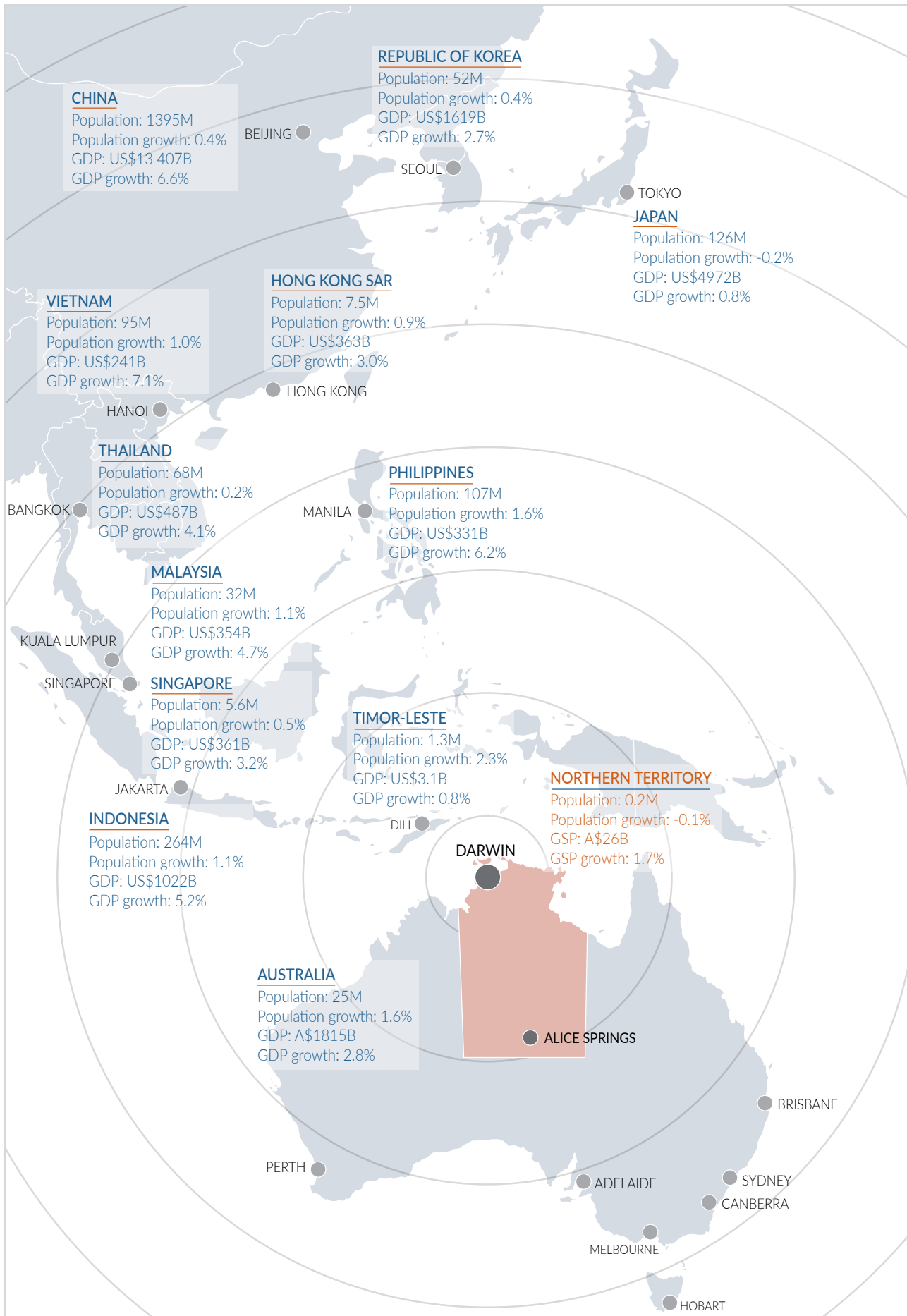


Contents

	Overview	3
Chapter 1	Structure of the economy	7
Chapter 2	Economic growth	17
Chapter 3	External economic environment	27
Chapter 4	Population	33
Chapter 5	Labour market	43
Chapter 6	Prices and wages	49
Chapter 7	Residential property market	55
	Abbreviations and Acronyms	63
	Glossary	64



This map is produced from various sources. The Department of Treasury and Finance cannot guarantee the accuracy, currency or completeness of the information. To be used as a guide only.
 GDP: gross domestic product; SAR: special administrative region; GSP: gross state product

Overview

The 2019-20 Northern Territory Economy publication details the outlook for the Territory economy across a range of key economic indicators. These include economic growth, population, labour market, prices and wages, and the residential property market. The Territory's key economic forecasts for the 2019-20 Budget and outlook period are detailed in Table i.

As this publication largely focuses on the outlook for the Territory economy, commentary on current and historical macroeconomic conditions is provided through the Territory Economy website at nteconomy.nt.gov.au. The economic outlook across the Territory's key industries is available in the [2019-20 Industry Outlook](#), a separate online publication at budget.nt.gov.au. However, a concise summary on each key industry is included within the Structure of the Economy chapter in this publication, with further references throughout the publication where relevant.

Table i: Territory key economic indicators (%)

	2017-18a	2018-19e	2019-20f	2020-21f	2021-22f	2022-23f
Gross state product ¹	1.7	- 0.2	6.3	4.1	2.9	2.5
State final demand ¹	- 2.7	- 9.4	- 1.7	0.3	2.4	2.2
Population ²	- 0.1	- 0.7	0.2	0.6	0.7	0.8
Employment ³	- 1.2	- 1.6	0.0	0.7	0.9	1.0
Unemployment rate ⁴	4.2	4.7	4.6	4.5	4.5	4.4
Consumer price index ³	1.0	1.5	1.6	2.0	2.2	2.2
Wage price index ³	1.3	1.8	1.5	1.5	1.6	1.8

a: actual; e: estimate; f: forecast

1 Year ended June, year-on-year percentage change, inflation adjusted.

2 Year ended June, annual percentage change.

3 Year ended June, year-on-year percentage change.

4 Year average.

Source: Department of Treasury and Finance; Australian Bureau of Statistics

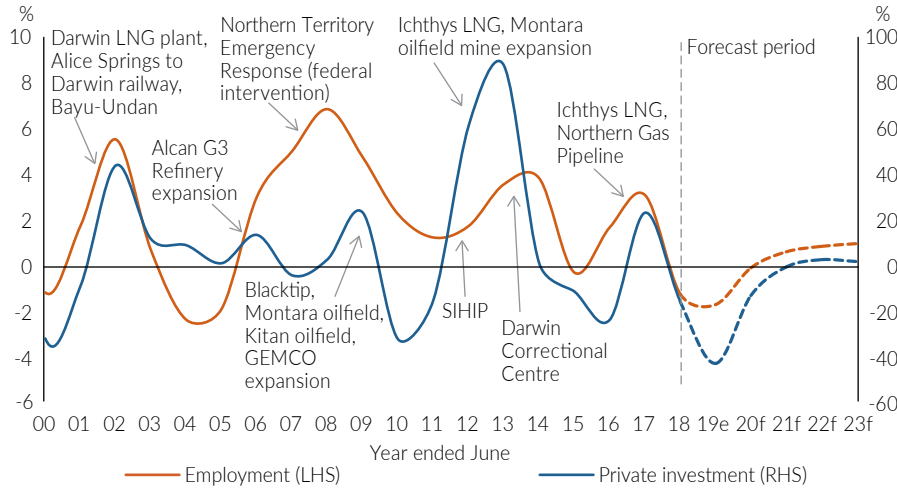
Past economic trends

The small size of the Territory economy is heavily influenced by large, typically resource-based projects that have a substantial impact on investment, employment and income streams, resulting in volatile economic cycles. Over the last 20 years, the Territory economy has expanded from a succession of major projects, with the most recent contributor being the Ichthys liquefied natural gas (LNG) project, which has added an average \$5 billion of private investment per annum to the Territory economy since 2011-12. During the construction phase of the project, the local economy attracted a significant number of workers (sourced from both interstate and overseas) to supplement the local skilled workforce. This supported increased investment and construction activity, including in the residential market. This further drove strong employment growth over a broad range of industries, however as the construction phase of the project has wound down, so too has the broader economic expansion with a range of indicators now declining in the non-export aspects of the Territory economy (Table i).

The Territory's resident employment and private investment are closely correlated, as reflected in Chart i. Over 2006 to 2011, there was strong investment activity associated with a range of resource projects. This coincided with the Commonwealth's Northern Territory Emergency Response, which resulted in a large number of Commonwealth public servants relocating to the Territory. However, during 2011 to 2014, the impact on resident employment growth was more subdued than movements in investment, partly attributable to the large fly-in fly-out (FIFO) workforce for the Ichthys LNG project not captured in resident employment data. The current

economic business cycle reflects this well established pattern, which is expected to continue over the forward estimates.

Chart i: Changes in private investment and employment¹



e: estimate; f: forecast

¹ Year-on-year change.

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

Economic outlook

Over the outlook period, the Territory economy is expected to transition to export-led growth. This will result in some of the key economic indicators for the Territory, particularly gross state product (GSP) and state final demand (SFD), reporting quite different measures of economic activity over the short term. As a result, SFD is estimated to decline by 9.4 per cent in 2018-19, before gradually improving to a 2.4 per cent increase in 2021-22. In contrast, GSP is estimated to grow strongly by 6.3 per cent in 2019-20, predominantly from the production and exports of LNG, liquefied petroleum gas and condensate, followed by continued growth in the outer years, albeit at more modest rates. However, growth in export volumes is unlikely to generate broader benefits for other areas of the Territory economy, such as the labour market and population.

The non-export sectors of the economy will continue to face challenging conditions as there are no projects of a comparable scale on the horizon to help mitigate the loss of economic activity. While the Territory Government has continued to offer support through increased infrastructure investment and economic stimulus packages, it does not have the fiscal capacity to offset a decline in private investment of this magnitude. Despite the cyclical downturn in 2018-19 and 2019-20, the Territory economy's underlying fundamentals not linked to major project activity (such as baseline business investment, jobs and population) are forecast to improve from 2020-21, as the one-off contractionary factors wash out of the economy.

As a result of a large outflow of workers from the Territory following completion of the Ichthys LNG project's construction, the Territory's population is forecast to decline by 0.7 per cent in 2018-19 before recovering to a 0.2 per cent increase in 2019-20, although remaining well below long-term trends. While net interstate migration (NIM) is expected to start returning towards more sustainable levels, lower private investment and employment opportunities across the construction and service sectors are expected to keep population growth subdued. Over the outlook period, the Territory's population growth is expected to average 0.3 per cent per annum.

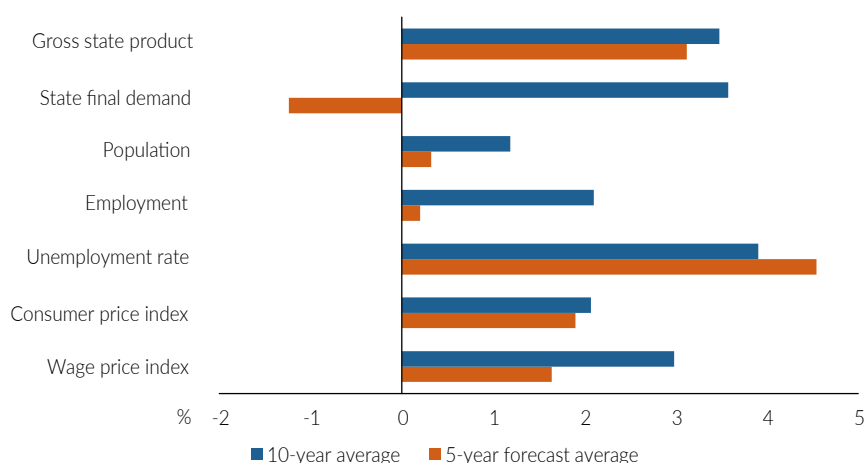
The same factors affecting population are also expected to flow on to employment, which is forecast to decline by 1.6 per cent in 2018-19, before recovering and returning to growth by 2020-21, albeit well below long-term averages. In response, the unemployment rate is expected

to peak in 2018-19, before returning to a long-term average of 4.5 per cent in the four years from 2019-20. A gradual recovery in both the population and labour market conditions reflects projected improvement in economic conditions and the end of negative effects from the completion of a major project.

The Darwin consumer price index (CPI) is expected to grow towards long-term trends, remaining in the lower range of the Reserve Bank of Australia's (RBA) target band over the forecast period. The continued low wage growth both nationally and in the Territory, is also expected to dampen household spending and consumer demand for goods and services. The expectation of more stable population growth is likely to continue to weigh on the housing component, which historically has had the largest weighting on the Darwin CPI.

The modest outlook for employment is expected to constrain growth in wages over the forward estimates. Public sector wage growth is anticipated to be slightly higher than the private sector over the forward estimates, however growth is still expected to be below long-term averages, reflecting ongoing financial constraints and consolidation across all tiers of government.

Chart ii: Performance of Territory economic key indicators



Source: Department of Treasury and Finance; Australian Bureau of Statistics

Economic opportunities

Despite current challenges, the Territory is well positioned to take advantage of a number of opportunities likely to reshape the structure of the economy across the forward estimates and into the next decade. The Territory's labour market has the potential to benefit from recent government actions and incentives aimed at attracting population and supporting local residents to continue living and working in the Territory, including a range of home incentives aimed at improving affordability in the housing market.

The Territory Government has signed a new Designated Area Migration Agreement with the Commonwealth, replacing the previous agreement, that is aimed at encouraging more migrants to move to regional areas rather than major cities. The Commonwealth's new regional provisional visas are designed to support skilled migrants to become established in and contribute to regional economies, with a pathway to permanent residency at the end of a three-year period. The Commonwealth has also committed to greater efforts to disperse international students to regional universities, with associated scholarships and visa incentives. With the population dynamics in regional and northern Australia in stark contrast to the south-eastern states of Australia, the Territory Government welcomes future changes to the Commonwealth's migration policies, which meet population needs, contribute to regional areas, address local skill shortages and invest in local economies such as the Territory.

Furthermore, the Territory Government recognises that infrastructure spending is vital to stimulating economic activity, creating employment, expanding labour force skills and expertise, and supporting population growth, and thus will continue to play a key role in supporting long-term infrastructure that supports economic development. In September 2018, the 10-year Infrastructure Plan was updated for 2018-2027, which continues to set the Territory's long-term infrastructure agenda across existing and new sectors. In addition, the first progress report of the Economic Development Framework (EDF) shows achievement and progression on a number of actions across the five identified growth sectors and five developing sectors. In August 2018, the Territory's masterbrand, which promotes the Territory as a "good place to live, work, visit, study, invest, trade and do business," was launched coinciding with the release of the 2018-2028 Population Growth Strategy. This plan outlines various incentives aimed at attracting and retaining early career women, late career workers and migrant workers, to high priority jobs. The purpose of these strategies and incentives is to diversify the economy and grow the Territory's population across the regions over the long term, which is further expected to generate flow-on effects to the local labour market.

Following the lifting of the moratorium on unconventional gas extraction in 2018, the Territory economy is expected to benefit from onshore gas exploration and development opportunities over the outlook period with encouraging growth prospects for population and employment. Alongside existing offshore gas developments, there is also potential for a new down-stream gas processing industry and manufacturing hub in the greater Darwin region that could deliver broader benefits to the national economy than LNG production alone. The Territory remains a major strategic location for defence and the industry continues to make a substantial contribution to the Territory economy, particularly through the Commonwealth's long-term major infrastructure investment commitment.

The Territory has a significant pipeline of infrastructure projects that present upside potential to sustain new employment and economic activity, and provide confidence to people, industries and businesses across the Territory's regions. As these projects remain subject to the usual regulatory approval processes or final investment decisions, the potential economic contributions arising from these projects have not been included in the published economic forecasts as part of the 2019-20 Budget.

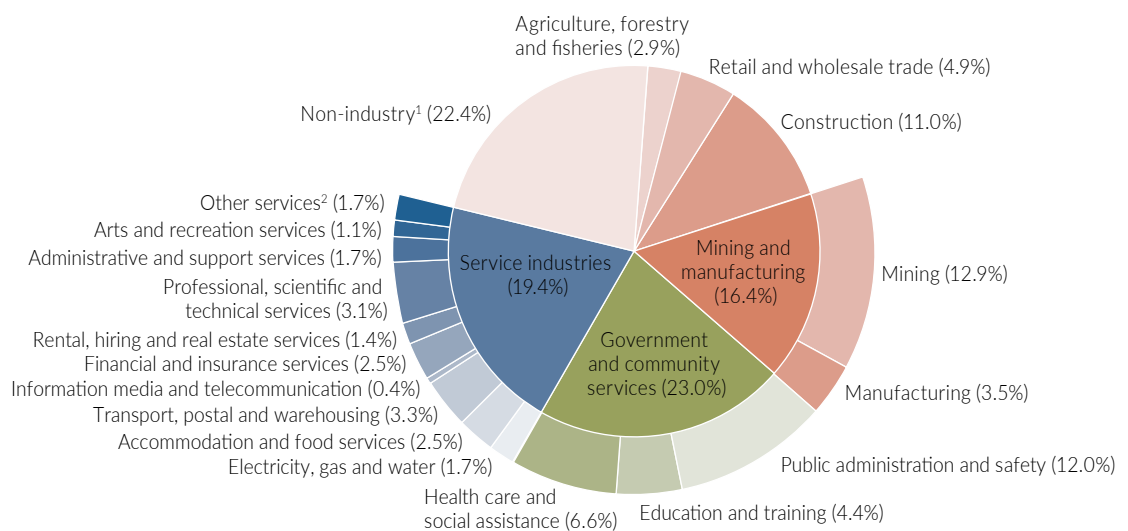
Chapter 1

Structure of the economy

Outlook

Over the decade to 2017-18, GSP grew by 31.3 per cent to \$26.2 billion and population increased by 9.4 per cent, or about 21 300, to 247 300 people during this period. The Territory's labour force also expanded, increasing by about 21 900 (18.1 per cent) to over 143 100 people. The Territory economy continued to diversify, with a greater share of employment and output across goods and service industries (Chart 1.1). While the decade to 2017-18 stands out as one of strong growth for the Territory across key economic parameters, led by a series of major projects, the economic outlook has now shifted, with much more challenging fundamentals, including declining domestic demand, population, employment, housing demand and house prices.

Chart 1.1: Contributions to GSP, 2017-18



GSP: gross state product

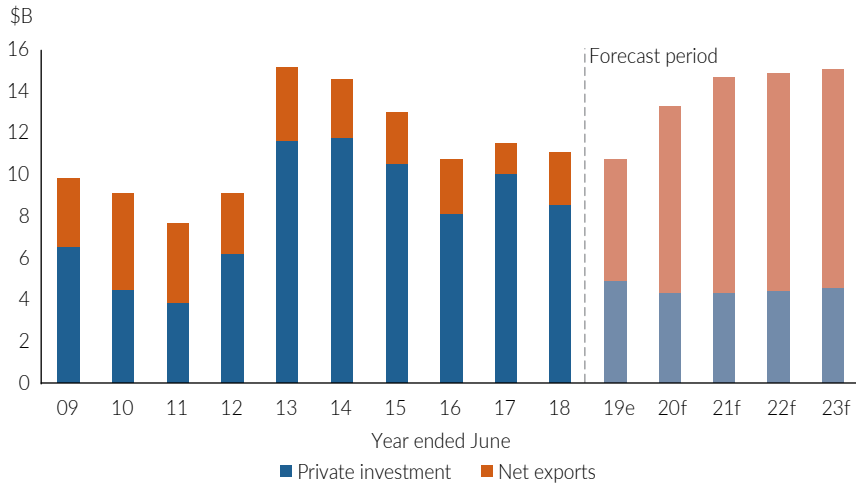
1 Non-industry components of GSP include ownership of dwellings, taxes less subsidies and statistical discrepancy.

2 Other services components of GSP include personal services and general repair and maintenance activities.

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

Over 2018-19, 2019-20 and 2020-21 the Territory economy will face challenging conditions, as it recalibrates from being driven by major project construction and business investment, to export-led growth. However, there is untapped potential for the Territory economy with undeveloped mineral and energy resources yet to be realised, that could support the economy into the future. There are currently a few major projects that are progressing closer to final investment decision although none of these compare in scale to the recently completed Ichthys LNG project.

Chart 1.2: Territory investment and net exports¹



e: estimate; f: forecast

¹ Inflation adjusted.

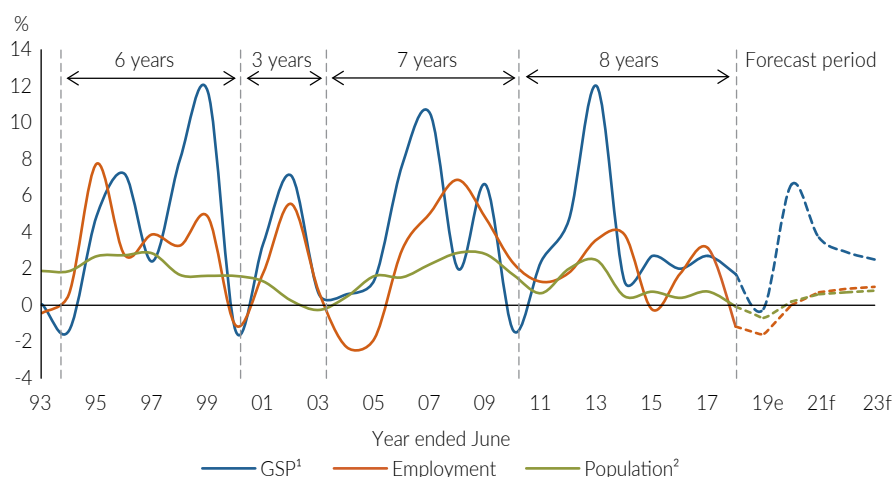
Source: Department of Treasury and Finance; ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0

Net exports from the Ichthys LNG plant are expected to emerge as the primary driver of Territory economic growth over the forward estimate period. However, there are fewer local economic impacts from exports than previously, as the ongoing employment requirements are much lower.

