



# NORTHERN AUSTRALIA ECONOMIC UPDATE

NWQROC / September 2023

## ABOUT THIS PRESENTATION

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### Purpose of this Presentation

This presentation has been prepared in-kind by the AEC Group PTY LTD (AEC) for the Developing Northern Australia (DNA) Conference 2023.

The aim of this report is to provide a quantitative baseline for discussion at and beyond the DNA Conference, with the intention of focusing combined efforts by government, industry and community in areas of either most need and/or most opportunity.

### Measures of Success

There are multiple ways to measure the success of different strategies.

Typical measures include an assessment of:

- Performance – achievement of specified tasks
- Effectiveness – measured by achievement of targeted outcomes
- Impact – measurable change in the economy/community

This report seeks to assess the impact of the Northern Australia agenda since the release of the Our North, Our Future Whitepaper in 2015.

### Principles of Economic Growth

This report focuses on identifying the key drivers of economic growth (measured in Gross Domestic/Regional Product – GDP/ GRP).

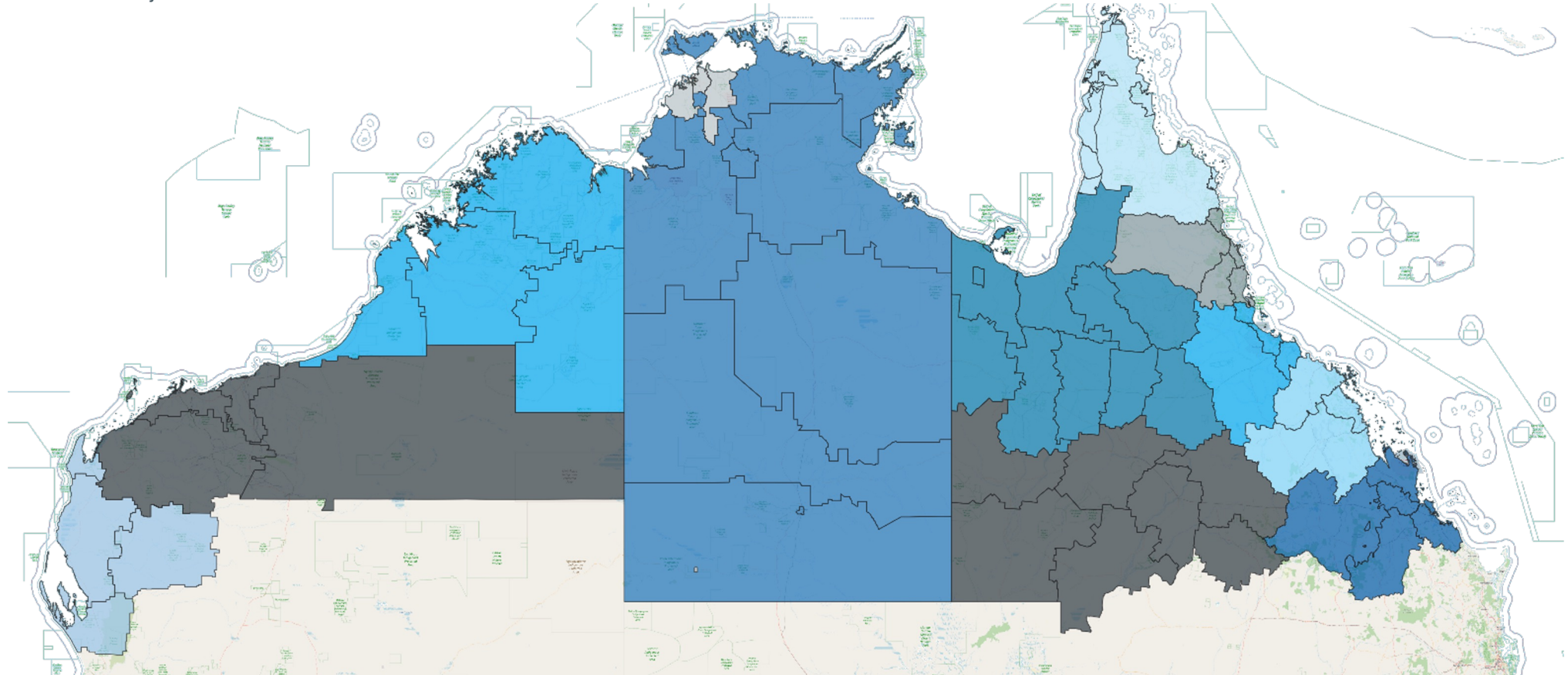
For reference, GRP/GDP is calculated by:

- Domestic consumption, which is best represented by:
  - Population size and growth
  - Visitation and visitor spend
  - Average incomes and household expenditure
- Private investment, such as investment in:
  - Buildings
  - Plant & machinery
- Government spending, such as spending on:
  - Infrastructure
  - Welfare
  - Services
- Net Exports, which is value of exports minus value of imports

## GEOGRAPHIES ANALYSED

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This report analyses the economic performance of the below identified regions in Northern Australia, as well as each jurisdiction and the North as a whole.



## ABOUT AEC

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### A unique Northern heritage

AEC was founded in Northern Australia (Townsville) over 30 years ago and continues to be the largest economics consulting firm operating in Northern Australia.

With a unique combination of economics, finance, market research and visual communications expertise, AEC has a proud history of providing strategic advice to private industry, local governments, regional economic development organisations, regional tourism organisations and commonwealth and state/territory agencies.

We have trusted networks across Northern Australia and beyond, allowing us to provide national best-practice advice to our clients in Northern Australia.

Our experience working with tier one, as well as local engineering, town planning, capital investors enables us to lead complex project delivery, with an economics lens, focused on identifying and meeting local needs.

Our tools, resources and databases have been developed over our 30 years of operating from and in Northern Australia, which are now available to our clients through our subscription-based platform – DataAU.

## OUR CORE SERVICES

- > OPPORTUNITY IDENTIFICATION
- > ECONOMIC MASTER PLANNING
- > PROJECT VISIONING
- > FEASIBILITY STUDIES
- > ECONOMIC PROFILING
- > BUSINESS CASE DEVELOPMENT
- > LONG-TERM FINANCIAL SUSTAINABILITY
- > VISUAL COMMUNICATIONS
- > SUPPLY CHAIN ASSESSMENT
- > GRANT APPLICATIONS

## OUR EXPERTISE

- > ECONOMICS
- > FINANCE
- > DATA
- > MARKET RESEARCH
- > VISUAL COMMUNICATIONS

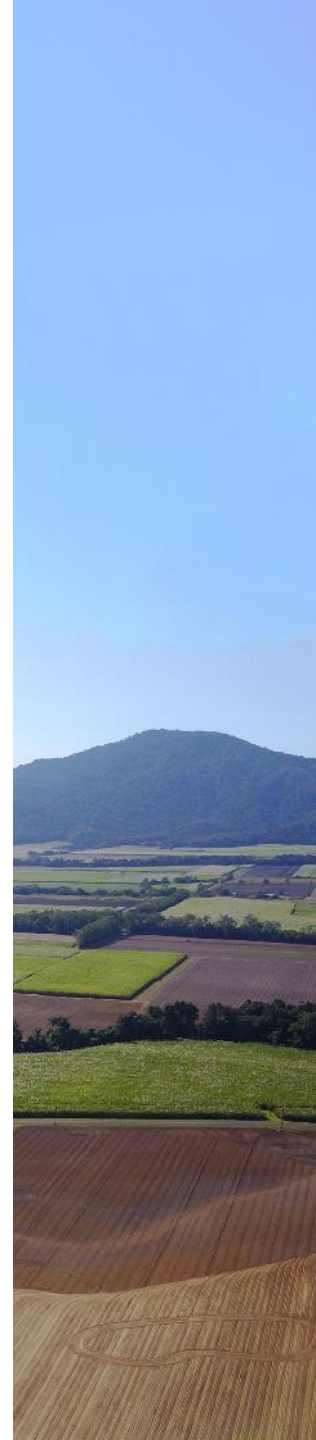


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# NORTHERN AUSTRALIA DEVELOPMENT PRIORITIES

The White Paper on Developing Northern Australia was released by the Australian Government in 2015, with a vision to facilitate transformational growth.

The White Paper outlined the enormous opportunity to develop; not just to the benefit of the North, but to the benefit of all of Australia.

A subsequent update was released in 2021, improving the focus on key sectors

This section explores the priorities of the White Paper (and subsequent update) in terms of:

- Reform priorities
- Key objectives
- Focus industries





# KEY ECONOMIC INDICATORS

This section explores the following key economic indicators:

- Economic Growth
  - Gross Regional Product (GRP)
  - Net Exports
- Labour Force
  - Total Employment (FTE)
- Population
  - Estimated Resident Population
  - Net Migration
- Investment
  - Non-residential Building Approvals
  - Public Investment
  - Private Investment

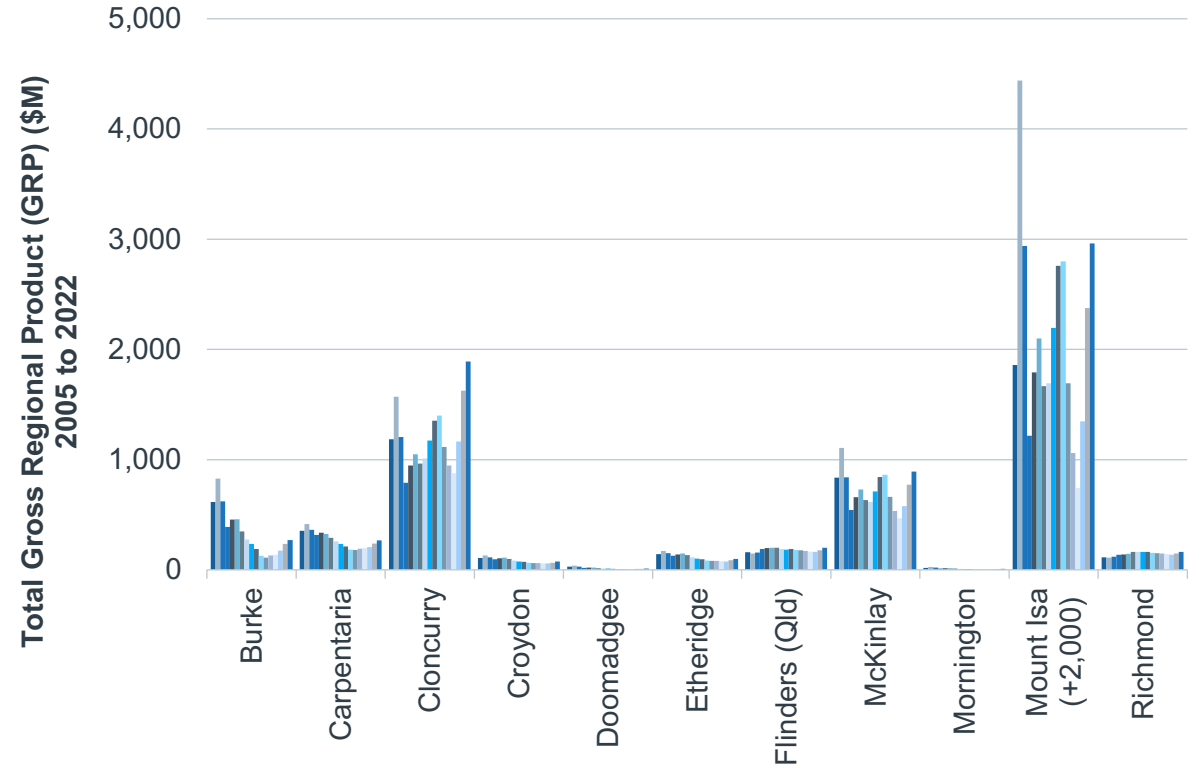


## ECONOMIC GROWTH – GROSS REGIONAL PRODUCT

**Key Points:**

- Northern Australia’s economy has grown faster than Australia’s generally
- However, growth is not uniform and some regions are failing to grow or are contracting
- The NT’s economy has consistently grown slower

Region	GRP (\$B)		
	2015	2022	Change(%)
<b>Sub-regions</b>			
WA Pilbara	\$96.71	\$119.08	23%
QLD Mackay-Isaac-Whitsunday	\$26.64	\$42.10	58%
QLD Central Queensland	\$27.24	\$26.79	-2%
NT Greater Darwin	\$18.20	\$19.59	8%
QLD Townsville & Region	\$17.28	\$18.38	6%
QLD Cairns & Region	\$15.69	\$17.73	13%
NT Rest of NT	\$8.59	\$11.03	28%
QLD North West QLD	\$7.89	\$8.84	12%
WA Kimberley	\$4.62	\$4.52	-2%
QLD Cape York	\$2.40	\$2.64	10%
WA Gascoyne	\$1.69	\$1.60	-5%
QLD Central West QLD	\$1.43	\$1.35	-6%
<b>North Australia Summary</b>			
Total NT	\$26.80	\$30.62	14%
Northern QLD	\$98.57	\$117.84	20%
Northern WA	\$103.02	\$125.19	22%
<b>Northern Australia</b>	<b>\$228.39</b>	<b>\$273.65</b>	<b>20%</b>
<b>Australia</b>	<b>\$1,972.13</b>	<b>\$2,309.75</b>	<b>17.1%</b>
<b>% of Australia</b>	<b>11.6%</b>	<b>11.8%</b>	<b>0.3%</b>



Source: ABS (2023). Regional Population, 2022. Cat no. 3218.0. Australian Bureau of Statistics, Canberra

