CLARENCE VALLEY INDUSTRIAL LANDS STRATEGY

An initiative of Clarence Valley Council

Clarence Valley
Industrial Lands Strategy

Final

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Executive Summary

Introduction

The *Clarence Valley Industrial Lands Strategy* is being prepared to ensure a sufficient and suitable supply of industrial land to meet the future industrial needs of the Clarence Valley region over the next 25 years. The primary aim of the project is to identify a supply of strategically located industrial lands, using best practice design and innovative management structures, to support the economic targets set out in the *Clarence Valley Economic Strategic Plan*. In this way, the project will create a network of industrial precincts and locations for a range of industry types to support and enhance the economic competitiveness of the Clarence Valley.

Strategic Planning Context

The industrial land sector is an important economic contributor to the Clarence Valley and provides general service-based industry to support local population needs along with major value adding businesses to drive large-scale employment. The Clarence Valley is classified as a low socio-economic region and there has been a significant focus by Council and government to drive economic development and increase employment opportunities. Council's Economic Strategic Plan identifies a number of value adding, strategic export industry opportunities that would be accommodated on industrial land. The provision of market ready, attractive industrial land in the Clarence Valley would position the region more competitively for new investment in key competitive areas such as transport and freight, marine services and value adding to primary production.

While, in quantum terms, there appears sufficient vacant industrial land for expansion (approximately 100 ha in existing industrial zones), this land is, in most cases, considered either unsuitable for future industrial use due to site constraints, or unlikely to attract demand from developers and tenants in its current form. Many local industrial businesses express a desire to expand but are unable to do so due to a shortage of suitable land. There are also anecdotal reports that the Clarence Valley is losing potential industrial investment to other Northern Rivers and Mid North Coast regions due to a lack of market attractive land despite the relative affordability of industrial land in the Clarence Valley. Revitalisation processes for these lands are often lengthy and complex.

Based on the relationship between employment needs and land needs, there is projected demand for an additional 32-129 ha of industrial land in the Clarence Valley over the next 25 years (which includes an indicative allowance for buffering, roads, services and utilities). The upper supply requirement of 129 ha significantly exceeds the minimum allowance of additional industrial land presented in the *Draft Mid North Coast Regional Strategy* of 22 ha over the next 25 years. The projected demand will be spread across light, general and heavy industry servicing a range of local and export geographic markets. There is potential demand for a transport and freight hub, marine industry cluster, further heavy industry associated with value adding to primary production (including timber), and light/general industry to service anticipated population growth. It is argued that providing the required flexibility to accommodate major export industry requires an additional allowance of land beyond the 129 ha projection, particularly when considering the improving competitive position of the region.

The planning for industrial land supply requires a balanced, holistic and strategic view of a range of issues, including the current position of the industrial market (such as capacity pressures, suitability of existing sites and remaining development potential in existing areas), the most appropriate amount of land to supply to the market at any one time relative to projected demand, the different locational needs of and markets served by various industry types, the most appropriate spatial framework and distribution of land to ensure market strength and competitive position, and the impacts of new land releases on existing zoning and previous investment decisions. Additionally, the supply strategy should provide opportunities for industry clustering and consider the implications for the relationship between where people live and where they work.

Identifying the required amount of unconstrained land for industrial development in the Clarence Valley is challenging given the competition from competing land uses like residential and the environmental sensitivities in some areas. In particular, it is noted the coastal areas face significant limitations with regard to favourable land not impacted by flood or other encumbrances or currently under productive agricultural uses. However, compared with the regional coastal centres nearby, the Clarence Valley is well placed to provide larger-scale industrial land to meet strategic export industry opportunities. Preserving strategic land for future employment in a viable manner is central to this study and involves a shared role between Council and the private sector.

To ensure the continued growth of the sector and to position the region to take advantage of potential market opportunities, both new and redeveloped land will be required in suitable scales and locations. The preference, where possible, is for a consolidated approach with the clustering of industrial land in fewer key sites, particularly to accommodate larger, export orientated businesses and to, where possible, consolidate industrial development around existing zones. Such an approach can deliver a number of economic, social, environmental and town planning advantages for the region. The NSW Department of Planning requests any rezonings be made within a broader strategic planning framework. This Strategy seeks to provide this framework to support a range of industry types and enhance the economic competitiveness of the Clarence Valley.

Strategic Planning Framework

The strategic planning framework used to formulate this Strategy aims to take a balanced, holistic and strategic view of a range of key issues, including:

- **Appropriate planning horizon:**
    - This Strategy adopts a long-term planning horizon of 25 years. The planning horizon for industrial land is longer than that of other land uses due to:
        - Lengthy lead times required for major infrastructure headworks;
        - Sizable capital costs and associated risks to financing;
        - Planning, design and consent requirements for new development;
        - Sensitive nature of industrial uses and impacts on surrounding areas;
        - Required sizes of sites to concentrate the majority of the activity.
    - Adopting a 25 year planning horizon provides the flexibility to study short-, medium- and long-term demand trends for industrial land, allows for the implementation of a performance based approach to ensure responsiveness to short-term surges and long-term possibilities, ensures new industrial land carefully considers the planning for new settlements and is consistent with the Department of Planning's 2031 population projections and *Draft Mid North Coast Regional Strategy* planning horizon.
- **Quantum of Future Industrial Land Required:**
    - Projecting demand is a separate issue to assessing what represents the appropriate supply of industrial land. The appropriate supply should consider existing take-up and vacant land, projected demand based on population and employment growth, the flexibility to respond to any surge in demand beyond that anticipated due to a structural change to the market, and the impacts on land values and affordability across the region. The majority of stakeholders believe there is inadequate industrial land to cater for future growth (both from internal and external forces) in the Clarence Valley.
    - Considering the adopted 25 year planning timeframe, the strategic location, previous take-up rates and the settlement characteristics of the region, it is considered a 25-year supply of industrial land would be appropriate i.e. for supply to be equal to the 25-year demand projection. However, the quantum

of supply should also consider any unprecedented take-up rate or structural change to the market that may result from the:

- The attraction of major export industries and new investment;
- The region's forecast fast economic growth;
- Strategic location between Brisbane and Sydney;
- Improved positioning against regional counterparts;
- Possible greater regional decentralisation of industrial activities.

- This approach also considers:

  - Improves the affordability in the future supply of land;
  - Allows for surplus lands to be rezoned to other uses if required;
  - Provides allowance for any greater than expected buffering;
  - Provides for a greater range and choice of lands for the market; and
  - Considers uncompetitive/constrained nature of existing vacant lands.

- Therefore, considering the need for flexibility for the above reasons, it is considered the identification of strategically located sites providing land beyond the 129 ha over the next 25 years which already includes allowances for land for buffers, roads and services is appropriate.

- **Distinction Between Local/Export Lands and Locational Needs:**

  - Strategic planning needs to distinguish between general services based land needs and strategic export needs.

  - Local service based industry needs to be accessible to the population centres and supplier markets in the local area. Often these businesses require street front exposure to passing trade and may retail goods and services from a shopfront or warehouse. The provision of land in local areas should be in accordance with projected population growth and appropriate supply for growth so as to not jeopardise the role of other industrial precincts. Demand analysis indicates the largest industrial land demand is for the faster growing former Maclean Council area i.e. the Lower Clarence.

  - Strategic export sectors, on the other hand, have different location needs, often requiring direct access to their primary products, larger land areas for larger operations, and access to major transport infrastructure for access to markets outside the region. In many cases they do not rely on direct exposure to a local market since this is not a core market for their business. The location of new export land in the region will need to ensure that while remaining reasonably proximate to the local labour force, the areas take advantage of major transport infrastructure on large tracts of flat land capable of accommodating a wide range of larger businesses.

- **Distinction Between Different Industry Types and Locational Needs:**

  - Strategic planning needs to distinguish between different industry types and their locational needs. For example, heavy industry has a greater social and environmental impact and requires more extensive buffering from residential and other conflicting urban land uses. Such industry can also create greater truck movements for heavy vehicles. This means these uses are often located away from population areas.

  - General and light industries have lower impacts and are located closer to their sources of demand from major population centres.

  - Transport and storage businesses often operate 24 hours a day and require different access considerations. These businesses also generate heavy vehicle movements. These businesses often favour clustering with similar uses to increase competition and access to suppliers and flow-on services. This Strategy's land supply approach should attempt to reduce heavy traffic

movements in urban areas and take greater advantage of industrial opportunities with immediate access to the Highway.