All economies are subject to business cycles, with the frequency, magnitude and length of time between periods of growth often linked to the size of the economy, structure and reliance on key industries, and vulnerability to external factors such as commodity prices and exchange rates. As a small open economy heavily reliant on resources and historically driven by major projects, the peaks and troughs of the economic cycles in the Territory tend to be more pronounced than in other jurisdictions in Australia. Over the last 25 years the Territory has experienced growth cycles averaging six to seven years where expansionary economic conditions have been experienced. These expansionary phases have been followed by periods of contraction.

The combined impact of these factors is reflected in the current economic outlook. The Territory’s GSP, employment and population collectively provide an overview of the cyclical nature of the Territory economy as well as the recent structural challenges (Chart 1.3). The highly transient nature of the Territory’s population is a significant factor in these movements, as economic and particularly employment conditions influence people to come to or leave the Territory. Hence, population growth has generally been in line with growth in the Territory’s GSP when that growth has been fuelled by employment-generating projects. Since employment is a key driver of NIM, its movement is generally consistent with population growth. The recent expansionary cycle to 2017-18 (which peaked in 2012-13), was driven by the Ichthys LNG project, which had an unprecedented effect on the Territory economy. The positive impact will continue for the duration of the 40-year operational life of the project, largely through exports of LNG, ongoing maintenance activities, including major shutdowns, and potential future investment.

Chart 1.3: Year-on-year change in key indicators



GSP: gross state product

1 Inflation adjusted.

2 Annual change.

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

Opportunities

Major projects

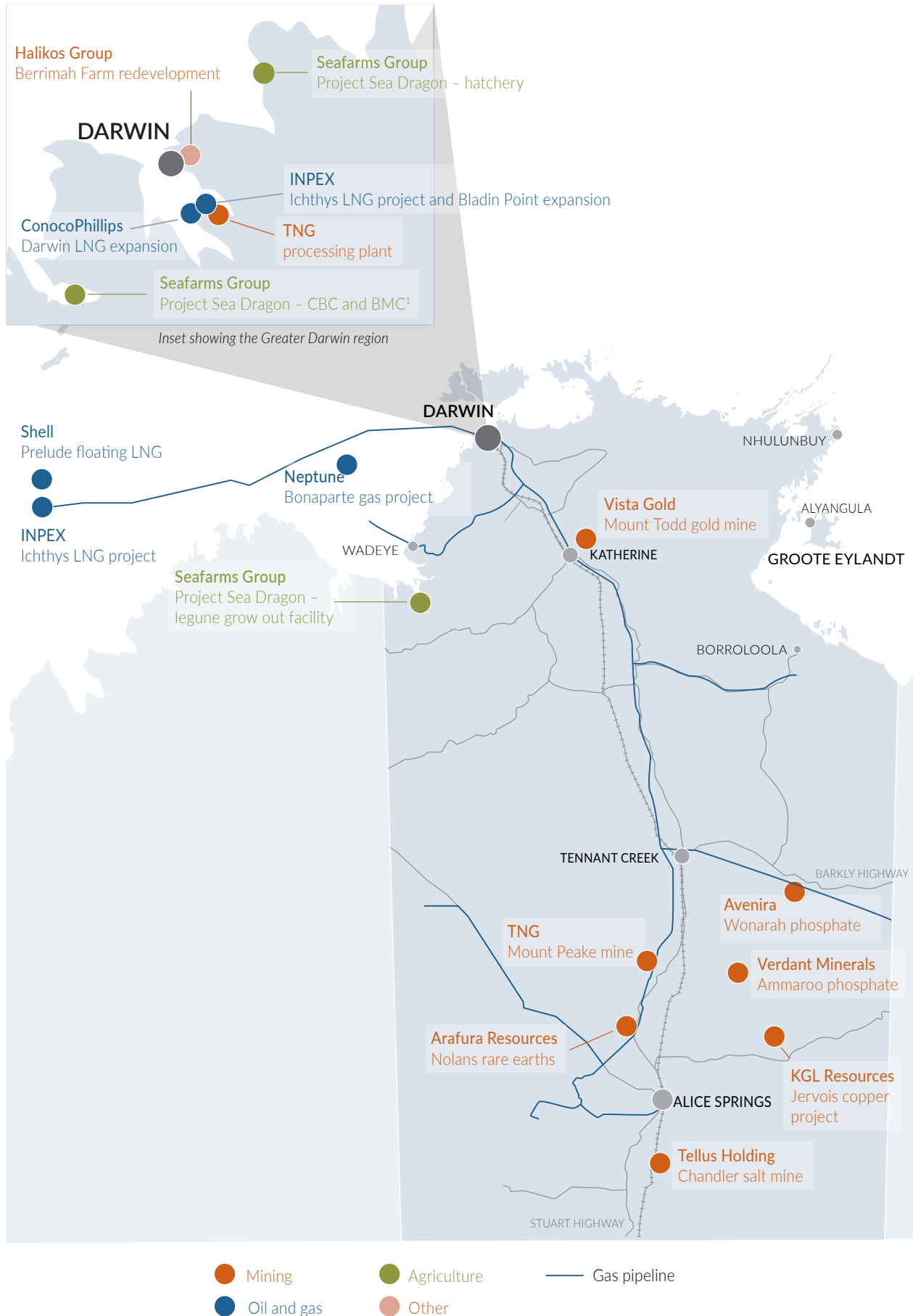
The Territory Government is committed to stimulating economic activity and attracting private investment opportunities to support local industries. There are a number of major projects identified that have the potential to sustain growth over the medium and long term (Map 1). Furthermore, there are several projects that have received major project status from the Territory Government and, if realised, are expected to provide some support to the economy in the future. The Territory Government has also partnered with the private sector to deliver government-facilitated projects. As these projects remain subject to the usual regulatory approval processes or final investment decisions, the economic contributions arising from these projects have not been included in the published economic forecasts. If any of these projects commence over the forward estimates, it will have a positive influence on the economic outlook.

Resources

The Territory has an abundance of reserves in manganese, uranium, phosphate, base metals, gold, vanadium and rare earths, and substantial land yet to be fully explored for potential development and mineral projects. There are a range of potential developments that could diversify the mining industry.

In April 2018, the Territory Government lifted the moratorium on hydraulic fracturing of onshore unconventional gas reservoirs. The Territory Government released the Hydraulic Fracturing Implementation Plan in July 2018. The plan will deliver all 135 recommendations from the Final Report of the Scientific Inquiry into Hydraulic Fracturing in the Northern Territory over three stages. Approximately \$160 million of onshore exploration is expected to be conducted in the Beetaloo Sub-basin in 2019-20. Depending on the commercial assessment of the exploration results, onshore gas could develop into a significant industry for the Territory in the long term, with significant downstream opportunities in the form of gas-based processing and manufacturing. However, these developments predominantly lie outside forward estimates.

Map 1: Territory projects with major project status



¹ Core breeding centre and broodstock maturation centre.
Source: Department of Trade, Business and Innovation

Free trade agreements

Current free trade agreements (FTAs) between Australia and Japan, South Korea and China are expected to provide long-term trade opportunities for the Territory through the expansion of existing export markets and opening of new export markets for Territory goods and services. The Trans-Pacific Partnership between Australia, Canada, Japan, Mexico, New Zealand, Singapore and Vietnam has been signed and came into force in December 2018. Other FTAs concluded but not yet in force include the Peru-Australia FTA, Indonesia FTA, Hong Kong FTA and the Pacific Agreement on Closer Economic Relations Plus. FTAs under negotiation include the Australia-European Union FTA, Australia-Gulf Cooperation Council FTA, Australia-India Comprehensive Economic Cooperation Agreement, Environmental Goods Agreement, Pacific Alliance FTA, Regional Comprehensive Economic Partnership and Trade in Services Agreement. The benefits of additional FTAs are likely to increase the flow and diversity of economic activity between the Territory and key trading partners.

Defence

Defence continues to be a steady contributor to the Territory economy and is expected to increase its contribution considerably over the medium term, providing stimulus to local businesses and creating employment opportunities in the region. The Territory Defence advocate has been in place since 2017 to ensure the Territory capitalises on current and future defence opportunities. The 2016 Defence White Paper highlights the importance of the Territory to Australia's defence and security. There are a number of significant infrastructure upgrades in progress or expected to commence in the near term, such as the \$472 million redevelopment of Larrakeyah Barracks and HMAS Coonawarra.

Infrastructure plan

Government investment in economic infrastructure is critical to facilitating economic activity, creating jobs, and growing labour force skills and expertise. The Northern Territory 10-year Infrastructure Plan, updated for 2018-2027 and released in September 2018, continues to set the Territory's long-term infrastructure agenda and is expected to provide guidance and confidence to business and individuals to invest, establish new industries and develop skills to support the economy.

Northern Australia Infrastructure Facility

The Northern Australia Infrastructure Facility (NAIF) is a \$5 billion lending facility established by the Commonwealth to provide loans to infrastructure projects in northern Australia. The NAIF has fully approved and executed a \$7.2 million loan for Humpty Doo Barramundi in the Territory to help fund an expansion of its production ponds and upgrade the barramundi nursery and feed system. Another NAIF loan has been fully approved and executed for Voyages Indigenous Tourism of up to \$27.5 million for urgent resurfacing and upgrades to the Yulara airport runway. Northern Territory Airports has received approval for a NAIF loan of up to \$150 million for the construction of a freight, cold storage and export hub at Darwin International Airport in 2019, and upgrades to the Alice Springs Airport.

Economic Development Framework

The Territory Government's EDF is focused on building a strong, vibrant economy for all Territorians by increasing private sector investment, growing jobs, and strengthening and diversifying the Territory economy. The first progress report on the EDF highlights a summary of progress and key achievements since the EDF was released in mid-2017, as well as identifying upcoming economic development priorities and actions. Overall, EDF projects and the three-year work program are on

track, including the Regulation Reform Agenda, regional economic development plans and priority projects, industry development strategies and revitalising city areas. A series of industry forums to be held with key partners and stakeholders over the course of 2019 are expected to identify contemporary industry opportunities and challenges, and provide scope to refine EDF actions and priorities.

Industry structure and employment

The history of the Territory's economic development and growth cycles has largely been driven by the resources sector. The Territory economy has a relatively large public sector, significant defence force presence, and small and remote population that is distributed over a large and isolated area. In recent years, the construction and mining industries have been the main drivers of economic growth. However, growth prospects for the mining industry in particular are reliant on overseas demand and investment, and subject to movement in global commodity prices and exchange rates.

The government and community services industry has traditionally contributed a far greater share to both the Territory's economy and employment than it does nationally. Other key industries in the Territory include the construction, and mining and manufacturing sectors. By comparison, the services industry is the dominant industry nationally (Chart 1.4).

Chart 1.4: Key industry proportion of GSP and GDP



GSP: gross state product; GDP: gross domestic product

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

2 Service industries includes electricity, gas and water; accommodation and food services; 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, *Australian National Accounts: State Accounts*, Cat. No. 5220.0

Government and community services

The government and community services sector contributed 23.0 per cent to economic growth and employed over one third of the Territory workforce (37.9 per cent) in 2017-18 (Chart 1.5). This industry includes public administration and safety, education and training, and health care and social assistance employees. While the industry is dominated by the Territory, Commonwealth and local government public sector employees (including defence), it also includes output from non-government providers of education and training, health, aged care and community services. The relatively large size of the government and community services industry reflects the considerably labour-intensive and higher per unit cost of delivering a wide range of services to a small and highly dispersed population over a large land mass with mainly Aboriginal population in remote and very remote areas with high levels of disadvantage.

Chart 1.5: Share of total employment by key industries



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

2 Service industries includes electricity, gas and water; accommodation and food services; 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*, Cat. No. 6291.0.55.003

A key driver for growth in government and community services in 2018-19 will be the Palmerston Regional Hospital which opened in August 2018. This was a jointly-funded project of the Territory and Commonwealth governments to provide a 116-bed facility to offer a wide variety of services including emergency care, rehabilitation, day surgery, maternity services and paediatric services.

The Territory Government released a plan to return the budget to balance or surplus over the medium term in response to the Fiscal Strategy Panel's final report: *A plan for budget repair*, which will constrain growth in government and community services over the outlook period. In conjunction to this report, savings have been identified in the 'Root and branch review'.

Ongoing public infrastructure investment and continued defence spending is expected to contribute to the modest growth in government and community services over the outlook period. Public infrastructure projects over the outlook period include remote housing, a new Palmerston fire and emergency services complex, upgrades to Litchfield National Park, along with the Territory and Commonwealth Government co-funded Darwin and Alice Springs City Deals and the Barkly Regional Deal.

Service industries

The service industries category includes a variety of industries that, although disparate, have been grouped because individually they make a relatively small contribution to the Territory economy but collectively their contribution is important. These comprise accommodation and food services; transport; postal and warehousing; information and media telecommunications; financial insurance services; rental, hiring and real estate services; professional, scientific and technical services; administrative and support services; electricity, gas, water and waste services; and arts and recreation services. In 2017-18, the service industries collectively accounted for 19.4 per cent of the Territory's output and 33.7 per cent of total employment (Chart 1.5). Nationally, the service industries accounted for a larger share of gross domestic product (GDP) at 36.1 per cent in 2017-18.

The outlook for the service industries is mixed, reflecting the wide variety and diverse nature of industries in this category. In the medium term, investment and development from the government and private sector is anticipated to support the tourism sector. This will support the industries of accommodation and food services, and arts and recreation services. These initiatives include:

- Territory Government's \$103 million tourism stimulus package expected to flow into 2019-20, which was announced in February 2018, and a further \$69.1 million over 2019-20 and 2020-21 as part of the second stimulus package
- \$200 million development of the Westin Darwin Hotel, which commenced construction in early 2019, providing high-end accommodation for visitors to Darwin
- Territory Government's \$131.5 million from 2019-20 to 2022-23 and the Commonwealth's \$216.2 million over 10 years to transition Jabiru from a mining town to a tourism hub and refresh Kakadu.

However, some industries are projected to decline as the Ichthys LNG project enters full operational phase. These include professional and technical services, transport, and postal and warehousing services, which expanded during the construction phase of the Ichthys LNG project. However, there is potential for the professional and technical services to be supported by exploration activity associated with onshore unconventional gas.

Mining and manufacturing

In 2017-18, the mining and manufacturing industries accounted for 16.4 per cent of the Territory's GSP, above the national average of 14 per cent. The significance of mining and energy to the Territory's economy reflects the abundance of natural resources, including natural gas, petroleum, uranium, lead-zinc, gold and manganese. The contribution of the mining and manufacturing industries to GSP remains below its 10-year average of 23.8 per cent, although it has increased for the first time in six years. The INPEX LNG plant commenced exports in late 2018 and is expected to reach full production capacity in 2020. In line with this expectation, contribution from the mining and manufacturing industries is expected to continue to increase, approaching the 10-year average.

Mining and manufacturing accounted for only 6.7 per cent of the Territory's resident employment compared to 9.1 per cent of the national workforce. This is largely due to the more labour-intensive manufacturing industry at the national level, as well as the prevalence of FIFO workforce arrangements for large projects in the Territory.

The outlook for the mining and energy industry is expected to be dominated by increasing production and exports from the INPEX LNG plant over 2018-19, 2019-20 and 2020-21. Strong growth is expected for the non-LNG components of mining and energy, with a number of mines reopening in late 2019, and several proposed mines approaching final investment decision. Lifting the moratorium on unconventional gas extraction also has significant upside for the contribution of the mining and energy industry to GSP. Mineral exploration expenditure increased by 35.1 per cent in 2018, significantly higher than the 10-year average growth rate of 0.7 per cent. Though mining exploration does not always lead to the development of new mines, levels of exploration activity provide a leading indicator of potential future mining development.

ConocoPhillips is considering a number of projects to extend the life of the ConocoPhillips LNG plant post 2023, when its current supply of gas is expected to be exhausted. The Barossa project is currently the leading candidate to provide backfill gas, with offshore development scheduled to begin in 2021-22.

Construction

Construction accounted for 11 per cent of the Territory's GSP, remaining the third largest industry in the Territory in 2017-18. Over the same period, the construction industry also remained a key employer in the Territory, employing 14 490 persons in the local labour market. The strength of the construction industry has been largely supported by private engineering investment and activity related to major projects, resulting in the value of the Territory's construction industry growing by 79.2 per cent between 2011-12 and 2017-18.

Following the completion of the construction of the Ichthys LNG project, the construction industry's contribution to the economy and workforce is expected to moderate, reflecting a substantial loss of construction jobs due to the housing downturn and completion of major engineering projects. This outcome will likely be more pronounced in the greater Darwin region.

In response to the anticipated contracting levels of private sector construction activity, the Territory Government is continuing to support the construction sector through economic strategies, infrastructure programs and incentives. Despite this positive contribution, the public sector does not have the scale or financial capacity to offset the sharp decline in private sector investment. This is a result of the sheer dominance of private sector engineering projects in the level of construction activity over the past two decades.

Retail and wholesale trade

Retail and wholesale trade, as a contribution to the Territory's output, remains relatively stable, averaging 5.0 per cent of GSP over the past decade. In 2017-18, the value of the industry increased by 2.2 per cent, largely reflecting strong growth in the wholesale sector. Retail and wholesale trade is one of the larger employers in the Territory with 9.8 per cent of employed people working in this industry in 2017-18. Although significant, this remains below the 10-year average of 10.8 per cent.

The outlook for the retail and wholesale trade industry is heavily influenced by expectations of both business and consumer confidence. The outlook for population and employment is expected to constrain growth in retail trade and more broadly household consumption.

Agriculture, forestry and fishing

The agriculture, forestry and fishing industry's share of Territory output was below the long-run average in recent years, reflecting a number of seasonal fluctuations and horticultural biosecurity setbacks, which affected production levels and output of a number of local businesses in the Territory. While in 2017-18, the value of the industry declined by 0.9 per cent, the industry's share of Territory GSP was 2.9 per cent, which is above the 10-year average of 2.3 per cent. Although the agriculture, forestry and fishing industry makes a relatively small contribution to Territory GSP, it is a vital industry in terms of generating economic activity and employment in regional areas.

In the short term, the agriculture industry is expected to increase, driven by growth in live cattle exports under the free trade agreement signed between Indonesia and Australia in March 2019. This is partly offset by competition with Indian buffalo meat and shocks to the Australian cattle supply chain due to severe flooding events in Queensland. The horticulture and fisheries sector is anticipated to improve over the medium term, driven by positive outlooks for barramundi, prawns and a recovery in banana and melon production. Over the long term, there are a number of opportunities for the agriculture industry to expand with trials of new mango varieties and potential crops such as industrial hemp, cotton and Kakadu plum. Stage 1 of Project Sea Dragon is continuing to progress, having received an aquaculture licence for production ponds at Legune Station, and released a tender to upgrade the Keep River Road. The project aims to produce over 150 000 tonnes of black tiger prawns each year, although it has yet to receive a final investment decision.

Chapter 2

Economic growth

Recent activity

Headline economic growth in the Territory moderated to 1.7 per cent in 2017-18, reflecting declining private investment, offset by net exports, consumption and public investment. Similarly, the 2.7 per cent decline in SFD was predominantly driven by falling private investment from historically high levels.

Outlook

The Territory is experiencing a structural rebalancing, as the economy transitions from unprecedented levels of private investment and construction to growth driven by LNG exports.

Economic growth is forecast to average 3.1 per cent per annum over the five-year outlook period, after initially contracting by 0.2 per cent in 2018-19.

GSP represents the value of economic output in the Territory economy and is published by the Australian Bureau of Statistics (ABS) on an annual basis. GSP is calculated using three measures: income, production and expenditure. Headline GSP is an average of the combined income, expenditure and production measures. ABS also publishes quarterly estimates of SFD, a measure of domestic economic activity that is the sum of consumption and investment expenditure and forms a key component of GSP. SFD reflects domestic activity, but does not include demand for the Territory's goods and services from overseas, net interstate trade or changes in inventories.

Department of Treasury and Finance (DTF) forecasts are based on a single measure, GSP on an expenditure basis, which includes changes to consumption, investment and net exports, as well as the balancing item. The balancing item measures interstate trade and changes in inventories, and importantly, confidentialised expenditure such as the value of feedstock gas imports from the Joint Petroleum Development Area and the Browse Basin off the north-west coast of Western Australia.

ABS data and DTF forecasts regarding public investment and consumption are not directly comparable to Territory Government expenditure reported in the budget papers due to differences between the statistical and accounting treatment of expenditure.

Caution should also be noted when comparing data in this publication to previous publications. Historical GSP data is often revised by the ABS from year to year as a result of new information made available, particularly from major project proponents. Given the relatively small size of the Territory economy, and when new information pertains to very large projects with complex staging and timing, any subsequent revisions can have a significant impact on the Territory's reported growth rates.