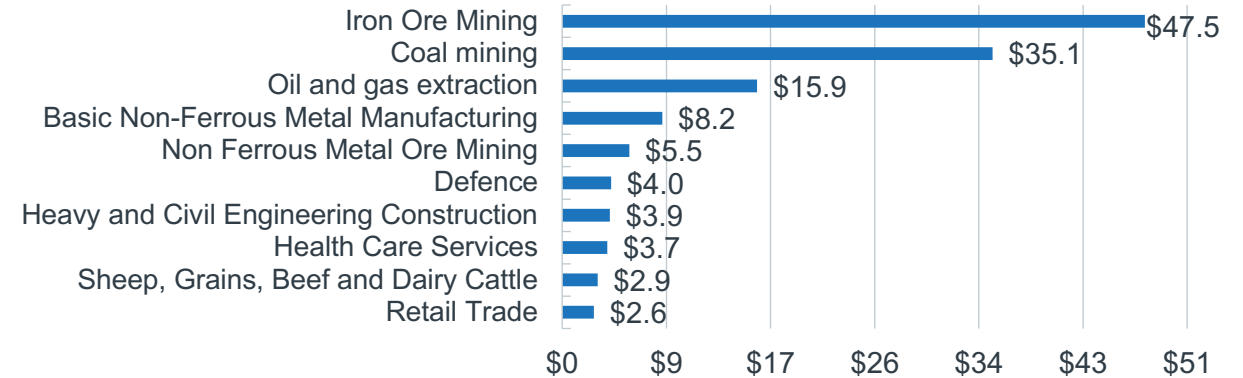
## NET EXPORTS

### Key Points:

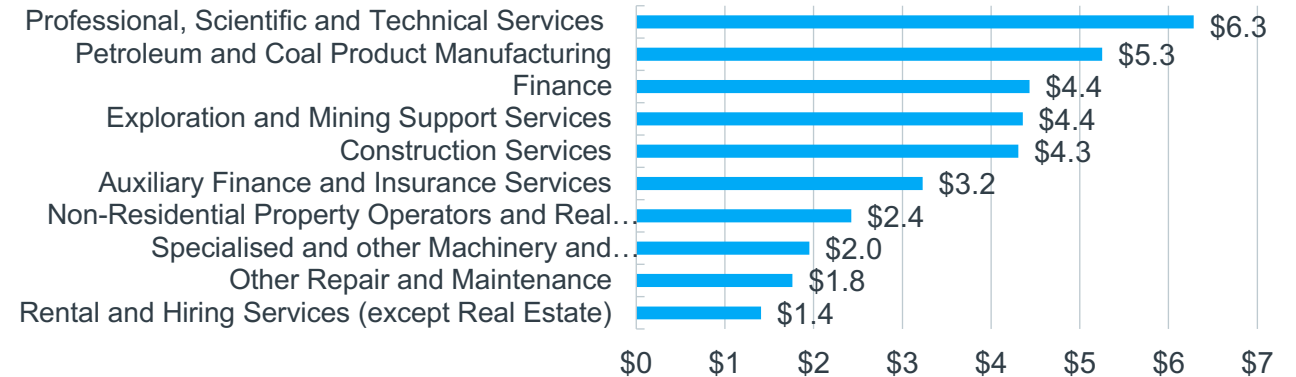
- Every region in the North is a net exporter, but this is largely driven by mining activity (96% of net export value)
- Professional services is largest import and can be easily replaced to support future growth (\$6 billion annually)

Sector	Exports (\$B)	Imports (\$B)	Net Exports
Mining	\$107.1	\$6.2	\$100.9
Public administration and safety	\$7.1	\$0.8	\$6.2
Agriculture, forestry and fishing	\$6.7	\$0.9	\$5.8
Health care and social assistance	\$4.5	\$0.1	\$4.5
Education and training	\$2.9	\$0.1	\$2.7
Retail trade	\$2.8	\$0.2	\$2.6
Accommodation and food services	\$3.0	\$0.9	\$2.1
Ownership of dwellings	\$2.0	\$0.0	\$2.0
Transport, postal and warehousing	\$6.3	\$4.3	\$2.0
Construction	\$11.0	\$9.2	\$1.8
Electricity, gas, water and waste services	\$4.4	\$3.5	\$0.9
Arts and recreation services	\$0.8	\$0.3	\$0.6
Administrative and support services	\$2.1	\$2.0	\$0.1
Wholesale trade	\$2.4	\$2.9	-\$0.6
Information media and telecommunications	\$1.0	\$2.4	-\$1.4
Other services	\$1.2	\$2.8	-\$1.6
Rental, hiring and real estate services	\$1.4	\$5.2	-\$3.8
Manufacturing	\$15.0	\$19.4	-\$4.4
Professional, scientific and technical services	\$2.6	\$10.0	-\$7.3
Financial and insurance services	\$1.2	\$9.0	-\$7.8

**Top 10 Exports – By Industry Value (\$B)**



**Top 10 Imports – By Industry Value (\$B)**



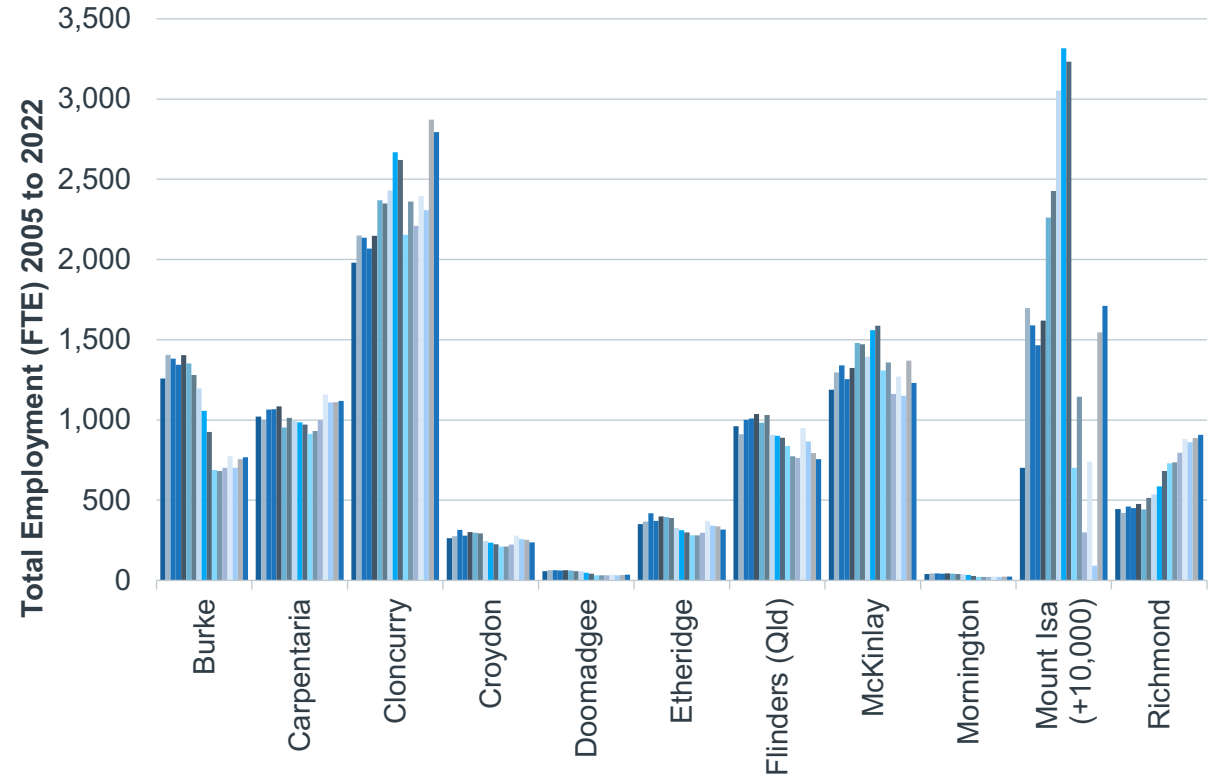
Source: AEC (unpublished). AEC Supply Chain Model 2020-21. AEC Group, Townsville

## LABOUR FORCE – TOTAL EMPLOYMENT

**Key Points:**

- Employment growth across Northern Australia has slowed below Australian growth since 2015
- Recent employment growth shows strong improvement across most regions, relative to Australian averages

Region	Total Employment		
	2015	2022	Change (%)
<b>Sub-regions</b>			
QLD Cairns & Region	102,998	118,635	15%
QLD Townsville & Region	108,167	111,911	3%
QLD Central Queensland	107,314	109,929	2%
QLD Mackay-Isaac-Whitsunday	85,695	97,436	14%
NT Greater Darwin	74,371	78,792	6%
WA Pilbara	67,002	71,534	7%
NT Rest of NT	34,430	35,792	4%
QLD North West QLD	21,507	19,899	-7%
WA Kimberley	18,972	17,353	-9%
QLD Cape York	10,599	10,150	-4%
QLD Central West QLD	6,335	5,906	-7%
WA Gascoyne	5,320	5,347	1%
<b>North Australia Summary</b>			
Total NT	108,801	114,584	5%
Northern QLD	442,616	473,866	7%
Northern WA	91,294	94,234	3%
<b>Northern Australia</b>	<b>642,711</b>	<b>682,684</b>	<b>6%</b>
<b>Australia</b>	<b>10,528,365</b>	<b>12,327,239</b>	<b>17%</b>
<b>% of Australia</b>	<b>6.10%</b>	<b>5.54%</b>	<b>-0.57%</b>



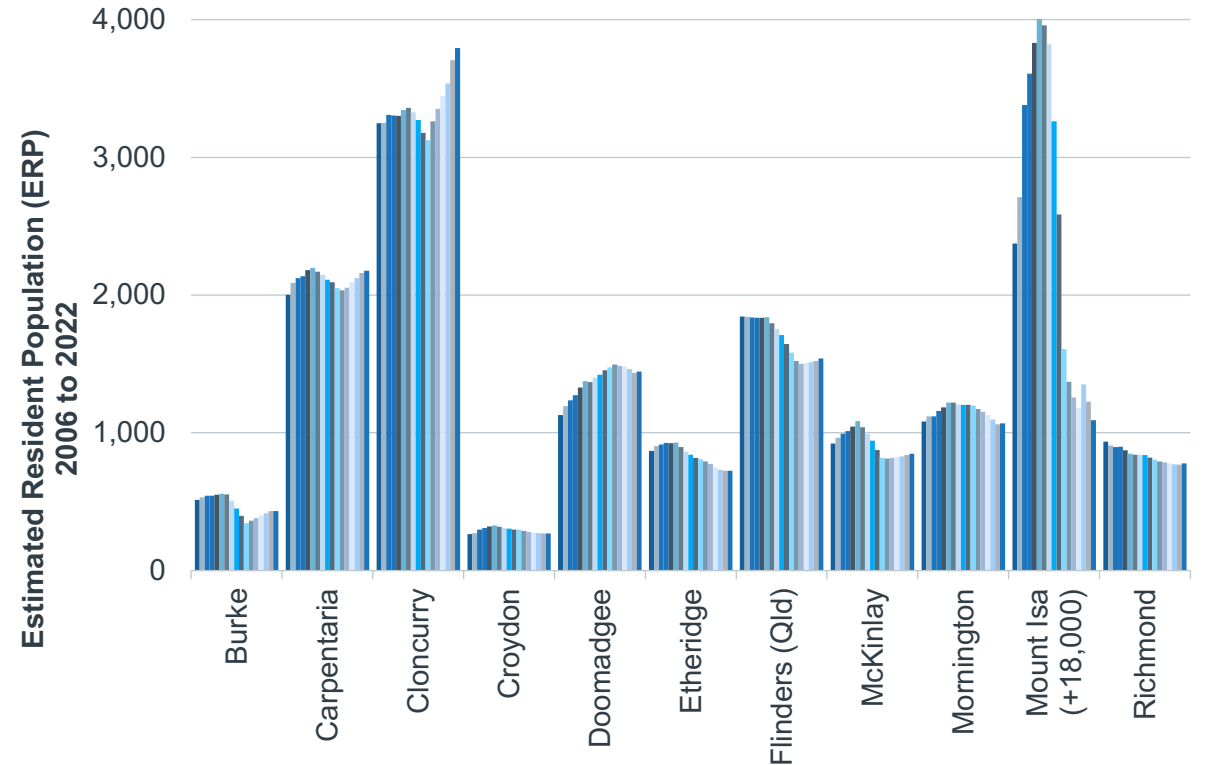
Source: AEC (unpublished). Employment Estimates Model 2021-22. AEC Group, Townsville

## POPULATION – ESTIMATED RESIDENTIAL POPULATION

### Key Points:

- The North continues to grow slower than Australia and is now a smaller part of the national population than in 2015
- Some Northern Queensland regions are growing faster than the Australian average post-COVID

Region	Resident Population		
	2015	2022	Change (%)
<b>Sub-regions</b>			
QLD Cairns & Region	250,537	267,456	7%
QLD Townsville & Region	233,543	240,758	3%
QLD Central Queensland	227,141	234,543	3%
QLD Mackay-Isaac-Whitsunday	174,974	186,512	7%
NT Greater Darwin	152,490	157,141	3%
NT Rest of NT	92,202	93,561	1%
WA Pilbara	63,021	58,904	-7%
WA Kimberley	37,066	38,932	5%
QLD North West QLD	33,363	32,165	-4%
QLD Cape York	25,551	25,547	0%
QLD Central West QLD	11,207	10,721	-4%
WA Gascoyne	9,836	10,107	3%
<b>North Australia Summary</b>			
Total NT	244,692	250,702	2%
Northern QLD	956,316	997,702	4%
Northern WA	109,923	107,943	-2%
Northern Australia	1,310,931	1,356,347	3%
Australia	23,815,995	25,996,144	9%
% of Australia	5.5%	5.2%	-0.3%



