6 billion investment in Territory infrastructure under its Energy Security and Regional Investment Plan will significantly strengthen economic growth, but this is not currently included in the forecasts as timing will depend on finalisation of project-specific business cases.

After several years of subdued inflation, growth in Darwin's consumer price index (CPI) was 5.1% in 2021, and is estimated to be 5.7% in 2021-22. While contributing factors include increased fuel prices and rents, a significant portion of the rise in 2021 can be attributed to the unwinding of COVID-19-related policies from 2020, such as the Territory's Home Improvement Scheme (see Chapter 7 *Prices and wages*). Most of these one-off measures will have minimal impact on the 2022-23 inflation forecast of 3.1%, which is more reflective of rents, housing construction costs, geopolitical tensions and the impact of disrupted supply chains.

Risks to the outlook

The pace and strength of recovery in the domestic economy to date has mitigated some level of uncertainty in the current economic outlook. The potential for further COVID-19-related impacts on household and business behaviours and any government intervention still remains, but not at the levels of recent years.

Key risks to current forecasts include:

- any future variants of COVID-19 and the efficacy of vaccines going forward
- the success of vaccine programs in international markets, consumer and business sentiment regarding international travel, reciprocated border access and the pace of resuming overseas migration and tourism to Australia and the Territory
- the longevity of the Russia-Ukraine conflict and the level of subsequent impact on supply chains, and food and fuel prices
- projects under consideration that have not yet achieved final investment decision present upside risk. Conversely, several large projects underpin growth forecasts and present risks to the extent that they may not proceed at the level or timing assumed in their final investment decision.

Key assumptions underpinning the forecasts are:

- Australia's vaccine program remains effective against any new COVID-19 variants going forward
- the virus remains manageable in the Territory
- the opening of Australia's border in early 2022 will be followed by a gradual increase in international tourism and overseas migration, approaching pre-COVID-19 levels by 2024-25
- the Russia-Ukraine conflict remains localised and supply chain issues are largely resolved by late 2022.

Chapter 1

Structure of the economy

Structure

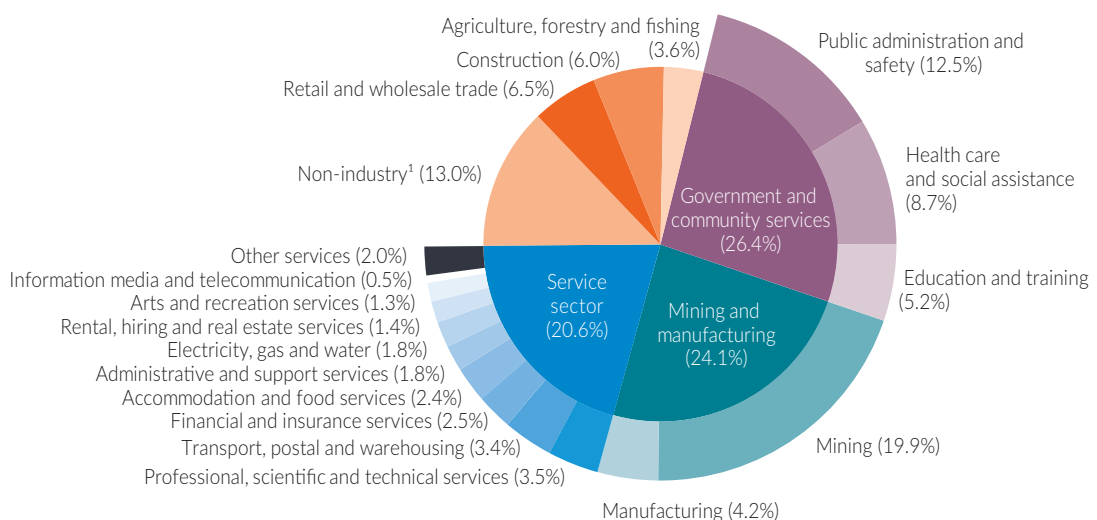
The structure of the Territory's economy reflects its wealth of natural resources, strategic defence location, tourism attractions, and relatively large government and community services sector.

In 2020-21, the Territory's GSP was \$26.2 billion, a 0.6% decrease from 2019-20 while SFD increased by 6.1%. The decrease in GSP was largely attributable to a decline in LNG production, driving a 12.1% reduction in output for the mining industry overall (which includes oil and gas), detracting 3.4 percentage points from GSP in 2020-21.

In the past decade, the Territory economy has grown by 25.6% from \$20.9 billion in 2010-11. Over the same period, the Territory's population increased by around 15,000 to 246,000 people (6.3%), while employment increased by about 8,600 to almost 130,000 people (7.1%).

Mining and manufacturing, construction, tourism, government and community services are the Territory's most significant industries, accounting for almost two-thirds of economic activity in 2020-21 (Chart 1.1). Tourism is not reported as an industry due to the nature of its output (see *Explanation of terms*). The share of industry contributions can be volatile in the short term, while changes in the underlying structure of the economy tend to occur over the long term and reflect comparative economic advantages.

Chart 1.1: Contributions to gross state product, 2020-21



1 Non-industry components of GSP are ownership of dwellings, taxes less subsidies and statistical discrepancy.

Source: ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0

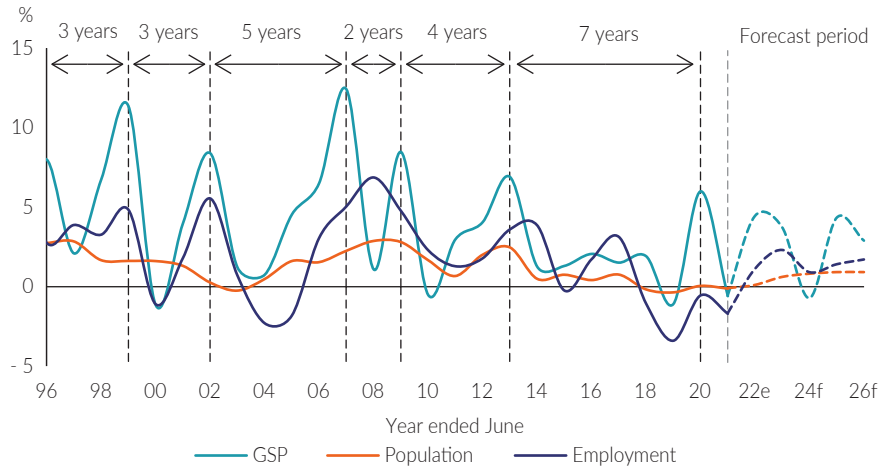
Industries and employment

All economies are subject to business cycles. The frequency, magnitude and duration of cycles are influenced by the underlying structure of the economy and exposure of key industries to external factors that influence demand, prices and exchange rates. The characteristics of the Territory economy result in economic cycles being more pronounced compared with other jurisdictions.

Over the past 25 years the Territory has experienced business cycles that average four years, with a range from two to seven years. These cycles have been driven by major projects, where domestic conditions are affected by resource exploration, construction and production cycles. Employment and population growth broadly follow GSP growth, although not to the same magnitude given the capital-intensive nature of investments in the Territory and the higher productivity per worker that results (Chart 1.2).

Apart from major investment projects, economic growth is driven by more fundamental factors such as population growth; business sentiment; household consumption and confidence; public sector expenditure; and small to medium-scale private investment that relies on domestic demand or niche interstate and international trade opportunities.

Chart 1.2: Economic cycles in the Territory¹



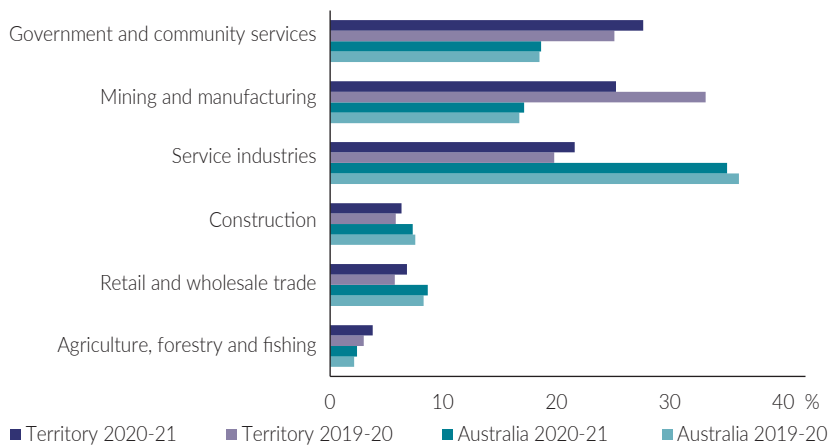
e: estimate; f: forecast; GSP: gross state product

¹ Change in year-on-year growth.

Source: ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0, *Labour Force, Australia*, Cat. No. 6202.0, *Australian Demographic Statistics*, Cat. No. 3101.0; Department of Treasury and Finance

Government and community services, and mining and manufacturing industries contribute a much greater share to the Territory economy compared to those industries' national contribution to gross domestic product (GDP). In contrast, the services sector is dominant nationally (Chart 1.3).

Chart 1.3: Key industry proportions of gross state product and gross domestic product



Source: ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0

Government and community services and the service industries are the largest employers both in the Territory and nationally. Mining and manufacturing industries contribute less to employment relative to their output given the capital-intensive nature of large mining projects (Chart 1.4).

Chart 1.4: Share of employment by key industries



Source: ABS, *Australian Labour Force, Australia*, Cat. No. 6291.0.55.003

Government and community services

The government and community services sector accounted for 26.4% of the Territory's GSP in 2020-21, compared with 17.8% nationally. This sector includes public administration and safety; health care and social assistance; and education and training. Public administration and safety accounts for just under half of the sector's contribution. Nationally, health care and social assistance is the largest contributor. Population is a key driver of growth in the sector as it affects demand for police, education, health and community services.

The sector accounted for 43.7% of Territory employment in 2020-21 compared with 29.2% nationally. It is the largest employer in the Territory and the second largest employer nationally. The higher proportion of employment in the Territory reflects a number of factors including the need to deliver services to a relatively small population dispersed over a large area, with relatively high demand for community services.

Mining and manufacturing

The significance of mining and manufacturing to the Territory's economy reflects the abundance of natural resources, including natural gas, manganese, zinc/lead, gold, and bauxite, along with rare earths and critical minerals such as lithium. In 2020-21, the mining and manufacturing industry accounted for 24.1% of the Territory's GSP, down from 31.6% in 2019-20, but still significantly above the national rate of 16.3%.

Mining and manufacturing output fell by 10.6% over 2020-21, largely driven by a reduction in LNG production, partially offset by increased manufacturing output. Falling LNG prices throughout the first half of 2020 signalled to suppliers to reduce their production throughout the second half of the year. Maintenance shutdowns also disrupted production throughout 2021.

LNG prices rose sharply through the second half of 2021 and into 2022. The Russia-Ukraine conflict and increasing global demand for gas will continue to exert upwards pressure on prices for Australian LNG and, as a result, mining and manufacturing output is also expected to increase over 2021-22.

Looking forward, mining output is expected to decrease in 2023-24 when the Darwin LNG plant temporarily pauses production as it transitions from sourcing gas from Bayu-Undan to the Barossa field, with production not due to recommence until 2025. However, mining output over this period will be supported by the Finnis lithium project, the first new mine in more than 10 years and the first lithium mine to open in the Territory, with production expected to commence by the end of 2022.

Mining and manufacturing accounts for 4.9% of the Territory's residential employment, compared to 8.7% nationally. This is largely due to the more labour-intensive manufacturing industry at the national level, as well as interstate fly-in fly-out workers who are not included in the Territory labour force figures.

The Territory Economic Reconstruction Commission Final Report includes recommendations to capitalise on the Territory's competitive advantages to attract more private investment, with the mining and manufacturing sector identified as a key driver of economic growth in the medium term. Consistent with this, government has established the Minerals Development Taskforce to identify, assess and recommend policy, strategy and regulatory options to accelerate private investment in mineral projects.

As detailed in Chapter 2 *Major projects and investment opportunities*, up to 20 new mining projects are expected to reach final investment decision over the next three to four years.

Services sector

The services sector comprises a number of small industries, with each accounting for between 0.5% and 3.5% of GSP in 2020-21. The industries in this sector are professional, scientific and technical services; transport, postal and warehousing; financial and insurance services; accommodation and food services; administrative and support services; electricity, gas, water and waste services; rental, hiring and real estate services; arts and recreation services; information and media telecommunications; and other services.

The services sector accounted for 20.6% of economic output and 31.8% of employment in the Territory in 2020-21. Nationally, the sector represents the largest share of GDP (33.4%) and is the largest employer (37.5%).

The Territory's successful response to COVID-19 resulted in minimal trading restrictions allowing the economy to continue its recovery from a period of prolonged downturn, however some industries were affected by the closure of international and domestic borders at the outset of the pandemic. With the resumption of domestic travel the accommodation and food services industry reported the highest growth of all service industries over 2020-21 (8.5%).

Retail and wholesale trade

Despite sporadic COVID-19 outbreaks, Territory consumption made a strong recovery throughout 2020-21. Minimal trading restrictions allowed Territory businesses to operate almost as normal with retail and wholesale trade output increasing by 10.1% in 2020-21.

The retail and wholesale trade sector represented 6.5% of Territory GSP in 2020-21, compared with 8.2% nationally. The sector is the third largest employer in the Territory, accounting for 9.9% of the workforce in 2020-21 compared with 12.9% nationally.

Construction

Construction's contribution to the Territory's GSP and employment is gradually stabilising following a significant drop after construction of the Ichthys LNG project was completed in 2018.

Construction accounted for 6% of the Territory's GSP in 2020-21, compared with 7% of national GDP, supported by a range of Territory and Commonwealth stimulus programs such as the Home Improvement Scheme, BuildBonus and HomeBuilder. Construction accounted for 7.9% of the Territory's employment and 9% nationally.

Demand in the sector is driven by private and public investment, with the Territory Economic Reconstruction Commission highlighting the importance of attracting private investment to the Territory to drive economic growth. Modest growth is expected in 2021-22 with a number of large scale projects commencing or underway.

Agriculture, forestry and fishing

The agriculture, forestry and fishing sector represented 3.6% of the Territory's GSP compared with 2.3% nationally.

Despite the relatively small contribution to GSP, the industry is vital in generating economic activity and employment in regional areas. The agriculture, forestry and fishing sector accounted for 1.8% of the Territory's workforce in 2020-21, compared with the national rate of 2.6%.

The industry's contribution to GSP is expected to decrease in 2022 with the high price of Australian cattle and restricted supply constraining livestock exports.

Chapter 2

Major projects and investment opportunities

The Territory is a small open economy and its economic growth is primarily driven by infrastructure investment and major projects.

The economic growth forecasts presented in Chapter 3 *Economic growth* only include projects that have reached final investment decision, and this is reflected by a forecast moderation in private investment from 2023-24 onwards.

There is a significant pipeline of projects on the Territory's horizon that are not included in the forecasts. These projects and investment opportunities will, if they proceed, positively influence the Territory's economic development through the creation of jobs and business opportunities to sustain growth and diversify the Territory's economic base (Map 2.1).

Strengthening our approach to investment and project delivery

The key to economic recovery, achieving a \$40 billion Territory economy by 2030 and net zero emissions by 2050, is substantial and sustained private investment. Government is focused on attracting and winning private investment by supporting projects to reach final investment decisions faster, while also working to maximise value capture from these projects by the Territory and project proponents. The Territory Government is also developing opportunities to take to market, targeting new investment opportunities, and is assisted by a network of global advisors to support the Territory's growth.

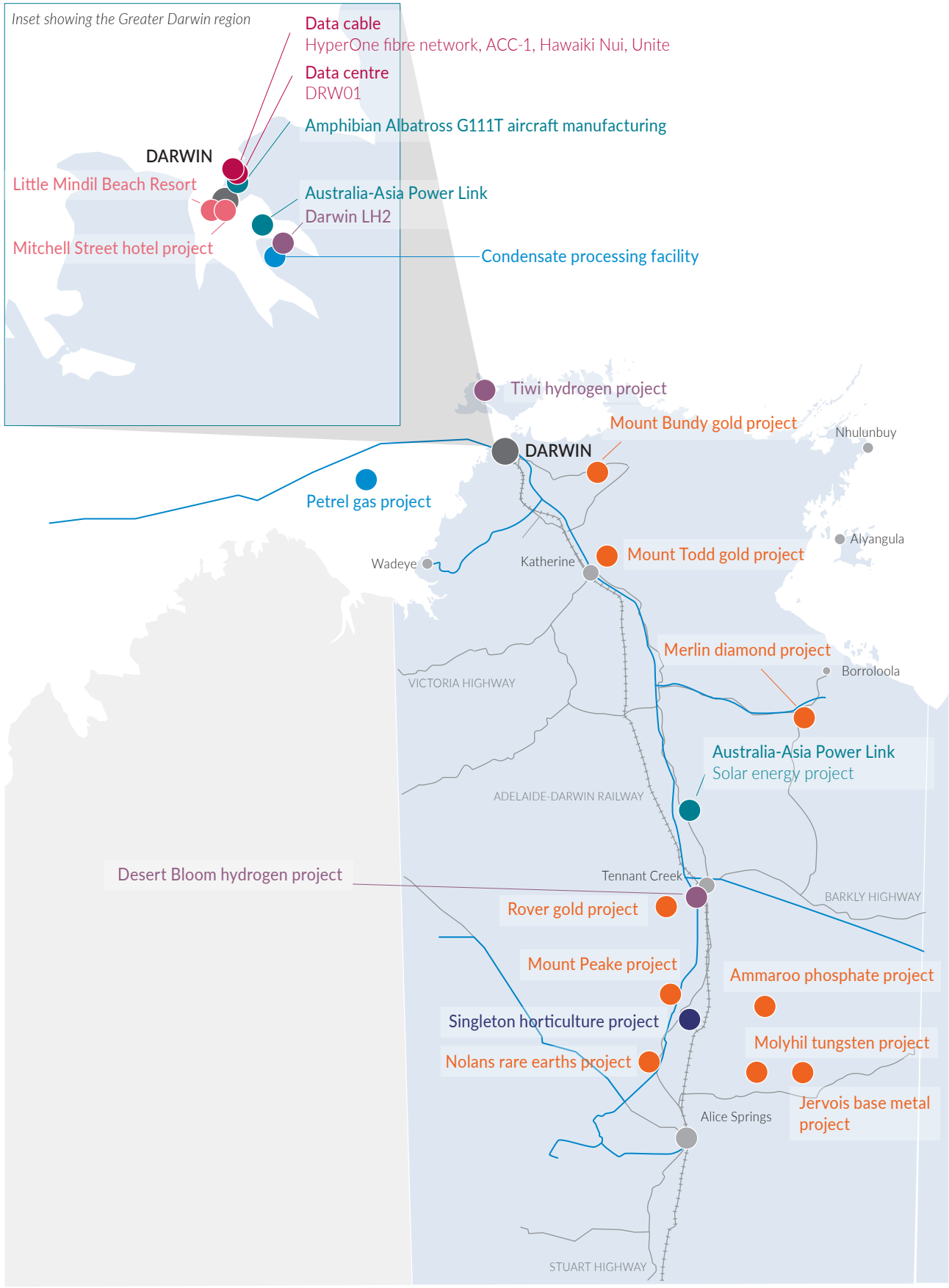
To drive these efforts the government has appointed commissioners with key responsibilities in investment, major projects and infrastructure to:

- identify and attract local, national and international private sector investment in key areas (Investment Commissioner)
- provide a link between the private sector and government so projects can benefit from the coordination of services with a focus on project delivery and value capture (Major Projects Commissioner)
- coordinate strategic infrastructure planning and development to align with future industry and population needs (Infrastructure Commissioner).