For the latest data on the Territory's economic activity, refer to the [Territory Economy](#) website.

Outlook

Table 2.1: Territory economic growth forecasts (%)¹

	2017-18a	2018-19e	2019-20f	2020-21f	2021-22f	2022-23f
Gross state product	1.7	- 0.2	6.3	4.1	2.9	2.5
State final demand	- 2.7	- 9.4	- 1.7	0.3	2.4	2.2

a: actual; e: estimate; f: forecast

¹ Inflation adjusted.

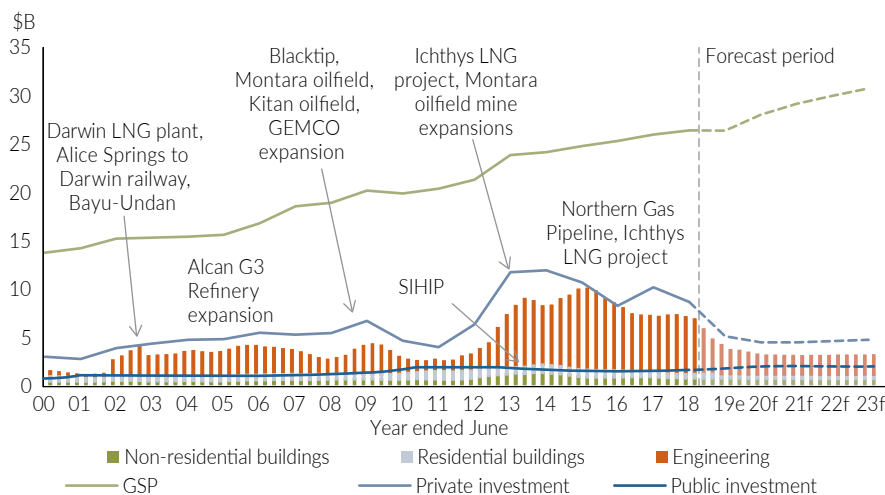
Source: Department of Treasury and Finance; ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0

Gross state product

In 2017-18 the Territory recorded headline economic growth of 1.7 per cent with GSP of \$26.2 billion. This was lower than the 2.7 per cent growth rate in 2016-17 and below the national economic growth rate of 2.8 per cent.

In contrast to the past two decades, economic growth forecasts for the Territory incorporate a significant reduction in construction-related investment (Chart 2.1). Since the early 2000s, a number of major construction, energy and resource-related projects have contributed to a significant expansion in the Territory's economic base. These historical major projects include: the Alice Springs to Darwin railway, the Gove alumina refinery expansion, Blacktip gas project, development of Kitan and Montara oilfields and, most recently, the Ichthys LNG project. On the back of these projects, the size of the Territory's economy in 2017-18 was 31.3 per cent larger than a decade earlier and nearly \$12.5 billion larger than two decades ago. Over the forecast period, private investment is expected to return to pre-Ichthys LNG project levels.

Chart 2.1: Territory gross state product¹ and construction work done (moving annual total)^{1,2}



LNG: liquefied natural gas; GEMCO: Groote Eylandt Mining Company; SIHIP: Strategic Indigenous Housing and Infrastructure Program; GSP: gross state product; e: estimate; f: forecast

¹ Inflation adjusted.

² Construction work done preliminary data estimates.

Source: Department of Treasury and Finance; ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0, *Construction Work Done, Australia*, Cat. No. 8755.0

The Territory's economic growth over the forecast period reflects a significant structural readjustment. The Territory has experienced a broad multi-industry economic expansion, underpinned by record levels of private investment and non-dwelling construction activity, attributed to the United States (US) \$37 billion Ichthys LNG project. The more than seven-year labour-intensive and population-supporting phase of this project is now transitioning toward a much less labour-intensive export-driven phase (Chart 2.2). As the Territory's largest-ever project, the Ichthys LNG project has provided a significant contribution to the Territory economy since 2011

through private investment, population, employment and consumption, including adding an average of \$5 billion of private investment per annum to the Territory economy.

As a result, the winding down of the employment-intensive construction and broad stimulus phase to long-run operation of an export facility is being felt across the Territory's economic landscape, with employment contracting and an associated one-off population decline.

As commissioning activity has commenced and the INPEX LNG plant increases levels of LNG, liquefied petroleum gas and condensate exports through 2018, 2019 and 2020, headline GSP and on-the-ground activity measured through SFD are rebalancing while also diverging.

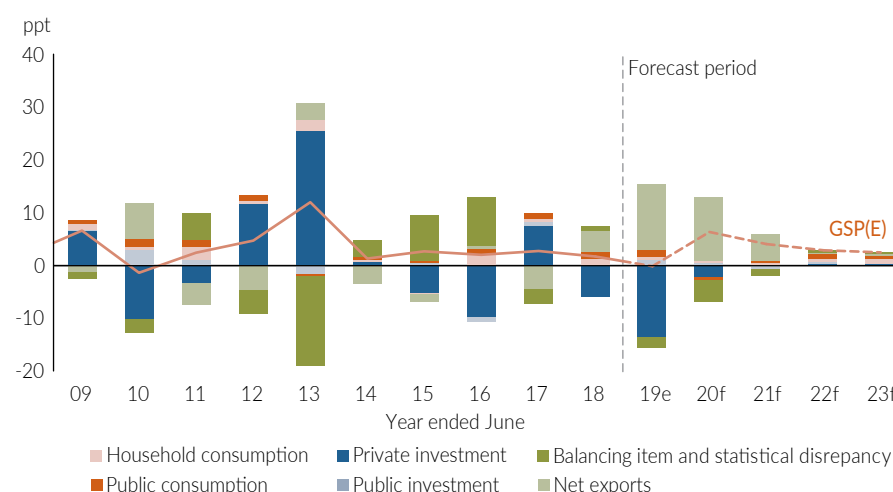
Territory GSP is forecast to contract over 2018-19, largely due to a decline in business investment (down 46.4 per cent) as the Ichthys LNG project completes its construction and commissioning phase, partially offset by an increase in cumulative net exports, predominantly LNG. Economic growth over 2019-20 and into 2020-21 reflects significant growth in net exports, although this growth is partially offset by continuing but less rapid declines in business investment (Table 2.1).

Public investment, including the Territory's Government's \$1.45 billion 2019-20 infrastructure investment program, fast-tracked construction projects, Turbocharging Tourism stimulus programs and 10-year Remote Housing Investment Package, is supporting economic activity. However, it is acknowledged public investment cannot fully offset the \$5 billion per annum the Ichthys LNG project has contributed on average to the Territory economy. While GSP will be supported by net exports, SFD will diverge over the same period, forecast to decline by 9.4 per cent in 2018-19 and continue declining over 2019-20 at a more modest rate of 1.7 per cent.

Economic growth in the outer years is likely to be supported by moderate growth in household consumption, public investment, and initial levels of exploration activity associated with onshore unconventional gas. Growth over 2021-22 and 2022-23 is forecast to average 2.7 per cent (Chart 2.2).

Despite short-term challenges, overall the Territory economy is still expected to be over 50 per cent larger by 2022-23, at \$30.5 billion, compared to 2008-09.

Chart 2.2: Contribution to Territory economic growth¹



GSP(E): expenditure measure of gross state product; ppt: percentage point; e: estimate; f: forecast

¹ Inflation adjusted.

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

Sensitivites to forecasts

The Ichthys LNG project has contributed substantially to the Territory economy since 2011, initially through business investment, employment and population growth over the project's construction phase, and then with exports since late 2018, expected to continue for the project's 40-year life.

As the largest-ever project in the Territory's economic history, the size and scale of the US\$37 billion Ichthys LNG project is unique for the Territory. Its integrated project approach, straddling Western Australia (with the gas wellhead) and the Territory (with the LNG plant and main export hub) linked by a 890 kilometre subsea pipeline, and the impact of timing changes in the ramp-up to full production, have and will continue to affect Territory economic forecasts.

Any changes to timing assumptions around the completion of commissioning activity with the INPEX LNG plant and ramp-up to full production and export activity will materially impact DTF's 2019-20 Budget Paper forecasts over 2018-19, 2019-20 and 2020-21. As a sensitivity, a 5 per cent change in the level of exports from the LNG plant equates to a 0.9 per cent change in Territory GSP growth.

Similarly, affecting Territory GSP forecasts in the 2019-20 Budget Papers are conservative assumptions that underpin the value added of exports from the INPEX LNG plant. DTF has assumed that a portion of the estimated \$6.4 billion LNG export value from the plant is created at the wellhead, nominally located in Western Australian waters, hence treated as an interstate import to the Territory, which will result in an increase in the size of the Territory's negative balancing item, with the remaining export value created through the LNG process in the Territory. Different assumptions by the ABS when reporting Territory GSP from 2018-19 onwards will have a material effect on the reported size and growth of the Territory economy.

As a sensitivity, a 2.5 per cent change in the value of production added at the wellhead equates to about \$190 million change in the size of the Territory economy, or about 0.7 per cent to GSP growth, through changes to the balancing item containing interstate trade.

State final demand

The expected change in the non-trade exposed sector of the Territory economy over the forecast period, as measured by SFD, reflects the Territory's transition to levels of business investment that are more consistent with historical levels. SFD is experiencing a significant rebalancing following years of record private investment and consumption, which supported employment and population growth. As a result, SFD is expected to continue to contract over part of the forecast period as, unlike GSP growth, it will not benefit from the boost in exports from 2018-19 onwards (Chart 2.3), and the magnitude of the decline in business investment far exceeds any upside in consumption. Consequently, the value of GSP (as opposed to growth rate) is forecast to exceed SFD in 2019-20 for the first time since 1996-97 (Table 2.2).

In the short term, SFD is estimated to continue contracting in 2018-19 (falling 9.4 per cent), following a 2.7 per cent decline in 2017-18 to \$29.4 billion, mainly driven by declining business investment. The forecast for 2018-19 is in line with the latest data, which saw SFD decline by 1.8 per cent in the December quarter 2018. However, this decline in business investment in 2018-19 will be partly offset by increased public investment associated with the Territory Government's infrastructure program and moderate growth in household consumption that will provide some support to SFD.

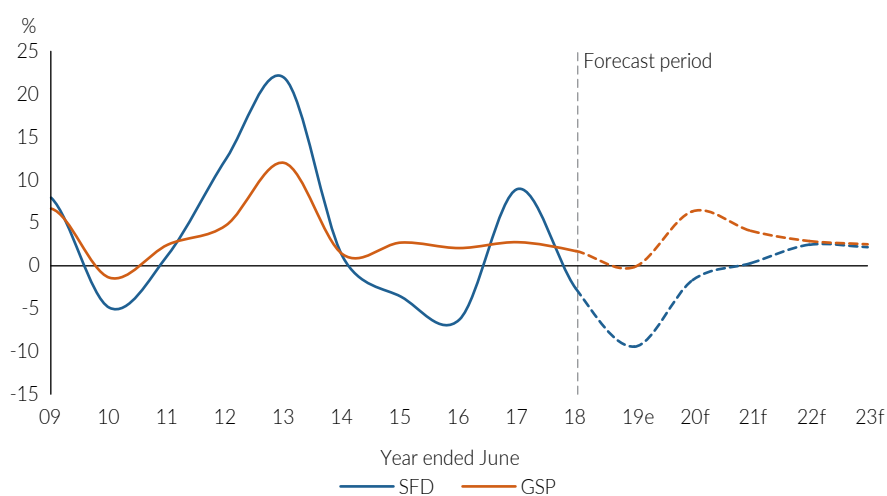
SFD is expected to continue to contract in 2019-20, declining 1.7 per cent, followed by a return to growth of 0.3 per cent in 2020-21. Underlying public investment is expected to provide some offsetting support to SFD, however not at a level sufficient to fully offset the scale of the contraction in private investment.

SFD is expected to return to moderate growth, averaging 2.3 per cent over 2021-22 and 2022-23, as household consumption strengthens, albeit below trend levels over the medium term, and private investment resets to levels that existed prior to the commencement of the Ichthys LNG project. This improving trend over the outer forecast period is largely in line with population and employment growth forecasts.

There remains prospective private and public sector investment projects in the pipeline, including those with major project status, which have not been included in the above forecasts as they have not yet received final investment decisions. If realised, these projects have the potential to provide significant upside to the Territory's economic growth forecasts over the forward estimates period.

Potential defence projects include \$210 million on upgrades at HMAS Coonawarra to support the new offshore patrol vessels, \$770 million on works at the Royal Australian Air Force (RAAF) Base Tindal to support the KC30A multi-role tanker air transport, and the \$160 million National Aircraft Pavement Maintenance Program at RAAF Base Tindal and RAAF Base Darwin. Projects awarded major project status by the Territory Government that have not yet reached a final investment decision include the US\$1.5 billion prawn farm development Project Sea Dragon, \$853 million stage 1 of the Mount Peake vanadium-titanium-iron mine, \$368 million stage 1 of the Ammaroo phosphate project and ConocoPhillips' Darwin LNG plant life extension project.

Chart 2.3: Changes to Territory GSP and SFD¹



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

¹ Inflation adjusted.

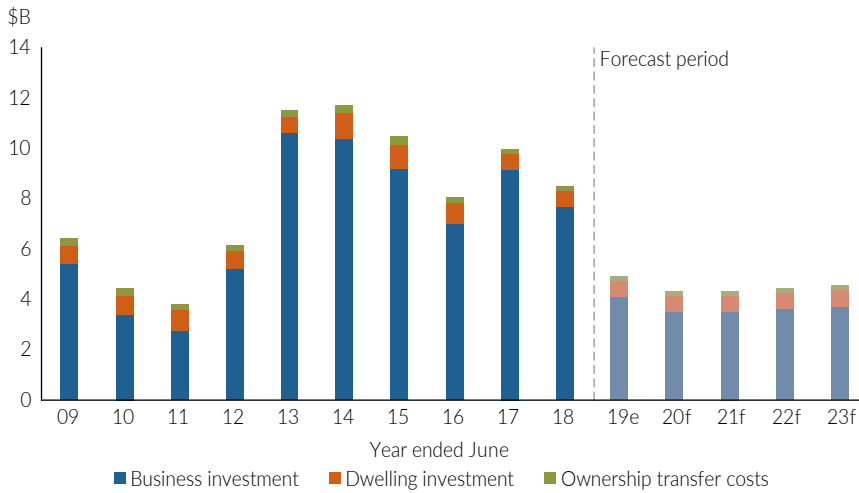
Source: Department of Treasury and Finance; ABS, *Australian National Accounts: State Accounts*, Cat. No. 5220.0

Private investment

Following record levels of private investment over the past few years, investment levels will continue to contract over the medium-term outlook (Chart 2.4). This will see private investment in the outer years reflect levels of activity with few major projects commencing or under way.

In 2018-19, private investment is estimated to substantially decline (falling by 42.0 per cent). This is in line with the latest data trends for private investment, showing a 10.1 per cent decrease in the December quarter 2018. This reflects the transition of the Ichthys LNG project from its investment phase through construction and commissioning activity to its operational and export phase.

Chart 2.4: Territory private investment¹



e: estimate; f: forecast

¹ Inflation adjusted.

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

Private investment is expected to contract further over the near term, declining 12.4 per cent in 2019-20 before leveling out in 2020-21. However, the forecast decline is softened by the expected commencement of the \$200 million Westin Darwin luxury hotel, and \$300 million expansions by NT Airports at the Darwin, Alice Springs and Tennant Creek airports, as well as ongoing levels of investment associated with maintenance and operation of the INPEX LNG plant.

Dwelling investment is forecast to remain subdued with demand for housing reflecting population forecasts, as well as existing capacity in the housing market to support below-trend population growth over the near term. However, there are bright spots in Territory dwelling investment, with dwelling approvals in Alice Springs remaining strong (with 149 approvals in 2018, up from 61 in 2017), and ongoing demand from first home owners due to lower house prices across the Territory and the Territory Government’s first home owner incentive schemes with housing finance commitments to first home buyers up 13.3 per cent in 2018.

In the outer years, growth in private investment is expected to average 2.8 per cent per annum. Growth in private investment is likely to be supported by some recovery in greater Darwin dwelling investment and exploration activity associated with unconventional onshore gas and smaller-scale projects.

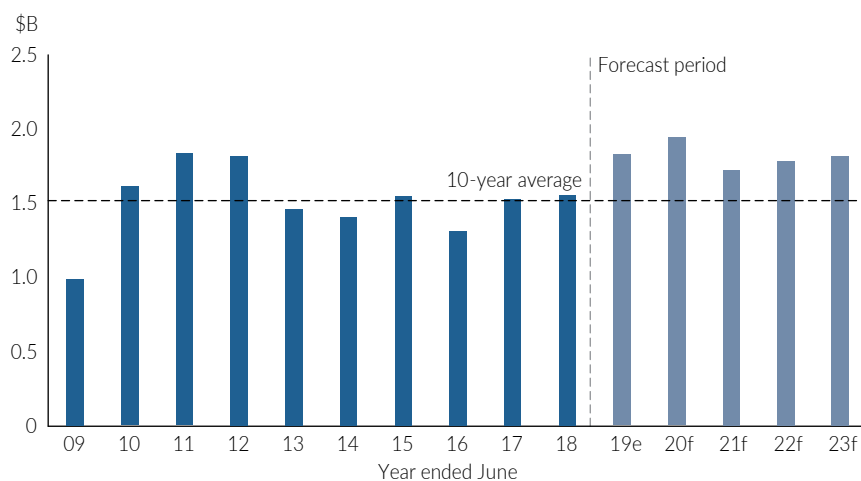
Public investment

Public investment is expected to play an important role, however significantly less in quantum than private investment, in supporting economic activity over the forecast period. The Territory Government’s infrastructure spending and the Commonwealth’s large-scale defence projects remain key drivers of public investment over the medium term.

In 2018-19, public investment is estimated to increase substantially, up 17.7 per cent, to \$1.8 billion. This largely reflects an increase in Territory Government investment related to significant infrastructure spending throughout the year, which includes roads, hospital and health care facilities, schools, community safety facilities (new Palmerston police station and new Katherine fire station) and stimulus activity to support the correction in private investment. It also includes continued construction of remote Aboriginal housing and the Territory Government’s Turbocharging Tourism infrastructure investments. Growth is also expected to be supported by increased levels of Commonwealth investment, including defence expenditure such as the \$161 million upgrades to RAAF Base Darwin to support the new Poseidon P-8 maritime patrol aircraft and \$177 million

redevelopment works at the Delamere Range to support EA-18G Grower aircraft training, beef roads and major highway investments.

Chart 2.5: Territory public investment¹



e: estimate; f: forecast

¹ Inflation adjusted.

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

Public investment is expected to peak at \$1.9 billion in 2019-20 (Chart 2.5). Major Territory Government-funded projects scheduled for 2019-20 include \$649.1 million for Territory roads and transport infrastructure upgrades, \$90 million for the Remote Housing Investment Package and land servicing, continuing investment relating to City Deals projects in the Darwin and Alice Springs central business districts (CBDs), and Turbocharging Tourism stimulus package. Growth will also be supported through current Commonwealth investment programs across Territory defence establishments, including RAAF Base Tindal and RAAF Base Darwin airfield works to support new aircraft and greater levels of defence activities, as well as upgrade works at Larrakeyah Barracks, HMAS Coonawarra and Robertson Barracks.

In the outer years, public investment will be supported by Territory Government infrastructure investment, albeit at lower levels than the current elevated investment expenditure, including \$131.5 million in investment in the Jabiru masterplan over 2019-20 to 2022-23, as well as increased levels of Commonwealth defence-related expenditure and co-investment of \$216.2 million into the Jabiru master plan over the forward estimates and beyond. Public investment is forecast to average \$1.8 billion over 2021-22 and 2022-23.

Household consumption

Household consumption is estimated to remain subdued over the forecast period, reflecting underlying trends in economic activity, employment and population growth in the Territory. Growth in household consumption is forecast to remain below trend, averaging 1.4 per cent per annum over 2018-19 through to 2020-21.

Over the outer years, household consumption is expected to strengthen toward long-term trend levels, averaging 1.9 per cent per annum. Though still modest, this growth will be supported by strengthening employment and population forecasts in the outer years.

Public consumption

Growth in public consumption is expected to provide moderate support to economic growth across the forecast period, averaging 1.9 per cent per annum, however well below the 10-year average growth rate of 2.6 per cent. This reflects the fiscal and expenditure constraints of the Territory Government and fiscal repair measures announced as part of the Territory Government's response

to the Fiscal Strategy Panel’s final report: *A plan for budget repair*. However continued support through Commonwealth expenditure relating to ongoing defence operations in the Territory, including the growing Joint Australia-US Force Posture Initiative, and the continued rollout of the National Disability Insurance Scheme, will contribute positively to public consumption.

