



# Northern Rivers Employment Land Study

Prepared for  
Northern Rivers JO

September 2023



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## Reviewer

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Signature		Dated	14/09/23
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# EXECUTIVE SUMMARY

HillPDA was commissioned by the Northern Rivers Joint Organisation (NRJO) to undertake an employment lands study (the Study) for the Northern Rivers region. This region encompasses the seven LGAs of Ballina, Byron, Clarence Valley, Kyogle, Lismore, Richmond Valley and Tweed Shires. Across the Northern Rivers, employment lands encompass land zoned as E3 Productivity Support, E4 General Industrial, and W4 Working Waterfront.

## Strategic context

The Northern Rivers sits within the North Coast Region in the State's north-east. It has strategic connections to the rapidly growing areas of Sydney and South-East Queensland via the Pacific Motorway.



Source: North Coast Region Plan, Department of Planning and Environment, 2022

The North Coast Regional Plan establishes a variety of considerations for planning at the local government level with regard to employment land. These include the support of new and existing employment lands, the identification of specialisations, the alignment of infrastructure, and flexibility and responsiveness to change. These requirements ensure that employment land is considered and supported at a smaller-scale level within the broader region.

### Socio-economic trends

A review of socio-economic trends for the Northern Rivers was undertaken which identified some key factors and unique features including:

- Over the 20-year period to 2021, the population in the Northern Rivers increased by around 47,850 persons or 18%, representing an annual compound growth rate of around 0.84%. The population projection scenarios adopted for the study assume a growth of 9% or 27,825 persons (Scenario 1) and 23% or 70,563 persons (Scenario 2) between 2021-41.
- Residents in the prime working age cohort of 15-49 years increased between 2011-2021 (+7,335 persons).
- The unemployment rate across the Northern Rivers has declined over the last ten years, from 8.1% in 2011 to 5% in 2021
- At the 2021 Census, the most common industries of employment for residents in the Northern Rivers were similar to those of the wider North Coast. The five most common industries were:
  - Health Care and Social Assistance – 22,893 or 18.4% of employed residents
  - Retail Trade – 13,551 or 10.5% of employed residents
  - Construction – 12,760 or 9.8% of employed residents
  - Education and Training – 12,455 or 9.6% of employed residents
  - Accommodation and Food Services – 11,657 or 8.9% of employed residents.
- Over the ten-year period to 2021, the total jobs generated across the Northern Rivers increased by around 21,620 or 30%, reaching a total of around 112,455 jobs. The largest employing industry sectors were:
  - Health Care and Social Assistance - 21,687 jobs (19% of employment)
  - Retail Trade - 13,442 jobs (12% of employment)
  - Education and Training - 11,809 jobs (11% of employment)
  - Accommodation and Food Services - 11,296 jobs (10% of employment)
  - Construction - 8,981 jobs (8% of employment).
- The industries that added the most value to the Northern Rivers economy were:
  - Health Care and Social Assistance - \$1,724 million
  - Construction - \$1,293 million
  - Retail Trade - \$902 million
  - Education and Training - \$878 million
  - Manufacturing - \$687 million.
- By 2021, there were 29,080 registered businesses in the Northern Rivers. This represented 62% of all registered businesses across the North Coast.

## Industrial trends

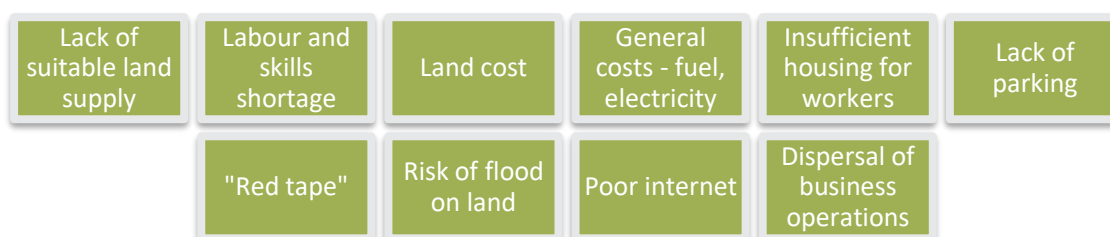
Industry trends were overviewed with the top trends considered to be of relevance to the Northern Rivers being:

- Globalisation and the use of information technology including AI causing industry disruptions
- The emergence of non-traditional uses in general industrial areas
- Greater dependency on strong access to motorways
- An increasingly automated workplace
- An increase in industrial building heights
- Growing demand for transport and logistics and 'last-mile' servicing which is generating a need for larger land parcels near motorways
- Rapid growth in industrial land values.

In response to the industrial trends and having reviewed the broad planning provisions, there may be a need for some councils to revisit their building height and minimum lot size provisions to remain relevant.

## Engagement findings

A business survey and targeted conversations were undertaken to inform the study. The common barriers that were perceived to be restricting employment businesses and the development of employment lands included:



## Employment land supply

The land use audit indicates that the Northern Rivers contains around 1,811 hectares of zoned employment land. Of this, 1,307 hectares, or 72%, was considered developed, with the remaining 504 hectares, or 28%, was vacant. Of the vacant employment land E4 General Industrial, accounted for 89% (448 hectares), W4 - Working Waterfront accounted for 7% (37 hectares), and E3 – Productivity Support, accounted for 4% (19 hectares) of total vacant land stock.

Northern Rivers employment land stocks by LGA, zone and land status (ha)

Land status	Land zone	Ballina	Byron	Clarence Valley	Kyogle	Lismore	Richmond Valley	Tweed	Total
Developed	E3	18.8	3.4	29.6	0	24.3	0	72.6	148.8
	E4	93.9	50.3	403.6	63.3	155.1	225.9	154.4	1,146.6
	W4	0	0	10.7	0	0	0	0.9	11.6
	<b>Total</b>	<b>112.8</b>	<b>53.7</b>	<b>443.9</b>	<b>63.3</b>	<b>179.4</b>	<b>225.9</b>	<b>227.9</b>	<b>1,306.9</b>
Vacant	E3	1.8	4.9	0.3	0	1.9	0	10.0	19.0
	E4	26.3	14.8	79.4	47.3	98.7	80.3	101.6	448.4
	W4	0	0	36.7	0	0	0	0	36.7
	<b>Total</b>	<b>28.1</b>	<b>19.7</b>	<b>116.5</b>	<b>47.3</b>	<b>100.6</b>	<b>80.3</b>	<b>111.6</b>	<b>504.1</b>
Total	E3	20.7	8.3	30	0	26.2	0	82.6	167.7
	E4	120.2	65.1	483.1	110.5	253.9	306.2	256.1	1,595.0
	W4	0	0	47.4	0	0	0	0.9	48.3
	<b>Total</b>	<b>140.9</b>	<b>73.4</b>	<b>560.4</b>	<b>110.5</b>	<b>280.1</b>	<b>306.2</b>	<b>339.6</b>	<b>1,811.0</b>

Source: HillPDA 2022

## Employment land demand

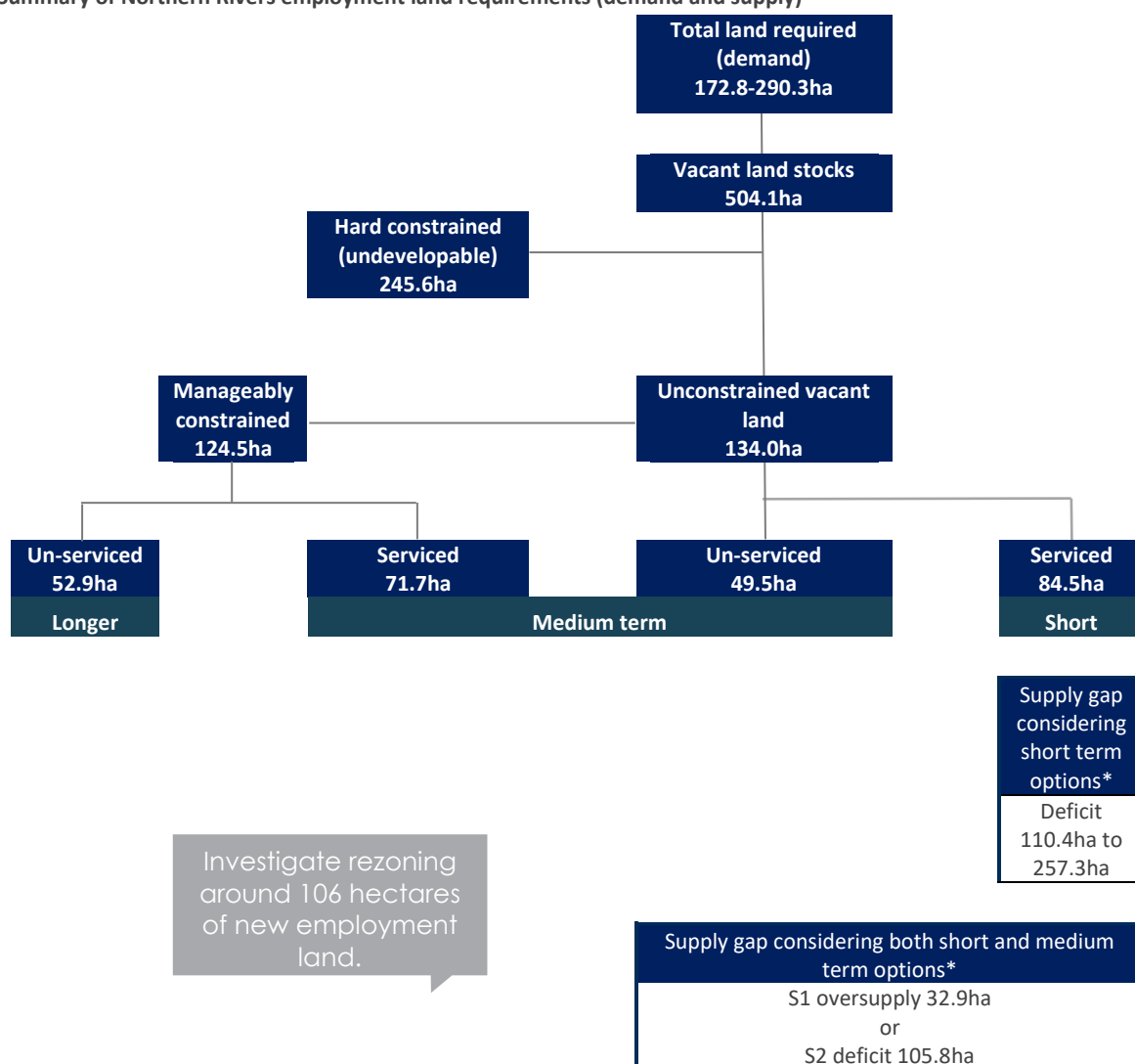
The employment land demand chapter projected the amount of additional employment land required to support the Northern River's resident, worker and visitor communities. It was estimated that the Northern Rivers would demand between 172.8 and 290.3 hectares of employment land between 2021-41. This equates to an annual demand of between 8.7 to 14.5 hectares over the 20-year period.

The demand analysis does not consider the additional demand that may be generated due to established businesses wanting to relocate out of existing industrial areas due to flood constraints. While it is acknowledged that flooding would burden the existing supply chain, ultimately it is unlikely the land will be 'back zoned' and it is therefore still contributing to land supply. While there is option for businesses to continue to locate in these areas, due to insurance premiums and flood risk, it is likely that some of these existing zones may become less utilised. It is therefore logical that additional land could be identified in LGAs that are subject to flood risk to accommodate some demand generated from reduced precinct utilisation.

## Servicing and constraints analysis

Several factors have an impact on the supply of land. These factors include environmental constraints, infrastructure issues (including servicing), land ownership patterns, withholding issues, highest and best use of land, presence of residential development, development feasibility, the suitability or unsuitability of the land and the existing planning framework.

### Summary of Northern Rivers employment land requirements (demand and supply)



\*deficit figure accounts for 20% of land being occupied by non-employment uses

It would be logical to plan for new development in areas where there is a supply deficit across all scenarios, including Ballina, Byron, Lismore and Tweed, however if land is too constrained, it could be possible to investigate surrounding LGAs if strong transport connections are in place.

### Options to meet demand

To assist in alleviating some of the pressure on employment land across the Northern Rivers, the following options have been identified for consideration.

**Regional planning** - Where land in some LGAs is constrained, explore opportunity to bring online employment land in neighbouring LGAs to alleviate pressure. The northern extents on Clarence Valley LGA and eastern extents of Lismore LGA are the most appropriately located to support the higher demand in Tweed, Byron and Ballina.

**Increase land supply** - Work with State Government to investigate future short term employment land opportunities in line (see Table 69). Not all employment land investigation areas will be needed across the Northern Rivers to meet future demand. The rezoning of future land should consider the benefits to the broader region and demand. The highest priorities for rezoning would be in the LGAs of Tweed and Ballina where there is an identified deficit. The rezoning of land in Lismore would be to create capacity for businesses to relocate out of flood affected areas. There is opportunity for the land that is in flood affected areas to be rezoned to alternate uses so not to falsely inflate supply. When investigating future land supply options, consultation with landowners should be undertaken to determine interest in selling or redeveloping land for employment purposes. Alternatively, where council's own suitable employment land, this could be prioritised.

**Site specific analysis of vacant land supply** - Undertake more detailed site-specific analysis of vacant, zoned land supply to determine interventions to bring parcels to the market and address barriers.

**Land rezoning** - On vacant land that is heavily constrained by hard constraints, consider rezoning to an alternate zone such as conservation or rural zones to portray a more realistic supply pipeline.

**Infrastructure servicing and delivery plans** - Prepare LGA wide infrastructure servicing and delivery plans that investigate enabling infrastructure priorities in response to employment and residential demand and provide clarity around the timing for delivery and any cost deficits. Share information with state departments.

**Employment land monitor** - Maintain an employment land monitor that identifies vacant and underutilised employment land. The monitor could incorporate the assessment of sites against the land suitability criteria, the size of the sites and the infrastructure and service requirements. It should also list constraints that could be a barrier to development.

**Critical infrastructure barriers** - DPE to work with local councils across the region to understand the critical infrastructure capacity barriers and determine potential the funding priorities aligned with residential and employment land use growth needs.

**Planning control review** - Councils, particularly Ballina, Byron and Tweed could consider reviewing or removing building height parameters, particularly for E4 General Industrial land, to maximise the flexibility of typology and use that can operate on the site. Councils with existing or future employment land along the Pacific Motorway to consider introducing a minimum lot size provision to protect land for larger floor plate uses such transport and distribution, manufacturing and warehousing that are more dependent on efficient road access.

**Biodiversity** - Advocate to State Government for greater leniency around biodiversity constraints in zoned urban areas to reduce the cost to councils and proponents to undertake detailed biodiversity investigations on a site by site basis.

# INTRODUCTION

# 1.0 INTRODUCTION

HillPDA was commissioned by the Northern Rivers Joint Organisation (NRJO) to undertake an employment lands study (the Study) for the Northern Rivers region. This region encompasses the seven LGAs of Ballina, Byron, Clarence Valley, Kyogle, Lismore, Richmond Valley and Tweed Shires (refer to Figure 1).

This Study includes an analysis of growth influences and current supply and capacity, and then a projection of the future floorspace/land requirements to accommodate additional growth and capitalise upon the strategic location of the Northern Rivers.

## 1.1 Background

Employment lands are vital to ensuring and promoting a region's economic growth and sustainability. They also ensure that the functionality and well-being of urban areas are kept through providing space for:

- Essential urban services such as waste and water management, repair trades and construction services
- Warehousing, logistics and last mile distribution centres
- Areas for businesses that design, manufacture and produce goods and services
- Businesses to increase their economic output and efficiencies through the effects of agglomeration.

To ensure the continued economic well-being of the Northern Rivers and its residents, this Study seeks to better understand the region's land and industry types to inform positive and promotional planning provisions.

## 1.2 Employment land uses

As defined by the Department of Planning and Environment's (NSW DPE) Employment Lands Development Monitor (ELDM), employment lands are defined as:

*"land zoned for industrial or similar purposes in planning instruments. They are generally lower density employment areas containing concentrations of businesses involved in: manufacturing; transport and warehousing; service and repair trades and industries; integrated enterprises with a mix of administration, production, warehousing, research and development; and urban services and utilities.*

*They are vital to the functioning of our urban areas, providing space for:*

- *Essential services such as waste and water management, repair trades and construction services*
- *Warehousing, logistics and distribution centres*
- *Areas for businesses that design, manufacture and produce goods and services".*

Across the Northern Rivers, employment lands encompass land zoned as E3 Productivity Support, E4 General Industrial, E5 Heavy Industrial and W4 Working Waterfront. These land zones were formerly IN1 General Industrial, IN2 Light Industrial, IN3 Heavy Industrial, IN4 Working Waterfront, B5 Business Development, B6 Enterprise Corridor and B7 Business Park.

## 1.3 Objectives

The purpose of the study is to provide an audit of industrial and employment land across the Northern Rivers. Specifically, the demand and supply looking forward 20 years and beyond, identify the likely demands for various employment and industrial land uses, considering global, domestic and local trends and provide commentary of the economic, social and environmental values and issues related to various land uses.

Specific objectives are to:

- Understand and contribute to the establishment of shared economic and employment objectives for Northern Rivers land use planning to help turn the opportunities into a reality
- Avoid major mismatches between local jobs and the resident/seasonal workforce
- Avoid shortage of service land at appropriate locations so that economic/employment opportunities are not lost, and land/tenancy pricing maintained at a viable level for interregional business competitiveness
- Ensure efficient and effective use of strategically located sites and infrastructure
- Ensure planning outcomes are economically and environmentally sustainable
- Recognise fundamental elements in the employment lands and economy that could assist in 'closing the gap'.

## 1.4 Study area

The Northern Rivers region encompasses the seven LGAs of Ballina, Byron, Clarence Valley, Kyogle, Lismore, Richmond Valley and Tweed Shires.

**Figure 1: Northern Rivers study area**



Source: HillPDA

## 1.5 Study approach and structure

The Study is structured in the following manner:

- **Chapter 2 | Strategic context** - provides an overview of the relevant State and local government policy and legislation and how it influences employment land uses across the region.
- **Chapter 3 | Socio-economic trends** - undertakes a review of the current and historic economic and employment trends within the Northern Rivers region.
- **Chapter 4 | Industrial market trends** - documents historic and emerging trends in the industrial/urban service markets and resultant implications in planning/demand for such land uses into the future.
- **Chapter 5 | Planning framework review** – provides a comparative analysis of the planning framework across the region’s LGAs.
- **Chapter 6 | Stakeholder engagement findings** – summary of findings from stakeholder engagement.
- **Chapter 7 | Employment lands audit** – provides an audit of employment land across the Northern Rivers. The audit identifies key characteristics of the region’s employment land including their development status.
- **Chapter 8 | Employment lands demand** - projects the demand for employment land required to support the projected growth in employment over the next 20 years.
- **Chapter 9 | Servicing and constraints analysis** - undertakes a review of the Northern Rivers employment land stocks to determine if they are serviced or not serviced and the extent of constrained versus unconstrained land.
- **Chapter 10 | Supply and demand gap analysis** – overviews the gap in land supply to meet future demand at an LGA and regional level
- **Chapter 11 | Future land investigation** – identifies the land suitability criteria that should be considered when identifying land for employment uses. Overviews the future land investigation areas.

# STRATEGIC CONTEXT

## 2.0 STRATEGIC CONTEXT

The Northern Rivers is diverse, with the LGAs each contributing independently and differently to the region's economy and supply of employment land. The following tables draw on insights from the North Coast Regional Plan 2041, Local Strategic Planning Statements, previous North Coast Employment Land Review and other local council strategies and documents. Full analysis of all documents can be found in Appendix A.

**Table 1: Ballina strategic context**

Theme	Insights
<b>General directions</b>	<ul style="list-style-type: none"> <li>Maximise the opportunities associated with the Southern Cross Industrial Precinct to deliver additional jobs</li> <li>Support employment lands and jobs at Ballina, Lennox Head and Wollongbar</li> <li>Stimulate economic activity, and provide improved access to local services and facilities, by reviewing planning controls around major Shire infrastructure such as Ballina Hospital, Ballina Byron Gateway Airport, and education facilities</li> <li>Support a regional framework for employment land delivery by fostering stronger connections and collaboration at the Northern Rivers subregional level</li> <li>Maximise opportunities associated with the growth in South East Queensland and the increased connectivity provided by the upgraded Pacific Motorway and digital technology.</li> </ul> <p>Source: North Coast Regional Plan 2041, Ballina LSPS 2020-2040</p>
<b>Historic employment land demand and status</b>	<p>A 2019 a Demand Assessment found that Ballina's existing industrial zoned land stocks were sufficient to meet demand to 2041, with a surplus in supply of around 4.5 hectares. It is also acknowledged that there is currently around 52 hectares of additional industrial lands stocks proposed. If this proposed land were to be realised surplus industrial land stocks would increase to around 56.5 hectares.</p> <p>Source: Ballina Shire Commercial &amp; Industrial Land Demand Assessment (2019) and Ballina Council 2023</p>
<b>Future expansion areas and timing for delivery</b>	<ul style="list-style-type: none"> <li>Prepare a masterplan for Southern Cross Industrial Estate Expansion Area.</li> <li>Evaluate suitability of rural land adjoining the Russellton Industrial Estate for industrial use.</li> <li>Evaluate the employment land area located in Ross Lane and incorporate into the Lennox Head place based strategic plan.</li> </ul> <p>Source: Ballina LSPS 2020-2040</p>

**Table 2: Byron strategic context**

Theme	Insights
<b>General directions</b>	<ul style="list-style-type: none"> <li>Support the Shire's net zero target including zero waste to landfill through a circular economy</li> <li>Maximise opportunities associated with the growth of South East Queensland</li> <li>Improve the utilisation of existing industrial areas for industrial and urban service use</li> <li>Promote an attractive investment environment with people-friendly industrial areas and business centres</li> <li>Improve infrastructure in business centres and industrial areas</li> <li>Ensure the local planning framework protects industrial businesses and trade services, aid business clustering, and facilitate the Byron Arts and Industry Estate Precinct Plan</li> <li>Participatory collaboration with the local Aboriginal Community in determining new employment land locations</li> </ul> <p>Source: Byron Shire Business and Industrial Lands Strategy (2020); North Coast Regional Plan 2041</p>
<b>Historic employment land demand and status</b>	<ul style="list-style-type: none"> <li>The 2020 study indicates that there is insufficient zoned industrial land to meet future need.</li> <li>Over the forecast period to 2040, it is estimated that between 7 hectares to 25 hectares of land would be needed.</li> </ul> <p>Source: Business and Industrial Land Strategy October 2020</p>
<b>Future expansion areas and timing for delivery</b>	<ul style="list-style-type: none"> <li>Area 1 Billinudgel Industrial Estate minor expansion 0.2ha (short term)</li> <li>Area 2 Mullumbimby Industrial Estate expansion 2.4ha (short term)</li> <li>Area 3 Gulgan East industrial - 9ha (short-medium term)</li> <li>Area 4 Gulgan West industrial and business park – 10ha (medium to long term)</li> <li>Area 5 Gulgan North industrial and business park – 6.5ha (medium term)</li> <li>Area 6 Byron Bay West industrial and business park – 7ha (short term)</li> <li>Area 7 Bangalow Industrial Estate eastern expansion – 1ha (medium term)</li> </ul> <p>Source: Byron Shire Business and Industrial Lands Strategy (2020)</p>

**Table 3: Clarence Valley strategic context**

Theme	Insights
General directions	<ul style="list-style-type: none"> <li>Foster innovation in 'engines of growth' for the Region including forestry, sugar production, marine manufacturing and services and logistics.</li> <li>Support the growth and diversification of the valley's agricultural base and support sustainable industries and value adding processes to encourage new opportunities for agribusiness, agritourism and associated manufacturing and transport. The ELS notes the potential for a distribution centre or intermodal facility in the LGA to facilitate agribusiness-related clustering.</li> <li>Progress opportunities for aviation, industrial and emergency services related clusters at Clarence Valley Regional Airport.</li> <li>Focus employment lands in Grafton, Maclean and Yamba, and in planned growth areas near Junction Hill, South Grafton, Lanitza (Airport) and Townsend; and marine based precincts at Harwood.</li> <li>Investigate new industrial uses of the Harwood Marine Precinct and conduct a feasibility study into the infrastructure required to support the precinct activation. The Clarence Valley FER REDS Update highlights the role of the Harwood Marine Precinct in fostering boat and ship manufacturing, which would in turn support the regional industry of agriculture, forestry and fishing.</li> <li>Progress opportunities to leverage employment lands delivery in the subregion and opportunities arising from the Coffs Harbour Bypass.</li> <li>Integrate freight and logistics, industrial development and value adding businesses, taking advantage of road, rail and air freight corridors and infrastructure investment. Work with industry and business groups in the Clarence to identify development opportunities on existing employment land and investigation areas for freight and transport based business.</li> <li>Maximise opportunities associated with regional health and justice infrastructure, including Grafton Base Hospital, Maclean District Hospital, Grafton District Court, and Clarence Correctional Centre.</li> <li>The LSPS notes that the neighbouring Coffs Harbour LGA has a low supply of employment land, and that potential employment land in the Clarence Valley LGA can be drawn upon in a strategic approach for the wider area.</li> </ul>
	Source: North Coast Regional Plan 2041; Regional Economic Development Strategies - 2022 Update, Clarence Valley Functional Economic Region Draft; Clarence Valley Employment Land Strategy 2022; Clarence Valley LSPS
Historic employment land demand and status	<ul style="list-style-type: none"> <li>Clarence Valley was projected to require a total of between 21 and 44 hectares of industrial land to 2041.</li> <li>The LGA contains approximately 111 hectares of land that is zoned for industrial purposes and is identified as vacant.</li> <li>Of the 111 hectares, around 56 hectares was not constrained and considered available for development.</li> <li>The supply of land was considered sufficient to meet future demand requirements to 2041.</li> </ul> <p>Source: Clarence Valley Employment Land Strategy 2022</p>
Future expansion areas and timing for delivery	<ul style="list-style-type: none"> <li>The ELS and other investigations by council recommended that Council prioritise South Grafton, adjacent to Alipou Creek, for future employment land. The investigation area could accommodate 66 ha, subject to the resolution of potential flooding constraints.</li> </ul> <p>Source: Clarence Valley Employment Land Strategy 2022</p>

**Table 4: Lismore strategic context**

Theme	Insights
General directions	<ul style="list-style-type: none"> <li>Support the development of employment lands, including commercial and industrial employment opportunities such as retail sharing outside the Lismore CBD.</li> <li>Seek funding to support the development of the renewable energy sector through actions identified in the North Coast Regional Plan including; (a) considering renewable energy resource precincts and infrastructure corridors, (b) enabling small-scale renewable energy projects, and (c) promoting community-scale renewable energy projects.</li> </ul>
	<ul style="list-style-type: none"> <li>Expand agriculture and the agribusiness sector while protecting productive agricultural land.</li> <li>Investigate the expansion of health precincts to support the Lismore Base and St Vincent's Hospitals (and allied health services) and land use zoning and planning controls to support any expansion.</li> <li>Develop a precinct plan for Lismore airport to enable airport expansion opportunities including a freight and logistics hub and associated infrastructure requirements. Lismore airport is seen as a potential catalyst for employment, in the form of a related freight and logistics hub. The LSPS seeks</li> </ul>

Theme	Insights
	<p>to make the airport a Local Activation Precinct, part of a State Government initiative to bolster local economies.</p> <ul style="list-style-type: none"> <li>• Unlock the economic potential of the local knowledge economy, centred around institutions such as Southern Cross University, as well as potential industrial land in South Lismore and Goonellabah.</li> <li>• Seek funding to establish the Lismore CBD, the Justice Precinct and the Bridge to Bridge Precinct as Local Activation Precincts.</li> </ul> <p>Source: Lismore LSPS 2040</p>
Historic employment land demand and status	<ul style="list-style-type: none"> <li>• The commercial and industrial land needs analysis (2013) found Lismore had 494.8 hectares of zoned business and industrial land and that this was sufficient to meet future needs. Feedback given to inform the 2022 Growth Management Strategy suggested that the location and size of undeveloped industrial land did not meet the needs of businesses and others wanted to secure flood free land.</li> <li>• The 2015 North Coast Review suggested over the forecast period to 2031, that the supply of industrial land will exceed demand by 185.8 hectares.</li> </ul> <p>Source: Lismore Growth Management Strategy (2022); North Coast Employment Land Review (2015)</p>
Future expansion areas and timing for delivery	<ul style="list-style-type: none"> <li>• Goonellabah Industrial precinct – potential expansion area – approx. 50 hectares (map 19 GMS).</li> <li>• Wyrallah Road, Monaltrie – potential industrial area (map 20 GMS)</li> <li>• Three Chain Road, South Lismore (map 21 GMS).</li> </ul> <p>Source: Lismore Growth and Realignment Strategy (2022)</p>

**Table 5: Kyogle strategic context**

Theme	Insights
General directions	<ul style="list-style-type: none"> <li>• Develop employment lands at Kyogle in conjunction with the Northern Rivers Joint Organisation to support jobs growth.</li> <li>• Create the right conditions to support enterprise and innovation.</li> <li>• Identify opportunities to increase inward investment and to support growth of existing businesses and industries.</li> <li>• Prepare an Employment Land Demand Analysis to determine requirements for business and industrial land supply.</li> <li>• Amend the LEP to ensure supply of appropriately located and serviced business and industrial zoned land.</li> <li>• The LSPS notes the challenges of low or negative growth, positioning employment opportunities as a means of drawing more people into the area. Sufficient supply of new land, development permissibility, and infrastructure are seen as key components in strengthening employment in the LGA. Simultaneously, the LSPS calls for existing businesses to be invested in.</li> </ul> <p>Source: North Coast Regional Plan 2041; Kyogle LSPS 2020</p>
Historic employment land demand and status	<ul style="list-style-type: none"> <li>• Over the forecast period, the North Coast Employment Land Review (2015) estimated that the supply of industrial land will exceed demand by 175.9 hectares.</li> </ul> <p>Source: North Coast Employment Land Review (2015)</p>
Future expansion areas and timing for delivery	<p>None specifically identified due to existing supply.</p>

**Table 6: Richmond Valley strategic context**

Theme	Insights
<b>General directions</b>	<ul style="list-style-type: none"> <li>• Diversify the range of services and employment options.</li> <li>• Encourage the establishment of new manufacturing and rural industries to support local processing of primary products and to diversify the employment market.</li> <li>• Partner with key stakeholders to deliver new and diversified employment opportunities, and employment lands.</li> <li>• The LSPS seeks diverse businesses to contribute to the LGA's economy, including businesses relating to medicinal cannabis, waste, freight, and tourism.</li> <li>• Leverage the new Richmond Valley Regional Job Precinct to continue to expand new employment and housing opportunities in both Casino and the broader LGA. Its aim is to support the development of food production, manufacturing and alternative energy. The Richmond Valley RJP seeks to make it easier for businesses to become established in the area. It is located at the intersection of the Bruxner Highway and the Summerland Way, and includes an industry cluster in Casino, as well as already developed or approved land. The precinct's boundary is in a process of being analysed.</li> <li>• The Growth Management Strategy identifies a number of economic growth principles including relevant to the employment lands including: <ul style="list-style-type: none"> <li>– Boost Casino as a Regional Job Precinct</li> <li>– Deliver sufficient and suitable industrial lands</li> <li>– Support a strong and diverse employment base.</li> </ul> </li> </ul> <p>Source: Richmond Valley Local Strategic Planning Statement (2020); North Coast Regional Plan 2041; Richmond Valley Regional Job Precinct Update (October 2021); Growth Management Strategy (April 2023)</p>
<b>Historic employment land demand and status</b>	<ul style="list-style-type: none"> <li>• Richmond Valley is projected to require and additional 187 hectares of industrial land over the next 20 years to cater to growth</li> <li>• It has around 120 ha of total vacant land, 52ha of vacant land within zoned areas and approx. 0.2ha of market available land.</li> <li>• With constraints and probable encumbrances removed, the modelling suggests a shortfall of around 67 hectares.</li> </ul> <p>Source: Richmond Valley Growth Management Strategy 2023 (Gyde Consulting)</p>
<b>Future expansion areas and timing for delivery</b>	<ul style="list-style-type: none"> <li>• RJP Area 1 Nammoona Industrial Area (expansion)</li> <li>• RJP Area 2 Casino Food Co-op Complex (expansion)</li> <li>• RJP Area 3b Sewerage Treatment Plant and surrounds</li> <li>• Casino Drive land use investigation area</li> <li>• Hare Street proposed employment zone expansion</li> <li>• Proposed aviation based employment zone</li> </ul> <p>Source: Casino Place Plan 2023 (Gyde Consulting)</p>

**Table 7: Tweed strategic context**

Theme	Insights
<b>General directions</b>	<ul style="list-style-type: none"> <li>• Deliver new employment and business park opportunities at Kingscliff, Pottsville, Tweed Heads south and South Murwillumbah, and encourage the development of airport related and tech business in the Cobaki release area, land owned by Gold Coast Airport P/L, the former Boyds Bay Garden World Site, and land at the southern extent of the airport runway.</li> <li>• Encourage employment and mixed use clustering.</li> <li>• Foster stronger alignment and integration with the Southern Gateway Economic Cluster in South East Queensland and the Northern Rivers subregion.</li> <li>• Focus the attention of new employment areas on the potential for export industries and employers without neglecting the service industry needs of the Tweed community.</li> <li>• Consider new or expanded employment areas with existing or potential access to regional transport links such as the Gold Coast airport, Pacific Motorway and the future extension of the railway system from South East Queensland into northern NSW.</li> <li>• The Tweed FER REDS Update highlights the importance of flood-resilient land for employment lands. As a result, it calls for such land to be rezoned for release, alongside the development of infrastructure and community support.</li> <li>• Review land-use planning to support community access to educational and hospital or related health care services and to leverage economic benefits and new education or health sector business opportunities outside of the significant farmland areas. Work in partnership with NSW State Government on the master-planned redevelopment of the existing Tweed Heads Hospital site.</li> <li>• Promote the establishment of a hub or precinct to incentivise the establishment of sustainability (green) industries in the Tweed LGA.</li> <li>• Review current zoning schemes to achieve a balance of land use allocation between agricultural growth needs and population and industrial growth.</li> </ul> <p>Source: Regional Economic Development Strategies - 2022 Update, Tweed Functional Economic Region Draft; North Coast Regional Plan 2041; Tweed Shire Employment Lands Strategy 2009; Tweed Local Strategic Planning Statement – 2020</p>
<b>Historic employment land demand and status</b>	<ul style="list-style-type: none"> <li>• The North Coast Employment Land Review (2015) forecasts that the supply of industrial land will exceed demand by 385.4 hectares – over the period to 2031.</li> <li>• Council policy states that to reduce the likelihood of supply shortage it is appropriate to have a 25-year supply of industrial land and a similar supply of potential office space to satisfy reasonable demand estimates.</li> </ul> <p>Source: North Coast Employment Land Review (2015)</p>
<b>Future expansion areas and timing for delivery</b>	<ul style="list-style-type: none"> <li>• Key existing and emerging employment land areas of prominence include: <ul style="list-style-type: none"> <li>– Gold Coast Airport</li> <li>– Border Park</li> <li>– The Tweed Hospital</li> <li>– Murwillumbah District Hospital</li> <li>– Tweed Valley Hospital (under construction)</li> <li>– Kingscliff Business and Innovation Park.</li> </ul> </li> </ul> <p>Source: Tweed Growth Management and Housing Strategy - Draft Issues Paper (September 2022)</p>

# SOCIO-ECONOMIC TRENDS

## 3.0 SOCIO-ECONOMIC TRENDS

This section undertakes a review of the current and historic socio-economic trends in the Northern Rivers. Information has been sourced from the Australian Bureau of Statistics (ABS), Transport for NSW and Profile.id.

Where relevant, economic performance indicators of the Northern Rivers have been benchmarked against the North Coast<sup>1</sup> to further identify any industry specialisation and/or opportunities for the Northern Rivers.

### 3.1 Resident working population characteristics

The resident population refers to persons living in the Northern Rivers, regardless of where they travel to work.

#### 3.1.1 Terminology

In line with the Greater Cities Commission's (GCC) employment categories, employment industries have been aggregated into four broad industry codes (BICs) in some sections within this chapter and preceding chapters. These are based on the Australian and New Zealand Standard Industrial Classification (ANZSIC) 1-Digit categories.<sup>2</sup> These four BICs are as follows:

- **Knowledge intensive:** Information, Media and Telecommunications; Financial and Insurance Services; Rental, Hiring and Real Estate Services; Professional, Scientific and Technical Services; and Public Administration and Safety
- **Health and education:** Education and Training; Health Care and Social Assistance
- **Population serving:** Retail Trade; Accommodation and Food Services; Arts and Recreation Services; Construction; Administrative and Support Services and Other Services
- **Industrial:** Agriculture; Forestry and Fishing; Mining; Manufacturing; Electricity, Gas, Water and Waste Services; Wholesale Trade; and Transport, Postal and Warehousing.