Recognising the rich resource base in the Territory, land mass and strategic location, along with well-established sectors, there are new opportunities being pursued to diversify the Territory's economic base through advanced manufacturing, carbon capture and storage, and a sustainable precinct development approach.

Projects and investment opportunities are being progressed in industries such as renewables, digital, space, aviation and maritime, along with projects in the Territory's traditional growth sectors of gas, minerals, agribusiness and tourism.

Map 2.1: Significant prospective projects in the Territory



- Agriculture
- Mining
- Hydrogen
- Digital
- Tourism
- Oil and gas
- Other
- Gas pipeline

Box 2.1: Major project status

Major project status is awarded by the Territory Government to projects that are complex, and strategically and economically significant. For the project proponent, the benefits of major project status include whole of government support, coordination and facilitation, assistance in identifying and mapping regulatory approvals, a dedicated project case manager and facilitation of engagement with the Commonwealth through a single point of contact.

The major project case management approach also works with proponents to build opportunities to capture additional benefit for the Territory through supply chain and value-add such as mineral processing and commercialisation of waste streams. Table 2.1 outlines a list of committed and prospective projects in the Territory, including those currently with major project status.

Key opportunities

The Territory's close proximity to key export markets in Asia, potential and developed industrial and export infrastructure, abundant natural resources, as well as being Australia's northernmost jurisdiction and natural operating base for defence activities in the Indo-Pacific region, have historically influenced the nature of investment in the Territory. These strategic features are reflected in the proportion of the Territory's share of output occupied by the mining, defence and agriculture sectors (Chapter 1 *Structure of the economy*), and the nature of those initiatives that currently hold major project status (Box 2.1).

As the world is increasingly digitally connected, geopolitically unstable and seeks alternative energy sources to minimise the impact of climate change, these strategic features are opening new pathways for investment in the Territory, as companies seek to capitalise on its advantages. This can be seen in the recently approved major project status for hydrogen and digital projects.

Renewables

Global energy transition means the demand for renewable energy is growing. As part of committing to net zero emissions, many countries have signalled interest in large-scale green hydrogen investment to support emissions reduction. Some of Australia's largest trading partners, such as Japan, Korea and China, have committed to using hydrogen to decarbonise their energy systems. The size of these markets and their potential demand is contributing to the focus on renewable hydrogen opportunities. The Territory's large land mass, high solar irradiance and proximity to large land-constrained population centres in Asia mean it is well positioned to supply affordable and reliable solar energy and hydrogen, and carbon capture and storage opportunities. The Territory Government is also committed to a 50% renewable energy target by 2030 and net zero emissions by 2050.

Solar

The Territory's renewable potential has been recognised by Sun Cable's \$30+ billion Australia-Asia Power Link project. Australia-Asia Power Link is a world first, transformational renewable energy project providing a pathway to a new export industry. With its solar farm to be located in the Barkly region, it involves developing infrastructure and systems to deliver renewable electricity to Darwin and Singapore via a 5,000 kilometre high voltage direct current transmission system and subsea cable. It is estimated the project has the potential to provide up to 15% of Singapore's electricity needs from 2027, and abate 8.6 million tonnes of carbon dioxide (CO₂) equivalent per year.

The foundation of the project is a 12,000 hectare solar precinct (including solar farm and storage), to be built near the town of Elliott, an overhead transmission line to Darwin, and a subsea cable system to Singapore. The potential supply to Darwin is up to 800 megawatts. It is estimated the project may inject up to \$8 billion into the Australian economy during the construction phase, with most of this occurring in the Territory. This project has the potential to create thousands of construction jobs and opportunities for local businesses and suppliers.

The Darwin-Katherine electricity system plan, released in October 2021, features opportunities for investment in the power system to enable transition to achieve the 50% renewable energy target. This includes a large scale solar and renewable energy hub, and new large scale storage.

The Territory is working on a strategy to deliver 70% renewable energy penetration into remote Aboriginal communities through the Remote Power System Strategy and renewing power generation with new renewable energy sources, which will also require significant capital investment. The Territory Government is currently developing a framework for increased private sector participation and use of non-government capital.

Hydrogen

The International Energy Agency notes that with growing global commitment to net zero and a global energy sector disrupted by ongoing geopolitical instability, the versatility of hydrogen is attracting stronger interest from a diverse group of governments and companies. The Commonwealth has identified Darwin as a priority area to facilitate the production of clean hydrogen for domestic and export markets. The Commonwealth's 2022-23 Budget allocated funding to support low emissions LNG and clean hydrogen production at Darwin, together with associated carbon capture and storage infrastructure.

There are a range of project proponents considering opportunities for hydrogen production in the Territory. For example, Aqua Aereem's Desert Bloom Hydrogen project was awarded major project status in December 2021. Desert Bloom Hydrogen is a staged commercial-scale green hydrogen operation with potential to grow to a \$15 billion project and deliver around 410,000 tonnes of hydrogen per annum for international export and domestic use through atmospheric water capture technology and a modular design, supporting remote application across the Territory.

Global Energy Ventures has also announced the Tiwi Green Hydrogen Export project (Tiwi H2) located on the Tiwi Islands. The project has potential to scale up to 2.8 gigawatts of solar generation to produce 100,000 tonnes per annum of green hydrogen for export to the Asia-Pacific region. Global Energy Ventures is currently preparing environmental referral submissions, with a final investment decision targeted for mid 2023.

Other potential projects currently being developed include TNG Limited's Darwin HySustain green hydrogen plant, a joint venture between TNG and AGV Energy, and Lattice Technology's LH2 project in Darwin.

Digital

The Territory offers considerable strategic benefits for prospective digital investment, and improved digital infrastructure supports growth opportunities in data-intense industries such as defence, aerospace and mining.

The Territory Government recently signed a memorandum of understanding with NEC Corporation to identify major areas for digital development in the Territory. Under the memorandum, NEC will explore the use of its world-leading technologies, such as submarine cable systems, open radio access networks 5G and artificial intelligence in the Territory, as well as building industry training opportunities for Territorians.

Cable networks

There are over \$4 billion worth of projects under consideration that are routed to, or through, the Territory. While much of the capital investment for these projects will occur outside the Territory, the resulting connectivity provides opportunities for Darwin to establish as a new data centre hub, expand technology businesses in the Territory and create digital jobs opportunities. In the past year, three new international digital connections linking Darwin to the commercial and population centres of South-East Asia and North America have been announced and include:

- Vocus' Darwin-Jakarta-Singapore Cable will be the first direct fibre link between Darwin and Singapore. With installation commencing this year, it will be operational by mid 2023
- Hawaiki Nui will start construction on its 25,000 kilometre subsea cable system this year, connecting Darwin to Singapore, Jakarta, eastern Australia, New Zealand, Hawaii and Los Angeles. It will be ready for service in 2025
- Inligo Network's \$700 million, 16,000 kilometre Asia Connect Cable system (ACC-1) will link Indonesia, Timor-Leste, Guam, Japan and the US. Construction is proposed in 2022 and expected to be operational by 2025.

There are two other international digital connections proposed but not yet confirmed:

- Project Echo, a trans-Pacific subsea cable connecting Singapore to the US with a planned branch to Darwin
- Project Koete, a subsea fibre-optic cable from Perth to Darwin and into South-East Asia.

Domestic connectivity has been improved with the completion in August 2021 of the \$18 million Terabit Territory project that upgraded the fibre backbone between Adelaide, Darwin and Brisbane, delivering 25-times increased data capacity over the previous technology of this network. The upgrade was jointly funded by Vocus and the Territory Government, with the Local Jobs Fund contributing \$7.9 million.

Further investments are set to create another step change in the Territory's connectivity with the rest of Australia, including:

- HyperOne – Australia's first hyper-scale national fibre network. Estimated to cost \$1.5 billion, it will deliver 20,000 kilometres of new high-speed fibre cable across Australia, with 2,200 kilometres across the Territory, capable of carrying over 10,000 terabits per second
- Inligo Networks' Unite Cable System project – a new \$200 million terrestrial cable connecting Darwin to Adelaide, and through to Melbourne, Canberra and Sydney.

Data centres

Improving connectivity is attracting data centre operators to the Territory. DXN Limited currently operates the Secure Data Centre in Darwin and other projects under development include:

- D1 (NEXTDC) – an \$80 million data centre in the Darwin central business district (CBD). With construction starting in 2022, the facility will deliver up to 8 megawatts of ICT load. NEXTDC has also identified a site for its second Darwin data centre, D2, to service the region's longer term technology infrastructure needs
- DRW01 (DCI Data Centres) – with an ICT load of 10 megawatts, the secure cloud edge data centre is planned to be constructed on a 2.7 hectare site in a Darwin business precinct.

The increasing domestic and international connectivity, access to affordable land and competitively priced renewable energy, and the Territory Government commitment to the Digital Territory strategy will ensure the Territory remains an attractive location for data centres and digital investment into the future.

Aerospace

The world is increasingly digitally connected and, in addition to physical cables, there is increasing demand for satellite services to link users. This is creating opportunities in the commercial space sector, which could be worth over \$1 trillion by 2040, and support a significant number of new jobs in Australia by 2030.

Arnhem Space Centre

The Territory's proximity to the equator makes it an ideal location for cost-effective rocket launches. Equatorial Launch Australia is working with local, national and international stakeholders to establish a spaceport in the Territory. The National Aeronautics and Space Administration (NASA) is working with Equatorial Launch Australia to launch three sub-orbital rockets from the Arnhem Space Centre in mid 2022.

Aerospace Manufacturing Precinct – Darwin

The Territory's aerospace sector is developing rapidly in areas such as defence, space, aircraft storage and maintenance (Asia Pacific Aircraft Storage in Alice Springs), and aircraft manufacturing (Amphibian Aerospace Industries plans to manufacture the G-111T Albatross aircraft in Darwin).

Amphibian Aerospace Industries is establishing its manufacturing footprint in the Territory to build an upgraded version of the Albatross G-111T, an amphibious aircraft that can take off and touch down from land, snow, ice and water. The Territory Government is investing \$10 million in the project, which will create around 300 direct jobs.

A new Aerospace Manufacturing Precinct will be established at Darwin International Airport, creating jobs and new training opportunities for Territorians. The Territory and 15 other signatories have signed a Collaboration Agreement. The signatories include aerospace, manufacturing and commercial investment industry organisations, as well as the Territory Aviation Skills Centre, Chamber of Commerce NT, the Advanced Manufacturing Growth Centre and Airport Development Group, owners and operators of Darwin International Airport.

Establishing the Aerospace Manufacturing Precinct in Darwin will boost the position of the Territory as a critical location in Australia for the aviation sector. It also demonstrates the Territory Government's focus on sustainable precinct development and capturing additional opportunities in the value chain in industries where the Territory has existing natural comparative advantages, such as minerals, agribusiness and energy.

Resources

Mining and gas projects have historically driven private investment in the Territory due to large reserves of natural gas, manganese, gold, uranium, phosphate, base metals, vanadium and rare earths; the Territory's proximity to export markets; and large areas of unexplored land. Access to base and critical mineral deposits, affordable and reliable renewable energy, and relative political stability will deliver a growing competitive advantage in and opportunities to undertake energy-intensive mineral processing.

Minerals

With a combined value estimated at more than \$6 billion, there are more than 20 projects across the Territory that, in the next three to four years, could reach a final investment decision, which will boost mineral production and create significant construction and ongoing jobs, particularly in the regions.

Core Lithium's Finiss lithium project recently reached final investment decision and is expected to begin production from late 2022, enabling the Territory to play a key role in supplying a mineral of strategic importance for new and emerging technologies. Construction of the mine development will support 250 construction jobs. Core Lithium has also been awarded a grant under the Commonwealth's modern manufacturing initiative to build a pilot processing facility to produce battery grade lithium hydroxide.

Mineral exploration in the Territory is currently at the highest levels in more than a decade and there are currently six mineral projects with major project status that are working towards final investment decision in the next few years.

China accounts for over 95% of the world's processing of rare earths, used in technology manufacturing. Arafura Resources' \$1.056 billion Nolans rare earths project aims to diversify this supply chain by building Australia's first rare earth separation facility and recently received \$30 million in Commonwealth funding to help achieve this. The project could generate 650 construction jobs and 280 jobs ongoing.

Resource and mineral process technology company, TNG is finalising financing for design of its Mount Peake vanadium-titanium-iron consolidated and integrated mining and processing operation in Central Australia. The project has an estimated construction value of \$824 million and could generate 1,600 construction jobs and 1,000 jobs ongoing.

Verdant Minerals' \$1.8 billion Ammaroo phosphate project aims to develop one of the world's largest phosphate resources and add value by converting raw phosphate to fertiliser for export and domestic agricultural use. This project has the potential to create up to 1,000 jobs during construction and 265 ongoing.

Other resource projects awarded major project status by the Territory Government have a combined value of about \$1.7 billion in capital expenditure.

Energy

The Territory has significant gas resources and a long-established gas industry that contributes to Australia's energy security and the Territory's economy as a key export centre, and provides downstream opportunities for Territory businesses. The Northern Territory Gas Strategy aims to establish Darwin as a world class production, manufacturing and services hub by 2030, and funding announced in the Commonwealth 2022-23 Budget will help achieve this (Box 2.2).

Box 2.2: Energy Security and Regional Development Plan

Announced as part of the 2022-23 Budget, the Commonwealth will invest \$2.6 billion in infrastructure projects across the Territory, transforming it into an industrial hub for next generation exports. The projects include:

- building marine infrastructure at the Middle Arm Sustainable Development Precinct, which includes a modular offloading facility, common user wharf, dredging and land reclamation, common user hard stand facilities, as well as enabling infrastructure, such as a rail spur and a new road network to support modular manufacturing components being brought into the precinct and Territory exports
- building logistics hubs including at Alice Springs, Katherine and Tennant Creek to facilitate more export activity from the Territory
- support for low emissions LNG and clean hydrogen production at Darwin, together with associated carbon capture and storage infrastructure
- continuing upgrades and further sealing of the Tanami Road, better connecting mining, resources, tourism and agribusinesses between the Territory and Western Australia.

Complementing this funding, the Commonwealth and Territory governments have negotiated an Energy and Emissions Reduction Bilateral Agreement that secures commitment from the Commonwealth on a number of foundational projects aimed to advance Australia's energy future, move the Territory towards its 50% renewable energy target by 2030, grow the economy and create local jobs. The agreement establishes actions across three broad areas of gas, emissions reduction and generation, networks and storage.

Onshore

The Beetaloo basin is recognised as a world class shale gas field, with an estimated resource of more than 175,000 petajoules. There are significant opportunities for Beetaloo gas to support economic and employment growth opportunities for the Territory, particularly in the regions, underpinned by export-oriented downstream gas manufacturing in Darwin (for example, LNG, fertiliser and chemicals) and linking to the national energy market through expanded pipeline infrastructure.

Gas exploration in the Beetaloo basin is ongoing, with explorers/operators drilling test wells to assess the commercial viability of the resource.

Offshore

Darwin is also a supply service centre and production centre for offshore oil and gas operations in waters to the north, with opportunities to expand this capability.

Santos is progressing development of the Barossa field to supply gas to its Darwin LNG facility, and INPEX has plans for expanding exploration activities to support incremental growth in LNG production from its Darwin facility in the short term. Bringing Barossa gas to Darwin is a US\$4.2 billion project that will sustain LNG production, business activity and local employment for the next 20 years.

Box 2.3: Middle Arm Sustainable Development Precinct

The Territory Government is working with industry and the Commonwealth to transform Middle Arm into a globally competitive, sustainable precinct with a focus on low-emission advanced manufacturing, renewable hydrogen, carbon capture and storage, minerals processing and petrochemicals. The Middle Arm Sustainable Development Precinct is already home to the Santos Darwin LNG and the INPEX Ichthys LNG processing facilities. It has an extensive product corridor network for the efficient transmission of utilities, gas, feedstock and products, and is in close proximity to Darwin International Airport, Darwin Port, the Adelaide to Darwin railway and freight terminal, and the road network. The Commonwealth's 2022-23 Budget announced the Energy Security and Regional Development Plan, which includes funding for the development of the precinct including marine infrastructure (see also Box 2.2).

Carbon capture and storage

In October 2021 the Territory Government, in partnership with CSIRO, industry and engineering companies, signed an agreement to fast-track emissions reduction across northern Australia's energy sector. The agreement will see all parties, including INPEX, Santos, Eni Australia, Woodside, Xodus Group and Origin Energy, develop a joint business case to assess the viability of a large-scale low-emission carbon capture and utilisation storage hub at Middle Arm.

In February 2022, INPEX announced its plan to build one of the world's largest carbon capture and storage facilities. Starting with an injection of 2 million tonnes of CO₂ per annum, the proposed hub has the potential to expand to 7 million tonnes per annum and is estimated to be a \$1.2 billion investment.

Santos has also announced plans to progress carbon capture and storage at its Bayu-Undan field. It is estimated Bayu-Undan will have storage capacity of around 10 million tonnes of CO₂ per annum, with existing pipeline infrastructure to be repurposed to deliver the service, which may be operational by 2025. This follows the signing of a memorandum of understanding between Santos and the Timor-Leste Government to progress the project, which is located in the Timor Sea.

Agribusiness

The Territory's large land mass and two distinctive climate zones make it a prime agricultural region that allows for optimal growing zones for crops, horticultural products, and aquaculture and forest commodities.

Humpty Doo Barramundi has been awarded a \$24.2 million loan from the Northern Australia Infrastructure Facility (NAIF) for stage 2 of its expansion, and pond and nursery facilities, including constructing a hatchery at Channel Island, the first purpose-built commercial barramundi hatchery in the Territory.

Other investment opportunities are also being progressed in the Douglas Daly (with plans to increase cotton production), Western Davenport region, Keep Plains Agricultural Development area, Wildman Agricultural Precinct, and Larrimah Agricultural Precinct. Project Sea Dragon has recently announced that a farming pilot is being scoped, building on the existing partially constructed ponds at Legune.

Agricultural developments are contingent on reliable water supply. Projects, such as Manton Dam returning to service and the Adelaide River off-stream water storage (AROWS) in the Darwin region, will deliver long-term water security for domestic, agricultural and industrial users, through new pumping stations and potentially support agricultural production on 2,000 hectares of currently undeveloped agricultural land at Lambells Lagoon. For funding details, refer to the *Public investment to support economic and social development* section of this chapter.

The Territory Government is also committed to constructing the Katherine Logistics and Agribusiness Hub to develop the region's agricultural potential and status as a major logistics link between Western Australia and Queensland. This has been supported by the announcement of Commonwealth funding in the 2022-23 Budget. For funding details, refer to the *Public investment to support economic and social development* section of this chapter.

Tourism

Tourism is a significant contributor to economic activity in the Territory, playing a key role as a sustainable and growing industry that provides regional business and employment opportunities. With a gradual return to international tourism expected post-COVID-19, significant tourism investment is occurring that will maintain the Territory's reputation as a compelling destination with world-class visitor experiences. Investment to support visitation by domestic and overseas travellers includes:

- Future of Jabiru and Kakadu – the Territory Government is investing \$135.5 million to help Jabiru transition from a mining town to a vibrant and sustainable tourism hub, and service centre for Kakadu National Park and the West Arnhem region
- Lasseters Hotel Casino redevelopment in Alice Springs – a five-year project, Iris Capital has allocated \$70 million and is expected to expand the resort by 230 rooms
- Waterfront Precinct luxury hotel – the Territory Government is seeking investment interest in the development of new luxury accommodation at the Darwin Waterfront.