Net exports

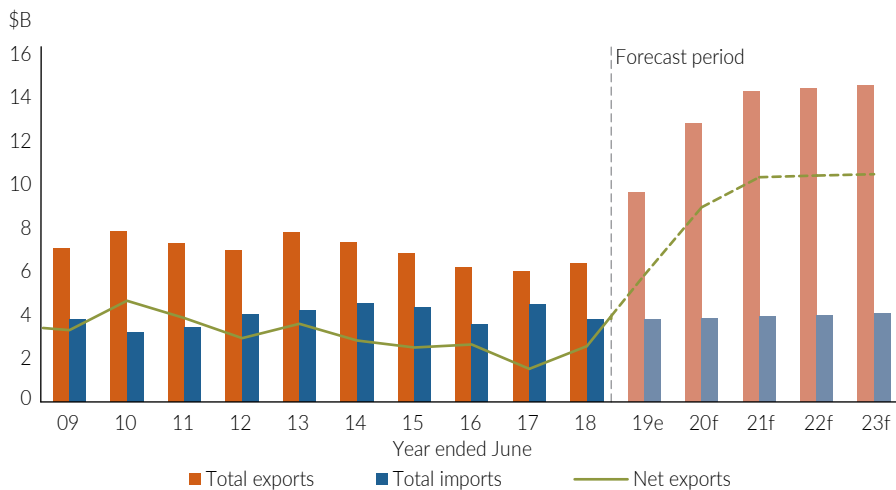
The Territory’s net exports through 2018-19 to 2020-21 are heavily influenced by the INPEX LNG plant commencing production and ramping up to a steady state of exports (LNG, liquefied petroleum gas and condensate). This will be further supported by growth in exports from the resources and agriculture sectors, as well as limited growth in imports as major project activity remains flat.

The Territory’s net exports will substantially increase over 2018-19 to 2020-21, growing more than 300 per cent to \$10.3 billion, significantly higher than the \$3.0 billion average over the past decade (Chart 2.6).

Over the outer years of the forecast period, net exports are expected to stabilise at around \$10.4 billion per annum, reflecting average growth of 0.6 per cent per annum. This below-trend growth in net exports reflects moderate additional activity in both exports and imports, albeit with exports at historically high levels.

These forecasts assume existing commodity prices and exchange rate conditions continue. Given the Territory’s exposure to international markets, diversity of mineral resources and agricultural potential, there remains significant upside in forecasts for net exports, particularly related to minerals and agriculture projects yet to achieve final investment decisions. Additionally, the Territory’s agriculture sector is likely to benefit from the Indonesia-Australia Comprehensive Economic Partnership Agreement signed in March 2019, providing increased access to Indonesian markets over the forward estimates, particularly for livestock trade.

Chart 2.6: Territory net exports¹



e: estimate; f: forecast

¹ Inflation adjusted.

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

Table 2.2: Components of Territory gross state product (expenditure)^{1,2}

	Value (\$M) ^{1,2}									
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19e	2019-20f	2020-21f	2021-22f	2022-23f
Total consumption	17 616	17 618	18 401	18 762	19 418	19 925	19 966	20 262	20 701	21 143
Household consumption	10 469	10 399	10 936	11 041	11 326	11 498	11 643	11 809	12 017	12 268
Public consumption	7 145	7 219	7 463	7 721	8 091	8 427	8 323	8 453	8 684	8 875
Total investment	13 146	12 033	9 387	11 506	10 033	6 744	6 250	6 032	6 231	6 371
Private investment	11 744	10 488	8 078	9 985	8 484	4 920	4 311	4 312	4 451	4 555
Dwelling investment	1 044	949	855	652	613	625	632	639	650	663
Ownership transfer costs	292	314	214	195	183	174	174	174	176	180
Business Investment	10 385	9 209	7 001	9 139	7 688	4 121	3 506	3 499	3 625	3 713
Public investment	1 404	1 545	1 308	1 521	1 549	1 824	1 939	1 720	1 780	1 816
State final demand	30 772	29 656	27 787	30 268	29 450	26 669	26 216	26 293	26 932	27 514
Net exports	2 820	2 501	2 639	1 519	2 564	5 795	8 957	10 338	10 403	10 467
Total exports	7 337	6 852	6 204	5 988	6 355	9 601	12 795	14 255	14 399	14 546
Total imports	4 517	4 351	3 565	4 469	3 791	3 807	3 838	3 916	3 997	4 079
Balancing item ³	- 9 653	- 7 576	- 5 343	- 6 021	- 5 814	- 6 306	- 7 362	- 7 692	- 7 564	- 7 475
Gross state product	23 939	24 581	25 083	25 767	26 200	26 157	27 810	28 939	29 770	30 505
	Year-on-year change (%) ^{1,2}									
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19e	2019-20f	2020-21f	2021-22f	2022-23f
Total consumption	1.1	0.0	4.4	2.0	3.5	2.6	0.2	1.5	2.2	2.1
Household consumption	0.7	- 0.7	5.2	1.0	2.6	1.5	1.3	1.4	1.8	2.1
Public consumption	1.6	1.0	3.4	3.5	4.8	4.2	- 1.2	1.6	2.7	2.2
Total investment	1.0	- 8.5	- 22.0	22.6	- 12.8	- 32.8	- 7.3	- 3.5	3.3	2.2
Private investment	1.6	- 10.7	- 23.0	23.6	- 15.0	- 42.0	- 12.4	0.0	3.2	2.3
Dwelling investment	60.4	- 9.1	- 9.9	- 23.7	- 6.0	2.0	1.0	1.3	1.6	2.0
Ownership transfer costs	6.6	7.5	- 31.8	- 8.9	- 6.2	- 5.0	0.0	0.0	1.0	2.5
Business Investment	- 2.1	- 11.3	- 24.0	30.5	- 15.9	- 46.4	- 14.9	- 0.2	3.6	2.4
Public investment	- 3.8	10.0	- 15.3	16.3	1.8	17.7	6.3	- 11.3	3.5	2.0
State final demand	1.0	- 3.6	- 6.3	8.9	- 2.7	- 9.4	- 1.7	0.3	2.4	2.2
Net exports	- 21.4	- 11.3	5.5	- 42.4	68.8	126.0	54.6	15.4	0.6	0.6
Total exports	- 6.0	- 6.6	- 9.5	- 3.5	6.1	51.1	33.3	11.4	1.0	1.0
Total imports	7.1	- 3.7	- 18.1	25.4	- 15.2	0.4	0.8	2.0	2.0	2.1
Balancing item ³	- 7.3	- 21.5	- 29.5	12.7	- 3.4	8.5	16.7	4.5	- 1.7	- 1.2
Gross state product	1.3	2.7	2.0	2.7	1.7	- 0.2	6.3	4.1	2.9	2.5
	Percentage point contribution to year-on-year GSP change (ppt) ^{1,2}									
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19e	2019-20f	2020-21f	2021-22f	2022-23f
Total consumption	0.8	0.0	3.2	1.4	2.5	1.9	0.2	1.1	1.5	1.5
Household consumption	0.3	- 0.3	2.2	0.4	1.1	0.7	0.6	0.6	0.7	0.8
Public consumption	0.5	0.3	1.0	1.0	1.4	1.3	- 0.4	0.5	0.8	0.6
Total investment	0.6	- 4.6	- 10.8	8.4	- 5.7	- 12.6	- 1.9	- 0.8	0.7	0.5
Private investment	0.8	- 5.2	- 9.8	7.6	- 5.8	- 13.6	- 2.3	0.0	0.5	0.4
Dwelling investment	1.7	- 0.4	- 0.4	- 0.8	- 0.2	0.0	0.0	0.0	0.0	0.0
Ownership transfer costs	0.1	0.1	- 0.4	- 0.1	0.0	0.0	0.0	0.0	0.0	0.0
Business Investment	- 1.0	- 4.9	- 9.0	8.5	- 5.6	- 13.6	- 2.4	0.0	0.4	0.3
Public investment	- 0.2	0.6	- 1.0	0.8	0.1	1.0	0.4	- 0.8	0.2	0.1
State final demand	1.3	- 4.7	- 7.6	9.9	- 3.2	- 10.6	- 1.7	0.3	2.2	2.0
Net exports	- 3.3	- 1.3	0.6	- 4.5	4.1	12.3	12.1	5.0	0.2	0.2
Total exports	- 2.0	- 2.0	- 2.6	- 0.9	1.4	12.4	12.2	5.2	0.5	0.5
Total imports	1.3	- 0.7	- 3.2	3.6	- 2.6	0.1	0.1	0.3	0.3	0.3
Balancing item ³	3.2	8.7	9.1	- 2.7	0.8	- 1.9	- 4.0	- 1.2	0.4	0.3
Gross state product	1.3	2.7	2.0	2.7	1.7	- 0.2	6.3	4.1	2.9	2.5

e: estimate; f: forecast; ppt: percentage point

1 Inflation adjusted.

2 Components may not add to totals due to rounding and ABS chain volume estimation.

3 Balancing item includes statistical discrepancy.

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

Chapter 3

External economic environment

Recent activity

In 2017-18 the Territory's net exports increased by 68.8 per cent to \$2.6 billion, primarily driven by a 6.1 per cent increase in total exports combined with a 15.2 per cent decline in total imports.

Outlook

With the Ichthys LNG project now operational, exports from the Territory are expected to increase sharply in 2018-19 and into 2019-20 as production ramps up, stabilising in 2020-21 as full production is reached.

The Northern Territory is a small open economy influenced by movements in commodity prices, exchange rates, international trade and private investment, historically around major resource and infrastructure projects. The main industries in the Territory include construction, mining and tourism, which collectively account for a third of economic activity in the Territory.

This chapter outlines national and global economic conditions, as well as those of key trading partners and commodities relevant to the Territory economy. Forecasts of key economic parameters of important trading partners and the related external environment are also included over the short to medium term.

For the latest data on Territory international trade and major trading partners, refer to the [Territory Economy website](#).

Outlook

International trade

The Territory's net exports are expected to increase to \$5.8 billion in 2018-19, primarily due to commencement of exports from the Ichthys LNG project. In the forward years, net exports are forecast to increase significantly as LNG, liquid petroleum gas and condensate products are exported to Japan, Taiwan and other global destinations, while imports are forecast to grow below trend, reflecting limited major project activity over the forecast period. By 2020-21, net exports are expected to reach over \$10.3 billion (Table 3.1) as the Ichthys LNG project reaches full production.

Table 3.1: Net export component of Territory GSP (\$M)^{1, 2}

	2017-18a	2018-19e	2019-20f	2020-21f	2021-22f	2022-23f
Total exports	6 355	9 601	12 795	14 255	14 399	14 546
Total imports	3 791	3 807	3 838	3 916	3 997	4 079
Net exports	2 564	5 795	8 957	10 338	10 403	10 467

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

1 Inflation adjusted.

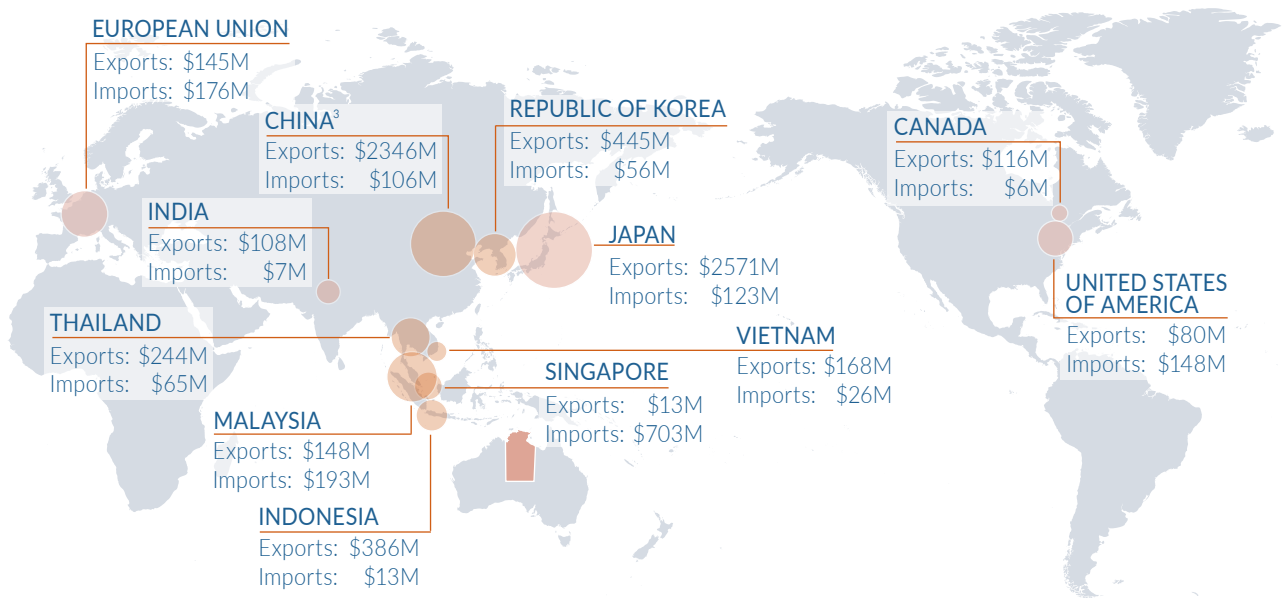
2 Components may not add to totals due to inflation adjustments.

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

The Territory is geographically located near major Asian economies including China, Japan, Indonesia and Thailand. As expected, these countries are some of the Territory's major export destinations. The Territory imports goods and services from a range of other Asian countries including Singapore and Malaysia, as well as the US and the European Union (EU).

The Territory's international trade performance can be influenced by the economic conditions within the Territory's major trading partners, which directly influence the demand for Territory commodities. Other important factors include exchange rates, trade policy and FTA, foreign currency reserves and inflation, which all influence underlying demand. Map 2 provides a summary of the Territory's trade activity with major trading partners for 2018.

Map 2: Territory's major goods trading partners, 2018^{1,2}



1 Current prices.
 2 This map is produced from various sources. Department of Treasury and Finance cannot guarantee the accuracy, currency or completeness of the information. To be used as a guide only.
 3 Excluding special administrative regions (Macau and Hong Kong) and Taiwan.
 Source: Department of Treasury and Finance; ABS, *International Trade in Goods and Services*, Cat. No. 5368.0

Global growth

Table 3.2: GDP growth for the Territory's current major trading partners, Australia and world regions (%)

	2018a	2019e	2020f	2021f	2022f	2023f	5-year average
United States	2.9	2.3	1.9	1.8	1.6	1.6	1.8
China	6.6	6.3	6.1	6.0	5.7	5.6	5.9
European Union	2.1	1.6	1.7	1.7	1.6	1.6	1.6
India	7.1	7.3	7.5	7.7	7.7	7.7	7.6
Indonesia	5.2	5.2	5.2	5.2	5.3	5.3	5.2
Japan	0.8	1.0	0.5	0.5	0.5	0.5	0.6
Malaysia	4.7	4.7	4.8	4.8	4.8	4.8	4.8
Republic of Korea	2.7	2.6	2.8	2.9	2.8	2.9	2.8
Singapore	3.2	2.3	2.4	2.5	2.6	2.6	2.5
Taiwan	2.6	2.5	2.5	2.4	2.3	2.2	2.4
Thailand	4.1	3.5	3.5	3.5	3.5	3.6	3.5
Australia	2.8	2.1	2.8	2.8	2.6	2.6	2.6
Emerging markets and developed economies	4.5	4.4	4.8	4.9	4.8	4.9	4.8
Advanced economies	2.2	1.8	1.7	1.7	1.6	1.6	1.7
Global	3.6	3.3	3.6	3.6	3.6	3.6	3.5

GDP: gross domestic product; a: actual; e: estimate; f: forecast
 Source: International Monetary Fund

According to the International Monetary Fund (IMF), about 180 countries experienced economic growth in 2018, up from 173 in 2017. The IMF forecasts global growth to decrease marginally from 3.6 per cent in 2018 to 3.3 per cent in 2019 and average 3.5 per cent over the next five years (Table 3.2). This forecast was already revised downward due to the effects of tariff increases in the US and China, however the further downward revision reflects softer momentum in 2018 in the US, Japan and Europe. Advanced economies are forecast to grow by 1.8 per cent while emerging markets are forecast to grow by 4.4 per cent in 2019.

Global growth is forecast to continue over the five years, with emerging markets and developed economies expected to grow on average by 4.8 per cent. In 2019 soft growth is expected in the Asian region partially as a result of trade tensions between US and China. However, there is still potential for positive performance in 2019 for the Asian Tigers (Indonesia, Thailand, Malaysia, the Philippines, Korea, Taiwan, Hong Kong and Singapore). Growth in Indonesia is expected to remain strong, with average growth of 5.2 per cent expected over the forecast period. Indonesia is one of the Territory's major trading partners and, according to the Organisation for Economic Co-operation and Development (OECD), its strong labour market should help expand private consumption. With continuous improvement in the investment climate, this is expected to help with expanding the production base and job opportunities for Indonesia. This could potentially see the Territory's exports with Indonesia grow. India's economy also continues to grow substantially, up 7.1 per cent in 2018, and is expected to grow on average by 7.6 per cent over the next five years.

In contrast to the relatively stable growth in developing economies, economic growth in China is forecast to moderate from 6.6 per cent in 2018 to 6.3 per cent in 2019. The IMF reports China's economy is likely to slow due to tighter financial regulations and trade tensions with the US. Although still at relatively high levels, by global standards, China's growth is forecast to moderate further to 5.7 per cent in 2022 and 5.6 per cent in 2023, which would be the first time since 1990 that China's reported growth has been below 6.0 per cent. According to the Australian Bureau of Agricultural and Resource Economics from the Commonwealth Department of Agriculture and Water Resources, the slowdown in China represents the continuing transition to a consumption and services-driven economy from one reliant on exports and heavy industry. This transition could have an impact on Australia and the Territory in terms of exports to China.

Advanced economies grew by 2.2 per cent in 2018 and are expected to grow by 1.8 per cent in 2019. According to the IMF, these modest growth forecasts have been influenced by downward revisions in many Euro economies reflecting issues such as the higher auto emission standards in Germany, weak domestic demand, higher borrowing in Italy, and industrial action and street protests in France. Advanced economies are forecast to further soften and grow by an average of 1.7 per cent over the next five years. Growing uncertainty exists around the potential exit of the United Kingdom (UK) from the EU. The Territory's goods trade with the UK is not significant enough to cause a great impact to the Territory's trade balance should the exit occur, however there are some potential opportunities if the UK begins to negotiate its own bilateral trade agreements with other countries, including Australia. Japan's economy is expected to grow by 1.0 per cent in 2019, which has been revised down due to additional fiscal support involving measures to mitigate the effects of the planned consumption tax rate increase in October 2019. Japan's economy is then expected to decrease to 0.5 per cent growth rate from 2020 onwards (an upward revision) following the implementation of those measures.

Growth in the US is expected to moderate from 2.3 per cent in 2019 to 1.9 per cent in 2020, with the unwinding of fiscal stimulus as well as strong domestic demand growth increasing imports and the US current account deficit. In December 2018, the US Federal Reserve raised interest rates from 2.25 per cent to 2.5 per cent. According to Deloitte Access Economics, US interest rates are forecast to increase to 2.6 per cent in 2020-21, before rising again to 2.8 per cent in 2021-22.

China is Australia's largest destination for exports such as iron ore, bauxite, copper ores and concentrates. The imposition of tariffs on Chinese imported goods (including goods that contain steel, copper and aluminium) by the US has the potential to reduce demand by China for imported products, with the potential to affect Australia's export trade as well as global growth.

Commodity prices

According to the Office of the Chief Economist from the Department of Industry, Innovation and Science, most commodity prices experienced decreases over 2018, with the exception of uranium, iron ore and thermal coal which increased. The outlook for commodity prices is mixed, reflecting several different global shifts in supply and demand.

Bauxite and manganese remain two of the Territory's major commodity exports. In line with global demand for alumina and aluminium, bauxite is expected to decrease in 2019 and then stabilise over the outlook period, with the main risks associated with imposition of tariffs on Chinese goods by the US and stricter Chinese environmental regulations. Manganese is forecast to stabilise as a result of rising steel production and consumption in emerging Asian nations, partially offset by declining steel supply and demand in China.

Uranium experienced large supply reductions in 2018, driven by reduced output from Canada and Kazakhstan, which has led to a recent lift in prices. Prices are still expected to increase over the outlook period due to the effects of the supply cuts, increased demand and postponement of prospective new mines in Africa. Due to these conditions, the value of existing stockpiles of uranium reserves in the Territory is expected to increase.

Overall, zinc prices experienced a decrease in 2018, with sharp declines occurring in the second half of the year following an 11 year peak in early 2018. Low zinc levels and reduced smelter output levels in China and Europe are forecast to keep prices elevated in the short term. Beyond 2019, prices are expected to decline as production from new mines improves global supply. The imposition of US tariffs on a number of Chinese goods has the potential to decrease zinc demand, partially offset by higher infrastructure spending in China.

Vanadium is used primarily in steel production as well as a growing role in large-scale storage and distribution of renewable energy in the form of redox flow batteries. Prices have reached new highs due to ongoing demand from the steel industry and a shortage of vanadium in China. Prices for vanadium are expected to increase in the short and medium term due to production cuts as a result of Chinese environmental regulations and new Chinese construction standards expected to increase demand. With the price and demand for vanadium increasing, there is potential upside for the Territory as prospective projects become more commercially viable.

Gold prices declined for most of 2018 as a result of rising US interest rates, financial restructuring in the US Treasury, higher US Treasury bond yields and a strong US dollar. In the last quarter of 2018, gold prices recovered to 2017 levels, supported by trade tensions between the US and its trading partners. Over the five years to 2024, gold prices are forecast to increase as gold's status as a safe haven asset increases demand and world mine supply declines from 2020. In the Territory, gold is produced in the form of gold dore, which is not exported directly overseas but transported to Western Australia for refining into gold bars.