#### 3.1.2 Resident population growth

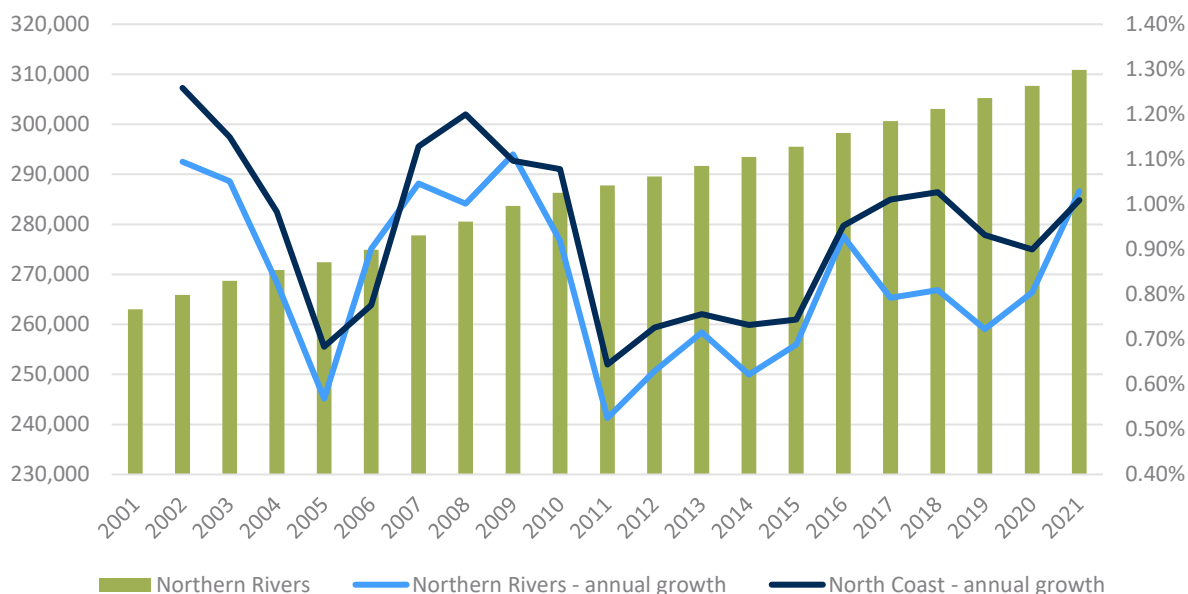
Over a 20-year period to 2021, the population in the Northern Rivers increased by around 47,850 persons or 18%, reaching a total of around 310,860 residents. This represented an annual compound growth rate of around 0.84%. This was slightly lower than the annual compounded growth rate recorded for the North Coast over the period (0.94%). As of 2021, around 58% of the North Coast's population was within the Northern Rivers; a proportion that has remained relatively stable over the 20-year period.

As seen in the figure below, the Northern Rivers annual growth rate mostly corresponds to, but is below that of, the wider North Coast. The exception to this has been during the years between 2016-21, where the annual growth rate of the Northern Rivers declined to 2019 before increasing to 2021. By contrast, the North Coast increased to 2018 and declined to 2020, before increasing to 2021. In fact, by the time of 2020-21, the growth rate between the two locations was around 1% each.

<sup>1</sup> Includes the LGAs of Ballina, Bellingen, Byron, Clarence Valley, Coffs Harbour, Kyogle, Kempsey, Nambucca Valley, Lismore, Port Macquarie – Hastings, Richmond Valley and Tweed.

<sup>2</sup> The Australian and New Zealand Standard Industrial Classification (ANZSIC) 1-Digit industry system classifies entities based on their main business activity and is used to collect and analyse data across 19 industries.

**Figure 2: Estimated resident population 2001-21 (year ending in June)**



Source: ABS Regional population, HillPDA

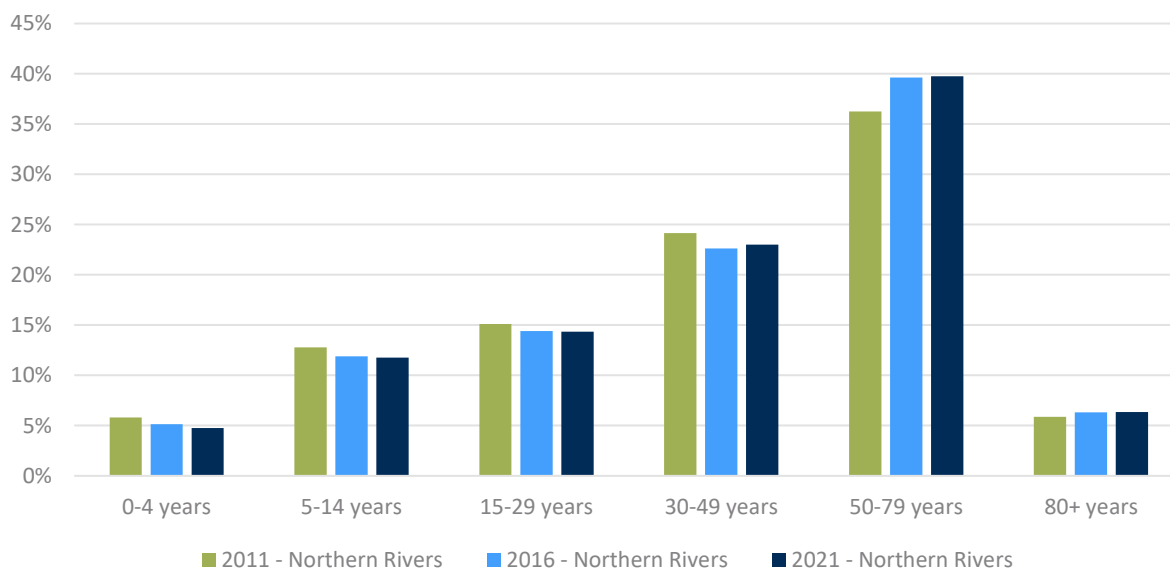
### 3.1.3 Age composition

Overall, proportionally, the age composition of the Northern Rivers population between 2011-21 was comparable to that of the wider North Coast. Over the ten-year period, the Northern Rivers experienced an ageing of its population, with residents aged 60 years and over comprising 81% of population growth during this time. This was also evident in the median age increasing from 43.9 years in 2011 to 46.7 years by 2021.

Over the time period, all age groups experienced positive growth, with the exception being the 0-4-year-old age group, which recorded a decline of around 1,280 persons.

Residents in the prime working age cohort of 15-49 years increased (+7,335 persons). Growth in this age cohort has a corresponding demand for increased employment opportunities, such as those provided in the region's employment precincts.

**Figure 3: Age composition 2011-21 (proportion to total population in census year)**



Source: ABS 2011 and 2021 Census, Table Builder

The Northern Rivers post-COVID 19 has become an attractive place to work and live. This is evident in the fact that residents in the prime working age cohort of 15-49 years decreased (-1,372 residents) between 2011-16, a trend that reversed between 2016-21, with an additional 8,705 residents in this age group.

Overall, residents aged under 50 years decreased by 3,587 persons between 2011-16, compared to a growth of 10,890 persons over the next 5 years (2016-21). This growth slowed the ageing of the population, evident in the median age remaining the same over the 2016-21 period.

The large growth in younger residents, particularly working aged residents, has likely increased demand for employment opportunities in across the North Coast, such as those provided in employment precincts.

**Table 8: Net change in age cohorts between census dates**

Age group	2011-2016	2011-21	2016-21
0-4	-1,224	-1,278	-54
5-14	-991	1,145	2,136
15-29	-49	2,686	2,735
30-49	-1,323	4,647	5,970
50-79	14,482	23,180	8,698
80+	2,068	3,491	1,423
<b>Total</b>	<b>12,963</b>	<b>33,871</b>	<b>20,908</b>

Source: ABS 2011,16 and 21 Census

### 3.1.4 Labour force status

The unemployment rate across the Northern Rivers has declined over the last ten years, from 8.1% in 2011 to 5% in 2021. This was a trend reflective of the wider North Coast, but the Northern Rivers unemployment rate was slightly lower in 2021. This, coupled with the high growth in working age residents, further implies that there has been strong demand for increased employment opportunities across the North Coast, with this being higher in the Northern Rivers.

**Table 9: Labour force status 2011-21**

Metric	2011	2021
Northern Rivers	8.1%	5.0%
North Coast	8.1%	5.2%

Source: ABS 2011 and 2021 Census, Table Builder

### 3.1.5 Resident industry of employment

#### 3.1.5.1 Major industries

At the 2021 Census, the most common industries of employment for residents in the Northern Rivers were similar to those of the wider North Coast. The five most common industries were:

- Health Care and Social Assistance – 22,893 or 18.4% of employed residents
- Retail Trade – 13,551 or 10.5% of employed residents
- Construction – 12,760 or 9.8% of employed residents
- Education and Training – 12,455 or 9.6% of employed residents
- Accommodation and Food Services – 11,657 or 8.9% of employed residents.

#### 3.1.5.2 Fastest-growing industries

Over the ten years to 2021, employed residents in the Northern Rivers increased by around 21,000, or 19%, reaching a total of around 130,630 employed residents. This represented an annual compound growth rate of around 1.8%, comparable to that recorded for the North Coast (1.9%).

There was growth in employed residents between 2016-21, with an additional 16,610 employed residents. This represented almost 80% of the net growth experienced since 2011, and a compound annual growth rate of 2.8%.

The top five growth industries for employed residents over the 2011-21 period were:

- Health Care and Social Assistance – 6,580 additional jobs
- Construction – 3,089 additional jobs
- Education and Training – 2,402 additional jobs
- Professional, Scientific and Technical Services – 1,967 additional jobs
- Accommodation and Food Services – 1,650 additional jobs.

Conversely, there were several industries that experienced a reduction in employed residents, such as:

- Manufacturing – 1,208 fewer jobs
- Retail Trade – 489 fewer jobs
- Wholesale Trade – 973 fewer jobs
- Information Media and Telecommunications – 158 fewer jobs.

As discussed previously, between 2016-21, the Northern Rivers has seen strong growth in working age residents and demand for employment (evident in the low unemployment rate). This has seen a rebound in growth of some formerly declining industries, such as:

- Manufacturing – 189 additional jobs
- Wholesale Trade – 169 additional jobs.

Certain industries, such as manufacturing; wholesale trade; and transport and warehousing, are key drivers and occupiers of employment precincts. As such, the growth and decline of these industrial-related industries would likely impact the demand and economic growth within the Northern Rivers employment precincts.

**Table 10: Resident employment by industry**

Industry	Northern Rivers			Net Change		NR	NC
	2011	2016	2021	2016-21	2011-21	2021%	2021%
Agriculture, Forestry and Fishing	5,227	5,709	6,129	420	902	4.7%	4.6%
Mining	594	674	756	82	162	0.6%	0.5%
Manufacturing	7820	6,423	6,612	189	-1208	5.1%	4.5%
Electricity, Gas, Water and Waste Services	1036	1,000	1203	203	167	0.9%	1.2%
Construction	9,671	10,284	12,760	2,476	3,089	9.8%	9.8%
Wholesale Trade	3215	2,073	2,242	169	-973	1.7%	1.7%
Retail Trade	14,040	12,911	13,551	640	-489	10.4%	10.5%
Accommodation and Food Services	10,007	10,449	11,657	1,208	1,650	8.9%	8.9%
Transport, Postal and Warehousing	4,001	4,070	4,072	2	71	3.1%	3.1%
Information Media and Telecommunications	1,345	1,136	1,187	51	-158	0.9%	0.8%
Financial and Insurance Services	2,002	1,751	2,003	252	1	1.5%	1.5%
Rental, Hiring and Real Estate Services	1,910	1,984	1,951	-33	41	1.5%	1.4%
Professional, Scientific and Technical Services	4,893	5,318	6,860	1,542	1967	5.3%	4.8%
Administrative and Support Services	3,397	4,084	4,505	421	1108	3.4%	3.5%
Public Administration and Safety	6,083	6,178	6,837	659	754	5.2%	5.5%
Education and Training	10,053	10,712	12,455	1,743	2,402	9.5%	9.6%
Health Care and Social Assistance	16,313	18,245	22,893	4,648	6,580	17.5%	18.4%
Arts and Recreation Services	1,608	1,757	2,038	281	430	1.6%	1.4%
Other Services	4,012	4,266	4,933	667	921	3.8%	3.8%
Inadequately described/not stated	2,390	4,994	5,983	989	3593	4.6%	4.3%
<b>Total</b>	<b>109,617</b>	<b>114,018</b>	<b>130,627</b>	<b>16,609</b>	<b>21,010</b>		

Source: ABS 2011 and 2021 Census, Table Builder

### 3.1.6 Resident employment by occupation

In 2021, of the employed residents in the Northern Rivers, around 33% had a manager or professional occupation, compared to 32% for the North Coast. Thirty-one per cent of employed residents had occupations as technicians and trades workers; machinery operators and drivers; or labourers, which was comparable to the North Coast. Employment related to these occupations has strong linkages to industrial precincts either directly or from a supportive role (providing materials and repair services).

**Table 11: Resident employment occupation**

Occupation	Northern Rivers		NC 2021
	2011	2021	
Managers	13%	13%	13%
Professionals	18%	20%	20%
Technicians and Trades Workers	14%	14%	14%
Community and Personal Service Workers	12%	14%	14%
Clerical and Administrative Workers	12%	11%	11%
Sales Workers	11%	9%	9%
Machinery Operators and Drivers	6%	5%	5%
Labourers	12%	12%	12%
Inadequately described / not stated	2%	2%	2%

Source: ABS 2011 and 2021 Census, Table Builder

### 3.1.7 Where residents work and self-containment rate

As seen in Table 12, of the around 130,640 employed residents in Northern Rivers, around 107,340, or 82%, worked in the Northern Rivers (referred to as a self-containment rate), while 86% of employed residents worked within the North Coast. This implies that as the number of employed residents increases, the majority will seek employment within the Northern Rivers. This would have implications on the demand for space and land within the Northern Rivers' employment precincts.

**Table 12: Northern Rivers employment self-containment rate (2021)**

Location	Number	Percentage
Live and work in the area	107,338	82.2%
Live in the area, but work outside	23,302	17.8%
<b>Total employed residents in the area</b>	<b>130,640</b>	<b>100%</b>

Source: ABS 2021 Table Builder

When looking at the BICs, the industrial sector had the second highest self-containment rate (84%), just behind the health and education sector (85%). This implies that, comparatively, industrial industries have higher economic and environmental benefits to the Northern Rivers.

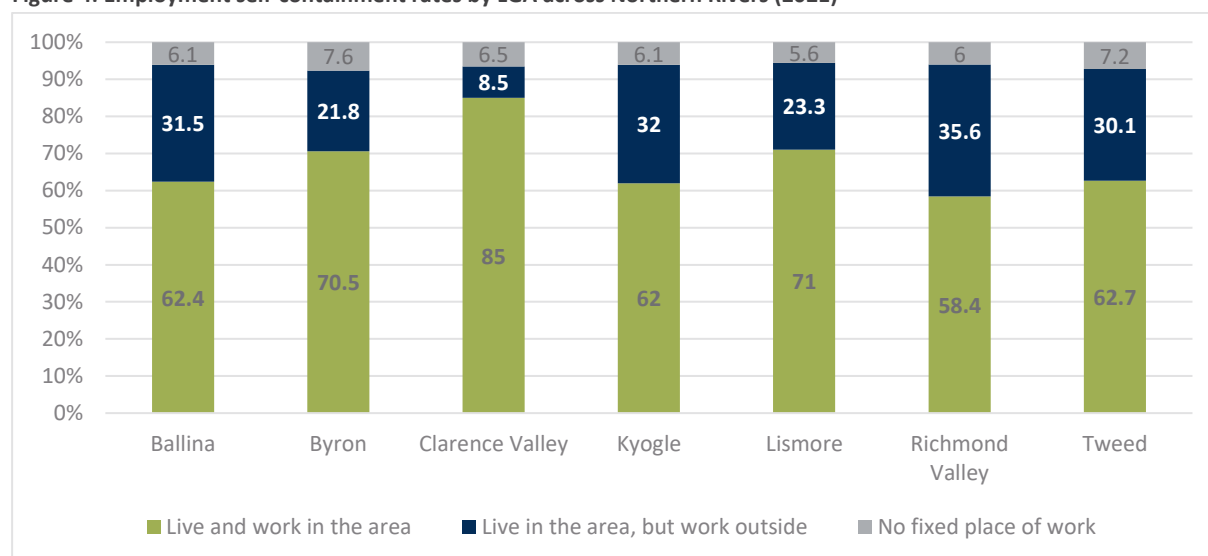
**Table 13: Northern Rivers employment self-containment rate by BIC (2021)**

BIC	Live and work in the area	Live in the area, but work outside	self-containment rate
Knowledge intensive	17,941	5,402	77%
Health and education	30,212	5,136	85%
Population serving	36,806	8,133	82%
Industrial	17,602	3,412	84%

Source: ABS 2021 Table Builder

Within the Northern Rivers, self-containment rates differed across LGAs in 2021, shown in Figure 4. Richmond Valley LGA had the lowest self-containment rate, with 58.4% of residents working within the LGA. Clarence Valley LGA had the highest, with 85% of residents working within the LGA. Ballina, Kyogle, and Tweed LGAs also had relatively low self-containment rates (respectively 62.4%, 62%, and 62.7%). Lismore and Byron LGAs had moderate self-containment rates for the region (71% and 70.5% respectively).

**Figure 4: Employment self-containment rates by LGA across Northern Rivers (2021)**



Source: Profile.id 2021, *Journey to Work*

Certain journeys to work were common across the region. For instance, significant numbers of residents commuted into Lismore from Ballina, Clarence Valley, and Richmond Valley LGAs; and into Ballina from Lismore and Byron LGAs.

Northern Rivers residents generally worked within the region. Tweed LGA is an exception to this, with 7,675 (18.9%) residents crossing the NSW-Queensland border to work in the Gold Coast, a greater proportion than those who leave the LGA to work elsewhere in the Northern Rivers. Simultaneously, 6,184 (18.6%) of Tweed's workers commuted from the Gold Coast to Tweed LGA. This shows the strong cross-border connection between Tweed LGA and Gold Coast City.

Self-containment rates within the Northern Rivers differed regardless of industry. For instance, employment in Clarence Valley LGA is particularly self-contained, most strongly in industries including Health Care and Social Assistance, Retail Trade, and Public Administration and Safety. In Richmond Valley, from which many residents commute elsewhere for work, these are some of the least self-contained industries.

### 3.2 Population projections

Two population projection data sets have been analysed for this study, these being:

- NSW DPE population projections, released in 2022.
- Forecast.id.

Please note the following amendments were made to the above data sets:

1. Each data set had a slight undercount in 2021 population compared to ABS Census data. As such, for each data set's respective LGA, the net growth in population between 2021-41 was applied to that LGA's 2021 ABS Census population estimate.
2. For Byron LGA, population projections from Forecast.id were not available. To provide an alternative growth scenario, the annual compound growth rate experienced between 2001 and 2021 was applied to this LGA.
3. Forecast.id projections for Ballina LGA only extended to 2036. As such, the annual compound growth rate projected between 2016-36 was applied to 2036-41.
4. Richmond Valley Council provided population forecast for Scenario 2. The net growth projected was applied to the 2021 ABS population estimate.

Based on the above amendments, two population scenarios were developed. Scenario 1 is based on NSW DPE Common Planning Assumption (CPA) projections and Scenario 2 is based on Forecast.id estimates (with some variances, as discussed above). Each Scenario is provided in the following table.

**Table 14: Population projections**

LGA	Scenario 1 – DPE CPA			Scenario 2 – Forecast Id		
	2021	2041	Change	2021	2041	Change
Ballina	46,296	54,272	7,976	46,296	53,413	7,117
Byron	36,116	44,706	8,590	36,116	44,230	8,114
Clarence Valley	54,115	56,622	2,507	54,115	64,056	9,941
Kyogle	9,359	7,274	-2,085	9,359	10,398	1,039
Lismore	44,334	40,414	-3,920	44,334	50,431	6,097
Richmond Valley	23,565	25,033	1,468	23,565	27,366	3,801
Tweed	97,392	110,682	13,290	97,392	131,846	34,454
<b>Total NR</b>	<b>311,177</b>	<b>339,002</b>	<b>27,825</b>	<b>311,177</b>	<b>381,740</b>	<b>70,563</b>

Source: DPE 2022, Forecast.id, 2021 ABS Census, HillPDA

Under Scenario 1, the population of the Northern Rivers is projected to increase from 311,177 residents in 2021 to just over 339,000 residents in 2041. This represents an increase of 27,825 persons, or a 9% growth. In this scenario, the populations of Kyogle and Lismore are projected to experience a decline in population.

Under Scenario 2, the population of the Northern Rivers is projected to increase from 311,177 residents in 2021 to 381,740 residents in 2041. This represents an increase of around 70,563 persons, or 23% growth. In this scenario, all LGAs are projected to experience growth in their populations.

To note the Northern Rivers has been subject to significant flooding in addition to migration impacts from COVID-19. It is unclear at this time as to the longer term impact on population and employment movements due to these significant events. It is difficult to rely on population projections with any confidence in light of the major impact on several communities due to flooding, however for the purpose of this report a baseline is required.

### 3.3 Employment and economic characteristics

Employment refers to persons aged 15 years and over working in the Northern Rivers, regardless of their place of usual residence.

#### 3.3.1 Employment

Over a ten-year period to 2021, the total jobs generated across the Northern Rivers increased by around 21,620 or 30%, reaching a total of around 112,455 jobs. This represented an average annual compounded growth rate of 2.63% over the period, which was in line with the rate experienced across the North Coast (2.64%). The 2021 employment profile of Northern Rivers was reflective of the wider North Coast.

As of 2021, the top five industries by total employment were:

- Health Care and Social Assistance - 21,687 jobs (19% of employment)
- Retail Trade - 13,442 jobs (12% of employment)
- Education and Training - 11,809 jobs (11% of employment)
- Accommodation and Food Services - 11,296 jobs (10% of employment)
- Construction - 8,981 jobs (8% of employment).

COVID-19 has increased the demand for locally produced and made products, while also increasing the attractiveness and suitability of “regional areas” to remotely work and live, particularly those regions with greater lifestyle amenities compared to inner city living.

This trend is reflected in the net change in employment by industry type experienced between 2016-21, when compared to the 2011-16 period. For example, between 2011-16, the following industries recorded a notable reduction in job generation:

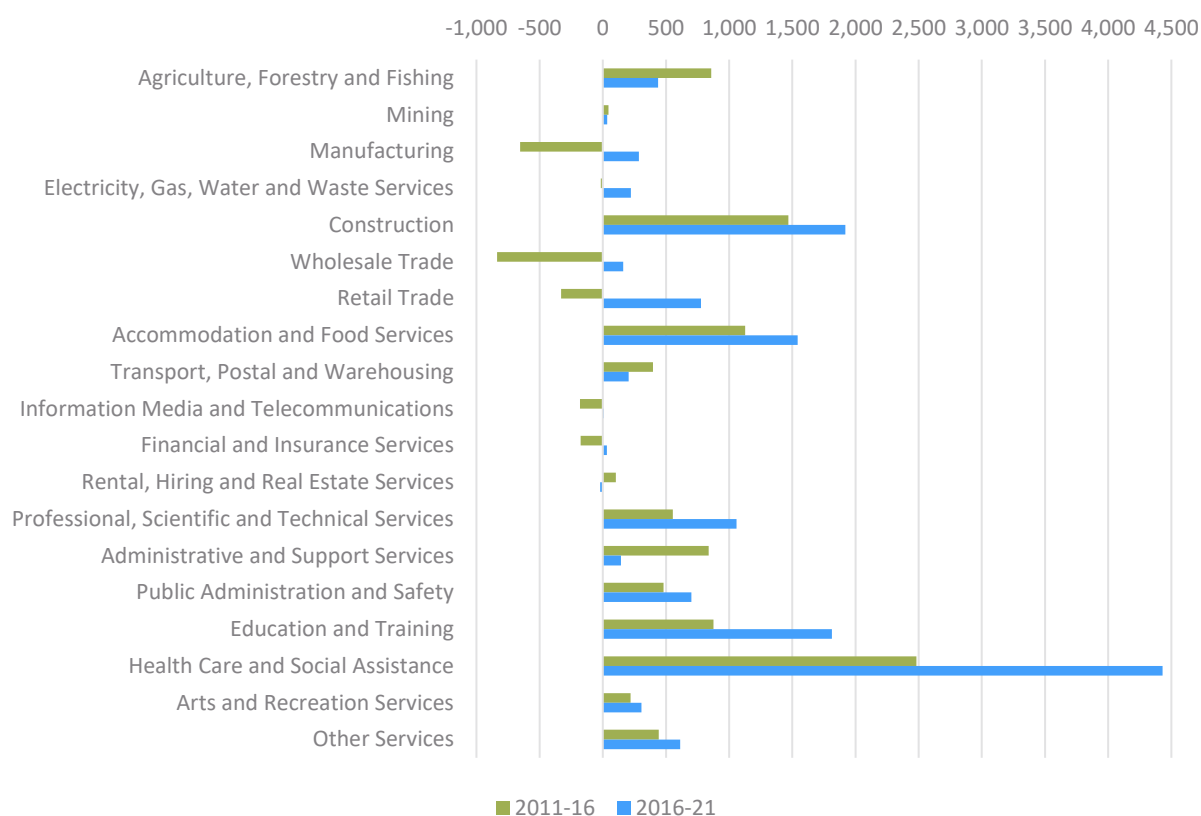
- Wholesale Trade - 837 fewer jobs
- Manufacturing - 654 fewer jobs
- Retail Trade - 330 fewer jobs
- Information Media and Telecommunications - 181 fewer jobs
- Financial and Insurance Services - 176 fewer jobs
- Electricity, Gas, Water and Waste Services - 16 fewer jobs.

However, over the 2016-21 period, the same industries recorded the following growth in employment:

- Wholesale Trade - 161 additional jobs
- Manufacturing - 285 additional jobs
- Retail Trade - 777 additional jobs
- Information Media and Telecommunications - 6 additional jobs
- Financial and Insurance Services - 33 additional jobs
- Electricity, Gas, Water and Waste Services - 223 additional jobs.

In addition to the above industries, over the 2016-21 period, the growth in employment related to Professional, Scientific and Technical Services and Health Care and Social Assistance industries increased at almost double the rate of that experienced between 2011-16.

**Figure 5: Net change in employment by industry and census period**



Source: 2011, 2016 and 2021 Census

When looking at the BICs, the largest employment generator was population serving industries (40,000 jobs), followed by health and education (33,500 jobs), knowledge intensive industries (19,895 jobs), and lastly the industrial sector, with 19,015 jobs.

As seen in the following table, the industrial BIC significantly increased in employment between 2016-21 (1,345 jobs). This is compared to a decrease of 210 jobs between 2011-16. Population serving and health and education BICs also significantly increased between 2016-21 (5,155 and 6,245 additional jobs, respectively).

It must also be noted that the number of jobs inadequately described or not stated significantly increased between the 2016 and 2021 Censuses. This may imply that employment within some job sectors is higher than that identified in the ABS. For example, Economy.id estimates Manufacturing employment to have been at around 7,700 jobs in 2021. This was 1,530 jobs or 25% higher than that estimated in the 2021 Census.

**Figure 6: Employment by BICs 2011, 2016 and 2021**

BIC	Northern Rivers			Net change	
	2011	2016	2021	2011-16	2016-21
Knowledge intensive	16,355	17,971	19,893	1,616	1,922
Health and education	23,894	27,252	33,496	3,358	6,244
Population serving	31,968	34,897	40,051	2,929	5,154
Industrial	17,878	17,670	19,015	-208	1,345
Inadequately/not stated	740	4,370	5,284	3,630	914
<b>Total industries</b>	<b>90,835</b>	<b>102,160</b>	<b>117,739</b>	<b>11,325</b>	<b>15,579</b>

Source: 2011, 2016 and 2021 Census

### 3.3.2 Manufacturing employment

Manufacturing is a key occupier and driver of employment precincts. Overall, employment decreased by around 654 jobs over the last ten years (2011-21). However, over the last five years (2016-21), manufacturing recorded an increase in employment of around 285 jobs. Analysis of industries at the ANZSIC 4-digit level<sup>3</sup> reveals that over the 2016-21 period, around 63 manufacturing sub-categories increased in employment, recording a growth of around 1,190 additional jobs. The top ten industries by net employment growth, were:

- Ice Cream Manufacturing - 143 additional jobs
- Manufacturing, nfd - 131 additional jobs
- Beer Manufacturing - 84 additional jobs
- Toy, Sporting and Recreational Product Manufacturing - 79 additional jobs
- Bread Manufacturing (Factory based) - 68 additional jobs
- Timber Resawing and Dressing - 65 additional jobs
- Wooden Furniture and Upholstered Seat Manufacturing - 52 additional jobs
- Basic Non-Ferrous Metal Manufacturing, nfd - 35 additional jobs
- Ready-Mixed Concrete Manufacturing - 30 additional jobs
- Spirit Manufacturing - 29 additional jobs.

### 3.3.3 Transport, postal and warehousing employment

The industry of transport, postal and warehousing is another key driver for industrial land and space. This industry increased over the five-year period to 2021 likely experiencing high demand and rapid growth during the COVID-19 crisis. The top ten industries by net employment growth, were:

- Other Warehousing and Storage Services - 45 additional jobs
- Rail Freight Transport - 34 additional jobs

<sup>3</sup> The lowest industry level that the ABS provides and undertakes employment analysis in

- Other Transport Support Services nec - 33 additional jobs
- Interurban and Rural Bus Transport - 29 additional jobs
- Courier Pick-up and Delivery Services - 25 additional jobs
- Urban Bus Transport - 21 additional jobs
- Air and Space Transport - 21 additional jobs
- Postal Services - 21 additional jobs
- Transport, Postal and Warehousing, nfd - 16 additional jobs
- Water Transport, nfd - 15 additional jobs.

### 3.3.4 Wholesale trade employment

Wholesale trade is another key occupier and driver of industrial lands. Overall, employment decreased by around 8,340 jobs over the last ten years (2011-21). However, over the last five years (2016-21), wholesale trade recorded an increase in employment of around 161 jobs in total. Over the 5 year period to 2021, the top ten growth wholesale sub-industries were:

- Other Hardware Goods Wholesaling - 72 additional jobs
- General Line Grocery Wholesaling - 49 additional jobs
- Agricultural and Construction Machinery Wholesaling - 27 additional jobs
- Professional and Scientific Goods Wholesaling - 25 additional jobs
- Other Specialised Industrial Machinery and Equipment Wholesaling - 23 additional jobs
- Other Agricultural Product Wholesaling - 22 additional jobs
- Computer and Computer Peripheral Wholesaling - 18 additional jobs
- Meat, Poultry and Smallgoods Wholesaling - 18 additional jobs
- Plumbing Goods Wholesaling - 15 additional jobs
- Fruit and Vegetable Wholesaling - 11 additional jobs.

### 3.3.5 Other services employment

Although the industry of “other services” is classified as a population serving industry, it is comprised of a mixture of unrelated industries. These include religious services; repair and maintenance; parking services; personal services; and sex workers, to name a few. A key component and occupier of employment lands is the various repair and maintenance sub-industries that are included in this broad category, particularly automotive and machinery repair services.

Of the 4,585 jobs which are classified as “other services” in 2021, around 2,010 or 44% are related to various automotive and other machinery/equipment repair services. Combined, these industries increased by around 103 jobs over the 2016-21 period. This highlights that they are growing, and key drivers for increased employment land within the Northern Rivers.

### 3.3.6 Industry clustering/specialisations

Location quotient (LQ) is a simple way of identifying the specialised industries in an area, relative to a comparable area.

- Where LQ=1, the identified industry is as prevalent as in the comparable area
- An LQ greater than 1.2 indicates a significant specialisation of the industry in the study area – indicating possibly a key economic strength. Higher numbers indicate a greater specialisation with anything exceeding 2 being a major specialisation

- An LQ between 0.8 and 1.2 means the industry is broadly similar in importance in the study area compared to the comparison region and could be seen as representative
- An LQ under 0.8 indicates an industry which is more important in the comparable area than the study area and may represent an economic weakness or opportunity for growth.<sup>4</sup>

When looking at typical employment industries within industrial precincts and comparing them to the wider North Coast Region, it is evident that the Northern Rivers had a significant specialisation in the following industries:

- Pulp, Paper and Converted Paper Product Manufacturing
- Primary Metal and Metal Product Manufacturing
- Fabricated Metal Product Manufacturing
- Rail Transport.

When compared to Regional NSW, the Northern Rivers had a significant specialisation in the following industries:

- Textile, Leather, Clothing and Footwear Manufacturing
- Food Product Manufacturing
- Wood Product Manufacturing
- Furniture and Other Manufacturing
- Other Goods Wholesaling
- Grocery, Liquor and Tobacco Product Wholesaling
- Water Transport.

**Table 15: Employment location quotient**

Industry	NR	NC	RNSW	LQ	
				NR to NC	NR to RNSW
Manufacturing					
Food Product Manufacturing	48%	42%	33%	0.9	1.3
Beverage and Tobacco Product Manufacturing	4%	3%	6%	0.9	0.5
Textile, Leather, Clothing and Footwear Manufacturing	4%	4%	3%	0.9	1.5
Wood Product Manufacturing	10%	12%	7%	1.2	1.7
Pulp, Paper and Converted Paper Product Manufacturing	0%	0%	1%	1.8	0.2
Printing (including the Reproduction of Recorded Media)	2%	3%	2%	1.1	1.4
Petroleum and Coal Product Manufacturing	0%	0%	0%	0.0	0.0
Basic Chemical and Chemical Product Manufacturing	3%	2%	4%	0.8	0.6
Polymer Product and Rubber Product Manufacturing	1%	1%	1%	1.2	0.9
Non-Metallic Mineral Product Manufacturing	4%	5%	4%	1.1	1.1
Primary Metal and Metal Product Manufacturing	4%	5%	15%	1.3	0.3
Fabricated Metal Product Manufacturing	4%	5%	6%	1.3	0.8
Transport Equipment Manufacturing	5%	6%	7%	1.2	0.8
Machinery and Equipment Manufacturing	3%	5%	8%	1.4	0.6
Furniture and Other Manufacturing	8%	8%	4%	0.9	1.9
Wholesale Trade					
Basic Material Wholesaling	35%	36%	35%	1.0	1.0
Machinery and Equipment Wholesaling	19%	17%	30%	0.9	0.6
Motor Vehicle and Motor Vehicle Parts Wholesaling	11%	10%	9%	0.8	1.1
Grocery, Liquor and Tobacco Product Wholesaling	23%	24%	14%	1.0	1.7
Other Goods Wholesaling	10%	12%	8%	1.2	1.5
Commission-Based Wholesaling	1%	1%	3%	1.0	0.4
Transport, Postal and Warehousing					
Road Transport	61%	60%	53%	1.0	1.2
Rail Transport	2%	3%	9%	1.3	0.3
Water Transport	1%	1%	1%	0.8	1.4

<sup>4</sup> Economy.id

Industry	NR	NC	RNSW	LQ	
				NR to NC	NR to RNSW
Air and Space Transport	3%	2%	3%	0.8	0.7
Other Transport	1%	2%	1%	1.1	1.1
Postal and Courier Pick-up and Delivery Services	21%	21%	19%	1.0	1.1
Transport Support Services	6%	7%	10%	1.1	0.7
Warehousing and Storage Services	4%	5%	5%	1.1	0.9

Source: ABS 2021 Census – LQ are calculated for the respective ANZSIC 1-digit totals, excluding non-defined

### 3.3.7 Industry Value Added and worker productivity

The industry value added (IVA) refers to the value of outputs less the costs of inputs. It measures the contribution that the industry makes to the country's wealth or gross domestic product (GDP). The top five industries by value added in 2020/21 were:

- Health Care and Social Assistance - \$1,724 million
- Construction - \$1,293 million
- Retail Trade - \$902 million
- Education and Training - \$878 million
- Manufacturing - \$687 million.

When looking at the BIC's, the highest contribution in the Northern Rivers was provided by population serving industries (\$3,072 million). The next highest contributing BIC was the health and education sector (\$2,602 million), followed by the knowledge intensive sector (\$2,512 million), and lastly the industrial sector, which contributed \$2,283 million to the Northern Rivers GRP in 2020/21.

Worker productivity is a measure of the value that each worker contributes to the local economy or GRP. Worker productivity is calculated by dividing the industry value added by the number of persons employed in that industry. The worker productivity rates for each of the four broad industry sectors were as follows:

- Knowledge intensive - \$126,008/worker
- Industrial - \$110,303/worker
- Health/education - \$75,611/worker
- Population serving - \$72,311/worker.

It must be noted that out of the four BICs, the knowledge intensive and industrial sectors generated the lowest amount of employment in 2021 (19,893 and 19,015 jobs respectively). However, they had the two highest worker productivity rates, at around \$126,010 and \$110,300 per worker respectively.

This implies that industrial related industries are generally more productive than other industries. This highlights that although not high employment generators, they significantly contribute to the overall economic growth and sustainability of the Northern Rivers economy.

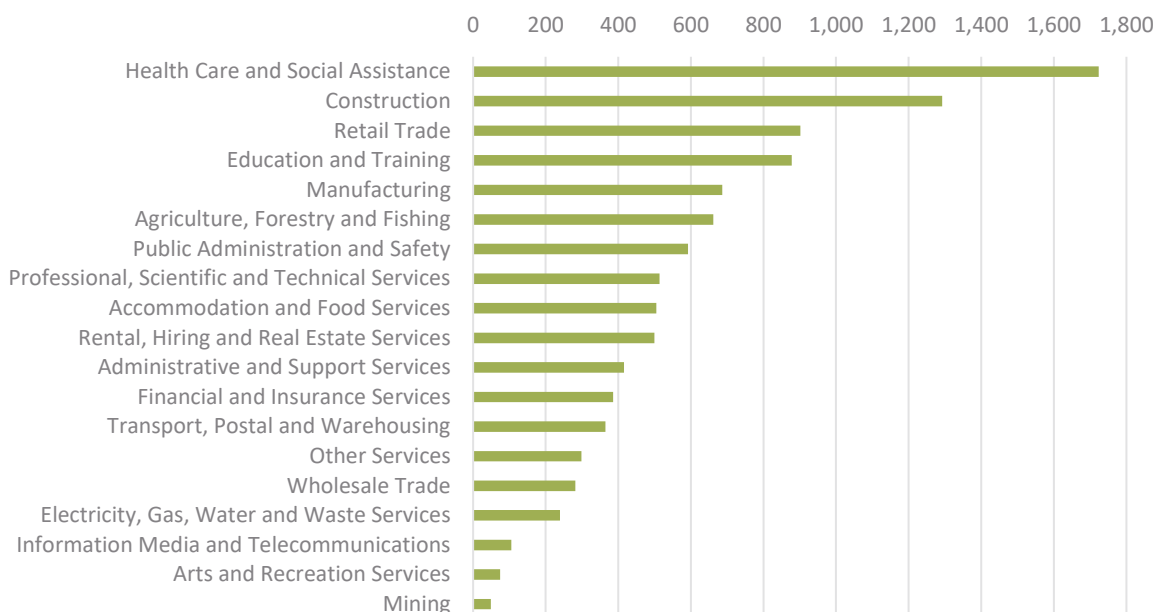
When compared to Rest of NSW, the Northern Rivers worker productivity rates are lower across each BIC apart from the population serving BIC. It is worth noting that the industrial BIC had the highest worker productivity rate for Rest of NSW.