Maritime

The maritime industry is a key enabler of the Territory economy and both the Territory and Commonwealth governments are investing to build infrastructure to support industry growth and capability, mostly in Darwin. Targeted investment may unlock opportunities servicing the commercial and coastal shipping, tourism, commercial fishing, defence and offshore energy sectors. The keystone investment is in the \$400 million ship lift facility in Darwin Harbour, complemented with investment in a range of maritime infrastructure in Darwin, including a new multi-user facility to facilitate the development of the Middle Arm Sustainable Development Precinct. The Department of Industry, Tourism and Trade is developing a Maritime Industry Development Plan that will articulate a shared vision for the Territory's maritime sector and support its holistic development.

Defence

The 2016 Defence White Paper and Integrated Investment Plan identified the strategic importance of the Territory to Australia's defence and regional stability. Increasing geopolitical instability in the Asia region (and the world) in recent years has refocused the importance of and investment in an effective defence presence in the Top End. Increased defence spending supports private sector investment, business development and local employment across a broad range of industries in the Territory.

The Commonwealth is in the midst of an \$8 billion infrastructure investment commitment in the Territory until 2025. Over the next five years, defence capital investment under development is estimated at \$4.4 billion.

Refer to the *Defence* section in the 2022-23 *Industry Outlook* publication for more information.

Public investment to support economic and social development

The new Northern Territory Infrastructure Framework sets the strategic priorities and pathways to prioritise government infrastructure investment to support economic and population growth, and is aligned to Infrastructure Australia's framework. The Territory currently has eight projects on Infrastructure Australia's priority list including the Middle Arm Sustainable Development Precinct, Tanami Road and Darwin Region Water Supply Infrastructure.

Transport infrastructure

Investment in transport infrastructure will boost the Territory's export potential, with positive downstream outcomes for local business and jobs during project construction. Planned transport infrastructure investment includes:

- Middle Arm Sustainable Development Precinct – the Commonwealth announced funding for marine infrastructure at the Middle Arm Sustainable Development Precinct, which includes a modular offloading facility, common user wharf, dredging and land reclamation and common user hard stand facilities to support modular manufacturing components being brought into the precinct and to support Territory exports
- roads investment – the Territory Government has a roads and transport infrastructure program of \$1.65 billion in 2022-23. The capital works program in forward years will be supported by Commonwealth funding announced in the 2022-23 Budget for key roads supporting industry and tourism as part of the Energy Security and Regional Development Plan (Box 2.2).

Water and land supply

The *Bringing Land to Market: An Independent Review of the Land Development Processes, Land Under Development and Titled Land* report identified that sustained growth and a broad economic base is needed to achieve a stable baseline economy with consistent population growth. Water is also a key enabler of industry and agricultural growth, and needed to achieve the \$40 billion economy by 2030, while maintaining water security for the Darwin region. Significant investment in adequate land and water includes:

- Manton Dam return to service and AROWS – Commonwealth funding of \$301 million has been provided in the 2022-23 Budget to return Manton Dam to service, construct a pipeline from Strauss water treatment plant to Middle Arm and commence AROWS project development activities. This funding represents the first phase of implementation for the Darwin Region Water Supply Infrastructure program
- future and final investment decisions are yet to be made by the Territory and Commonwealth governments for capital funding for the AROWS project
- residential land development – the Territory has committed \$132 million to fast-track development of residential land, supporting construction and population growth across the Territory, including developing Holtze and Kowandi (Darwin), Coolalinga, Katherine East, Kilgariff Alice Springs and Tennant Creek.

Social Infrastructure

Industry growth, diversification and quality services rely on the availability of skilled workers. In order to supply workers that will drive the Territory's economic diversification and industry growth, the Territory, in partnership with the private sector, is facilitating and investing in major recreational and cultural projects to enhance the Territory's liveability. These projects also provide downstream benefits during the construction phase. Projects throughout the Territory currently underway include:

- Civic and State Square Redevelopment – the \$165 million redevelopment is part of the \$200 million Darwin City Deal, jointly funded by the Territory and Commonwealth governments, and includes the \$47 million State Square Art Gallery, which will complement the National Aboriginal Art Gallery as part of the Territory Arts Trail
- National Aboriginal Art Gallery (Alice Springs) – the Territory Government has committed \$50 million to support and grow the arts and cultural industry, and provide new and enhanced attractions for national and international visitors, bringing an estimated \$64 million into the economy annually
- Darwin Education and Community Precinct – the \$250 million Charles Darwin University campus, funded under the Darwin City Deal, is already under construction aiming to be completed by November 2023 and will improve Darwin's international competitiveness in the education sector.

Northern Australia Infrastructure Facility

NAIF is an important investment partner to finance infrastructure and support economic development in the north and in January 2022, the original \$5 billion NAIF was expanded by the Commonwealth by \$2 billion and extended the life of the NAIF legislation to 30 June 2026.

A new partnership between NAIF and the Territory's Local Jobs Fund was also announced in February 2022 to provide additional capital funding for business to deliver small to medium Territory projects. Under the new partnership, proponents in the Territory will be able to access additional NAIF funding through the Local Jobs Fund.

Local Jobs Fund

Investment Territory deploys resources to crowd-in private sector investment and support for projects that establish in the Territory. The Local Jobs Fund is a co-investment fund to accelerate major and significant projects. As part of the 2021-22 Budget, \$120 million was invested in the fund to support economic transformation projects and help high growth potential Territory businesses to increase exports of goods and services both interstate and internationally. The fund offers business investment concessional loans, equity co-investment and a grants program. The support provided to date from the fund and as advised by proponents, is expected to support the creation of 613 direct jobs and another 1,353 indirect jobs throughout the Territory.

Projects in the pipeline

Table 2.1 illustrates a snapshot of more significant projects that are committed or announced, and projects that are proposed but are not reflected in the outlook at this stage. Project details are based on the best currently available information.

Table 2.1: Pipeline of projects

Committed	Planned/proposed
<ul style="list-style-type: none"> • Barossa Project • Remote Housing Investment Package • Tanami mine expansion 2 • RAAF Base Tindal airfield and redevelopment • Roads infrastructure • Larrakeyah Barracks and HMAS Coonawarra upgrades • Darwin ship lift facility and marine industry project • Jabiru and Kakadu future developments • Darwin City Deal, including the Charles Darwin University campus • Darwin Region Water Supply Infrastructure (Manton Dam return to service) • Robertson Barracks, Kangaroo Flats, Mount Bunday and Bradshaw upgrades • Arafura Class Offshore Patrol Vessel upgrades • Residential land development • Katherine Logistics and Agribusiness Hub • US bulk fuel storage facility • Lasseters Hotel Casino redevelopment • National Aboriginal Art Gallery • Finniss lithium project • D1 data centre • Barkly Regional Deal 	<ul style="list-style-type: none"> • Australia-Asia Power Link • Desert Bloom Hydrogen • HyperOne fibre network • Ammaroo ammonium phosphate fertiliser project • Condensate processing facility • Mount Todd gold mine • Petrel gas project • Nolans rare earths project • Tom's Gully, Rustlers Roost and Quest 29 gold mines (Mount Bundy project) • Mount Peake Vanadium-Titanium-Iron Project • Asia Connect Cable system • Little Mindil Beach Resort • Jervois base metal project • Rover gold project • Mitchell Street hotel project • Amphibian Albatross G111T aircraft manufacturing • Molyhil tungsten mine • Singleton Horticultural project • DRW01 data centre • Tiwi Hydrogen Project (Tiwi H2) • Darwin LH2 • Unite Cable System project • Merlin Diamond project
Estimated \$14.7 billion	Estimated \$39.7 billion

Chapter 3

Economic growth

Outlook

Private investment is recovering along with employment and population growth. The economy is forecast to grow by 4.4% in 2021-22 and to average 2.9% growth per annum over the five years to 2025-26.

Table 3.1: Territory economic growth forecasts (%)

	2020-21a	2021-22e	2022-23f	2023-24f	2024-25f	2025-26f
Gross state product	- 0.6	4.4	3.7	- 0.7	4.3	2.9
State final demand	6.1	8.8	5.4	0.3	- 2.5	- 1.8

a: actual; e: estimate; f: forecast

Source: Department of Treasury and Finance; ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0

In 2020-21, GSP declined by 0.6%, while SFD, which excludes trade, increased by 6.1% (Chart 3.1), the strongest growth of the jurisdictions. If the trade-exposed mining industry (which includes oil and gas) was excluded from GSP in 2019-20 and 2020-21, GSP growth in 2020-21 would be 3.8%.

In 2021-22, GSP is forecast to increase by 4.4%, driven by an increase in private investment and supported by an increase in consumption. This is partly offset by weaker net exports, with a large increase in goods imports. SFD is estimated to remain strong and increase by 8.8% in 2021-22. Growth is expected to be supported by private investment associated with the Barossa Project, Finniss lithium project (Box 3.1), US defence fuel storage facility and defence upgrades.

COVID-19 continues to impact economies worldwide and the Territory is no exception. While uncertainty around COVID-19 and potential future variants of the virus presents some risk to the outlook, high vaccination rates and the resumption of international travel should instil confidence in both consumers and investors going forward (Box 3.2).

Box 3.1: Finniss lithium project

The Finniss lithium project received final investment decision in September 2021. The project is anticipated to be one of the lowest capital-intensive lithium projects in Australia and will be the first lithium mine in the Territory. The project lies within the Bynoe Pegmatite Field, just south of Darwin, and drilling has found samples of high grade lithium reserves. Work commenced in the last quarter of 2021, with first production scheduled for the end of 2022. Core Lithium has offtake agreements in place with Jiangxi Ganfeng Lithium Co. Ltd, Sichuan Yahua Industrial Group Co. Ltd, and a binding term sheet with Tesla.

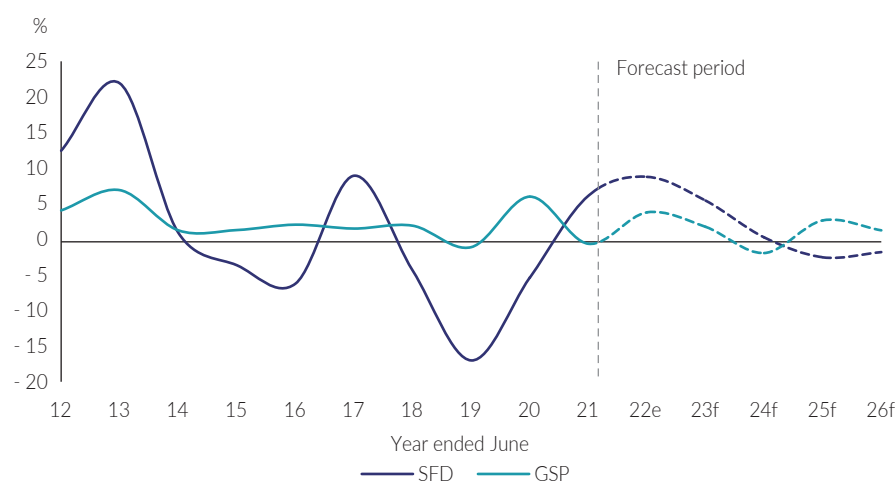
With increasing global demand for lithium for batteries, in particular the growing market for electric vehicles, the project has potential for adding downstream processing opportunities in the Territory, given the proximity to Darwin and the Middle Arm Sustainable Development Precinct. There is further potential for the project to expand capacity with other possible reserves in the field.

GSP in the forecast period is expected to be heavily influenced by the Barossa Project and related investment at the Darwin LNG plant, with increases in private investment over the next two years. A planned pause in LNG production from 2023-24 as the plant transitions to Barossa gas is anticipated to temporarily detract from net exports.

Non-trade exposed-SFD will be similarly influenced by the increased levels of private investment, and is estimated to increase by 8.8% in 2021-22 and 5.4% in 2022-23, before moderating in 2023-24 and declining in the outer years of the forecast period as Barossa-related construction is completed (Table 3.1 and Chart 3.1).

Notwithstanding other significant major projects on the horizon (see Chapter 2 *Major projects and investment opportunities*), the outlook is for investment to return to more normal patterns over the forecast period. In the short term, business investment is expected to continue to grow and contribute to GSP growth, after detracting from growth between 2017-18 and 2019-20. Public investment will be supported by a significant program of defence works, as well as the Territory Government's capital works program returning to higher capacity following the recent years of COVID-19 disruption. There is also potential upside in the outer years of the forecast period and beyond with works relating to the Commonwealth's Energy Security and Regional Development Plan, including \$2.6 billion in announced infrastructure investment for the Territory (see Box 2.3).

Chart 3.1: Changes to Territory gross state product and state final demand



e: estimate; f: forecast; GSP: gross state product; SFD: state final demand

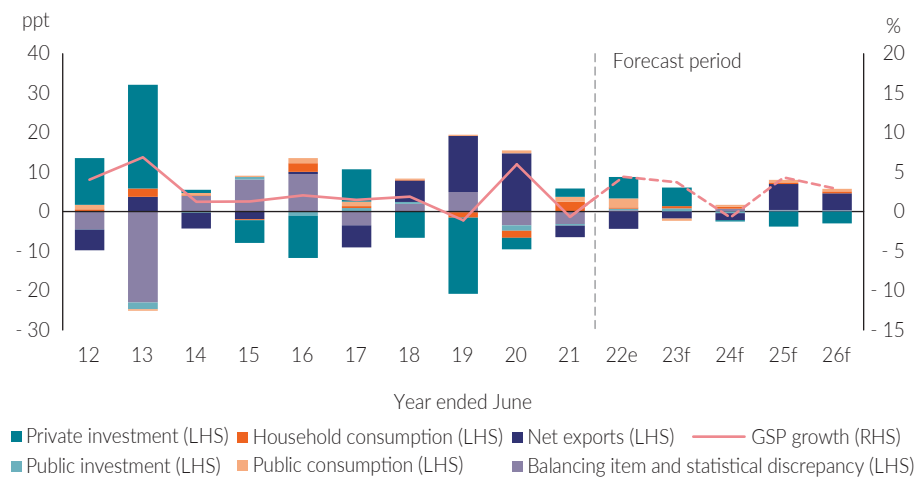
Source: ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0; Department of Treasury and Finance

In the near term, household consumption is expected to be supported by increased levels of household savings built up in recent years, one-off cost-of-living payments from the Commonwealth, and low and middle income tax offsets. Consumption in the outlook period will benefit from improving domestic conditions more broadly and population growth.

Net exports are expected to be weaker in 2021-22, with strengthening energy exports as world energy demand and prices increase, offset by significant increases in imports associated with large engineering and construction projects. Recovery in international services trade is anticipated to be gradual, with Australia's border opening in 2022. The weak forecast for GSP in 2023-24 (Table 3.1 and Chart 3.2) reflects declining exports from the Darwin LNG plant due to the depletion of gas reserves from the Bayu-Undan field. Production is expected to resume in the first half of 2025 when the Barossa field becomes the new source of gas.

The Russia-Ukraine conflict is a new source of major uncertainty and a risk to the outlook, potentially adversely affecting energy and commodity prices, supply chains and confidence.

Chart 3.2: Contributions to Territory gross state product growth



e: estimate; f: forecast; GSP: gross state product; LHS: left-hand side; ppt: percentage points; RHS: right-hand side
 Source: Department of Treasury and Finance; ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0

The projections made in the economic outlook do not factor in potential or planned projects yet to reach final investment decision, or the \$2.6 billion infrastructure investment announced by the Commonwealth under its Energy Security and Regional Development Plan, with the timing and location of that investment subject to the finalisation of project-specific business cases. There are many projects on the Territory's horizon that could proceed in the forecast period but are not currently reflected in the outlook. It is likely some of these projects will reach final investment decision during the forecast period, and therefore there is considerable upside in the economic outlook (see Chapter 2).

Box 3.2: COVID-19

The closure of interstate and international borders over the past two years has heavily impacted the Territory's tourism industry. Over 2021, the tourism industry was supported by intrastate tourism through the Territory Tourism Voucher, Roadhouse to Recovery grants, and Tourism Survival funding, however overall domestic and international visitor numbers and spending remained lower than pre-COVID-19. With the removal of border restrictions in early 2022, the tourism industry is expected to recover gradually over the outlook period with international tourism expected to return to pre-COVID-19 levels by 2024-25. For more information, refer to the *Tourism* section in the 2022-23 *Industry Outlook* publication.

The closure of borders over the past two years has also impacted access to labour for industries reliant on international and interstate migration, such as agriculture, tourism and construction. Higher COVID-19 case numbers in the Territory in early 2022 have also added to labour supply pressures, with employees being unable to attend work while quarantining or caring for sick dependants. While the international border opened in early 2022, a gradual return to pre-COVID-19 migration means these industries may continue to experience shortages in the short term, limiting output.

Despite the above pressures, business confidence in the Territory remained stronger than pre-COVID-19 over 2021, supported by the Territory's Business Hardship Package, the Territory's successful response to COVID-19 and limited lockdowns, and strong levels of household savings and private investment. Looking ahead, high vaccination rates are expected to support activity with the return of tourism, and private investment and household consumption contributing to growth in the short term.

Private investment

Private investment is estimated to increase by 36.6% in 2021-22 (Chart 3.3), driven by non-dwelling construction and activity associated with the Barossa Project, Finniss lithium project and US fuel tank storage facility.

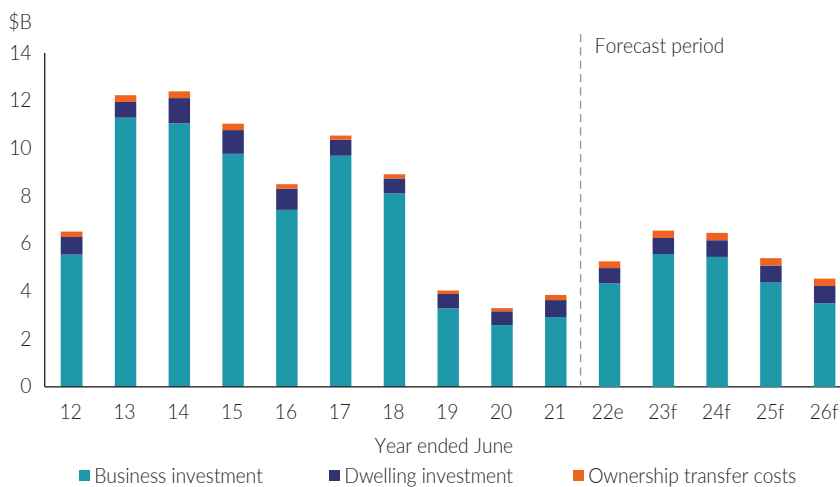
There have been strong incentives to bring forward investment, such as the temporary full expensing allowance, pulling forward investment in machinery and equipment, in particular the purchasing of vehicles. Additionally, petroleum and mineral exploration in the Territory has increased in 2021, likely due to increased global energy and commodity prices coupled with Commonwealth initiatives such as the Beetaloo Cooperative Drilling Program, the Modern Manufacturing Initiative, and the Geophysics and Drilling Collaborations program.

Greater investor interest in the Territory is reflected in increased private investment with recent significant commercial property transactions including the sale of Lasseters Hotel Casino (\$70 million redevelopment planned), Casuarina Square (with refurbishments planned) and Willeroo, Arona, Narwietooma, Napperby, Glen Helen and Derwent stations.

Dwelling investment is estimated to fall by 10.3% in 2021-22 following the strong growth in 2020-21 supported by numerous government programs including the Territory’s Home Improvement Scheme and BuildBonus grant, and the Commonwealth’s HomeBuilder grant, as well as historically low interest rates. Over the outlook period, growth in dwelling investment is anticipated to be more in line with population growth, and will be supported by an increased availability of land supply in Holtze and Kilgariff, as well as the Commonwealth’s Home Guarantee Scheme expansion to support more first home buyers.