The price of crude oil peaked in October 2018, the highest level reported in four years. A range of global circumstances contributed to this price spike, including renewed sanctions by the US against Iran, low Venezuelan production and falling OECD reserves. Since this peak, the World Bank reports that crude oil has seen a decline of 17.5 per cent. In the short to medium term, the price of crude oil is expected to remain relatively stable due to the renewal of production agreements from the Organisation of the Petroleum Exporting Countries (OPEC) and non-OPEC production agreements

to cut back on oil production. This outlook may be affected by lower economic growth, particularly in China.

LNG prices are closely linked to the price of oil. The spike in oil prices to October 2018 flowed through to higher prices for Australian LNG, with prices then declining in line with the subsequent drop. Prices are expected to ease in 2019-20 due to stabilising oil prices and increased global LNG supply. The market or spot price of LNG has less effect in the Territory as most of the LNG produced in the Territory is sold on long-term contracts.

Exchange rates

Movements in the Australian dollar are influenced by domestic and international interest rates and also world commodity prices. Deloitte Access Economics forecasts the Australian to US dollar exchange rate will depreciate and remain at the low 70 cent level in 2018-19 due to the strength of the US dollar. The Australian to US dollar exchange rate is expected to remain within the 70 cent and 73 cent range over the forecast period. A relatively weaker Australian dollar is expected to benefit the Territory's goods and service exports.

National economy

According to the IMF, economic growth in Australia is forecast to be 2.1 per cent in 2019 and average 2.6 per cent over the forecast period to 2023. According to the 2019-20 Commonwealth Budget, the Australian economy is expected to slow to 2.25 per cent in 2018-19 before strengthening to 2.75 per cent from 2019-20 and 2020-21, supported by household consumption, business investment, public final demand and exports. Dwelling investment is expected to detract from economic growth as a result of declines in house prices.

Interest rates

The RBA has held the cash rate at 1.5 per cent since August 2016. Other things being equal, lower interest rates could help support economic activity in Australia and the Territory in areas of business confidence, consumption and investment. In the RBA's Minutes of the Monetary Policy Meeting of the Reserve Bank Board (April 2019), a scenario was discussed where if inflation did not increase and unemployment trended up, that a decrease in the cash rate would be likely. The impact of this adjustment is expected to be smaller than in the past due to high levels of household debt and movements in the housing market.

Chapter 4

Population

Recent activity

The Territory's population declined by 0.1 per cent in 2017-18, largely due to record interstate migration outflows. The Territory has had 24 consecutive quarters of negative NIM.

Outlook

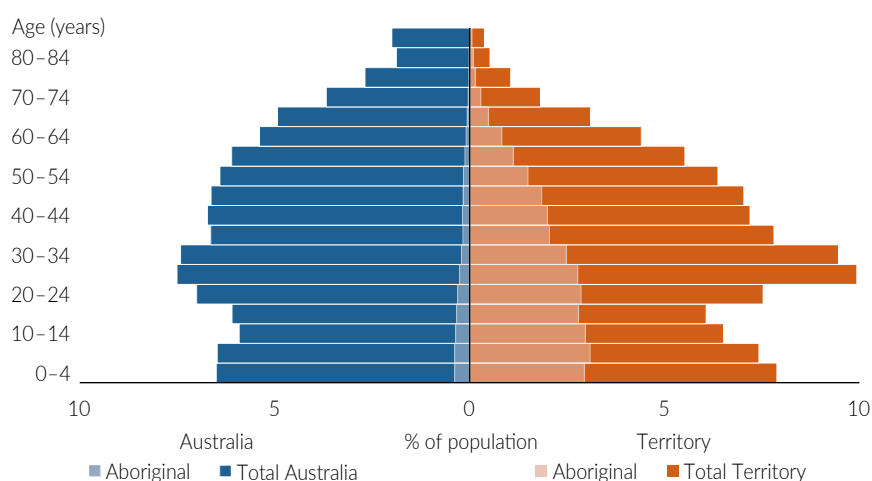
The Territory's population is expected to continue to decline in 2018-19 before gradually improving over the forecast period, mainly due to natural increase once again exceeding net migration outflows. Population growth is forecast to average 0.3 per cent per annum over the five years to 2022-23.

The Territory's estimated resident population (ERP) is just less than 250 000, making it less than 1 per cent of the total Australian population. The Territory is the smallest of all states and territories in population, but is spread over the third largest Australian jurisdiction, also making it the most sparsely populated jurisdiction with 0.2 persons per square kilometre. While a majority (60.1 per cent) of the Territory's population resides in the greater Darwin area, the remainder is dispersed over remote and very remote areas. About one third of the Territory's population is Aboriginal, around 80 per cent of whom live in remote and very remote areas. According to the ABS geographical classifications, the most densely populated part of the Territory (greater Darwin) is still only classified as 'outer regional', compared to the 'major cities' and 'inner regional' classifications of other capital cities.

Compared to the rest of Australia, the Territory has a fairly young age profile, with a median age of 32.9 years, which is the lowest of the jurisdictions and over four years younger than the national median age of 37.3 years. This reflects the relatively large number of persons aged 25 to 34 years in the Territory, as well as the Territory's large Aboriginal population, which is younger than the national population (Chart 4.1). The structure of the Territory's economy supports its youthful profile, with employment dominated by mining, construction and defence. As a result, the Territory's gender balance is also more heavily skewed to males than at the national level, with 108 males to every 100 females, whereas the national rate is 98 males for every 100 females.

For the latest data on the Territory's ERP, refer to the [Territory Economy](#) website.

Chart 4.1: Population age profile – Australia and Territory by Aboriginal status, as at June 2016



Outlook

Table 4.1: Territory population forecasts (%)

Financial year	2017-18a	2018-19e	2019-20f	2020-21f	2021-22f	2022-23f
Annual change	- 0.1	- 0.7	0.2	0.6	0.7	0.8
Calendar year	2017a	2018e	2019f	2020f	2021f	2022f
Annual change	0.3	- 0.7	0.0	0.5	0.6	0.7

a: actual; e: estimate; f: forecast

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

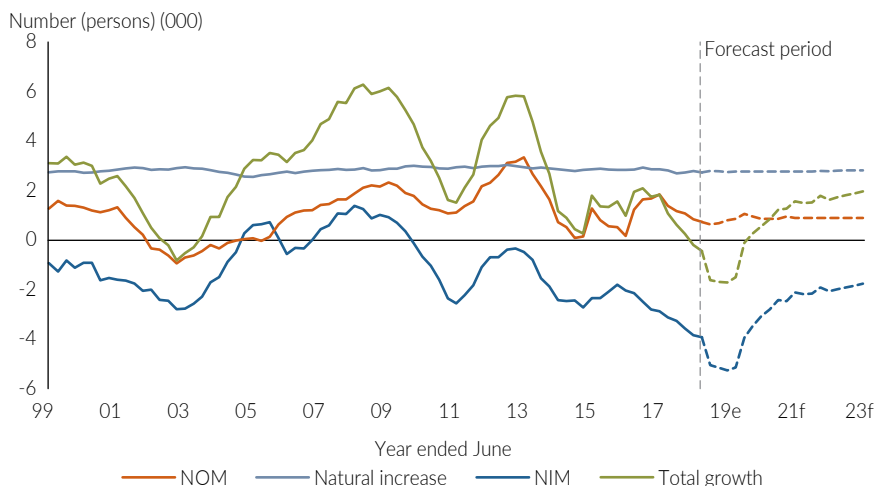
The Territory’s population growth has been subdued over the past few years, driven by large net outflows of interstate migrants, lower levels of overseas migration inflows and moderating fertility rates. In 2017-18, the Territory’s population declined by 0.1 per cent to 247 327. Since then, it is estimated the rate of decline has accelerated as the majority of the construction work on the Ichthys LNG project is now complete, resulting in large numbers of workers leaving the Territory at the end of 2018. Due to this, as well as further outflows of workers in early 2019, it is forecast the Territory’s population will decline by 0.7 per cent in 2018-19. In simple terms, negative population change indicates natural increase (births minus deaths – the largest and least volatile contributor to population growth) is more than offset by net migration outflows, resulting in a decline in the population.

Following the one-off large outflow of workers in 2018-19, the Territory’s population is expected to stabilise in 2019-20, with the population forecast to increase by 0.2 per cent, still well below the long-term trend but a recovery from the previous year. While NIM is expected to begin to return towards more sustainable levels, it is not expected to return to previous higher long-term rates and is expected to keep population growth subdued. Again, in simple terms, a small positive increase in the population means the net migration outflow is no longer completely offsetting the positive contribution of natural increase.

Over the forward estimates the Territory’s population growth is expected to begin to strengthen, reflecting projected improvement in economic conditions and the end of negative effects from the completion of a major project.

Despite this improvement, growth rates are expected to remain subdued with all components of population growth at lower levels than the average rate over the previous 10 years (Chart 4.2).

Chart 4.2: Components of Territory population growth



NIM: Net interstate migration; NOM: net overseas migration; e: estimate; f: forecast

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

As a jurisdiction that relies heavily on net migration, changes to Commonwealth migration settings will impact the Territory's population growth. Changes have already been made to temporary visas for skilled workers, including the abolition of the temporary work subclass 457 visa in March 2018 and its replacement with a new Temporary Skill Shortage visa. The temporary work subclass 457 visa has been of great importance to Territory employers, and well utilised. The impact of these changes on overseas migration to the Territory are still to play out, though the concern has been the impact will be relatively larger in regional and northern economies of Australia than the large eastern seaboard cities. The Commonwealth has also announced a number of changes to its migration program, which will likely have an effect on the Territory's population growth over the longer term.

Population strategy and action plan

In light of recent low population growth and 24 consecutive quarters of negative NIM, the Territory Government has developed the 2018-2028 Northern Territory Population Growth Strategy. The strategy identifies the activities needed to attract and retain people in the Territory and increase the understanding of the drivers of population dynamics, predominantly employment.

As part of the strategy, the Territory Government has introduced a number of targeted incentives to encourage interstate migrants to come to the Territory, including relocation payments for workers in high demand occupations and further incentives if they stay over the medium term.

In addition, the Territory Government has commissioned Charles Darwin University to undertake further research to provide detailed information on the drivers of population change in the Territory.

Components of population growth

ERP is the official ABS measure of Australia's population. It quantifies the number of usual residents of Australia and locations within Australia. ERP provides the most reliable measure of the Territory's resident population and is based on the results of the five-yearly Census of Population and Housing, adjusted for census undercount. It is updated quarterly between censuses using information on births and deaths (natural increase), NIM and net overseas migration (NOM).

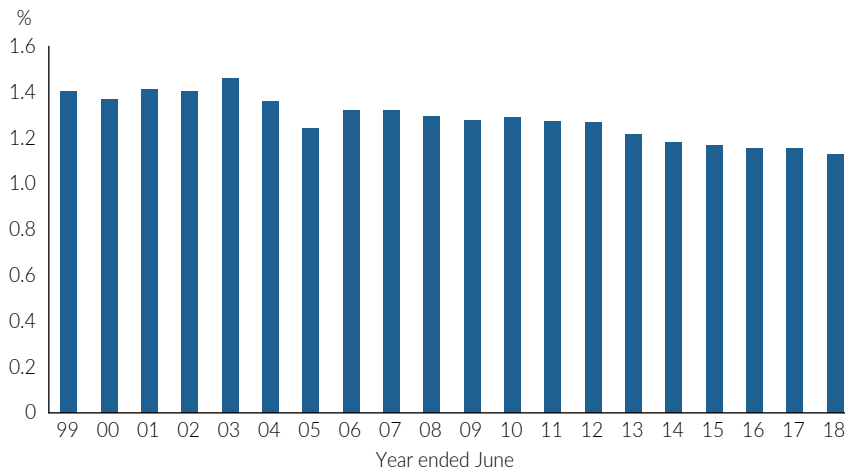
Natural increase

Natural increase is the difference between the number of births and deaths and it shows population growth in the absence of migration. The ABS obtains birth and death information from state and territory Registrars of Births, Deaths and Marriages.

The Territory differs markedly from the rest of Australia in respect to the impact of natural increase on total population growth. While at a national level, natural increase contributed 0.6 percentage points to total population growth of 1.6 per cent in 2017-18, in the Territory, natural increase contributed 1.1 percentage points of growth to the total fall of 0.1 per cent. The greater contribution of natural increase to the Territory's population is due to its younger age profile and slightly higher than national fertility rates in both its Aboriginal and non-Aboriginal population.

Although the Territory continues to have a higher fertility rate than the national population, the contribution of natural increase to population growth has been steadily declining. Two decades ago, natural increase contributed 1.5 percentage points to the Territory's population growth rate of 1.7 per cent. A decade ago, the contribution of natural increase reduced to 1.3 percentage points, and five years ago it was 1.2 percentage points (Chart 4.3).

Chart 4.3: Contribution of natural increase to the Territory's population growth



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

The decrease in contribution of natural increase to population growth partly reflects an ageing population (therefore a smaller proportion of women are of child-bearing age), a reduction in total fertility rates and, more recently, a reduction in the number of young women migrating to the Territory (both from interstate and overseas). Due to the population ageing, and despite a 7.0 per cent increase in the number of births over the past 20 years to 3904 in 2017-18, there has been a 34.4 per cent increase in the number of deaths (1109) over the same period.

The Territory's total fertility rate, which is a measure of the average number of births per woman, was 1.9 in 2017-18, down from 2.1 five years previously but still above the national rate of 1.8. Lower fertility rates are consistent across Australia, reflecting higher educational attainment of women, higher labour force participation of women, ease of availability of birth control options and increased age of first-time mothers. The exception is New South Wales, which reported a sharp increase in fertility rates in 2017-18, largely reflecting the age profile and gender mix of new overseas migrants. As the Territory's fertility rate continues to converge to the national rate, the contribution of natural increase to population growth will continue to diminish.

While the rate of births in the Territory declined in 2017-18, the number of deaths increased slightly. However, after adjusting for an ageing population, the Territory reported the largest decline in death rates of any jurisdiction with an age standardised death rate of 7.2 deaths per 1000 persons, down from 8.5 deaths per 1000 in 2012-13. This would suggest the increase in deaths has been driven by the relatively fast ageing of the Territory population, with a greater proportion of deaths being among older Territorians than in prior decades. As a result, the number of deaths each year is likely to rise as the population continues to age. This will further contribute to the ongoing decline in the contribution of natural increase to population growth. The number of deaths due to ageing of the population is increasing despite improvements in Aboriginal life expectancy.

Department of Treasury and Finance – Charles Darwin University partnership

Territory population numbers and characteristics have a major effect on the levels of Commonwealth funding flowing to the Territory. DTF provides funding for and works closely with the demography research program at the Northern Institute at Charles Darwin University. The institute is a significant research hub in northern Australia and the population program presents Territory population issues and related research at national and international forums.

Key elements of the institute's current and planned population work program include the creation of a new population projection model for the Territory, undertaken as a joint project with DTF, development of population projections for small areas of the Territory and a variety of other research projects. This work helps inform policy development and service delivery decision-making for the Territory.

Further information on the Northern Institute and its reports are available at: cdu.edu.au/northern-institute/demography-and-growth-planning

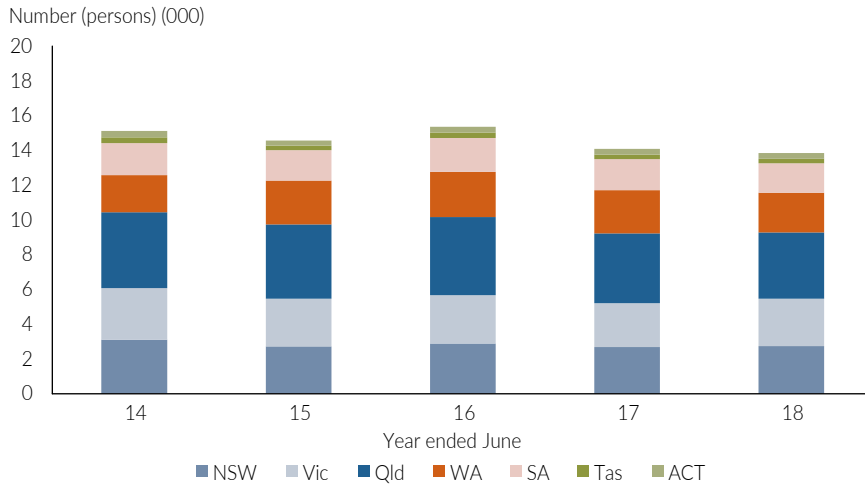
Interstate migration

NIM is derived from Medicare interstate change of address information with adjustments for defence personnel who are not covered by Medicare. Historically, Territory NIM tends to be negative, with positive NIM last reported from 2007 to 2009. The component flows of arrivals and departures to and from the Territory each year far exceed the reported NIM, averaging between 15 000 and 17 000 persons annually.

NIM has averaged an annual net outflow of 1238 persons from the Territory over the past 20 years. This outflow has been steadily increasing over the past few years, with 3831 more persons leaving the Territory in 2017-18 than arriving. This net outflow is expected to increase over 2018-19, as a large number of workers have left the Territory following the completion of the Ichthys LNG project. The majority of these are thought to have departed between late 2018 and the first half of 2019. This project had very significant impacts on a range of recent Territory economic and demographic variables that have since been unwinding.

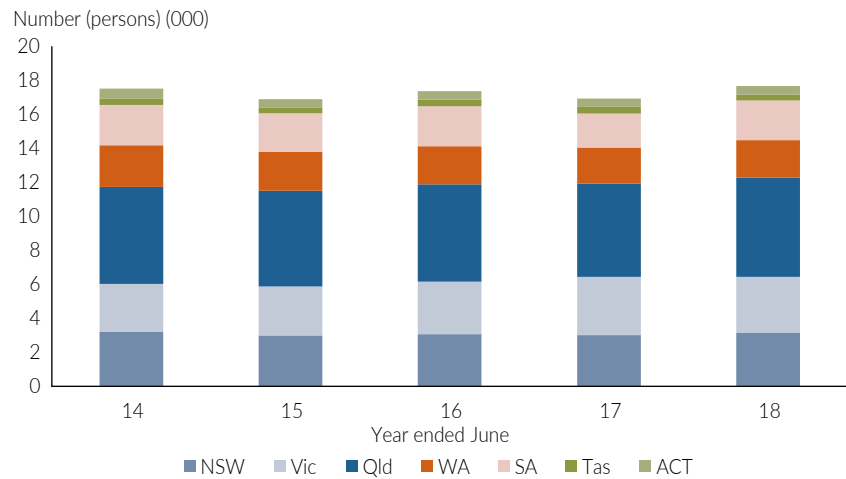
The number of people arriving in the Territory from interstate declined by 1.7 per cent to 13 856 persons in 2017-18. This was well below the 20-year average of 15 680 arrivals and largely reflects a decline in the number of people arriving from Western Australia and Queensland, as well as South Australia (Chart 4.4). Over the same period, the number of departures interstate increased by 4.3 per cent to 17 687, above the long-term average (Chart 4.5). The increase in departures reflects people leaving for states that were previously experiencing a decline in arrivals, most likely due to improving economic conditions in those states. In contrast to the worsening levels of migration from Western Australia, Queensland and South Australia, the Territory's net position improved in terms of migration from Victoria in 2017-18.

Chart 4.4: Number of interstate arrivals in the Territory



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

Chart 4.5: Number of interstate departures from the Territory



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

Overseas migration

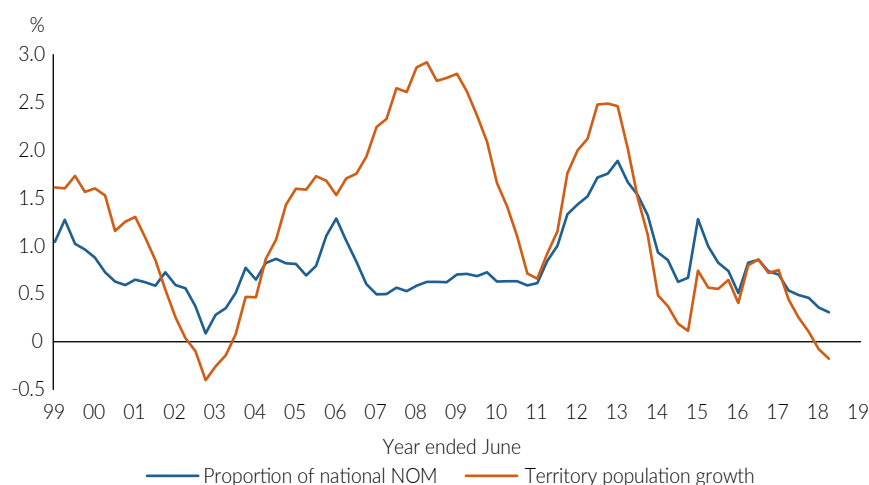
In 2017-18 NOM added 846 people to the Territory’s population, almost 1000 persons fewer than the previous year, and well below the 20-year average of 1500 persons. The decline in NOM in the year reflects a sharp fall in the number of arrivals, mostly men aged 20 to 34, but also females in that age group. This was partly offset by a fall in the number of departures by men aged 20 to 34.

The Territory’s share of NOM at a national level has been declining over recent years, down from a peak of 1.3 per cent of national NOM in 2014-15, to just 0.4 per cent in 2017-18. While NOM is still a positive contributor to the Territory’s population, its declining contribution is a factor in the Territory’s recent slowing population growth.