**Table 16: Worker productivity rates Northern Rivers and Rest of NSW 2020/21**

Land use	NR	RNSW	Difference
Knowledge intensive	\$126,008	\$139,912	-\$13,904
Industrial	\$110,303	\$155,149	-\$44,846
Health and education	\$75,611	\$80,121	-\$4,510
Population serving	\$72,311	\$66,518	\$5,793

Source: Economy id, ABS 2021 Census, HillPDA

**Figure 7: Industry value added by industry 2020/21 (\$m)**



Source: Economy.id

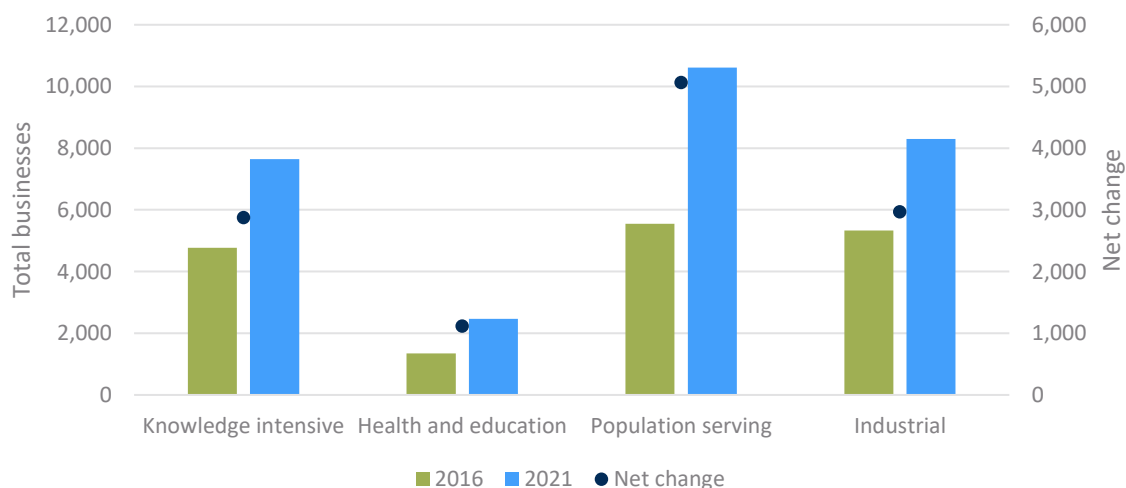
### 3.3.8 Change in number of businesses by industry type 2016-21

Between 2016-21 the number of businesses in the Northern Rivers increased by 11,935, or 70%. By 2021, there were 29,080 registered businesses in the Northern Rivers. This represented 62% of all registered businesses across the North Coast.

Over this period, businesses increased at a faster rate in the Northern Rivers when compared to the wider North Coast. This was evident in the proportion of businesses in the North Coast that were in the Northern Rivers increasing from 53% in 2016 to 62% by 2021.

Over this five-year period, the largest increase in businesses was in the population serving BIC (+5,065 businesses), followed by industrial businesses (+2,965), knowledge intensive (+2,870) and lastly health and education with 1,112 additional businesses.

**Figure 8: Change in number of businesses 2016-21**



Source: ABS Counts of Australian Businesses, including Entries and Exits

# INDUSTRIAL TRENDS

## 4.0 INDUSTRIAL TRENDS

The following section discusses the emerging broader industry trends and potential implications on employment lands across the Northern Rivers.

### 4.1 Industrial market trends and considerations

#### 4.1.1 Macro-economic context



Globalisation



Automation



Information technology

The demand for industrial floorspace in Australia continues to be influenced by the globalisation of trade, labour and production costs, the increasing dominance of information technology in production processes and access to primary goods.

#### 4.1.2 Globalisation

The demand for industrial floorspace is influenced by trends such as globalisation and the use of information technology. The globalised economy comprises sophisticated linkages between businesses, which are adept in the efficient sharing of information and the delivery of goods through a global supply chain. This supply chain, once thought of as the flow of goods through production to the end user, is now seen as an alignment of firms that design, develop, market and produce goods and services, and deliver them to the customer when needed.

Globalisation and the free movement of people, goods and services have increased the amount of competition and have resulted in a decline in the proportion of jobs within manufacturing industries.

Industrial floorspace used primarily for business related storage is in secular decline, whereas space built for the transferral of goods is increasing. This 'high throughput distribution' space is essentially designed to facilitate the rapid movement of goods through the supply chain. Businesses with low inventory turnover are gravitating to inexpensive land and low-cost buildings.

In contrast, businesses that have high inventory turnover and high value products, and typically provide value added functions (including product customisation, packaging and customs) are more prepared to pay a premium for excellent access to a large customer base and proximity in time and space to roads, ports and airports.

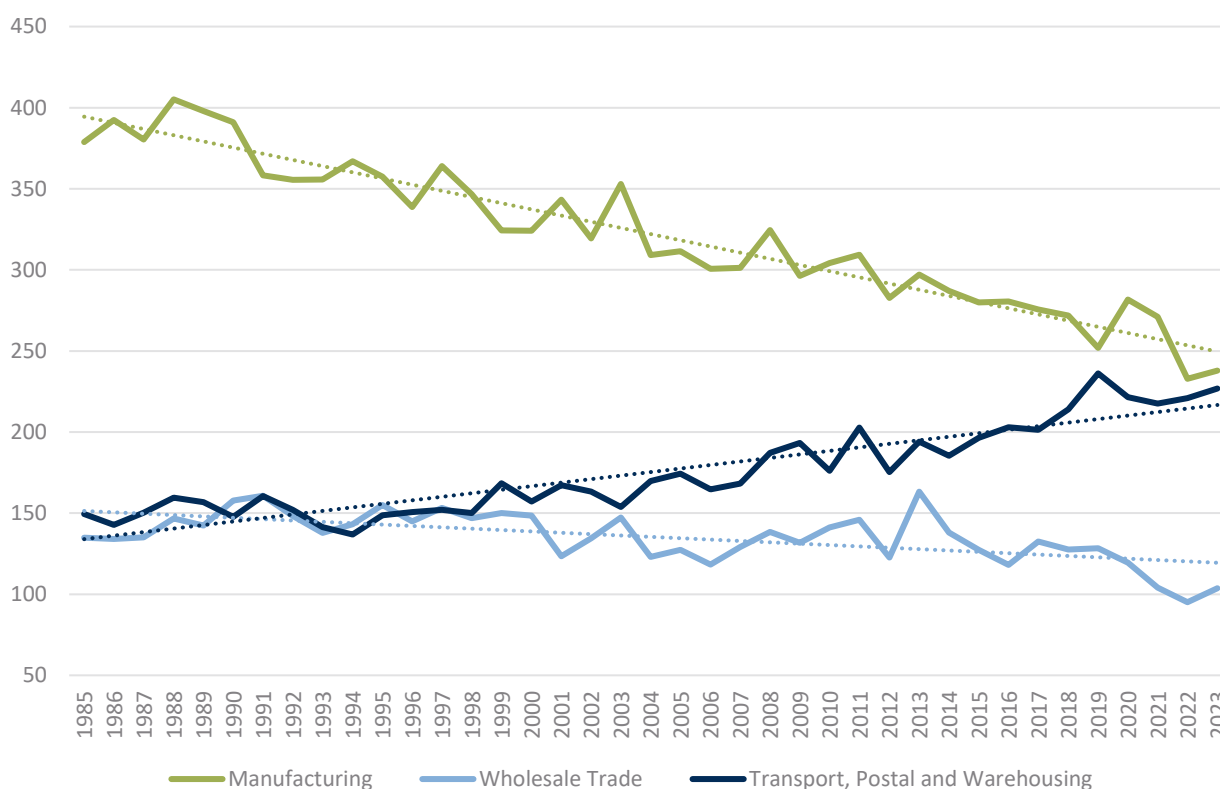
As a result of the industrial trends described above, over the last thirty-eight years (1985-2023), the development of industrial land and floorspace in NSW has generally occurred at a rate slower than overall employment growth. This, however, has varied considerably between specific sectors of industrial activity. Employment in manufacturing and wholesale trade has steadily decreased in NSW over the period (overall employment down 33% and 23% respectively). In contrast to this pattern has been the performance of transport and storage, which have shown strong growth with a 77,380 or 52% increase in employment. This is partly a result of increased demand for 'last mile' delivery and storage spaces close to where customers reside.

This economic trend may be summarised by the fact that traditional manufacturing is changing and becoming more efficient in its processes because of the use of new technologies and equipment. These greater efficiencies

in many cases have not resulted in a decline in output or the need for floorspace, but rather a reduction in the number of employees required. It must be noted that the COVID-19 pandemic disrupted global supply chains, which resulted in a renewed focus on locally manufactured goods. This is reflected in the recent growth in manufacturing between August 2019-21 (+27,553 jobs); assuming an occupancy rate of 80sqm per employee, this could have resulted in just over 2.2 million square metres of industrial floorspace space being occupied over the period in NSW. These gains, however, seem to have been lost, with manufacturing recording 37,291 fewer jobs between August 2021 and February 2023.

Conversely, employment in wholesale trade and transport/warehousing decreased between August 2019-21 period (-26,298 and -15,765 jobs, respectively), likely in anticipation of reduced demand and subsequent sales. However, the rate of employment loss slowed in wholesale trade with only 795 fewer jobs being recorded between August 2021 and February 2023. While transport/warehousing rebounded with 14,023 additional jobs over the period.

**Figure 9: Employed persons by selective industry, NSW (,000)**



Source: Collated by HillPDA 2022 from ABS Labour Force, Australia, Detailed – month of August

#### 4.1.3 Non-traditional uses within industrial precincts

In addition to the more traditional industrial and urban service uses, industrial precincts are increasingly being occupied by other non-traditional uses such as knowledge intensive businesses, large format retailers and factory outlets and education or health services.

This was evident in our land use surveys for Clarence Valley in 2022, Hornsby LGA in 2019 and Byron Bay LGA in 2017, which showed that between 20-40% of the occupied employment floorspace in industrial zoned precincts was being attributed to non-traditional uses. Typically, these uses are attracted to industrial precincts given their relatively lower land values and market rents compared to commercial centres, and the need for large lots with good access to the local road network. The presence of these uses, however, can increase market rents and land values in industrial precincts as space becomes limited and non-traditional uses are typically more willing and capable of paying higher rent.

The characteristics of many of the Northern Rivers commercial centres are reflective of the area's heritage and development of small neighbourhood and village centres, making it more difficult to retrofit large office and retail premises. Economic productivity zones located close to commercial centres could play a role in creating job and service opportunities, while preserving the region's unique characteristics.

#### **4.1.4 Motorway accessibility**

The proximity of industrial precincts to key transport routes has recently emerged as a key priority for industrial occupiers. The preference for industrial tenants to be located close to a motorway was evident in CBRE research that found that every additional minute drive closer to a motorway equated to a 2.1% spike in rent. Occupiers were paying on average \$3 per square metre more than those further away from a motorway.<sup>5</sup>

The reason for this locational preference stems from transport costs typically comprising a large share of an industrial business's operational cost base, compared to its rental cost. As such, an industrial business makes costs savings by locating itself nearer to key infrastructure. With the rise of e-commerce and the need for 'last mile' and other distribution services, this preference to have good road access has increased and become a major consideration for businesses.

The Northern Rivers contains several industrial precincts that have proximal access to major arterial roads. These include the Bruxner, Pacific, Gwydir and Gold Coast Highways. The locational attributes of these current and potential precincts increase their attractiveness to potential occupiers, particularly those occupiers that require transportation of goods, equipment or supplies.

#### **4.1.5 An increasingly automated workplace**

The impact that automation and artificial intelligence is an increasingly controversial topic. Depending on whom you are speaking to, it will either cause mass unemployment or continue a natural evolution of human-based employment, with replaced employees being 'upskilled' into more complex jobs, or the creation of and employment in new industries that cannot be imagined/conceived of today.

This 'upskilling', or transference of employment into more complex or knowledge-based industries, can be seen in the agricultural industry. At the start of the twentieth century, agriculture comprised a significant proportion of employment. However, with increased mechanisation of farm equipment, large numbers of people transitioned from the land and moved into cities for employment opportunities. Employment in other industries such as retail or professional and financial services grew as a result.

This trend has continued with the creation of new employment industries that did not exist 40 years ago, such as IT services, coding, web design and application development.

A report by the Committee for Economic Development of Australia (CEDA) found that almost 40% of Australian jobs could be replaced by technology by 2025.<sup>6</sup> If this prediction comes to fruition, there would be a need for significant re-shifting and the 'upskilling' of the workforce. A way to mitigate this impact is for employees, companies and institutions to remain agile, embracing life-long learning and continued education to stay competitive and skilled.

Currently, industries associated with manufacturing, transport, warehousing and distribution are at the forefront of this change. The impact that automation is having upon these industries is a reduction in overall employment generated. However, it is important to note that this does not directly translate into a reduction in the amount of floorspace or land required. As such, although these industries require fewer people for their operation needs, they still require appropriate floorspace and land for their increasingly automated factories and warehouses. It

<sup>5</sup> CBRE - Motorway access drives rental shift in Sydney's industrial powerhouse market, Natasha Pierson 2018

<sup>6</sup> Australia's future workforce? CEDA 2015

is therefore prudent to appropriately plan for the future land needs of these industries, even as their projected employment levels decline.

What this means for the region is that, as automated processes and practices increase, there would likely be a corresponding decrease in industrial-related employment. However, there would not be a corresponding decrease in the demand for appropriate employment land or space; such demand would rather increase over the coming decades.

#### **4.1.6 Industrial building heights**

Over the last decade, industrial building heights have shown some notable changes influenced by factors such as advancements in technology, evolving business needs, and economic considerations. This trend has been driven by factors such as:

- Maximising vertical utilisation: The need for maximising available land space, increasing storage capacity, and accommodating advanced automation and material handling systems.
- Multi-Level Warehousing: To optimise land use in densely populated areas or where land availability is limited.
- E-commerce and distribution centres: e-commerce has driven the need for large-scale distribution centres closer to urban areas. These facilities often have taller ceilings to accommodate high-density storage systems, robotic automation, and vertical sorting mechanisms.

While traditionally building height for industrial premises have been between three to 12 metres, more mid-rise industrial builds are becoming common place on the market with heights ranging from 12-24 metres. Less common and more concentrated to metropolitan areas (i.e. Eastern Creek and Kemps Creek) are industrial buildings over 24 metres. These 'high-rise' industrial buildings generally cater to large distribution centres and advanced manufacturing facilities.

To attract some of the larger distribution, logistics and warehousing companies, planning controls around height limits may need to be amended to reflective of the changing industrial trends and requirements. This would need to be undertaken with consideration of scenic amenity and view corridors.

#### **4.1.7 Freight and logistics 'last mile' services and e-commerce**

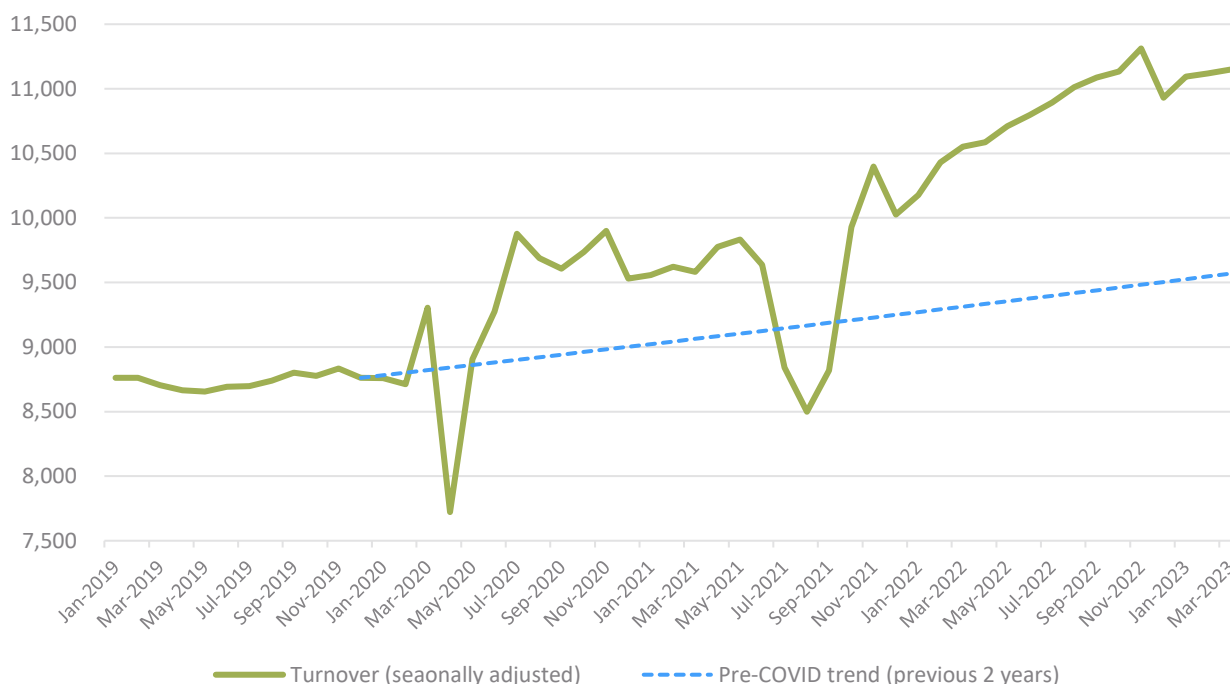
The rise of e-commerce has seen significant growth in the demand for freight and logistics industrial space in close proximity to customers, often referred to as 'last mile' customer logistics. This decreases the delivery time of products, with some companies offering same day delivery services. With e-commerce's market share growing at a faster rate than traditional retail, there is likely to be a growing demand for space in appropriate locations for 'last mile' services.

The impact of COVID-19 and its associated measures to reduce its spread overall had no impact on retail spending across NSW. As seen in the figure below, retail expenditure sharply recovered after each shutdown shock to be above pre-lockdown levels.

In fact, retail turnover across NSW is well above the historic trend before COVID-19. A likely factor of this increased retail expenditure is people having greater levels of disposable income which, instead of being directed towards holidays and travel, is spent on retail items.

This increased retail expenditure has increased the demand for delivery, storage and warehousing services, which, in turn, increases the demand for industrial logistics space. Recent interest rates hikes and people's ability to travel once again, will likely see the rate of retail expenditure steady.

**Figure 10: Retail turnover NSW – seasonally adjusted (\$m)**



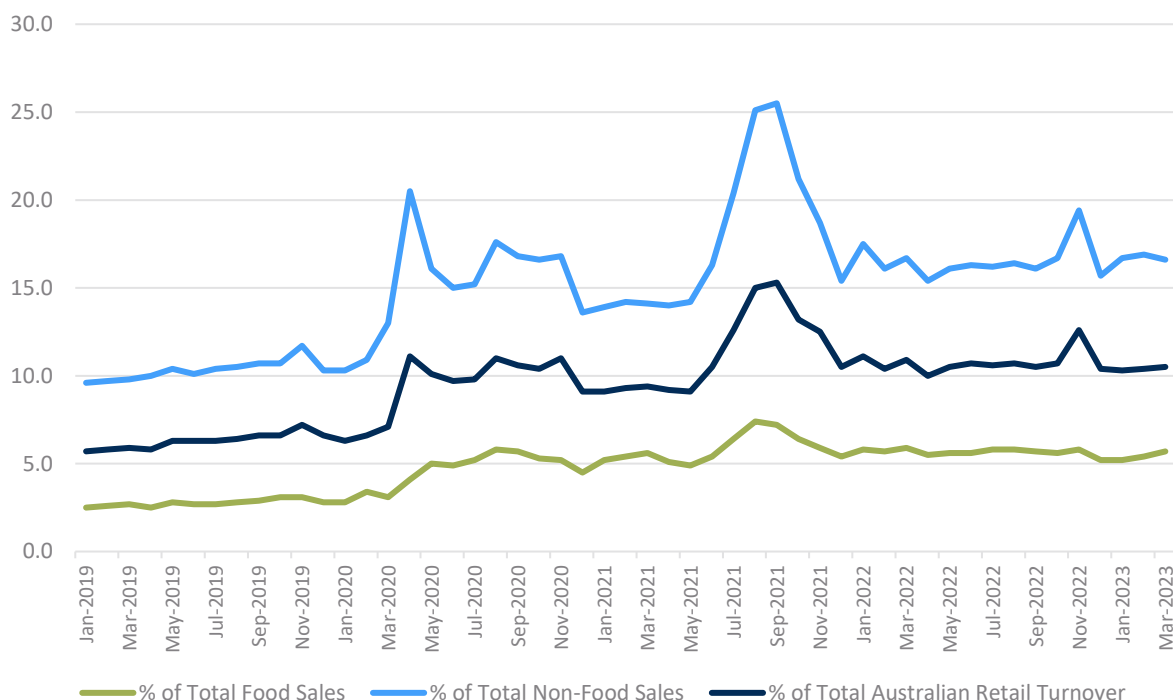
Source: Retail Trade, Australia March 2023, (Table 12) HillPDA

In 2019, a CBRE report estimated that an additional 350,000sqm of distribution space would be required annually to service e-commerce growth across Australia.<sup>7</sup> This was a pre-COVID estimate. As seen in the figure below, the proportion of online retail sales significantly increased from March 2020, peaking at around 15% of all retail sales in September 2021. The proportion of non-food online retail sales peaked at 25.5% in the same month. Despite a reduction being recorded since September 2021, the proportion of online retail sales remains well above pre-COVID levels.

The significant growth in online sales would further drive increased demand for distribution space across Australia and NSW. In 2021, The Northern Rivers had the capability to reach and serve around 94% of New South Wales and Queensland populations combined, and around half of Australia's population, with last mile distribution services. With these populations expected to increase over the coming decades, the Northern Rivers' strategic location, coupled with existing infrastructure, will increase the appropriateness and profile of the Northern Rivers to last mile logistics occupiers, and hence there will be a growing demand for additional land and space.

<sup>7</sup> The Rise of Multistorey Warehousing in Australia, CBRE Research 2019

**Figure 11: Proportion of online retail turnover (Australia)**



Source: Retail Trade, Australia March 2023

#### 4.1.8 Unimproved land value trends

According to the Valuer General July 2022 report, commercial and Industrial unimproved land values on the North Coast have increase 24.1% and 29.6% respectively since 2021. Table 17 shows the growth in cumulative industrial unimproved property values by LGA between 2021 and 2022. The relatively affordability of industrial property in Clarence Valley LGA saw heightened demand for the limited supply of affordable fringe industrial land, pushing up land prices by 122.5% over the 2021-22 financial year<sup>8</sup>. While the industrial land value in Lismore reduced overall (5.2%), the flood impacts saw the emergence of a two-tier market with companies willing to pay a premium for flood free industrial land.

**Table 17: LGA cumulative industrial property unimproved values trends July 2021 - July 2022**

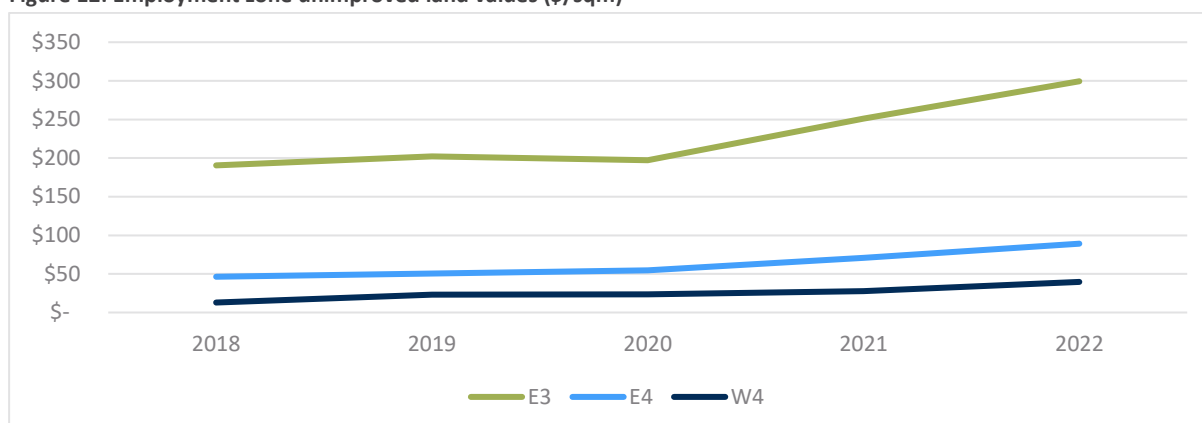
LGA	1-Jul-21	1-Jul-22	% change
Ballina	\$244,633,200	\$299,907,000	22.6%
Byron	\$521,575,600	\$591,317,300	13.4%
Clarence Valley	\$102,257,900	\$227,537,520	122.5%
Kyogle	\$8,465,620	\$9,272,550	9.5%
Lismore	\$105,361,290	\$99,933,100	-5.2%
Richmond Valley	\$48,565,630	\$59,425,460	22.4%
Tweed	\$217,254,520	\$277,024,980	27.5%

Source: NSW Valuer General, region report July 2022

Unimproved land value across all employment zones has grown since 2018 (see Figure 12), with the largest growth seen in the E3 Productivity Support zone over the last two years. The dollar per square metre rate for properties in the E4 General Industrial zone has almost doubled over the last five years (92% growth). While still more affordable than the E3 and E4 land zones, the Working Waterfront land zone has increased a 206% growth since 2018.

<sup>8</sup> Valuer General NSW 1 July 2021 to 1 July 2022 reporting

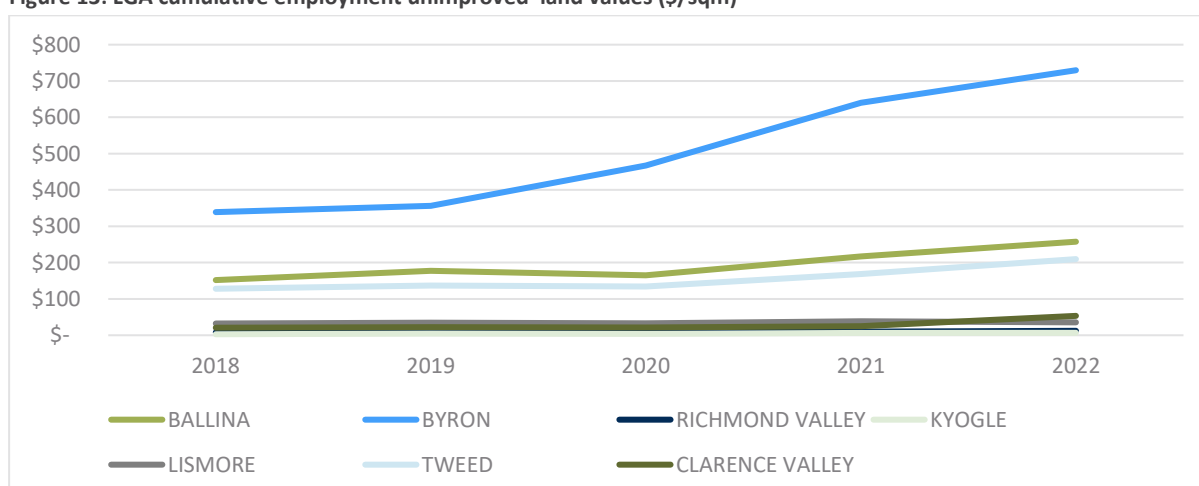
**Figure 12: Employment zone unimproved land values (\$/sqm)**



Source: Valuer General NSW, Bulk land value information, data release 1 June 2023

Cumulatively, across all employment zones (E3, E4 and W4), Byron LGA has experienced a significantly higher growth in unimproved land values, particularly since 2019. Richmond Valley and Kyogle while growing, have still remained the most affordable markets. Clarence Valley has seen the greatest proportional increase of 157% from 2018.

**Figure 13: LGA cumulative employment unimproved land values (\$/sqm)**



Source: Valuer General NSW, Bulk land value information, data release 1 June 2023

When comparing the dollar per square metre rate of employment land values across the Northern Rivers LGAs, it is evident that Byron LGA has the most expensive industrial land, Tweed the most expensive business support land and Richmond Valley the most expensive working waterfront land stock. Higher land prices are generally a direct indicator of market demand and where supply may be limited. Table 18 shows how land values compare across the LGAs and employment zones.

**Table 18: LGA comparative unimproved land values (July 2022) by zone**

LGA	E3 Productivity Support	E4 General Industrial	W4 Working Waterfront
Ballina	\$ 273.93	\$ 254.72	\$ -
Byron	\$ 144.31	\$ 804.95	\$ -
Richmond Valley	\$ -	\$ 12.12	\$ 383.75
Kyogle	\$ -	\$ 6.69	\$ -
Lismore	\$ 62.21	\$ 33.46	\$ -
Tweed	\$ 553.69	\$ 110.07	\$ 208.71
Clarence Valley	\$ 114.20	\$ 47.48	\$ 19.04

Source: Valuer General NSW, Bulk land value information, data release 1 June 2023

# PLANNING PROVISION REVIEW

## 5.0 PLANNING PROVISION REVIEW

This section provides a high-level comparative review of the main planning considerations as applied to employment zones across the Northern Rivers LGAs. The review was undertaken prior to the employment land reform applying. Most council LEPs are yet to be updated to reflect the new reform.

### 5.1 LEP Review

#### 5.1.1 Minimum lot size

This provision limits the size of lots in order to promote lots that practically suit their intended use, and to reduce ownership fragmentation. As can be seen in Table 19, all LGAs adopt a minimum lot size provision across some precincts. This provision can be useful in tight market to protect industrial lots from densification into higher intensity employment uses such as office and retail. In industrial areas close to major distribution corridors, there could be merit in increasing the minimum lot size provision to protect some land for larger floorspace users such as transport and distribution, manufacturing and warehousing.

**Table 19: Minimum lot size provision comparison**

LGA	Comparison of provision
Ballina	1,000sqm minimum lot size in IN1 precinct in Ballina.
Byron	The minimum lot size specification in Byron Industrial Park is 1000sqm.
Clarence Valley	1,000sqm minimum lot size in IN1 precinct in Grafton.
Kyogle	1,500sqm minimum lot size in IN1 and IN2 zoned areas. Mostly vacant land, subdivisions have not occurred yet.
Lismore	Industrial 1 zoned land has a 1,500sqm minimum lot size. B6 Enterprise Corridor has none.
Richmond Valley	750sqm minimum lot size in IN1 zones areas. Not considered a barrier due to availability of land.
Tweed	A small portion of industrial zoned lots in Tweed have a minimum lot size requirement of 2,000sqm.

#### 5.1.2 Building height

This provision limits the heights of buildings to protect amenity values in certain areas. As identified in section 4.1.6, building height design requirements around industrial buildings is changing, with more high-bay product and multi-storey warehousing entering the market. As seen in Table 20, height limits of 10 metres or less is relatively commonplace across the Northern Rivers. Where possible, Council's should consider whether the height limits applied to industrial areas are required to protect amenity or if they are adding additional and unnecessary restrictions.

**Table 20: Building height provision comparison**

LGA	Comparison of provision
Ballina	10m maximum height in industrial areas.
Byron	There is a 9 metre building height limit in Byron's main industrial park. Most buildings are meeting that limit.
Clarence Valley	9m height limit in some industrial areas.
Kyogle	Not used in industrial areas.
Lismore	Not used in industrial areas.
Richmond Valley	8.5m height limit across the LGA. This height limit could be revised for designated sites/areas while maintaining an appropriate level of amenity.
Tweed	Most of Tweed's employment lands are subject to a 10-metre height limit and the outcomes meet this standard.

### 5.1.3 Floor space ratio

This provision specifies the gross floor areas permitted on a site as a proportion of the total site area. Considering the requirements around landscaping, parking, services and vehicle manoeuvring, it is often difficult for industrial premises to achieve higher floorspace ratios. There is limited evidence that floorspace ratios are required or have become a deterrent to development across the Northern Rivers.

**Table 21: Floor space ratio provision comparison**

LGA	Comparison of provision
Ballina	Not used in industrial areas.
Byron	Byron's main industrial park has an FSR control of 0.9:1. Many properties would likely be built at the maximum FSR permissible. If the height limit is set at an appropriate level, then an increased FSR would increase employment floorspace without increasing building height.
Clarence Valley	Not used in industrial areas.
Kyogle	Not used in industrial areas.
Lismore	Not used in industrial areas.
Richmond Valley	Not used in industrial areas.
Tweed	Most employment land in Tweed have an FSR of 2:1. Some areas such as Murwillumbah do not have FSR controls. Almost all employment land development is not filling out the 2:1 ratio as car parking is being provided at grade. The FSR controls do not appear to be an encumbrance from a planning perspective.

### 5.1.4 Industrial retail exclusion

For industrial retail outlets and the artisan food and drink industry, the floor area used for retail sales (not including any cafe or restaurant area) must not exceed:

- (a) 40% of the gross floor area of the industry, or
- (b) 400 square metres,

whichever is the lesser. The following table discusses how effective the provision is across the LGAs.

**Table 22: Industrial retail provision performance**

LGA	Performance of provision
Ballina	Some evidence of retail in industrial area due to limited supply and close access to catchment. Homemaker's Centre on Boeing Ave has seen retail uses on previously industrial land. Managed by DCP and LEP, but policy consideration due.
Byron	This provision is not effectively curtailing hospitality and retail uses in the Byron context. There are multiple restaurants and retail outlets in Byron's industrial park. This is likely a market response to land constraints in central Byron pushing centre-based uses out into the industrial area.
Clarence Valley	Not considered an issue in Clarence Valley.
Kyogle	Not considered an issue in Kyogle.
Lismore	Not considered an issue in Lismore. Also managed by DCP.
Richmond Valley	Not considered an issue in Richmond Valley.
Tweed	Not considered an issue in Tweed.

## 5.2 Development control plan provisions

While a detailed comparative review of the development control plans has not been undertaken, the following table provides an overview regarding the extent of prescriptive controls that relate to industrial development.

**Table 23: Floor space ratio provision comparison**

LGA	Comparison of provision
Ballina	A mix of discretionary and prescriptive controls in Chapter 5 – Industrial Development. Precinct-based controls for Ballina’s two main IN1 precincts.
Byron	Chapter D1 of the DCP provides provisions that guides the assessment of residential dwellings that are ancillary to uses in industrial zones and B7 zone. Chapter D5 of the DCP provides 11 design provisions. 5 have prescriptive provisions. These include setbacks, materiality, flood design, water supply, sewerage management, fencing and outdoor storage.
Clarence Valley	Industrial DCP – large range of discretionary and prescriptive controls including precinct-specific controls. DCP covers flood management and environmental protection. Could be reviewed to avoid duplications.
Kyogle	No industrial DCP.
Lismore	Lismore DCP industrial chapter provides mostly non-prescriptive provisions. One provision requires bulky goods retailing to be minimum 1,000sqm of GFA.
Richmond Valley	Standard DCP in terms of scope and prescriptions. Includes Crime Prevention Through Environmental Design requirements for industrial uses.
Tweed	Employment zone provisions in the DCP Section A17 are mostly non-prescriptive provisions.

## 5.3 Land use permissibility

The permissibility of land uses across the various employment zones has been reviewed and is provided in a separate spreadsheet. As a general principle, it is advised to restrict uses that are able to return a higher premium and do not directly address the objective of the precincts. As way of example:

- Large format retailing should be restricted from E4 General Industrial areas as it can displace general industrial uses that are unable to operate in other zones.
- Residential and tourist accommodation should be restricted from E4 General Industrial areas as they can introduce land use conflicts and restrict industrial uses from operating.
- Residential uses in E3 Productivity Support zones can increase land values and reduce the viability of the land for business operations.
- Retail and accommodation uses generally generate higher pedestrian and vehicles volumes and can introduce both safety and manoeuvrability conflicts within employment precincts.

## 5.4 Additional permitted uses

All LGAs within the Northern Rivers provide for “additional permitted uses” through relevant LEPs. In some cases, these additional permitted uses allow for employment land uses to be carried out in otherwise prohibitive zones. The purpose of such additional permitted uses is often to facilitate the continuation of existing on-site developments and activities. However, there are also cases in which additional permitted use provisions seek to unlock employment land opportunities beyond those provided by local zoning schemes. Table 24 summarises additional permitted uses that are generally associated with employment lands.

**Table 24: Additional permitted uses throughout Northern Rivers**

LGA	Site	Zonings	Additional permitted uses	Area
Ballina	Teven Road Transport Logistics Hub	RU2	Freight transport facility and a warehouse or distribution centre	17.1ha*
Byron	Byron Bay Rail Corridor and Lawson Street South Car Park	SP2, RE1, B2	Community facilities, information and education facilities, markets	2.9ha
Byron	Byron District Hospital site	R2	Office premises, light industry [for commercial kitchen], restaurant or café	0.5ha
Richmond Valley	Pacific Intermodal and Industrial Hub area, Casino	RU1, C3	Rail freight transport facility	121.9ha
Tweed	Nullum Street, Murwillumbah	R3	Office premises	0.1ha

Source: HillPDA (2022). \*3.2ha of this site constrained by flooding

Several other sites for additional permitted uses also exist throughout the Northern Rivers, generally pertaining to service stations and other small business uses.