Over the medium term, private investment is expected to be influenced by the Barossa Project, global demand for Territory resources, the Territory’s cost competitiveness in producing resources and the risk appetite of investors. Medium to longer term investment opportunities will also be influenced by the amount of resource exploration activity. Exploration is critical for project development and, following the deferral of activity as a result of COVID-19, has seen an improvement in 2021. The NAIF and the Local Jobs Fund will continue to be important facilitators of private investment. The Territory is well placed to take advantage of the increasing global appetite for renewable energy, and this has the potential to attract further private investment for the expansion of this industry.

Chart 3.3: Territory private investment



e: estimate; f: forecast

Source: ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0; Department of Treasury and Finance

Public investment

Public investment is forecast to average \$1.5 billion per annum over 2021-22 to 2025-26 and will provide significant support to the Territory economy and jobs, with a steady supply of road infrastructure works and defence projects (Chart 3.4).

In 2020-21, public investment decreased by 7.8% to \$1.2 billion, with declines across all levels of government reflecting COVID-19-related disruptions. Public investment is forecast to increase by 8.3% in 2021-22 and by a further 17.1% in 2022-23.

Major public sector projects underway and scheduled (see Chapter 2 *Major projects and investment opportunities*) include:

- Remote Housing Investment Package
- Darwin ship lift facility and marine industry project
- Darwin City Deal
- Alice Springs CBD revitalisation
- Darwin youth justice facility
- Mandorah marine facility
- the National Aboriginal Art Gallery in Alice Springs
- the Katherine Logistics and Agribusiness Hub
- upgrades at HMAS Coonawarra and Larrakeyah barracks, and training areas
- upgrades at RAAF bases Darwin and Tindal.

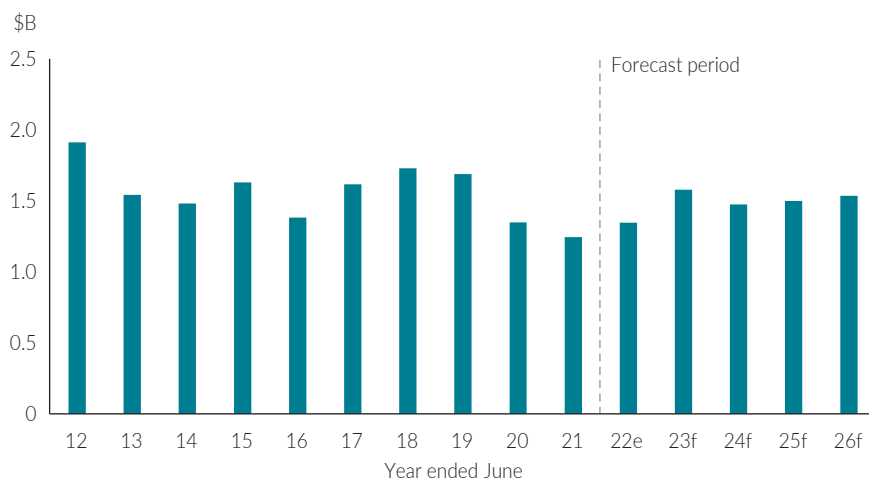
There is also likely upside to the economic growth forecasts in the outer years of the forecast period and beyond, with \$2.6 billion in funding announced as part of the Commonwealth's 2022-23 Budget under the Energy Security and Regional Development Plan. The funding in the forward years is not finalised and is subject to completed business cases (see Box 2.2).

Other Commonwealth-funded contributions announced but committed to in the medium term include:

- \$301 million for the Darwin Region Water Supply Infrastructure program to return Manton Dam to service and to commence AROWS project development activities
- \$132 million toward upgrades to Central Australian Tourism Roads
- \$124 million toward upgrades to the Outback Way
- \$55 million toward an overpass at the Tiger Brennan Drive and Berrimah Road intersection.

The Territory is also well positioned to benefit from the Commonwealth's \$53 million package to develop a competitive domestic gas market.

Chart 3.4: Public investment in the Territory



e: estimate; f: forecast

Source: ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0; Department of Treasury and Finance

Household consumption

Household consumption is estimated to increase by 0.8% in 2021-22, following strong growth of 6.6% in 2020-21, and is forecast to average growth of 1.2% per annum over the four years to 2025-26, reflecting a return to long-term trends in line with population growth.

Household consumption is expected to be impacted by the short lockdowns and lockouts that occurred in the Territory during 2021-22, but their effects have not been large and were limited to the service industries, compared with the extended lockdowns in other jurisdictions. There may be other COVID-19 variants that emerge in the future but they are not expected to have a significant effect as a high proportion of the population is vaccinated, and the management of COVID-19 transitions from pandemic to endemic in the community.

Cost of living pressures are expected to have minimal impact on aggregate household consumption. The non-discretionary nature of items such as fuel, rents and food means households will be unable to escape the effects of price increases, however increased consumption in these categories may come at the expense of discretionary spending. To help alleviate these pressures, the Commonwealth is providing a one-off cost of living payment of \$250 to eligible welfare recipients and a one-off cost of living tax offset of \$420 in the final quarter of 2021-22, which will offer some support to household consumption in the near term. Over the forecast period, household consumption will be driven by more fundamental factors such as employment, population growth, confidence, wages and the drawing down of relatively high savings built up over the course of the pandemic.

Public consumption

Following growth of 3.6% in 2020-21, public consumption is estimated to increase by 6.7% in 2021-22 with expenditure on the vaccine rollout, personal protective equipment, rapid antigen tests and operating the Centre for National Resilience and Alice Springs quarantine facility.

Expenditure on these facilities is expected to be scaled back significantly in 2022-23, decreasing public consumption. Beyond 2022-23, public consumption is expected to provide a modest contribution to economic growth in each of the outlook years, with growth constrained by the Territory Government's commitment to fiscal repair.

Net exports

Net exports averaged \$4 billion per annum over the 10 years to 2017-18 and have more than doubled to \$9.2 billion over the three years to 2020-21 as the Ichthys LNG plant reached full production. Net exports are expected to average \$9.1 billion per annum over the forecast period (Chart 3.5).

However, net exports are estimated to decrease by 11.5% in 2021-22, with a 70.5% increase in imports and a 5.7% increase in exports. The large increase in estimated imports appears to be due to construction activity associated with Barossa and other large engineering projects. Closed international borders have also been impacting tourism and defence-related service exports and imports.

Exports will be supported by lithium exports from the Finiss lithium project which is expected to commence production in late 2022. Exports are forecast to fall by 3% in 2023-24 after the Bayu-Undan gas feedstock for the Darwin LNG plant is depleted. It is expected there will be a break in LNG production given the time needed to develop the Barossa gas field and shut the plant for an extended period of maintenance and works. Production is expected to recommence in the first half of 2025.

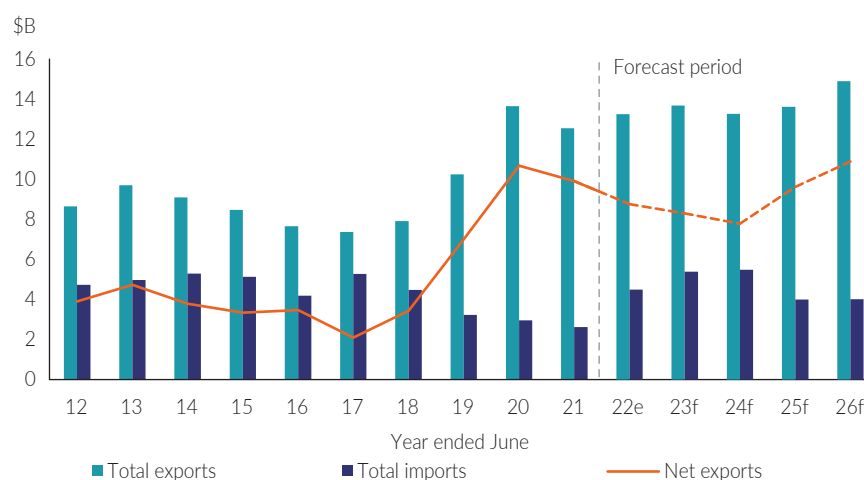
The services component of net exports will be heavily dependent on the recovery in international tourism, which is expected to be gradual and will depend on rebuilding global aviation networks, with inbound tourism anticipated to reach pre-COVID-19 levels by 2024-25 (Box 3.2).

The national household savings ratio has been high since the June quarter 2020, averaging 16.7%, and was 13.6% in the December quarter 2021. The high savings ratio indicates potential capacity for households to travel internationally and it appears there is a level of interest among Australians to resume travelling overseas. The Territory is typically a net importer of overseas travel, meaning Territorians spend more overseas each year than international visitors spend within the Territory. As such, the opening of international borders is likely to detract from the Territory's net exports.

The reopening of international borders will also be an important mechanism to help ease supply chain constraints. Entry restrictions were eased to allow international students entry to Australia from 1 December 2021 in time for the 2022 school year. International students contribute to Territory service exports. However, the number of international students enrolled in the Territory for the January-February 2022 period was 2,706, an 18% decrease compared with the same period in the previous year.

There is potential for increased demand for Territory commodities emanating from the Russia-Ukraine conflict, however global uncertainty also poses a downside risk for goods exports.

Chart 3.5: Territory net exports



e: estimate; f: forecast

Source: ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0; Department of Treasury and Finance

Table 3.2: Components of Territory gross state product (expenditure)¹

	Value (\$M) ¹									
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22e ³	2022-23f	2023-24f	2024-25f	2025-26f
Total consumption	19 298	19 410	19 136	18 874	19 867	20 551	20 520	20 801	21 116	21 444
Household consumption	11 023	11 072	10 727	10 284	10 964	11 053	11 196	11 328	11 458	11 597
Public consumption	8 262	8 326	8 403	8 590	8 903	9 498	9 323	9 473	9 658	9 847
Total investment	12 107	10 601	5 722	4 650	5 096	6 610	8 121	7 926	6 889	6 065
Private investment	10 491	8 871	4 032	3 301	3 853	5 263	6 543	6 451	5 388	4 530
Dwelling investment	670	632	609	573	716	643	673	705	716	722
Ownership transfer costs	174	166	142	143	217	287	304	304	308	312
Business Investment	9 689	8 103	3 283	2 585	2 919	4 333	5 567	5 442	4 364	3 496
Public investment	1 616	1 730	1 690	1 349	1 244	1 347	1 578	1 476	1 501	1 535
State final demand	31 311	29 944	24 854	23 523	24 964	27 161	28 640	28 728	28 005	27 509
Net exports	2 093	3 440	7 005	10 678	9 910	8 770	8 302	7 788	9 621	10 886
Total exports	7 375	7 915	10 241	13 649	12 543	13 259	13 690	13 274	13 621	14 903
Total imports	5 282	4 475	3 236	2 971	2 633	4 490	5 388	5 487	4 001	4 017
Balancing item ²	- 8 751	- 8 260	- 7 010	- 7 862	- 8 693	- 8 592	- 8 583	- 8 367	- 8 261	- 8 185
Gross state product	24 653	25 125	24 849	26 339	26 181	27 339	28 359	28 148	29 365	30 210
	Year-on-year change (%) ¹									
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22e ³	2022-23f	2023-24f	2024-25f	2025-26f
Total consumption	2.0	0.6	- 1.4	- 1.4	5.3	3.4	- 0.2	1.4	1.5	1.6
Household consumption	1.0	0.4	- 3.1	- 4.1	6.6	0.8	1.3	1.2	1.1	1.2
Public consumption	3.4	0.8	0.9	2.2	3.6	6.7	- 1.8	1.6	2.0	2.0
Total investment	22.6	- 12.4	- 46.0	- 18.7	9.6	29.7	22.9	- 2.4	- 13.1	- 12.0
Private investment	23.5	- 15.4	- 54.5	- 18.1	16.7	36.6	24.3	- 1.4	- 16.5	- 15.9
Dwelling investment	- 24.0	- 5.7	- 3.6	- 5.9	25.0	- 10.3	4.7	4.7	1.7	0.8
Ownership transfer costs	- 8.9	- 4.6	- 14.5	0.7	51.7	32.2	5.9	0.0	1.4	1.4
Business Investment	30.5	- 16.4	- 59.5	- 21.3	12.9	48.5	28.5	- 2.2	- 19.8	- 19.9
Public investment	16.8	7.1	- 2.3	- 20.2	- 7.8	8.3	17.1	- 6.5	1.7	2.3
State final demand	8.9	- 4.4	- 17.0	- 5.4	6.1	8.8	5.4	0.3	- 2.5	- 1.8
Net exports	- 39.6	64.4	103.6	52.4	- 7.2	- 11.5	- 5.3	- 6.2	23.5	13.2
Total exports	- 3.7	7.3	29.4	33.3	- 8.1	5.7	3.2	- 3.0	2.6	9.4
Total imports	26.0	- 15.3	- 27.7	- 8.2	- 11.4	70.5	20.0	1.8	- 27.1	0.4
Balancing item ²	10.5	- 5.6	- 15.1	12.2	10.6	- 1.2	- 0.1	- 2.5	- 1.3	- 0.9
Gross state product	1.5	1.9	- 1.1	6.0	- 0.6	4.4	3.7	- 0.7	4.3	2.9
	Percentage point contribution to year-on-year GSP change ¹									
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22e ³	2022-23f	2023-24f	2024-25f	2025-26f
Total consumption	1.6	0.5	- 1.1	- 1.1	3.8	2.6	- 0.1	1.0	1.1	1.1
Household consumption	0.5	0.2	- 1.4	- 1.8	2.6	0.3	0.5	0.5	0.5	0.5
Public consumption	1.1	0.3	0.3	0.8	1.2	2.3	- 0.6	0.5	0.7	0.6
Total investment	9.2	- 6.1	- 19.4	- 4.3	1.7	5.8	5.5	- 0.7	- 3.7	- 2.8
Private investment	8.2	- 6.6	- 19.3	- 2.9	2.1	5.4	4.7	- 0.3	- 3.8	- 2.9
Dwelling investment	- 0.9	- 0.2	- 0.1	- 0.1	0.5	- 0.3	0.1	0.1	0.0	0.0
Ownership transfer costs	- 0.1	0.0	- 0.1	0.0	0.3	0.3	0.1	0.0	0.0	0.0
Business Investment	9.3	- 6.4	- 19.2	- 2.8	1.3	5.4	4.5	- 0.4	- 3.8	- 3.0
Public investment	1.0	0.5	- 0.2	- 1.4	- 0.4	0.4	0.8	- 0.4	0.1	0.1
State final demand	10.6	- 5.5	- 20.3	- 5.4	5.5	8.4	5.4	0.3	- 2.6	- 1.7
Net exports	- 5.7	5.5	14.2	14.8	- 2.9	- 4.4	- 1.7	- 1.8	6.5	4.3
Total exports	- 1.2	2.2	9.3	13.7	- 4.2	2.7	1.6	- 1.5	1.2	4.4
Total imports	- 4.5	3.3	4.9	1.1	1.3	- 7.1	- 3.3	- 0.3	5.3	- 0.1
Balancing item ²	- 3.4	2.0	5.0	- 3.4	- 3.2	0.4	0.0	0.8	0.4	0.3
Gross state product	1.5	1.9	- 1.1	6.0	- 0.6	4.4	3.7	- 0.7	4.3	2.9

e: estimate; f: forecast

1 Inflation adjusted, components may not add to totals due to rounding and Australian Bureau of Statistics (ABS) chain volume estimation.

2 Balancing item includes statistical discrepancy.

3 Historical data is sourced from ABS Cat. No. 5220, released in November each year. Components of SFD are reported and revised quarterly but not updated here to ensure all components of historical GSP compute.

Source: ABS, Australian National Accounts: State Accounts, Cat. No. 5220.0; Department of Treasury and Finance

Chapter 4

External economic environment and trade

Outlook

Net exports are expected to decline in 2021-22 due to an increase in imports associated with large construction projects offsetting a small rise in exports resulting from higher commodity prices. Net exports are expected to continue to decline over 2022-23 and 2023-24 before a return to growth in 2024-25.

Table 4.1: Territory trade (\$M, chain volume measure)

	2020-21a	2021-22e	2022-23f	2023-24f	2024-25f	2025-26f
Total exports	12 543	13 259	13 690	13 274	13 621	14 903
Total imports	2 633	4 490	5 388	5 487	4 001	4 017
Net exports	9 910	8 770	8 302	7 788	9 621	10 886

a: actual; e: estimate; f: forecast

Source: ABS, *Australian National State Accounts*, Cat. No. 5220.0; Department of Treasury and Finance

International trade

The Territory's international trade surplus decreased by 7.2% to \$9.9 billion in 2020-21 and is expected to decrease by 11.5% to \$8.8 billion in 2021-22.

The contraction in the Territory's trade surplus in 2020-21 was driven by an 8.1% decrease in exports as suppliers responded to record low LNG prices in the first half of the year due to COVID-19-related uncertainty having a huge impact on global economic growth and energy demand. Production in the Territory was also affected by maintenance shutdowns during this period.

LNG prices recovered through the second half of 2020-21 as the global economy recovered from the initial COVID-19 shocks and underinvestment in exploration and production capacity impeded the world's ability to respond quickly to rapidly growing demand. Prices are likely to continue to rise throughout 2022 due to supply and demand issues, with supply constrained due to the Russia-Ukraine conflict and many western nations choosing not to import Russian energy products at a time when the global economy and energy demand are increasing. However, the value of Territory energy exports is expected to decrease in 2023-24 as output from the Darwin LNG plant pauses while it transitions from Bayu-Undan source gas to the new Barossa field, with production expected to recommence in the first half of 2025.

Imports to the Territory fell by 11.4% in 2020-21 as COVID-19 and closed international borders severely curtailed opportunities for Territorians to travel abroad, contributing to an 82% decline in service imports. Imports are expected to increase in 2021-22 as materials are imported for the construction of large projects. Furthermore, imports will be affected over the outlook period as international borders open and a proportion of increased household savings accrued over the past two years is spent on renewed international (and domestic) travel opportunities.

Over the five years to 2025-26, the trade surplus is expected to average \$9.1 billion per annum. The Territory consistently maintains a trade surplus due to its significant export-oriented resources sector and its small domestic economy that, in the absence of major projects, has limited demand for goods and services sourced directly from international markets. The Territory's main export markets are the major Asian economies of Japan, China, Taiwan, Republic of Korea and Singapore.

In 2020-21, the Territory's major goods exports were petroleum-based products (LNG, liquefied petroleum gas and condensate) and metalliferous ores, with major goods imports of refined petroleum products and road vehicles. The Territory's main service exports relate to tourism and defence. Map 4.1 shows the Territory's trade activity with major trading partners in the calendar year 2021.

Global economic outlook

In 2021, the global economy grew by 6.1% and returned to pre-pandemic levels, despite the Omicron variant re-introducing widespread restrictions and ongoing supply-side disruptions. The International Monetary Fund (IMF) expects growth in global economic output to moderate to 3.6% in 2022 and 3.6% in 2023 (Table 4.2).

Advanced economies grew by 5.2% in 2021, with growth of 3.3% expected in 2022. Output in most advanced economies has recovered to pre-pandemic levels and wage growth has supported increased consumption.

Emerging and developing economies grew by 6.8% in 2021, with growth of 3.8% expected in 2022. Despite strong growth, many emerging economies will continue to be impacted by reduced international tourism and lower vaccination rates.