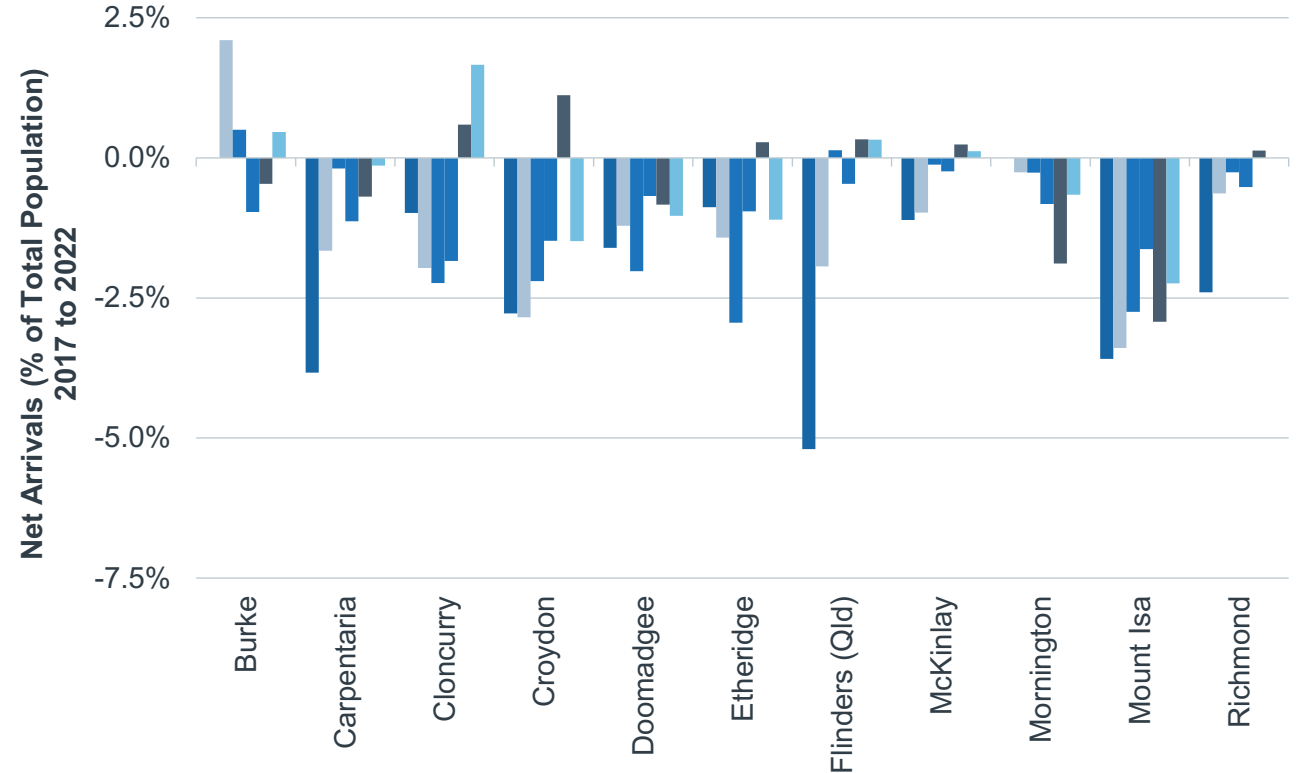
Source: ABS (2023). Regional Population, 2022. Cat no. 3218.0. Australian Bureau of Statistics, Canberra

## POPULATION – NET ARRIVALS (MIGRATION)

**Key Points:**

- Coastal Northern Queensland is now a net migration destination and is growing faster than Australia generally
- Most other areas in Northern Australia are not retaining existing residents (despite a slowing of net departures)

Region	Net Arrivals (% of total ERP)		
	2017	2022	Change
<b>Sub-regions</b>			
QLD Mackay-Isaac-Whitsunday	-1.2%	1.1%	2.3%
QLD Cairns & Region	0.5%	1.1%	0.5%
QLD Central Queensland	-0.8%	0.8%	1.7%
QLD Townsville & Region	-0.1%	0.8%	0.9%
WA Gascoyne	-2.6%	0.7%	3.4%
QLD Central West QLD	-2.8%	0.3%	3.1%
NT Rest of NT	-0.9%	-0.1%	0.8%
WA Pilbara	-1.6%	-0.2%	1.4%
WA Kimberley	-2.0%	-0.4%	1.6%
NT Greater Darwin	-0.1%	-0.5%	-0.4%
QLD Cape York	0.1%	-0.7%	-0.8%
QLD North West QLD	-3.0%	-1.2%	1.8%
<b>North Australia Summary</b>			
Total NT	-0.4%	-0.4%	0.1%
Northern QLD	-0.4%	0.8%	1.2%
Northern WA	-1.8%	-0.2%	1.6%
<b>Northern Australia</b>	<b>-0.5%</b>	<b>0.5%</b>	<b>1.1%</b>
<b>Australia</b>	<b>1.1%</b>	<b>0.7%</b>	<b>-0.4%</b>



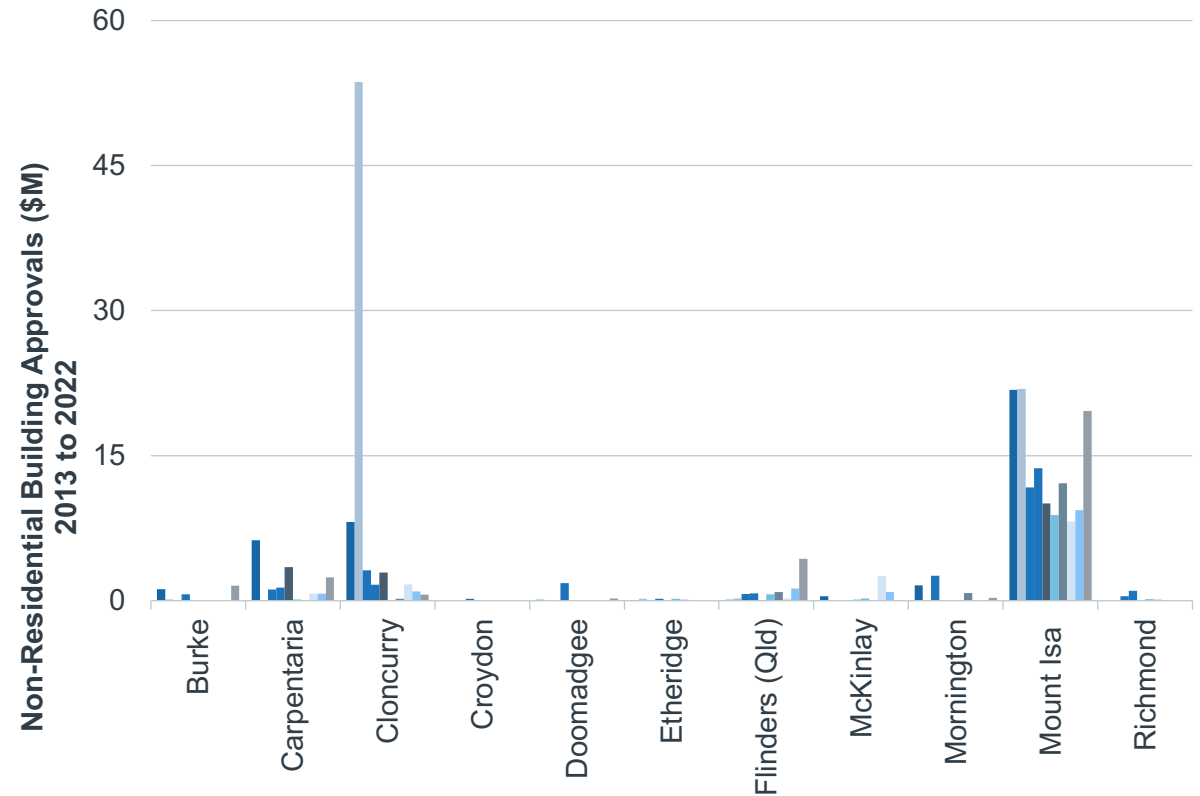
ABS (2023). Regional Population, 2022. Cat no. 3218.0. Australian Bureau of Statistics, Canberra

## INVESTMENT – NON-RESIDENTIAL BUILDING APPROVALS

**Key Points:**

- Non-residential building approvals in northern Western Australia and the Northern Territory have not grown at the same rate as Northern Queensland or Australia generally.

Region	Total Non-Resi Investment (\$M)		
	2015	2022	Change
<b>Sub-regions</b>			
NT Greater Darwin	719	645	-10%
QLD Townsville & Region	313	510	63%
QLD Mackay-Isaac-Whitsunday	116	398	243%
WA Pilbara	315	376	20%
QLD Central Queensland	158	328	108%
QLD Cairns & Region	120	300	150%
NT Rest of NT	123	209	70%
WA Gascoyne	34	69	104%
WA Kimberley	48	54	13%
QLD North West QLD	20	29	47%
QLD Cape York	21	25	21%
QLD Central West QLD	4	6	60%
<b>North Australia Summary</b>			
Total NT	842	854	1%
Northern QLD	750	1,595	113%
Northern WA	397	499	26%
<b>Northern Australia</b>	<b>1,990</b>	<b>2,949</b>	<b>48%</b>
<b>Australia</b>	<b>29,447</b>	<b>58,162</b>	<b>97.5%</b>



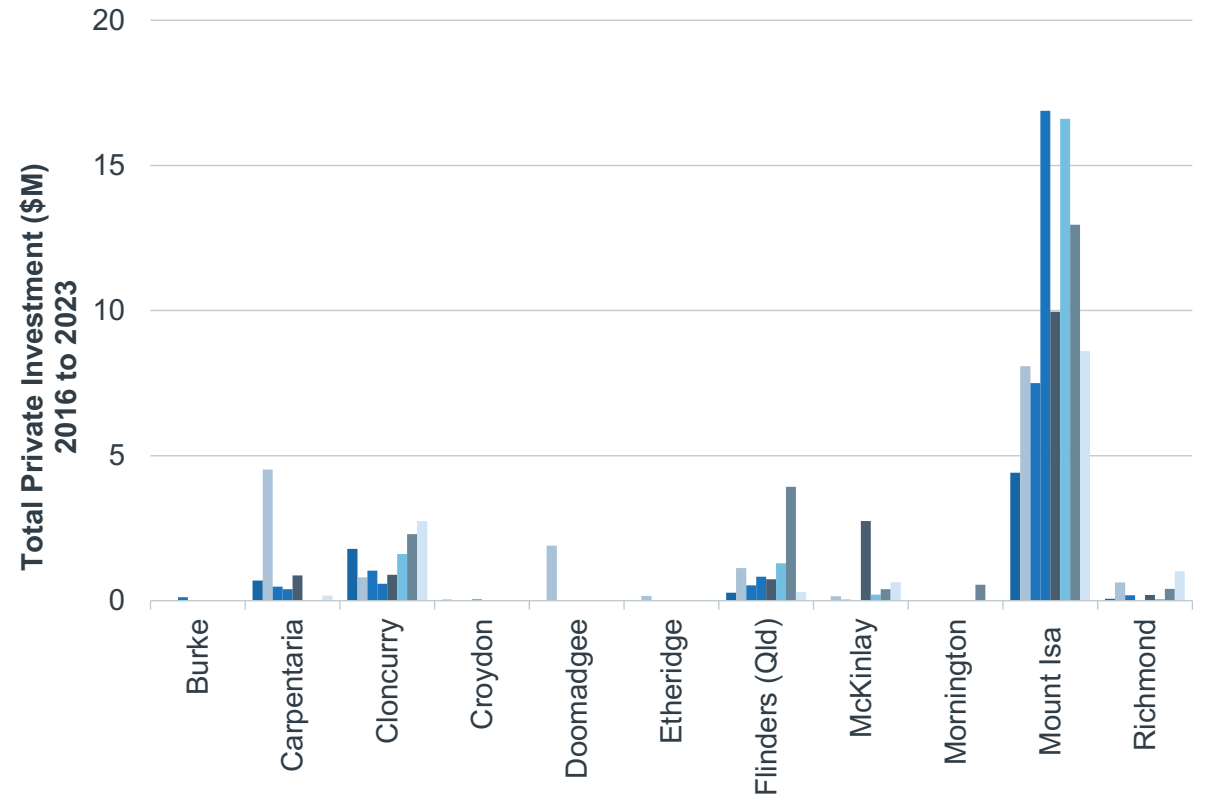
Source: ABS (2022). Building Approvals, Australia, Jun 2022. Cat no. 8731.0. Australian Bureau of Statistics, Canberra

## INVESTMENT – PRIVATE INVESTMENT

**Key Points:**

- Private investment has grown faster than Australia generally, except for the Northern Territory
- The North's share of total private investment in Australia has grown from 2.12% to 2.9%.