While the additional permitted use approach is acceptable, it can make it overly cumbersome for businesses to seek modifications or alterations in uses, even if generally in line with existing operations. In the case of Teven Road, Byron District Hospital Site and the Pacific Intermodal and Industrial Hub there may be merit in rezoning the land to an employment zone. The future prospect of using Teven Road for additional employments lands would also be dependent to a large part on the outcome of current flood investigations being undertaken by Ballia Council.

# BUSINESS SURVEY FINDINGS

## 6.0 BUSINESS SURVEY FINDINGS

HillPDA developed a business survey which was distributed to business owners in the Northern Rivers region. The survey encompassed such topics as business details, staffing levels, and floor space requirements; desired criteria for business locations; and potential barriers to business growth. A copy of the survey is attached at Appendix B. The survey was open for responses between 8 October 2022 and 2 December 2022, with 30 responses received. Key findings from the survey are summarised under the following headings.

In addition to the business survey, targeted phone calls and agency meetings were also undertaken. The findings of these conversations have also been incorporated.

### Infrastructure, services and amenities

- Access to adequate infrastructure, services, and amenities was seen as necessary for business operations by many respondents.
- 93% of respondents stated that access to quality internet and communication services is an essential consideration for the location of businesses.
- In addition, several respondents listed access to power, water, phone service, and sewer networks as criteria for the location of businesses.
- Other facilities and amenities were also identified as desirable in business locations, e.g., shared office spaces, and educational facilities near industrial areas.

### Accessibility

- Most respondents mentioned proximity to major roads, particularly the M1 Pacific Motorway, as a requirement for businesses.
- Access to major roads was seen as important for manufacturing and transport businesses in particular.
- The M1 Pacific Motorway was identified by respondents as providing for transport up and down the coast and an important asset for the Northern Rivers.
- Respondents saw the accessibility of business locations for workers and customers as important, particularly with regard to public transport availability; proximity to workers' housing; and the overall centrality of businesses.
- Concerns regarding workplace accessibility for workers were somewhat related to general concerns regarding businesses' current lack of access to skilled labour.
- While many respondents noted the need for businesses to be accessible from residential areas to attract workers, some noted the need for buffers from residential areas. Respondents connected to transport businesses particularly saw buffers from residential areas as essential.
- Accessibility for consumers was seen as highly important for population-serving businesses. Some respondents cited visibility in town centres as essential for performance.
- With regard to industrial settings, some respondents called for more sites able to be accessed and used for 24/7 operations.
- The ability for trucks to access business sites was identified as important for a variety of types of businesses.
- The presence of adequate car parking was also seen as beneficial for a range of businesses.

### **Flooding risks**

- 80% of respondents stated that the risk of flooding is a business consideration.
- Flooding was identified by businesses both as a consideration for where to locate, and as a barrier to business development (i.e. if roads were closed etc. during flood events).
- Potential consequences of flooding included loss of business; damage to stock, equipment, and documents; and inability to access transport routes for business activities. Multiple respondents identified potential difficulties of rebuilding after a flooding event, as well as receiving insurance and government support.

### **Synergies with nearby businesses**

- A variety of synergies with nearby businesses was identified by respondents operating in most industries within the Northern Rivers region.
- Types of synergies with other businesses across the Northern Rivers region included sourcing local products; servicing or supplying goods to other businesses; using local services; and supporting other businesses through referrals and a shared customer base.
- Respondents in manufacturing businesses identified a particularly large set of direct synergies with other businesses in the Northern Rivers region. Such synergies included the shared use of transport and suppliers among the food manufacturing industry, or the use of harvest and haulage contractors for raw materials.
- Proximity to other businesses was identified by four respondents as a driving factor in deciding upon business locations.
- Multiple respondents mentioned the proximity of certain agricultural land uses as a business dependency.
- The potential for co-located creative business sites was also mentioned by one respondent.

### **Slope of land**

- Many respondents identified the slope of land as a consideration for the location of business activities. Several respondents stated level ground as a key criterion for selecting a business location.
- The slope of land was a particularly important consideration among respondents in manufacturing industries. Out of those respondents, half deemed the slope of land a “major” consideration, with the remaining half deeming it a “moderate” consideration.

### **Availability of suitable land**

- Many respondents identified a lack of suitable land as a barrier to further business development. This included land for infrastructure, industries (including from a lack of refrigerated warehouses), storage sheds, commercial uses, and food manufacturing.
- Multiple respondents identified planning processes as failing to respond to businesses’ changing land and building design needs.
- In particular, development application timeframes, and rezoning timeframes and associated costs, were seen as significant impediments for businesses to expand. The concept of “red tape” was also expressed by several respondents to describe governmental barriers.

### Land, lifestyle and business costs

- A variety of costs were identified as challenges for businesses operating in the Northern Rivers region.
- Potential business land was seen by some respondents as expensive, with cost a major driver for decisions regarding where to locate.
- In addition, regional costs of accommodation and living were seen as an impediment to businesses, due to the lack of potential available workers able to afford to live within the Northern Rivers region.
- Some respondents gave examples of looking to move business premises to a location closer to where most workers live, in order to increase the appeal for employment.
- Some businesses suggested a desire to consolidate their operations on to one site however indicated there was limited availability of land or floorspace in areas that are desired.

### Common perceived dependencies



### Common perceived barriers



### Perceived planning or zoning issues



# LAND AUDIT FINDINGS

## 7.0 LAND AUDIT FINDINGS

The following section overviews the land characteristics of the existing and proposed employment precincts in the Northern Rivers. Characteristics include:

- Total land area
- Total land area by zoning
- Status of employment land (developed and vacant)
- Lot sizes (developed and vacant).

### 7.1 Land use audit methodology and data sources

The land use audit was informed by the following information sources:

- NSW Department of Planning and Environment (DPE) land use zones (former zones)
- Department of Spatial Services, SIX Maps Clip and Ship Cadastral layer (property lots)
- MetroMap aerial imagery
- Cordell Connect, development applications.

#### Employment land estimate methodology

To determine the amount of employment land, the following steps were undertaken:

1. Each LGA's cadastral or property lot layers were clipped against NSW DPE land zones
2. Each lot was assigned its corresponding land zone, LGA name and land area (sqm)
3. All land zones except for employment land zonings were excluded
4. Road, laneways and footpaths were excluded, where possible
5. Resulting property lot land areas were assessed at the zone and LGA level.

#### Land status definitions and methodology

To determine the status of Northern Rivers employment land stocks, the following steps were undertaken:

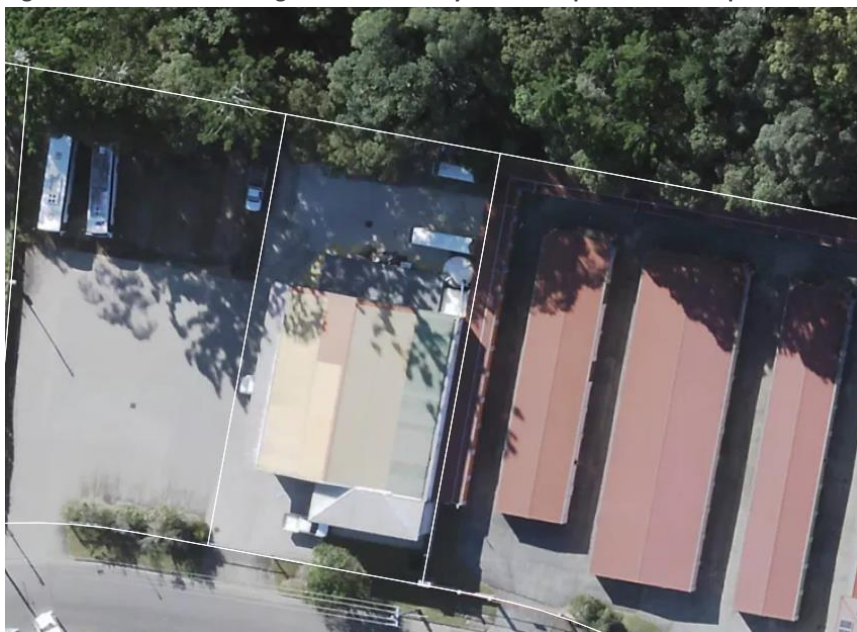
1. Each individual employment cadastral or property lot was assessed using aerial imagery via MetroMap
2. Each lot was assigned the status of developed or vacant
3. MetroMap was somewhat dated in some locations (early 2021 satellite images). As such, Cordell Connect was used to overlay recent industrial developments and those currently under construction (post 2021). Where these intersected with any lots identified as vacant, they were changed to a developed status.

Two land use status definitions have been applied in this assessment, these being:

- **Developed:** this is employment land stocks that are being used or which are considered to have limited to no capacity to contribute to future development. Developed land predominantly was identified by having a pre-existing building (commercial or residential) on the lot. In some cases, developed land includes land that is being used for ancillary operational businesses purposes, including storage (see Figure 14 below for an example). This category also includes railway land which is zoned as employment land. These corridors, if inactive, are too narrow to be used for future supply.
- **Vacant:** this is employment land stocks which are vacant; that is, they do not contain a pre-existing building, have no building under construction, or have limited storage use. This land is available for development. Please note a constraints analysis was not undertaken.

An example of a vacant lot being used for ancillary business operations is seen below. The left lot contains no building and would be assumed to be vacant. However, closer examination shows the lot is being used for a bus/coach business located in the building to the right of the lot. The loss of this lot would impact the operations and viability of the business.

**Figure 14: Vacant land being used for ancillary business operations example**



Source: MetroMap

## 7.2 Existing employment land characteristics

NSW has implemented employment zone reforms (April 2023). These reforms replaced 12 commercial and industrial zones with five new employment zones and three supporting zones. The intent of these new zones is to support business productivity and jobs growth.

The table below provides a general conversion summary of the new zones against the previous zones.

**Table 25: NSW employment zone reforms**

Previous zone	New zone
B5 - Business Development	E3 – Productivity Support
B6 - Enterprise Corridor	
B7 - Business Park	
IN1 - General Industrial	E4 - General Industrial
IN2 - Light industrial	
IN3 - Heavy Industrial	E5 - Heavy Industrial
IN4 - Working Waterfront	W4 - Working Waterfront

The following summarises the supply of employment land across the Northern Rivers. The audit was originally undertaken against the former planning framework and a general conversion has been undertaken. There may be instances where the zone may have been independently reclassified by Council under the new planning framework and does not reflect the direct conversion above.

### 7.2.1 Total zoned employment land area by development status and LGA

The land use audit indicates that the Northern Rivers contains around 1,811 hectares of zoned employment land. The majority (560 hectares or 31% of land stocks) was contained within Clarence Valley, followed by Tweed Shire (340 hectares or 19% of land stocks) and Richmond Valley, with 306 hectares or 17% of land stocks.

Of total employment land stocks, 1,307 hectares, or 72%, was considered developed, with the remaining 504 hectares, or 28%, being vacant. The following table summarises employment land stocks by area and status for each LGA that comprise the Northern Rivers.

**Table 26: Employment land area by status and LGA (ha)**

LGA	Developed	Vacant	Total
Ballina	112.8	28.1	140.9
Byron	53.7	19.7	73.4
Clarence Valley	443.9	116.5	560.4
Kyogle	63.3	47.3	110.5
Lismore	179.4	100.6	280.1
Richmond Valley	225.9	80.3	306.2
Tweed	227.9	111.6	339.6
<b>Total</b>	<b>1,306.9</b>	<b>504.1</b>	<b>1,811.0</b>

Source: HillPDA 2022

## 7.2.2 Employment land by zone and development status

### Total employment land stock by zone

Of the 1,811 hectares of total employment land stocks across the Northern Rivers:

- E4 General Industrial, accounted for 88% (1,595 hectares) of total land stocks
- E3 Productivity Support accounted for 9% of land stocks (168 hectares)
- W4 Working Waterfront accounted for 3% of land stocks (348 hectares).

### Developed land stock by zone

Of the 1,307 hectares of zoned developed employment lands:

- E4 - General Industrial, accounted for 88% (1,147 hectares) of total developed land stocks.
- E3 – Productivity Support, accounted for 11% (149 hectares) of total developed land stocks.
- W4 - Working Waterfront accounted for 1% (12 hectares) of total developed land stocks.

### Vacant land stocks by zone

Of the 503 hectares of zoned vacant employment lands:

- E4 General Industrial, accounted for 89% (448 hectares) of total vacant land stocks.
- W4 - Working Waterfront, accounted for 7% (37 hectares) of total vacant land stock.
- E3 – Productivity Support, accounted for 4% (19 hectares) of total vacant land stock.

The following table summarises employment land stocks by zone, land area and development status for each LGA that comprise the Northern Rivers.

**Table 27: Northern Rivers employment land stocks by LGA, zone and land status (ha)**

Land status	Land zone	Ballina	Byron	Clarence Valley	Kyogle	Lismore	Richmond Valley	Tweed	Total
Developed	E3	18.8	3.4	29.6	0.0	24.3	0.0	72.6	148.8
	E4	93.9	50.3	403.6	63.3	155.1	225.9	154.4	1,146.6
	E5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	W4	0.0	0.0	10.7	0.0	0.0	0.0	0.9	11.6
	<b>Total</b>	<b>112.8</b>	<b>53.7</b>	<b>443.9</b>	<b>63.3</b>	<b>179.4</b>	<b>225.9</b>	<b>227.9</b>	<b>1,306.9</b>
Vacant	E3	1.8	4.9	0.3	0.0	1.9	0.0	10.0	19.0
	E4	26.3	14.8	79.4	47.3	98.7	80.3	101.6	448.4
	E5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	W4	0.0	0.0	36.7	0.0	0.0	0.0	0.0	36.7
	<b>Total</b>	<b>28.1</b>	<b>19.7</b>	<b>116.5</b>	<b>47.3</b>	<b>100.6</b>	<b>80.3</b>	<b>111.6</b>	<b>504.1</b>
Total	E3	20.7	8.3	30.0	0.0	26.2	0.0	82.6	167.7
	E4	120.2	65.1	483.1	110.5	253.9	306.2	256.1	1,595.0
	E5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	W4	0.0	0.0	47.4	0.0	0.0	0.0	0.9	48.3
	<b>Total</b>	<b>140.9</b>	<b>73.4</b>	<b>560.4</b>	<b>110.5</b>	<b>280.1</b>	<b>306.2</b>	<b>339.6</b>	<b>1,811.0</b>

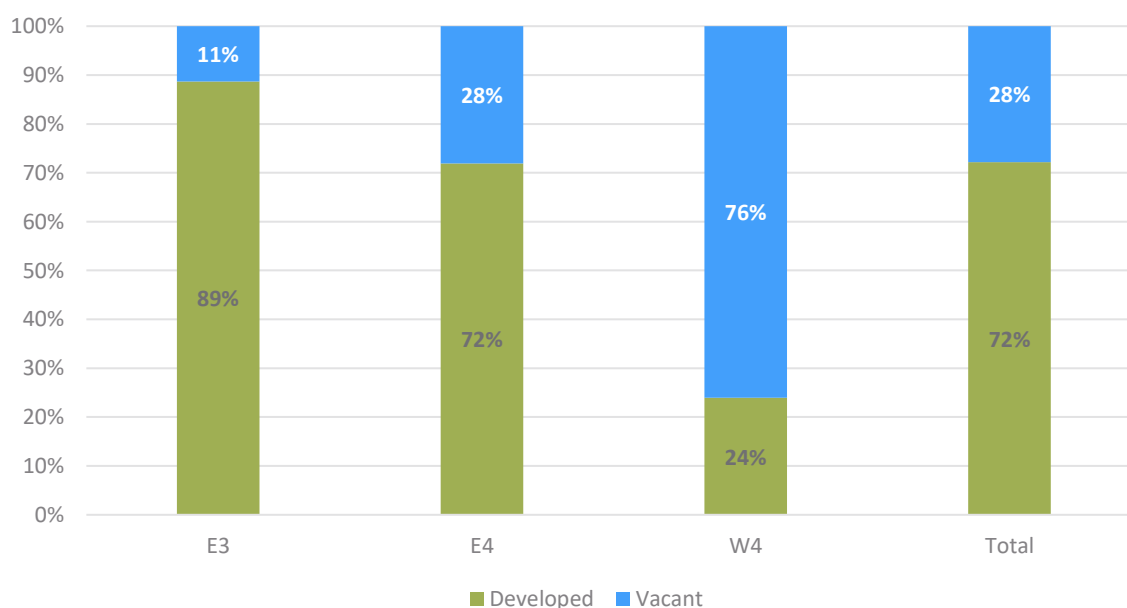
Source: HillPDA 2022

### 7.2.3 Vacant land by individual zone

Figure 15 shows the proportion of land developed versus vacant for each employment zone. It shows that:

- Of the 168 hectares of E3 Productivity Support zoned land, just 11% (19 hectares) was vacant.
- Of the 1,594 hectares of E4 General Industrial zoned land, 28% (448 hectares) was vacant.
- Of the 48 hectares of W4 Working Waterfront zoned land, 76% (37 hectares) was vacant.

**Figure 15: Proportion of employment zoned land developed versus vacant by zone**



Source: HillPDA 2022

## 7.2.4 Number of lots by size ranges and status

There were an estimated 3,166 zoned employment lots across the Northern Rivers. Of these, around 2,855 lots, or around 90%, were developed, with the remaining 10%, or 311 lots, being vacant.

Of the 3,166 lots, around 82% (2,600 lots) were 5,000sqm and under. The most common lot size range was 1,000-2,000sqm. Lots in this range accounted for 29% of all lots (922 lots).

The number of vacant lots, when expressed as a proportion to the total number of lots within a range, shows that the lower lot ranges (5,000sqm and under) had a lower proportion of vacant lots when compared to larger land holdings. For example, only 127 (or 7%) of the 1,899 lots ranging in size of 2,000sqm and under were vacant. This is compared to 30% of lots sized 1 hectare and larger being vacant.

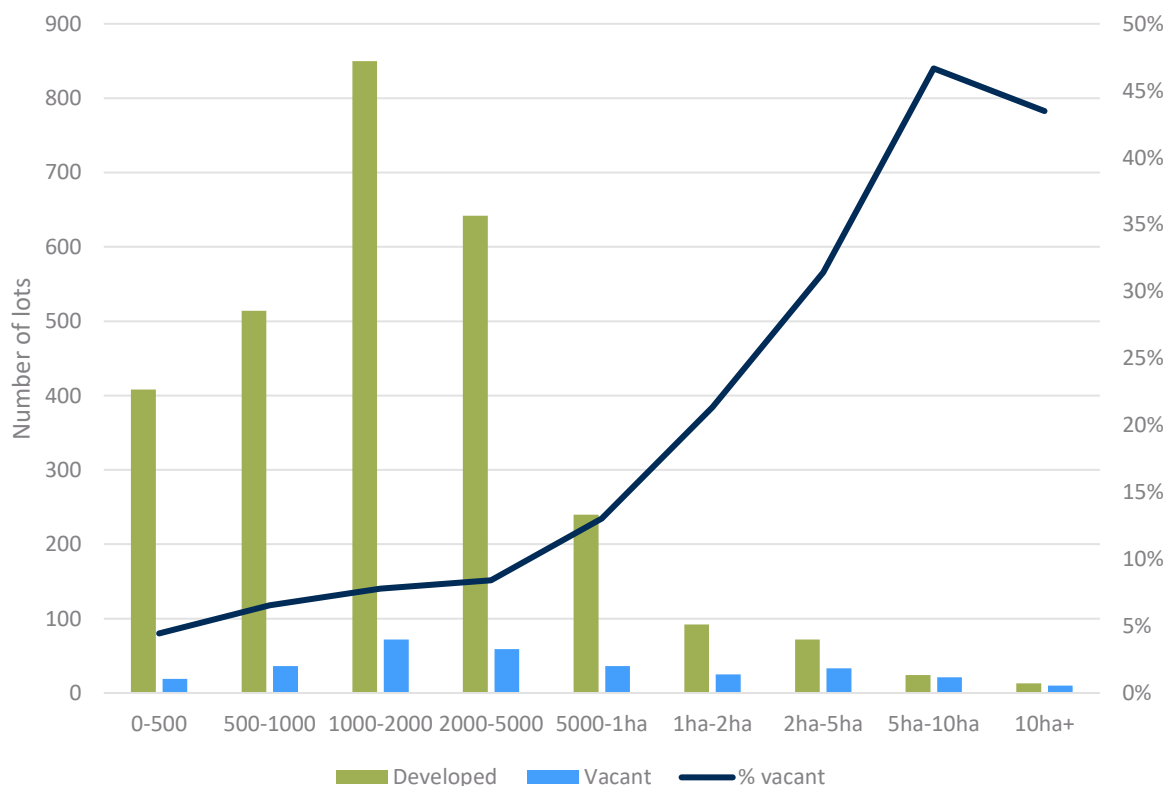
The table below provides the number of lots counted for each size range by its development status.

**Table 28: Number of employment land lots by size range and status**

Status	0-500	500-1000	1000-2000	2000-5000	5000-1ha	1ha-2ha	2ha-5ha	5ha-10ha	10ha+	Total
Developed	408	514	850	642	240	92	72	24	13	2,855
Vacant	19	36	72	59	36	25	33	21	10	311
<b>Total</b>	<b>427</b>	<b>550</b>	<b>922</b>	<b>701</b>	<b>276</b>	<b>117</b>	<b>105</b>	<b>45</b>	<b>23</b>	<b>3,166</b>
% of total lots	13%	17%	29%	22%	9%	4%	3%	1%	1%	100%
% vacant	4%	6%	8%	8%	13%	21%	31%	47%	43%	10%

Source: HillPDA 2022

**Figure 16: Count of employment land lots by size range and status**



Source: HillPDA 2022

### 7.2.5 Amount of employment zoned land by lot size range and status (ha)

In contrast to the number of lots analysed above, most employment zoned land area is captured within lots that are greater than 1 hectare, 1,220 hectares or 67% of all employment zoned land, is in this range.

Although lots within the 1,000-2,000sqm size were the most common lot range (29% of all lots), they only comprised 7% (127 hectares) of employment land stocks. Of this, only 9 hectares was vacant.

The amount of vacant land stocks is proportionally higher in the larger lots. For example, of the 504 hectares of vacant land stock, 89% or 447 hectares had a lot size of 1 hectare and over.

The table below provides the total land area of employment zoned land by lot size range and status.

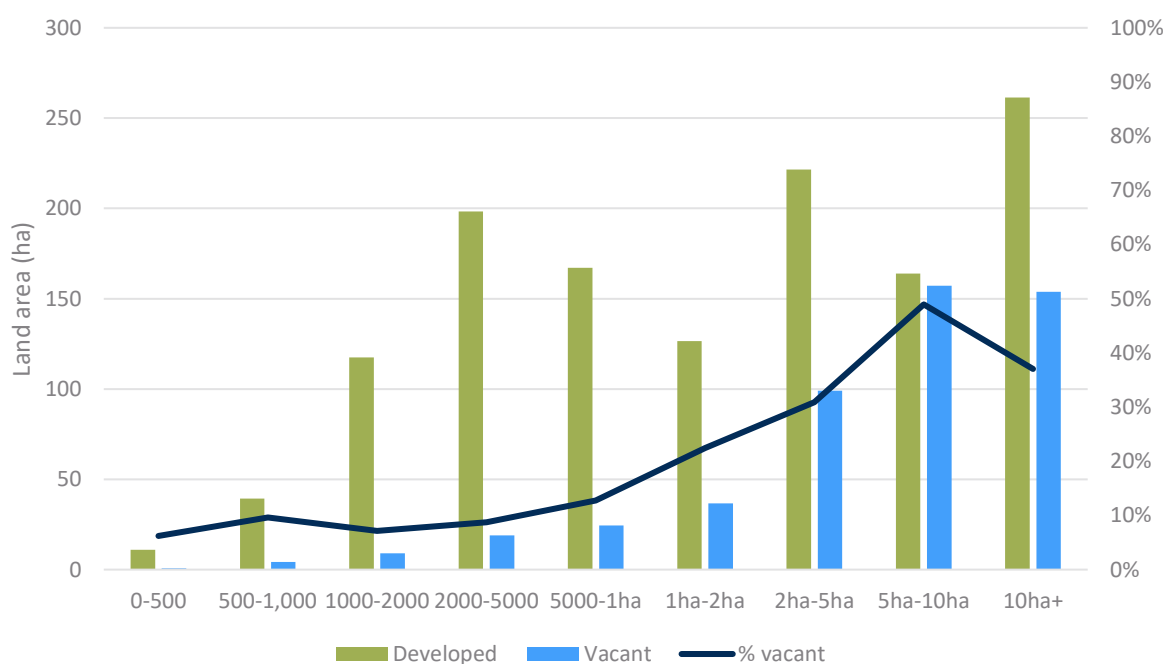
**Table 29: Amount of employment zoned land by lot size range (ha)**

Status	0-500	500-1000	1000-2000	2000-5000	5000-1ha	1ha-2ha	2ha-5ha	5ha-10ha	10ha+	Total
Developed	11	39	117	198	167	127	222	164	261	1,307
Vacant	1	4	9	19	24	37	99	157	154	504
<b>Total</b>	<b>12</b>	<b>44</b>	<b>127</b>	<b>217</b>	<b>191</b>	<b>163</b>	<b>321</b>	<b>321</b>	<b>415</b>	<b>1,811</b>
% vacant	6%	10%	7%	9%	13%	22%	31%	49%	37%	28%

Source: HillPDA 2022

What this means is that there is disparity between the size of lots that are more in demand and the size of lots that are available to the market. While there is anecdotal evidence that the market wants some larger lots, around 1ha, lots significantly greater than this are not necessarily meeting demand and would require further subdivision. This makes it less appealing for industrial developers as they are then required to do all the subdivision and service planning, which impacts viability.

**Figure 17: Total land area of employment zoned land by lot size range (ha)**



Source: HillPDA 2022

# EMPLOYMENT LAND DEMAND

## 8.0 EMPLOYMENT LAND DEMAND

The following sections project the amount of additional employment land required to support the Northern Rivers's resident, worker and visitor communities.

To understand and forecast future demand, this section analyses population projections (detailed in Section 3.2), which informs revised employment projections for the Northern Rivers. Employment projections are then converted into floorspace equivalents and land requirements using standard conversion ratios.

### 8.1 Employment land demand methodology

The methodology for projecting the demand for employment land is as follows:

1. Analyse State Government employment projections (released in November 2022) at the LGA and Northern Rivers level.
2. Pro rata State employment projections to the revised population projections assessed in this study.
3. Estimate the amount of employment directed towards employment precincts, based on the industry type, land zonings, previous land use audits for Ballina, Clarence Valley and Byron LGAs and market trends.

This step is achieved by applying a distribution proportion to the net growth/decline in employment at the industry level. For example, 90% of manufacturing would be expected to be directed towards employment precincts, while 10-20% of retail would be directed to the employment precincts.

4. Convert net growth in employment directed towards employment precincts to floorspace by applying industry standard employment densities (the amount of floorspace required per worker) to the net growth/decline by industry type.
5. Convert floorspace requirements into demand for land by applying typical Floor Space Ratios (FSRs) for developments in employment precincts.

### 8.2 Population growth scenarios

Two population growth scenarios for the Northern Rivers have been developed and assessed in this Study. These scenarios and assumptions applied are detailed in Section 3.2.

The population growth scenarios applied in this Study are as follows:

- **Scenario 1:** under Scenario 1 the population of the Northern Rivers is projected to increase from 311,177 residents in 2021 to just over 339,000 residents in 2041. This represents an increase of 27,825 persons or a 9% growth. In this scenario the population of Kyogle and Lismore are both projected to experience a decline in population
- **Scenario 2:** under Scenario 2 the population of the Northern Rivers is projected to increase from 311,177 residents in 2021 to 380,205 residents in 2041. This represents an increase of around 69,030 persons or a 22% growth. In this scenario all LGAs are projected to experience growth in their populations.

### 8.3 Revised employment projections by growth scenario

Employment projections are based on forecasts provided by Transport, Performance and Analytics (TPA), a branch of Transport for NSW. Projections are provided for each industry sector in 5-year increments between 2016-66. Although these projections are based on NSW DPE population projections, some discrepancies have been noted.

TPA employment projections provided an important baseline for future employment growth and are based on observed trends. TPA employment projections have been prorated to the revised population scenarios developed in this study.

Using this methodology, it is estimated that:

- Under Scenario 1, employment across the Northern Rivers would increase by around 20,855 jobs or 16% over the 20-year period
- Under Scenario 2, employment across the Northern Rivers would increase by around 40,960 jobs or 31% over the 20-year period.

**Table 30: Revised employment growth scenarios – Northern Rivers**

Industry	Scenario 1			Scenario 2		
	2021	2041	Net change	2021	2041	Net change
Agriculture, Forestry and Fishing	6,899	7,849	949	6,899	8,963	2,064
Mining	174	115	-60	174	126	-48
Manufacturing	7,581	8,162	581	7,581	9,103	1,522
Electricity, Gas, Water and Waste Services	1,257	1,429	172	1,257	1,611	353
Construction	11,880	12,295	415	11,880	13,790	1,910
Wholesale Trade	2,117	2,262	145	2,117	2,534	417
Retail Trade	16,181	17,893	1,712	16,181	20,352	4,171
Accommodation and Food Services	11,577	13,136	1,559	11,577	14,671	3,094
Transport, Postal and Warehousing	4,976	5,154	177	4,976	5,778	801
Information Media and Telecommunications	882	900	19	882	1,007	125
Financial and Insurance Services	1,937	2,449	512	1,937	2,757	820
Rental, Hiring and Real Estate Services	2,119	2,562	443	2,119	2,850	731
Professional, Scientific and Technical Services	7,658	10,147	2,488	7,658	11,374	3,716
Administrative and Support Services	4,352	5,164	812	4,352	5,788	1,436
Public Administration and Safety	7,341	8,059	718	7,341	9,201	1,860
Education and Training	12,699	14,670	1,970	12,699	16,751	4,051
Health Care and Social Assistance	23,366	30,369	7,003	23,366	35,021	11,655
Arts and Recreation Services	2,149	2,660	510	2,149	2,946	797
Other Services	5,238	5,964	727	5,238	6,721	1,483
<b>Total</b>	<b>130,384</b>	<b>151,239</b>	<b>20,855</b>	<b>130,384</b>	<b>171,343</b>	<b>40,958</b>

Source: TPA, HillPDA 2022

Similar to population projections, the full extent of impacts to employment projections from recent flood events is yet to be understood. Anecdotally, businesses with high value product and machinery are looking to move out of flood effected areas, however would still look to locate in industrial precincts. The ultimate impact on numbers is potentially minimal. There may also be inflation in construction employment due to rebuilding across the region. For the purpose of modelling however, these anomalies have not been factored in.

## 8.4 Net employment directed towards employment precincts

To estimate the amount of employment directed towards employment precincts, distribution has been based on individual industry type, land zonings present, previous land use audits for Ballina, Clarence Valley and Byron LGAs, and market trends.

Based on these assumptions and current land uses present, the table below provides a summary of the estimated net additional employment directed to the employment precincts across the Northern Rivers under each growth scenario.

**Table 31: Net change in jobs directed towards Northern Rivers employment precincts 2021-41**

Industry	Scenario	
	1	2
Agriculture, Forestry and Fishing	47	105
Mining	-3	-2
Manufacturing	523	1,436
Electricity, Gas, Water and Waste Services	34	72
Construction	83	387
Wholesale Trade	130	379
Retail Trade	342	845
Accommodation and Food Services	468	943
Transport, Postal and Warehousing	142	666
Information Media and Telecommunications	2	13
Financial and Insurance Services	51	82
Rental, Hiring and Real Estate Services	177	294
Professional, Scientific and Technical Services	498	744
Administrative and Support Services	162	290
Public Administration and Safety	72	191
Education and Training	197	409
Health Care and Social Assistance	700	1,175
Arts and Recreation Services	77	121
Other Services	327	678
<b>Total</b>	<b>4,031</b>	<b>8,826</b>

Source HillPDA 2023

Based on the assumptions detailed above, it is estimated that over the 20-year period:

- Under Scenario 1, around an additional 4,030 jobs would be accommodated in Northern Rivers employment precincts.
- Under Scenario 2, around an additional 8,825 jobs would be accommodated in Northern Rivers employment precincts.

## 8.5 Net employment floorspace requirements 2021-41

Employment is converted into floorspace needs by applying industry standard employment densities (the amount of floorspace required per worker) to the amount of employment directed towards the Northern Rivers employment precincts in 2021 and 2041. Employment densities for the industries of manufacturing, wholesale and warehousing have considered business practices and technologies that are changing, such as increased automation.

Based on our assumptions it is estimated that between 2021-41:

- Under Scenario 1, employment precincts across the Northern Rivers would accommodate an additional 575,940sqm of employment floorspace.
- Under Scenario 2, employment precincts across the Northern Rivers would accommodate an additional 967,760sqm of employment floorspace.

**Table 32: Northern Rivers, net floorspace demand 2021-41 (sqm)**

Industry	Demand scenario	
	1	2
Agriculture, Forestry and Fishing	1,424	3,137
Mining	-89	-71
Manufacturing	188,773	280,031
Electricity, Gas, Water and Waste Services	5,155	10,805
Construction	2,490	11,620
Wholesale Trade	64,197	113,974
Retail Trade	15,409	38,003
Accommodation and Food Services	18,710	37,736
Transport, Postal and Warehousing	167,734	272,598
Information Media and Telecommunications	56	383
Financial and Insurance Services	1,537	2,461
Rental, Hiring and Real Estate Services	26,604	44,058
Professional, Scientific and Technical Services	14,930	22,314
Administrative and Support Services	5,685	10,138
Public Administration and Safety	2,153	5,737
Education and Training	5,911	12,281
Health Care and Social Assistance	24,512	41,112
Arts and Recreation Services	4,594	7,234
Other Services	26,155	54,209
<b>Total</b>	<b>575,940</b>	<b>967,760</b>

Source: HillPDA 2023

## 8.6 Net employment land demand 2021-41

Net growth in floorspace is converted into land requirements by applying typical Floor Space Ratios (FSRs) for developments in employment precincts.

Typically, the building areas of industrial developments do not encompass the entirety of the land parcels they reside within. This is a result of the specific site requirements of typical industrial occupiers, which require setbacks from property boundaries, turning areas, parking areas, loading and unloading, landscaping etc. In our experience, although employment (industrial) precincts have an allowable typically FSR around 1:1—that is, the amount of floorspace that could be developed is equal to the properties' total land area—the actual built FSR ranges from between 0.3:1 to 0.6:1. For this assessment, HillPDA has applied a ratio of 0.4:1 to net growth in floorspace demand.

It is also prudent to allow for some level of vacancy and additional capacity. As such, an additional 20% in floorspace demand has been applied.

Using this methodology, it is estimated that the Northern Rivers would require between 173 and 290 hectares of employment land between 2021-41. This equates to an annual demand of between 8.7 to 14.5 hectares over the 20-year period.

**Table 33: Total additional employment land demand 2021-41 (ha)**

LGA	Demand (ha)	
	Scenario 1	Scenario 2
Ballina	33	31
Byron	29	28
Clarence Valley	21	41
Kyogle	2	10
Lismore	9	44
Richmond Valley	11	19
Tweed	68	118
<b>NR total</b>	<b>173</b>	<b>290</b>

Source: HillPDA 2023

Based on the current development patterns, the above total demand for employment land has been distributed into two broad employment land zones, these being:

1. Businesses zoned land (current B5, B6 and B7 zones), these have generally been converted into E3 Productivity Support under the new planning reforms.
2. Industrial zoned land (current IN1, IN2, IN4 zones), these have been converted into E4 General Industrial and W4 Working Waterfront zones under the new planning reforms.

**Table 34: Total additional employment land demand by broad zone 2021-41 (ha)**

Demand scenario	Business (ha)	Industrial (ha)	Total (ha)
Scenario 1	20	153	173
Scenario 2	33	257	290

Source: HillPDA 2023

## 8.7 Industrial lands capacity gap assessment

The land use audit found that the Northern Rivers contained around 504 hectares of vacant zoned employment land.

Comparing this to the demand under each scenarios reveals that:

- Under Scenario 1, there is an overall surplus in employment zoned land of around 331 hectares.
- Under Scenario 2, there is an overall surplus in employment zoned land of around 214 hectares.

Please note that this capacity assessment has not been informed by a constraints analysis. The availability and suitability of vacant land stocks for development would need to be determined. This step is undertaken in the following Chapter (Chapter 9).

**Table 35: Employment precinct supply and demand gap assessment (ha) by LGA**

LGA	Supply	Demand		GAP	
		Scenario 1	Scenario 2	Scenario 1	Scenario 2
Ballina	28.1	32.8	30.5	-4.7	-2.4
Byron	19.7	29.0	27.6	-9.2	-7.9
Clarence Valley	116.5	21.4	41.1	95.0	75.4
Kyogle	47.3	1.7	9.9	45.6	37.4
Lismore	100.6	9.4	44.5	91.2	56.2
Richmond Valley	80.3	11.0	18.8	69.2	61.4
Tweed	111.6	67.5	117.9	44.1	-6.3
<b>Total</b>	<b>504.1</b>	<b>172.8</b>	<b>290.3</b>	<b>331.3</b>	<b>213.8</b>

Source: HillPDA

Under both scenarios, Ballina and Byron have a deficit in available employment zoned land. Under scenario 2, Tweed has a deficit in available employment zoned land. This is consistent with the feedback that was received through the engagement process which indicated these LGAs as the preferable market location for new employment land stock.

Ballina, Byron and Tweed LGAs have a deficit of employment zoned land.

# SERVICING AND CONSTRAINTS ANALYSIS

## 9.0 SERVICING AND CONSTRAINTS ANALYSIS

Several factors have an impact on the supply of land. These factors include environmental constraints, infrastructure issues (including servicing), land ownership patterns, withholding issues, highest and best use of land, presence of residential development, development feasibility, the suitability or unsuitability of the land and the existing planning framework.