Global trade increased by 10.1% in 2021 and the IMF forecasts trade growth to moderate to 5% in 2022. International services trade, such as tourism and education, is expected to remain weak through 2022, disproportionately affecting lower-income economies reliant on tourism.

High consumer demand for goods coupled with supply disruptions through 2021 caused severe supply-demand imbalances, contributing to strong inflation. The Russia-Ukraine conflict is likely to further exacerbate inflationary pressures. Reduced exports from these countries, through loss of productive capacity and sanctions, will place upward pressure on the price of energy, food and other commodities in the short to medium term.

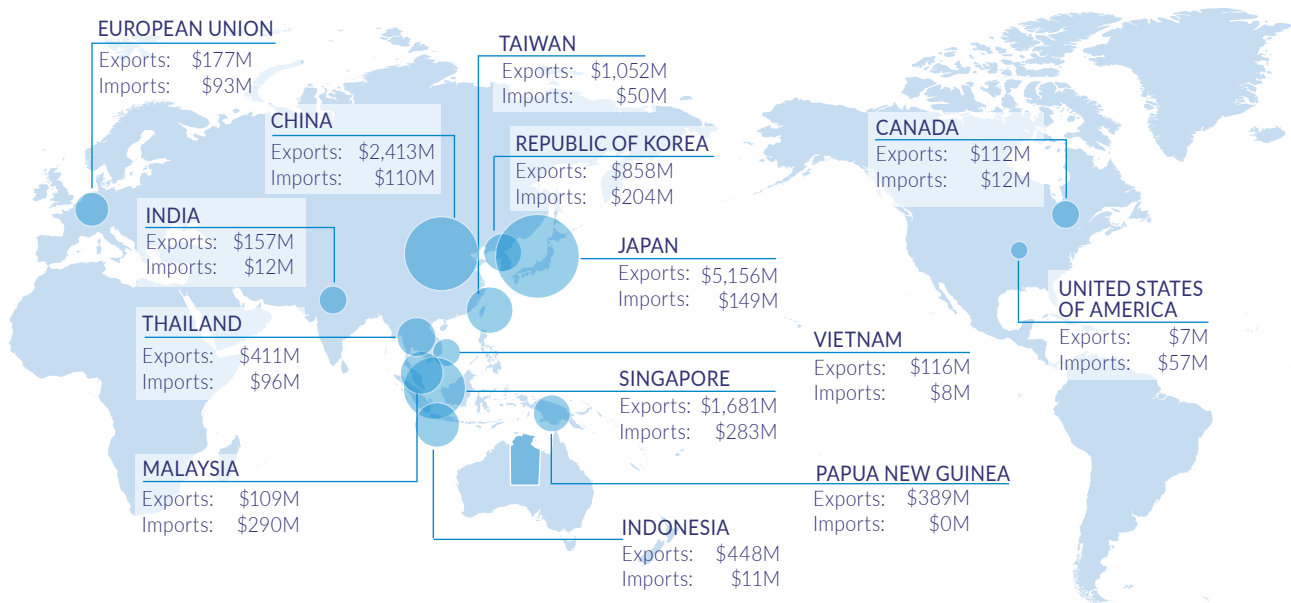
Table 4.2: Economic growth outlook¹

	2020a	2021a	2022f	2023f	2024f	2025f	2026f
Australia	- 2.2	4.7	4.2	2.5	2.3	2.3	2.5
China	2.2	8.1	4.4	5.1	5.1	5.0	4.9
India	- 6.6	8.9	8.2	6.9	7.0	7.0	6.5
Indonesia	- 2.1	3.7	5.4	6.0	5.8	5.4	5.3
Japan	- 4.5	1.6	2.4	2.3	0.8	0.7	0.5
Korea, Republic of	- 0.9	4.0	2.5	2.9	2.6	2.5	2.4
Malaysia	- 5.6	3.1	5.6	5.5	4.9	4.4	4.4
Singapore	- 4.1	7.6	4.0	2.9	2.6	2.5	2.5
Taiwan	3.4	6.3	3.2	2.9	2.2	2.1	2.1
United States	- 3.4	5.7	3.7	2.3	1.4	1.7	1.7
Vietnam	2.9	2.6	6.0	7.2	7.0	6.9	6.8
European Union	- 5.9	5.4	2.9	2.5	2.1	1.9	1.8
Emerging market and developing economies	- 2.0	6.8	3.8	4.4	4.6	4.5	4.4
Advanced economies	- 4.5	5.2	3.3	2.4	1.7	1.7	1.6
World	- 3.1	6.1	3.6	3.6	3.4	3.4	3.3

a: actual; f: forecast

¹ Year-on-year change in gross domestic product.

Source: IMF, *World Economic Outlook Update*, April 2022.

Map 4.1: Territory's major goods trading partners, 2021¹

1 Moving annual total.

Source: ABS, *International Trade in Goods and Services*, Cat. No. 5368.0; Department of Treasury and Finance

Japan

Japan is the Territory's largest export market, accounting for 39% of goods exports in 2021, largely LNG. Japan's slow vaccination rollout and extended state of emergency through 2021 delayed its economic recovery. In annual terms, Japan's economy grew by 1.6% in 2021, with the IMF expecting growth of 2.4% in 2022.

A cold winter contributed to Japan's strong LNG demand in 2021. Looking forward, the Japanese government has legislated a target of net-zero emissions by 2050 that will reduce the longer-term demand for LNG as the country transitions to alternative energy sources. It is expected that Japan's demand for LNG will decrease slowly over 2022 and 2023 as it transitions towards a great reliance on nuclear and renewable energy generation.

China

China is the Territory's second largest export market, accounting for 18.2% of goods exported in 2021, largely LNG and mineral commodities including manganese.

China experienced strong growth during the first half of 2021, as recovering international and domestic consumption bolstered its manufacturing industries and a booming real estate market facilitated industrial growth.

However, policy decisions to reduce coal imports have caused severe energy shortages and restricted industrial output. China's demand for LNG is expected to grow as it transitions to lower carbon fuels such as gas.

China's economic output increased by 8.1% in 2021, with growth expected to moderate to 4.4% in 2022 as it maintains its zero-COVID-19 policy, depressing domestic consumption amid the spread of the Omicron variant and attempts to constrain its over-leveraged property market. Both these factors will act to constrain growth.

Malaysia

Malaysia is the Territory's largest import market, accounting for 19.8% of goods imports in 2021, predominantly refined petroleum products. Malaysia's economy grew by 3.1% in 2021, driven by strong external demand for technology and greater household spending. However, Malaysia's output remains below pre-pandemic levels. Growth is expected to continue into 2022 due to expanding global demand for Malaysia's exports and improving labour market conditions.

Singapore

Singapore is the Territory's second largest import market, accounting for 19.3% of goods imports in 2021, predominantly refined petroleum products. Singapore is also the Territory's third largest export market accounting for 12.7% of goods exports in 2021, largely LNG. Singapore's economy grew by 7.6% in 2021, with strong growth in the manufacturing and construction industries.

Sun Cable's Territory-backed development of the Australia-Asia Power Link will supply 20% of Singapore's annual electricity needs from the world's largest solar farm. Construction for the project is proposed to start in 2023, with energy exports estimated to begin in 2027.

Republic of Korea

The Republic of Korea is a long-term trading partner of the Territory and accounted for 13.9% of goods imports in 2021. Its economy grew by 4% in 2021 due to strong international demand for computer chips. Solid economic growth is expected to continue at 2.5% in 2022. The Republic of Korea's demand for LNG is likely to increase as it transitions from coal to gas and nuclear energy sources.

Taiwan

In 2021 Taiwan accounted for 8% of the Territory's exports, largely LNG. As with other economies in the east Asian region, Taiwan's demand for LNG is likely to continue to grow in 2022 as it attempts to phase out all nuclear power generation by 2025 and replace it with gas in the short term. Taiwan's output increased by 6.3% in 2021, driven by strong technology exports. Taiwan's economic growth is expected to moderate to 3.2% in 2022.

Indonesia

Indonesia is the Territory's primary live cattle export market and accounted for 3.4% of the Territory's goods exports in 2021. Indonesia's growing middle class is likely to see increased demand for the Territory's cattle exports, with the Australian Bureau of Agriculture and Resource Economics and Sciences forecasting Indonesian food demand to quadruple by 2025, with the majority met by imports. Despite a severe Delta outbreak of COVID-19 in the middle of the year, Indonesia's economy grew by 3.7% in 2021. The IMF expects Indonesia's growth to accelerate to 5.4% in 2022 as vaccination rates increase.

Trade agreements

Free trade agreements (FTAs) reduce or eliminate barriers to trade and investment, and facilitate stronger trade and commercial ties between signatory nations. Australia is a participant to a large number of bilateral and multilateral FTAs.

The Regional Comprehensive Economic Partnership Agreement came into force in January 2022, strengthening Australia's trade relationships with the 14 other signatories from the Indo-Pacific. The Regional Comprehensive Economic Partnership Agreement is the world's largest FTA with participating countries making up 29% of the world's output and accounting for 67% of Australia's exports. The agreement aims to reduce tariffs and implement shared rules for commerce, labour and intellectual property.

The Australia-United Kingdom Free Trade Agreement was signed in December 2021. The agreement will eliminate tariffs on 99% of Australian goods exports to the United Kingdom and make it easier for Australian service companies to operate in the United Kingdom.

Australia is currently negotiating FTAs with the European Union, Gulf Cooperation Council (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates), India, Chile, Colombia, Mexico and Peru.

Commodity outlook

LNG, bauxite, gold, manganese and zinc are major commodities produced in the Territory, with lithium production expected to commence by the end of 2022.

LNG is the Territory's largest export commodity. As the global economy recovered from COVID-19, demand for natural gas increased sharply and placed upward pressure on prices, which reached a record high in April 2022. Demand is expected to remain strong in 2022 and beyond as China and Japan continue national coal-to-gas substitution policies and strategies to reduce greenhouse gas emissions. Prices are expected to increase as the Russia-Ukraine conflict places strong upward pressure on energy prices.

Bauxite is a major input in the production of aluminium. Global demand for aluminium is likely to increase as the global economic recovery bolsters demand for electric vehicles, electrical equipment and renewable energy components, all of which require aluminium. In addition, China, the world's largest producer of aluminium, has restricted electricity consumption for high energy-intensive industries in an effort to reduce carbon emissions, and limited aluminium production capacity. This is putting upward pressure on global prices. As the price of bauxite is linked to the price of aluminium, bauxite prices are expected to increase over 2022.

After reaching a record high in August 2020, the gold price moderated over the remainder of 2020 and 2021, reflecting the improved economic outlook, causing outflows from the safe-haven asset to growth-oriented assets. Prices began to rise again in early 2022 as rising inflation rates, a decline in real bond yields and geopolitical uncertainty surrounding the Russia-Ukraine conflict drove demand for gold. Gold prices are expected to lower throughout the year, however heightened global uncertainty may act to keep prices high.

The global transition to low-carbon energy has driven demand for clean energy products such as electric vehicles that rely on lithium-ion batteries. In recent years, underinvestment in the production of lithium has tightened supply as demand boomed, causing the price of lithium to increase by over 450% in 2021. Prices have continued to rise through the early months of 2022 and are expected to persist through the year as demand continues to exceed supply.

Manganese is a key input to steel production and is also used in the production of lithium-ion batteries. Demand for manganese increased in 2020-21 with the amount of manganese sold increasing by 9.1%. Growth is expected to continue throughout 2022 as strong manufacturing activity in emerging economies recovers.

National economy

Australia's economic growth was constrained by COVID-19 in 2020-21, with the economy growing by a modest 1.5%. Output contracted by 1.9% in the September quarter 2021 as widespread Delta outbreaks of the virus caused major disruptions to personal movement and economic activity. The economy rebounded in the December quarter 2021 with growth of 3.4%, largely driven by household consumption as lockdown restrictions eased and pent-up demand contributed to strong spending on consumer goods and services, with economic growth increasing to 4.7% in 2021.

The Omicron variant of the virus is expected to have slowed growth in the March quarter 2022 but economic activity is unlikely to be as severely affected as it was during the Delta outbreaks of 2021. The Reserve Bank of Australia (RBA) expects GDP to grow by 4.25% in 2022 and moderate to 2% in 2023. Similarly, the IMF predicts Australia's GDP will grow by 4.2% in 2022 and 2.5% in 2023. In financial year terms, the Commonwealth has forecast Australia's GDP to grow by 4.25% in 2021-22, easing to 3.5% in 2022-23 and 2.5% in 2023-24.

The unemployment rate continues to fall and was 4% in March 2022. Demand for labour remains strong with job vacancies at record high levels. Further improvement in the labour market is anticipated over 2022, with the RBA forecasting the unemployment rate to decline to 3.75% by the end of the year.

Supply disruptions have had a significant impact on inflation across a wide range of industries. Strong global demand for goods has also placed upward pressure on prices. Inflation increased by 5.1% through the year to March 2022. The RBA expects inflation to increase further in 2022 then gradually decrease as supply disruptions ease.

Exchange rates

Movements in the Australian dollar are influenced by domestic and international interest rates, and demand for commodities that impact demand for Australian dollars. Fluctuations in exchange rates can affect industries reliant on international markets such as mining and tourism. Given the Territory is a small open economy highly reliant on trade, with net exports accounting for 38% of the Territory's output in the 2020-21 financial year, fluctuations in exchange rates can have a significant impact on the economy. The Australian dollar depreciated over 2021, driven by a significant drop in iron ore prices in the second half of the year. Continued demand for Australia's commodity exports will likely place upward pressure on the dollar throughout 2022, however this will be partially offset by the expanding US-Australian interest rate differential.

Interest rates

The RBA is committed to supporting Australia's economic recovery and return to full employment through accommodative monetary policy. In November 2020 the RBA reduced the cash rate to a record low of 0.1%.

The RBA began tightening monetary policy in February 2022 by ceasing its spending under the bond purchase program in response to strong employment growth and the equivalent actions of central banks around the world. Underlying inflation has reached the RBA's target range (2% to 3%) and the RBA increased rates by 25 basis points to 0.35% in May 2022.

Chapter 5

Population

Outlook

The Territory's population growth is expected to strengthen over the forecast period as large construction projects drive economic activity and create employment opportunities, and the easing of COVID-19 restrictions enables the return of overseas migration.

Table 5.1: Territory population forecasts (%)

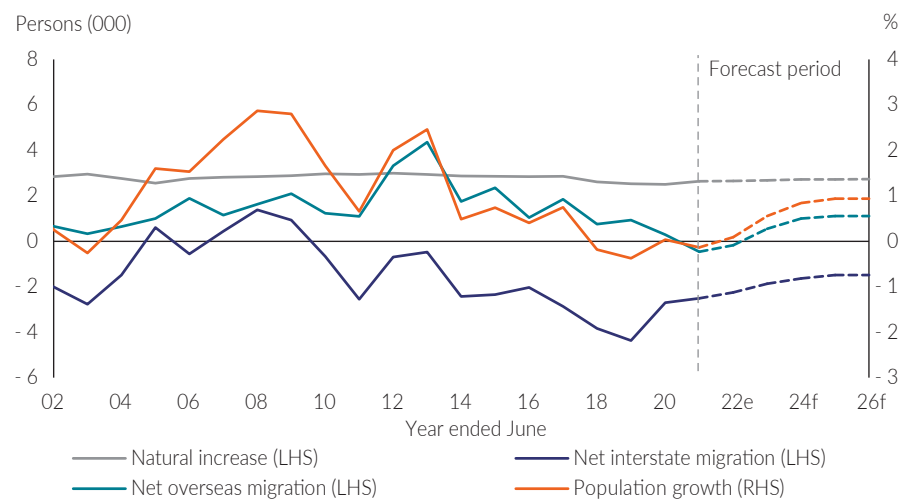
Financial year	2020-21a	2021-22e	2022-23f	2023-24f	2024-25f	2025-26f
Annual change	- 0.1	0.1	0.6	0.8	0.9	0.9
Calendar year	2020a	2021e	2022f	2023f	2024f	2025f
Annual change	0.4	- 0.2	0.3	0.6	0.9	0.9

a: actual; e: estimate; f: forecast

Source: ABS, *Australian Demographic Statistics*, Cat. No. 3101.0; Department of Treasury and Finance

The Territory's population of 245,900 persons in 2020-21 is expected to grow on average by 0.7% per annum over the five years to 2025-26 (Chart 5.1). Growth in the first year is expected to be subdued as the easing of interstate COVID-19 restrictions in late 2021 allowed for greater interstate migration outflows, and ongoing international border closures and quarantine requirements until early 2022 delayed the recovery of overseas migration.

Chart 5.1: Territory population growth



e: estimate; f: forecast; LHS: left-hand side; RHS: right-hand side

Source: ABS, *Australian Demographic Statistics*, Cat. No. 3101.0; Department of Treasury and Finance

From 2022-23 onwards, population growth is expected to strengthen, supported by several major construction projects, such as the Darwin ship lift facility, Finniss lithium project and defence-related works, adding to the steady pipeline of activity that is driving economic growth and creating demand for workers in the Territory. Overseas migration is also expected to begin to pick up following the opening of international borders in early 2022. Migration flows, particularly those related to employment opportunities, are likely to be hampered over the short term as economies reopen and compete for labour, however several government initiatives have been announced to attract and retain workers for the Territory that if successful will help alleviate this constraint. These initiatives include improvements to the Territory’s Designated Area Migration Agreement to ease recruiting and retaining overseas workers by employers and a \$12.8 million Territory workforce boost package.

In addition to major projects, ongoing work to enhance the liveability of the Territory, unlock residential and commercial land opportunities and attract private investment is also expected to support population growth.

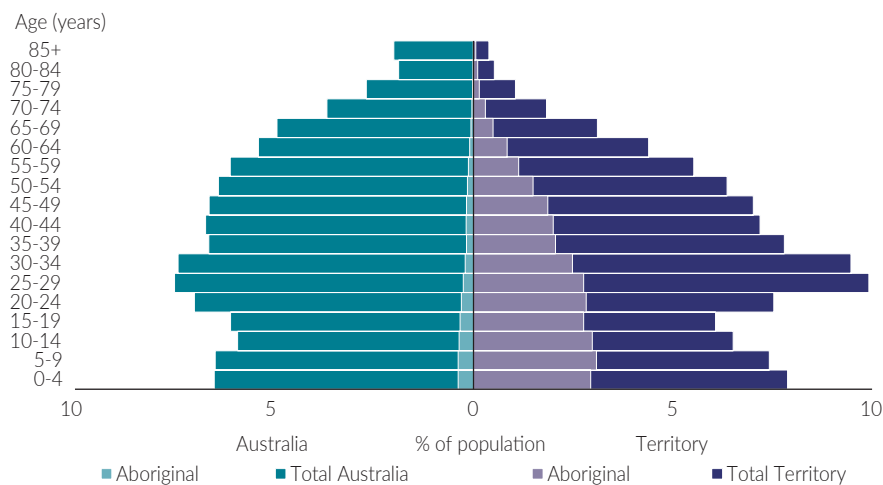
Over the forecast period, interstate and overseas migration are expected to return to long-term trends as migration patterns normalise.

Population growth in the Territory is significantly more volatile than growth in the Australian population. Historically, the Territory’s population growth has been predominantly driven by natural increase and net overseas migration with fluctuations in growth due to variations in interstate migration, which is typically linked with employment opportunities. In this respect, announced significant Commonwealth infrastructure investments coupled with the likelihood of additional private investment provide upside to the forecasts. Although the forecasts assume migration will return to usual patterns over the forecast period, uncertainties around COVID-19 regarding future outbreaks and government responses, and the impact on people’s migration intentions remain a risk to the migration outlook.