Region	PRIVATE INVESTMENT (\$M)		
	2016	2022	Change
<b>Sub-regions</b>			
QLD Cairns & Region	268	747	179%
QLD Mackay-Isaac-Whitsunday	99	729	638%
QLD Townsville & Region	312	674	116%
QLD Central Queensland	123	651	429%
NT Greater Darwin	239	394	65%
WA Pilbara	55	283	413%
NT Rest of NT	29	105	265%
WA Kimberley	19	66	253%
WA Gascoyne	7	60	784%
QLD North West QLD	7	21	182%
QLD Cape York	7	14	99%
QLD Central West QLD	3	9	244%
<b>North Australia Summary</b>			
Total NT	268	499	86%
Northern QLD	820	2,845	247%
Northern WA	81	409	408%
<b>Northern Australia</b>	<b>1,168</b>	<b>3,753</b>	<b>221%</b>
<b>Australia</b>	<b>55,470</b>	<b>130,131</b>	<b>134.6%</b>
<b>% of Australia</b>	<b>2.1%</b>	<b>2.9%</b>	



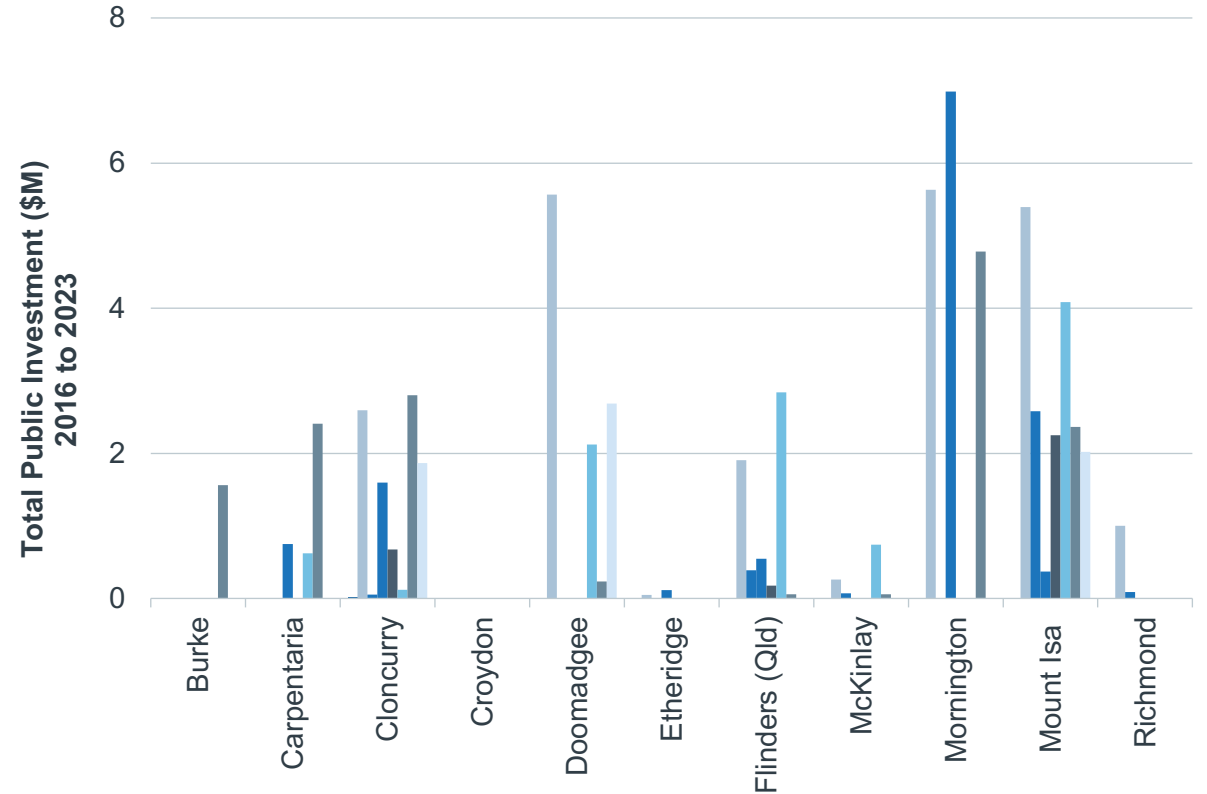
Source: ABS (2022). Building Approvals, Australia, Jun 2022. Cat no. 8731.0. Australian Bureau of Statistics, Canberra

## INVESTMENT – PUBLIC INVESTMENT

**Key Points:**

- Despite growth in all sub-regions, the North's share of public investment has halved.
- Growth in public investment in Northern WA and Northern Territory have consistently been below Australia generally.

Region	PUBLIC INVESTMENT (\$M)		
	2016	2022	Change
<b>Sub-regions</b>			
WA Kimberley	48	302	530%
NT Greater Darwin	159	263	66%
NT Rest of NT	131	180	37%
QLD Townsville & Region	47	163	242%
WA Pilbara	90	143	59%
QLD Central Queensland	15	93	534%
QLD Cairns & Region	65	71	10%
QLD Mackay-Isaac-Whitsunday	15	38	147%
QLD Cape York	24	29	20%
WA Gascoyne	5	25	437%
QLD Central West QLD	1	16	1964%
QLD North West QLD	0.02	14	79168%
<b>North Australia Summary</b>			
Total NT	290	443	53%
Northern QLD	167	425	154%
Northern WA	142	470	230%
<b>Northern Australia</b>	<b>600</b>	<b>1,337</b>	<b>123%</b>
<b>Australia</b>	<b>5,027</b>	<b>22,778</b>	<b>353.1%</b>
<b>% of Australia</b>	<b>11.9%</b>	<b>5.9%</b>	



Source: ABS (2022). Building Approvals, Australia, Jun 2022. Cat no. 8731.0. Australian Bureau of Statistics, Canberra

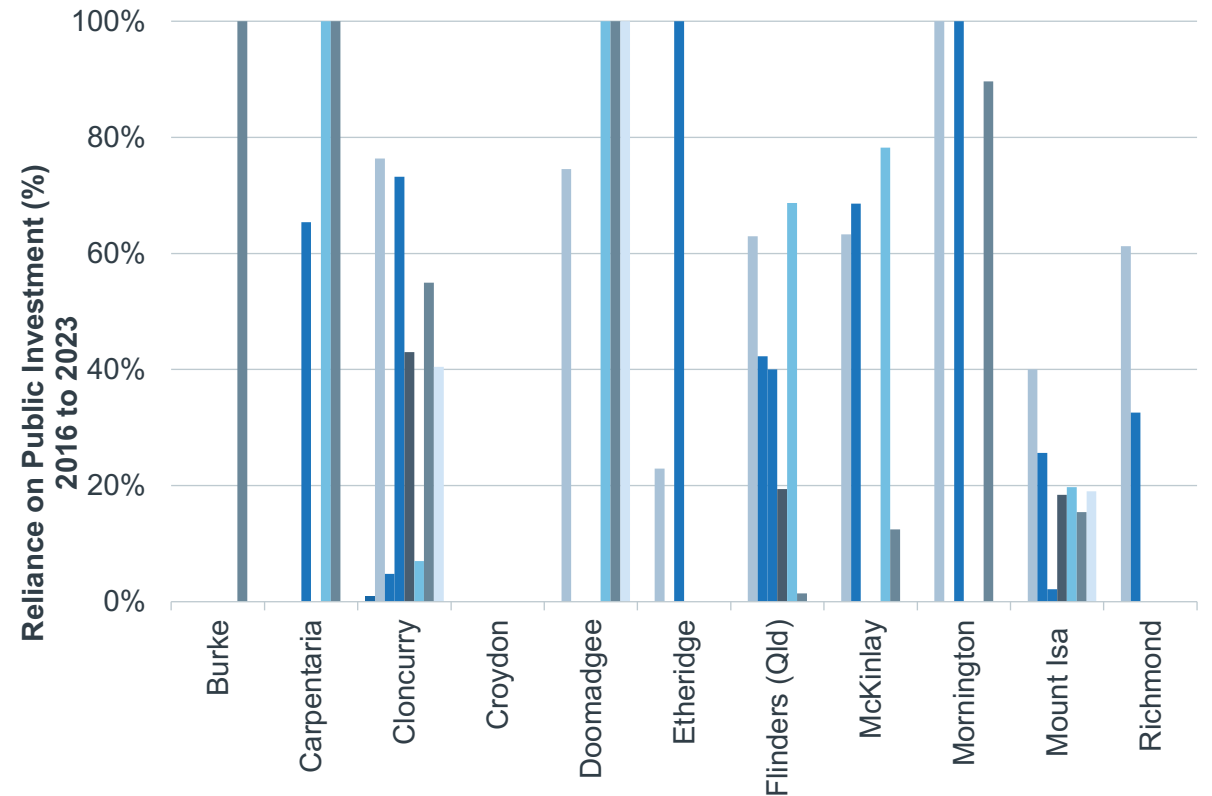


## INVESTMENT – RELIANCE ON PUBLIC INVESTMENT

**Key Points:**

- Despite some reduction, the North continues to rely on public investment for growth.
- Some sub-regions in the North are considerably more reliant on public investment and others receive much less public investment than Australia generally.

Region	% of Investment is Public		
	2016	2022	Change
<b>Sub-regions</b>			
WA Kimberley	72.0%	82.1%	10%
QLD Cape York	76.6%	66.4%	-10%
QLD Central West QLD	23.3%	64.6%	41%
NT Rest of NT	82.1%	63.2%	-19%
QLD North West QLD	0.2%	41.0%	41%
NT Greater Darwin	39.9%	40.0%	0%
WA Pilbara	61.9%	33.5%	-28%
WA Gascoyne	40.7%	29.4%	-11%
QLD Townsville & Region	13.2%	19.4%	6%
QLD Central Queensland	10.7%	12.6%	2%
QLD Cairns & Region	19.5%	8.7%	-11%
QLD Mackay-Isaac-Whitsunday	13.5%	5.0%	-9%
<b>North Australia Summary</b>			
Total NT	52.0%	47.0%	-5%
Northern QLD	16.9%	13.0%	-4%
Northern WA	63.9%	53.4%	-10%
<b>Northern Australia</b>	<b>33.9%</b>	<b>26.3%</b>	<b>-8%</b>
<b>Australia</b>	<b>8.3%</b>	<b>14.9%</b>	<b>6.6%</b>



Source: ABS (2022). Building Approvals, Australia, Jun 2022. Cat no. 8731.0. Australian Bureau of Statistics, Canberra



# KEY INDUSTRY PERFORMANCE

This section explores the performance of the following key industries (measured through total employment – Place of Work):

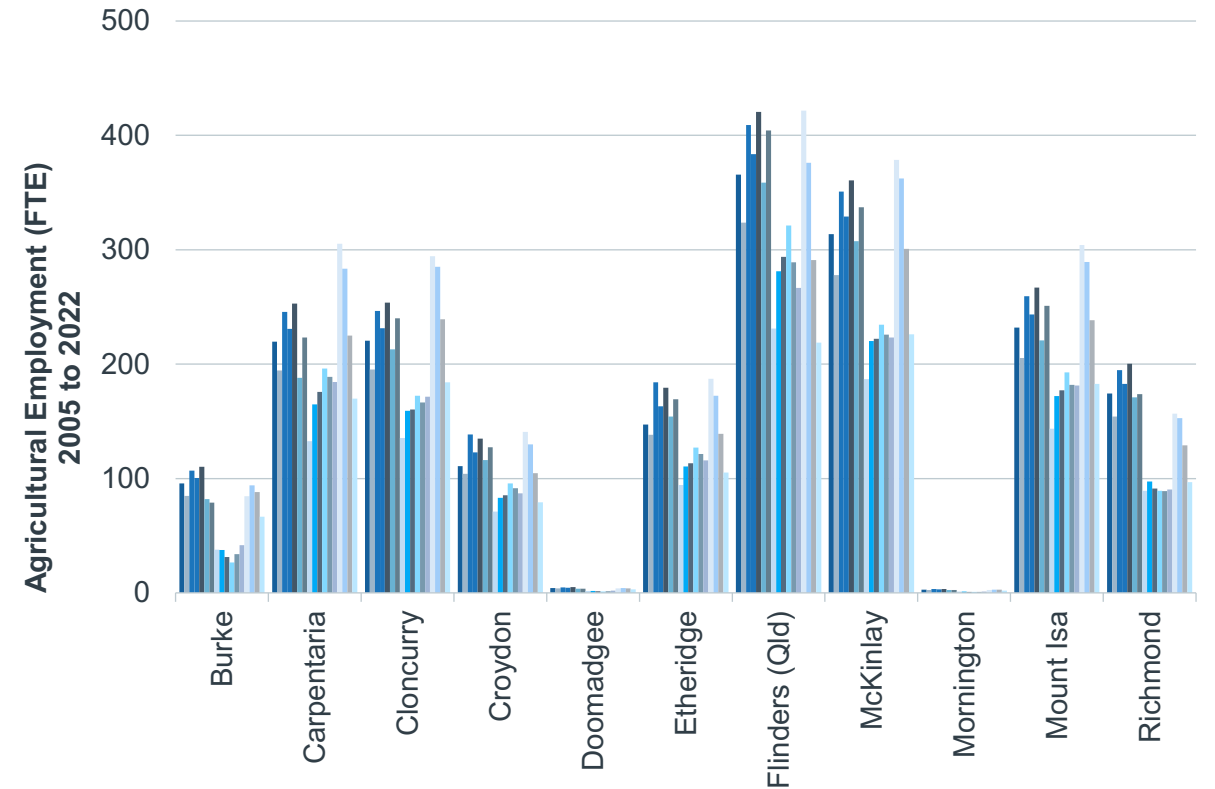
- Agriculture
- Mining
- Tourism
- International education
- Defence

## KEY INDUSTRY – AGRICULTURE (INCL FORESTRY AND AQUACULTURE)

**Key Points:**

- Total employment in agriculture has declined across Northern Australia.
- Despite gains in Northern WA and the Northern Territory, Northern Queensland is in decline.