This chapter undertakes a review of the Northern River's employment land stocks to determine their availability for development i.e the future supply of land. Constraints analysed are of an environmental and infrastructure perspective with the analysis undertaken via desktop only. Any rezoning or future development will require further investigation prior to approval. This analysis was undertaken in two stages, these being:

- **Stage 1 | serviceability of employment land stocks:** this stage assesses if a vacant lot is serviced or not serviced. Land that is not serviced may incur additional developer costs, reducing the attractiveness for development over land that is serviced.
- **Stage 2 | constraints analysis:** this stage undertakes a constraints analysis of vacant employment land stocks to determine, of the vacant undeveloped land stocks, how much is available for development. This will determine how much additional land is required to maintain equilibrium with demand (assessed in Chapter 8.0).

### 9.1 Serviced and un-serviced land

For the purposes of this report, the definition of 'serviced land' as defined by the NSW DPE Employment Lands Development Monitor (ELDM) has been applied:

*'serviced land' is land where a sewerage and potable water service may be available for connection (lead-in water and wastewater infrastructure). It is acknowledged that the servicing data does not include servicing in terms of power, roads or other infrastructure.*

Discussion with representatives from the NSW DPE ELDM team revealed that for non-metropolitan areas serviced land is defined as land being located within a thirty-metre buffer from a sewerage or potable water service. This buffer has been applied for the purpose of this study.

Serviced land is assumed to have a greater capacity to be developed over non-serviced land, primarily because the lower costs incurred during development. There may be instances where a parcel of land is just outside the service buffer and could be included. Further investigation into servicing should be undertaken at a site-by-site level.

The analysis only considers the ability to connect to services. It does not consider the capacity of existing infrastructure systems to accommodate the additional load generated by the development.

### 9.1.1 Vacant employment land stocks serviceability identification

HillPDA has assessed the serviceability of the Northern Rivers undeveloped vacant land stocks. This excludes land considered being used for storage or any other ancillary purpose to a business's operation and land being developed or with a development application or construction certificate.

Of the 503 hectares of vacant employment lands stocks across the Northern Rivers around 370 hectares or 74% is serviced, with the remaining 130 hectares or 26% of vacant employment land stocks being un-serviced.

**Table 36: Vacant land stock service status (ha)**

LGA	Service status		Total vacant stocks
	Serviced	Un-serviced	
Ballina	25.9	2.2	28.1
Byron	8.5	11.3	19.7
Clarence Valley	103.3	13.2	116.5
Kyogle	29.3	18.0	47.3
Lismore	91.3	9.3	100.6
Richmond Valley	24.9	55.3	80.3
Tweed	89.3	22.4	111.6
<b>Total</b>	<b>372.4</b>	<b>131.7</b>	<b>504.1</b>

Source: HillPDA 2023, figure may not total due to rounding

74%  
serviced

## 9.2 Constraints analysis

The following undertakes a constraints analysis on zoned vacant employment land stocks. In conjunction with the NSW DPE, two constraint categories were developed to assess the availability of the North Coast's vacant and zoned employment land stocks for development.

These two constraint categories were:

- **Hard constraints** | these are restrictions that would reduce the availability and appropriateness of land for development. As such, land identified as being affected by a hard constraint is considered unavailable for development. Hard constraints analysed included:
  - Flooding (land below the Flood Planning Level (FPL))
  - Heritage.
- **Manageable constraints** | these are restrictions on the development of land that are considered manageable, that is, with appropriate planning, off-setting, and design concessions the development of land is achievable. Manageable constraints analysed include:
  - Flooding (land between the FPL and PMF)
  - Agricultural land
  - Bushfire
  - Environmental conservation
  - Biodiversity
  - Airport noise
  - Contamination
  - Biodiversity
  - Mineral resources
  - Landslip.

Land area that is not subject to manageable or hard constraints is considered unconstrained. Note however that while the land area may be unconstrained, the analysis does not consider the location of this unconstrained proportion and if it is viable to develop.

### 9.2.1 Hard constraints analysis

Of the 504 hectares of vacant employment land stock across the Northern Rivers, just under 246 hectares or 49% was affected by hard constraints. This land is considered unsuitable for development.

**Table 37: Northern River's vacant employment land stocks affected by hard constraints (ha)**

LGA	Total vacant land	Hard constraints present	Remaining vacant land
Ballina	28.1	18.7	9.4
Byron	19.7	9.8	9.9
Clarence Valley	116.5	41.1	75.4
Kyogle	47.3	22.7	24.6
Lismore	100.6	75.3	25.3
Richmond Valley	80.3	21.0	59.3
Tweed	111.6	57.0	54.6
<b>Total</b>	<b>504.1</b>	<b>245.6</b>	<b>258.5</b>

Source: HillPDA 2023

Around 50% of zoned employment land is considered unsuitable for development.

### 9.2.2 Manageable constraints analysis

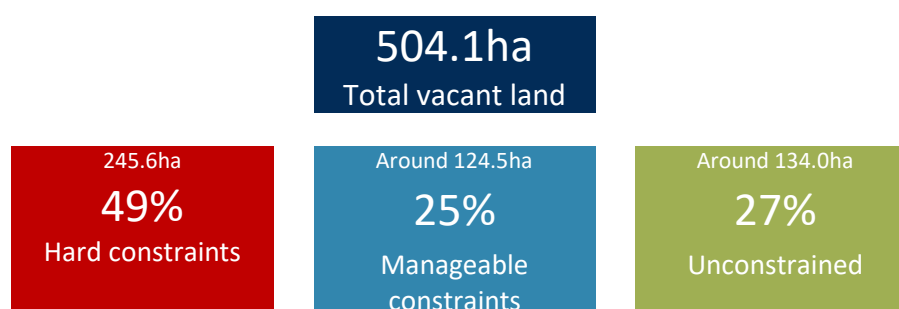
Of the 259 hectares of employment land stock across the Northern Rivers not containing hard constraints, around 125 hectares or 25% of total vacant land was subject to manageable constraints.

**Table 38: Northern rivers vacant employment land stocks affected by manageable constraints (ha)**

LGA	Land unaffected by hard constraints	Contains manageable constraints	Remaining unconstrained land
Ballina	9.4	9.4	0.0
Byron	9.9	9.3	0.6
Clarence Valley	75.4	18.2	57.2
Kyogle	24.6	14.2	10.5
Lismore	25.3	19.4	5.9
Richmond Valley	59.3	21.2	38.1
Tweed	54.6	32.9	21.8
<b>Total</b>	<b>258.5</b>	<b>124.5</b>	<b>134.0</b>

Source: HillPDA

The remaining 134 hectares or 26% of total zoned and vacant employment land was assessed as being unconstrained. Ballina, Byron and Lismore contained very small amounts of unconstrained land.



### 9.3 Combined servicing and constraints analysis

This analysis has identified the amount of land that is subject to manageable constraints or is unconstrained and considered whether they are serviceable.

This analysis found:

- Of the 134 hectares of unconstrained vacant employment land, around 85 hectares or 63% was serviceable while the remaining 50 hectares or 37% was not serviced.
- Of the 125 hectares of manageable constrained vacant employment land around 72 hectares or 57% was serviceable while the remaining 53 hectares or 42% was not serviced.

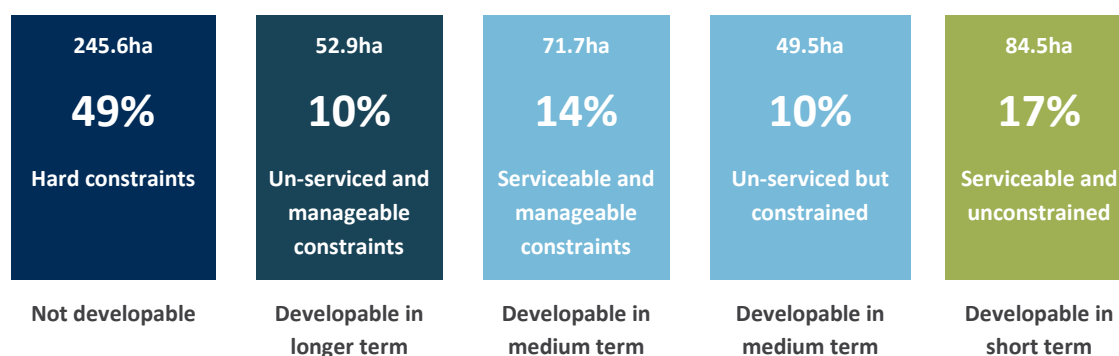
A breakdown of each local government area is provided in the following table.

**Table 39: Vacant land stocks availability status by constraint and serviceability (ha)**

LGA	Manageable constraints			Unconstrained		
	Serviced	Non-serviced	Total	Serviced	Non-serviced	Total
Ballina	9.4	0.0	9.4	0.0	0.0	0.0
Byron	3.4	5.9	9.3	0.1	0.5	0.6
Clarence Valley	15.9	2.3	18.2	54.7	2.5	57.2
Kyogle	5.5	8.6	14.2	1.1	9.3	10.5
Lismore	15.2	4.2	19.4	4.0	1.9	5.9
Richmond Valley	0.7	20.6	21.2	3.4	34.6	38.1
Tweed	21.6	11.3	32.9	21.2	0.6	21.8
<b>Total</b>	<b>71.7</b>	<b>52.9</b>	<b>124.5</b>	<b>84.5</b>	<b>49.5</b>	<b>134.0</b>

Addressing servicing and constraints on land can add to development cost and increase timeframes. It is therefore less likely that land would be market ready in the short term (0-5 years). It is assumed that if a proponent only has to address either servicing or constraints, land could be made available in the medium term (5-10 years). If a proponent is required to address servicing and constraints the viability of development becomes questionable and the likelihood of supply coming online reduces.

The following summarises the estimate employment land supply pipeline with consideration of constraints and servicing.



# SUPPLY AND DEMAND GAP ANALYSIS

## 10.0 SUPPLY AND DEMAND GAP ANALYSIS

### 10.1 LGA Gap

Chapter 8 of this study estimated that, to accommodate the projected growth in employment, there was demand for an additional 173-290 hectares of employment land across the Northern Rivers to 2041.

For the purpose of this report, we have assumed that the cumulative short and medium term supply pipeline is more likely to be able to contribute to addressing demand to 2041.

The breakdown of the gap analysis at an LGA level is identified in Table 40.

**Table 40: Supply and demand gap assessment by scenario and LGA (ha)**

LGA	Total demand		Land supply pipeline			Gap analysis					
	Scenario 1	Scenario 2	Long	Medium	Short	Including short term supply only		Including short and medium term supply		Including all supply	
						1	2	1	2	1	2
Ballina	32.8	30.5	0.0	9.4	0.0	-32.8	-30.5	-23.4	-21.1	-23.4	-21.1
Byron	29.0	27.6	5.9	3.9	0.1	-28.9	-27.5	-25.0	-23.6	-19.1	-17.7
Clarence Valley	21.4	41.1	2.3	18.5	54.7	33.2	13.6	51.7	32.1	54.0	34.3
Kyogle	1.7	9.9	8.6	14.8	1.1	-0.5	-8.7	14.3	6.1	23.0	14.7
Lismore	9.4	44.5	4.2	17.1	4.0	-5.4	-40.5	11.6	-23.4	15.9	-19.2
Richmond Valley	11.0	18.8	20.6	35.3	3.4	-7.6	-15.4	27.7	19.9	48.3	40.4
Tweed	67.5	117.9	11.3	22.2	21.2	-46.3	-96.7	-24.1	-74.5	-12.9	-63.3

Source: HillPDA 2023

To be conservative, and assuming that it would be less likely for land that has both manageable constraints and that is un-serviced to contribute to addressing demand, it would be prudent to plan for additional employment land in the LGAs of Ballina, Byron, Lismore and Tweed LGAs. To account for the full extent of land required to develop a new employment precinct, a general rule of thumb is that around 20% of the zoned land is taken up by other uses such as the development of internal roads, access, sidewalks, parks, other infrastructure and landscaping requirements. For this reason, it would be worth investigating:

- Ballina – around 26 to 30 hectares
- Byron – around 29 - 32 hectares
- Lismore – around 30 hectares (scenario 2)
- Tweed – between around 30 hectares to 95 hectares.

Considering however that a lot of Lismore's existing zoned employment land is affected by flooding, there may be further latent demand experienced in the Lismore LGA from businesses seeking to relocate out of the flood affected areas. This would further exacerbate the need for additional short-medium land supply.

The demand analysis does not consider the additional demand that may be generated due to established businesses wanting to relocate out of existing industrial areas due to flood constraints. While it is acknowledged that flooding would burden the existing supply chain, ultimately it is unlikely the land will be 'back zoned' and it is therefore still contributing to land supply. While there is option for businesses to continue to locate in these areas, due to insurance premiums and flood risk, it is likely that some of these existing zones may become less utilised. It is therefore logical that additional land could be identified in LGAs that are subject to flood risk to accommodate some demand generated from reduced precinct utilisation.

## 10.2 Northern Rivers

The servicing and constraints analysis for the Northern Rivers identified that, of the supply pipeline, in the:

- Short term (0-5 years) – around 85 hectares could be brought online
- Medium term (5-10 years) – around 121 hectares could be brought online
- Longer term (10+ years) – around 53 hectares may become available.

The gap analysis for the Northern Rivers identifies that with consideration of the:

- Market ready land supply only (serviced and unconstrained) between 88 to 206 additional hectares of zoned employment land would be required.
- Short and medium term pipeline only, under Scenario 1 no additional land would be required, however around 85 hectares would be required under Scenario 2.
- Full pipeline, no additional land would be required under Scenario 1 and around an additional 32 hectares would be required under Scenario 2

For the purpose of this report, we have assumed that the short and medium term supply pipeline is more likely to be able to contribute to addressing demand to 2041.

To account for the full extent of land required to develop a new employment precinct, a general rule of thumb is that around 20% of the zoned land is taken up by other uses such as the development of internal roads, access, sidewalks, parks, other infrastructure and landscaping requirements. Therefore, under scenario 2, there could be merit in investigating an additional 106 hectares of land for employment purposes across the Northern Region. No additional land would be required under Scenario 1. The breakdown of this analysis is identified in Table 41 and Figure 18.

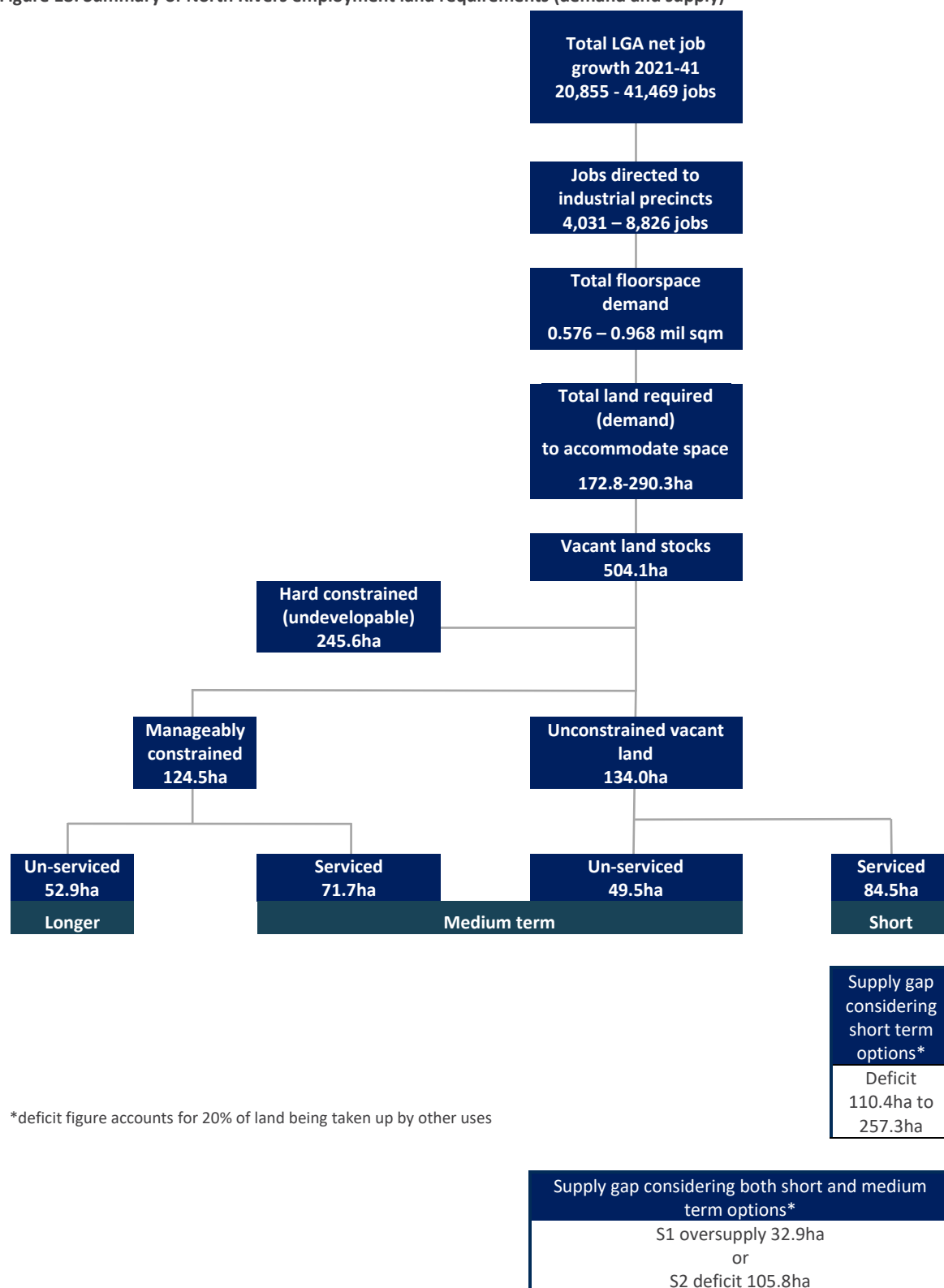
**Table 41: Northern Rivers supply and demand gap assessment by scenario (ha)**

Location	Total demand		Land supply pipeline			Gap analysis							
	Scenario 1	Scenario 2	Long	Medium	Short	Including short term supply only		Including short and medium term supply		Including all supply		Other use allowance (20%)	
						1	2	1	2	1	2	1	2
Northern Rivers	172.8	290.3	52.9	121.2	84.5	-88.3	-205.8	32.9	-84.6	85.8	-31.8		-105.8

Source: HillPDA 2023

Investigate rezoning around 106 hectares of new employment land.

Figure 18: Summary of North Rivers employment land requirements (demand and supply)

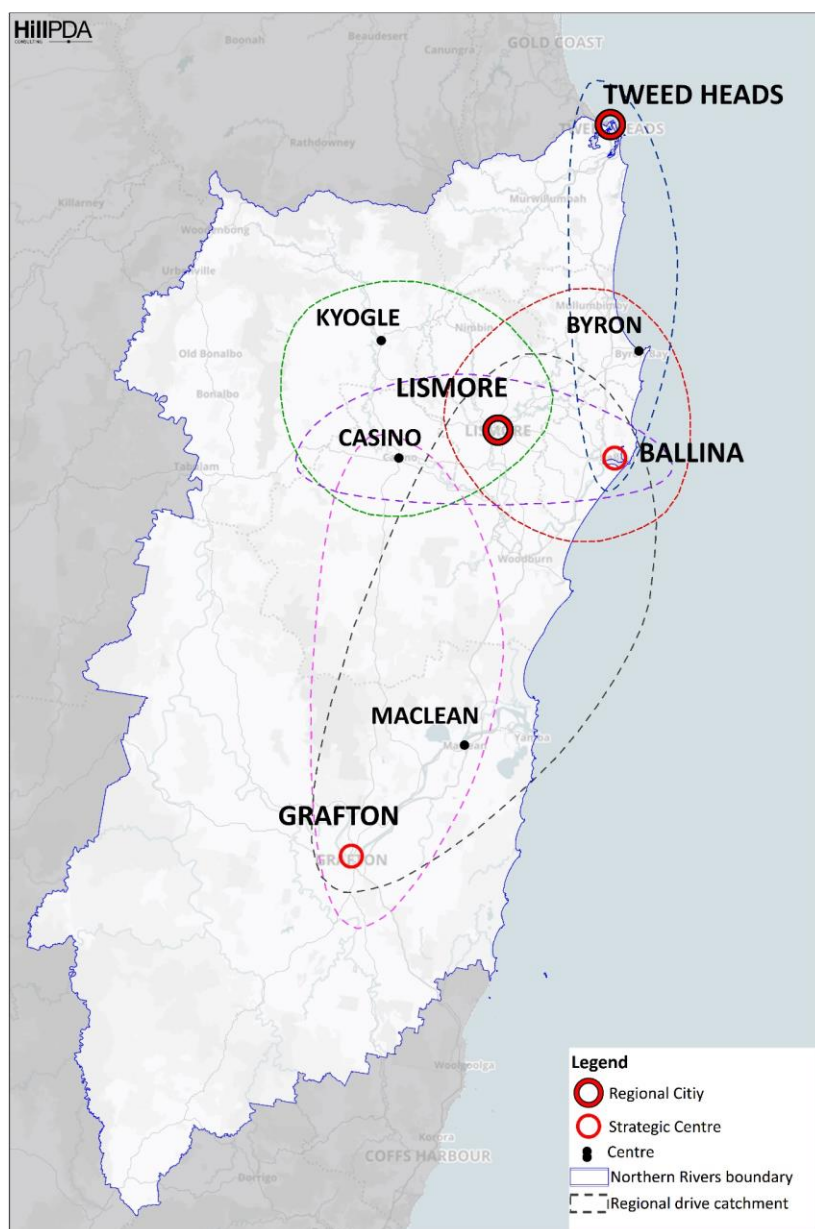


It would be logical to plan for new development in areas where there is a supply deficit across all scenarios, however if land is too constrained, it could be possible to investigate surrounding LGAs, if strong transport connections are in place (see section 10.3).

### 10.3 Regional drive time gap analysis

An analysis has been undertaken that creates service catchments assuming a drive range of no more than one hour from the main centres. As identified in section 3.1.7, the majority of residents in the Northern Rivers also work within the sub-region. This can involve working residents travelling to and from different LGAs, cities, and towns for employment. Workforce and service catchments can be analysed based on 1-hour commuting times to and from city and town centres, to indicate the practical accessibility of different investigation areas (see Figure 19). This average commute time is based on the Australian average of 62 minutes. It is acknowledged that some people would commute more or less than this. While it is not identified in the below table or figure, there is also a cross border drive catchment between Tweed and the Gold Coast. The southern extent of Clarence Valley LGA would also share a service catchment with Coffs Harbour LGA. Table 42 identifies the supply deficit or surplus at a regional drive catchment level.

**Figure 19: Regional drive service catchments**



Source: HillPDA 2023

**Table 42: Regional drive service catchment gap analysis (ha)**

Regional catchments	drive	Total demand		Short-medium supply pipeline	Surplus / deficit	
		S1	S2		S1	S2
Tweed to Ballina		129.3	176.1	56.8	-72.5	-119.3
Byron, Lismore	Ballina,	71.2	102.6	34.5	-36.7	-68.2
Richmond Lismore, Ballina	Valley,	53.2	93.8	69.2	16.0	-24.6
Kyogle, Richmond Valley, Lismore		22.1	73.2	75.7	53.7	2.6
Richmond Valley, Clarence Valley		32.5	59.9	111.9	79.4	51.9

The analysis assumes that LGAs within a catchment could potentially support the delivery of land and help meet future employment demand requirements. The analysis only considers the short-medium supply pipeline in being able to meaningfully contribute to market ready opportunities. It shows that across the Northern Rivers, the greatest need for future employment land is in the Tweed to Ballina catchment and the Byron to Lismore catchment. This is due to the supply shortfall in Tweed, Byron and Ballina LGAs and anecdotally across the Gold Coast. Under scenario 2, most of the service catchments have limited supply available due to the high demand expected for the eastern coastline LGAs.

Unfortunately, these coastal service catchments also face considerable constraints in the form of flooding and biodiversity and it can be difficult to find appropriate and affordable land to suit employment uses. Stakeholder consultation identified that Casino, in Richmond Valley can play an important regional role for manufacturing, which could alleviate pressure from other LGAs. Clarence Valley (north) and Lismore (east) LGA's can also play a strategic role in alleviate pressure from Ballina and Byron if land with strong road access is made available.

# FUTURE LAND PROVISION

## 11.0 FUTURE LAND INVESTIGATION

The analysis contained in the previous chapters identified that there is a need to investigate new employment land supply to cater to demand to 2041. The gaps analysis findings identified that the LGAs of Ballina, Byron, Lismore and Tweed were in immediate need of investigating additional land supply. In the case of Ballina, Byron and Tweed, the findings correlated with anecdotal evidence that was provided through stakeholder engagement.

### 11.1 Land suitability criteria

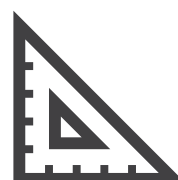
This section outlines the criteria that should be considered when seeking to identify new land for employment.



**Environmental constraints**

Environmental constraints such as conservation zoned land and important agricultural land can limit development potential. This applies to areas of environmental significance both on zoned land and on land abutting employment areas. Sensitive environmental assets should be protected and areas of environmental risk or strategic importance (eg flooding, bushfire) should be avoided.

**Principle: Avoid land subject to or in proximity to significance, hazard and protection planning layers.**



**Slope**

Employment lands benefit from flat topography. Industrial uses are not suited to sloped land due to access constraints, the large property areas required and the cost of developing on sloped land.

**Principle: Generally speaking, the flatter the land the better.**



**Electricity supply**

The vast majority of industries are reliant on electricity for operational needs. Industrial electricity supply requires significant forward planning with the servicing agencies because expensive “headworks” upgrades may be required to service employment lands.

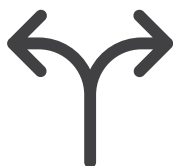
**Principle: Provide an appropriate standard of electricity to employment lands to meet industrial uses.**



**Water supply and management**

Water supply is vital for employment uses, particularly the provision of adequate levels of water pressure to allow firms to meet fire safety requirements. Water management such as sewer and stormwater services should also be in place.

**Principle: Locate employment lands in areas which can be serviced by water, sewerage, and stormwater in a cost effective and environmentally sensitive way.**



**Vehicular access**

Vehicular access is the foundation for functional employment land uses. Consideration of car access and parking, truck and B-double circulation and motorway access is key.

**Principle: Locate and design employment lands to have vehicular access from a major road with circulation and parking suitable to the vehicles that need access.**



**Freight access**

Employment lands benefit from access to the national and international freight network. This includes railway, ports and airports. Direct freight access or access via an intermodal logistics terminal is an asset for employment land.

**Principle: Locate employment lands with close access to a freight road, railway, port or airport terminals and networks.**



**Land use conflicts**

Land use conflicts can occur when employment lands are located proximal to sensitive uses such as schools, childcare, residential etc. New employment lands should be buffered by less sensitive uses.

**Principle: General industrial employment lands should be isolated or buffered by less intensive zones such as E3 Productivity Support to enable maximum utilisation.**



**Agglomeration**

Employment uses benefit from proximity to other employment land uses. Therefore, new employment lands should seek to leverage the economic value of existing areas to boost efficiencies.

**Principle: Employment lands can benefit from being located adjacent to existing employment precincts.**



**Workforce and service catchment**

Businesses located in proximity to residential areas have better access to the skills they need to operate and the customer base they service. Access to a populated catchment offers a competitive advantage to employment lands.

**Principle: Employment lands should be located in a driveable distance from a regional population centre.**



**Public transport**

Adequate public transport access means easier access for workers. Public transport can often be of concern to firms based in the more inaccessible regional areas in relation to moving employees to and from work.

**Principle: Employment lands should be accessible by at least one form of public transport. (Preferrable but not necessary in regional areas)**

## 11.2 Future land investigation areas

As identified in Chapter 0, the employment land supply in the LGAs of Ballina, Byron, and Tweed are unlikely sufficient to meet future demand. There will likely be demand pressures in the LGA of Lismore as well due to businesses wanting to relocate out of flood prone areas. Due to constraints, some of these LGAs are also limited in their capacity to deliver future land supply. For this reason, a regional approach to land delivery has been suggested with the LGA of Clarence Valley more able to support the need. Lismore is also suitably located if appropriate and serviceable land is able to be found.

To inform the future land investigation, we have used the investigation areas identified within the North Coast Regional Plan (sourced from DPE, 2023). In addition to this, Council had the opportunity to provide two additional areas to be considered in the analysis. Three councils provided additional areas.

### 11.2.1 Analysis methodology

The following sections analyse the suitability of investigation areas for employment at an LGA level. The area, provided by DPE, were identified within the North Coast Regional Plan. This analysis involves three stages for each area: Locational suitability, constraints and barriers and summary (development priority/comment).

Location suitability analysis considers freight access, workforce and service catchments, agglomeration potential, and land zone suitability. Areas are designated scores, or indicative zonings based on these considerations. Assessment criteria are outlined below.

**Table 43: Locational suitability criteria for investigation areas**

Freight access	Workforce and service catchment	Agglomeration
<p>Scored out of 3.</p> <ul style="list-style-type: none"> <li>Access to no motorways, major roads, or secondary roads: 1</li> <li>Nearby access to motorways, major roads, and/or secondary roads: 2</li> <li>Nearby access to motorways, major roads, or secondary roads; and either rail, airport, or port: 3.</li> </ul>	<p>Scored out of 3. Commuting distance is considered up to 1 hour based on the Australian average commute time.</p> <ul style="list-style-type: none"> <li>Not in commuting distance of any regional city/strategic centre catchments: 1</li> <li>In commuting distance of one regional city/strategic centre catchment: 2</li> <li>In commuting distance of multiple regional city/strategic centre catchments: 3.</li> </ul>	<p>Scored out of 2.</p> <ul style="list-style-type: none"> <li>Not within approximately 100m of existing employment zoned land: 1</li> <li>Within approximately 100m of existing employment zoned land: 2.</li> </ul>

Constraints and barriers analysis considers manageable/hard constraints as well as servicing. This involves calculating the percentage of each area affected by both manageable and hard constraints and assessing each area's access to water, sewer, and road services within 30 metres. Analysis criteria are outlined below.

**Table 44: Constraints and barriers analysis criteria for investigation areas**

Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access
Percentage of area covered by hard constraints.	Percentage of area covered by manageable constraints.	<ul style="list-style-type: none"> <li>Water pipes are accessible within 30 metres of the site: Y</li> <li>Water pipes are <b>not</b> accessible within 30 metres of the site: N.</li> </ul>	<ul style="list-style-type: none"> <li>Sewer pipes are accessible within 30 metres of the site: Y</li> <li>Sewer pipes are <b>not</b> accessible within 30 metres of the site: N.</li> </ul>	<ul style="list-style-type: none"> <li>Roads are accessible within 30 metres of the site: Y</li> <li>Roads are <b>not</b> accessible within 30 metres of the site: N.</li> </ul>

The third stage of analysis involves a summary table indicating the total land with manageable or no constraints able to be provided by each area, alongside assessments of development priority and general comments. Considerations for summary analysis are outlined below.

**Table 45: Prioritisation and evaluation**

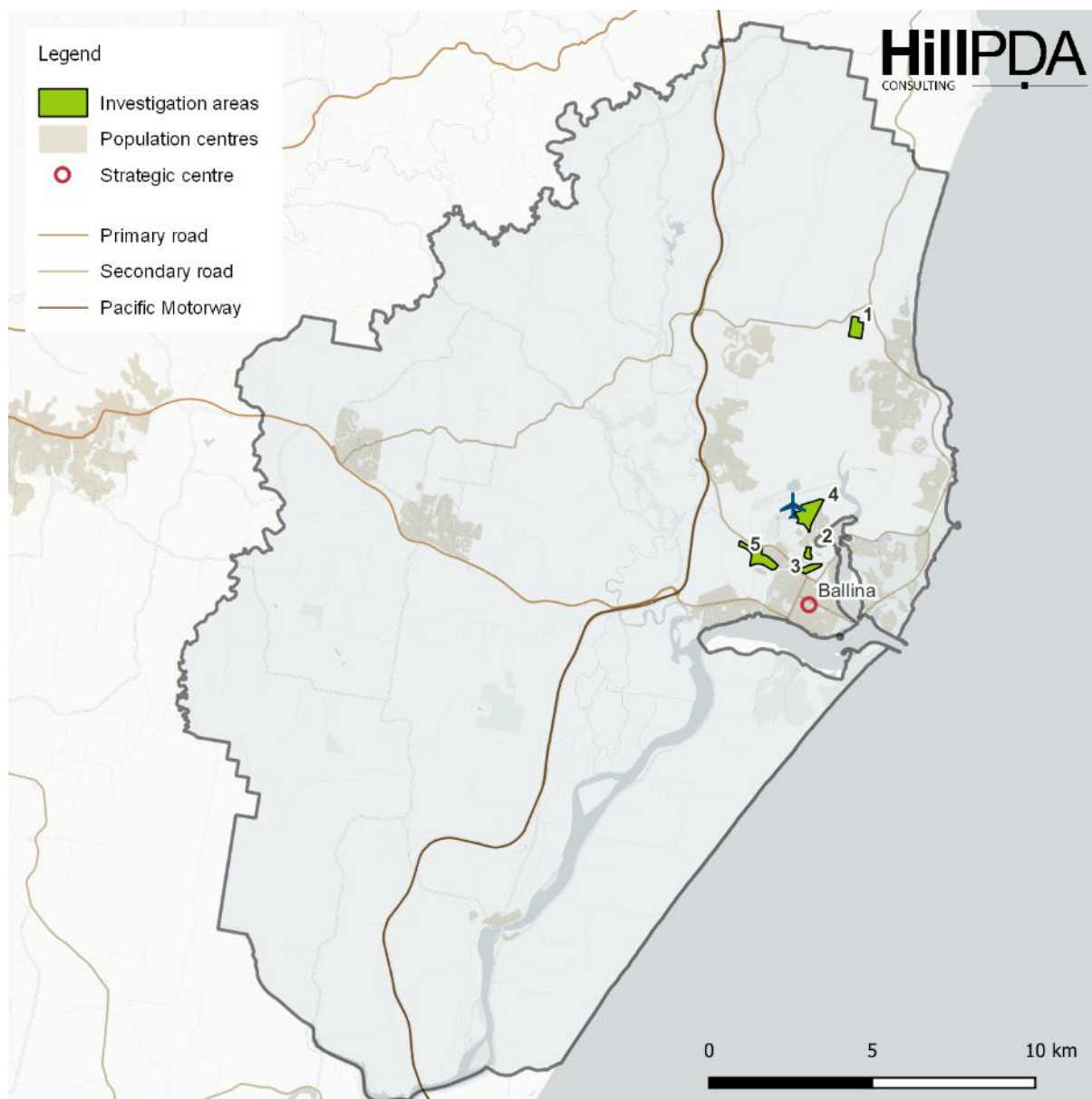
Contribution to manageable and/or unconstrained supply (ha)	Development priority	Potential zone	land	Comment
Total hectares of land either unconstrained, or with manageable constraints.	<p>Evaluated timeframe for when development could occur based on serviceability, location suitability, demand and constraints.</p> <ul style="list-style-type: none"> <li>• Short-term</li> <li>• Medium-term</li> <li>• Long-term</li> <li>• Unlikely (<i>development not recommended due to extent of hard constraints or further detailed site analysis should be undertaken</i>).</li> </ul>	Consider the potential land zone suitability based on demand and location.		<p>Comment on overall suitability for development. This outlines the following:</p> <ul style="list-style-type: none"> <li>• Location suitability</li> <li>• Regional demand serviceability (where relevant)</li> <li>• Constraints and barriers, including tasks that would be necessary for development.</li> </ul>

It is noted, that while biodiversity was considered a manageable constraint for the purpose of this analysis, councils have anecdotally suggested it is more likely to be a hard constraint considering cost and technical requirements.