- **Spatial Distribution of Industrial Land (Coordinated versus Fragmented):**
    - Strategic planning must also determine the most appropriate spatial distribution for industrial land in the Clarence Valley.
    - Fragmentation and proliferation of industrial areas can reduce the ability to create business clusters and attractive investment opportunities. This can also result in a lack of cost-effective infrastructure services through unnecessary duplication of investment for different sites i.e. a lack of efficiency of resource use. There can also be unnecessary impacts on adjacent land uses and the community.
    - This Strategy supports a consolidated (or compact) planning approach versus a dispersed planning approach for the following reasons:
        - Strengthen the market and key precincts;
        - Improve business clusters and commercial attractiveness;
        - Reduce duplication of often costly infrastructure services; and
        - Reduce conflicting land issues and impacts.
    - The consolidation approach for industrial land relates to both existing and new industrial areas. Consolidation that can occur in and around an existing industrial area is preferable. This requirement must, in some way, be balanced by the need for providing range and choice of industrial lands to provide competitive land supply.
- **Clustering of Industrial Activities:**
    - The consolidated planning approach recommended above links directly with the concept of business and industry clustering. Clusters are groupings of related firms within a particular geographical space, with the aim that this proximity to other firms will: Facilitate interaction between producers; Centralise labour and resources within one particular place; and Generate economies of scale (lower costs and improve efficiency).
    - There are opportunities for clusters within Clarence Valley including transport, marine, timber and other value adding sectors. This strategy therefore supports the creation of clusters and notes the role suitable industrial land supply can play in the creation of business and industry clusters.
    - It may take some time for the benefits of industry clusters to be realised initially. All clusters should be self generating; with the internal benefits of clustering able to attract new firms to the cluster, broadening the skills and specialisations of the cluster, providing greater opportunities for external trade and within cluster linkages, with these opportunities attracting new firms and so on.
- **Journey to Work and Energy Efficiency:**
    - A final key strategic planning consideration is the relative proximity and alignment of employment lands with the residential location of the workforce i.e. where they work and where they live.
    - Locating employment lands proximate to where the workforce lives benefits:
        - Energy efficiency and carbon emissions;
        - Travel to work times;
        - Employee vehicle costs;
        - Housing affordability and sustainability;
        - Business-to-business costs; and

- Road safety and traffic movements.

- This strategy seeks to, where possible, provide for employment land commensurate with population growth and employment demand in each of the areas of the Clarence Valley, which records a dispersed settlement pattern. In this respect, it is important for the strategy to consider the needs of both the Upper and Lower Clarence. Council's Settlement Strategy and the Draft Mid North Coast Regional Strategy have therefore informed the strategy, although the future growth areas are yet to be finalised.

Site Selection Criteria

There are many factors to consider when identifying and assessing potential sites for new industrial land development. Industrial businesses responding to the business survey indicated a range of different key factors to be considered when choosing an industrial land site. In an unprompted situation, the location of the site was a key factor, along with the size of the land parcel, transport access and price.

State Government Departments have in place planning policy to guide the selection of new urban land. The Department of Planning needs to be satisfied new industrial land is located in consistency with the criteria established in Clause 38 – Land Release Principles and Processes in the *North Coast REP*. The RTA requires any new industrial land development to consider access, traffic, safety and energy efficiency as its main factors when assessing proposals for new employment land.

Council's *Clarence Valley Sustainability Initiative* has also been carefully considered, including its economic, social and environmental objectives.

This following industrial site evaluation framework is outlined for use when undertaking detailed assessment of the appropriateness of various sites (see **Table E.1**).

Table E.1: Industrial Land Site Selection Criteria

Guiding Principle	Category	Factor	Detailed Description
Economic	• Healthy economic activity	• Commercial attractiveness	• Land affordability • Profile of the site • Ability to attract tenants • Flexibility of site to accommodate tenants • Data technology capabilities • Ability to create an industry cluster • Development feasibility
		• Regional positioning	• Capacity to service intra region growth and development • Regional competitiveness (capacity to service competitive advantage)
	• Efficient and effective transport access	• Accessibility/ transport	• Access and profile to highway / major roads network • Access for consumers, workers and service vehicles (energy efficiency) • Proximity to education and training facilities • Access to export markets from airport, seaport and rail • Proximity to existing industrial areas • Access to tradewaste sites and transfer stations • Traffic implications and constraints • Access for B Double vehicles • Access costs to connect with the Highway network • Availability of public transport
	• Efficient resource use	• Cost-effective infrastructure and land use	• Existing investment in services and infrastructure • Upfront investment required in infrastructure and impact on viability • Impact on existing land uses and other industrial areas
	• Meaningful work and employment	• Employment impacts	• Direct and indirect employment generation • Proximity to labour force and vehicle kilometers
Governance	• Accountability and compliance	• Town planning	• Existing zoning and suitability of proposed land use • Planning direction of and support from Council and Dept. Planning • Potential for future expansion
	• Community health and well being	• Landowner views	• Willingness of owners to develop as industrial • Attitudes of and impacts on adjoining land holders
	• Good community relations	• Community acceptance	• Acceptable levels of impact on community amenity • Acceptable visual impacts and appropriate buffers
Human Habitat	• Quality built environment	• Physical suitability	• Proximity of residential areas and potential encroachment

Guiding Principle	Category	Factor	Detailed Description
	and places		• Ability to integrate with surrounding land uses • Proximity of areas of high environmental value • Convenience of workplace trips • Suitable size for intended role (i.e. large scale vs local) • Elevation of land and fill requirements

	• Effective essential services	• Infrastructure services	• Proximity to essential services:
			  ○ Water
			  ○ Sewer
			  ○ Electricity
			  ○ Broadband/technology

Ecology	• Healthy waterways	• Flood and water	• Flood levels • Catchment management • Waste water treatment
	• Protecting the land	• Geotechnical	• Contamination issues • Geotechnical issues • Soils testing • Vegetation
	• Protecting biodiversity	• Biodiversity	• Flora and fauna/wildlife corridors/threatened species • Other vegetation/conservation issues

Source: Clarence Valley Council, AEC*group*

Industrial Land Strategy

Based on the demand and need for industrial land in the Clarence Valley as determined by the strategic planning framework, the future Strategy is described as a strategy providing new land release within a compact planning approach that concentrates future major industrial land supply around existing industrial nodes.

The Industrial Lands Strategy identifies three new land release areas with total site area of approximately 150 ha to be considered for future investigation for the purpose of industrial rezoning and use (see **Table E.2**). It should be noted that the identification of the sites does not necessarily mean they will be rezoned. Rather, detailed investigations are required to be undertaken to determine the appropriateness of any rezoning of that land. It should also be noted that total ha values may not equate to total ha yield values for the proposed purpose as yield will be impacted by the characteristics of the individual sites and will require additional investigations. The Strategy has included preliminary environmental and physical constraints mapping analysis.

The South Grafton industrial area would be expanded to the east to encompass an approximate 110 ha of land between Swallow Road, Tyson Street and the Pacific Highway. This expansion will provide a large tract of land to allow for the expansion of existing business by providing greater choice and improved quality, along with attracting strategic export industry to the region through provision of more commercially attractive lands. There are no conflicting land use issues for the site. Strict guidelines would apply to development of the site to ensure a high standard development. From a strategic perspective, the land is well located relative to transport infrastructure and abuts a major existing industrial area. The spatial area and ownership pattern provides the opportunity to master plan a staged development featuring a range of sub-precincts/zones to accommodate a range of uses. Importantly, the site, along with the Airport in the long-term, presents the potential to locate a future transport hub. This will be further investigated as part of a feasibility study for a transport hub in the Clarence Valley.

There are 31 ha of future investigation area identified on the Summerland Way at Koolkhan at the former Koolkhan Power Station and an adjoining site. This land is already the focus of rezoning proposals and value adding projects using the infrastructure on site. The area is opposite and adjacent to existing industrial zones. A further 17 ha of land is identified in an expanded Maclean-Townsend industrial area to accommodate growth in the Lower Clarence, specifically Gulmarrad and Maclean-Townsend, along with providing increased lands for export industry in this area. The expansion would occur on land zoned for future investigation and represents a logical extension to the estate. Transport and access is provided to the site however a new access arrangement will not be considered prior to the finalisation of the Pacific Highway options.