Region	Total Employment		
	2015	2022	Change (%)
<b>Sub-regions</b>			
QLD Cairns & Region	5,613	5,397	-4%
QLD Mackay-Isaac-Whitsunday	5,875	4,266	-27%
QLD Central Queensland	4,818	4,091	-15%
QLD Townsville & Region	3,250	2,692	-17%
NT Rest of NT	1,342	1,903	42%
QLD North West QLD	1,353	1,335	-1%
QLD Central West QLD	1,456	1,221	-16%
WA Kimberley	618	925	50%
NT Greater Darwin	790	797	1%
WA Gascoyne	511	551	8%
QLD Cape York	314	294	-6%
WA Pilbara	209	288	38%
<b>North Australia Summary</b>			
Total NT	2,132	2,700	27%
Northern QLD	22,680	19,297	-15%
Northern WA	1,338	1,765	32%
<b>Northern Australia</b>	<b>26,149</b>	<b>23,761</b>	<b>-9%</b>
<b>Australia</b>	<b>271,111</b>	<b>274,413</b>	<b>1.2%</b>
<b>% of Australia</b>	<b>9.6%</b>	<b>8.7%</b>	<b>-1.0%</b>



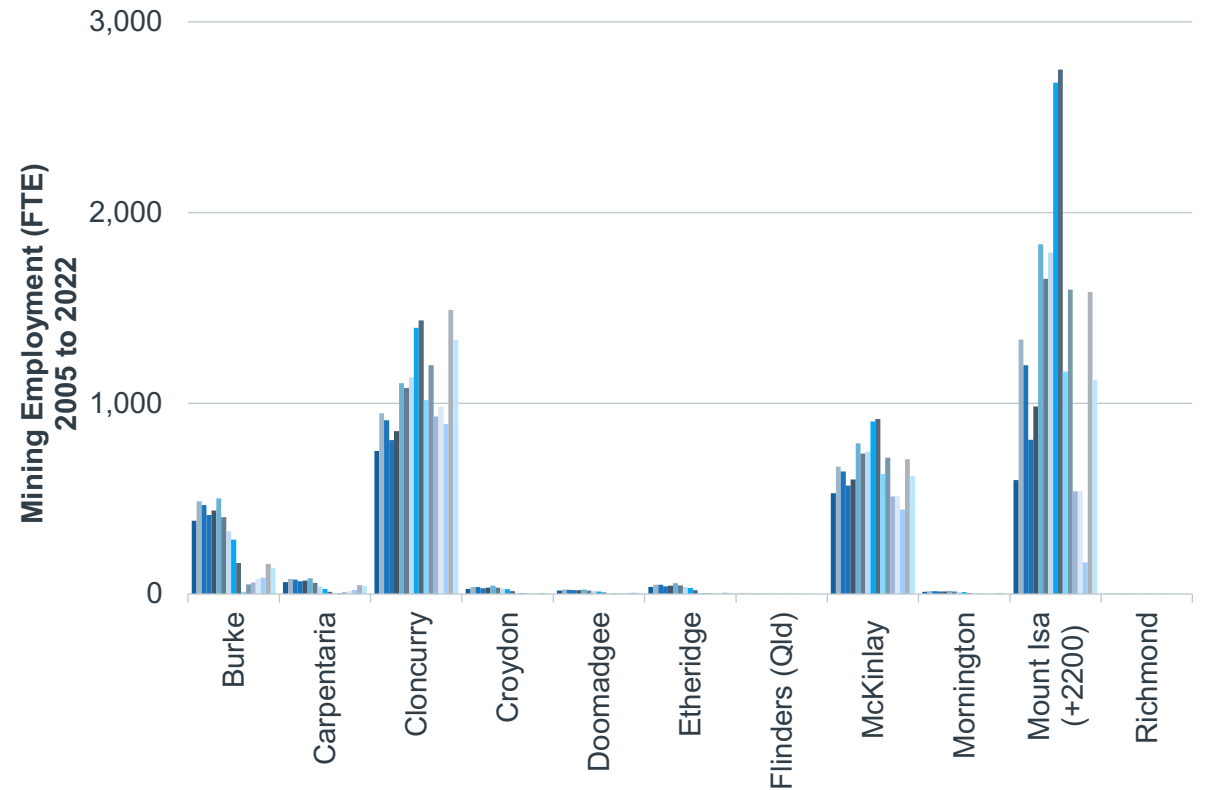
Source: AEC (unpublished). Employment Estimates Model 2021-22. AEC Group, Townsville

## KEY INDUSTRY – MINING (INCL GAS)

**Key Points:**

- Employment in mining in Northern Australia has grown considerably, principally in the Pilbara.
- In Northern Queensland, employment in coal mining has remained steady, while non-coal regions have declined.

Region	Total Employment		
	2015	2022	Change (%)
<b>Sub-regions</b>			
WA Pilbara	24,244	41,430	71%
QLD Mackay-Isaac-Whitsunday	16,570	18,255	10%
QLD Central Queensland	11,606	9,096	-22%
QLD North West QLD	7,528	5,476	-27%
NT Rest of NT	2,641	3,209	21%
QLD Townsville & Region	1,278	1,474	15%
QLD Cape York	1,559	1,151	-26%
NT Greater Darwin	1,342	1,112	-17%
WA Kimberley	792	1,107	40%
QLD Cairns & Region	646	553	-14%
WA Gascoyne	320	401	25%
QLD Central West QLD	81	29	-64%
<b>North Australia Summary</b>			
Total NT	3,984	4,320	8%
Northern QLD	39,267	36,034	-8%
Northern WA	25,356	42,938	69%
<b>Northern Australia</b>	<b>68,607</b>	<b>83,292</b>	<b>21%</b>
<b>Australia</b>	<b>200,745</b>	<b>263,227</b>	<b>31.1%</b>
<b>% of Australia</b>	<b>34.2%</b>	<b>31.6%</b>	<b>-2.5%</b>



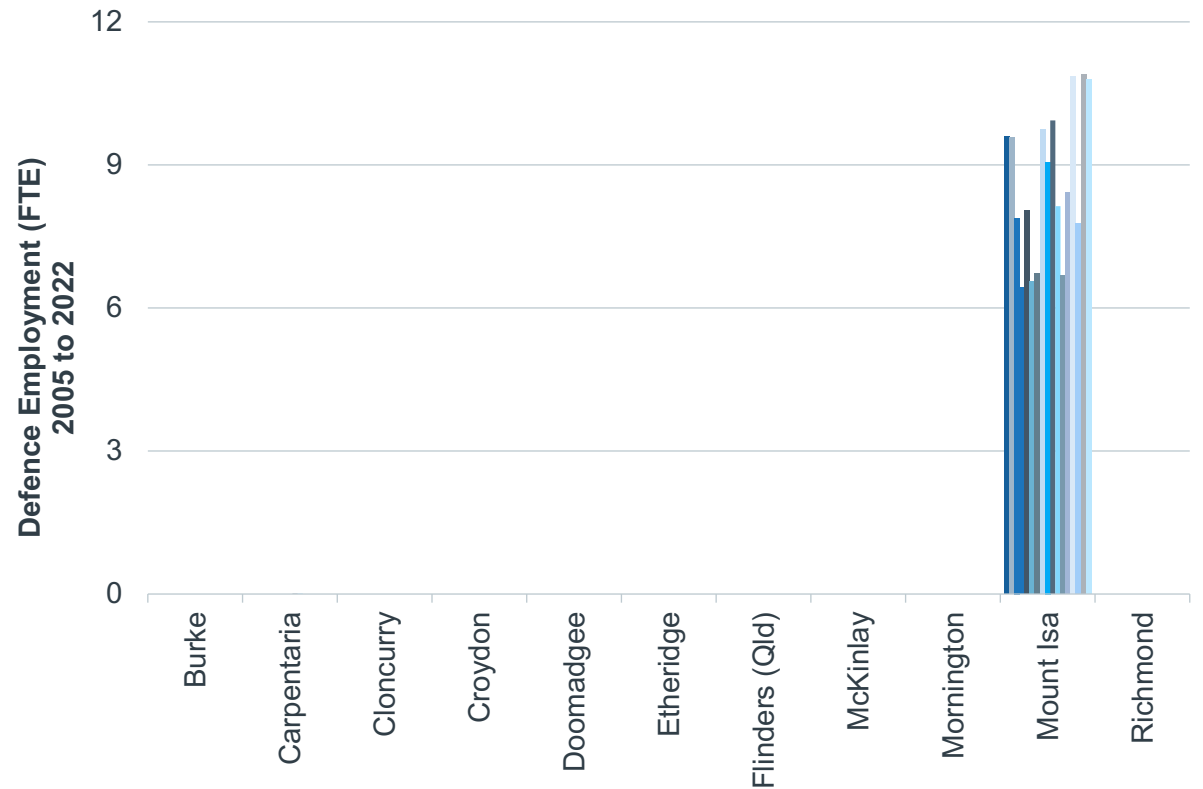
Source: AEC (unpublished). Employment Estimates Model 2021-22. AEC Group, Townsville

## KEY INDUSTRY – DEFENCE

### Key Points:

- Total employment in Defence has declined across Northern Australia, both in total FTEs and as proportion of Australia.
- Growth in Defence across Australia is primarily occurring in southern Australia.

Region	Total Employment		
	2015	2022	Change (%)
<b>Sub-regions</b>			
QLD Townsville & Region	5,970	6,081	2%
NT Greater Darwin	4,261	3,832	-10%
NT Rest of NT	918	959	5%
QLD Cairns & Region	1,049	906	-14%
QLD Cape York	92	112	22%
QLD Central Queensland	100	61	-39%
WA Pilbara	44	58	32%
WA Gascoyne	36	37	3%
WA Kimberley	10	20	109%
QLD Mackay-Isaac-Whitsunday	19	14	-28%
QLD North West QLD	10	11	9%
QLD Central West QLD	12	7	-43%
<b>North Australia Summary</b>			
Total NT	5,178	4,791	-7%
Northern QLD	7,251	7,191	-1%
Northern WA	90	116	29%
<b>Northern Australia</b>	<b>12,519</b>	<b>12,098</b>	<b>-3%</b>
<b>Australia</b>	<b>76,963</b>	<b>91,939</b>	<b>19.5%</b>
<b>% of Australia</b>	<b>16.3%</b>	<b>13.2%</b>	<b>-3.1%</b>



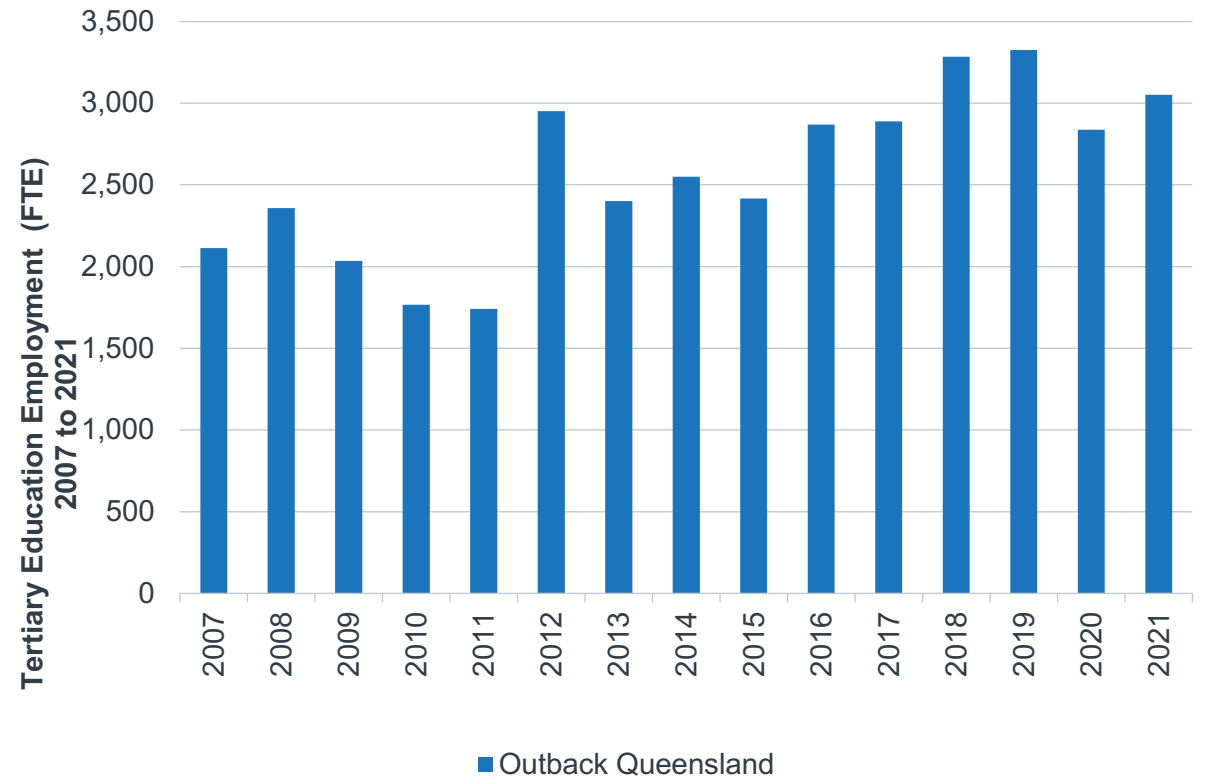
Source: AEC (unpublished). Employment Estimates Model 2021-22. AEC Group, Townsville

## KEY INDUSTRY – TOURISM

### Key Points:

- Pre-COVID-19, tourism in Northern Australia was lagging behind growth in Australia generally.
- Northern Australia's tourism industry has persevered with the COVID-19 pandemic better than Australia and increased its share of total industry employment.