## 11.2.2 Ballina

### 11.2.2.1 Location suitability

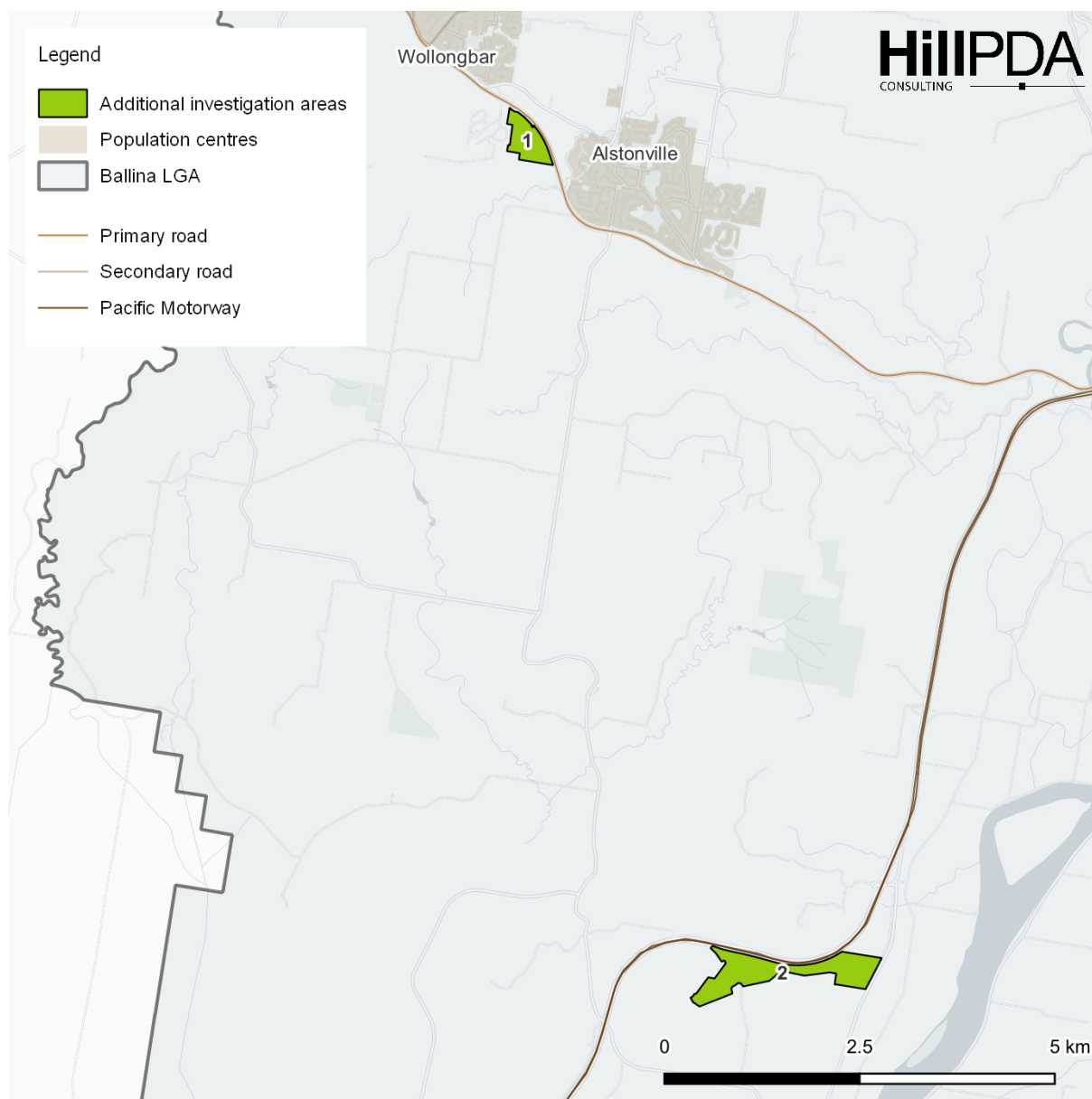
Figure 20: Investigation areas, Ballina



Imagery: CARTO

There are two additional investigation areas in Ballina LGA shown in **Error! Reference source not found..**

**Figure 21: Additional investigation areas, Ballina**



Imagery: CARTO

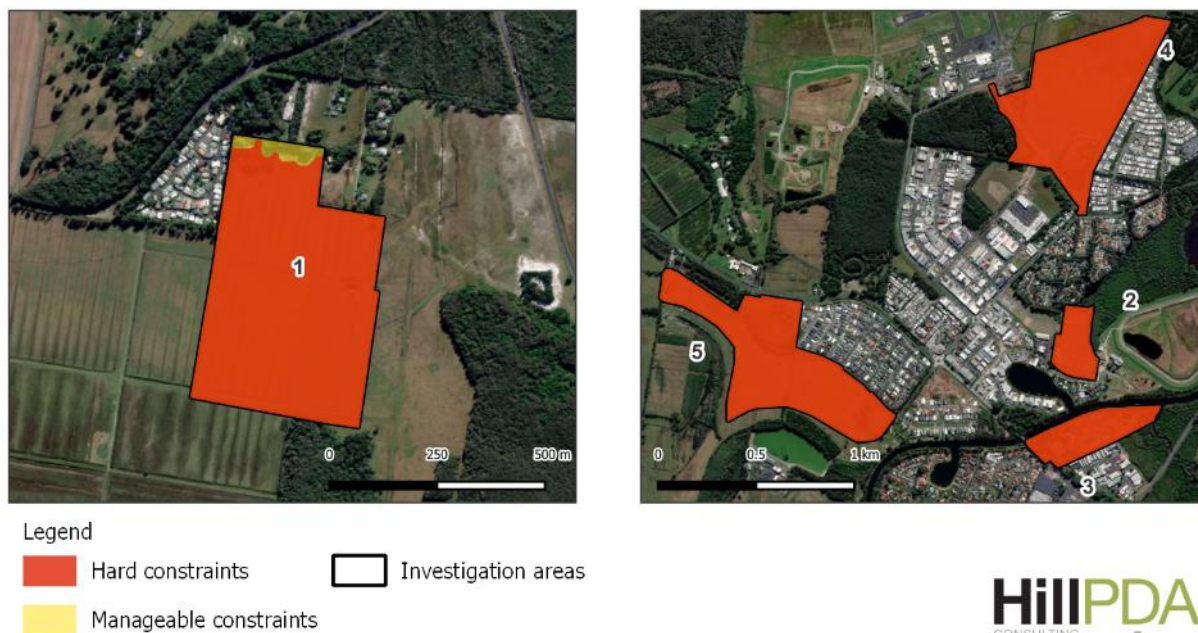
Figure 20 illustrates investigation areas within Ballina. The below table evaluates location suitability criteria for each investigation area.

**Table 46: Ballina investigation areas location suitability criteria**

Investigation area	Freight access	Workforce catchment	and service	Agglomeration
1	2	3		1
2	3	3		2
3	3	3		2
4	3	3		2
5	3	3		1
A1	2	3		2
A2	2	3		1

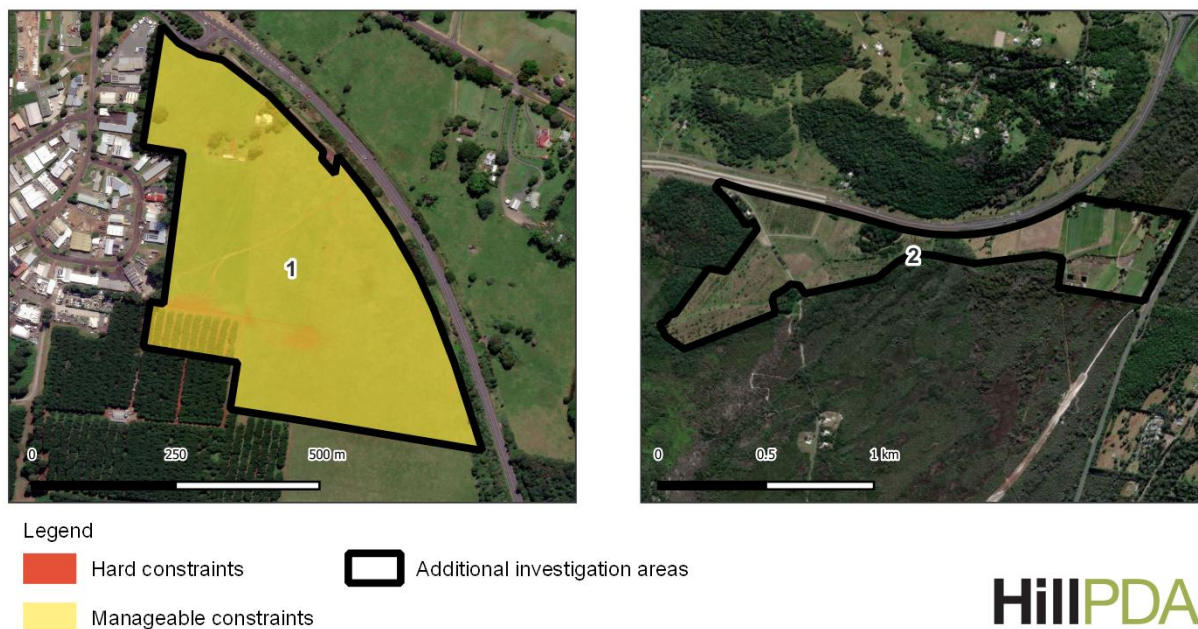
### 11.2.2.2 Constraints and barriers

Figure 22: Ballina investigation area constraints and barriers



Imagery: Bing Maps

Figure 23: Additional investigation area constraints, Ballina (A1 and A2)



Imagery: Bing Maps

Figure 22 and Figure 23 illustrates investigation area constraints and barriers within Ballina. The below table evaluates constraints and barriers for each investigation area.

Table 47: Ballina investigation area constraints and barriers

Investigation area	Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access
1	97	100	Y	N	Y
2	100	100	Y	Y	Y

Investigation area	Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access
3	100	100	Y	N	Y
4	100	100	Y	Y	Y
5	100	100	Y	Y	Y
A1	0	100	Y	N	Y
A2	0	0	Y	Y	Y

### 11.2.2.3 Summary

Table 48 summarises the investigation areas within Ballina in terms of short-; medium-; and long-term development priority, based on location suitability; constraints; and barriers.

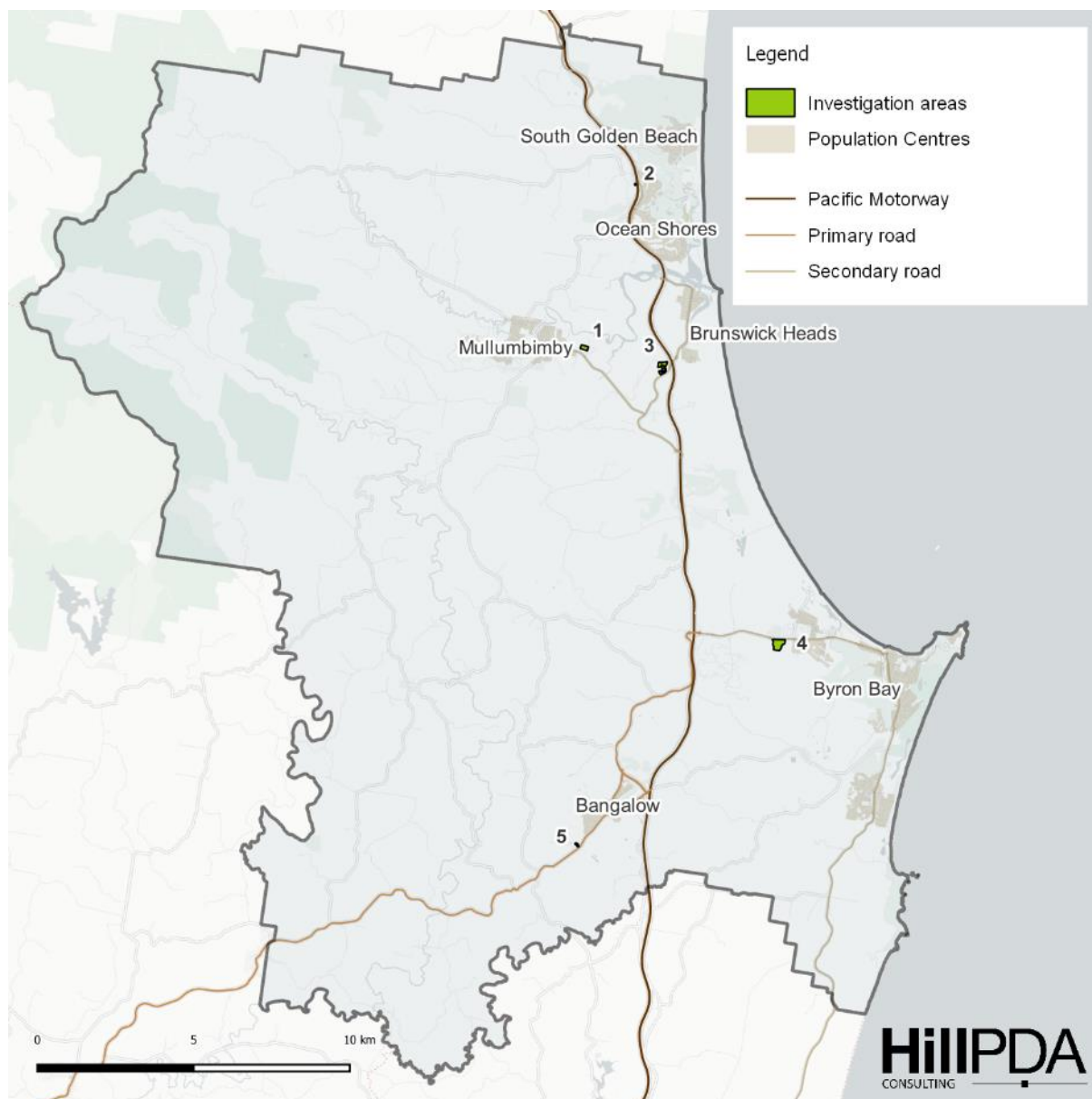
**Table 48: Summary of Ballina investigation area overall suitability**

Investigation area	Contribution to manageable and/or unconstrained supply (ha)	Development priority	Potential land zone	Comment
1	0.7	Long-term	E4	High demand. Less than 1 hectare of land without hard constraints. Lacks sewer servicing
2	0	Unlikely	E4	High demand. Site specific investigations warranted due to location suitability and access to services. Covered by hard constraints – flood prone
3	0	Unlikely	E4	High demand. Site specific investigations warranted due to location suitability and access to most services. Covered by hard constraints – flood prone
4	0	Unlikely	E3 or E4	High demand. Site specific investigations warranted due to location suitability and access to services. Covered by hard constraints – flood prone
5	0	Unlikely	E3 or E4	High demand. Site specific investigations warranted due to location suitability and access to services. Covered by hard constraints – flood prone
A1	23	Medium-term	E4	High demand. Manageable constraints. Relatively good access back to motorway. No sewer access, however connection likely nearby. Logical expansion of existing industrial area.
A2	68	Short-term	E4	High demand. Limited or no constraints. Possibility of strong connection to motorway. Water, sewer and road access available.

### 11.2.3 Byron

#### 11.2.3.1 Location suitability

Figure 24: Investigation areas, Byron



Imagery: CARTO

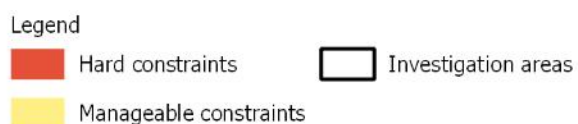
Figure 24 illustrates investigation areas within Byron. The below table evaluates location suitability criteria for each investigation area.

Table 49: Byron investigation areas location suitability criteria

Investigation area	Freight access	Workforce catchment	and service	Agglomeration
1	2	3		2
2	2	3		2
3	2	3		1
4	2	3		2
5	2	3		2

### 11.2.3.2 Constraints and barriers

Figure 25: Byron investigation area constraints and barriers



Imagery: Bing Maps

Figure 25 illustrates investigation area constraints and barriers within Byron. The below table evaluates constraints and barriers for each investigation area.

Table 50: Byron investigation area constraints and barriers

Investigation area	Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access
1	100	100	Y	Y	Y
2	100	100	Y	Y	Y
3	7	99	Y	N	Y
4	100	100	Y	N	Y
5	63	37	Y	N	Y

### 11.2.3.3 Summary

Table 51 summarises the investigation areas within Byron in terms of short-; medium-; and long-term development priority, based on location suitability; constraints; and barriers.

**Table 51: Summary of Byron investigation area overall suitability**

Investigation area	Contribution to manageable and/or unconstrained supply (ha)	Development priority	Potential land zone	Comment
1	0	Site specific investigation	E3 or E4	High demand. Limited by hard constraints – flood prone. Agglomeration potential. Could undertake detailed investigation. Would likely service Mullumbimby area rather than broader region.
2	0	Unlikely	E4	High demand. Limited by hard constraints – flood prone. Agglomeration potential. Limited yield.
3	6	Long-term	E4	High demand. Covered by manageable constraints; requires sewer servicing. Separated from land use conflicts, but relatively low agglomeration potential. Fragmented parcels.
4	0	Site specific investigation	E4	High demand. Limited by hard constraints. Good agglomeration potential. Reasonable access to highway. Detailed site investigation would be recommended. Planning proposal expected on the site.
5	0.2	Long-term	E4	High demand. Formerly part of larger investigation area. Reduced following planning proposal to rezone part of larger area (finalised 18 June 2023).

Byron Shire Council is currently pursuing a number of planning proposals to rezone further industrial land having undertaken detailed investigations on a number of the aforementioned sites. Considering the high demand in the region, there is merit in progressing with rezonings. These include:

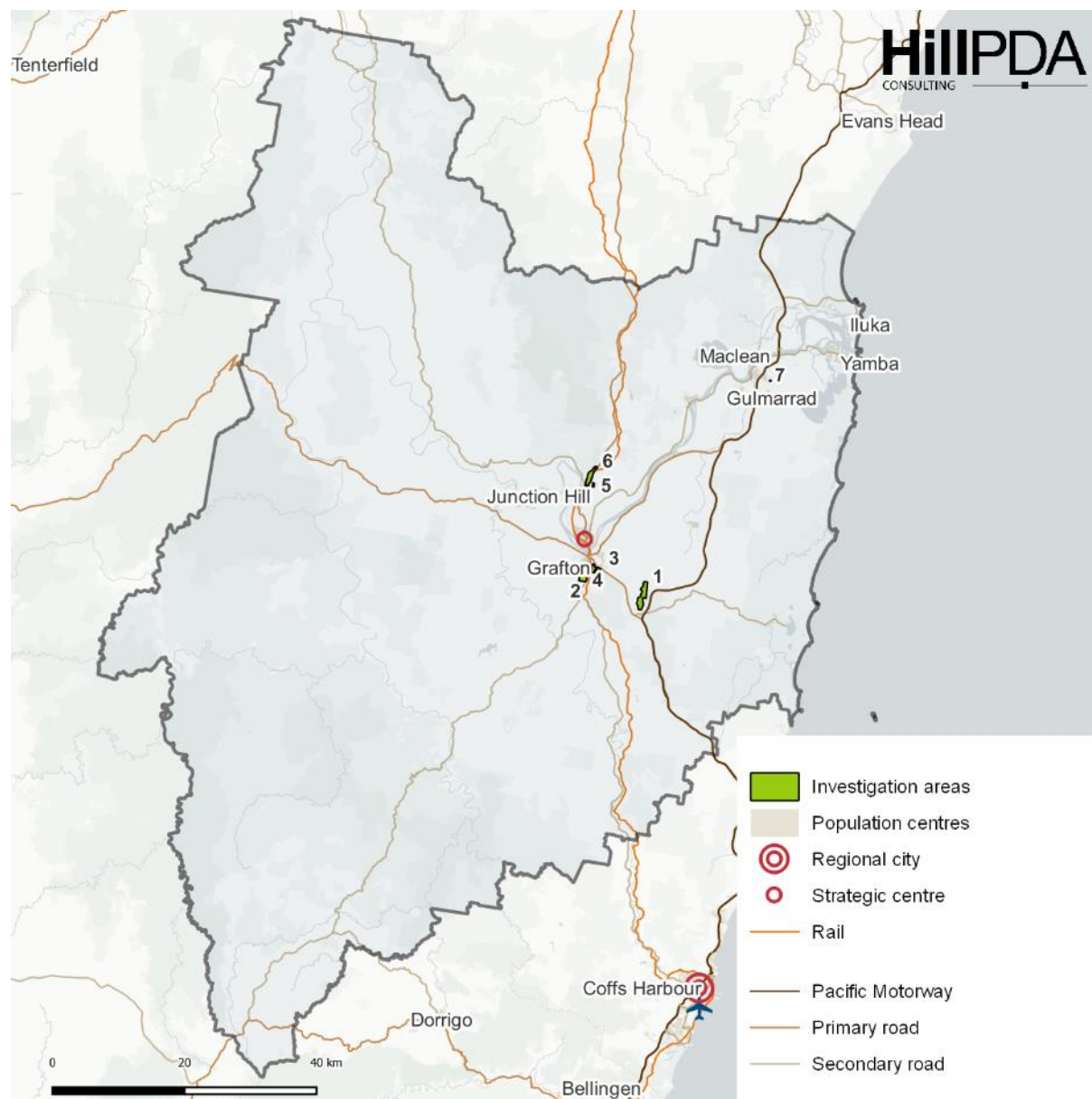
**Table 52: Byron Bay Industrial Land Planning Proposals**

Description	Status	Potential developable land	Preferred role
Mullumbimby Industrial Estate expansion Part of Lot 67 DP 1226493 (Area 1 above)	<ul style="list-style-type: none"> <li>Planning Proposal Submitted.</li> <li>Yet to be reported to Council for Gateway</li> <li>Further work required to finalise studies for assessment</li> </ul>	2.4ha	E4
Gulgan North industrial and business park Part of Lot 2 DP 1159910 66 The Saddle Road, Brunswick Heads (Area 3 above)	<ul style="list-style-type: none"> <li>Planning Proposal Submitted</li> <li>Yet to be reported to Council for Gateway</li> <li>Further work required to finalise studies for assessment</li> <li>Planning Proposal expected to be updated to propose work/live provisions for Area A</li> </ul>	6.5ha	Split use – small business park and traditional industrial estate
Byron Bay West industrial and business park Part Lot 181 in DP 755695 268 Ewingsdale Road (Area 4 above)	<p>Planning proposal expected 2023</p> <p>Landowner advised that studies are being finalised.</p>	7ha	E4

## 11.2.4 Clarence Valley

### 11.2.4.1 Location suitability

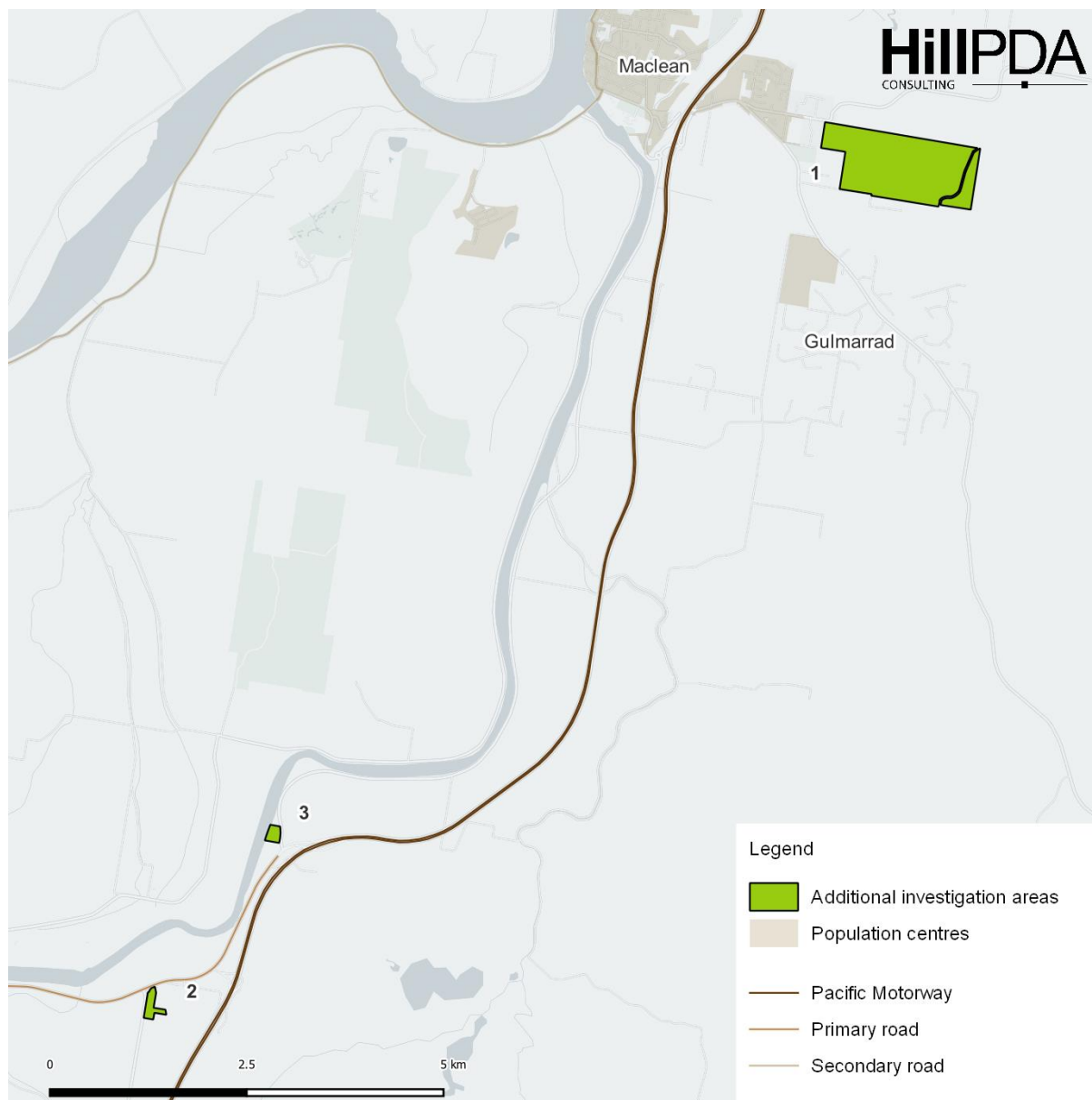
Figure 26: Investigation areas, Clarence Valley



Imagery: CARTO

There are three additional investigation areas in Clarence Valley LGA shown in **Error! Reference source not found.**

Figure 27: Additional investigation areas, Clarence Valley



Imagery: CARTO

Figure 26 and Figure 27 illustrate investigation areas within Clarence Valley. The below table evaluates location suitability criteria for each investigation area.

Table 53: Clarence Valley investigation areas location suitability criteria

Investigation area	Freight access	Workforce catchment	and service	Agglomeration
1	2	3		1
2	3	3		2
3	3	3		2
4	3	3		2
5	3	3		2
6	3	3		2
7	2	2		2
A1	2	2		2
A2	2	2		2
A3	2	2		1

#### 11.2.4.2 Constraints and barriers

Figure 28: Clarence Valley investigation area constraints and barriers



Imagery: Bing Maps

Figure 29: Additional investigation area constraints, Clarence Valley



Imagery: Bing Maps

Figure 28 illustrates constraints and barriers for each investigation area within Clarence Valley, detailed in the below table.

Table 54: Clarence Valley investigation area constraints and barriers

Investigation area	Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access
1	2	7	N	Y	Y
2	0	66	Y	Y	Y
3	4	92	N	N	Y
4	0	21	Y	Y	Y
5	0	0	Y	N	Y
6	0	0	Y	N	Y
7	0	97	Y	N	Y
A1	15	17	Y	Y	N
A2	15	15	Y	Y	N
A3	83	88	Y	N	N

#### 11.2.4.3 Summary

Table 55 summarises the investigation areas within Clarence Valley in terms of short-; medium-; and long-term development priority, based on location suitability; constraints; and barriers.

Table 55: Summary of Clarence Valley investigation area overall suitability

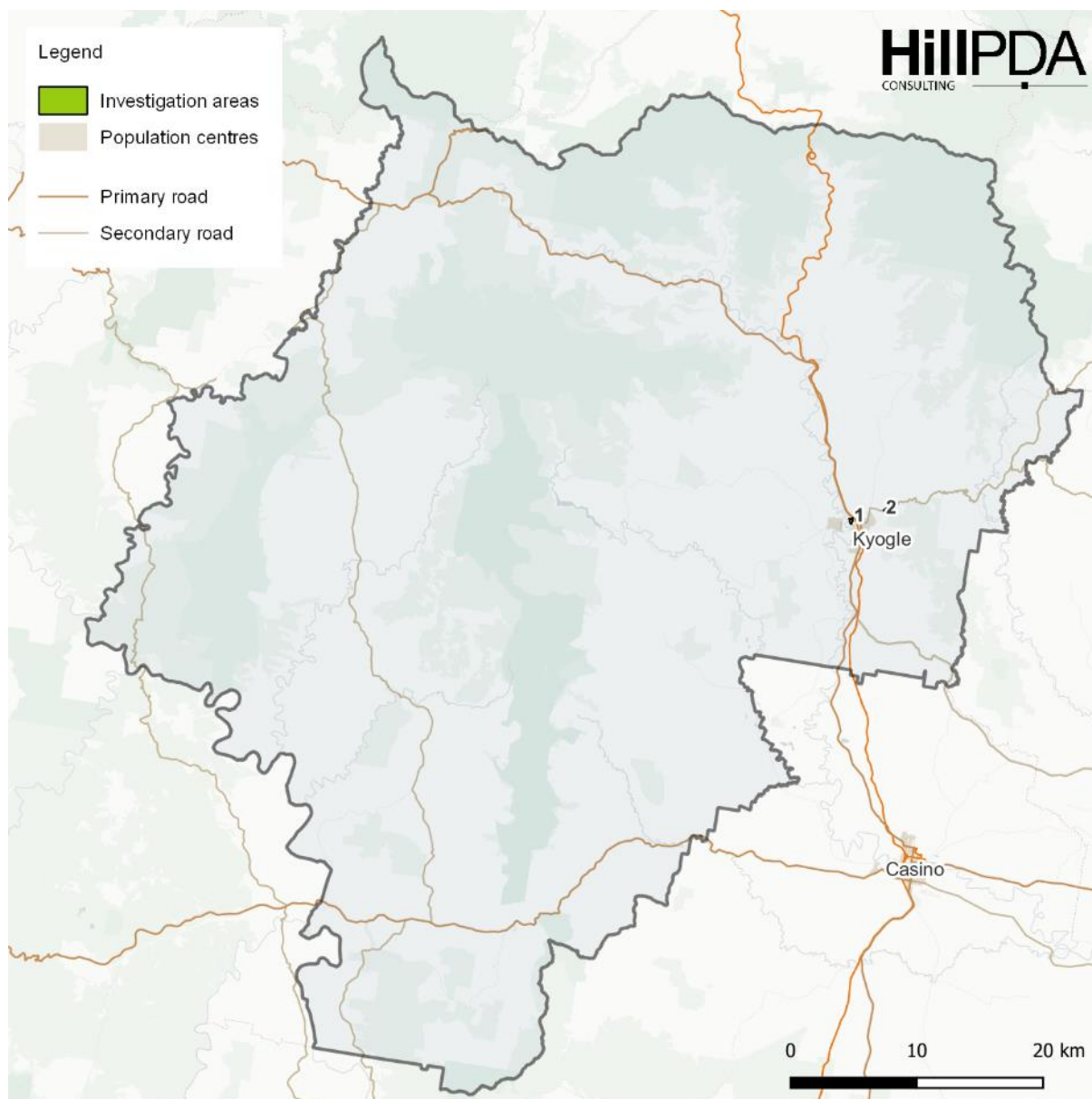
Investigation area	Contribution to manageable and/or unconstrained supply (ha)	Development priority	Potential land zone	Comment
1	331	Short-term	E4	Demand from neighbouring LGAs. Located near Pacific Motorway with some capacity to service wider region. Majority of area unconstrained but requires water servicing. Somewhat lower potential for agglomeration. Strong candidate to help alleviate regional demand pressures. Land ownership arrangements and interest should also be explored.

Investigation area	Contribution to manageable and/or unconstrained supply (ha)	Development priority	Potential land zone	Comment
2	121	Long-term	E4	More likely to service Grafton than wider region. No hard constraints, with the majority of area covered by manageable constraints. Already serviced, with strong freight and workforce/service catchment access and agglomeration potential
3	55	Medium-term	E4	Majority of area is manageably constrained. Requires sewer and water servicing. Strong freight and workforce/service catchment access and agglomeration potential. More likely to service Grafton than wider region. The site is owned by Council and could potentially be brought online more quickly.
4	66	Medium-term	E4	Serviced land, the majority of which is unconstrained. Strong freight and workforce/service catchment access and agglomeration potential. Requires structure plan. More likely to service Grafton than wider region.
5	15	Long-term	E4	No constraints but requires sewer servicing. Strong freight and workforce/service catchment access and agglomeration potential. More likely to service Grafton than wider region.
6	187	Long-term	E4	No constraints but requires sewer servicing. Strong freight and workforce/service catchment access and agglomeration potential. More likely to service Grafton than wider region.
7	3	Short-term	E4	Demand from neighbouring LGAs. Proximal distance to Pacific Highway. Almost all manageably constrained and requires sewer servicing. Strong freight and workforce/service catchment access and agglomeration potential
A1	122	Short-term	E4	Demand from neighbouring northern LGAs. Proximal distance to Pacific Highway. Strong freight and workforce/service catchment access and agglomeration potential. While not being flagged as having biodiversity value – there is significant vegetation on the site which may be a challenge to address. Strong candidate to help alleviate regional demand pressures. Land ownership arrangements and interest should also be explored.
A2	4	Short-term	E4	Access to water, sewer and proximal access to road. Strong connection to Pacific Highway. Demand from neighbouring northern LGAs. Logical expansion of existing E4 employment precinct.
A3	0.6	Unlikely	E4	Predominantly covered by hard constraints and unlikely suitable to progress.

## 11.2.5 Kyogle

### 11.2.5.1 Location suitability

Figure 30: Investigation areas, Kyogle



Imagery: CARTO

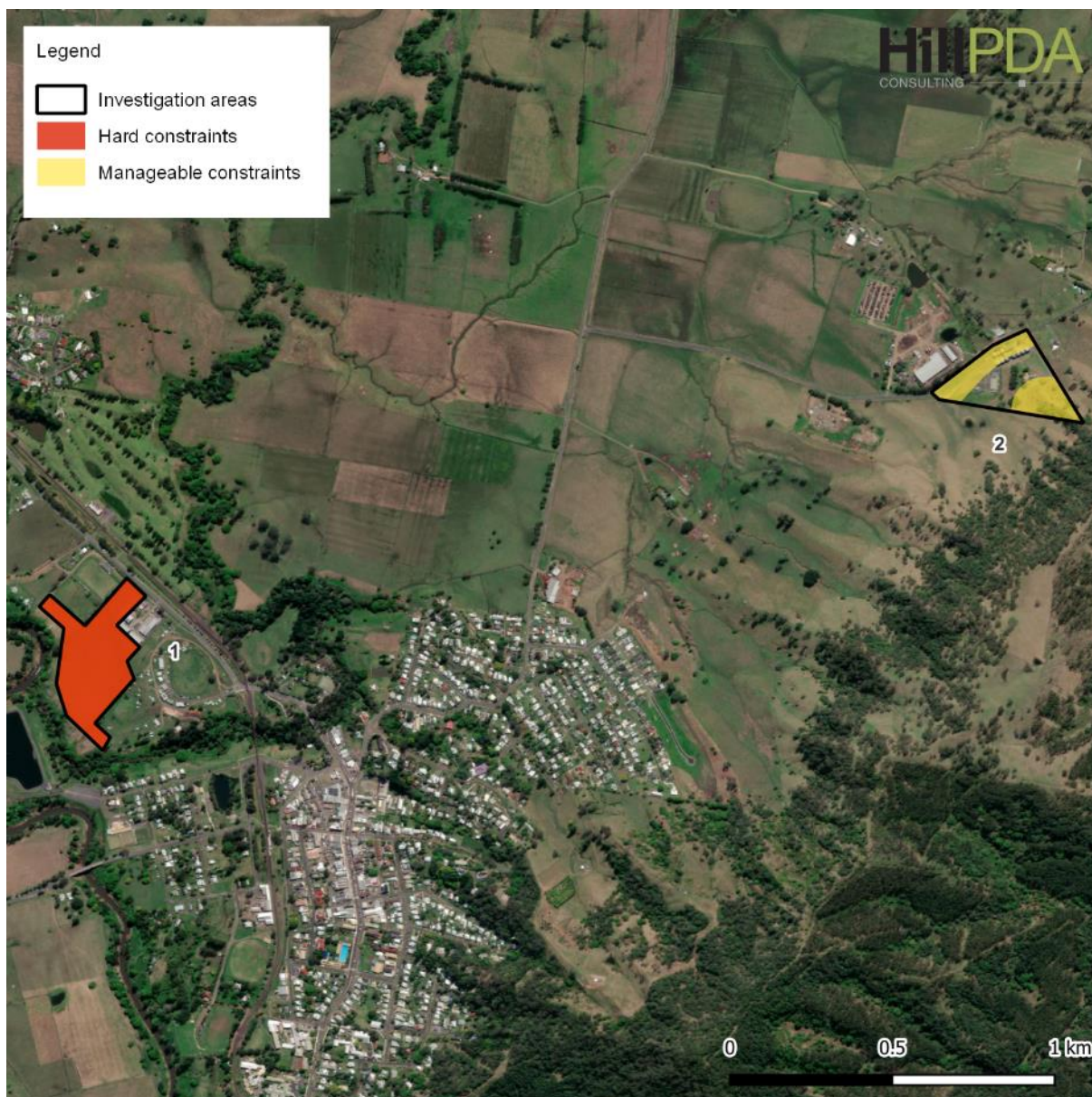
Figure 30 illustrates investigation areas within Kyogle. The below table evaluates location suitability criteria for each investigation area.

Table 56: Kyogle investigation areas location suitability criteria

Investigation area	Freight access	Workforce catchment	and service	Agglomeration
1	3	2		1
2	2	2		2

### 11.2.5.2 Constraints and barriers

Figure 31: Kyogle investigation area constraints and barrier



Imagery: Bing Maps

Figure 31 illustrates investigation area constraints and barriers within Kyogle. The below table evaluates constraints and barriers for each investigation area.

Table 57: Kyogle investigation area constraints and barriers

Investigation area	Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access
1	100	100	Y	Y	Y
2	0	60	N	N	Y

### 11.2.5.3 Summary

Table 58 summarises the investigation areas within Kyogle in terms of short-; medium-; and long-term development priority, based on location suitability; constraints; and barriers.