Table E.2: Inventory of Future Industrial Land Investigation Areas

Investigation Area	Role and Uses	Area (ha)	Timing (yrs)	Zone
Swallow Road, Tyson Street and Pacific Highway, South Grafton	• Major new land area for business expansion and export industry with different precincts and zones, including a transport hub. The site provides the flexibility to attract new industry/business, provide higher quality land development and provide greater market choice and range for industrial lands.	~110	<5	IN1-3
Summerland Way sites, Koolkhan	• New industrial land on former power station and adjoining site to provide opportunity for value adding from existing infrastructure.	~31	<5	IN1
Maclean-Townsend Industrial Estate	• Expansion of the existing industrial estate to provide increased and affordable land supply for the fast growing Lower Clarence.	~17	5-10	IN1-2

Note: IN1 – General Industrial, IN2 – Light Industrial, IN3 – Heavy Industrial
Source: AEC*group*

In terms of the quantum of land supply, the three areas identified above total approximately 150 ha of land area subject to future investigation not inclusive of lands identified surrounding the Grafton Airport. The Airport represents a long-term strategic area and regionally significant area for future large-scale industrial development in the Clarence Valley following the construction of the realigned Pacific Highway and should be considered for land banking so as to preserve the lands for this opportunity. The strategic significance of this land is when the highway is developed and after the consolidation of the existing and other short-term release industrial areas. The Airport is one of the sites subject to a current feasibility study relating to transport hubbing options in the Clarence Valley, therefore providing an additional allowance to cater for export industry.

In addition to the identified future release and investigation areas, there are 100 ha of vacant undeveloped land within the existing industrial zones. While much of this land is constrained for a range of reasons, particularly the southern portion of the existing South Grafton industrial area and the fragmented lands in Grafton, the existing vacant land provides further development opportunities and supply in the areas of Iluka, Yamba, Maclean-Townsend and Koolkhan-Trenayr. The revitalisation of these industrial areas has the potential to increase land use efficiency, lift amenity and development standards, and improve the commercial attractiveness of the vacant lands for future development.

Vacant industrial lands in Iluka, in combination with improved enforcement of use, are considered sufficient to meet projected local services demand. The staged development of the vacant land at Yamba is underway and will be sufficient to meet future local and district level demand in this growing area. Maclean-Townsend still provides vacant land to meet future local growth with current subdivision. This capacity will be enhanced by an expansion to the estate. Koolkhan-Trenayr will continue to provide large tracts of land for heavy industry. Vacant land and development opportunities created through revitalisation of the South Grafton industrial area will provide for local and district services demand in the Upper Clarence, including the areas of Nymbodia, Copmanhurst and Ulmarra.

The industrial land strategy has been developed based on the strategic planning framework which sought to identify the following sites/lands:

- **Strategic Intent I – Local services:** Provision of land located proximate to future population and residential growth areas. The size of the industrial areas are to be in accordance with projected local services demand and consolidated, where capacity allows, as part of existing industrial areas and zones:

    - Yamba – There is projected demand for up to 14 additional ha of industrial land in Yamba to meet general service needs, assuming the adoption of the West Yamba LEP. This demand will be catered for through development of the southern industrial zone (11 ha) which is under construction. Any additional demand would be encouraged to locate in industrial lands nearby, including the major town of Maclean.

    - Iluka – There is projected demand for up to 2 additional ha of industrial land in Iluka to meet general service needs. This demand can be catered for within the existing industrial zone with a vacant 4.3 ha available for development. This requires the enforcement of industrial uses in the zone given non-industrial uses current occur on vacant sites. The vacant land is Crown land but currently is the subject of an Aboriginal Land Claim. The land's intended use as industrial should however be retained irrespective of ownership. In summary, the existing zone is considered sufficient to cater for projected local demand.

    - Maclean/Townsend – There is projected demand for up to 4 additional ha of industrial land in Maclean-Townsend to meet general service demand. In addition to this, there is projected demand of up to 3 ha of industrial land from Gulmarrad and the surrounding area. This demand can be catered for within the existing industrial zone with a vacant 8.2 ha available for development. Added to this, there is up to 17 ha of vacant land in adjacent parcels that could be rezoned to industrial. There may also be long-term opportunities for additional lands in the Gulmarrad/James Creek area.

- Grafton/South Grafton – There is projected demand for an additional 17 ha of general service based industrial land in the Upper Clarence. To cater for this demand, there is the potential to revitalise parts of the remaining vacant land in the South Grafton estate of 35.6 ha along with a 110 ha investigation area. It is considered the South Grafton estate could also cater for local services demand generated from the nearby Copmanhurst, Ulmurra and Nymbodia to concentrate industrial zoning and land supply.

- **Strategic Intent II – General/mixed use industry:** Provision of lands capable of catering for expanded general industry uses in a strategic location(s) to the sub-regional catchment proximate to major transport infrastructure and suitably removed from residential encroachment:

  - South Grafton – The industrial area is already the largest industrial area in terms of occupancy and records a wide mix of business activities. An expansion to the estate provides the ability to concentrate future industrial activity in a single location. Providing higher quality land development within the future investigation area, along with revitalisation of the existing zone, presents the potential for a significant industrial area proximate to the regional centre of Grafton close to major transport infrastructure.

  - Maclean/Townsend – The industrial area provides the potential to expand the existing industrial zone by up to 17 ha and cater for additional demand relating to general services in the fast growing Lower Clarence region, along with strategic export opportunities that may arise from improved position due to the planned highway realignment. The option would provide an affordable industrial land supply for the future growth of the Lower Clarence. Providing the additional land also considers a potential new depot in the existing zone.

  - Summerland Way – The industrial area will provide more than 30 ha of land to facilitate the development of general industry, value adding initiatives around underutilised infrastructure. The site is located adjacent and opposite an existing industrial area and will provide local employment opportunities.

  - Airport: Employment lands within close proximity to the Pacific Highway are in high demand and this location is viewed as being strategically aligned in the long-term to future demand in the region for large-scale industrial land and regionally significant development. The strategic significance of the site is dependent on the construction of the realigned Pacific Highway.

- **Strategic Intent III – Heavy industry:** Provision of land suitable to cater for expanded heavy industry and economic/industry development opportunities in the region offering large flat tracts of land with larger lot sizes proximate to major transport infrastructure, including rail and road highway access, and suitably removed from residential encroachment:

  - Koolkhan-Trenayr – Heavy industry development would continue to be promoted in the Koolkhan-Trenayr industrial area where there is already a developed cluster of these uses away from residential planning conflicts and with rail access on site. The estate is capable of providing the flexibility for Council to cater for major value adding opportunities to primary production. There could also be some subdivision around these uses to add further opportunities for small value adding businesses.

  - South Grafton – the investigation and potential release of approximately 110 ha of land east of the existing South Grafton industrial zone provides a master planning opportunity to incorporate heavy industry. There is already heavy industry located within the South Grafton estate and there are no residential encroachment issues for the new release area. Importantly, the site is strategic for heavy industry in that it provides rail access, large tracts of land and is located on the Pacific Highway side of Grafton, thereby reducing heavy vehicle movements through the city of Grafton.

- **Strategic Intent IV – Transport hub:** Provision of land suited to the development of a transport and freight hub located in a highly visible and accessible location, preferably as part of a broader industrial area, proximate to major trucking routes and highways and with the potential to co-locate rail infrastructure (to be further tested as part of a feasibility study for a transport hub in the Clarence Valley):
    - South Grafton – Transport and logistics uses would be encouraged to locate in a dedicated precinct in South Grafton to provide access to both road and rail infrastructure. This precinct would be designed as part of a master plan for the new release area directly to the east of the existing zone. There is already a major transport operator establishing adjacent to this release area. The area provides access to both the Pacific Highway and rail.
    - Airport: Employment lands within close proximity to the Pacific Highway are in high demand and this location is viewed as being strategically aligned in the long-term to future demand in the region for transport, logistics, warehousing and support service hubbing. The strategic significance of the site is dependent on the construction of the realigned Pacific Highway.
- **Strategic Intent V – Marine industry:** Support for the provision of lands located on the Clarence River to leverage competitive locational advantages and provide for industry expansion:
    - The River access and established nature of the marine industry in the Clarence Valley provide an obvious opportunity for expansion. There is the potential to expand the current sector and to cluster supporting marine businesses in the Clarence Valley to respond to market trends. The preferred area for marine sector development and marine support services would be in the Lower Clarence close to existing industry, skilled labour force and with access to the Clarence River.
- **Strategic Intent VI – Timber industry:** Provision of land suitable to cater for ongoing expansion of the region's timber industry, including value adding processes, located away from residential with access to both major road and rail infrastructure and export markets:
    - Koolkhan-Trenayr – Timber value-adding would continue to be promoted in the Koolkhan-Trenayr industrial area where there is already a developed cluster of these uses away from residential planning conflicts with rail access on site and road access via the Summerland Way.