Region	Total Employment		
	2015	2021	Change (%)
<b>Sub-regions</b>			
QLD Tropical North Queensland	16,863	14,857	-12%
QLD Mackay-Isaac-Whitsunday	6,264	7,965	27%
QLD Central Queensland	5,454	7,129	31%
WA Australia's North West	6,607	5,957	-10%
WA Gascoyne-Geraldton	6,139	5,917	-4%
QLD Townsville & Region	5,796	4,871	-16%
NT Greater Darwin	5,238	4,595	-12%
QLD Outback Queensland	2,416	3,051	26%
NT Rest of NT	2,934	2,923	0%
<b>North Australia Summary</b>			
Total NT	8,172	7,518	-8%
Northern QLD	36,792	37,873	3%
Northern WA	12,746	11,874	-7%
<b>Northern Australia</b>	<b>57,710</b>	<b>57,265</b>	<b>-1%</b>
<b>Australia</b>	<b>565,726</b>	<b>500,622</b>	<b>-11.5%</b>
<b>% of Australia</b>	<b>10.2%</b>	<b>11.4%</b>	<b>1.2%</b>



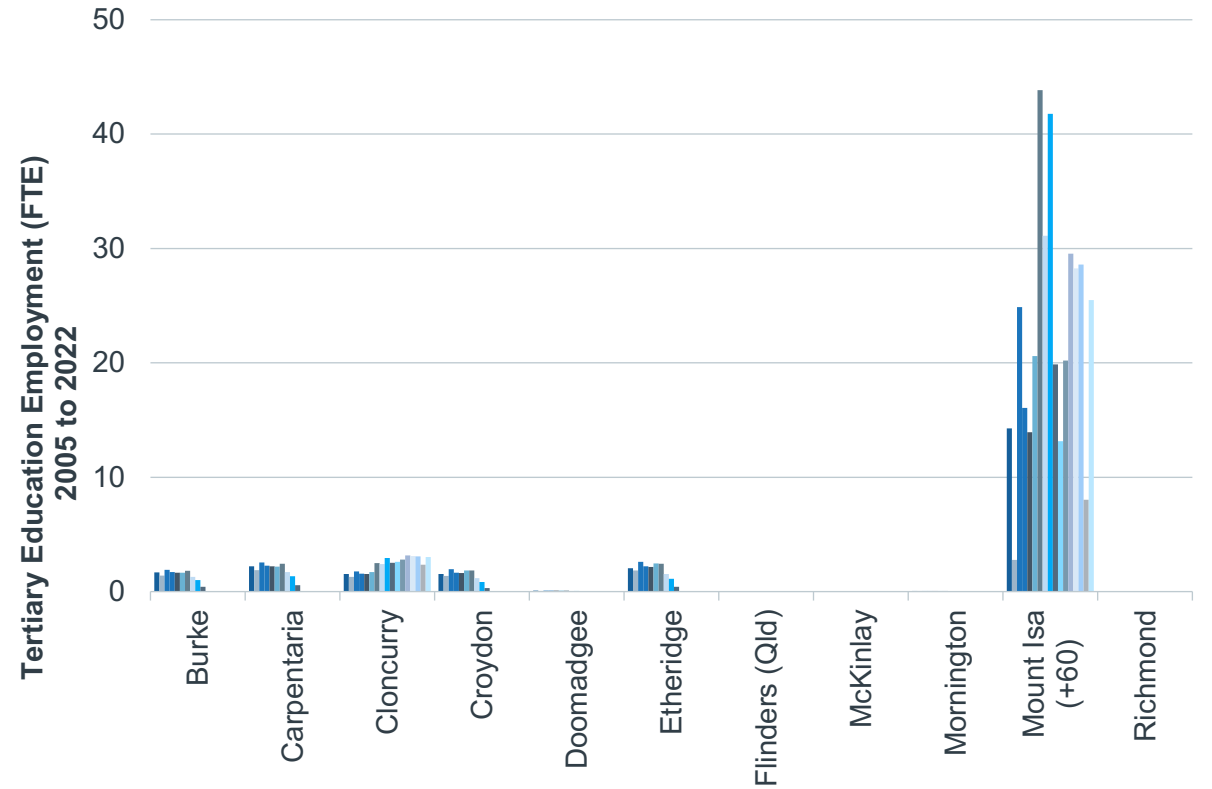
Source: TRA (2023). Regional Tourism Satellite Account. Tourism Research Australia, Canberra

## KEY INDUSTRY – TERTIARY EDUCATION

**Key Points:**

- Growth in employment in tertiary education remains at or below Australian averages.
- Sector employment has grown in Northern Queensland's major university hubs, while contracting in Darwin.

Region	Total Employment		
	2015	2022	Change (%)
<b>Sub-regions</b>			
QLD Townsville & Region	2,446	2,461	1%
QLD Cairns & Region	1,134	1,537	36%
QLD Central Queensland	1,466	1,474	1%
NT Greater Darwin	1,442	1,329	-8%
QLD Mackay-Isaac-Whitsunday	464	416	-10%
NT Rest of NT	433	325	-25%
WA Kimberley	295	220	-25%
WA Pilbara	209	173	-17%
QLD North West QLD	84	89	5%
QLD Cape York	29	53	82%
QLD Central West QLD	29	22	-24%
WA Gascoyne	33	16	-51%
<b>North Australia Summary</b>			
Total NT	1,875	1,654	-12%
Northern QLD	5,652	6,052	7%
Northern WA	537	409	-24%
<b>Northern Australia</b>	<b>8,064</b>	<b>8,114</b>	<b>1%</b>
<b>Australia</b>	<b>221,820</b>	<b>235,325</b>	<b>6.1%</b>
<b>% of Australia</b>	<b>3.6%</b>	<b>3.4%</b>	<b>-0.2%</b>



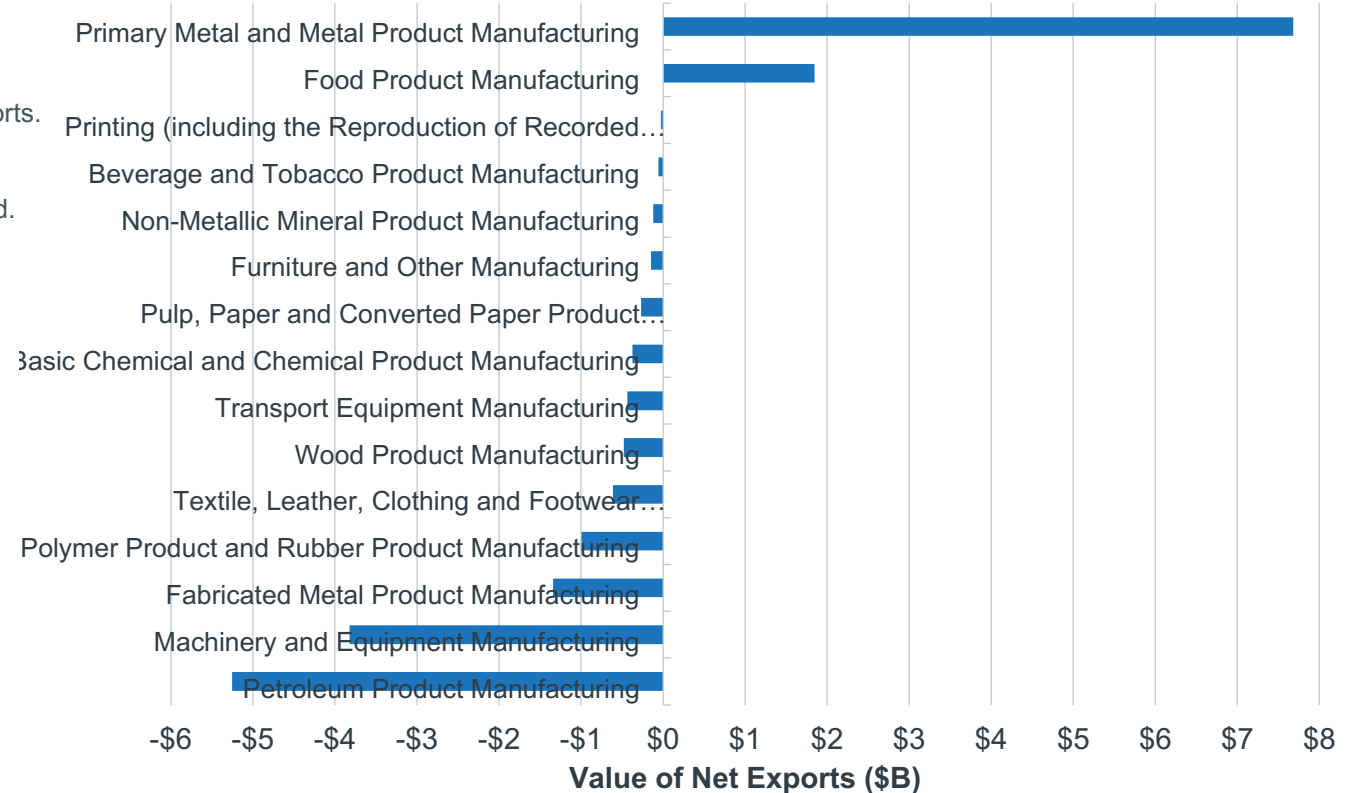
Source: AEC (unpublished). Employment Estimates Model 2021-22. AEC Group, Townsville

## KEY INDUSTRY – MANUFACTURING

### Key Points:

- Northern Australia has a \$4.39 billion manufacturing trade deficit, principally driven by liquid fuel and machinery imports.
- The only net export sectors include metals (namely aluminium) and food products (sugar and beef)
- 90% of manufacturing export is from Northern Queensland.

Sector	Exports (\$B)	Imports (\$B)	Net Exports
Primary Metal and Metal Products	\$8.42	-\$0.74	\$7.68
Food Product Manufacturing	\$3.06	-\$1.21	\$1.85
Printing (including Media Reproduction)	\$0.06	-\$0.09	-\$0.02
Beverage and Tobacco Products	\$0.10	-\$0.16	-\$0.06
Non-Metallic Mineral Products	\$0.42	-\$0.54	-\$0.12
Furniture and Other Manufacturing	\$0.08	-\$0.23	-\$0.15
Pulp, Paper and Converted Paper Products	\$0.05	-\$0.31	-\$0.27
Basic Chemical and Chemical Products	\$0.96	-\$1.33	-\$0.37
Transport Equipment	\$0.56	-\$1.00	-\$0.44
Wood Products	\$0.10	-\$0.58	-\$0.48
Textile, Leather, Clothing and Footwear	\$0.06	-\$0.67	-\$0.61
Polymer Product and Rubber Products	\$0.10	-\$1.09	-\$0.99
Fabricated Metal Products	\$0.48	-\$1.81	-\$1.34
Machinery and Equipment	\$0.34	-\$4.16	-\$3.82
Petroleum Products	\$0.21	-\$5.47	-\$5.25
<b>Manufacturing Total</b>	<b>\$15.00</b>	<b>\$19.39</b>	<b>\$4.39</b>



Source: AEC (unpublished). AEC Supply Chain Model 2020-21. AEC Group, Townsville





# SOCIAL DEVELOPMENT INDICATORS

This section explores the performance of the following social development indicators:

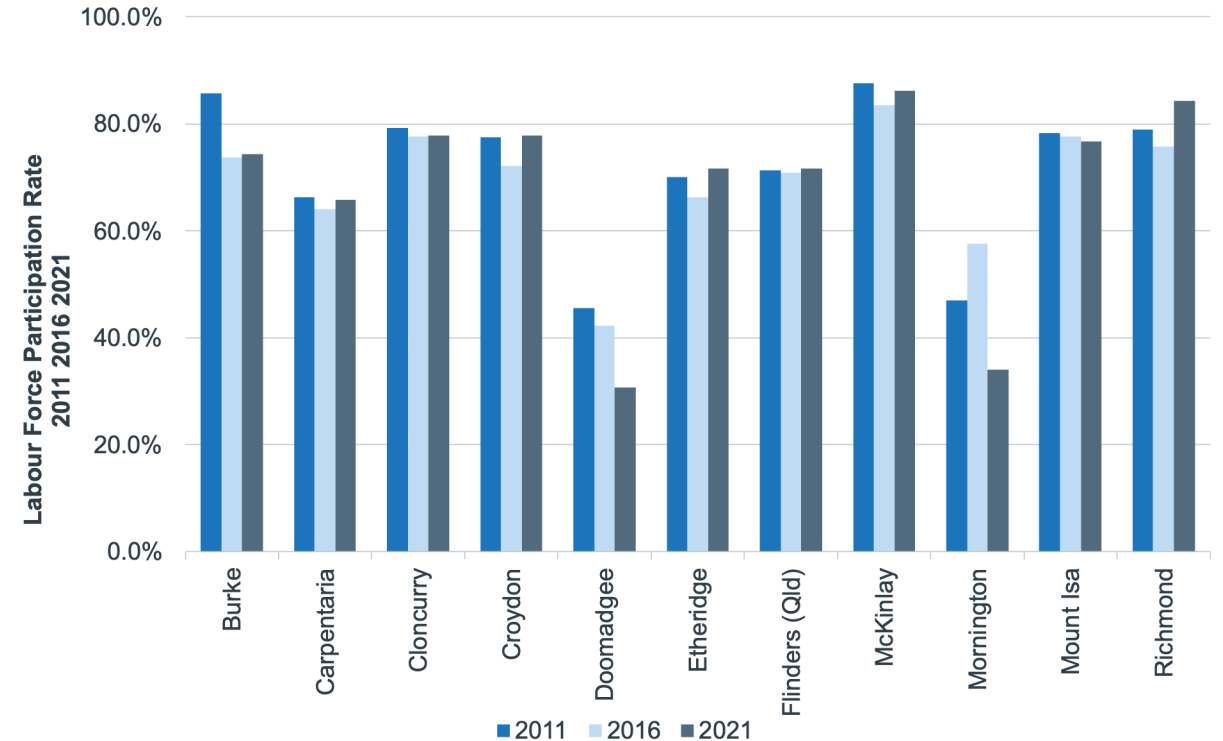
- Labour force participation
- Non-resident employment (FIFO)
- Prevalence of long-term health conditions
- Average household income
- Non-school qualifications

## LABOUR FORCE – PARTICIPATION

### Key Points:

- Participation is generally higher in the North, but highly variable across regions.
- Participation in most Northern regions has deteriorated over time.