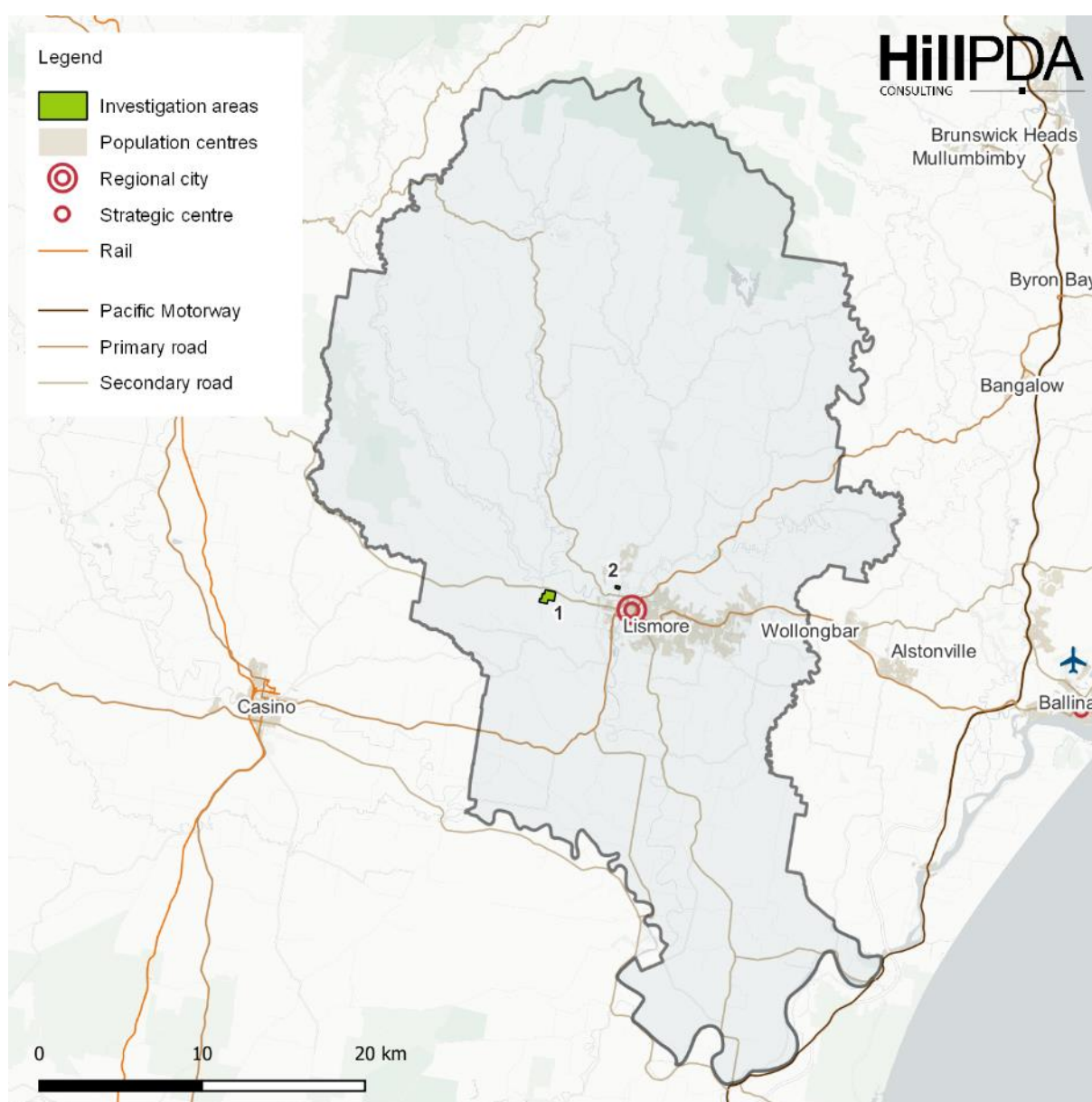
Table 58: Summary of Kyogle investigation area overall suitability

Investigation area	Contribution to manageable and/or unconstrained supply (ha)	Development priority	Potential land zone	Comment
1	0	Unlikely	E4	Covered by hard constraints – flood prone
2	7	Long-term	E4	Majority of area covered by manageable constraints. Requires water and sewer servicing.

## 11.2.6 Lismore

### 11.2.6.1 Location suitability

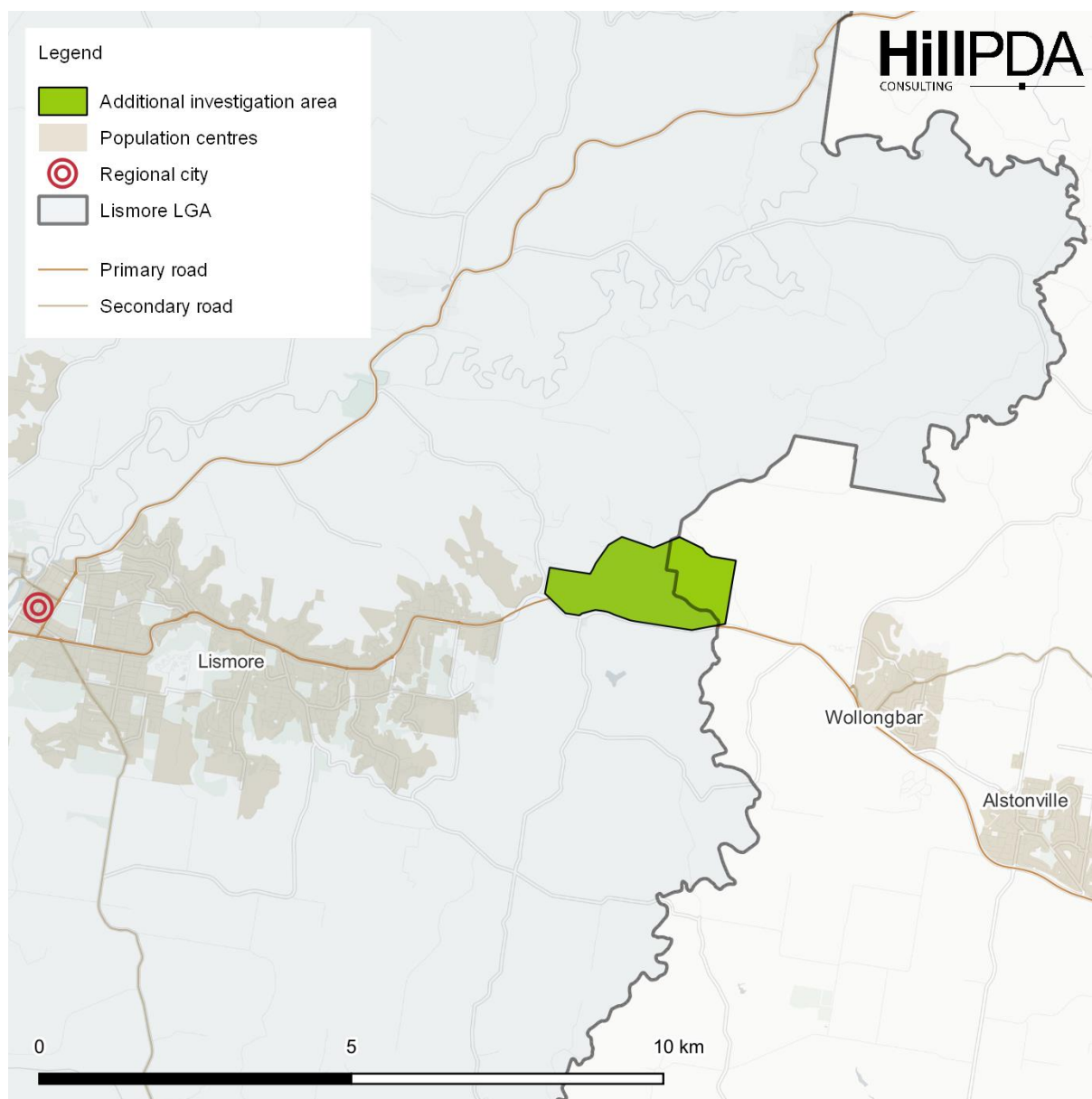
Figure 32: Investigation areas, Lismore



Imagery: CARTO

There is one additional investigation area in Lismore LGA shown in **Error! Reference source not found..**

**Figure 33: Additional investigation area, Lismore**



Imagery: CARTO

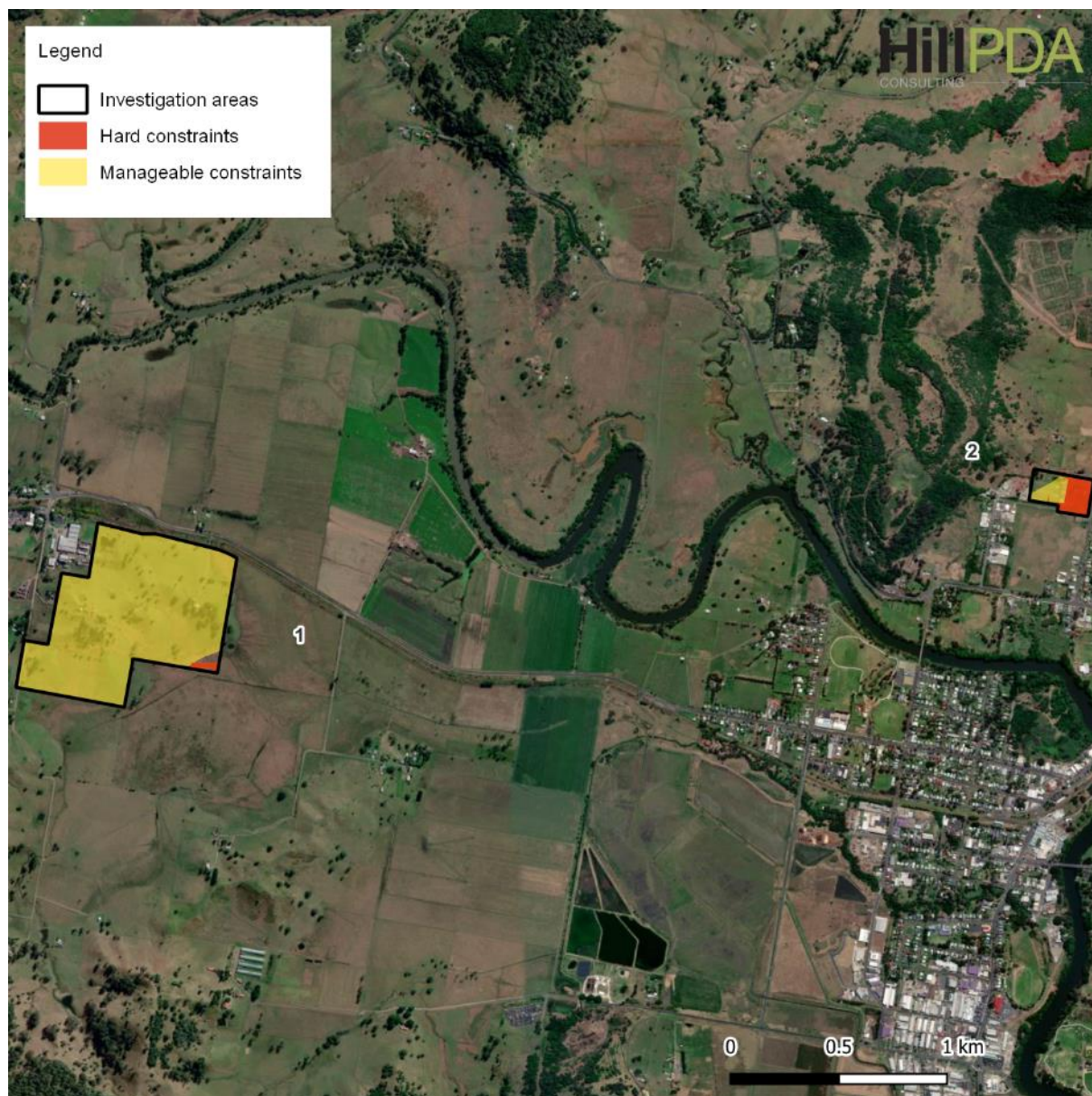
Figure 32 and Figure 33 illustrate investigation areas within Lismore. The below table evaluates location suitability criteria for each investigation area.

**Table 59: Lismore investigation areas location suitability criteria**

Investigation area	Freight access	Workforce catchment and service	Agglomeration
1	2	3	2
2	2	3	2
A1	2	3	1

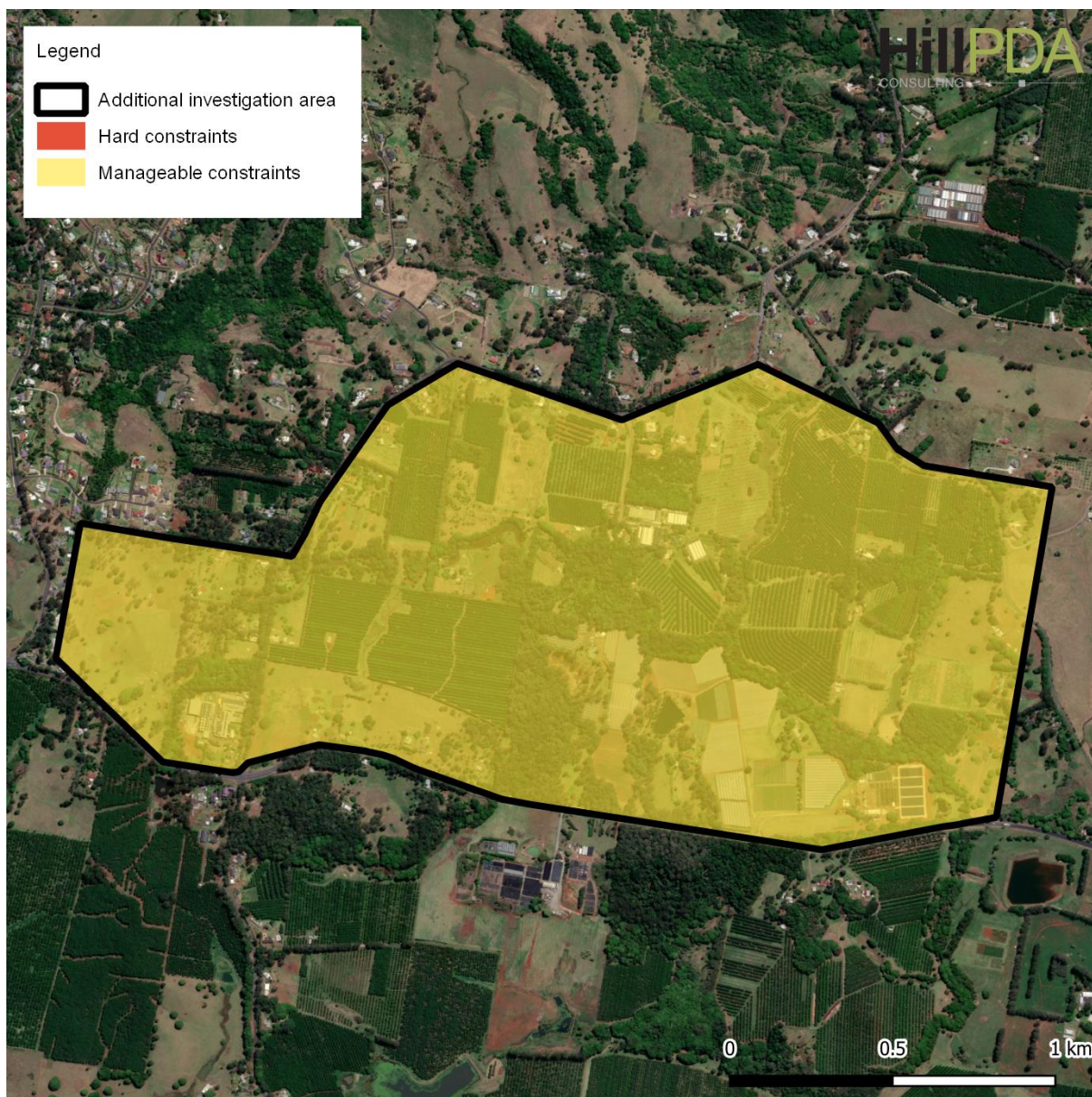
### 11.2.6.2 Constraints and barriers

Figure 34: Lismore investigation area constraints and barriers



Imagery: Bing Maps

Figure 35: Additional investigation area constraints, Lismore



Imagery: Bing Maps

Figure 34 and Figure 35 illustrate investigation area constraints and barriers within Lismore. The below table evaluates constraints and barriers for each investigation area.

Table 60: Lismore investigation area constraints and barriers

Investigation area	Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access
1	1	99	Y	N	Y
2	51	82	Y	Y	Y
A1	0	100	Y	Y	Y

### 11.2.6.3 Summary

Table 61 summarises the investigation areas within Lismore in terms of short-, medium-, and long-term development priority, based on location suitability; constraints; and barriers.

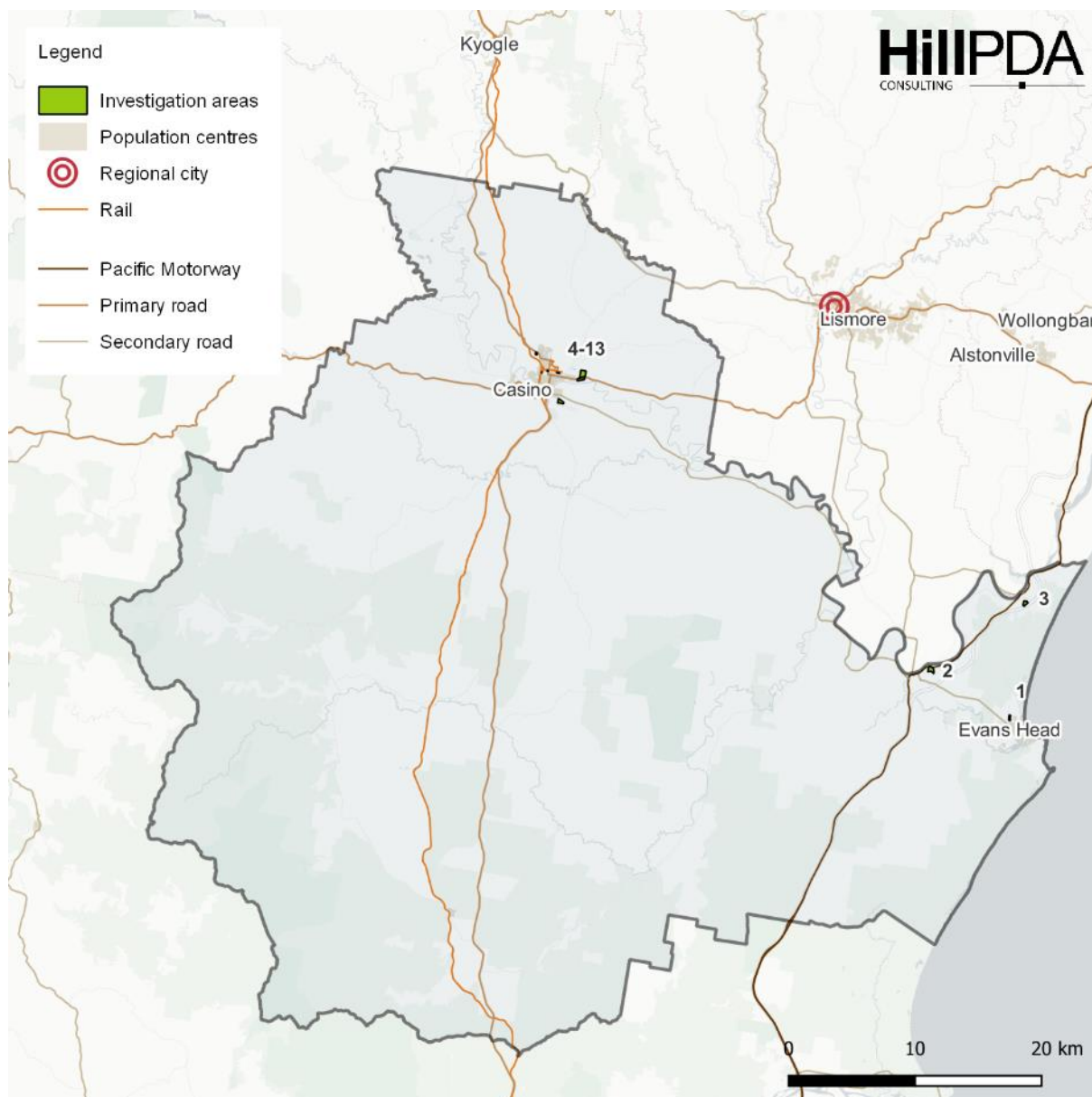
**Table 61: Summary of Lismore investigation area overall suitability**

Investigation area	Contribution to manageable and/or supply (ha)	Development priority	Potential land zone	Comment
1	53	Long-term	E4	Almost all covered by manageable constraints and requires sewer servicing. Strong agglomeration and workforce/service catchment potential. Less suitable to meet demand for Ballina/Byron service catchment due to location west of town.
2	2	Medium-term	E4	Roughly half covered by hard constraints (flood prone). However, most of the remainder adequately serviced, although covered by manageable constraints. Strong agglomeration and workforce/service catchment potential.
A1	313	Short-term	E4	Almost all covered by manageable constraints. Has road, water and sewer access. Located on the primary road connection with Ballina so could alleviate demand pressure from surrounding LGAs. Currently zoned for primary production so would need to work collaboratively with Department of Primary Industry to determine strategic agricultural importance. Opportunity for large lot sizes and capacity to support manufacturing and processing for surrounding agriculture uses. Strong candidate to help alleviate regional demand pressures. Land ownership arrangements and interest should also be explored.

## 11.2.7 Richmond Valley

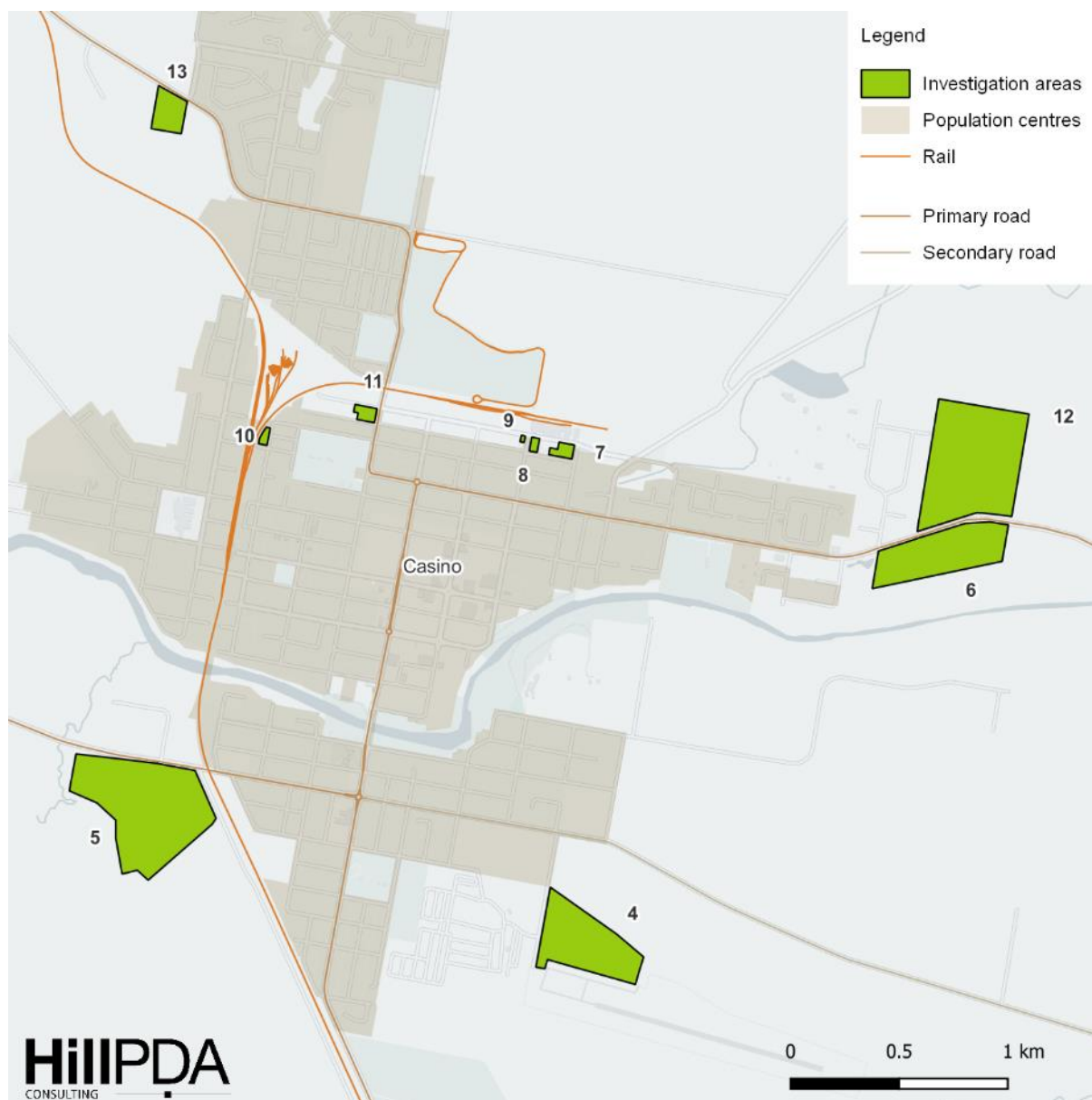
### 11.2.7.1 Location suitability

Figure 36: Investigation areas, Richmond Valley



Imagery: CARTO

Figure 37: Investigation areas 4-13, Richmond Valley



Imagery: CARTO

Figure 36 and Figure 37 illustrate investigation areas within Richmond Valley. As the figures show, the majority of investigation areas are located in a cluster near Casino. The below table evaluates location suitability criteria for each investigation area.

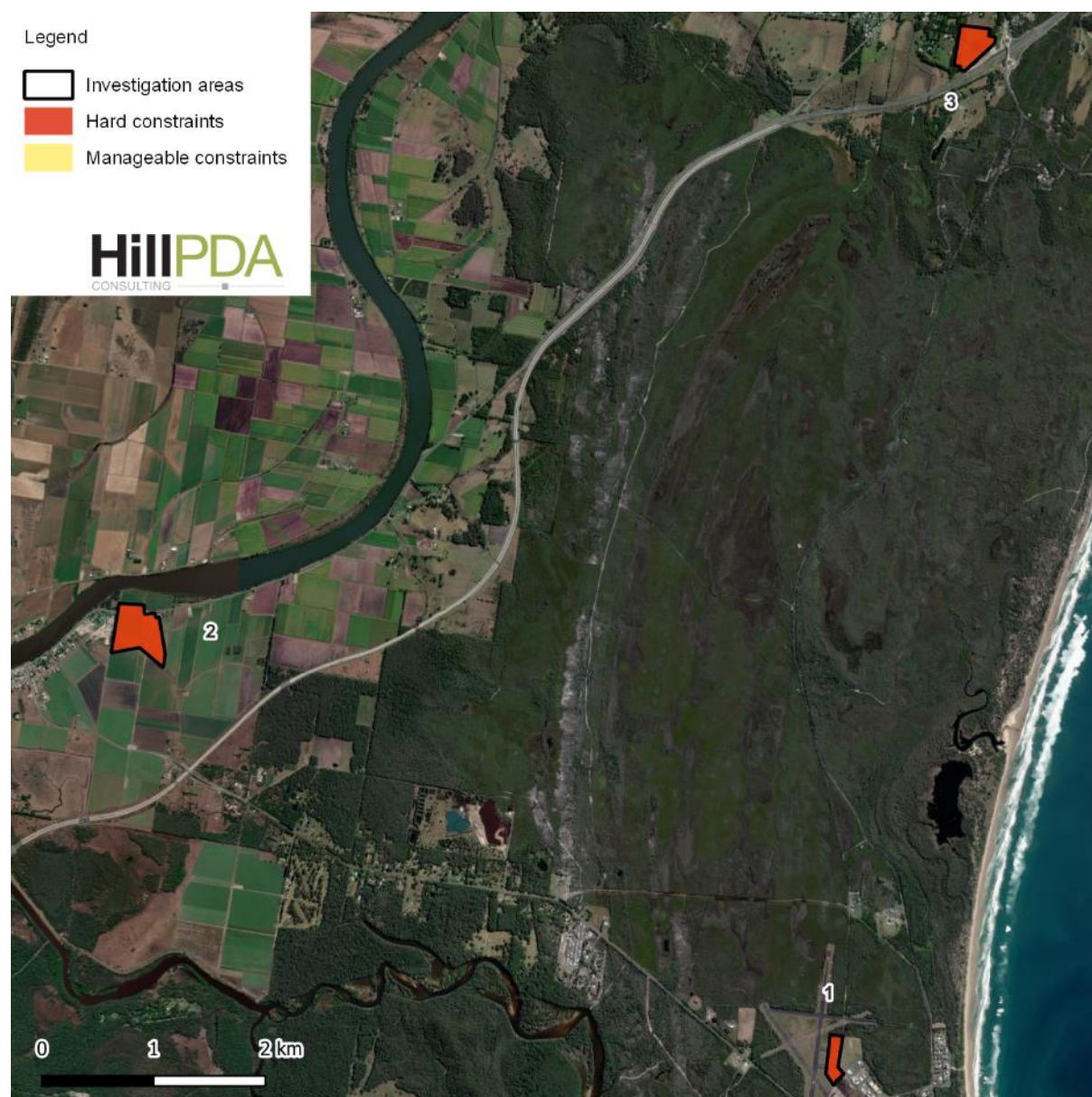
Table 62: Richmond Valley investigation areas location suitability criteria

Investigation area	Freight access	Workforce catchment	and service	Agglomeration
1	2	3		2
2	2	3		2
3	2	3		1
4	3	3		1
5	3	3		2
6	3	3		2
7	3	3		2
8	3	3		2
9	3	3		2

Investigation area	Freight access	Workforce catchment and service	Agglomeration
10	3	3	2
11	3	3	2
12	3	3	2
13	3	3	2

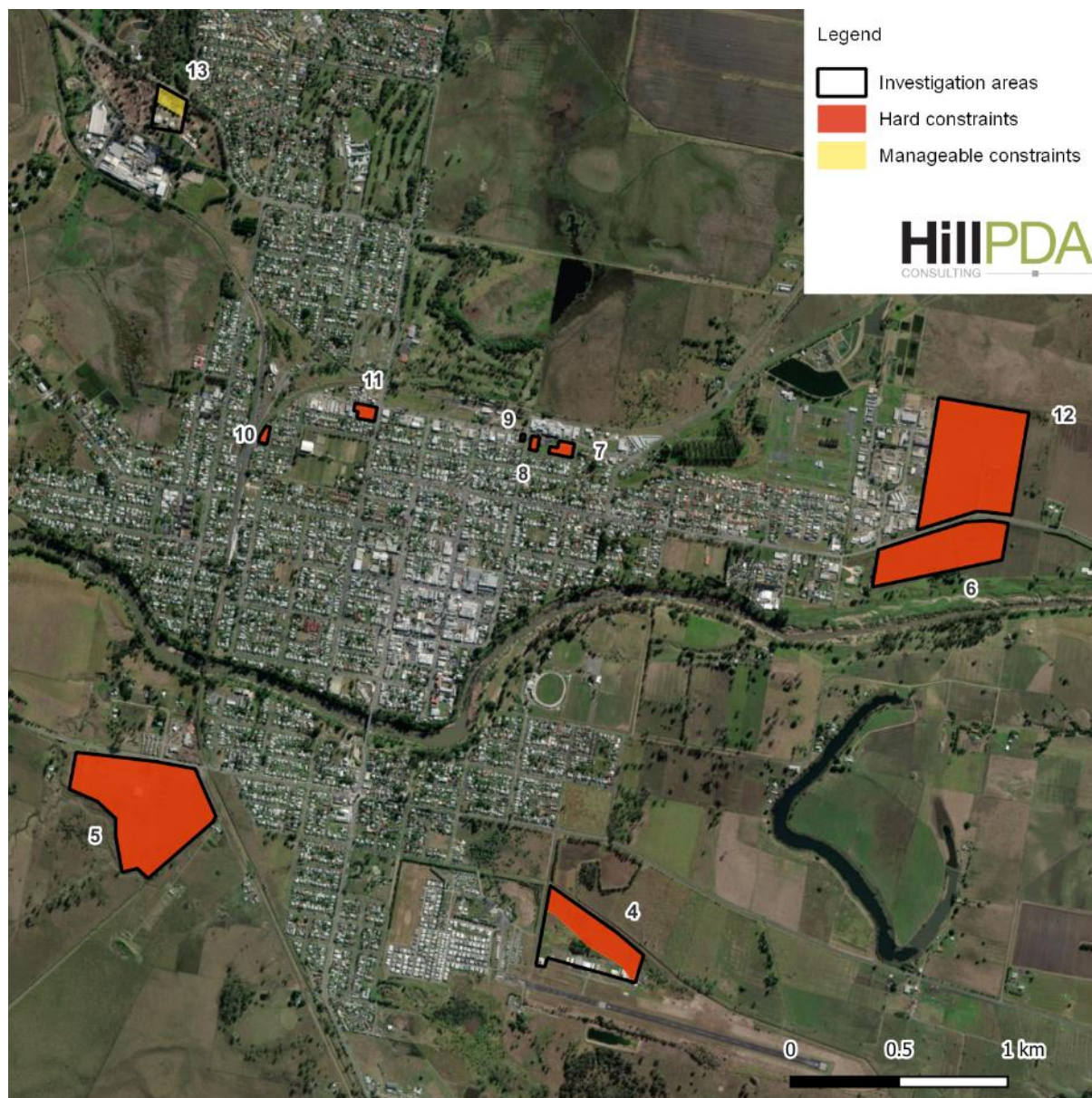
### 11.2.7.2 Constraints and barriers

Figure 38: Constraints and barriers, Richmond Valley investigation areas 1-3



Imagery: Bing Maps

Figure 39: Constraints and barriers, Richmond Valley investigation areas 4-13



Imagery: Bing Maps

Figure 38 and Figure 39 illustrate investigation area constraints and barriers within Richmond Valley. The below table evaluates constraints and barriers for each investigation area.

Table 63: Richmond Valley investigation area constraints and barriers

Investigation area	Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access
1	100	25	Y	Y	Y
2	100	100	Y	N	Y
3	100	100	N	Y	Y
4	53	54	Y	Y	Y
5	100	100	Y	Y	Y
6	100	100	Y	N	Y
7	100	100	Y	Y	Y
8	100	100	Y	Y	Y
9	100	100	N	Y	Y
10	100	100	Y	Y	Y

Investigation area	Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access
11	100	100	Y	Y	Y
12	100	100	Y	Y	Y
13	0	45	Y	Y	Y

### 11.2.7.3 Summary

Table 64 summarises the investigation areas within Richmond Valley in terms of short-; medium-; and long-term development priority, based on location suitability; constraints; and barriers.

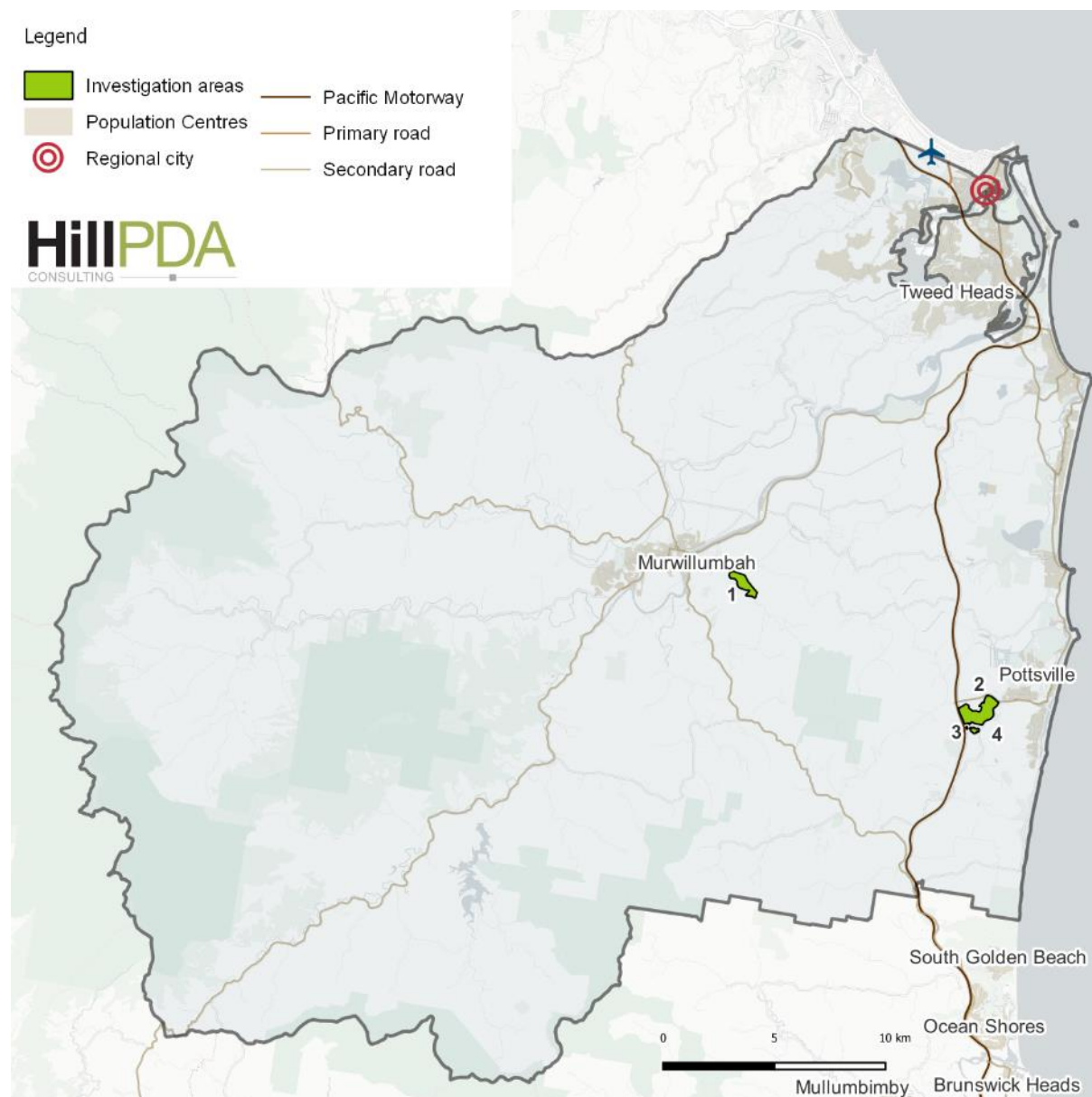
**Table 64: Summary of Richmond Valley investigation area overall suitability**

Investigation area	Contribution to manageable and/or unconstrained supply (ha)	Development priority	Potential land zone	Comment
1	0	Unlikely	E3	Covered by hard constraints – heritage
2	0	Unlikely	E4	Covered by hard constraints – flood prone
3	0	Unlikely	E4	Covered by hard constraints – flood prone
4	5	Short-term	E4	Majority of site covered by hard constraints (flood prone). However, remaining land unconstrained and serviced, with good freight and workforce/service access and agglomeration potential
5	0	Unlikely	E4	Covered by hard constraints – flood prone
6	0	Unlikely	E4	Covered by hard constraints – flood prone
7	0	Unlikely	E3	Covered by hard constraints – flood prone
8	0	Unlikely	E3	Covered by hard constraints – flood prone
9	0	Unlikely	E3	Covered by hard constraints – flood prone
10	0	Unlikely	E3	Covered by hard constraints – flood prone
11	0	Unlikely	E3	Covered by hard constraints – flood prone
12	0	Unlikely	E4	Covered by hard constraints – flood prone
13	2	Short-term	E3	Majority of site unconstrained and serviced, with good freight and workforce/service catchment access and agglomeration potential

## 11.2.8 Tweed

### 11.2.8.1 Location suitability

Figure 40: Investigation areas, Tweed



Imagery: CARTO

Figure 40 illustrates investigation areas within Tweed. The below table evaluates location suitability criteria for each investigation area.