Consistency with Relevant Planning Strategies

Relevant Council and regional planning strategies have informed the development of the industrial lands strategy. The supply strategy is considered consistent with these instruments as follows:

- Economic Strategic Plan: The industrial lands strategy provides the appropriate scale, mix and location of industrial land to facilitate the key economic development initiatives outlined in the Economic Strategic Plan and facilitate employment growth and the achievement of economic targets. Importantly, the strategy seeks to provide an improved range and a higher standard of industrial land to allow for local business growth along with the attraction of new and strategic export industry to the region.
- Settlement Strategy: The industrial lands strategy has based the future supply of industrial land within each of the sub-regions of the Clarence Valley on existing settlement patterns and anticipated future population growth as outlined in Council's Settlement Strategy. This ensures there are future employment opportunities located appropriately for each settlement area, which has subsequent benefits for journey to work, energy efficiency and housing affordability. The strategy has considered the

dispersed settlement pattern of the region and has provided both local and strategic lands in the Upper and Lower Clarence.

- Sustainability Initiative: The site selection and assessment criteria developed for the industrial lands strategy has been aligned with Council's Sustainability Initiative. Therefore, each of the critical sustainability variables across the economic, social and environmental spheres has been carefully considered in the identification and assessment of the future network of industrial precincts.

- Draft Affordable Housing Strategy: The industrial lands strategy is consistent with the Clarence Valley Affordable Housing Strategy in that consideration of the footprint of any future development has been a factor of both strategies and that affordable housing will be placed in close proximity to potential employment opportunities.

- Draft Mid North Coast Regional Strategy: The industrial lands strategy has responded to the strategic regional direction outlined in the *Draft Mid North Coast Regional Strategy*. The strategy has identified lands for future industrial activity to support employment growth, noting the strategic importance of the Clarence Valley in this market as industrial land shortages intensify in the other regional centres of the Mid North Coast. The strategy has provided opportunities for industrial development in the Major Regional Centre of Grafton and the Major Town of Maclean. In particular, the Regional Strategy indicates Grafton has land and infrastructure available to greatly increase its industrial capacity and the industrial lands strategy responds to this capacity and opportunity. The strategy has also considered the preliminary agreed growth areas for future urban growth.

Implementation Program

The implementation of the Strategy requires the following actions and considerations:

1. Landowner consultation:
    - Initiate consultation with all affected landowners of the future investigation (or new land release) areas;

2. Further technical investigations:
    - Detailed investigations are required to be undertaken to determine the appropriateness of rezoning of the future investigation areas in:
        - Koolkhan-Trenayr
        - Maclean-Townsend
        - South Grafton;

3. Planning amendments and controls:
    - Transfer to the new standard LEP template
    - Preparation of a structure plan for South Grafton land release area
    - Outline and implement strict development controls in DCP
    - Consider minimum lot sizes of 1,000sqm or within a master plan
    - Prohibit commercial development within industrial zones
    - Implement contribution plans for industrial areas
    - Consider alternative uses and rezoning for select sites;

4. Land release and timing schedule:
    - Implement the land release schedule;

5. Land banking:
    - Council's planning and facilitation role is to focus on:
        - Establishing planning controls and investment environment
        - Consultation with affected/relevant land owners
        - Identifying development opportunities and marketing
        - Providing market intelligence and analysis
        - Investment and business attraction strategy
        - Business conversion and approvals facilitation
    - Council's role to extend to banking of strategic long-term lands as follows:

- Summerland Way
- South Grafton
- Airport
- James Creek

6. Developer contributions and infrastructure financing:
    - Review developer contribution plans as part of LEP review process
    - Establish development contribution plans in new precincts
    - Council engage more broadly with RTA regarding state/local road interfaces
    - Council identify the required standard for road infrastructure upgrades
    - Council commit funding toward the upgrade of road infrastructure;

7. Revitalisation techniques:
    - Focus on the South Grafton industrial area
    - Implement infrastructure contribution plans
    - Identify site consolidation and redevelopment opportunities
    - Undertake signage and streetscape improvement projects;

8. Business investment and attraction:
    - Prepare inward investment strategy and marketing materials
    - Undertake investment strategy to attract developers/investors
    - Consider financial incentives to attract new investment and industry;

9. Performance measurement:
    - Review the Strategy in 5 years; and

10. Regional land monitor:
    - Annual updating of the industrial land database to meet reporting requirements from the Department of Planning, to better inform future planning and land take-up and assist business investment attraction.

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1. Introduction

1.1 Project Background

The Clarence Valley Local Government Area (LGA) is at the converge of two regional boundaries – the Northern Rivers and Mid North Coast regions of New South Wales. The LGA interrelates with both regions. This Strategy aligns itself with the statutory planning framework that defines the Clarence Valley as part of the Mid North Coast region.

The region has a population of just over 50,000 persons and boasts a diverse range of settlement areas and industry sectors. To facilitate sustainable economic growth in the region, Clarence Valley Council recently released the *Clarence Valley Economic Strategic Plan.* The Plan identified the need for a range of priority land use planning strategies, including one focusing on industrial lands.

As a first stage to industrial land planning, Council commissioned an audit of industrial lands in the Clarence Valley which was completed in August 2006 which provides a sound basis for analysing the available stock of industrial land, including access, services, development potential and site constraints/opportunities. The audit concentrated on vacant undeveloped land, vacant developed land and occupied lands. The Audit found the existing set of industrial lands face, in some cases, significant encumbrances and challenges to future development. This confirmed to some extent a growing concern that available industrial land stocks are insufficient to meet demand, thereby impacting on the growth and wellbeing of the local economy.

1.2 Purpose of the Study

The *Clarence Valley Industrial Lands Strategy* is being prepared to ensure a sufficient and suitable supply of industrial land to meet the future industrial needs of the Clarence Valley region over the next 25 years. The primary aim of the project is to identify a supply of strategically located industrial lands, using best practice design and innovative management structures, to support the economic targets set out in the *Clarence Valley Economic Strategic Plan*. In this way, the project will create a network of industrial precincts and locations for a range of industry types to support and enhance the economic competitiveness of the Clarence Valley.

The Strategy assesses existing industrial land supply, projects future industrial land demand, and then formulates a strategic planning framework and site selection criteria to identify specific industrial land needs, locational criteria and optimal sites for future investigation. The Strategy also discusses actions and planning approaches to revitalise existing industrial areas and encourage their development.

This Strategy document comprises the following research and analysis:

- Regional overview;
- Local and regional planning context;
- Industrial land uses;
- Economic significance and opportunities;
- Existing industrial land supply;
- Projected industrial land demand;
- Strategic planning approach; and
- Industrial lands strategy.

In addition to this document, the Strategy also comprises the following attachments:

- Annexure A – Business/Owner/Developer/Real Estate Survey Report;
- Annexure B – Site Development Options and Assessments Report;
- Annexure C – Implementation Program;
- Annexure D – Constraints Mapping for Existing Industrial Areas;
- Annexure E – Constraints Mapping for Industrial Investigation Areas; and
- Annexure F – Industrial Land Development Trends Report.

1.3 Project Methodology

Stage 1: Project Start-Up

The project commenced with an inception meeting between Council and the AEC*group* to ensure clarity on the project deliverables and study objectives.

↓

Stage 2: Data Collection and Literature Review

The stage involved the collection of property, economic and market data and the review of relevant planning policies and notices, previous industrial land studies and reviews and individual rezoning proposals and documentation.

↓

Stage 3: Site Visits

This stage involved visual inspection and familiarisation with the existing industrial precincts, along with those being considered for future industrial development.

↓

Stage 4: Industry Surveys

This stage involved surveys of industrial businesses, land owners, developers and real estate agents. A total of 74 surveys were completed, providing input into industrial land supply, demand and planning issues in the Clarence Valley.