The Territory Government has recently signed a new Designated Area Migration Agreement with the Commonwealth, replacing the previous agreement. These agreements are aimed at encouraging more migrants to move to regional areas, rather than major cities. The Commonwealth has released a new ‘Plan for Australia’s Future Population’ that includes a strategy to reduce the total migration cap but also redirect some migrants away from the cities towards regional areas. As a region seeking to increase its population growth, this strategy could benefit the Territory. The Territory remains keenly interested in any changes to the Commonwealth’s migration settings, targets and policies, with the population dynamics in regional and northern Australia in stark contrast to the dynamics in Australia’s largest states and cities, particularly on the eastern seaboard. However, the plan in its

present form has a broad definition of regional that includes large cities, such as Geelong and the Gold Coast, located close to major capital cities. Therefore the benefit of this plan for the Territory is not yet clear.

Chart 4.6: Territory NOM as a proportion of Australian NOM and annual change in Territory population



NOM: Net overseas migration

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

Regional population

Growth patterns across the Territory can be broadly split between greater Darwin and the rest of the Territory, with the former generally outperforming the latter. In 2017-18 the population of greater Darwin decreased by 0.2 per cent, the first decline since 2002-03. This was also the first time in over 15 years the rest of the Territory's overall population growth outperformed greater Darwin, increasing by 0.2 per cent. This is in contrast to the general trend across the nation of major cities outperforming regions in terms of population growth, and is likely to be short term in nature as it reflects a single, large scale event.

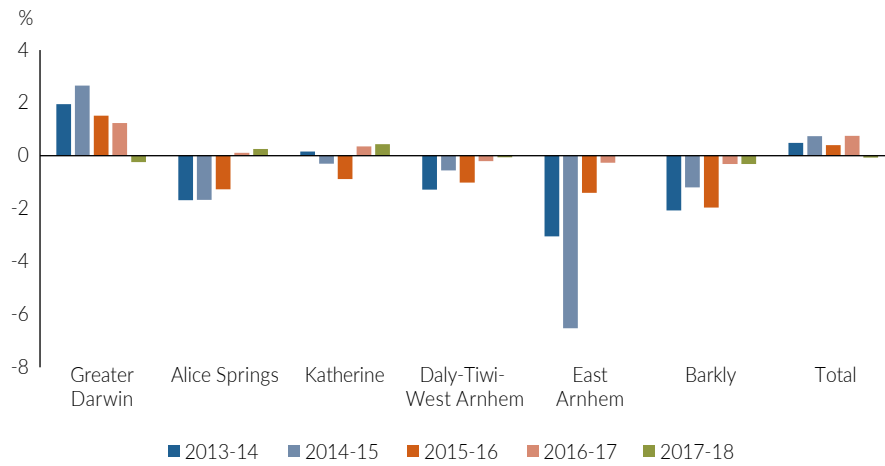
In 2017-18, the population of Darwin decreased by 1.5 per cent, by far the largest decline of the Territory's towns and cities, and reflective of the majority of the Territory's NIM outflows leaving from the city. Partly offsetting the decline in Darwin, Palmerston (up 2.6 per cent) and Katherine (up 0.5 per cent) both reported population growth in 2017-18. Over the short term, it is expected these trends will continue, with the large outflow of interstate migrants forecast at the Territory level over 2018 and 2019 anticipated to come mostly from Darwin, as well as from workers' camps located in the Litchfield area. It is expected Darwin's population will return to growth over the medium term as migration levels improve.

The population of Alice Springs increased by 0.3 per cent. This followed an increase of 0.1 per cent the previous year, indicating there may be a stabilisation in population growth in the region, following declines over the preceding three years. Over the medium term, population growth in Alice Springs could be supported by increasing production by and service provision for the mining industry, including potential new mines in the region as well as potential tourism and cultural developments.

The population in East Arnhem was stable in 2017-18, following four consecutive years of decline due to the closure of the Gove alumina refinery, which led to the population of Nhulunbuy falling from 4520 in 2011-12 to 3274 in 2017-18. The end to the declines from the refinery closure and associated loss of businesses, coupled with ongoing strength in the mining industry in the region, suggests the population will be stable, if not returning to growth over the near to medium term.

The population declined in Barkly (down 0.3 per cent) and Daly-Tiwi-West Arnhem (down 0.1 per cent) in 2017-18, slower than the five-year average rate of decline of 1.2 per cent and 0.6 per cent, respectively. The potential development of a mining services hub in Tennant Creek, continued strengthening of the gold industry across the two regions as well as works related to unconventional gas in the region, could help support a return to growth.

Chart 4.7 Territory regional annual ERP change



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

Long-term population projections

The Northern Territory population projections are calculations of the future size and characteristics of the Territory population and have been developed to assist Territory Government agencies, non-government organisations and businesses to plan service delivery across the Territory.

DTF has developed projections for the Territory's resident population to the year 2046, disaggregated by age, sex and Aboriginal status. The projections are based on ABS' 2016 Census final estimated resident population numbers at 30 June 2016. Supplementary regional population projections have also been developed.

Population projections should be used with a clear understanding of the underlying assumptions and limitations, as they are compiled by applying mathematical models and assumptions of likely population trends (current and historical) to the base population. Projections provide information about how a population may change over the long term, subject to assumed changes in key parameters. They are not intended to be accurate short-term forecasts. Projections are also not targets, nor do they necessarily reflect the effects of current or future policies.

Key characteristics of the Territory's population projections include:

- growing from 245 678 in 2016 to 351 607 in 2046, assuming an annual growth rate of 1.2 per cent. This includes growing at an annual rate of 0.5 per cent over 2016-21, modelling the Territory's currently weak population growth, before slowly increasing to reach an annual growth rate of 1.4 per cent from 2026-31
- Aboriginal population growing from 74 546 in 2016 to 104 387 in 2046, at an annual growth rate of 1.1 per cent, and the Territory's non-Aboriginal population growing from 171 132 in 2016 to 247 220 in 2046, an annual growth rate of 1.2 per cent
- regional projections have also been developed for the Territory's nine main regions for the period 2016 to 2036
- greater Darwin (consisting of Darwin city, Darwin suburbs, Litchfield and Palmerston) growing from 147 102 in 2016 to 195 663 in 2036, at an annual growth rate of 1.4 per cent
- the rest of the Territory growing from 98 576 in 2016 to 109 201 in 2036, an annual growth rate of 0.5 per cent
- across all Territory regions, Palmerston is projected to grow the fastest at 2.4 per cent annually over 2016 to 2036. Barkly is the only region projected to decline, at an annual rate of 0.2 per cent.

Chapter 5

Labour market

Recent activity

In 2017-18, the Territory's labour market was characterised by declining workforce demand associated with the Ichthys LNG project moving into its commissioning phase. In the year, the Territory's labour force consisted of 143 184 people.

Outlook

Employment levels are expected to continue to contract through to the end of 2018-19, following the demobilisation of the Ichthys LNG project construction workforce. While growth is forecast from 2020-21, it remains subdued due to softer economic conditions.

In response, the unemployment rate is expected to increase before labour market conditions begin to improve in the outer years of the forward estimates.

Labour market statistics are based on data collected in the monthly labour force survey and reported by the ABS. The Territory has proportionately more households surveyed each month compared to other states. However, due to the relatively small population of the Territory, the labour market estimates are subject to relatively high standard errors resulting in significant levels of volatility and data revisions. For this reason the ABS recommends using trend estimates, which better address the volatility in monthly data.

The monthly labour force survey measures the labour market status of civilians aged 15 years and over who are residents in the Territory. People are considered employed in the Territory if they work for one hour or more in a week and unemployed if not working but are actively looking for work and available to start work. The labour force participation rate measures the proportion of the civilian population aged 15 years and over, either employed or unemployed.

The ABS labour force survey reports on the employment of Australian workers in the jurisdiction based on usual place of residence rather than place of employment. Therefore, the survey does not record FIFO workers who report their state of usual residence outside the Territory. Similarly, permanent or temporary overseas workers will be classified as employed only if they identify themselves as a resident of the Territory. For these reasons, particularly in recent years with strong employment related to the Ichthys LNG project, the official ABS employment statistics likely under-reported the actual numbers of people working in the Territory.

Permanent defence force personnel are also excluded from the survey, another reason the ABS labour force survey does not accurately capture actual persons employed in the Territory. According to the 2016 Census and the latest Australian Defence Force data, there were about 8700 FIFO workers (at June 2016) and 4397 permanent defence force members (at June 2018) in the Territory. The relative proportion of FIFO workers and defence force personnel present in the Territory is higher compared to most jurisdictions, meaning the ABS labour force survey under-reports persons employed in the Territory to a greater extent than elsewhere in Australia. This reflects the unique structure of the Territory economy, with relatively higher reliance on the resources industry and defence.

For the latest data on the Territory's labour market, including up-to-date activity for employment, unemployment and participation, refer to the [Territory Economy](#) website.

Outlook

Table 5.1: Territory labour market forecasts (%)

	2017-18a	2018-19e	2019-20f	2020-21f	2021-22f	2022-23f
Employment ¹	- 1.2	- 1.6	0.0	0.7	0.9	1.0
Unemployment rate ²	4.2	4.7	4.6	4.5	4.5	4.4

a: actual; e: estimate; f: forecast

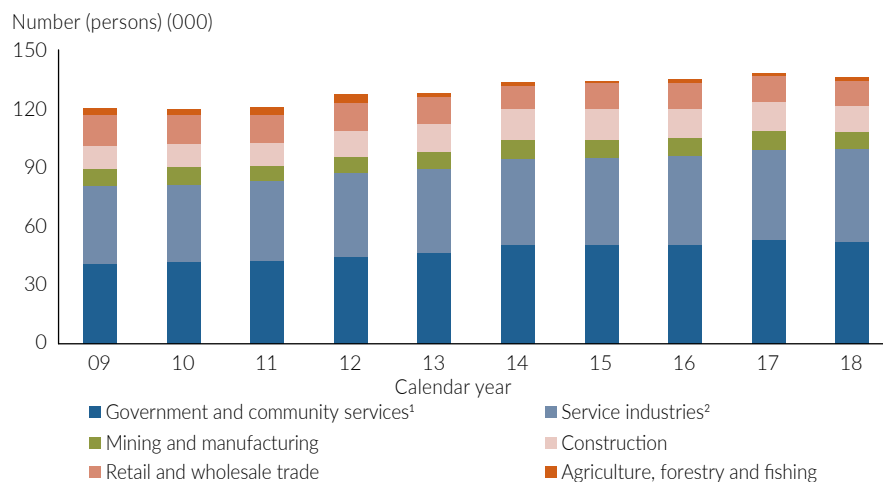
1 Year-on-year change in resident civilian employment.

2 Annual average.

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

As the largest construction project in the Territory's history, the Ichthys LNG project has been a dominant influence on the Territory's labour market. While the Ichthys FIFO workforce is not captured in the Territory's official employment statistics, the general economic expansion on the back of the Ichthys LNG project during 2011-12 through to 2016-17 resulted in strong employment growth (up 15 542 jobs) over a broad range of industries, including construction, retail, and professional and technical services (Chart 5.1). However, as the employment-intensive construction phase of the project has wound down, so too has the broader expansion across other industries in the Territory economy.

Chart 5.1: Territory employment by industry



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

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

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

In 2017-18, the Territory's resident employment declined by 1.2 per cent to an average of 137 190 employed persons, compared to growth of 3.1 per cent in the previous year. Since then, total employment has continued a negative trajectory, falling by 1.3 per cent in the year to March 2019 to an average of 135 395 employed residents in the Territory. This was primarily driven by a 6.5 per cent decrease in part-time employment, whereas full-time employment was relatively stable (up 0.1 per cent).

The smaller workforce requirement associated with the Ichthys LNG project's operational phase, combined with subdued economic conditions, constrained consumer spending and low wages growth, has resulted in several retailers and business owners ceasing operations across the greater Darwin region throughout 2018-19.

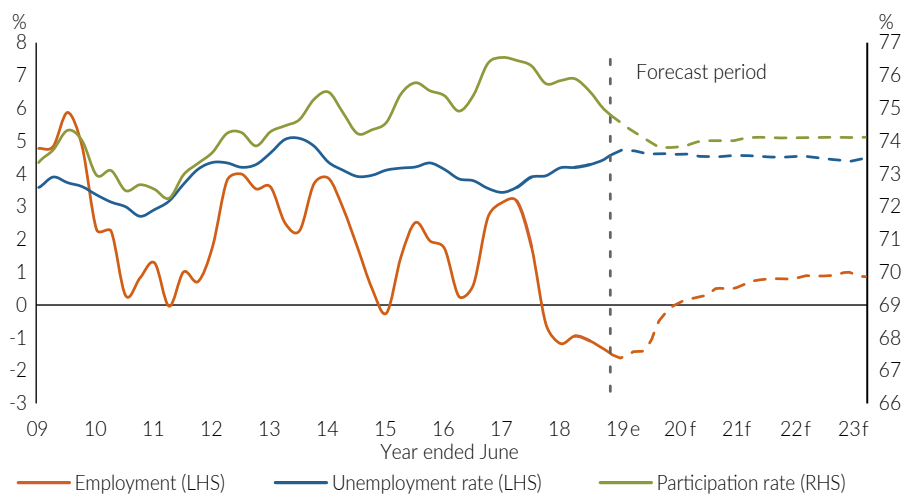
In 2018, more than half of the Territory's industries reported a decline in employment. More recent data shows worsening conditions, with the largest detractors from total employment being mining and manufacturing (down 19.0 per cent), construction (down 14.9 per cent), and retail and wholesale trade (down 4.2 per cent).

Given these developments, the short-term outlook for Territory employment is expected to be constrained, realising a further low point in 2018-19 following the unprecedented impacts of the Ichthys LNG project, as well as the current underlying economic conditions. Employment is forecast to decline by 1.6 per cent in 2018-19, while the Territory's unemployment rate peaks to an average 4.7 per cent over the same year (Chart 5.2).

A large portion of workers who become unemployed and unsuccessful in securing other employment are expected to move interstate for employment opportunities or, if they have not already, return to their usual place of residence by the end of 2019. This assumption is consistent with data that reports the key reason people move to and from the Territory is employment. However, the outflow of workers from the Territory's labour force is expected to limit the impact on the unemployment rate over the outlook period.

This propensity for Territory residents to relocate to other parts of Australia reflects the comparatively young age profile of the Territory's workforce and confirms employment is often a key motivator for people to move to the Territory, whereas unemployment is usually a key reason for people to leave. This traditional trend is expected to continue over the outlook period. As a consequence of the current and expected continuation of low economic activity and population change, the participation rate is also expected to be subdued over the Territory's outlook. Despite this weak trend, the participation rate is expected to remain the highest across all jurisdictions, reflecting the characteristics of the Territory's workforce.

Chart 5.2: Territory labour market conditions¹



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

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

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

Territory employment growth is expected to average 0.2 per cent per annum over the next five years, well below the long-term trend of 2.1 per cent, while the unemployment rate averages 4.5 per cent over the same period. The key drivers of future employment are spread across multiple sectors, which are considered in the following section.

Job creation

A key priority for the Territory Government is to help sustain long-term growth and employment opportunities in the Territory economy. The Territory Government's Infrastructure Strategy and 10-year Infrastructure Plan 2018–2027 provides a roadmap for individuals and businesses, and identifies opportunities for economic and employment growth over the long-term outlook. Furthermore, the Territory Government has developed a Population Growth Strategy and Action Plan that outlines various incentives aimed at attracting and retaining early career women, late career workers and migrant workers to high priority jobs. The goal of these incentives and other incentives designed for businesses to employ local Territorians over FIFO workers, is to increase the Territory's population over the longer term, which has flow-on effects to the local labour market. A long-term goal for the Territory is to achieve a self-sustaining population level, whereby the impacts on population and the economy from single projects are not so pronounced.

The second Designated Area Migration Agreement between the Territory and Commonwealth governments permits Territory employers to sponsor skilled and semi-skilled overseas workers to address labour market shortages across 117 occupations. While current challenging economic conditions and moderating levels of activity means there is currently minimal labour shortage in the workforce, the agreement has the potential to support employment as well as population growth, providing the opportunity for migrants to achieve Australian permanent residency after three years of working in the Territory.

The Territory Government continues to promote public sector employment opportunities for Aboriginal people living in the Territory through its Indigenous Employment and Career Development Strategy, with an aim to achieve 16 per cent public sector employment of Aboriginal people and 10 per cent Aboriginal participation in senior and executive roles by 2020. The Aboriginal Employment Program was established in effect to support whole of government initiatives for Aboriginal people who wish to expand their experience, re-enter the workplace, earn a qualification or build a career within the public sector. In turn, this will benefit the local communities as well as the labour market.

Territory Government infrastructure program of \$1.45 billion in 2019-20 is expected to contribute to economic growth and support employment across the Territory's regions. Continued government investment in remote communities and regional development initiatives will also support employment in the remote regions of the Territory. This includes the Commonwealth's investment of up to \$500 million on upgrades to priority Territory freight routes as part of a \$3.5 billion Roads of Strategic Importance initiative, which will result in infrastructure activity on roads in the regions including Alice Springs to Darwin, Newman to Katherine, Alice Springs to Halls Creek, Tennant Creek to Townsville and Adelaide River to Wadeye. The Territory Government's ongoing efforts on public housing and remote Aboriginal housing, and infrastructure programs is further expected to support employment for construction workers across the regions over the outlook period. In addition, the Commonwealth has committed \$550 million for remote Territory housing, which is also likely to support jobs over the five-year forecast period.

The Territory Government has fast-tracked several new construction projects valued at \$125.6 million, which are expected to create around 500 direct and indirect jobs over 2018-19 and 2019-20, aimed at supporting construction-related jobs during the economic downturn. Furthermore, the Territory Government is establishing an \$89 million Local Jobs Fund, to accelerate major and significant projects in the Territory, aimed at supporting economic transformation projects to help grow local businesses and increase exports of goods and services both interstate and internationally, creating new job opportunities and contributing to GSP.

Over the outlook, the Commonwealth's NAIF is also expected to provide support to the local workforce through new private sector infrastructure investment. Over 2018-19, three project proposals were approved in the Territory, with a total NAIF investment of up to \$184.7 million. These include new construction activity and upgrades to infrastructure for Humpty Doo Barramundi, Voyages Indigenous Tourism and Northern Territory Airports. The largest loan approved by the NAIF to date is for up to \$150 million to the Northern Territory Airports project, which will fund infrastructure works as part of the \$300 million expansion package across airport sites in Darwin, Tennant Creek and Alice Springs. This project is estimated to support 1000 jobs in the construction phase, 500 indirect jobs and 140 new ongoing positions, creating growth opportunities for tourism, agriculture and aquaculture sectors, and supply chains. The proponents have committed to a 10 per cent Aboriginal employment target through the project's Indigenous Engagement Strategy.

Following the commencement of production at the INPEX LNG plant in 2018-19, its operations are expected to support around 400 local jobs each year during its estimated forty years of production. This includes local employment opportunities and traineeships, with requirements to recruit applicants who have lived in the Territory in the last five years. In the retail building space, Casuarina Shopping Centre is undergoing an \$8.5 million upgrade over 2019, which will support a range of construction employment opportunities for local businesses and trades people to complete extensive renovations over the short-term outlook.

The current construction of the new Westin Darwin hotel is also expected to support more than 500 jobs and provide about 150 ongoing positions for locals. The Territory Government has committed \$17 million towards public infrastructure associated with the project in the Darwin CBD, which will create additional employment in the engineering and construction-related industries. The extension of the Turbocharging Tourism initiative (Turbo2) to 2020-21 is expected to support employment opportunities across multiple sectors including construction, tourism, hospitality, retail, arts and culture, and transport over the forward estimates.

Major private projects and government-facilitated projects contribute significantly to the Territory economy through the creation of jobs and business opportunities. The Territory's project pipeline includes many private investment opportunities that, if realised, could promote growth in the local construction and resources sectors over the outlook period. More detailed commentary is available in the Construction, and Mining and Energy sections of the [2019-20 Industry Outlook](#) online publication at budget.nt.gov.au.

An additional \$200 million as part of the City Deal project to revitalise the Darwin CBD, as well as a \$20 million funding commitment toward revitalisation works in the Alice Springs CBD, will further support construction jobs through new and upgrades to existing infrastructure. Major infrastructure investment is proposed towards a new Darwin CBD Charles Darwin University campus and civic precinct, to support the targeted growth of international student numbers, a key contributor to the Territory's economy. In addition to construction-related jobs, this will deliver new career opportunities in the educational and training, professional, accommodation and hospitality industries over the medium to long term. Part of the Darwin City Deal includes \$44 million towards the redevelopment of State Square, which is currently supporting construction jobs through a new multi-level carpark structure and landscaped park. There is further potential for the development of a new art gallery near State Square that, if realised, will create and support new construction and ongoing operational jobs in the Darwin region. The new Barkly Regional Deal involving a 10-year commitment of \$78.4 million between the Territory government, Commonwealth and Barkly regional council, is also expected to support employment and economic activity through the delivery of economic and social initiatives.

Resource-based projects also have the potential to provide a significant boost in employment to the Territory's construction, resources, and operational workforce over the forward estimates. Lifting the moratorium on unconventional gas extraction will likely benefit the Territory labour market, from onshore gas exploration to development opportunities over the medium term. Furthermore there is potential for a new downstream gas processing industry and manufacturing hub in Darwin that could deliver broader benefits than LNG alone to the national economy. Incremental ongoing employment has been estimated at 50 to 550 jobs, depending on the industry, and would be higher during the construction stage. There are several planned and potential projects in the pipeline that can generate new employment opportunities, with three large mines based in the Central Australian region receiving environmental approvals in the last year. For more information, refer to the Mining and Energy section in the online [2019-20 Industry Outlook](#) publication.