Population profile

The Territory’s population is characterised by its young age profile, with a median age of 33.9 years compared with 38.2 years nationally. This reflects a large number of persons aged 25 to 34 years in the Territory, as well as the Territory’s large Aboriginal population that, based on the Australian Bureau of Statistics (ABS) 2016 Census, had a median age of 26 years compared with 34.9 years for the non-Aboriginal population (Chart 5.2).

Chart 5.2: Population age profile – Australia and the Territory by Aboriginal status, 30 June 2016



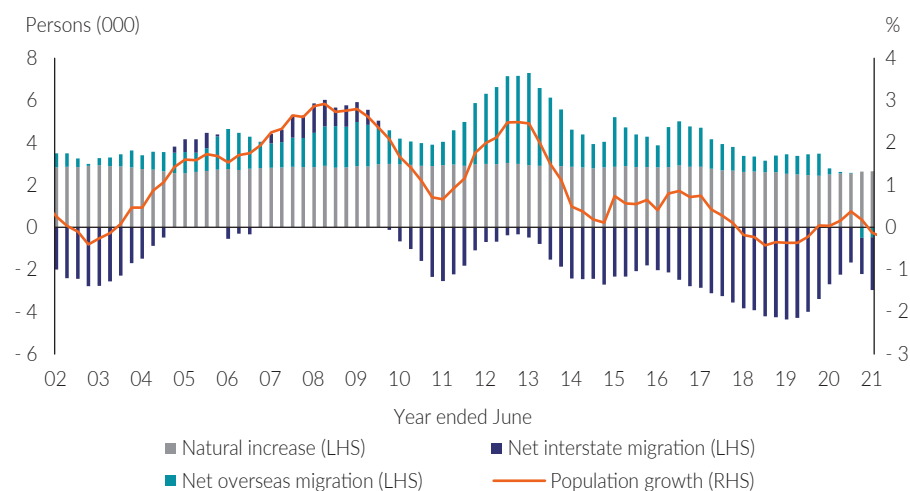
Note: 2021 Census data is expected to be available from June 2022. See 2021 Census section for more information.
Source: ABS 2016 Census

At 30 June 2016 (ABS 2016 Census), the Aboriginal population was estimated at 74,500, which represents about 30% of the Territory's population, with around 80% residing in remote and very remote areas. A further characteristic of the Territory's population is that males outnumber females 104.9 to 100, compared with 98.2 to 100 nationally. This is partly due to the prevalence of male-dominated industries such as mining, construction and defence, as well as the workforce demands of major projects.

Components of population growth

Population growth comprises natural increase, net interstate migration and net overseas migration (Chart 5.3). Historically natural increase is the largest contributor to annual population growth in the Territory followed by overseas migration while interstate migration generally detracts from population growth.

Chart 5.3: Components of Territory population growth¹



LHS: left-hand side; RHS: right-hand side

¹ Moving annual total.

Source: ABS, *Australian Demographic Statistics*, Cat. No. 3101.0

Natural increase

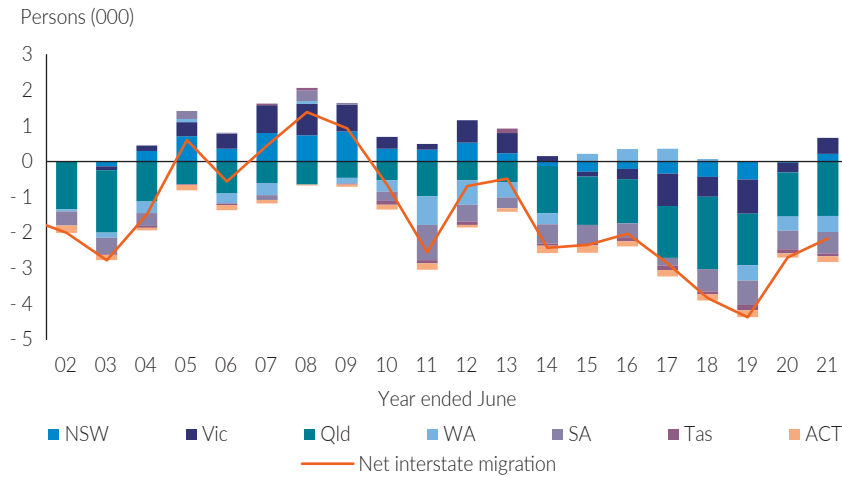
Natural increase is relatively stable in the Territory, contributing on average 1.1 percentage points to annual population growth over the five years to 2020-21, nearly double the national contribution of 0.6 percentage points. The greater contribution of natural increase reflects the Territory's younger age profile and higher fertility rate, however similar to the national trend, the fertility rate in the Territory has declined over time.

Interstate migration

Interstate migration is the most volatile component of population growth and generally detracts from the Territory's population. Over the five years to 2020-21, net interstate migration detracted on average 1.3 percentage points from annual population growth. During this period the Territory saw net interstate migration fall to a historic low in 2018-19, as workers and their dependants left after construction of the Ichthys LNG project was completed, before largely rebounding by mid 2020-21 as the economy began to recover and COVID-19 brought about smaller interstate outflows than previous years. In late 2020-21, the Territory experienced a downturn in net interstate migration as Australia's COVID-19 vaccination drive saw widespread updating of Medicare residential address records, which the ABS uses to estimate interstate migration movements.

The Territory's population is more mobile than the other jurisdictions, with an interstate migration rate of about 13%, compared with about 2% to 5% across most states in 2020-21. Arrivals from and departures to Queensland represented the largest share of movements for the Territory, followed by New South Wales and Victoria. In net terms, the Territory saw outflows against all jurisdictions in 2020-21 except for New South Wales and Victoria, with the largest net outflows to Queensland, South Australia and Western Australia (Chart 5.4).

Chart 5.4: Territory net interstate migration, by jurisdiction



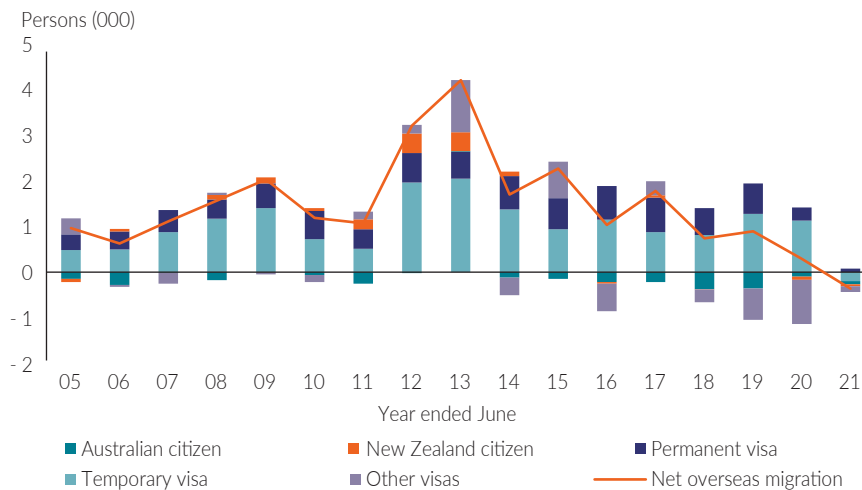
Source: ABS, *Australian Demographic Statistics*, Cat. No. 3101.0

Interstate migration flows are influenced by a range of factors but local economic and labour market conditions are significant, as are lifestyle, housing prices and location of family. Nevertheless, even during periods of strong employment growth, net interstate migration outflows can occur due to lagged factors.

Overseas migration

Historically, overseas migration supports population growth in the Territory and has contributed on average 0.3 percentage points annually over the five years to 2020-21. Overseas migration has been declining over this period mainly from net outflows of 'other' visa holders, and falls in permanent visa holders (Chart 5.5). The closure of international borders in early 2020 due to COVID-19 also exacerbated the reduction in net overseas migration, resulting in the Territory and the rest of Australia experiencing a net loss in overseas migration in 2020-21.

Chart 5.5: Territory net overseas migration, by visa category



Source: ABS, *Australian Demographic Statistics*, Cat. No. 3101.0

Overseas migration is expected to recover over the forecast period following the re-opening of international borders in early 2022 resulting in return of migrants, international students and working holiday visa holders. Previous changes to Australia's migration program, such as lowering the permanent migration cap and redefining regional areas to include major urban cities for migration purposes, are expected to constrain the Territory's ability to attract and retain overseas migrants.

In early 2022, several government initiatives were announced to improve overseas migration for the Territory and offset some of the constraints from previous policy settings. Notable Commonwealth initiatives include increasing the Territory's allocation of nominated skilled migration program places for 2021-22 by 200 places and amending the Territory's Designated Area Migration Agreement to be more accessible. Key changes include an increase to the annual ceiling of overseas workers able to be engaged by Territory employers and an expansion of the number of eligible occupations. Visa application fees for international students and working holiday makers were also made eligible for refunds.

Initiatives from the Territory Government include the workforce boost package which contains various incentives for overseas migration, such as the Working Holiday Maker Campaign and Tourism and Hospitality Turbo Charge which aim to attract 2,000 new tourism and hospitality workers in 2022, the Flexible Workforce Initiative to deliver projects and strategies to attract and retain workforces in the Territory, and boosting the Territory's skilled migration support for Territory businesses. Work to attract international students is also being undertaken, with marketing campaigns to promote the Territory as an ideal study destination for international students and funding support for Territory education and training providers to access international markets post-COVID-19.

Regional growth

Growth patterns in the Territory are broadly differentiated between greater Darwin and the rest of the Territory (Table 5.2), with about 60% of the Territory's population residing in the greater Darwin area and the remainder dispersed over remote and very remote areas across the rest of the Territory.

In 2020-21, greater Darwin's population decreased by 0.2% due to declining net overseas migration as international borders remained closed, although natural increase and net regional internal migration continued to improve, in part due to the Territory's relatively low number of COVID-19 cases.

Population across the rest of the Territory remained stable with growth in Alice Springs and East Arnhem largely offset by declines across the other regions. Alice Springs saw notable improvements in net regional internal migration while East Arnhem experienced higher natural increase. Growth in these regions has been supported by public investment in housing and health. The Daly-Tiwi-West Arnhem region reported a large population decline as the closure of the Ranger uranium mine in early 2021 saw net migration out of the region.

Going forward, defence will have a major role in supporting population growth with a significant pipeline of works committed across the Territory. Planned investments in the Barkly Regional Deal, Jabiru Futures and natural resource projects are also expected to promote economic, employment and population growth, particularly in the rest of the Territory regions.

Table 5.2: Territory population by region, 30 June 2021

	Population	Proportion	Annual change	5-year average annual change
	No.	%	%	%
Greater Darwin	146 982	59.8	- 0.2	0.0
Rest of the Territory	98 927	40.2	0.0	0.1
Alice Springs	39 458	16.0	0.1	0.1
Katherine	20 893	8.5	- 0.1	0.2
Daly-Tiwi-West Arnhem	17 852	7.3	- 0.3	- 0.1
East Arnhem	14 584	5.9	0.1	0.0
Barkly	6 140	2.5	- 0.1	0.0
Total	245 909	100.0	- 0.1	0.0

Source: ABS, *Regional Population Growth, Australia*, Cat. No. 3218.0

2021 Census

The ABS held Australia's five-year census of population and housing in August 2021.

The census is the principal means of estimating Australia's population and provides the most comprehensive statistical picture of Australian society and the economy. The Territory's unique demography and the limited availability of alternative reliable data means the Territory relies heavily on census data for policy development and service delivery planning.

The census also provides a new base for the ABS to estimate resident population going forward. Estimated resident population is key to the distribution of the GST pool.

The ABS is expected to release the first stage of census data in June 2022 which will include rebased estimated resident population as well as most of the data related to place of usual residence on census night. Two smaller releases are scheduled for October 2022 and early to mid 2023.

Chapter 6

Labour market

Outlook

In 2021-22, employment is expected to grow by 1.1%, and the unemployment rate to improve from 5.2% to 3.9%. Employment growth is expected to peak in 2022-23, supported by several major private and public sector construction projects.

Table 6.1: Territory labour market (%)

	2020-21a	2021-22e	2022-23f	2023-24f	2024-25f	2025-26f
Employment ¹	- 1.7	1.1	2.3	0.9	1.4	1.7
Unemployment rate ²	5.2	3.9	4.2	4.4	4.4	4.4

a: actual; e: estimate; f: forecast

1 Year-on-year change in resident civilian employment.

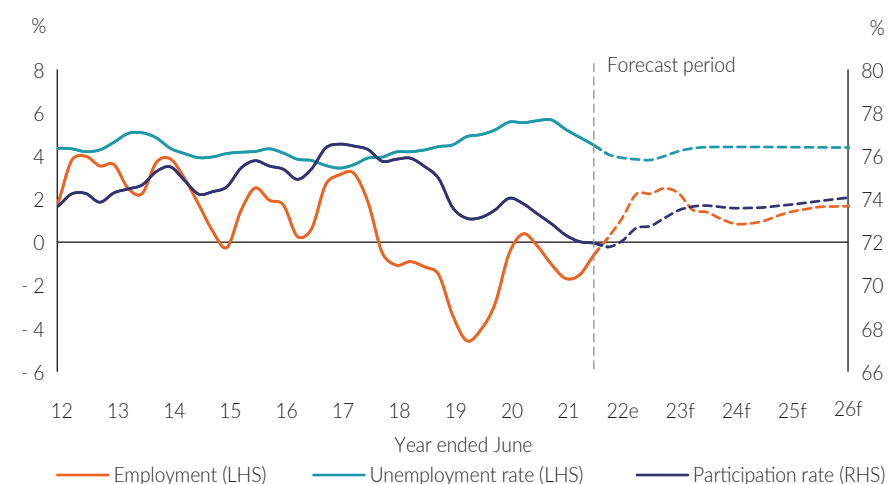
2 Annual average.

Source: ABS, *Labour Force, Australia*, Cat. No. 6202.0; Department of Treasury and Finance

Territory employment is highly cyclical and heavily influenced by investment and construction activity for large, typically resource-based projects such as the Ichthys LNG project. Employment growth associated with the construction phase of large projects is usually followed by a period of declining employment as the economy adjusts. The Territory labour market is characterised by a substantial public sector with government and community services accounting for 43.7% of employment in 2020-21, and a relatively large defence and fly-in fly-out workforce not captured in Territory data reported by the ABS.

The Territory's labour market rebounded in 2021-22, with employment expected to increase by 1.1% and the unemployment rate to decline to 3.9% (Table 6.1 and Chart 6.1). The return to growth reflects business confidence and the effectiveness of the Territory's response to COVID-19, allowing the labour market to weather the winding back of government support measures, cessation of the JobKeeper program in March 2021 and arrival of the highly transmissible Delta variant of the virus in Australia in mid 2021. Despite a return to growth in 2021-22, the total number of employed is expected to remain below 2019-20 levels.

Chart 6.1: Territory labour market conditions



e: estimate; f: forecast; LHS: left-hand side; RHS: right-hand side

Source: ABS, *Labour Force, Australia*, Cat. No. 6202.0; Department of Treasury and Finance

The Territory experienced an outbreak of the highly contagious COVID-19 Omicron variant in early 2022. This had significant short-term effects on the availability of labour and capacity of many businesses to trade due to staff absences. Despite the disruption to business activity, the employment level was unaffected in January and February 2022 growing by 1% in seasonally adjusted terms.

Employment growth is forecast to strengthen to 2.3% in 2022-23 supported by demand for labour associated with major private and public sector investments in construction projects (see Chapter 3 *Economic growth*), with downside risk to growth from a shortage of skilled labour across Australia. International borders were opened in early 2022, however migration is expected to gradually recover over the outlook period, with interstate flows recovering sooner. A rebound in international tourist visitations would boost the labour intensive tourism economy, though there is increased uncertainty as the Russia-Ukraine conflict and increased global tensions affect the appetite to travel, while record fuel prices and global inflationary pressures raise the cost of holidaying overseas.

Although private investment and, consequently, SFD are forecast to decline in the outer years of the forecast period, this is driven by the anticipated completion of construction activity related to the Barossa Project by 2024. However, the use of local content and employment for the offshore component of this project is expected to be minimal, and employment outcomes over the outlook will be tied to onshore project and industry activity more broadly, and supported by improved population growth.

There are a variety of upcoming projects that will increase demand for labour over the outlook period. Significant investments and construction projects include the Darwin ship lift facility project, Darwin Education and Community Precinct, construction for the Finnis lithium project (see Chapter 2 *Major projects and investment opportunities*), and major Australian and US defence-related investments across the Territory (see the *Defence* section in the 2022-23 *Industry Outlook* publication). Ongoing and increased gas exploration in the Beetaloo basin in coming years will support employment and create the foundation for additional jobs as exploration leads to production-related investment and employment.

As part of its 2022-23 Budget, the Commonwealth has committed funding for a range of projects over the next decade, including new infrastructure at Darwin Harbour, various road upgrades, and logistics and low emissions energy hubs, subject to successful business cases. These projects will provide a significant source of Territory jobs during construction.

Despite the positive prospects for jobs creation, employment growth, particularly in the short term, will be constrained by skilled labour shortages in the agriculture, construction and hospitality industries. The market for overseas migrants is highly competitive, with several major economies reopening their borders before Australia, and other Australian jurisdictions competing with the Territory for a limited pool of visa holders and holidaymakers. Notably for occupations in tourism, there is anecdotal reporting of labour shortages, wages growth pressures and risks of scaled-back operations due to these constraints, even in an environment of demand growth.

To alleviate some of these labour constraints, the Territory Government has implemented several employment initiatives as part of its \$12.8 million Workforce Boost package, including:

- \$3 million for the Flexible Workforce Initiative Fund to attract and retain workforces
- the \$2.6 million Working Holiday Maker campaign and Tourism and Hospitality Turbo Charge designed to attract 2,000 new tourism and hospitality workers, which includes \$500 incentives to holiday makers working for at least eight weeks
- \$1.5 million for the Global Worker Attraction program, targeting interstate and overseas markets
- \$1.35 million to boost the Territory's skilled migration capacity

- round 2 of the Work Stay Play program in March 2022, allowing businesses to reimburse workers moving for new jobs in the Territory with \$1,000 payments, up to a \$20,000 cap.

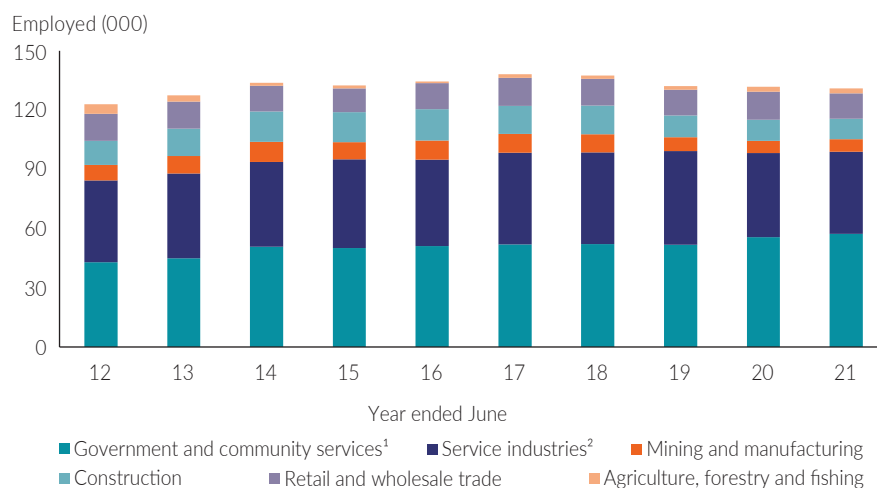
The Commonwealth has also announced changes to the Northern Territory Designated Area Migration Agreement to address regional skilled labour shortages by increasing the number of eligible occupations and providing additional concessions to standard visa eligibility.