↓

Stage 5: Stakeholder Consultation

This stage involved discussions with Council planning officers, State Government departments and other identified stakeholders regarding industrial land planning issues. Discussions were also held with the proponents of site-specific rezoning proposals or proposed industrial land development in the Clarence Valley.

↓

Stage 6: Strategy Preparation

This stage involved the preparation of this Strategy report, including analysis of economic opportunities, land supply and demand, future sites, business case, constraints mapping and strategic direction for future industrial land supply and planning.

↓

Stage 7: Reporting and Presentation

This stage involved the delivery of the draft report to the Council planning officers, a presentation to Councillors and the public exhibition of the Draft Strategy.

1.4 Disclaimer

2. Regional Overview

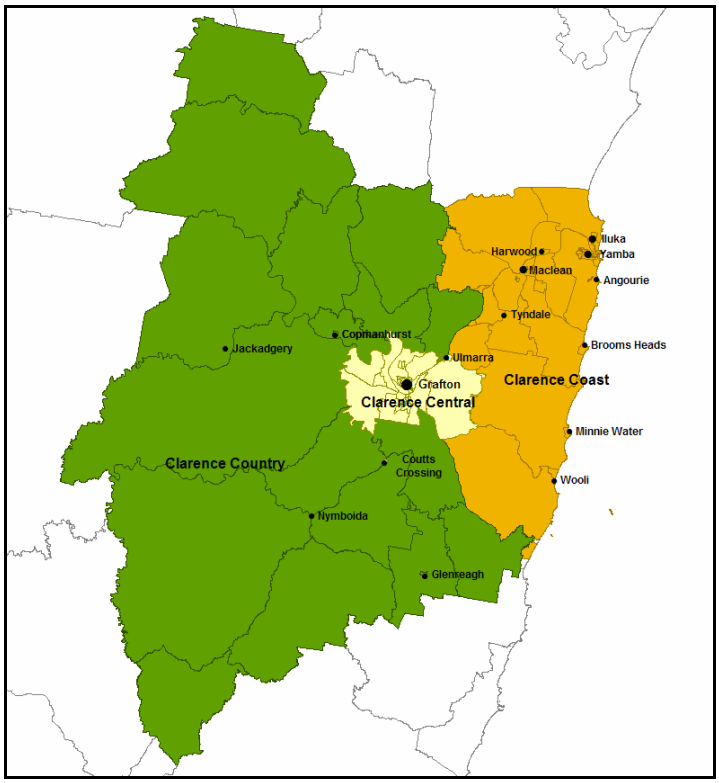
2.1 Geography

Clarence Valley is located in the Mid North Coast region of New South Wales. The new Council area comprises 10,440km^2, representing an estimated 51% of the landmass of the Northern Rivers region. The region is approximately 300km south of Brisbane and 600km north of Sydney. Coffs Harbour, Bellingen and Armidale Dumaresq councils border the Clarence Valley to the south, with Richmond Valley and Kyogle to the north, and Guyra, Severn and Tenterfield to the west.

The Clarence Valley is the largest coastal catchment in NSW at 22,700km^2, with a history of high rainfall (1,500mm per annum on average). The majority of the Valley's population and primary industry is located on the floodplain. A significant proportion of the Clarence Valley is state forest, national park and reserves. The Clarence Valley's most significant natural feature is the Clarence River, which extends approximately 380km from Yamba to the Queensland border. More than 100 islands form part of the Clarence River system. The River is an important cultural symbol for the Indigenous community.

The Clarence Valley comprises over 40 towns and villages with diverse settlement patterns ranging from fast-growing coastal areas like Yamba, agriculture based townships and villages like Maclean, to the regional urban centre of Grafton (see **Figure 2.1**). Within these areas, lifestyle choices range from urban areas, to historic small towns and villages, rural residential lots, coastal residential estates and hinterland settings.

Figure 2.1: Clarence Valley Local Government Area



Source: CDATA 2001, AEC*group*

2.2 Population

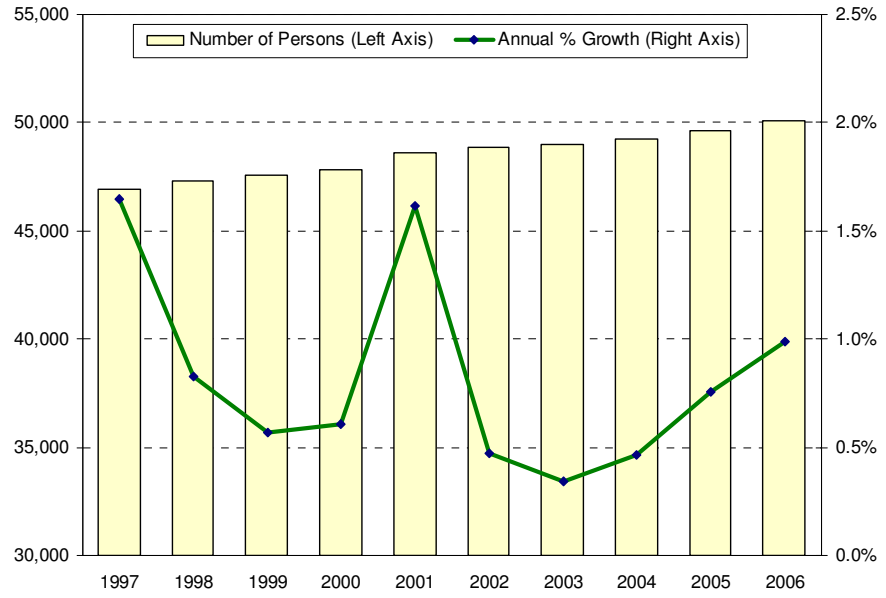
According to the most recent ABS estimated resident population statistics, there were an estimated 50,102 persons living in the Clarence Valley in 2006 (**Table 2.1**), representing population growth of 1.0% from 2005. This rate of growth was higher than the 5-year average of 0.6% per annum. **Figure 2.1** demonstrates an increasing population growth rate in Clarence Valley. The population of Clarence Valley is concentrated toward the central and coastal areas of the region, with Grafton the main population centre with around 17,000 persons and the Lower Clarence with around 19,000 persons. Population growth has been centred along the coastal plain.

Table 2.1: Estimated Resident Population Trends

Region	2001	2005	2006p	% change, 2005-2006	Avg. % change, 2001-2006
Clarence Valley	48,617	49,613	50,102	1.0%	0.6%
Mid North Coast	280,437	294,637	297,409	0.9%	1.2%
New South Wales	6,575,217	6,768,941	6,827,694	0.9%	0.8%

Note: r – revised, p – preliminary estimate
Source: ABS 3218.0 Regional Population Growth, AEC*group*

Figure 2.2: Clarence Valley Population Growth Trends



Source: ABS 3218.0 Regional Population Growth, AEC*group*

In terms of future population projections, the State Government's Department of Planning and Natural Resources (DIPNR) prepared population projections for all Council areas in New South Wales in 2004. These projections are not actuals, rather a scenario of outcomes based on assumptions of fertility, mortality and migration developed from historical trends. It is possible a fundamental change in migration, such as an increasingly positive net migration due to northward migration towards south-east Queensland and northern New South Wales could change the validity of these assumptions moving forward meaning historical trends may not be a true representation of future trends. Therefore, they are provided for base information purposes only.

According to DIPNR projections, the Clarence Valley's population is projected to increase to 59,620 persons in 2031 (see **Table 2.2**), equating to an additional 7,700 persons and an average population growth rate of 0.6% per annum, in line with growth recorded over the past five years. Growth is projected to be fairly constant over the projection period. New South Wales is projected to record a slowing average population growth to 0.8% per annum, still above the Clarence Valley average.

Table 2.2: Projected Resident Population Trends

Region	2006	2011	2016	2021	2026	2031	Avg. % change
Copmanhurst	4,920	5,240	5,580	5,920	6,280	6,640	1.2%
Grafton	17,150	16,760	16,380	16,030	15,680	15,290	-0.5%
Maclean	18,370	19,560	20,740	21,920	23,080	24,150	1.1%
Nymbodia	4,580	4,690	4,820	4,960	5,110	5,260	0.6%
Ulmarra	6,900	7,160	7,430	7,720	8,010	8,280	0.7%
Clarence Valley	**51,920**	**53,410**	**54,950**	**56,550**	**58,160**	**59,620**	**0.6%**

Source: DIPNR Population projections 2004, AEC*group*

There are two other sources of future population and residential growth for Clarence Valley: the *Settlement Strategy (1999)* and the *Draft Mid North Coast Regional Strategy*. Council's Settlement Strategy considered a population of 46,555 persons in 1996 and a population target in 2016 of 60,290 persons, or around 5,340 persons higher than that projected by DIPNR above. By comparison, the *Draft Mid North Coast Strategy*, which is the most recent of the population projections, establishes a projection of 7,000 additional dwellings in Clarence Valley over 25 years, or possibly 17,500 additional persons, more than two times higher than the DIPNR projected additional persons. The Strategy notes potential for new urban growth within the Grafton and Maclean areas, particularly within the suburbs of Clarenza and Junction Hill in Grafton and Gulmarrad in Maclean. Yamba is the current focus of coastal development in the Clarence but its continued development may be limited due to physical and ecological constraints.