The Commonwealth and Territory Government's masterplan to redevelop Jabiru and the Kakadu National Park through new tourism and infrastructure projects is expected to support around 1750 construction jobs in the Territory, with around 180 to be in Jabiru. Once in operation, the redeveloped region is expected to create around 126 ongoing positions, strongly supporting regional employment.

The defence industry will also play a significant role in terms of investment and job creation in the Territory with the \$20 billion infrastructure investment planned over 20 years. Refer to the Defence section in the online [2019-20 Industry Outlook](#) publication for more information on both confirmed and proposed major defence projects expected to support local jobs over the outlook period.

The residential market is also expected to help retain and support new construction workers, providing the opportunity to residents to continue to work and live in the Territory. The ongoing public housing stimulus programs as well as the Territory Government home owner incentives are likely to attract a higher demand for housing and stimulate new local construction jobs over the medium-term outlook. The new \$12 million BuildBonus incentive provides construction grants valued at \$20 000 to the first 600 people who build a new home in the Territory, including locals who currently own a home. This is expected to provide a timely stimulus for construction workers in the midst of the economic downturn. For more information, refer to the Residential Property Market chapter.

Although many of the above described projects are in initial approval and planning phases, the Territory's significant pipeline of projects presents the potential to generate new employment and economic activity, which should provide confidence to people, industries and businesses across the Territory's regions. While none of the individual projects come close to the scale of the Ichthys LNG project, collectively they represent economic growth opportunities and ongoing employment.

Chapter 6

Prices and wages

Recent activity

Growth in the Darwin CPI remains below the long-term trend, with the few inflationary drivers being fuel, alcohol and tobacco prices.

Territory wage growth is at comparatively low levels, reflecting moderate increases in both private and public sector wages and generally soft labour market conditions.

Outlook

The prevailing conditions over the last few years are expected to continue for the Darwin CPI over five years to 2022-23. The drivers of CPI in 2018-19 include the effects of adverse weather conditions, horticultural disease, world oil prices and Commonwealth excise taxes.

While the Territory's WPI is anticipated to strengthen in 2018-19, it is below trend rates, largely due to the continuation of soft economic and labour market conditions over the last few years.

Inflation is a key economic indicator that measures the change in the general level of consumer prices over a given period of time. It reflects supply and demand pressures in key markets such as housing, food products, fuel and utilities. Given the current soft and moderating economic and labour market conditions in the Territory, it is estimated inflationary pressures will remain low, with the exception of one-off policy-driven impacts or international factors influencing world oil prices.

The ABS measures inflation in the economy through changes in the price of a representative basket of goods and services in each Australian capital city. The capital city of Darwin for the ABS CPI measure includes Darwin central business district, Darwin suburbs, Lichfield and Palmerston. The basket comprises 11 groups of goods and services, and weightings as outlined in Table 6.2.

The ABS WPI measures the influence of market factors on the price employers pay for a standard unit of labour. To establish a standard unit of labour for the index, the ABS holds quantity and quality of labour services constant by excluding changes in composition of the labour force, hours worked and changes in characteristics of employees (such as productivity) from the index.

For the latest data on Territory prices and wages refer to the [Territory Economy](#) website.

Outlook

Table 6.1: Forecasts of the Darwin CPI and Territory WPI (%)

Financial year	2017-18a	2018-19e	2019-20f	2020-21f	2021-22f	2022-23f
CPI	1.0	1.5	1.6	2.0	2.2	2.2
WPI	1.3	1.8	1.5	1.5	1.6	1.8
Calendar year	2018a	2019e	2020f	2021f	2022f	2023f
CPI	1.2	1.5	1.8	2.1	2.2	2.3

CPI: consumer price index; WPI: wage price index; a: actual; e: estimate; f: forecast

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

Each group in the CPI basket is given a weighting depending on its relative importance to household expenditure. To determine the index, the price change in each group is combined according to its weighting. ABS has introduced the 17th series of weighting patterns of the CPI series to incorporate results from the 2015-16 Household Expenditure Survey (HES). From 2018, the ABS is re-weighting the CPI each December quarter based on household final consumption expenditure data available from the National Accounts to update weights for the years between the HES. Housing, which comprises rent, house purchase, utilities and other housing costs, has the largest weighting in the index and accounts for nearly a quarter of the Darwin CPI basket. The food and non-alcoholic beverages category is the second largest, accounting for around a further 16.46 per cent of the Darwin CPI basket (Table 6.2).

Table 6.2: Darwin CPI basket groups and weights

CPI basket group	Examples of basket items	Darwin CPI weightings December 2018
Housing	Rents, new dwelling purchase, maintenance and repair of dwellings, and utilities	22.42
Food and non-alcoholic beverages	Purchases associated with bread and cereal products, meat, seafood, dairy, fruit and vegetables, tea, coffee, juice, restaurant meals and takeaway	16.46
Recreation and culture	Costs for audio, visual and computing equipment, newspapers, books, stationery, holiday travel and accommodation, sports equipment, gaming and hobby materials, and services for animals	13.16
Alcohol and tobacco	Spirits, wine, beer, cigarettes, cigars and tobacco	10.35
Transportation	Payments associated with purchasing and hiring of vehicles, fuel, repairs of vehicles, maintenance of vehicles and public transport	10.16
Furnishings, household equipment and services	Furniture, linen, household appliances and utensils, cleaning products, child care and hairdressing	9.19
Financial and insurance services	Insurance fees, deposit and loan facilities (direct charges), and other financial services	5.30
Health	Payments associated with medications, treatments, therapeutic equipment, and medical, dental and hospital services	4.75
Communication	Payments for delivery of mail and parcels, and purchases, repair and services of telephones and internet connections	2.87
Education	Fees related to preschool, primary and secondary education, and tertiary education	2.67
Clothing and footwear	Garments for adults and children, shoes, accessories, dry cleaning, shoe repairs and tailoring	2.63

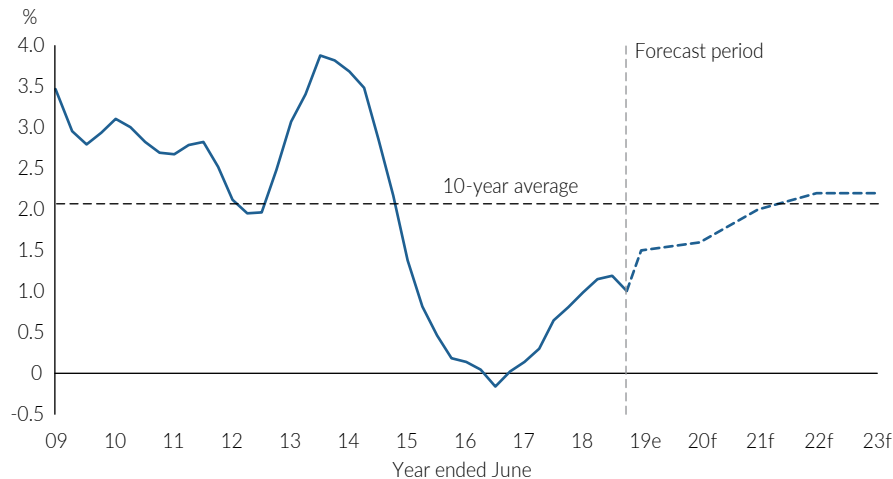
CPI: consumer price index

Source: ABS, *Consumer Price Index, Australia*, Cat. No. 6401.0

Darwin CPI growth has been modest, averaging 0.7 per cent per annum over the past four years. Detractors from price growth over this period have been food and non-alcoholic beverages, clothing and footwear, recreation and culture, communication and, in more recent times, housing. In the year to the March quarter 2019, prices in the housing category continued to detract from Darwin CPI growth, declining by 1.3 per cent, mainly driven by declines in rents (down 4.8 per cent). Other minor detractors from Darwin CPI include communication; furnishings, household equipment and services; and clothing and footwear prices, which declined by 4.6 per cent, 1.6 per cent and 0.8 per cent, respectively.

In 2018-19, the Darwin CPI is estimated to grow by 1.5 per cent, below long-term trends (Chart 6.1). There are estimated to be broad-based increases across most categories, with the exception of housing, communication, and clothing and footwear. Many of the categories contributing to CPI growth are anticipated to increase similar to long-term trends, with adverse weather conditions leading to one-off effects on the food and non-alcoholic beverages category.

Chart 6.1: Darwin CPI, financial year-on-year percentage change



CPI: consumer price index; e: estimate; f: forecast

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

The alcohol and tobacco category is likely to be the strongest contributor to price growth in the Territory in 2018-19, with the regular implementation of Commonwealth indexation of both the tobacco and alcohol excise tax. In recent years, the alcohol and tobacco category has been the strongest driver in the Darwin CPI. The downward pressure in the 2018-19 Darwin CPI will mainly come from the housing category, in particular, rent and its effect is expected to continue throughout 2019.

In 2018-19, growth in the category of food and non-alcoholic beverages is expected to come from a number of sources. Milk prices are expected to increase, with Woolworths increasing the price of milk by 10 cents per litre in February 2019 and Coles following in March 2019, ending the heavy discounting in milk prices seen in recent years. The severe flooding in Queensland in February 2019 damaged crops, caused substantial livestock losses and closed roads, which made it difficult for farmers to get their produce to market. The combination of events puts upwards pressure on a range of agricultural prices.

World oil demand is expected to grow over the forecast period, with a significant proportion of the demand from developing countries. Growth in world oil supply over the period is expected to be from the US, with lesser growth from Brazil and Canada. World oil prices are expected to be more stable over the outlook period with the 'Declaration of Cooperation,' a coordinated effort by OPEC and the non-OPEC countries to stabilise the global oil market through voluntary production adjustments. Fuel prices have started to trend downwards from the high prices experienced in 2018 with the monthly average unleaded petrol price in Darwin averaging 135.8 cents per litre (cpl) in March 2019, 12.5 cpl lower than in March 2018. The addition of the new fuel retail site in Palmerston, scheduled to be completed in July 2019, is expected to increase competition and place further downward pressure on fuel prices. Consequently, fuel is unlikely to have the same contribution to the Darwin CPI over the outlook period compared to 2017-18.

Over the forecast period, growth in the Darwin CPI is anticipated to continue to be modest without any strong inflation drivers and remain in the lower range of the RBA’s target band of 2 to 3 per cent at the end of the forecast period. Continued low wage growth is also expected to dampen spending and consumer demand for goods and services. Low growth in population is expected to further suppress consumer demand and property prices, and therefore inflation, over the outlook period.

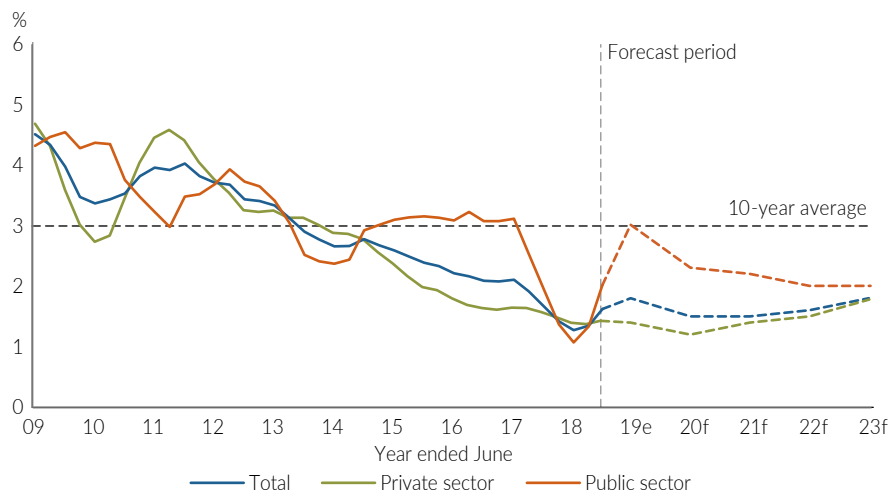
As the economy returns towards normal rates of growth over the forward estimates, Darwin CPI is expected to slowly trend upwards to 2.2 per cent in 2021-22 and 2022-23. This is a return to the 10-year average.

The RBA revised its national CPI forecasts down in the February 2019 Statement of Monetary Policy from 2 per cent to 1.25 per cent in 2018-19 and from 2.25 to 2 per cent in 2019-20. The downward revision was largely due to lower GDP growth profile and low growth in rents. The RBA notes that prices for utilities and items partly regulated (such as health, property rates and child care) or those mainly provided by the public sector may remain below average levels but it is unclear how households might respond to the shift in prices of these non-discretionary items.

Wages

In 2017-18, the Territory recorded a 1.3 per cent increase in WPI, the lowest rate on record and well below the 10-year average growth of 3.0 per cent. This was the result of record low growth in both the public and private sector. Public sector wages grew by 1.1 per cent in 2017-18, reflecting the delay by the Fair Work Commission in approving the 2017-21 Northern Territory Public Sector (NTPS) Enterprise Agreement. Private sector wages grew by 1.4 per cent in 2017-18. However, WPI growth has improved slightly, up 1.6 per cent in 2018, mainly driven by 2.0 per cent growth in public sector wages as enterprise agreements have been finalised (Chart 6.2). Private sector wage growth was below the 10-year average of 2.9 per cent, up 1.4 per cent in 2018. This low WPI growth is not limited to the Territory, with WPI growth also at low levels nationally (up 2.2 per cent in 2018, below the 10-year average of 2.9 per cent).

Chart 6.2: Year-on-year percentage change in the Territory WPI



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

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

In 2018-19, wages are estimated to grow by 1.8 per cent, which is largely driven by the public sector's enterprise bargaining cycle, in particular the delay in 2017-18 in approving the 2017-21 NTPS Enterprise Agreement. Private sector wage growth is estimated to grow modestly due to weaker economic conditions discouraging businesses from increasing wages. A factor contributing to moderate wage growth in the private sector in 2018-19 is the increase in the unemployment rate from an annual average of 3.9 per cent in 2017 to 4.3 per cent in 2018 and a forecast decline in employment in 2018-19. This increase in spare capacity in the Territory labour market places downward pressure on wage growth.

The outlook for employment over the forecast period is expected to remain modest, which will not put strong pressure on wage growth. Despite the slight improvement in full-time employment growth and the recent growth in part-time job creation now easing, any contributions to wage growth are likely to be minimal. Business sentiment is important for wage growth and the current economic conditions are not conducive to wage increases.

Chapter 7

Residential property market

Recent activity

Following a peak in new residential construction activity as well as prices and rents in 2013, the Top End housing market has weakened substantially over recent years. However, the residential property market is more resilient in Central Australia.

Outlook

The Territory property market faces a number of ongoing challenges over the near term, including declining demand for new and established dwellings, increasing vacancy rates, declining prices and rents, and an excess in supply of apartments, particularly in Darwin. However, the situation should begin to improve over the medium term as the economy and population are projected to begin to recover.

The residential property market encompasses buying or renting a home, constructing housing and developing new land. This chapter provides an outlook of the residential property market in the medium term by examining leading indicators and developments in the residential sector, including policy changes. This chapter also reflects on the Territory property market, set within the context of historical trends. Reporting of median prices and rents in this chapter are based on data from the Real Estate Institute of the Northern Territory (REINT) and the Real Estate Institute of Australia (REIA).

For the latest data on the Territory residential property market, refer to the [Territory Economy](#) website.

Outlook

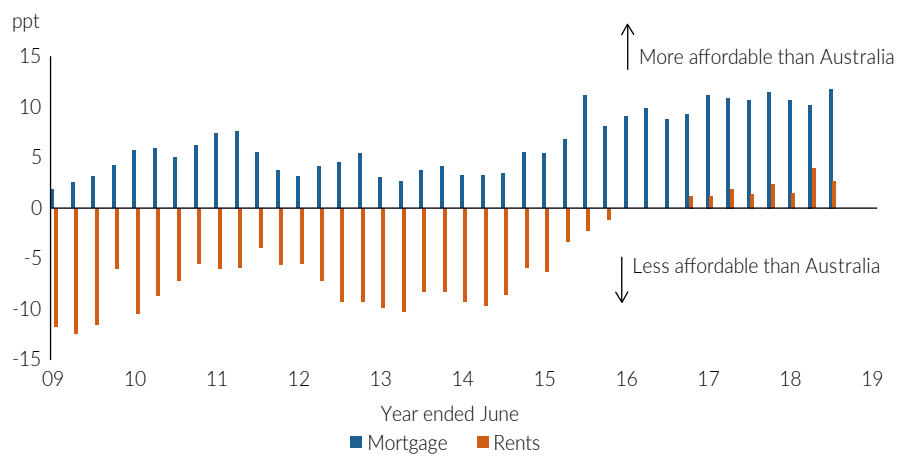
Key leading indicators, such as building approvals, housing finance commitments and building activity, suggest the outlook over the forward estimates period for the Territory residential property market as a whole remains weak. However, there are signs that some sectors are beginning to show improvement. Lower property prices have improved affordability in many areas and, partly as a result, the number of housing commitments by first home buyers has been increasing steadily. Unlike Darwin, which experienced a boom in prices over the 2012 to 2015 period, Alice Springs has seen steady growth and house and unit prices strengthened over 2018. Nevertheless, there are a number of challenges facing the Territory's housing market over the medium term. The Territory's population growth is expected to be weak over the near term, reducing demand for new housing. Higher than average vacancy rates are also likely to keep rental yields subdued.

The residential property market at the national level has been outperforming the Territory over the past few years, driven by strong growth in Sydney and Melbourne in particular, to the point where the median house price in Sydney was over \$1 million (compared to a national average of \$766 438 in the December quarter 2018). However, property prices have started to fall across much of the country, including along the Australian east coast. In Perth, prices have been declining for a number of years. The decline in house prices nationally is, in part, a reflection of tighter lending practices by banks following the Financial Services Royal Commission, which also recommended changes to the business model of mortgage brokers. Also, the effects of restrained wage growth and higher rents leading to reduced spending capacity of many potential home buyers are flowing through to lower house prices.

Northern Territory overview

The Territory’s housing market overall has seen a marked improvement in affordability over recent years. REIA and Adelaide Bank’s Home Loan Affordability Indicator reports that housing affordability in the Territory has improved from 36.8 at the end of 2013, at around the peak of the Territory’s most recent housing boom, to 49.0 at the end of 2018 (the higher the number, the more affordable). Average monthly loan repayments have fallen by over \$300 over the same period. Affordability for those in the rental market has also improved. At the end of 2013, Territory renters were paying on average just over a third of their income in rent. In 2018, this had fallen to 21.6 per cent. As reflected in Chart 7.1, after many years where Territory rents were more expensive than nationally, this has now corrected, with both house purchase and rental affordability better than the national average.

Chart 7.1: Difference between Australia and the Territory in the proportion of median income to meet loan repayments and rents

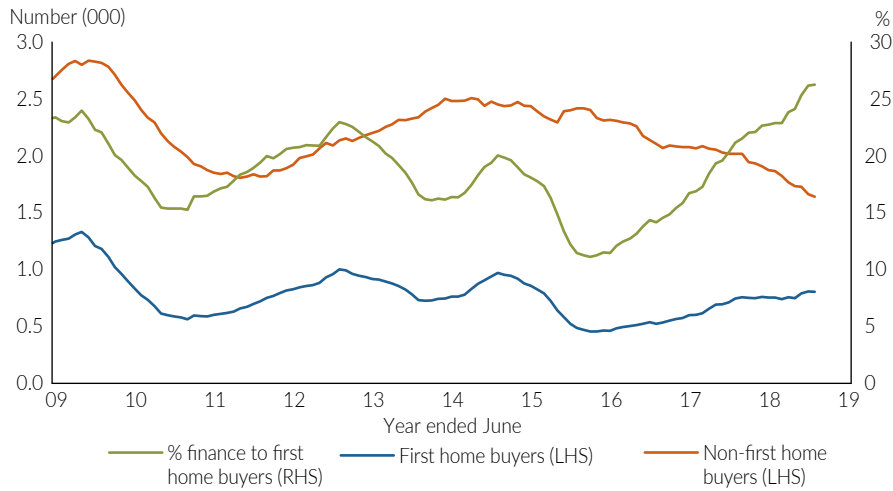


ppt: percentage point
 Source: Real Estate Institute of Australia and Adelaide Bank

This improvement in housing and rental affordability has been reflected in an improvement in the number of housing finance commitments by first home buyers, up by 13.3 per cent to 808 commitments in 2018 (Chart 7.2). This was above the 10-year average of 775 approvals per year to first home buyers. This significant improvement in housing affordability enhances the liveability of the Territory, and also means housing is no longer acting as a substantial deterrent to interstate residents moving to the Territory.

While lower house prices have helped improve affordability for first home buyers, housing finance commitments for non-first home buyers declined by 17.5 per cent to 1664 in 2018, well down on the 10-year average of 2186 commitments per annum. Three likely reasons for such a decline, in a period of falling house prices, is a decrease in investor-driven activity (see Chart 7.3), a decrease in resident population and an inability of those who bought at the peak of the market to afford to move. Housing finance for investment purposes is at the lowest level in over 15 years. In 2013-14 housing finance for investment housing exceeded finance for owner occupation. With the current historically low levels of investor activity, it is unlikely housing finance numbers will return to long-term averages over the near term.