Region	2011	2016	2021
<b>Sub-regions</b>			
WA Pilbara	86%	84%	83%
NT Greater Darwin	77%	77%	76%
QLD Central West QLD	73%	72%	73%
QLD North West QLD	76%	74%	73%
QLD Mackay-Isaac-Whitsunday	73%	70%	71%
WA Gascoyne	69%	69%	71%
QLD Townsville & Region	69%	67%	67%
QLD Central Queensland	70%	68%	67%
QLD Cairns & Region	67%	66%	65%
WA Kimberley	65%	66%	65%
QLD Cape York	62%	61%	61%
NT Rest of NT	62%	58%	55%
<b>North Australia Summary</b>			
Total NT	71%	71%	69%
Northern QLD	70%	68%	68%
Northern WA	78%	77%	76%
<b>Northern Australia</b>	<b>71%</b>	<b>69%</b>	<b>68%</b>
<b>Australia</b>	<b>65%</b>	<b>65%</b>	<b>65%</b>



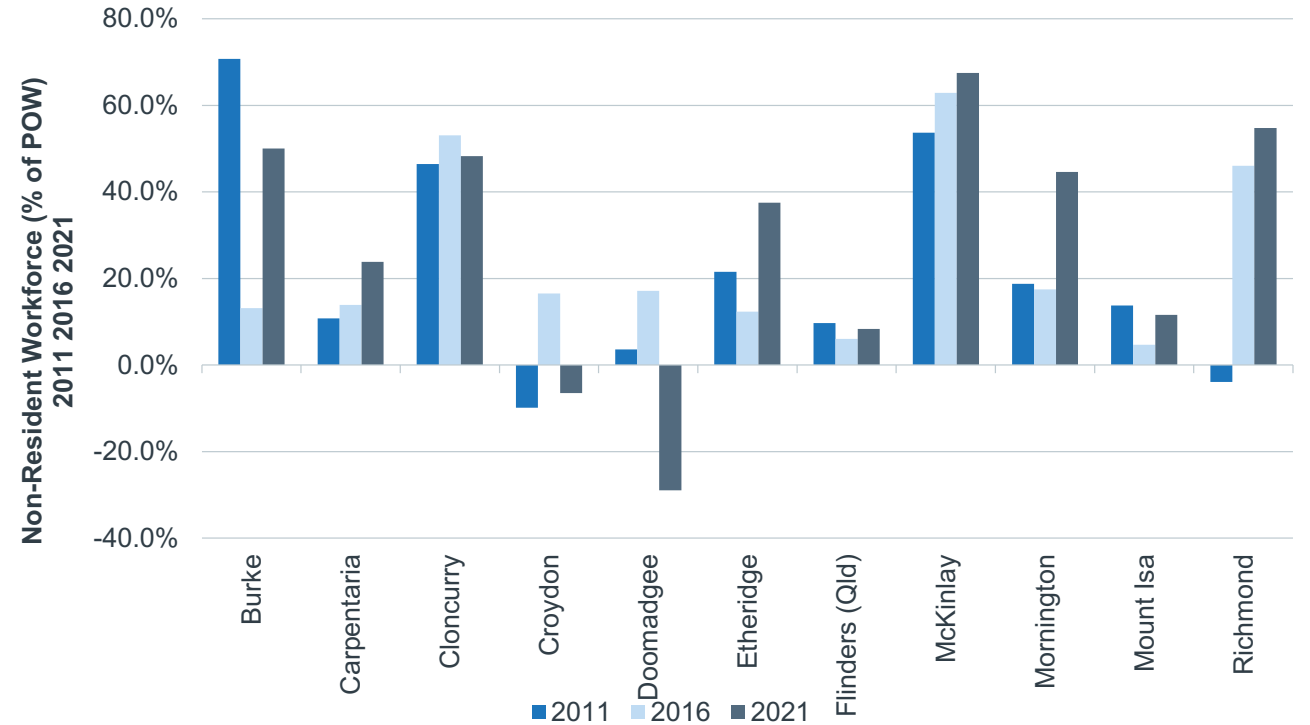
Source: ABS (2022). Census of Population and Housing, 2021. Australian Bureau of Statistics, Canberra

## LABOUR FORCE – NON-RESIDENT WORKFORCE

### Key Points:

- Increasing number of jobs not filled by local residents
- Some Northern regions are FIFO hubs, but their prominence is diminishing

Region	Non-Resident Workers		
	2011	2016	2021
<b>Sub-regions</b>			
WA Pilbara	21,442	31,852	31,888
QLD Mackay-Isaac-Whitsunday	6,985	6,337	9,494
NT Rest of NT	4,250	4,261	5,418
QLD North West QLD	4,932	3,635	5,037
QLD Central Queensland	3,287	3,473	2,907
WA Kimberley	2,930	1,669	1,951
QLD Cape York	593	1,245	1,012
QLD Central West QLD	463	316	439
WA Gascoyne	191	666	399
NT Greater Darwin	-861	2,594	-420
QLD Townsville & Region	-5,528	-1,362	-3,086
QLD Cairns & Region	-4,243	-2,865	-3,171
<b>North Australia Summary</b>			
Total NT	3,389	6,855	4,998
Northern QLD	6,489	10,779	12,633
Northern WA	24,563	34,187	34,239
<b>Northern Australia</b>	<b>34,441</b>	<b>51,821</b>	<b>51,870</b>



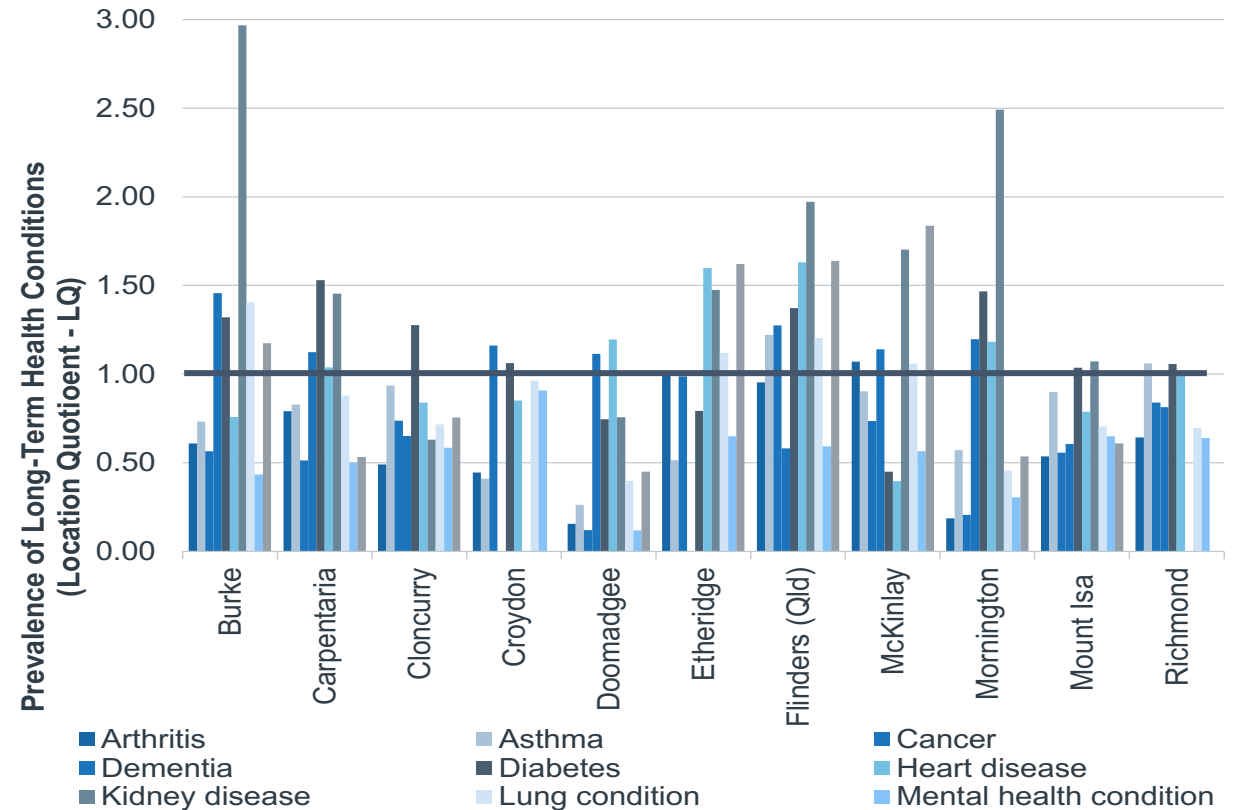
Source: ABS (2023). Regional Population, 2022. Cat no. 3218.0. Australian Bureau of Statistics, Canberra

## SOCIAL DEVELOPMENT – LONG-TERM HEALTH CONDITIONS

### Key Points:

- Townsville & North Queensland has the highest incidence of long-term health conditions (39% of total population).
- Some Northern regions have a high incidence of kidney disease, diabetes, lung conditions and mental ill-health.

Region	Kidney Disease	Diabetes	Lung conditions
<b>Sub-regions</b>			
QLD Townsville & Region	1.13	1.07	1.24
QLD Central Queensland	1.09	1.06	1.41
QLD Central West QLD	1.45	1.21	1.28
QLD Cairns & Region	1.03	0.97	1.17
QLD Mackay-Isaac-Whitsunday	1.01	0.96	1.12
NT Rest of NT	1.44	1.12	0.57
WA Gascoyne	1.04	1.00	0.99
NT Greater Darwin	0.82	0.78	0.72
WA Kimberley	1.08	0.91	0.58
<b>QLD North West QLD</b>	<b>1.14</b>	<b>1.10</b>	<b>0.75</b>
WA Pilbara	0.49	0.66	0.33
QLD Cape York	0.99	1.32	0.46
<b>North Australia Summary</b>			
Total NT	1.05	0.91	0.66
Northern QLD	1.07	1.03	1.20
Northern WA	0.76	0.78	0.48
<b>Northern Australia</b>	<b>1.04</b>	<b>0.99</b>	<b>1.05</b>
<b>Australia</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>



Source: ABS (2022). Census of Population and Housing, 2021. Australian Bureau of Statistics, Canberra

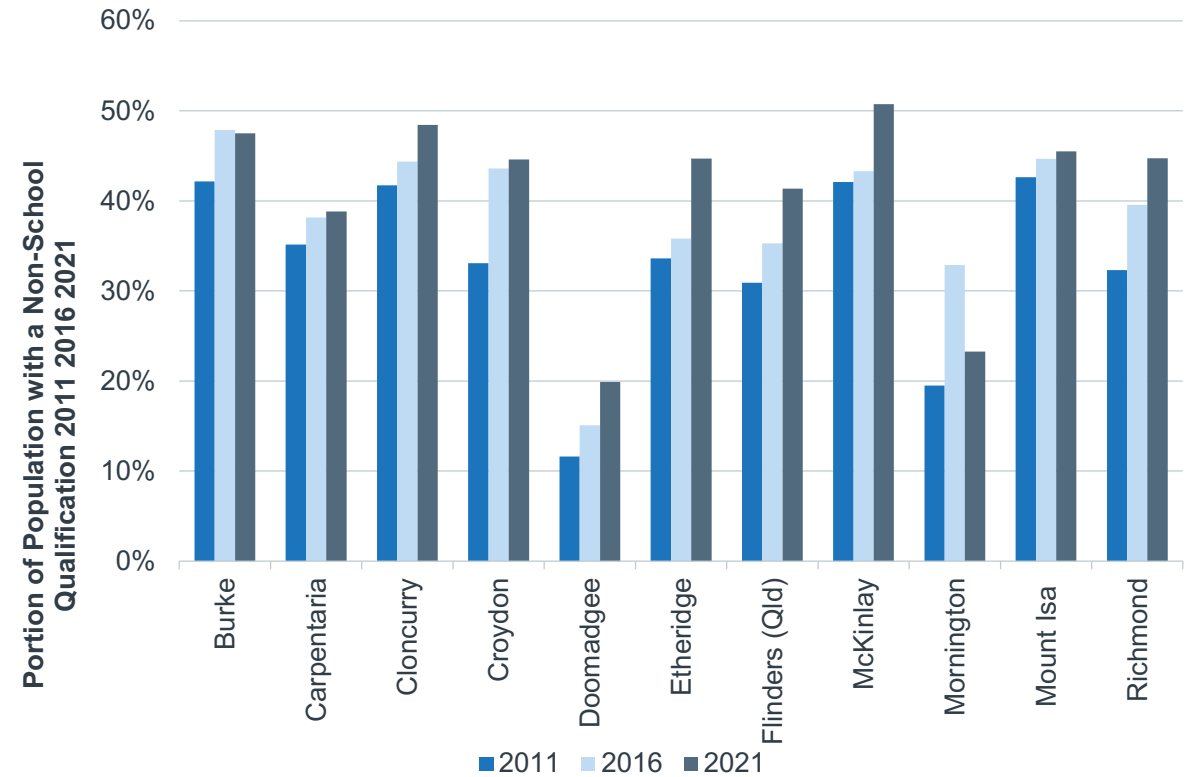
Note: Data presented on this page uses Location Quotients (LQ). LQs demonstrate the local intensity of an indicator relative to a larger region. A LQ above "1" indicates a higher local incidence of disease compared to the proportion of the same indicator in Australia.,

## SOCIAL DEVELOPMENT – NON-SCHOOL QUALIFICATION

### Key Points:

- While the level of non-school qualifications are increasing, the rate of growth is lower than Australia generally.
- Some regions continue to have considerable gaps in the attainment in non-school qualifications.