2.3 Demographics

The demographic trends analysis indicates the Clarence Valley is a relatively low socio-economic region in most respects, evidenced by its:

- Older population;
- Higher dependency ratio;
- Low labour force participation;
- Higher rates of part-time employment;
- Significantly higher unemployment;
- Significantly lower household income;
- Low computer and internet usage;
- Low completion of Year 12 schooling;
- Low attainment of non-school qualifications; and
- High ratio of blue collar workers.

As a measure of the socio-economic status of regional areas, the ABS produce and report Socio-Economic Index for Area's (SEIFA) data. Results for the Clarence Valley are outlined in **Table 2.3**. Four different measures are provided:

- *Index of Disadvantage* – This index is derived from attributes such as income, educational attainment, unemployment, and dwellings without motor vehicles. In particular it focuses on low-income earners, relatively lower educational attainment and high unemployment.

- *Index of Advantage/Disadvantage* – Low values indicate areas of disadvantage, and high values indicate areas of advantage. It takes into account variables relating to income, education, occupation, wealth and living conditions.

- *Index of Economic Resources* – Variables for this index include those relating to the income, expenditure and assets of families, such as family income, rent paid, mortgage repayments, and dwelling size.

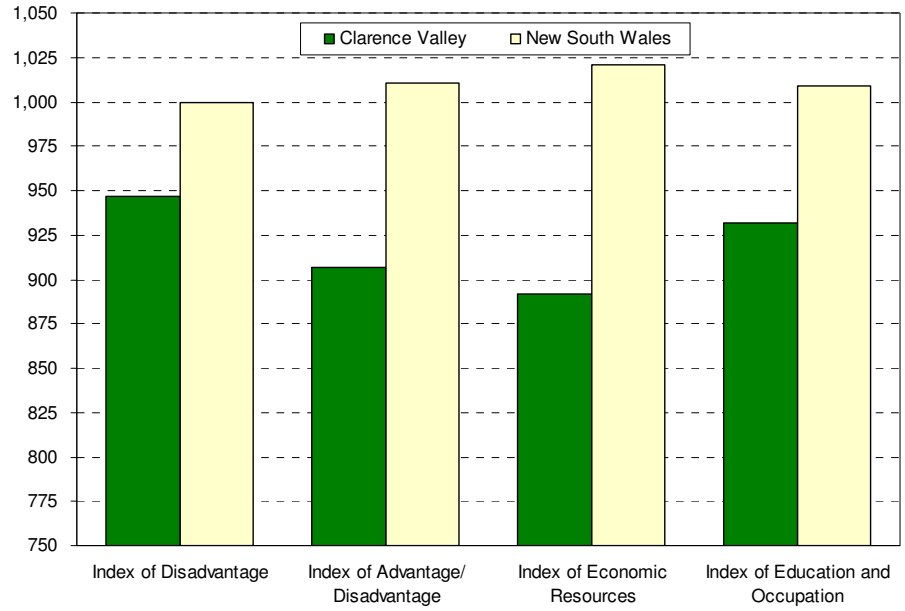
- *Index of Education and Occupation* – This index includes variables relating to the educational and occupational characteristics of communities, such as the proportion of people with a higher qualification or those employed in a skilled occupation.

It is clear from the analysis in **Figure 2.3** that the SEIFAs for the Clarence Valley are decidedly below state averages across each of the indexes. In terms of the index of disadvantage, Clarence Valley's rating of 947 is below the State rating of 1,000. The index of advantage/ disadvantage for the Clarence Valley is lower still at 907 relative to the state benchmark of 1,011, while the index of economic resources (more financial-based) is lower again at 892 versus a state benchmark of 1,021.

In terms of percentage and decile ratings, the Clarence Valley's ratings are below the mid point of the SEIFA of 5:

- Index of Disadvantage – 2.6;
- Index of Advantage/Disadvantage – 2.5;
- Index of Economic Resources – 1.2; and
- Index of Education and Occupation – 2.3.

Figure 2.3: SEIFAs, 2001 Census



Source: ABS 2001 Census, AEC*group*

Generally, Ulmarra scores the lowest across all the indexes. Grafton's index is generally the highest (with the exception of the index of disadvantage), while Maclean scores highest in the index of disadvantage. Copmanhurst and Nymboida score better in the index of education and occupation.

Table 2.3: SEIFAs, 2001 Census

Region	Disadvantage	Advantage/ Disadvantage	Economic Resources	Education and Occupation
Copmanhurst	963	915	894	942
Grafton	937	916	915	933
Maclean	961	908	884	938
Nymboida	973	916	889	941
Ulmarra	907	869	857	897
Clarence Valley	**947**	**907**	**892**	**932**
Decile rating	*2.6*	*2.5*	*1.2*	*2.3*
New South Wales	**1,000**	**1,011**	**1,021**	**1,009**

Source: ABS 2001 Census, AEC*group*

2.4 Building Approvals

Building approvals data provides an insight into new investment in the Clarence Valley. There are two components:

- Residential building investment consists of investment in the construction of new dwellings, including flats, units and apartments, along with investment in the alterations and additions to existing dwellings; and
- Non-residential investment consists of investment in the construction of all non-residential development, which commonly includes retail, commercial, tourism, community, industrial, engineering and other non-residential infrastructure.

New residential building investment fell back to $51.8 million in 2005-06 from a peak of $70.1 million in 2003-04 (see **Table 2.4**). This reflected a decline in the number of residential building approvals from 451 in 2003-04 to 244 in 2005-06.

Table 2.4: Number and Value of New Residential Building Approvals, Clarence Valley

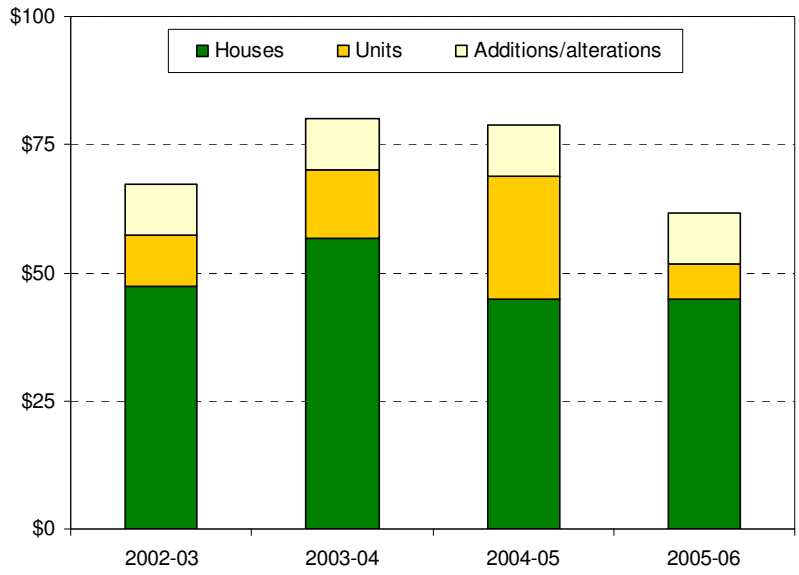
	No. of Dwellings			Value of Dwellings ($ million)		
Year	Houses	Units	Total	Houses	Units	Total
2002-03	315	27	342	$47.3	$9.9	$57.2
2003-04	450	1	451	$56.7	$13.4	$70.1
2004-05	265	138	403	$45.0	$23.7	$68.7
2005-06	244	33	277	$44.9	$6.9	$51.8

Source: ABS 8731.0

In addition to new residential dwelling investment, there has been increasing investment in alterations and additions to dwellings with $12.8 million recorded in 2005-06, up from $10.2 million in 2004-05.