To support businesses adversely affected during COVID-19, the Commonwealth introduced the Small and Medium Enterprise Recovery Loan Scheme. The original scheme ended on 31 December 2021 and an updated scheme has been extended to 30 June 2022. The Territory Government also provided financial support to businesses through the Business Hardship Register for applicants reporting a significant drop in turnover, and the COVID-19 Lockdown Payment Program for small businesses that had to suspend operations due to health directions.

Recent activity

In 2020-21, Territory employment declined by 1.7% with the unemployment rate at 5.2%. International travel restrictions continued to impact the economy in 2020-21. While retail trade in 2020-21 was strong, employment in retail and wholesale trade declined by 8.8%. Service industries also declined by 2.4%, however employment has recovered steadily since the easing of domestic travel restrictions (Chart 6.2).

Chart 6.2: Territory employment by industry



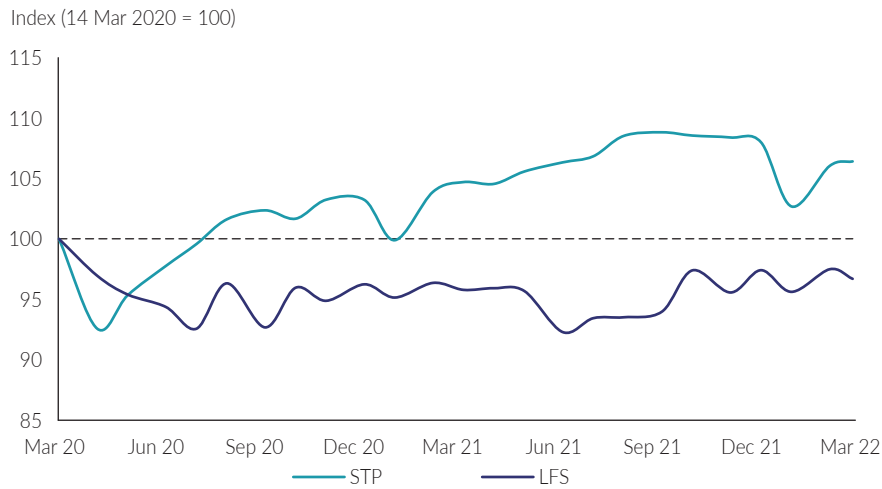
1 Government and community services are public administration and safety; education and training; and health care and social assistance.

2 Service industries are electricity, gas and water; accommodation and food; transport, postal and warehousing; information, media and telecommunications; financial and insurance; rental, hiring and real estate; professional, scientific and technical; administrative and support; arts and recreation; and other services.

Source: ABS, *Labour Force, Australia, Detailed, Quarterly*, Cat. No. 6291.0.55.003

Latest ABS labour force survey data reports an increase in employment through the year to March 2022, however, employment is yet to return to pre-COVID-19 levels, down by 3.3% since March 2020. This is due in part to reported pre-COVID-19 employment figures being elevated relative to other economic indicators. For comparison, the weekly payroll jobs data series reports jobs growth of 6.4% over the same period (Chart 6.3). Although there are data and methodological differences between the two series, the year-on-year performance of a range of other indicators of economic activity, such as consumption, retail trade, private new capital expenditure and construction, has reported growth ranging from 2.8% to 20.3%, suggesting that employment levels reported by the labour force survey may be understated.

Chart 6.3: Territory single touch payroll versus labour force survey comparison



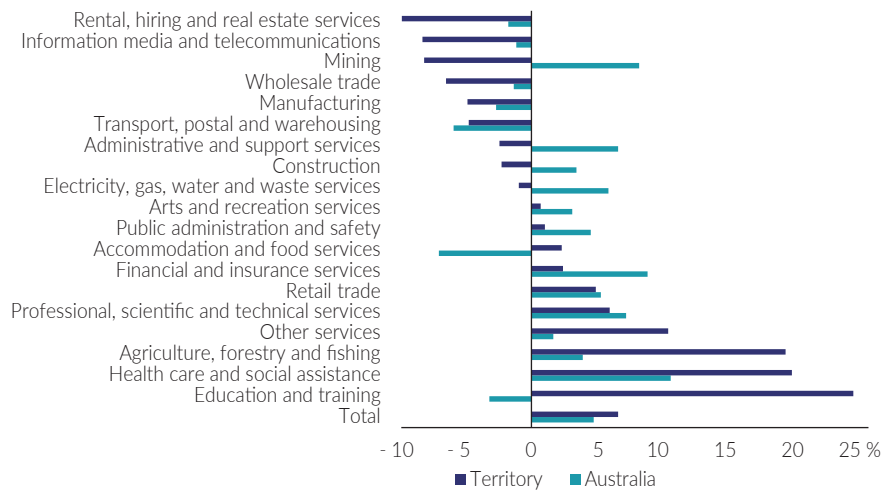
LFS: labour force survey; STP: single touch payroll

Source: ABS, *Labour Force, Australia*, Cat. No. 6202.0, *Weekly Payroll Jobs and Wages in Australia*, Cat. No. 6160.0.55.001

Payroll jobs

The weekly payroll jobs data reports that since 14 March 2020 (the date Australia recorded its 100th COVID-19 case), the Territory has had the second strongest growth in jobs. The pandemic has had varying impacts across Territory industries, with education and training, and health care and social assistance reporting the largest increases (Chart 6.4). The number of payroll jobs in the health and social assistance industry may decline following the lifting of domestic border entry requirements in February 2022, which has led to reduced operations at the Centre for National Resilience, although some staff will be diverted back to health operations.

Chart 6.4: Change in weekly payroll jobs from 14 March 2020 to 12 March 2022

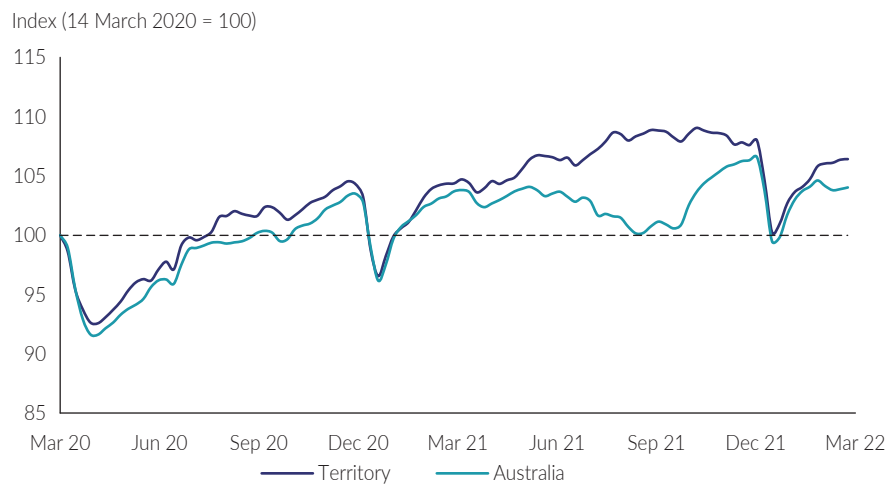


Source: ABS, *Weekly Payroll Jobs and Wages in Australia*, Cat. No. 6160.0.55.001

From April 2020 to December 2021 (before the Territory-wide COVID-19 restrictions in early January 2022), growth in the number of payroll jobs in the Territory relative to the reference date of 14 March 2020 was among the strongest of the jurisdictions (Chart 6.5). Effective health measures in the Territory have enabled limited trading and movement restrictions, and supported relatively 'normal' living conditions and employment outcomes. This was most notable during the height of the Delta wave of the virus that affected much of the east coast of Australia from June to October 2021.

The impact of the Omicron variant on payroll jobs in the Territory was minimal, reflecting high vaccination rates and coinciding with a seasonal drop over the Christmas period.

Chart 6.5: Weekly payroll jobs index from 14 March 2020 to 12 March 2022



Source: ABS, *Weekly Payroll Jobs and Wages in Australia*, Cat. No. 6160.0.55.001

Job vacancies

The number of job advertisements tends to rise alongside business confidence, offering a leading indicator for the short-term employment outlook. Internet job vacancies in the Territory have been trending up since May 2020. ABS job vacancies data report increases in both the private and public sectors, with private business advertisements accounting for the majority. This reflects a rebound in business confidence between June quarter 2020 and March quarter 2022, up from 28% to 50% according to Territory business surveys. However, despite record levels of job advertisements, employment growth has been constrained by the collapse of skilled migration from overseas through 2020 and 2021. This is highlighted in data identifying that professionals, and technicians and trade workers were the most advertised occupations, which are positions that tend to require qualifications.

Participation

The participation rate declined from 72.8% to 71.8% in the year to March 2022. The major contributing factor was a decline in the average number of unemployed people, down by 29.3% (2,300 people) in the year, compared with a 29.7% drop nationally. The fall in unemployment was not matched by a similar rise in employment, increasing by only 0.2% (300 people) in the year despite record job vacancies.

Historically, the Territory has a relatively high participation rate compared with other jurisdictions. This reflects a tendency for recently unemployed people who cannot secure work to move interstate for employment and for retirees to relocate interstate permanently. Since employment is a major factor for staying in the Territory, the participation tends to quickly stabilise during weak economic conditions as people not attached to the local labour force depart.

This tendency was not as pronounced in 2020 and 2021, reflecting the combined impacts of the Territory's effective response to COVID-19 and interstate travel restrictions, which encouraged people to stay in the Territory longer than they initially intended. As a result, the participation rate has continued to trend down, with no discernible decrease in the civilian population.

Chapter 7

Prices and wages

Outlook

Inflation is expected to be elevated over the short term due to the Russia-Ukraine conflict, the Territory's strong recent housing market, and disrupted global supply chain shortages, and will revert to lower growth over the medium term as these impacts unwind. Wages growth is expected to remain moderate over the outlook period as aggregate growth will be constrained by low growth in public sector wages.

Table 7.1: Darwin consumer price index and Territory wage price index¹ (%)

Financial year	2020-21a	2021-22e	2022-23f	2023-24f	2024-25f	2025-26f
Consumer price index	2.0	5.7	3.1	1.0	1.3	1.7
Wage price index	1.7	1.9	1.6	2.2	2.4	3.0
Calendar year	2020a	2021a	2022f	2023f	2024f	2025f
Consumer price index	- 0.2	5.1 ²	4.9	1.5	0.9	1.6

a: actual; e: estimate; f: forecast

1 Year-on-year change.

2 Department of Treasury and Finance estimates that the year-on-year growth in December 2021, excluding the impact of government policy initiatives, was 2.7%.

Source: ABS, *Consumer Price Index, Australia*, Cat. No. 6401.0, *Wage Price Index, Australia*, Cat. No. 6345.0; Department of Treasury and Finance

Consumer price index

Recent activity

In 2021, Darwin's year-on-year inflation rate was 5.1% with quarter-on-quarter increases of 2.6%, 1% and 1.5% in March, June and September, respectively. These were among the largest quarter-on-quarter movements in the Darwin CPI over the past 10 years.

Much of the rise in the year-on-year result across the second half of 2021 was due to the unwinding of government policy initiatives which were introduced in 2020 as COVID-19 stimulus measures, including the Commonwealth's HomeBuilder scheme and Child Care Subsidy, and the Territory's Home Improvement Scheme. The Territory Government's BuildBonus and Territory Home Owner Discount were introduced prior to COVID-19, however their removal in 2021 also had a similar effect on the Darwin CPI.

While the year-on-year result for the December quarter 2021 was 5.1%, Department of Treasury and Finance estimates government policy initiatives contributed around 2.4 percentage points to this result. That is, in the absence of the policy measures, Darwin's year on year inflation rate in the December quarter 2021 is estimated to be around 2.7%. This parameter has been applied to the Territory Government's 2022-23 Budget and utilised to calculate increases to the Territory's indexation arrangements for government fees, charges and penalties.

Stronger growth in the second half of 2021 compares with subdued CPI growth over the past five years, averaging 0.8% growth per annum, including a record low of 0.1% per annum in 2016-17, and 0.2% in 2019-20. The national inflation rate has averaged 1.6% per annum over the past five years.

Outlook

Darwin's inflation rate is expected to increase to 5.7% in 2021-22 and 3.1% in 2022-23 (Chart 7.1). This is stronger than forecast in the 2021-22 Budget and reflects the impact of increased housing and rental prices, geopolitical tensions and the ongoing impact of disrupted supply chains in the short term.

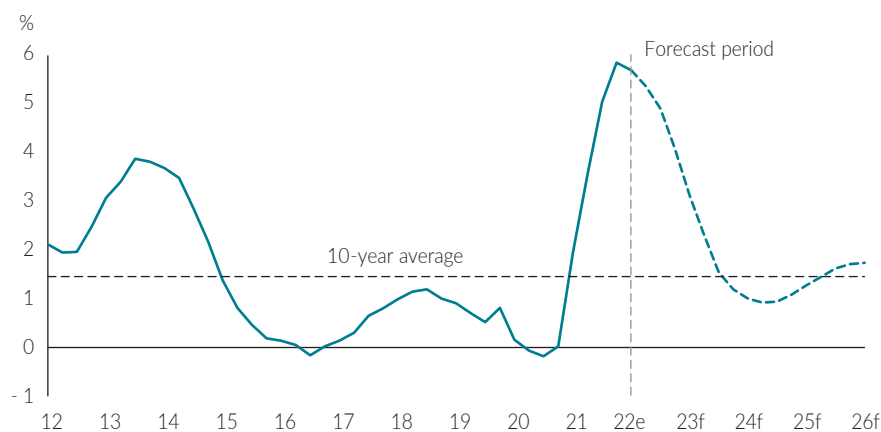
Housing is expected to make the largest contribution to inflation in the short term. New dwelling prices are expected to be higher driven by limited supply and elevated prices for key materials such as steel and timber, and demand from COVID-19 stimulus measures such as HomeBuilder. As these subsidies conclude and fewer grants are paid, more buyers will pay the full price for dwellings. Rental prices are also expected to remain elevated in the near term as leases are gradually renewed, with elevated prices reflecting the strength in Darwin's property market over 2021.

The Russia-Ukraine conflict is expected to increase food and petrol prices as it has disrupted the global supply of key commodities (including wheat and natural gas which is used in fertiliser). This will result in upwards pressure on food prices in the short term. Food prices are also set to be affected as a result of reduced supply from east-coast livestock herds being restocked following years of drought, and recent floods affecting food-growing conditions.

Crude oil prices rose sharply over 2021 as global COVID-19 restrictions continued to ease and supply remained limited. In the early part of 2022, crude oil prices have again increased as a result of the Russia-Ukraine conflict which has increased the price of fuel. Fuel is also a key input cost for many goods and services. In response, the Commonwealth introduced a six-month 22 cents per litre reduction to the fuel excise as part of 2022-23 Budget, which will reduce fuel prices temporarily.

In addition to elevated fuel prices, stronger demand for goods as a result of COVID-19 lockdowns, shipping container shortages, shipping delays, and global semiconductor shortages are expected to contribute to higher prices for import-exposed goods such as clothing, footwear, furniture, consumer appliances, electronics, and motor vehicles over the short term. Over the medium term, prices for import-exposed goods are expected to decline gradually.

Chart 7.1: Consumer price index¹



e: estimate; f: forecast

¹ Year-on-year change.

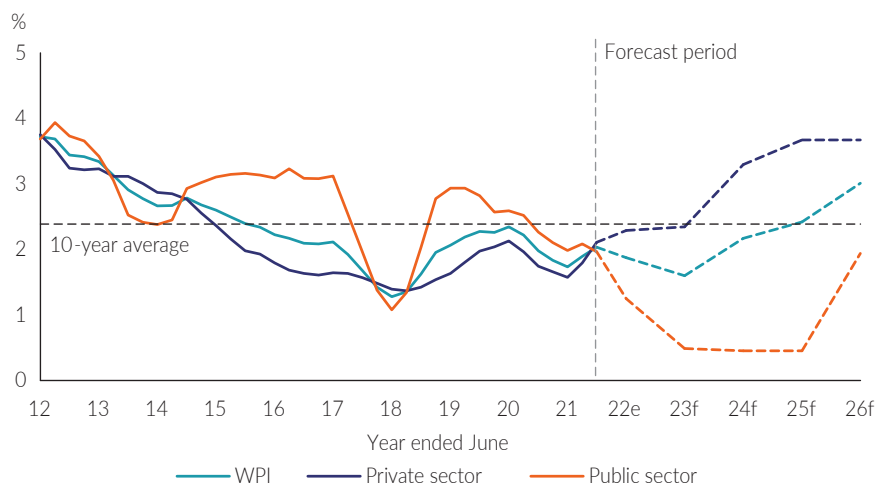
Source: ABS, *Consumer Price Index, Australia*, Cat. No. 6401.0; Department of Treasury and Finance

Wage price index

Outlook

Territory wages are expected to grow by 1.9% in 2021-22 (Chart 7.2), reflecting constrained public sector wage growth in line with the 2021–2025 Northern Territory Public Sector Enterprise Agreement and the Territory Government’s wage policy generally, and gradually improving private sector wages.

Chart 7.2: Territory wage price index¹



e: estimate; f: forecast; WPI: wage price index

¹ Year-on-year change.

Source: ABS, *Wage Price Index, Australia*, Cat. No. 6345.0; Department of Treasury and Finance

The outlook for wage growth over the forecast period is modest and constrained by subdued public sector wage growth in line with the government’s wages policy. The headline wage price index (WPI) number does not measure the impact of bonuses on hourly rates of pay and as a result, the public sector only contributes minimally, with wage growth over the outlook period primarily due to wage growth for Commonwealth and defence employees. In the private sector, labour shortages in specific skills and sectors are expected to put upward pressure on wages, and broader wage growth is anticipated to result from a consistently low unemployment rate over the outlook period.

The gradual lift in wages differs from other international markets such as the US, which has recently experienced a sharp lift in wage growth, resulting from higher levels of labour mobility and demand post COVID-19 (dubbed ‘the Great Resignation’). Australia is unlikely to experience this due to the nature of Australia’s JobKeeper package, which kept employees attached to employers through the pandemic, and Australia’s multi-year enterprise agreements and awards.

Driven by the gradual increase in private sector wages, aggregate wage growth is anticipated to reach and exceed the 10-year average growth rate of 2.4% in the last two years of the outlook period (2024-25 and 2025-26).

The RBA expects the national WPI to remain below 3.3% over the next few years (to June 2024), however notes some uncertainty around this forecast given the lack of experience it can draw upon to assess the impact of recent record low unemployment rates on wages.

Recent activity

In 2020-21, WPI increased by 1.7% in the Territory, with public and private sector wages increasing by 2% and 1.6%, respectively. This was largely consistent with national WPI growth of 1.5%, reflecting public and private sector wages growth of 1.6% and 1.5% respectively.

In 2021, the Territory WPI increased by 2%, with public and private sector wages increasing by 2% and 2.1%, respectively. Over the same period, national WPI increased by 2%, with public and private sector wage increases of 1.6% and 2%, respectively.

Chapter 8

Residential property market

Outlook

The Territory's residential property market is expected to remain strong over the outlook period, boosted by the return of overseas migration, a steady pipeline of large construction projects and government's commitment to increasing residential land supply across the Territory.

The residential property market in the Territory recorded strong growth over 2021 with government homeowner incentives and a low interest rate environment supporting demand for housing, along with the Territory's successful response to COVID-19 and commencement of large construction projects.