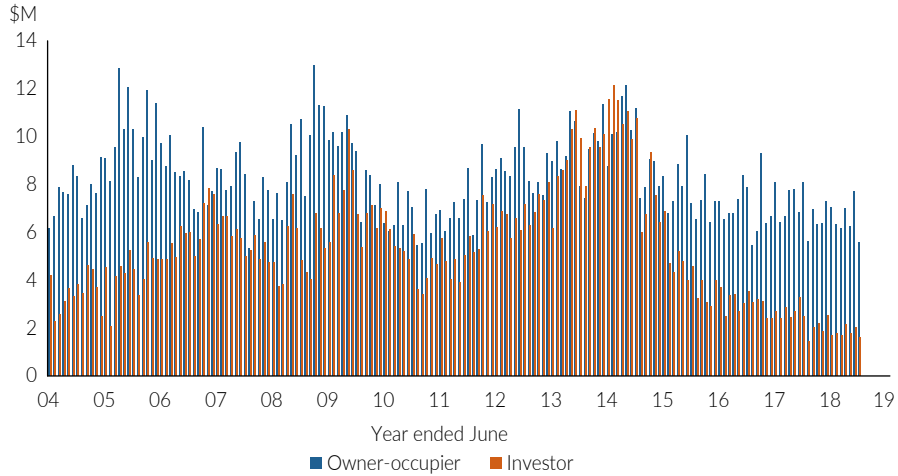
Chart 7.2: Number of housing finance commitments in the Territory



LHS: left hand side; RHS: right hand side
 Source: ABS, *Lending to Households and Businesses*, Cat. No. 5601.0

There are also likely to be ongoing constraints to home lending, especially related to investment properties, as banks tighten their lending criteria following changes by the banking regulators and increased public scrutiny over their lending practices. The continued contraction in housing finance approvals, albeit at a slower rate than over the past year, suggests property prices are not likely to see strong increases in the near future. The decline in housing finance (for non-first home buyers) is also consistent with the current population dynamic and large NIM outflows.

Chart 7.3: Value of housing finance commitments by purchase type



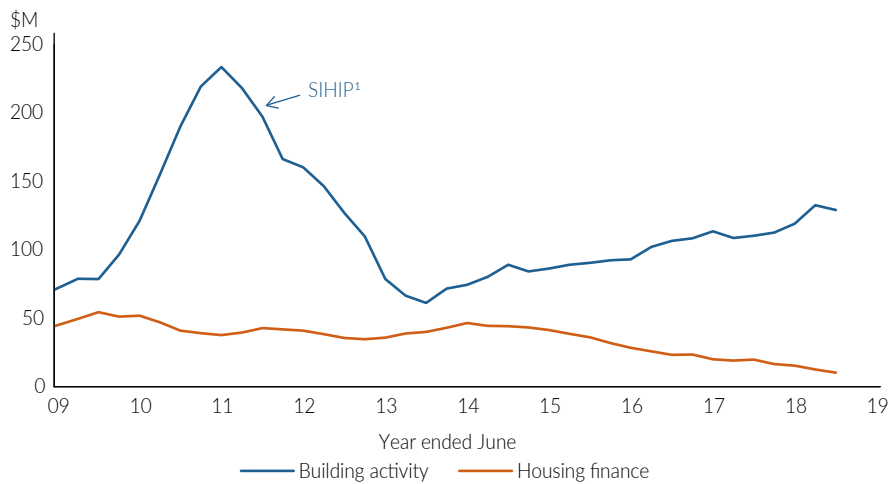
Source: ABS, *Lending to Households and Businesses*, Cat. No. 5601.0

In order to assist Territorians in buying a home, the government has launched a range of home owner incentives. Following the most recently announced incentives, from February 2019, a first home buyer in the Territory could access around \$50 000 in incentives, including the first home owner grant and discount, household goods grant (for the purchase of household goods for new homes) and the home renovation grant (for buyers of established dwellings). Some of the incentives, such as the \$20 000 BuildBonus grant, are not limited to first home buyers and aimed at providing a more general stimulus to the residential property market.

House prices may be continuing to decline but there has been an improvement in the number of new residential dwellings being constructed. In 2018, there were, on average, 951 properties (both houses and units) under construction, up from an annual average of 905 the previous year. This was still considerably lower than the 10-year average level of 1256 residential dwellings per year but may be an indicator of increasing activity in the housing market.

The rate of alterations and additions being completed in the Territory has also increased, likely indicating that those who cannot afford to relocate or are struggling to rent out their properties, are increasingly tending to renovate their properties. The total value of alterations and additions completed in the Territory increased by 16.4 per cent in 2018 and this trend seems likely to continue into 2019. Although overall alterations and additions are showing strength in the Territory’s property market, the value of housing finance commitments in this sector has been falling, which suggests the works are likely to be small in nature and funded through people’s savings or the home renovation grant offered to first home buyers (Chart 7.4).

Chart 7.4: Building work done and housing finance approvals for alterations and additions in the Territory



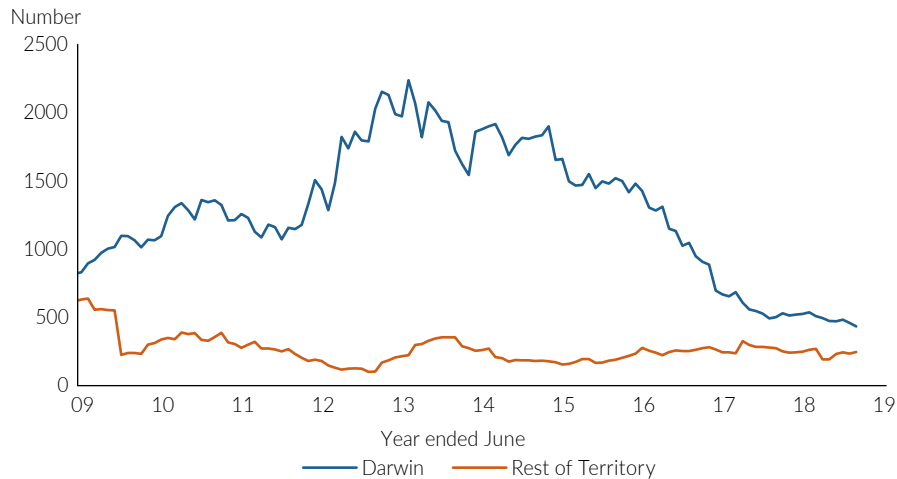
SIHIP: Strategic Indigenous Housing and Infrastructure Program
 1 The large spike in building activity in 2010-11 is related to public sector works on the SIHIP
 Source: ABS, *Building Activity*, Cat. No. 8752, *Lending to Households and Finance*, Cat. No. 5601.0

Darwin

The Darwin residential property market remains subdued, with 2018 median house prices in greater Darwin 19.1 per cent lower than five years ago, now just under \$500 000, compared to over \$600 000 in 2013. Inner Darwin has seen the largest falls in median house prices, declining more than \$200 000 (24.6 per cent) over the past five years. Unit prices in inner Darwin, where the supply of units has increased substantially over the past five years, have declined by 33.6 per cent. Median prices of the units have fallen from a peak of over \$565 000 in the March quarter 2015, to around \$355 000 in the December quarter 2018.

Construction activity in Darwin continues to be concentrated in the northern suburbs of Muirhead and Lee Point, as well as the recently released Northcrest development, at Berrimah in the south. As a result of this activity, approvals for dwelling construction in Darwin’s suburbs more than doubled in 2018 compared to 2017, to 153 approvals, with 73 of these in the Lyons area (which includes Muirhead and Lee Point) and a further 37 in Berrimah. In contrast, there were only 20 residential building approvals in Darwin city in 2018, well below the peak of 1080 approvals for the area recorded in the 12 months to April 2013.

Chart 7.5: Residential building approvals in the Territory

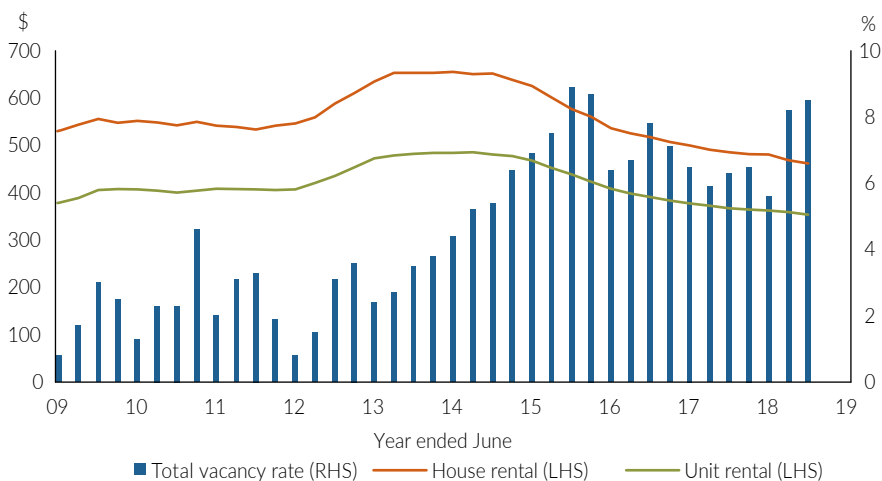


Source: ABS, *Building Approvals*, Cat. No. 8731.0

The rental market in Darwin has also continued to become more affordable. In December 2013 Australian Property Monitors reported that Darwin had the most expensive house and unit rental of any capital city, however by December 2018 Darwin had fallen to the third most expensive for house rent and the fourth for units (behind Sydney, Canberra and Melbourne). Over the same period, REINT reports average weekly house rents in Darwin overall have fallen by \$176 (27.7 per cent) while unit rents have fallen by \$146 (30.0 per cent). The decline in average rents has occurred across Darwin, with the biggest fall occurring in unit rents in inner Darwin, which has seen the largest increase in supply in recent years, down by \$189 (33.2 per cent) per week to an average of \$380 in December 2018.

Vacancy rates in Darwin remain well above the long-term average, with unit vacancies particularly high at 9.2 per cent, well above the 3.5 per cent reported five years ago. Demand for properties in the Darwin region is not expected to improve over the near term, as the completion of construction of the Ichthys LNG project in late 2018 and early 2019 has resulted in a large number of workers departing the region. Over the past few years, there has been a delay between an increase in vacancy rates and the fall in average rents (Chart 7.6), which could indicate average rents in Darwin could have further to fall before returning to growth. However, improved affordability and lower rents provide greater capacity for renters to save for a deposit to buy a home and could serve to stimulate Darwin’s housing market over the medium to long term.

Chart 7.6: Median rents and vacancy rates in Darwin



Source: Real Estate Institute of the Northern Territory

Land release in Darwin has slowed over the past year and is expected to remain at low rates of release in the near future, with the majority of blocks in Muirhead having been developed. The new subdivision of Northcrest, formerly part of Berrimah Farm, is currently under development, although demand appears to be low in the short term. As population and employment growth begin to pick up, it may drive an increase in demand for further land release in the Darwin area. As well as Northcrest, there are plans to release land at Muirhead North and Lee Point, near the suburb of Muirhead, which will help ensure an ongoing supply of land to meet future needs as the housing market improves.

Palmerston and rural

The population of Palmerston and Darwin's rural area has increased substantially over recent years. This has largely been a result of the development of new suburbs in Palmerston, as well as ongoing subdivisions in the Litchfield region. Construction of new dwellings, particularly in Palmerston, has been at very high levels until recently. The number of building approvals in Palmerston peaked in 2014 at 853 approvals. These were largely connected to the development of the new suburbs of Bellamack and Zuccoli, as well as work in Rosebery and Durack. Building approvals, and subsequently new house and unit development, in Palmerston have steadily declined since that time, down to 239 approvals in 2018. Despite the decline, Palmerston continues to expand, with continued land release in Zuccoli and Durack.

As with Darwin, house prices in Palmerston have fallen over the past five years, down from an average of \$540 000 in 2013 to \$447 000 in 2018 (17.2 per cent). Unit prices have also fallen, from \$414 000 to \$287 000 (30.7 per cent) over the same period. There has also been a fall in average rental prices in Palmerston, which have fallen by \$182 per week for houses and \$172 per week for units over the past five years. Falling prices and rents in Palmerston are reflective of the large increase in supply over recent years, as well as increasing vacancy rates, which have increased across all types of housing from an average of 4.5 per cent at the end of 2013, to 7.3 per cent at the end of 2018.

Building approvals in Litchfield are also well below the number five years ago, when there were large subdivisions occurring in Humpty Doo and Berry Springs. The decline in building approvals ended in 2017 and since that time have been reasonably steady in Litchfield, largely reflecting a return to longer-term levels of land availability. Further information on property prices, rents and vacancies is not available for the Litchfield area, however it would appear the market overall is reasonably stable.

Future work in Palmerston and the rural area would likely continue to be focused on expansion at Zuccoli. There is still the potential for further development at Durack Heights, however work there has slowed due to reduced demand.

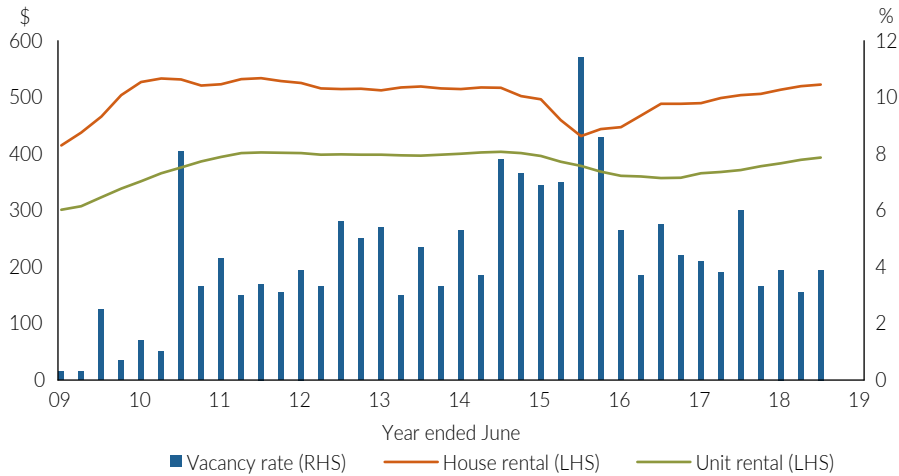
Alice Springs

Recent activity in the Alice Springs residential property market has been far more positive than activity in the Top End. Median house prices in Alice Springs increased by 1.6 per cent in annual terms by the end of 2018, to \$475 000. Unit prices, which are more volatile due to smaller stock levels than in Darwin and Palmerston, also increased to \$327 500 in December 2018, up from \$233 500 the previous year. Property prices in Alice Springs did not experience the same rapid increase as Darwin in 2012 and 2013, and as a result, the market has been more stable over recent years. Alice Springs has also not had the same level of population growth as the Top End, which has supported house price and rental stability in the town.

The Alice Springs rental market also continues to show strength. House rentals in Alice Springs increased by 2.0 per cent in December 2018 compared to the previous year, to an average of

\$520 per week. Over the same period, unit rentals in Alice Springs increased by 4.7 per cent to \$390 per week. Strength in unit rentals in particular reflects falling vacancy rates, which were down to 3.3 per cent. Vacancy rates for houses increased across 2018 but were still comparably low at 5.5 per cent (Chart 7.7).

Chart 7.7: Median rents and vacancy rates in Alice Springs



Source: Real Estate Institute of the Northern Territory

The outlook for the housing market in Alice Springs continues to be positive. Continued land release in Kilgariff is expected to support increased supply of new houses, and this is supported by a strong increase in building approvals in Alice Springs, which were up from 61 in 2017 to 149 in 2018.

Katherine

Due to lower stock and turnover than the larger cities, the housing market in Katherine can be more volatile than Darwin or Alice Springs. House prices in Katherine have declined in recent times, however not to the same extent as elsewhere in the Territory. The median house price in Katherine decreased from \$360 000 in December 2017 to \$312 000 in December 2018 (down 13.3 per cent). House rentals also declined over that period, down by \$20 per week (4.8 per cent) to an average of \$400. This decline is reflective of an increase in overall vacancy rates in Katherine, which grew to 5.3 per cent in December 2018. Data on unit prices and rentals is not currently available for Katherine.

The outlook for the housing market in Katherine appears to be quite positive. Although there was a decline in the number of building approvals for Katherine in 2018 (reflecting a large number of public sector approvals across the whole of the Katherine region), there is ongoing demand for housing in the town of Katherine, particularly in the Katherine East subdivision, supporting increased residential construction in the town.

Tennant Creek and elsewhere

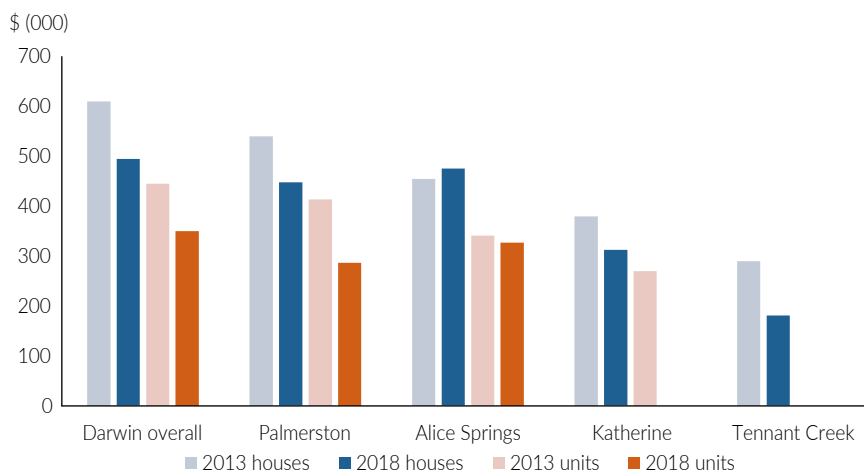
The residential property market in Tennant Creek has moderated recently, following a period of strong growth. The median house price of \$180 000 in December 2018 was \$110 000 below the median price five years previously. The previous strong rise and subsequent fall in property prices in Tennant Creek is partly reflective of restricted land availability in the town, which had constrained private housing construction. Large land releases, particularly around Peko Road, helped to increase supply, which in turn helped return property prices to more sustainable levels. Falling population in the region has also reduced demand for housing.

Over the coming years, it could be expected that the property market in Tennant Creek is likely to remain subdued, although demand may be stimulated by development of the region as a mining hub, providing support to resource-based activity in the region. While the number of residential building approvals in the region peaked at 41 in 2013, when property prices were at their peak, there were only 12 approvals in 2018.

There is very little information on private residential property in the more remote parts of the Territory. Based on the number of building approvals in 2018, it would appear there is likely to be a decline in private residential construction activity in the more remote areas of the Territory over the near term.

Public housing makes up a considerable portion of the housing stock in many remote communities. Over the past year, there has been a strong increase in the value of public sector residential construction work done, reflecting ongoing work to improve the quality and quantity of public housing stock in the Territory. Part of this increase reflects the Territory Government's 10-year, \$1.1 billion investment in improving housing in remote communities.

Chart 7.8: Median property prices in the Territory



1 Darwin overall encompasses Darwin city, Darwin suburbs and Palmerston.

Source: Real Estate Institute of the Northern Territory

Abbreviations and Acronyms

a	actual	OPEC	Organisation of the Petroleum Exporting Countries
ABS	Australian Bureau of Statistics	ppt	percentage point
ACT	Australian Capital Territory	Qld	Queensland
B	billion	RAAF	Royal Australian Air Force
Cat. No.	catalogue number	RBA	Reserve Bank of Australia
CBD	central business district	REIA	Real Estate Institute of Australia
CPI	consumer price index	REINT	Real Estate Institute of the Northern Territory
cpl	cents per litre	RHS	right-hand side
DTF	Department of Treasury and Finance	SA	South Australia
e	estimate	SAR	special administrative region
EDF	Economic Development Framework	SFD	state final demand
ERP	estimated resident population	SIHIP	Strategic Indigenous Housing and Infrastructure Partnership
EU	European Union	Tas	Tasmania
f	forecast	UK	United Kingdom
FIFO	fly-in fly-out	US	United States (of America)
FTA	Free trade agreements	Vic	Victoria
GDP	gross domestic product	WA	Western Australia
GEMCO	Groote Eylandt Mining Company	WPI	wage price index
GSP	gross state product		
GSP(E)	expenditure measure of gross state product		
HES	Household expenditure survey		
HMAS	Her Majesty's Australian Ship		
IMF	International Monetary Fund		
LHS	left-hand side		
LNG	liquefied natural gas		
M	million		
NAIF	Northern Australia Infrastructure Facility		
NIM	net interstate migration		
NOM	net overseas migration		
NSW	New South Wales		
NT	Northern Territory		
NTPS	Northern Territory Public Sector		
OECD	Organisation for Economic Co-operation and Development		

Glossary

Consumer price index

A general indicator of the prices paid by household consumers for a specific basket of goods and services in one period, relative to the cost of the same basket in a base period.

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 that 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.

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 is the sum of all income, namely, wages, salaries and profits, plus indirect taxes less subsidies. It can also 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.

Inflation adjusted (also known as chain volume)

Inflation-adjusted measures provide estimates of real changes by factoring in general changes 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.

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.

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 measured based on change of address information from Medicare.

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.

Participation rate

The proportion of the population over 15 years of age who are working or looking for work.

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 consumption includes all other public consumption.

Public investment

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. 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.

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

A measure of the change in the price of wage costs over time, unaffected by the change in the quality or quantity of work performed. It excludes non-wage costs such as superannuation, payroll tax and workers compensation.