Overall, there was $64.6 million of investment in residential property in the Clarence Valley in 2005-06 (see **Figure 2.4**). This was a $14.3 million decrease from 2004-05.

Figure 2.4: Total Value of Residential Building Approvals, Clarence Valley ($m)



Source: ABS 8731.0

There was a record high $31.2 million in non-residential building approvals in the Clarence Valley in 2005-06, the second year of significant growth (**Table 2.5**).

Table 2.5: Value of Non-Residential Building Approvals, Clarence Valley ($000)

Year	New	Alterations & Additions	Total
2002-03	$9,881	$5,447	$15,328
2003-04	$5,499	$7,748	$13,247
2004-05	$21,124	$5,804	$26,928
2005-06	$24,239	$7,004	$31,243

Source: ABS 8731.0

2.5 Labour

The Department of Employment and Workplace Relations reported the trend unemployment rate in the Clarence Valley in the December Quarter 2006 at 7.5%, above the New South Wales (5.3%) and Australian (4.9%) averages (see **Table 2.6**). There were an estimated 1,643 unemployed persons in the Clarence Valley in December 2006. Trend analysis suggests the number of unemployed persons has decreased resulting in the unemployment rate falling from 8.7% in December 2005.

Table 2.6: Unemployment Rate Trends (Smoothed Series)

Region	Dec 2005	Mar 2006	Jun 2006	Sep 2006	Dec 2006
Copmanhurst	7.7%	7.5%	7.4%	7.1%	6.6%
Grafton	7.9%	7.8%	7.7%	7.4%	6.9%
Maclean	9.6%	9.3%	9.1%	8.7%	8.1%
Nymboida	7.7%	7.5%	7.5%	7.1%	6.7%
Ulmarra	10.5%	10.2%	10.1%	9.6%	9.1%
Clarence Valley	**8.7%**	**8.5%**	**8.4%**	**8.0%**	**7.5%**
New South Wales	5.2%	5.2%	5.3%	5.4%	5.3%
Australia	5.1%	5.1%	5.1%	5.0%	4.9%

Source: Department of Employment and Workplace Relations Small Area Labour Markets, Dec Qtr 2006

3. Local and Regional Planning Context

3.1 Clarence Valley Industrial Lands Audit

The *Clarence Valley Industrial Lands Audit*, prepared by SGS Economics in August 2006, analysed the existing supply of industrial land in Clarence Valley. The Audit provides detailed information regarding existing businesses and land uses located in industrial zones, occupied and vacant industrial land, an assessment of the vitality and quality of the industrial zoned land offered, and an assessment of site encumbrances for each area. The Audit also produced a development potential rating for each land parcel to measure the ability for land parcels that could possibly attract a densification of development. The Audit found the existing set of industrial lands face, in some cases, significant encumbrances and challenges to future development. This confirmed to some extent a growing concern that available industrial land stocks are insufficient to meet demand, thereby impacting on the growth and well being of the local economy.

3.2 Council Local Environmental Plans

Local Environmental Plans (LEPs) set out the preferred arrangement for the future use, development and management of land in an area. The LEPs provide the local planning context for the study including where existing industrial land has been allocated and what the permitted/intended uses are for industrial zones and the circumstances governing this. The four LEPs for Grafton (1988), Maclean (2001), Copmanhurst (1990) and Ulmarra (1992) identify a single Industrial zone 4(a) to accommodate industrial uses. The intent and objectives of each of these zones is described in Chapter 4. The Nymbodia LEP (1986) and Richmond River LEP (1992) do not contain industrial zonings. There are seven main designated industrial zones in the Clarence Valley as described in Chapter 6.

3.3 North Coast Regional Environmental Plan

The *North Coast Regional Environmental Plan (REP)* 1988 establishes a regional planning framework for the North Coast region of New South Wales and is implemented by the NSW Department of Planning. The Department of Planning will need to provide approval for any rezonings of new industrial land in Clarence Valley. The main criteria that needs to be satisfied from the Department's perspective is that new industrial land is located, where possible, within the urban growth boundaries defined in the Draft Mid North Coast Strategy and that new land meets the criteria established in Clause 38 – Land Release Principles and Processes in the *North Coast REP*. These issues mainly relate to a preference for development that results in urban growth on land that adjoins other land which is already used for urban purposes and is the most economic service, not developing land that is unsuitable due to its agricultural capability or which adjoins agricultural land uses, nor developing land unsuitable due to environmental hazards.

3.4 Clarence Valley Settlement Strategy

The *Clarence Valley Settlement Strategy (1999)* represented a valley-wide strategic approach to future planning by the Councils of Copmanhurst, Grafton, Maclean, Nymbodia and Ulmarra in conjunction with the Department of Urban Affairs and Planning. The Strategy outlines a vision of how the Clarence Valley can grow sustainably over the next 20 years and seeks to locate population growth areas which will have the least costs in economic, social and environmental terms. The strategy represents an urban and rural land release strategy in terms of the North Coast REP and includes a basic hierarchical pattern of city, towns, villages and rural areas. The key implications for this study are the population targets established for each of the local regions across Clarence Valley which impacts the demand for local service based industry and also labour force distribution.

3.5 Clarence Valley Economic Strategic Plan

The *Clarence Valley Economic Strategic Plan* is an action-orientated document to direct and form a work program for economic development within the region into the future. This Strategy identifies a package of initiatives linked to four core themes. The four themes, having been identified during the consultation process, in conjunction with the Steering Committee and with reference to broader regional and state planning priorities. The Strategy outlines an economic development framework to ensure the sustained economic prosperity of the Clarence Valley and the strategies required in the short term to facilitate and enable this process.

The first of the core themes revolves around building on competitive advantages. In relation to industrial land, the Strategic Plan identified the potential for a marine industry cluster which would involve a geographically concentrated marine industry precinct to facilitate greater interaction between businesses and facilitate import replacement and efficiency advantages. This would have positive benefits for increased value adding and economic activity throughout the marine industry.

The second value adding theme contained strategies relating to wood fibre, soy bean processing facility, value adding to commercial fishing, marine and aquaculture industries, and sawn and raw timber. These strategies would ensure better utilisation of existing resources and drive employment generation from local value adding. The business attraction and retention core theme involved a strategy to develop a transport hub which would secure the future of the Clarence Valley as a regional industry, transport and distribution centre. The final theme related to planning and facilitation, with one of the strategies relating to land use planning. The strategy recommends Council undertake the required strategic planning studies to inform the development of a single uniform LEP throughout the Clarence Valley. This would also ensure that there is integration of the competitive advantages of the Clarence Valley within Council forward planning processes. The Clarence Valley Industrial Lands Strategy is a response to this requirement.

3.6 Clarence Valley Sustainability Initiative

The *Clarence Valley Sustainability Framework* highlights a number of principles and aspects that should be considered to ensure sustainable and appropriate development within the Clarence Valley. The documents defines sustainability in the following way:

"Sustainability involves identifying what we really care for as a community on a long term basis – ecological, economic, social and cultural values – and engaging in behaviour that ensures these values are maintained for present and future generations"

With regard to planning for future development, one of the guiding principles of the initiative is "taking a precautionary and anticipatory approach" which requires that decisions regarding future proposed development need to be based on a careful assessment of the potential risks, including reference to examples from other locations.

The *Clarence Valley Sustainability Initiative* also highlights a number of principles and aspects that should be considered to ensure sustainable and appropriate development within the Clarence Valley, including selecting sites for new industrial land. These are identified in Chapter 9 of this report.

3.7 Draft Mid North Coast Regional Strategy

The *Draft Mid North Coast Regional Strategy* aims to ensure that adequate land is available and appropriately located to accommodate the projected housing and employment needs of the region's population over the next 25 years. This Strategy has a number of implications for industrial land use planning in the Clarence Valley. In particular, the Strategy sets roles for each main urban locality, establishes indicative industrial land requirements for the next 25 years to 2031, and establishes population targets and residential requirements for Council areas.

The Strategy defines Grafton as a Major Regional Centre and Maclean as a Major Town, with Major Towns promoted as the focus of employment services (see **Figure 3.1**). A Major Regional Centre is outlined to accommodate the majority of regional employment opportunities and to deliver state and regional services to the region, including a concentration of business, employment, warehouses and transport logistics. The Strategy indicates Grafton has land and infrastructure available to greatly increase its industrial capacity. Major Towns, like Maclean, have a functional role in servicing their sub-regions (in this case the Lower Clarence) and may have warehousing and transport logistics.