Over the short term, it is anticipated that growth in the residential property market will be moderate compared with 2021. Expectations of increasing interest rates in the near future, the ending of government incentives from mid 2021 and limited land supply have seen growth in property market lead indicators moderating in recent months.

Year-on-year growth for the number of housing finance commitments (excluding refinancing) has slowed from 65.1% in August 2021 to 30.1% in February 2022. While residential building approvals across the Territory rose 36.6% in 2020-21, year-on-year growth has been negative since December 2021 (Chart 8.1).

Chart 8.1: Year-on-year growth in housing finance and residential building approvals in the Territory



Source: ABS, *Lending Indicators*, Cat. No. 5601.0, *Building Approvals*, Cat. No. 3731.0

Over the medium term the residential property market will be supported by improving economic conditions driven by the Territory's pipeline of large construction projects and the return of overseas migration, as well as government policies around land supply and home owner incentives. With residential property being a significant source of wealth for both owner-occupiers and investors, it is anticipated that growth in the residential property market will also support consumer confidence and household consumption.

Large construction projects currently underway include the Darwin Education and Community Precinct, Finniss lithium project and several major defence-related works. These projects are expected to span multiple years and create employment opportunities, providing a base for residential property demand. Additionally, the return of overseas migration following the reopening of international borders is also expected to help drive demand for property in the Territory.

In February 2022, the Territory Government released *Bringing Land to Market: An Independent Review of the Land Development Processes, Land Under Development and Titled Land*. The report identified areas for improvement in existing land development processes for the release of land, the production of lots, authority approvals and bonding, and other initiatives to bring forward titles. A cross-agency effort is underway to progress the 23 recommendations of the report, and an effective and efficient land development process will be a key driver of private sector residential development and support the Territory's growth over the outlook.

To support this initiative, the Territory Government aims to increase the supply of titled residential land with \$132 million allocated over three years in the 2022-23 Budget to bring forward residential land development in Darwin, Katherine, Alice Springs and Tennant Creek. Additional ongoing funding from 2022-23 has been approved to support accelerated land development activities.

The expansion of the Commonwealth's First Home Guarantee scheme to 35,000 places with an additional 5,000 for single parents, announced in the Commonwealth's 2022-23 Budget, should provide an incentive for first home buyers to enter the Territory residential market. In the Darwin market, residential property under \$500,000 is eligible for the scheme, while there is no price cap for other regional areas in the Territory. These regions should also benefit from the Regional Home Guarantee of 10,000 places, also announced in the Commonwealth 2022-23 Budget, to increase first home ownership outside capital cities.

Public housing is a significant proportion of housing investment across regional communities and has seen a significant increase in construction work done in recent years. This is largely due to the Territory Government's 10-year \$1.1 billion commitment in addition to the Commonwealth's \$550 million commitment over five years to improve housing supply and quality in remote communities, with housing developments underway in Maningrida and Galiwin'ku.

Interest rates are fundamental to the property market and any future increases can negatively affect the Territory's property market outlook.

Recent activity

House and unit prices

Over 2021, house and unit prices largely increased across the Territory with increased demand resulting from the government home owner incentives such as the Territory's BuildBonus, the First Home Owner Grant and the Commonwealth's HomeBuilder, low interest rates, and the Territory's successful response to COVID-19 (Chart 8.2).

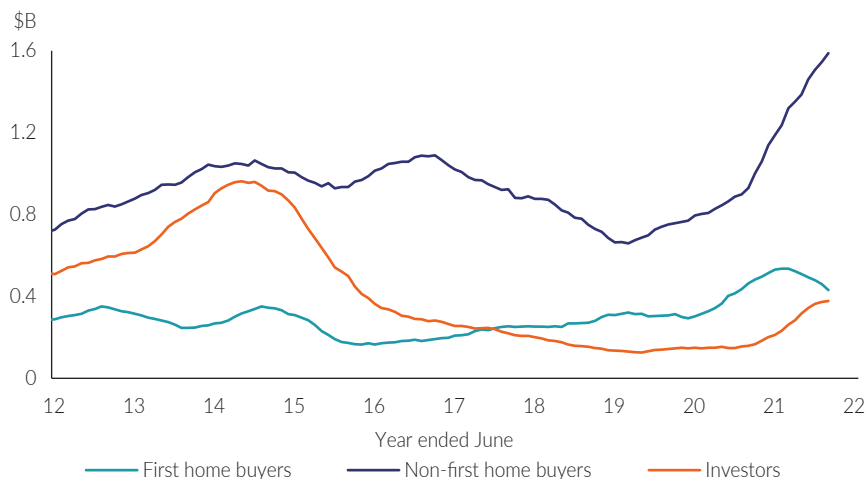
Over 2021, the largest price rises for houses were visible in Darwin (19.0%), however prices also rose in Katherine (9.5%), Alice Springs (5.7%) and Tennant Creek (12.3%). Unit prices rose by 26.1% in Darwin and 0.2% in Alice Springs, and fell by 5.6% in Katherine over 2021.

Chart 8.2: Territory house and unit prices, 2020 and 2021¹

¹ Moving annual average.

Source: Real Estate Institute of the Northern Territory

The ending of government incentives coupled with increasing house prices as a result of lower interest rates led to the return of non-first home buyers and investors to the Territory property market from mid 2021, and a decline in first home buyers (Chart 8.3).

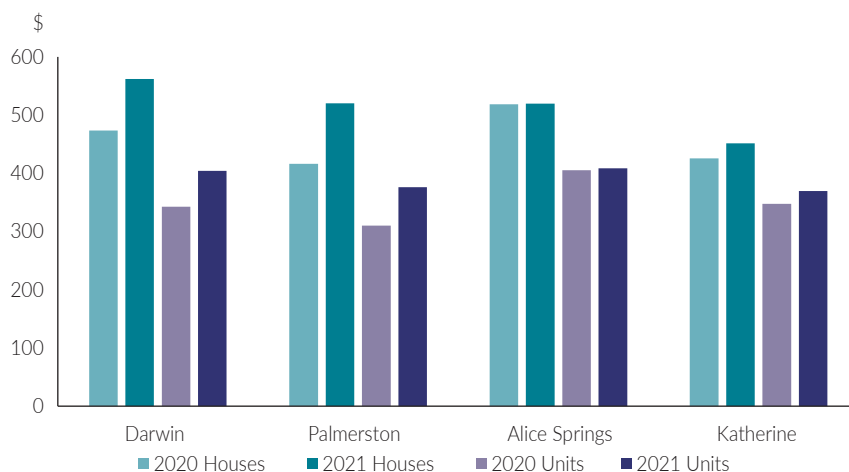
Chart 8.3: Value of housing finance, first home buyers and investors¹

¹ Moving annual total.

Source: ABS, *Lending Indicators*, Cat. No. 5601.0

Rental prices

House and unit rents increased across the Territory in 2021, driven by the Territory's successful response to COVID-19 with lockdowns that were fewer and shorter in duration compared with other jurisdictions, resulting in improved interstate migration over much of 2020-21. As a result, vacancy rates across Darwin fell from June 2020 and remained low over 2021. Vacancy rates averaged 2% over 2021, down from 3.5% in 2020. As a result of the limited rental supply over 2020, house and unit rents rose (18.6% and 18%, respectively) in year-on-year terms in Darwin over 2021.

Chart 8.4: Territory house and unit rents, 2020 and 2021¹

¹ Moving annual average.

Source: Real Estate Institute of the Northern Territory

Over 2021, vacancy rates in Katherine also remained low as demand was strong with work ongoing on the \$1.1 billion upgrades to the RAAF Base Tindal. Vacancy rates in Katherine averaged 1.3% across 2021, down from 3.3% in 2020. At the same time, house and unit rents rose 6% and 6.3%, respectively, in year-on-year terms in Katherine over 2021.

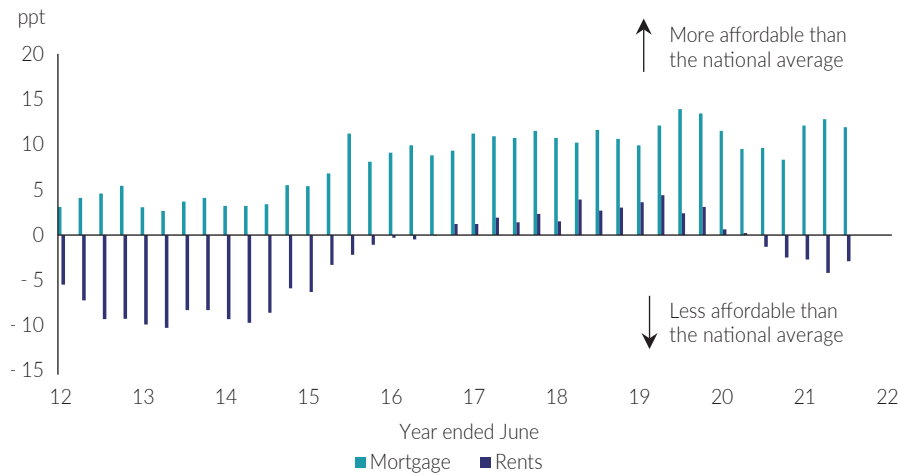
While average vacancy rates in Alice Springs also fell from 4.2% in 2020 to 2.2% in 2021, it did not see a large rise in house and unit rental prices in comparison to Darwin or Katherine. House and unit rents rose 0.1% and 0.9% over 2021. Unlike Darwin, which saw a large decline in house and unit rental prices between 2015 and 2019 following the construction phase of the Ichthys LNG project, Alice Springs did not report a similar decline and, therefore, rents in Alice Springs are not recovering from a low base.

Affordability

The Territory has seen a recent decline in affordability due to increases in property prices and rents. In the December quarter 2021, the Real Estate Institute of Australia's home loan affordability indicator (where the higher the number, the greater the affordability) for the Territory was 39.8, a decrease of 6.1% in annual terms. Over the same period, the average monthly loan repayment increased by 10.3% to \$2,383, partially offset by the median weekly family income increasing by 1.6% to \$2,190.

The proportion of the median weekly family income required to rent a three-bedroom house increased by 1.9 percentage points in annual terms to 25.9% in the December quarter 2021, while the proportion to meet loan repayments increased by 1.6 percentage points to 25.1% over the same period. The Territory was the most affordable of the jurisdictions for loan repayments, 11.9 percentage points below the national average of 37%, but ranked the third least affordable for rental affordability, 2.9 percentage points above the national average of 23% (Chart 8.5).

Chart 8.5: Housing and rental affordability¹



ppt: percentage points

1 Difference between the national average and the Territory in the proportion of weekly median income to meet loan repayments and rent.

Source: Real Estate Institute of Australia

To aid in improving rental affordability, the Territory Government introduced the Rent Choice scheme through the Venture Housing Company, for eligible workers. The scheme is available in Greater Darwin, Katherine, Tennant Creek and Alice Springs, and is open to workers within priority industries such as health, nursing and human services, hospitality, automotive, transport and logistics, and construction. Rent Choice provides a maximum rental subsidy of \$12,000 for 12 months for private rentals subject to income, household size and location.

Abbreviations and acronyms

a	actual	HMAS	Her Majesty's Australian Ship
ABS	Australian Bureau of Statistics	IMF	International Monetary Fund
ACC-1	Asia Connect Cable-1	LFS	labour force survey
AROWS	Adelaide River off-stream water storage	LHS	left-hand side
B	billion	LNG	liquefied natural gas
Cat. No.	catalogue number	M	million
CBD	central business district	NAIF	Northern Australia Infrastructure Facility
CO ₂	carbon dioxide	ppt	percentage point
CPI	consumer price index	RAAF	Royal Australian Air Force
CSIRO	Commonwealth Scientific and Industrial Research Organisation	RBA	Reserve Bank of Australia
e	estimate	RHS	right-hand side
f	forecast	SFD	state final demand
FTA	free trade agreement	STP	single touch payroll
GDP	gross domestic product	UK	United Kingdom
GSP	gross state product	US	United States (of America)
GST	goods and services tax	WPI	wage price index

Explanation of terms

Advanced economies and emerging market and developing economies

The International Monetary Fund's classifications of nations based on their economies, not based on strict criteria and evolved over time. Advanced economies typically have a high level of per capita income, a significant degree of industrialisation, varied exports, and a financial sector integrated into the global financial system. Emerging market and developing economies tend to have high expenditure on infrastructure, and export goods to wealthier advanced economies, often registering faster gross domestic product growth.

Annual growth

Annual growth compares data at a point in time, such as a monthly or quarterly result, with data from the corresponding point in time 12 months ago. It is the preferred and headline measure of population growth, but can also be applied to various other datasets.

Balancing item

The balancing item is the residual of gross state product less state final demand less net international trade in goods and services. It implicitly comprises the change in inventories at a jurisdictional level, plus net interstate trade.

Chain volume measure

A measure of growth that captures the change in quantity while removing the effects of price changes.

Consumer price index

The consumer price index measures inflation through changes in prices of items in a representative basket of goods and services for each Australian capital city over time.

The consumer price index's basket of goods has 11 categories of goods and services (food and non-alcoholic beverages; alcohol and tobacco; clothing and footwear; housing; furnishings, household equipment and services; health; transport; communication; recreation and culture; education; and insurance and financial services). These categories are weighted to reflect household consumption patterns in each city. Weights for each capital city are updated on an annual basis to reflect changing household consumption patterns over time.

Current prices

The value in nominal terms, not adjusted for inflation or changes in the purchasing power of money. It is the market value for the good or service at the time it was being sold.

Employed

Persons 15 years and older who worked for one hour or more in the week as measured by the labour force survey. Persons are measured as being employed in the jurisdiction in which they reside, regardless of the location of their employment.

Estimated resident population

The official Australian Bureau of Statistics population measure that represents the number of persons who reside in a defined locality for more than six months of the year and for a period of at least 12 out of 16 consecutive months.

Forecast period

The forecast period is the period of time in the future for which estimates have been prepared, comprising the four years succeeding the current financial year (2022-23, 2023-24, 2024-25, and 2025-26).

Gross domestic product

The total value of goods and services produced in Australia over the period for final consumption. Intermediate goods, or those used in the production of other goods, are excluded. Gross domestic product can be calculated by summing total output, total income or total expenditure.

Gross state product

Similar to gross domestic product, except it measures the total value of goods and services produced in a state or territory. It can be calculated by measuring expenditure, where it is the sum of state final demand and international and interstate trade, changes in the level of stocks, and a balancing item.

Household consumption

Household consumption is expenditure by resident households on goods and services that will not be resold or used in production. The purchase of dwellings is excluded from household consumption as dwellings are goods used by owners to produce housing services for those owners and is therefore captured in private investment.

Inflation adjusted (also known as chain volume)

Inflation adjusted measures provide estimates of real changes by factoring in general changes in prices from year to year.

Labour force

All persons 15 years and over who are available for work, that is, employed plus unemployed persons actively seeking work. Excludes Australian Defence Force personnel and non residents.

The Territory labour force is characterised by a substantial public sector, and a relatively large defence and fly-in-fly-out workforce that is not captured in Territory data reported by the Australian Bureau of Statistics. As such there is significant under reporting of on the ground employment in official statistics.

Labour force survey

A monthly survey conducted by the Australian Bureau of Statistics to collect information about the labour force status and other characteristics of the usually resident Australian civilian population aged 15 and over. This is the primary data source for official estimates of employment, unemployment, the unemployment rate and the participation rate.

Moving annual total

A method used to smooth data and remove the short term fluctuations in data by averaging observations collected over a 12 month period.

Natural increase

The number of births minus the number of deaths.

Net exports (also known as trade balance)

The trade balance is the difference between the value of a jurisdiction's exports and imports. When exports exceed imports, the jurisdiction has a trade surplus, and conversely, when imports exceed exports, the jurisdiction has a trade deficit.

Net interstate migration

The net difference between arrivals to a state or territory from the rest of Australia and departures from that state or territory to the rest of Australia. This is estimated using census data as a base and then applying Medicare change of address data as well as Department of Defence records.

Net overseas migration

The difference between the number of incoming travellers who stay in Australia for 12 months or more and are added to the population, and the number of outgoing travellers who leave Australia for 12 months or more and are subtracted from the population.

Non-dwelling construction

Non-dwelling construction consists of non-residential buildings and other structures. Non residential buildings are those other than dwellings, such as motels, hotels, hostels, hospitals, prisons, office buildings and warehouses. Other structures are structures other than buildings such as streets, sewers and site clearance and preparation other than for residential or non-residential buildings. Also included are shafts, tunnels and other structures associated with the extraction of mineral and energy resources and dams.

Participation rate

The proportion of the population over 15 years of age who are working or looking for work, that is, are participating in the labour force.

Private investment

Private investment is expenditure by producers on fixed assets that are used in the process of production and used repeatedly or continuously for longer than one year. It comprises dwelling investment, ownership transfer costs (fees incurred by the buyer or seller of real estate), non-dwelling construction (industrial, commercial and non-dwelling buildings and other structures such as pipelines and bridges), machinery and equipment, cultivated biological resources (natural resources used repeatedly to produce products such as milk or orchards) and intellectual property products (products as a result of creative activity, research and development and mineral exploration).

Public consumption

Public consumption includes government expenditure on goods and services (including wages and rents). National consumption is a combination of Commonwealth consumption, defence consumption and consumption by universities. State and local government consumption includes all other public consumption.

Public investment

Public investment is the expenditure by all levels of government on the purchase of fixed assets that are used over a long time period, similar to private investment, but also includes weapons systems for defence such as warships, submarines and fighter aircraft. Most data for public investment is sourced from state and territory government finance reporting. Adjustments are made to deduct expenditure that is classified as consumption, rather than investment. The Australian Bureau of Statistics' statistical treatment of public investment does not always reconcile with the Territory Government's reporting of investment expenditure and as a result is not directly comparable.

State final demand

State final demand is a major component of gross state product and is a measure of the demand for goods and services in an economy. While state final demand includes consumption and investment expenditure, it does not include the contribution of trade or changes in inventories to economic growth and as such is not a comprehensive measure of economic growth.

Tourism

Tourism is the travel for business and other reasons, such as education, visiting family and recreation, provided the destination is outside the person's usual place of residency. Tourism activity is defined by the status of the consumer being a visitor rather than a resident and is captured indirectly through a range of industries, including accommodation and food services, retail trade, culture and recreation and transport. The Australian Bureau of Statistics publishes an annual tourism satellite account to estimate tourism's contribution to the economy.

Unemployed

Persons 15 years and older who were not employed during the week of the labour force survey and were actively looking for work in the last four weeks.

Unemployment rate

The number of unemployed persons expressed as a percentage of the labour force.

Wage price index

The wage price index measures changes to hourly rates of pay over time for a fixed range of jobs. The Australian Bureau of Statistics measures the wage price index at the state and territory level (as well as nationally) and for both the public and private sectors. It excludes non wage costs such as superannuation, payroll tax and workers compensation.

Weekly payroll jobs and wages

Weekly payroll jobs and wages is derived from single touch payroll data provided to the Australian Taxation Office by businesses with single touch payroll data enabled payroll or accounting software, and is reported as indexes with the week ending 14 March 2020 (the date Australia recorded its 100th COVID-19 case) as the reference point. The weekly payroll jobs and wages indexes records each job separately irrespective of whether it is worked by a multiple job holder, in contrast to the labour force survey which counts the number of people employed. The data is published monthly with week-to-week statistics, providing a more granular time series than the monthly labour force survey and quarterly industry employment data.

Year-on-year growth

Year-on-year growth compares the results of one year's worth of data, with that of the previous year. It is used for the headline measures of growth in gross state product, state final demand, employment, the consumer price index and the wage price index.