Table 65: Tweed investigation areas location suitability criteria

Investigation area	Freight access	Workforce catchment	and service	Agglomeration
1	1	3		2
2	2	3		2
3	2	3		2
4	2	3		2

### 11.2.8.2 Constraints and barriers

Figure 41: Tweed investigation area constraints and barriers



Figure 41 illustrates investigation area constraints and barriers within Tweed. The below table evaluates constraints and barriers for each investigation area.

Table 66: Tweed investigation area constraints and barriers

Investigation area	Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access
1	32	67	Y	N	Y
2	23	37	Y	N	Y
3	0	14	N	N	N
4	0	94	Y	N	Y

### 11.2.8.3 Summary

Table 67 summarises the investigation areas within Tweed in terms of short-, medium-, and long-term development priority, based on location suitability; constraints; and barriers.

Table 67: Summary of Tweed investigation area overall suitability

Investigation area	Contribution manageable and/or unconstrained supply (ha)	Development priority	Potential land zone	Comment
1	39	Medium-term	E4	High demand. Some covered by hard constraints (flood prone). Remainder of site either manageable or no constraints. Requires sewer servicing.
2	95	Short-term	E4	High demand. Proximal access to motorway. Some covered by hard constraints (flood prone). Remainder of site either manageable or no constraints. Requires sewer servicing.
3	0.6	Medium-term	E4	High demand. No hard constraints, but relatively small area that requires water, sewer, and road servicing.
4	7	Medium-term	E4	High demand. Proximal access to motorway. Almost all covered by manageable constraints, and requires sewer servicing.

### 11.3 Options to meet demand

To assist in alleviating some of the pressure on employment land across the Northern Rivers, the following options have been identified for consideration (refer Table 68).

Table 68: Options to meet demand

Intervention	Option	Priority	Timing	Responsibility	Potential barrier
<b>Building height alterations</b>	Councils, particularly Ballina, Byron and Tweed should consider reviewing or removing building height parameters, particularly for E4 General Industrial land, to maximise the flexibility of typology and use that can operate on the site.	Moderate	Medium	Councils	Scenic amenity and protection of view corridors
<b>Minimum lot size alterations</b>	Councils with existing or future employment land along the Pacific Motorway to consider introducing a minimum lot size provision to protect land for larger floor plate uses such transport and distribution, manufacturing and warehousing that are more dependent on efficient road access.	Moderate	Short	Councils	
<b>Regional planning</b>	Where land in some LGAs is constrained, explore opportunity to bring online employment land in neighbouring LGAs to alleviate pressure. The northern extents on Clarence Valley LGA and eastern extents of Lismore LGA are the most appropriately located to support the higher demand in Tweed, Byron and Ballina.	High	Short	DPE and Councils	Community and political support Infrastructure funding deficits
<b>Land rezoning</b>	On vacant land that is heavily constrained by hard constraints, consider rezoning to an alternate zone such as conservation or rural zones to portray a more realistic supply pipeline.	High	Short	DPE, NRRC and Councils	Landowner opposition
<b>Infrastructure servicing and delivery plans</b>	Prepare LGA wide infrastructure servicing and delivery plans that investigate enabling infrastructure priorities in response to employment and residential demand and provide clarity around the timing for delivery and any cost deficits. Share information with state departments.	Moderate	Medium	Councils	Funding and resourcing shortfall
<b>Employment land monitor</b>	Maintain an employment land monitor that identifies vacant and underutilised employment land. The monitor could incorporate the assessment of sites against the land suitability criteria, the size of the sites and the infrastructure and service requirements. It should also list constraints that could be a barrier to development.	High	Short	Councils	Funding and resourcing shortfall
<b>Critical infrastructure barriers</b>	DPE to work with local councils across the region to understand the critical infrastructure capacity barriers and determine potential the funding priorities aligned with residential and employment land use growth needs.	Moderate	Short	DPE and Councils	

Intervention	Option	Priority	Timing	Responsibility	Potential barrier
<b>Increase land supply</b>	Work with State Government to investigate future employment land opportunities in line with the short term priorities identified in Table 69. Not all employment land investigation areas will be needed across the Northern Rivers to meet future demand. The rezoning of future land should consider the benefits to the broader region and demand. The highest priorities for rezoning would be in the LGAs of Tweed and Ballina where there is an identified deficit. The rezoning of land in Lismore would be to create capacity for businesses to relocate out of flood affected areas. There is opportunity for the land that is in flood affected areas to be rezoned to alternate uses so not to falsely inflate supply. When investigating future land supply options, consultation with landowners should be undertaken to determine interest in selling or redeveloping land for employment purposes. Alternatively, where council's own suitable employment land, this could be prioritised.	High	Short	DPE and relevant councils	Funding and resourcing shortfall
<b>Site specific analysis of vacant land supply</b>	Undertake more detailed site-specific analysis of vacant, zoned land supply to determine interventions to bring parcels to the market and address barriers.	Moderate	Medium	Tweed, Byron and Ballina Councils	Funding and resourcing shortfalls
<b>Biodiversity</b>	Advocate to State Government for greater leniency around biodiversity constraints in zoned urban areas to reduce the cost to councils and proponents to undertake detailed biodiversity investigations on a site by site basis.	Low	Short	Councils and DPE	

**Table 69: Short term land investigation opportunities**

LGA	Investigation area #	Land zone suitability	Hard constraints (%)	Manageable constraints (%)	Water access	Sewer access	Road access	Potential contribution to supply (ha)	Comment
Ballina	A2	E4	0	0	Y	Y	Y	68	High demand. Limited or no constraints. Possibility of strong connection to motorway. Water, sewer and road access available.
Clarence Valley	1	E4	2	7	N	Y	Y	331	Demand from neighbouring LGAs. Located near Pacific Motorway with some capacity to service wider region. Majority of area unconstrained, but requires water servicing. Somewhat lower potential for agglomeration. Vegetation and slope constraints. Private land ownership.
Clarence Valley	7	E4	0	97	Y	N	Y	3	Demand from neighbouring LGAs. Proximal distance to Pacific Highway. Almost all manageably constrained and requires sewer servicing. Strong freight and workforce/service catchment access and agglomeration potential
Clarence Valley	A1	E4	15	17	Y	Y	N	122	Demand from neighbouring northern LGAs. Proximal distance to Pacific Highway. Strong freight and workforce/service catchment access and agglomeration potential. While not being flagged as having biodiversity value – there is significant vegetation on the site which may be a challenge to address. Strong candidate to help alleviate regional demand pressures. Land ownership arrangements and interest should also be explored.
Clarence Valley	A2	E4	15	15	Y	Y	N	4	Access to water, sewer and proximal access to road. Strong connection to Pacific Highway. Demand from neighbouring northern LGAs. Logical expansion of existing E4 employment precinct.
Lismore	A1	E4	0	100	Y	Y	Y	313	Almost all covered by manageable constraints. Has road, water and sewer access. Located on the primary road connection with Ballina so could alleviate demand pressure from surrounding LGAs. Currently zoned for primary production so would need to work collaboratively with Department of Primary Industry to determine strategic agricultural importance. Opportunity for large lot sizes and capacity to support manufacturing and processing for surrounding agriculture uses. Strong candidate to help alleviate regional demand pressures. Land ownership arrangements and interest should also be explored.
Richmond Valley	4	E4	53	54	Y	Y	Y	5	Majority of site covered by hard constraints (flood prone). However, remaining land unconstrained and serviced, with good freight and workforce/service access and agglomeration potential
Richmond Valley	13	E3	0	45	Y	Y	Y	2	Majority of site unconstrained and serviced, with good freight and workforce/service catchment access and agglomeration potential
Tweed	2	E4	23	37	Y	N	Y	95	High demand. Proximal access to motorway. Some covered by hard constraints (flood prone). Remainder of site either manageable or no constraints. Requires sewer servicing.

# APPENDICES

# APPENDIX A : POLICY AND PLANNING DOCUMENT REVIEW

Key strategies/actions	Relevant components / so what's
<p><b>North Coast Regional Plan 2041</b></p> <ul style="list-style-type: none"> <li>Strategy 5.3 Use local strategic planning and local plans to adapt to climate change and reduce exposure to natural hazards by: <ul style="list-style-type: none"> <li>identifying industries and locations that would be negatively impacted by climate change and natural hazards and preparing strategies to mitigate negative impacts and identify new paths for growth.</li> </ul> </li> <li>Strategy 6.1 Support the development of circular economy, hubs, infrastructure and activities and consider employment opportunities that may arise from circular economies and industries that harness or develop renewable energy technologies and will aspire towards an employment profile that displays a level of economic self-reliance, and resilience to external forces.</li> <li>Strategy 6.2 Use strategic planning and waste management strategies to support a circular economy, including dealing with waste from natural disasters and opportunities for new industry specialisations</li> <li>Strategy 9.1 Strategic planning and local plans should consider: <ul style="list-style-type: none"> <li>ensuring sustainable development of higher-water use industries by considering water availability and constraints, supporting more efficient water use and reuse, and locating development where water can be accessed without significantly impacting on other water users or the environment.</li> </ul> </li> <li>Strategy 11.2 Utilise strategic planning and land use plans to maintain and enhance the function of established commercial centres by: <ul style="list-style-type: none"> <li>facilitating a broad range of uses within centres in response to the changing retail environment.</li> </ul> </li> <li>Strategy 11.3 Support existing and new economic activities by ensuring council strategic planning and local plans: <ul style="list-style-type: none"> <li>retain, manage and safeguard significant employment lands</li> <li>identify local and subregional specialisations</li> <li>identify future employment lands and align infrastructure to support these lands</li> <li>provide flexibility in local planning controls</li> <li>respond to future changes in industry to allow a transition to new opportunities</li> <li>provide flexibility and facilitate a broad range of commercial, business and retail uses within centres</li> <li>focus future commercial and retail activity in existing commercial centres, unless there is no other suitable site within existing centres, there is a demonstrated need, or there is positive social and economic benefit to locate activity elsewhere.</li> </ul> </li> <li>Strategy 11.4 New employment areas are in accordance with an employment land strategy endorsed by the Department of Planning and Environment</li> <li>Collaboration Activity 3 Support the development of the Richmond Valley Regional Job Precinct to create a hub focused on high-value agriculture, food processing, manufacturing, distribution, and renewable energy</li> <li>Local Government Narratives: Ballina Shire <ul style="list-style-type: none"> <li>Maximise the opportunities associated with the Southern Cross Industrial Precinct to deliver additional jobs</li> <li>Support employment lands and jobs at Ballina, Lennox Head and Wollongbar</li> <li>Support economic growth associated with the Ballina-Byron Gateway Airport</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The vulnerability of certain locations and industries to climate change and natural hazards is likely to influence the location of new industrial lands.</li> <li>In light of the possibilities of circular economies, the Regional Plan calls for hubs to be supported, which would entail some concentration of employment lands.</li> <li>Strategic planning is seen as a method for unlocking the opportunities of a circular economy.</li> <li>Commercial land uses are to be targeted towards being within existing urban centres, rather than in new areas.</li> <li>The Regional Plan establishes a variety of considerations for planning at the local government level with regard to employment land. These include the support of new and existing employment lands, the identification of specialisations, the alignment of infrastructure, and flexibility and responsiveness to change. These requirements ensure that employment land is considered and supported at a smaller-scale level within the broader region</li> <li>With the Regional Plan specifying the role of employment land strategies in guiding new employment areas, considerations for employment lands can also be made at a sub-regional level, such as what is carried out in this report</li> <li>The Richmond Valley Regional Job Precinct is highlighted for its potential to generate employment in a variety of sectors, within a cluster focused around Casino</li> <li>The Local Government Narratives for Ballina Shire include a detailed set of location considerations for employment lands within the LGA, while calling for collaboration across the Northern Rivers subregion</li> <li>The Local Government Narratives for Byron mention circular economy possibilities, while calling for some employment land to be delivered,</li> </ul>

Key strategies/actions	Relevant components / so what's
<ul style="list-style-type: none"> <li>– Support a regional framework for employment land delivery by fostering stronger connections and collaboration at the Northern Rivers subregional level</li> <li>• Local Government Narratives: Byron <ul style="list-style-type: none"> <li>– Support the shire's net zero target including zero waste to landfill through a circular economy</li> <li>– Maximise opportunities associated with the growth of South East Queensland</li> <li>– Deliver additional employment land at West Byron and other investigation sites in the Shire.</li> </ul> </li> <li>• Local Government Narratives: Clarence Valley <ul style="list-style-type: none"> <li>– Support the growth and diversification of the valley's agricultural base and support sustainable industries and value adding processes to encourage new opportunities for agribusiness, agritourism and associated manufacturing and transport</li> <li>– Progress opportunities for aviation, industrial and emergency services related clusters at Clarence Valley Regional Airport</li> <li>– Focus employment lands in Grafton, Maclean and Yamba, and in planned growth areas near Junction Hill, South Grafton, Lanitza (Airport) and Townsend; and marine based precincts at Harwood</li> <li>– Progress opportunities to leverage employment lands delivery in the subregion and opportunities arising from the Coffs Harbour Bypass</li> <li>– Integrate freight and logistics, industrial development and value adding businesses, taking advantage of road, rail and air freight corridors and infrastructure investment</li> <li>– Maximise opportunities associated with regional health and justice infrastructure, including Grafton Base Hospital, Maclean District Hospital, Grafton District Court, and Clarence Correctional Centre.</li> </ul> </li> <li>• Local Government Narratives: Kyogle <ul style="list-style-type: none"> <li>– Develop employment lands at Kyogle in conjunction with the Northern Rivers Joint Organisation to support jobs growth.</li> </ul> </li> <li>• Local Government Narratives: Lismore <ul style="list-style-type: none"> <li>– Support the creation of new opportunities that capitalise on the education and health-services industry clustering with the Southern Cross University and Lismore Base Hospital precincts</li> <li>– Support the development of employment lands, including commercial and industrial employment opportunities such as retail sharing outside the Lismore CBD</li> </ul> </li> <li>• Local Government Narratives: Richmond Valley <ul style="list-style-type: none"> <li>– Leverage the new Regional Job Precinct to continue to expand new employment and housing opportunities in both Casino and the broader LGA</li> <li>– Deliver new and diverse employment opportunities across the LGA</li> <li>– Support the development of the Regional Job Precinct, with a focus on food production, manufacturing and alternative energy</li> </ul> </li> <li>• Local Government Narratives: Tweed <ul style="list-style-type: none"> <li>– Deliver new employment and business park opportunities at Kingscliff, Pottsville, Tweed Heads south and South Murwillumbah, and encourage the development of airport related and tech business in the Cobaki release area</li> <li>– Identify emerging trends affecting work in the Tweed and develop a robust, contemporary and enabling policy framework to foster employment growth</li> <li>– Encourage employment and mixed use clustering</li> <li>– Foster stronger alignment and integration with the Southern Gateway Economic Cluster in South East Queensland and the Northern Rivers subregion.</li> </ul> </li> </ul>	<p>and for opportunities associated with the growth of South East Queensland to be maximised</p> <ul style="list-style-type: none"> <li>• The Local Government Narratives for Clarence Valley mention the role of agriculture in supporting manufacturing, and infrastructure in supporting industry, mentioning the potential for an industrial cluster at Clarence Valley Regional Airport. The identification of new sites for employment lands is also called for. Health and justice infrastructure opportunities are also acknowledged</li> <li>• The Local Government Narratives for Kyogle are vague with regard to employment lands, but call for coordination with the NRJO</li> <li>• The Local Government Narratives for Lismore include some mention of employment land opportunities, relating to health and education industries, as well as to retail sharing</li> <li>• The Local Government Narratives for Richmond Valley mention the expected role of the Regional Job Precinct in providing a range of employment opportunities particularly concentrated around Casino, also noting the need for employment diversity</li> <li>• The Local Government Narratives for Tweed identify a set of areas for employment lands, call for employment and mixed-use clustering to occur, and identify the need for inter-regional economic links.</li> </ul>

Key strategies/actions	Relevant components / so what's
<p><b>North Coast NSW Employment Strategy and Action Plan (2020)</b></p> <p>Demand</p> <ul style="list-style-type: none"> <li>Identify existing industry clusters and facilitate new ones (Short Term)</li> <li>Form industry specific clusters (Medium Term)</li> </ul>	<p>The Employment Strategy and Action Plan does not include in-depth consideration of employment land locations. However, it does note that the clustering of industries on a geographical basis is common in the Northern Rivers, and that industry-specific clusters should be better supported.</p>
<p><b>Regional Economic Development Strategies - 2022 Update, Clarence Valley Functional Economic Region Draft</b></p> <p>Strategy</p> <ul style="list-style-type: none"> <li>Foster innovation in 'engines of growth' for the Region including forestry, sugar production, marine manufacturing and services and logistics.</li> </ul> <p>New enablers</p> <ul style="list-style-type: none"> <li>Investigate new industrial uses of the Harwood Marine Precinct and conduct a feasibility study into the infrastructure required to support the precinct activation.</li> </ul>	<ul style="list-style-type: none"> <li>The Clarence Valley FER REDS Update highlights the role of the Harwood Marine Precinct in fostering boat and ship manufacturing, which would in turn support the regional industry of agriculture, forestry and fishing</li> <li>It notes the Precinct's following attributes: <ul style="list-style-type: none"> <li>Proximity to the Pacific Highway and the Port of Yamba</li> <li>The presence of an industrial park</li> <li>Working Waterfront and Working Waterways zonings</li> </ul> </li> <li>The REDS Update also states that a variety of infrastructure investments have taken place since 2018 across the Clarence Valley FER, particularly relating to health precincts.</li> </ul>
<p><b>Regional Economic Development Strategies - 2022 Update, Northern Rivers Functional Economic Region Draft</b></p> <p>Strategy</p> <ul style="list-style-type: none"> <li>Utilise the Reconstruction Corporation mandate and local government collaboration to develop a more climate resilient economy and provide for future population and economic growth across the Region.</li> </ul> <p>New enablers</p> <ul style="list-style-type: none"> <li>Prioritise coordinated land use planning and overcoming planning complexities to accelerate the release of land for residential, commercial, and industrial uses</li> <li>Investigate near and medium term energy and water infrastructure requirements to support growth in agriculture and manufacturing</li> <li>Develop a Region-wide digital black spots map and identify major gaps for key industries and businesses in the Region.</li> </ul> <p>Strategy</p> <ul style="list-style-type: none"> <li>Provide better access to jobs and affordable housing for local residents through strategic employment and housing land development.</li> </ul> <p>New enablers</p> <ul style="list-style-type: none"> <li>Conduct a skills demand and local supply analysis to support the Richmond Valley Regional Job Precinct.</li> </ul> <p>Strategy</p> <ul style="list-style-type: none"> <li>Develop and support the growth of emerging industries and the visitor economy.</li> </ul> <p>New enablers</p> <ul style="list-style-type: none"> <li>Monitor for industry opportunities in relation to renewable energies and explore incentives to encourage investment attraction in the sector.</li> </ul>	<ul style="list-style-type: none"> <li>The Northern Rivers Reconstruction Corporation, established in July 2022, seeks rapid development of the Northern Rivers region. As recognised by the Northern Rivers FER REDS Update, the Reconstruction Corporation seeks to fill industry gaps, accompanied by the delivery of associated infrastructure. It is also noted that industrial development should take place on flood-resilient land</li> <li>The Richmond Valley Regional Job Precinct, which is based around Casino, is acknowledged by the REDS Update as creating opportunities for accessible employment</li> <li>Renewable energy is seen as a key emerging industrial sector for the FER, which occupies the majority of the Northern Rivers region</li> <li>The REDS Update also states that there has been significant private investment in renewable energy projects, and public investment in the Richmond Valley Regional Jobs Precinct, since 2018.</li> </ul>

Key strategies/actions	Relevant components / so what's
<b>Regional Economic Development Strategies - 2022 Update, Tweed Functional Economic Region Draft</b>  Strategy <ul style="list-style-type: none"> <li>Cultivate the Region's specialised economic precincts and activities by providing increased access to climate resilient industrial land and a skilled local workforce.</li> </ul> New enablers <ul style="list-style-type: none"> <li>Strategically plan for a pipeline of future flood-free employment lands to support local job growth and business expansion</li> <li>Review current zoning schemes to achieve a balance of land use allocation between agricultural growth needs and population and industrial growth.</li> </ul> Strategy <ul style="list-style-type: none"> <li>Implement a precinct strategy for the Tweed Valley hospital development and redevelopment of the old hospital.</li> </ul> New enablers <ul style="list-style-type: none"> <li>Undertake master planning to position the emerging Tweed health and education precinct for investment attraction.</li> </ul>	<ul style="list-style-type: none"> <li>The Tweed FER REDS Update highlights the importance of flood-resilient land for employment lands. As a result, it calls for such land to be rezoned for release, alongside the development of infrastructure and community support</li> <li>Health and education are also recognised as important industries for the area, surrounding the asset of Tweed Valley hospital</li> <li>Economic integration across the border with Queensland is also highlighted as an ongoing consideration</li> <li>The REDS Update states that 80ha of employment land has been developed since 2018, and that an industrial land swap program has been implemented.</li> </ul>
<b>Ballina Shire Local Strategic Planning Statement 2020-2040</b> Planning Theme – Prosperous Economy <ul style="list-style-type: none"> <li>Planning Priority 3 Stimulate economic activity, and provide improved access to local services and facilities, by reviewing planning controls around major Shire infrastructure such as Ballina Hospital, Ballina Byron Gateway Airport, and education facilities</li> <li>Planning Priority 5 Maintain a supply of suitably located industrial land close to population centres at Alstonville – Wollongbar, and Ballina – Lennox Head so as to foster local employment opportunities and to reduce journey to work travel distances</li> <li>Planning Priority 7 Maximise opportunities associated with the growth in South Eastern Queensland and the increased connectivity provided by the upgraded Pacific Motorway and digital technology.</li> </ul>	<ul style="list-style-type: none"> <li>Actions 3.1 and 3.2 call for a precinct plan to be prepared (short term) and implemented (long term) for land surrounding Ballina Hospital. This would involve LEP and DCP amendments that “facilitate hospital associated land uses”. Action 3.4 calls for the immediate preparation of a master plan for the Southern Cross Industrial Estate Expansion Area, and for eventual precinct plans for land adjoining Ballina Shire TAFEs and schools</li> <li>Actions 5.1 and 5.2 call for the industrial potential of land adjoining industrial estates, and around Ross Lane, to be evaluated. Action 5.3 calls for rezoning in the case that the land is suitable</li> <li>Action 7.4 calls for a potential B6 Enterprise zone to be investigated for some properties in Wardell.</li> </ul>
<b>Clarence Valley Council Local Strategic Planning Statement 2020</b> <ul style="list-style-type: none"> <li>Priority 7 - Co-ordinate local and state funded infrastructure delivery with land use planning <ul style="list-style-type: none"> <li>Action 7.3 Work with state government and infrastructure providers to accelerate the provision of infrastructure and availability of residential and employment land to support a growing community and job opportunities in the Clarence Valley, where appropriate.</li> </ul> </li> <li>Priority 8 - Enable the development of industrial and employment land and the movement of freight and goods <ul style="list-style-type: none"> <li>Action 8.3 Work with industry and business groups in the Clarence to identify development opportunities on existing employment land and investigation areas for freight and transport based business</li> </ul> </li> <li>Priority 11 – Strengthen the local economy and provide opportunities for quality local employment <ul style="list-style-type: none"> <li>Action 11.1 Align the planning framework (zoning for business and employment land) to help achieve ecologically sustainable development and implementation of the Regional Economic Development Strategy</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The LSPS states that social and active travel infrastructure is essential in meeting employment land needs for the LGA's communities</li> <li>It is noted that there is already a good supply of employment land in the LGA. The LSPS calls for the further development of freight infrastructure and clustering of freight-dependent industries</li> <li>Across the LGA, there is 470ha of zoned industrial land, with a further 1,720ha identified for investigation. The LSPS calls for potential employment land zonings to</li> </ul>

Key strategies/actions	Relevant components / so what's
<ul style="list-style-type: none"> <li>– Action 11.2 Complete planning and constraints analysis for our 'Investigation areas' for employment land, particularly: <ul style="list-style-type: none"> <li>▪ Junction Hill/Koolkhan</li> <li>▪ South Grafton</li> <li>▪ CV Regional Airport</li> <li>▪ Gulmarrad and Townsend.</li> </ul> </li> </ul> <p>Identify any zoning, infrastructure funding, regulatory controls or other barriers that need to be updated to support development in line with the North Coast Settlement Planning Guidelines</p> <ul style="list-style-type: none"> <li>– Action 11.3 Complete an audit of supply and demand for employment land and investigate the need for a Clarence Valley Industrial Land Use Plan</li> <li>– Action 11.4 Explore opportunities and supporting planning controls for marine based industries in the Clarence Valley that help achieve ESD and grow local jobs for the area.</li> <li>• Priority 20 – Grow regional and sub-regional relationships <ul style="list-style-type: none"> <li>– Action 20.1 Strengthen regional and sub-regional relationships with other local Councils, state government, and business, particularly focussed on: <ul style="list-style-type: none"> <li>▪ Investigating and planning for future economic relationships with Coffs Harbour, including developing a more detailed understanding of economic development opportunities and the development of employment and industrial land in the Clarence Valley.</li> </ul> </li> </ul> </li> </ul>	<p>respond to the REDS and follow ESD principles</p> <ul style="list-style-type: none"> <li>• Four specific areas for further industrial development are identified. The LSPS calls for the improvement of employment land value in these areas, depending on potential impacts to communities, industries, and the environment</li> <li>• The affordability of the LGA's employment land is highlighted in the LSPS</li> <li>• Ecologically sustainable development is considered to be important for preserving the Clarence River's role in local employment. Harwood is one maritime manufacturing location mentioned, which the REDS has since sought to support</li> <li>• The LSPS notes that the neighbouring Coffs Harbour LGA has a low supply of employment land, and that potential employment land in the Clarence Valley LGA can be drawn upon in a strategic approach for the wider area.</li> </ul>
<p><b>Kyogle Local Strategic Planning Statement 2020</b></p> <ul style="list-style-type: none"> <li>• Planning Priority A4 Create the right conditions to support enterprise and innovation <ul style="list-style-type: none"> <li>– Action A4.1 Identify opportunities to increase inward investment and to support growth of existing businesses and industries</li> <li>– Action A4.2 Prepare an Employment Land Demand Analysis to determine requirements for business and industrial land supply</li> <li>– Action A4.3 Amend the LEP to ensure supply of appropriately located and serviced business and industrial zoned land.</li> </ul> </li> </ul>	<p>The LSPS notes the challenges of low or negative growth, positioning employment opportunities as a means of drawing more people into the area. Sufficient supply of new land, development permissibility, and infrastructure are seen as key components in strengthening employment in the LGA. Simultaneously, the LSPS calls for existing businesses to be invested in.</p>
<p><b>Inspire Lismore 2040: Local Strategic Planning Statement</b></p> <ul style="list-style-type: none"> <li>• Planning Priority 5 Identify and support the expansion of emerging industries <ul style="list-style-type: none"> <li>– Action 5.3 Seek funding to support the development of the renewable energy sector through actions identified in the North Coast Regional Plan including: (a) considering renewable energy resource precincts and infrastructure corridors, (b) enabling small-scale renewable energy projects, and (c) promoting community-scale renewable energy projects.</li> </ul> </li> <li>• Planning Priority 6 Expand agriculture and the agribusiness sector while protecting productive agricultural land <ul style="list-style-type: none"> <li>– Action 6.3 Review the GMS to ensure a suitable supply of industrial lands.</li> </ul> </li> <li>• Planning Priority 8 Consolidate existing industries and support their continued growth <ul style="list-style-type: none"> <li>– Action 8.1 Document economic growth projections for commerce and industry and zone land to satisfy demand. This will occur in conjunction with Action 1.1</li> <li>– Action 8.2 Document supply and demand for research and development land and consider clusters around educational institutions and employment lands close to key transport and freight corridors and markets</li> <li>– Action 8.5 Investigate the expansion of health precincts to support the Lismore Base and St Vincent's Hospitals (and allied health services) and land use zoning and planning controls to support any expansion.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• The LSPS acknowledges the importance of developing the renewable energy sector at different scales, partially through calling for renewable energy precincts and corridors to be considered</li> <li>• The LSPS states that sufficient industrial land for accommodating off-farm agribusiness activities will be ensured by Council, and guided by the GMS</li> <li>• Action 8.1 references Action 1.1, which establishes a framework for a GMS that responds to projected economic growth. Action 8.2 concerns the economic potential of the local knowledge economy, centred around institutions such as Southern Cross University, as well as potential industrial land in South Lismore and Goonellabah. Action</li> </ul>

Key strategies/actions	Relevant components / so what's
<ul style="list-style-type: none"> <li>Planning Priority 9 Transport and communications will keep our communities connected and facilitate the expansion of industries <ul style="list-style-type: none"> <li>Action 9.6 Develop a precinct plan for Lismore airport to enable airport expansion opportunities including a freight and logistics hub and associated infrastructure requirements</li> <li>Action 9.7 Seek funding to establish the Lismore airport precinct as a Local Activation Precinct.</li> </ul> </li> </ul>	<p>8.5 discusses the potential expansions of a Health Precinct surrounding Lismore Base Hospital, and of employment land surrounding St Vincent's Hospital</p> <ul style="list-style-type: none"> <li>Lismore airport is seen as a potential catalyst for employment, in the form of a related freight and logistics hub. The LSPS seeks to make the airport a Local Activation Precinct, part of a State Government initiative to bolster local economies. (See also: <i>Action 7.2 Seek funding to establish the Lismore CBD, the Justice Precinct and the Bridge Precinct as Local Activation Precincts.</i>)</li> </ul>
<p><b>Lismore Growth and Realignment Strategy (2022)</b></p> <p>4 Employment Lands</p> <ul style="list-style-type: none"> <li>4.1 CBD and New Commercial Centres</li> <li>4.2 New Industrial Land</li> <li>4.3 Critical Industry and Infrastructure Land</li> </ul>	<p>The Growth and Realignment Strategy states that industry feedback has indicated a need for better located and sized industrial land. Higher ground is also seen as desirable for businesses and industry, due to flooding risks.</p> <ul style="list-style-type: none"> <li>The Strategy also recommends that additional commercial precincts be established in flood-free locations close to residential areas, listing East Lismore and Goonellabah as suitable sites for further rezoning</li> <li>The Strategy identifies sites for flood-free industrial land in Goonellabah, Monaltrie, and South Lismore</li> <li>The Strategy also identifies an employment lands precinct as resulting from the future Bruxner Highway realignment.</li> </ul>
<p><b>Richmond Valley Regional Job Precinct Update (October 2021)</b></p> <ul style="list-style-type: none"> <li>What benefits will this bring to the Richmond Valley region?</li> <li>Where is the Richmond Valley Regional Job Precinct Located?</li> <li>Update on progress.</li> </ul>	<ul style="list-style-type: none"> <li>The Richmond Valley RJP seeks to make it easier for businesses to become established in the area</li> <li>It is located at the intersection of the Bruxner Highway and the Summerland Way, and includes an industry cluster in Casino, as well as already developed or approved land</li> <li>The precinct's boundary is in a process of being analysed.</li> </ul>
<p><b>Richmond Valley Local Strategic Planning Statement (2020)</b></p> <ul style="list-style-type: none"> <li>Planning Priority 8 Diversify the Range of Services and Employment Options <ul style="list-style-type: none"> <li>Action 8.1 Undertake an LEP Health Check, including a review of Land Use permissibilities, to support the growth of a diverse regional economy and to facilitate new economic activity</li> <li>Action 8.2 Prepare a Local Growth Management Strategy for future commercial and industrial areas, including opportunities to capitalise on freight and logistics transport routes in the area</li> <li>Action 8.5 Encourage the establishment of new manufacturing and rural industries to support local processing of primary products and to diversify the employment market</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The LSPS includes mention of the oversupply of commercial space, which can potentially be changed to be more concentrated around the Casino CBD</li> <li>The LSPS recognises that past GMSs are aging with regard to population growth rates, which would have different implications for commercial and industrial growth. It also emphasises the LGA's unique freight-related advantages</li> </ul>

Key strategies/actions	Relevant components / so what's
<ul style="list-style-type: none"> <li>– Action 8.8 Partner with key stakeholders to deliver new and diversified employment opportunities, and employment lands.</li> </ul>	<ul style="list-style-type: none"> <li>• The LSPS states that manufacturing is a strong industry in the region, which can be further strengthened by more extensive processing of local primary products</li> <li>• The LSPS seeks diverse businesses to contribute to the LGA's economy, including businesses relating to medicinal cannabis, waste, freight, and tourism.</li> </ul>
<p><b>Tweed Local Strategic Planning Statement – 2020</b></p> <ul style="list-style-type: none"> <li>• Planning priority 6 Promote a strong, sustainable and diverse economy with a robust economic policy framework to facilitate investment and local employment opportunities <ul style="list-style-type: none"> <li>– Action 6.3 Ensure flexibility in land-use planning to capitalise on a broad base of industry and business that supports a diverse range of local employment</li> <li>– Action 6.5 Enhance availability of information for decision making by government and business investment: <ul style="list-style-type: none"> <li>▪ Review employment demand and employment land supply needs across all sectors within the Tweed</li> <li>▪ Undertake a comprehensive commercial and retail strategy to guide future decisions concerning location, availability of appropriately zoned land supply</li> <li>▪ Research the demand, growth and needs of home based businesses in Tweed and strategies to support growth in this sector.</li> </ul> </li> <li>– Action 6.6 Review land-use planning to support community access to educational and hospital or related health care services and to leverage economic benefits and new education or health sector business opportunities outside of the significant farmland areas</li> <li>– Action 6.7 Promote the establishment of a hub or precinct to incentivise the establishment of sustainability (green) industries in the Tweed</li> <li>– Action 6.8 Work in partnership with NSW State Government on the master-planned redevelopment of the existing Tweed Heads hospital site</li> <li>– Action 6.15 Support the provision of technology work hubs within Tweed Heads neighbourhoods and villages to enable remote working arrangements and collaborative and innovative workplaces.</li> </ul> </li> <li>• Planning priority 7 Facilitate cross border collaboration, transport integration and connectivity to deliver sustainable, planned economic growth <ul style="list-style-type: none"> <li>– Action 7.10 Work with stakeholders to investigate further use and expansion of Bob Whittle Murwillumbah Airfield/ Murwillumbah Airport, including co-location of associated aviation operations and supporting industries</li> </ul> </li> <li>• Planning priority 8 Revitalise and promote Tweed Heads as a vibrant, contemporary and sustainable regional city <ul style="list-style-type: none"> <li>– Action 8.9 Promote an increased density of employment, housing and services to provide for population growth and a diversity of age and income groups.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Flexibility in land-use planning is seen as a key ingredient in maintaining a thriving local economy that performs well, by allowing businesses to adapt to market or industry challenges</li> <li>• Similarly, up-to-date information on employment land is seen to support continual investment and employment in the area</li> <li>• The health sector is seen as providing opportunities for employment growth, with the LSPS noting the potential opportunities resulting from hospital redevelopments in the LGA</li> <li>• The LSPS highlights the importance of sustainability with regard to industries supporting the local economy, which would be aided with the establishment of a hub</li> <li>• The Tweed Heads hospital site is seen as having the potential to form a commercial precinct</li> <li>• The opportunities offered by technology work hubs create more possibilities for employment land distribution within the LGA</li> <li>• The LSPS lists current major employment drivers in the LGA as Gold Coast Airport, Southern Cross University, Tweed Valley and Murwillumbah Hospitals, and Kingscliff and Murwillumbah TAFE campuses. In addition, other sites, such as Murwillumbah Airport, are mentioned for their potential to form new employment hubs</li> <li>• A higher density of employment in Tweed Heads is suggested as a response to increased population growth and diversity.</li> </ul>

## APPENDIX B : BUSINESS SURVEY

1. What type of business do you operate?

2. Is this business operating in the Northern Rivers? (Yes/no)

### Existing business

If yes, where?

### Emerging business

If no, are you looking to start up a business in the Northern Rivers? (Yes / No)

If yes, where?

3. Why do you choose to operate your business in the Northern Rivers?

What would attract you to start up a business in the Northern Rivers?

4. How has the COVID-19 pandemic affected your business operations?

5. Is potential flood risk a consideration for your business and why?

6. Is there a lack of suitable employment lands across the Northern Rivers? If so, where is it lacking?

7. To help us determine areas for new Employment Land, can you outline what criteria / variables you would consider if you were to look for a new location to operate your business?

8. What is an estimate of the land and floorspace your business would require?

9. Is your business dependent on being close to a residential catchment and why?

10. How much value do you place on being close to a major road network and why?

11. Does your business require a relatively flat site to build and operate, if not, what slope variance could your business tolerate?

12. Does your business have any other relationships or synergies with surrounding businesses? If so, can you describe these relationships?

13. Does your business have any other dependencies (i.e. nearby agriculture, buffers from residential etc.)

14. Is the current mobile and broadband service adequate for current needs and does this affect business decision making?

15. Are there any barriers or constraints affecting your business operations or preventing it from growing, please elaborate?

16. Are there any specific planning or zoning issues that are a barrier or that should be reviewed?

17. Is there anything else you would like us to consider for the employment land study?

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