Region	Non-school Qualifications		
	2011	2016	2021
<b>Sub-regions</b>			
NT Greater Darwin	48%	54%	53%
WA Pilbara	54%	54%	53%
QLD Cairns & Region	43%	48%	50%
WA Gascoyne	42%	47%	50%
QLD Mackay-Isaac-Whitsunday	41%	45%	48%
QLD Townsville & Region	40%	45%	47%
WA Kimberley	43%	46%	46%
QLD Central West QLD	34%	41%	46%
QLD Central Queensland	39%	43%	45%
NT Rest of NT	34%	40%	44%
QLD North West QLD	39%	42%	43%
QLD Cape York	34%	39%	43%
<b>North Australia Summary</b>			
Total NT	43%	49%	48%
Northern QLD	40%	45%	48%
Northern WA	49%	51%	50%
<b>Northern Australia</b>	<b>41%</b>	<b>46%</b>	<b>48%</b>
<b>Australia</b>	<b>45%</b>	<b>49%</b>	<b>52%</b>



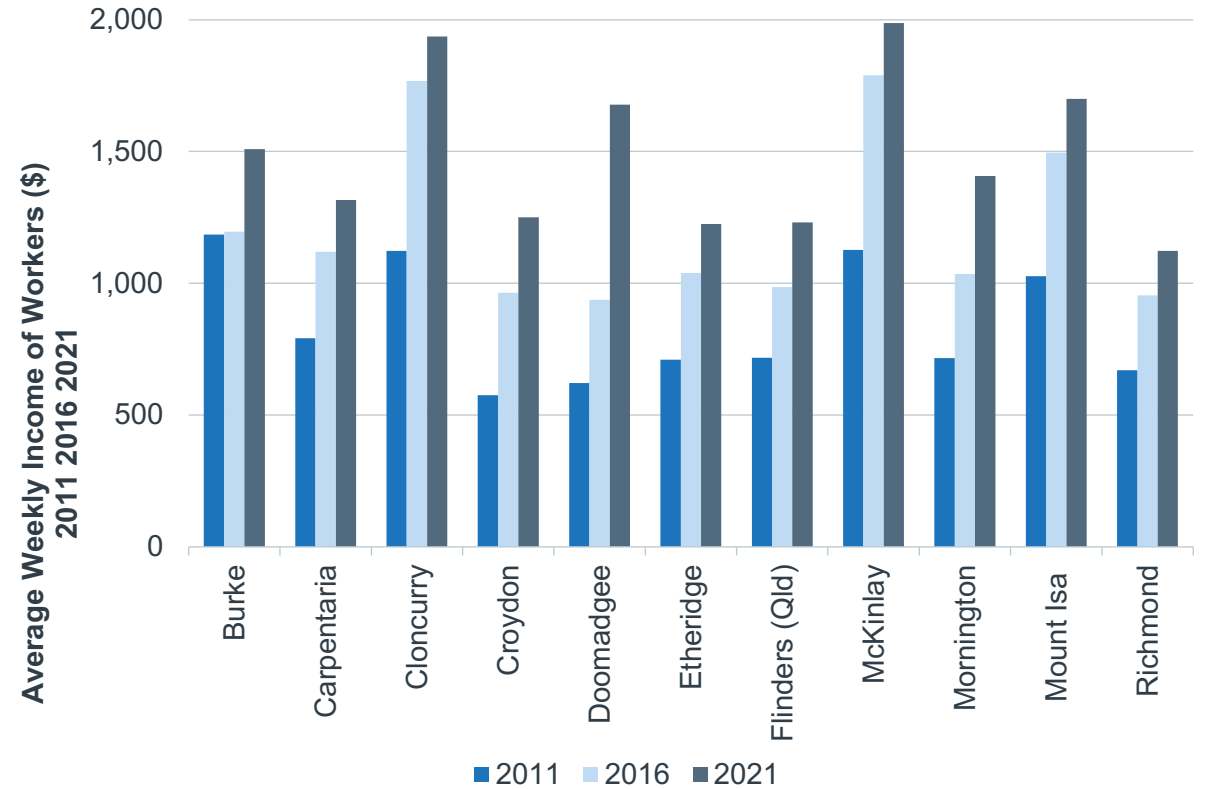
ABS (2022). Census of Population and Housing, 2021. Australian Bureau of Statistics, Canberra

## SOCIAL DEVELOPMENT – AVERAGE WEEKLY INCOME

### Key Points:

- Average worker income is highly variable across the North
- Incomes across nearly all regions in the North have grown slower than Australia generally between 2016 and 2021.

Region	Average Weekly Income		
	2011	2016	2021
<b>Sub-regions</b>			
WA Pilbara	\$1,752	\$2,256	\$2,278
QLD North West QLD	\$1,285	\$1,477	\$1,668
WA Kimberley	\$1,163	\$1,337	\$1,531
NT Greater Darwin	\$1,149	\$1,505	\$1,524
QLD Mackay-Isaac-Whitsunday	\$1,152	\$1,310	\$1,513
NT Rest of NT	\$1,047	\$1,286	\$1,502
QLD Central Queensland	\$1,086	\$1,255	\$1,405
QLD Cape York	\$908	\$1,184	\$1,395
WA Gascoyne	\$998	\$1,292	\$1,341
QLD Townsville & Region	\$966	\$1,100	\$1,287
QLD Central West QLD	\$872	\$1,045	\$1,287
QLD Cairns & Region	\$882	\$1,036	\$1,203
<b>North Australia Summary</b>			
Total NT	\$1,114	\$1,442	\$1,517
Northern QLD	\$1,026	\$1,179	\$1,359
Northern WA	\$1,565	\$2,029	\$2,068
<b>Northern Australia</b>	<b>\$1,106</b>	<b>\$1,339</b>	<b>\$1,471</b>
<b>Australia</b>	<b>\$1,012</b>	<b>\$1,206</b>	<b>\$1,416</b>



ABS (2022). Census of Population and Housing, 2021. Australian Bureau of Statistics, Canberra



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# CARBON EMISSIONS

This section explores the net Greenhouse Gas (GHG)/carbon (CO<sub>2</sub>e) emissions, based on Australia's National Greenhouse Gas Inventory.

Primary emitting sectors include:

- Electricity generation
- Transport fuels
- Industrial processes
- Agriculture & land use
- Natural processes
- Land use change
- Waste

Sequestering sectors include:

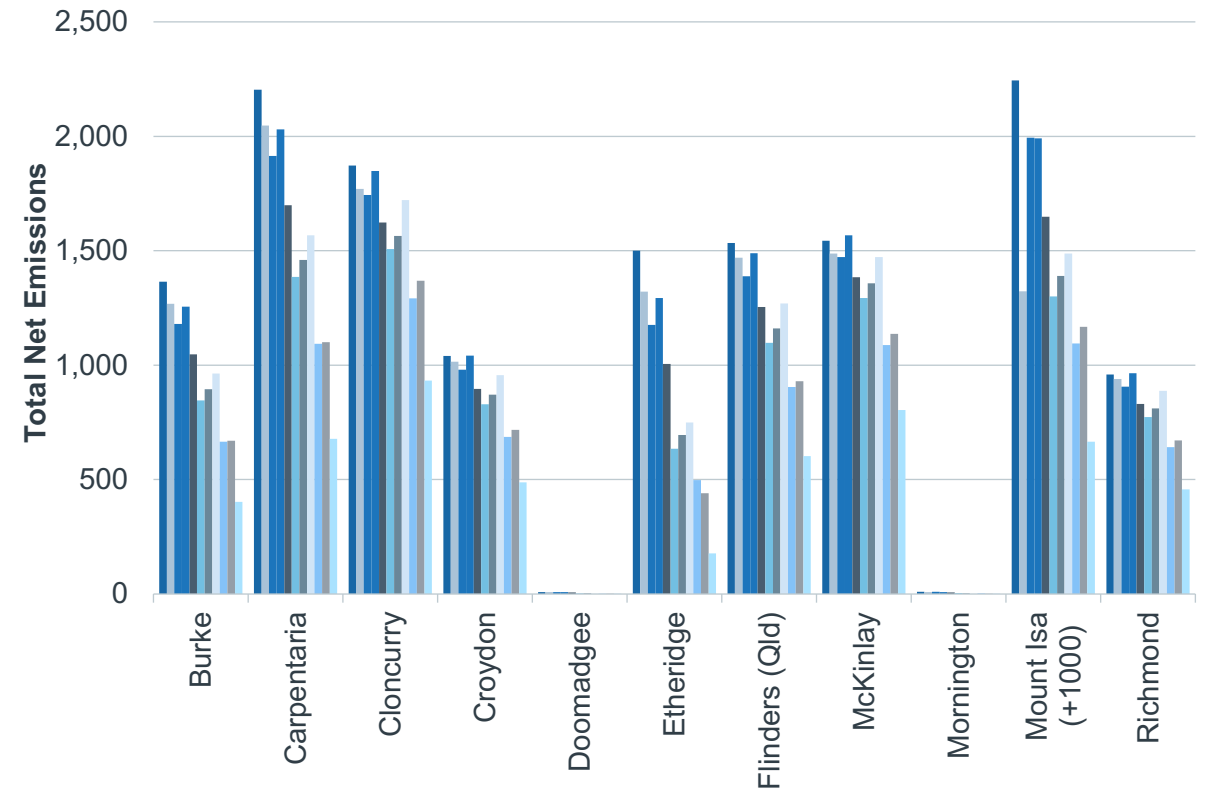
- Forestry and forest products

## CARBON EMISSIONS – TOTAL NET EMISSIONS

### Key Points:

- Northern Territory GHG emissions are growing.
- Northern Queensland is the largest CO<sub>2</sub>e emitter but has reduced emissions at twice the rate of Australia generally.
- Some regions in the North are already beyond Net Zero

Region	Total GHG Emissions		
	2015	2021	Change
<b>Sub-regions</b>			
QLD Central Queensland	33,122	29,543	-11%
QLD Mackay-Isaac-Whitsunday	14,627	14,100	-4%
NT Greater Darwin	5,441	11,573	113%
WA Pilbara	8,179	10,221	25%
QLD North West QLD	12,405	6,210	-50%
QLD Townsville & Region	5,552	4,370	-21%
NT Rest of NT	6,152	2,419	-61%
QLD Cairns & Region	4,029	2,245	-44%
QLD Central West QLD	8,800	1,757	-80%
WA Gascoyne	530	-412	-178%
WA Kimberley	1,585	-956	-160%
QLD Cape York	795	-2,595	-426%
<b>North Australia Summary</b>			
Total NT	11,592	13,992	21%
Northern QLD	79,329	55,629	-30%
Northern WA	10,294	8,852	-14%
<b>Northern Australia</b>	<b>101,215</b>	<b>78,473</b>	<b>-22%</b>
<b>Australia</b>	<b>539,967</b>	<b>463,955</b>	<b>-14%</b>
<b>% of Australia</b>	<b>19.30%</b>	<b>16.90%</b>	<b>-2.40%</b>



Source: AEC (unpublished). Carbon Model 2020-21. AEC Group, Townsville





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# CONCLUSIONS & RECOMMENDATIONS FOR NORTHERN AUSTRALIA

This section identifies a number of conclusions and recommendations that can be considered for strengthening the Northern Australia agenda into the future.

## CONCLUSIONS

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### More work to do!

Northern Australia is making progress in achieving the objectives of the White Paper on Developing Northern Australia.

However, progress is neither uniform across the North nor achieving sufficient success across a range of indicators.

For example, since 2015:

- While the North's share of the national economy has grown from 11.6% to 11.8%, there are some regions where the economy has considerably contracted
- The structure of the economy in the North remains hollow:
  - Mining alone accounts for 96% of export value
  - Most manufactured products consumed in the north are not produced in the North.
  - The proportion of employment in the North in key industries (such as Defence and tertiary education) is declining, relative to Australia generally
  - Enormous reliance on professional services and other office-based services from outside the North.
- Population growth remains weak and most regions are failing to attract more new residents than those leaving.
- While private investment has been increasing, the North remains heavily reliant on public investment.
- More jobs are being generated, but at a slower rate than Australia generally and with a higher reliance on FIFO labour.
- Social development issues remain unresolved, namely:
  - Declining economic participation across the North
  - Prevalence of numerous long-term health conditions

## RECOMMENDATIONS

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### Back to the basics

The Developing Northern Australia agenda can increase its impact by focusing on the key drivers of economic growth.

These drivers include:

- Growing the residential population, through:
  - Investing in quality urban infrastructure and services improve liveability, encouraging population retention and attraction
  - Re-calibrating tax incentives (such as Fringe Benefits Tax and the Zone Tax Rebate) to incentivise permanent migration to the North
- Supporting private investment by:
  - Improving sustainable development of natural resources
  - Lowering the cost of doing business in the North (electricity, transport and insurance)
- Increasing government spending on:
  - Catalytic infrastructure (dams, energy networks, transport – mass transit and freight)
- Increasing the value of exports, namely:
  - Identifying opportunities and supporting industry investing in value-adding primary exports
  - Identifying opportunities to replace major imports with local supply (such as professional services and liquid fuels).

These outcomes can be achieved through the development of a series of place-based development plans for all regions, with a priority on those who are falling behind.

These plans will need to include a clear assessment of each regions' opportunities and challenges and the infrastructure, investment and policy change required to realise their opportunities.



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## About the Author

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Jonathan is a senior economist and leads AEC's Northern Australia portfolio, bringing his industry and policy experience in the agricultural sector and industry development to identify and de-risk transformational economic development initiatives, particularly in regional Australia.

During his career, Jonathan has also successfully delivered complex economic and financial appraisals on several high profile infrastructure initiatives. Examples include transforming Australia's largest infrastructure project (Inland Rail), delivering detailed business cases for government (Townsville Concert Hall, Lakeland Irrigation Scheme and North Queensland Simulation Park – NQSPARK), supporting the re-establishment of manufacturing into regional Queensland (multiple initiatives), and construction supply chain analysis on Australia's largest dam proposal – the \$5 billion Hells Gates Dam Scheme.

Jonathan has also been a presenter at the Developing Northern Australia Conference, the Sustainable Growth for Regional Australia (SEGRA) Conference, the G20 and the Asia Pacific Cities Summit.

In addition to his professional work, Jonathan serves in the Queensland Rural Fire Service, Australian Army Reserves (rank: Major) and has served as President of the Hinchinbrook Chamber of Commerce, Industry and Tourism. Jonathan is also a member of the Order of Saint John of Jerusalem, Knights Hospitaller.



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