In terms of population, the Strategy establishes a dwelling projection of 7,000 additional dwellings in Clarence Valley over 25 years, or around 17,500 persons. The potential for new urban growth exists within the Grafton and Maclean areas, particularly within the suburbs of Clarenza and Junction Hill in Grafton and Gulmarrad in Maclean. Yamba is the current focus of coastal development in the Clarence but its continued development may be limited due to physical and ecological constraints. However, there is sufficient land in the Gulmarrad area and in the non-coastal areas of the subregion to accommodate the expected growth.

The Strategy notes that the availability of affordable industrial land across the region is becoming scarce, particularly in the major coastal areas of Coffs Harbour and Port Macquarie. The Strategy comments that the major regional centres and major towns further from the coast have the capacity to provide the land and other infrastructure to support industrial development, especially for industry with an export focus. Grafton, Kempsey and Taree in particular have significant potential for employment lands development that can be explored.

The Strategy indicates the minimum amount of additional industrial land needed in the Clarence Valley over the next 25 years is 22 hectares (ha), versus 83 ha in the Coffs Coast region, 82 ha in the Hastings-Macleay Valley region and 38 ha in the Manning Valley-Great Lakes area. The Strategy indicates that when Councils identify new land they should consider the specific uses and have regard for changing market trends. The Strategy also recommends Council restrict bulky goods retailing in industrial zones.

In terms of the implementation of the Strategy, Councils are required to prepare a local growth management strategy by mid 2007 to define agreed growth areas and address land supply issues for the next 25 years. All future industrial land in the Clarence Valley should be included within the agreed growth areas.

Figure 3.1: Mid North Coast Regional Centres Hierarchy

Source: Draft Mid North Coast Regional Strategy (2007)

3.8 Draft Affordable Housing Strategy

Council is presently finalising its Affordable Housing Strategy. The Strategy so far has identified the need to increase the supply of affordable housing for disadvantaged target groups within the community.

The housing issues that were identified have been clustered into four priority areas:

- Expand social housing;
- Develop planning mechanisms that provide opportunities for affordable housing;
- Change perceptions of landlords and investors; and
- Promote the comparative advantages of developing in Clarence Valley.

Being a low socio-economic region, the Strategy notes the importance of creating opportunities for employment and reducing the impact of housing stress faced by low-income households. The Strategy also notes transport and travel times are an important issue linked to affordable housing. When planning for additional supply in affordable housing access to employment, transport and other services is a key requirement.

The *Draft Mid North Coast Regional Strategy* identifies future urban growth for the Upper and Lower Clarence and there is potential for affordable housing projects in the area of South Grafton, Junction Hill and Townsend. This places affordable housing in close proximity to possible places of employment in the Industrial areas.

4. Industrial Land Uses

Industrial land can be used for a range of business activities. Some activities have a more significant environmental impact than others and as a result there are a number of different categories of industrial land use.

The definition of industrial land uses to be adopted for this study considers:

- General standards for industrial land analysis and strategies;
- Available methodologies to assess and project the demand for industrial land;
- Private sector's perspective of what constitutes industrial land uses;
- Existing business uses and intended business types in industrial land zones;
- Existing Council planning schemes and definitions;
- NSW Department of Planning's new standard LEP template; and
- ABS industry classifications to assist with data collection and analysis.

4.1 Existing Council LEP and Definitions

There are six LEPs currently in effect in different areas of the Clarence Valley. The following relevant planning policy is provided regarding land uses:

- *Grafton LEP (1988)*: Zone 4(a) Industrial Zone – the objective of this zone is to provide land for general industrial uses, ancillary retail uses, brothels and service industries unsuited to other areas.

- *Maclean LEP (2001)*: Zone 4(a) Industrial Zone – the primary aim of this zone is to enable industrial development and related uses which produce a range of goods and services and provides employment without adversely effecting adjoining land, or air or water quality.

- *Copmanhurst LEP (1990)*: Zone 4(a) Industrial Zone – the objectives of this zone are to allocate sufficient land in suitable locations to facilitate and promote the establishment of a broad range of industrial uses and to provide the necessary support facilities and services in industrial areas.

- *Ulmarra LEP (1992)*: Zone 4(a) General Industrial Zone – the objectives of this zone are to set aside certain land for the purposes of industries (other than offensive or hazardous industries), to encourage local employment in the Shire, to enable the development of land for other purposes where it can be demonstrated that suitable land for the proposed development is not available elsewhere and would not detrimentally affect any nearby industrial land.

The *Nymbodia LEP (1986)* and the *Richmond River LEP* (1992) don't contain industrial related zones.

4.2 NSW Draft Standard LEP Template

The draft standard template identifies the following compulsory industrial zones with the following associated objectives:

- General industrial (zone IN1):
  - To provide for a wide range of industrial and warehouse land uses
  - To encourage employment opportunities
  - To minimise any adverse impact of industry on other land uses;

- Light industrial (zone IN2):
  - To provide for a range of light industrial, warehouse and related land uses
  - To encourage employment opportunities
  - To minimise any adverse impact of industry on other land uses
  - To enable other land uses that provide facilities and services to meet the day to day needs of workers in the area;

- Heavy industrial (zone IN3):
  - To provide for suitable areas for those industries that need to be separated from other land uses
  - To encourage employment opportunities
  - To minimise any adverse effect of industry on land uses in other zones; and

- Enterprise corridor (zone B6):
  - To promote businesses along main roads and to encourage a mix of compatible uses
  - To enable a mix of employment (including business, office, retail and light industrial uses) and residential uses
  - To maintain the economic strength of centres by limiting the retailing of food and clothing; and

- Business/technology park (zone B7):
  - To provide for a range of office and light industry uses
  - To encourage employment opportunities; and
  - To enable other land uses that provides facilities and services to meet the day-to-day needs of workers in the area.

There is overlap in these zones and their objectives, along with their permitted uses with consent. This overlap makes it difficult to independently assess the demand for each specific zone. Rather, an industry definition/categorisation approach that considers land uses transferable to the draft LEP template definitions needs to be adopted.

4.3 Other Fringe and Commercial Business Uses

While light, general and heavy industry are the preferred uses in industrial zones in most planning instruments, similar site requirements by large format and bulky goods retailers and warehouses has meant these business types have also increasingly located in industrial zones. In response, many local planning authorities have actively sought to address these issues by prohibiting further commercial development in industrial zones.

The *Grafton LEP 1988* indicates bulky goods retailing should only be located in industrial zones if suitable land is not available in any nearby business centre, the predominantly industrial nature of 4(a) land would not be defeated and the proposed development would not jeopardise the viability of any business centre.

The draft standard LEP template for NSW defines an Enterprise Corridor zone for such commercial land uses. Additionally, the *Draft Mid North Coast Regional Strategy* recommends local government authorities restrict bulky goods retailing in industrial zones. For these reasons and preferred planning directions, these uses are not directly considered in this study and are better suited to retail planning.

4.4 Industrial Land Use Categories

There is no accepted NSW methodology to categorise industrial land uses to assess projected demand. However, the Queensland Department of State Development has prepared such a methodology which adopts the following general standards for industrial land uses based on ABS industry classifications:

- Heavy general industry:
  - Petroleum, coal, chemical and associated product manufacturing
  - Non-metallic mineral product manufacturing
  - Metal product manufacturing
  - Other noxious and hazardous uses;

- Modern general industry:
  - Food, beverage and tobacco manufacturing
  - Textile, clothing, footwear and leather manufacturing
  - Wood and paper product manufacturing

    - Printing, publishing and recorded media
    - Machinery and equipment manufacturing
    - Other manufacturing;

- Transport, warehousing & storage:
    - Wholesale trade
    - Transport & storage; and

- Other supporting industry:
    - Depot and service facilities for the construction industry
    - Communications facilities (e.g. call centres)
    - Retail outlets for manufactured goods or servicing the industrial estate
    - Financial and property service providers supporting industry; and
    - Personal services.

These categories are adopted in the demand analysis for this Strategy. Each of these categories and their sub-sectors align with ABS industry classifications, enhancing data availability and reporting consistency. Together, the categories align with the aggregation of three broad industries: manufacturing; wholesale trade; and transport & storage.

5. Economic Significance and Opportunities

5.1 Economy Size and Structure

The size of the Clarence Valley economy, as measured by Gross Regional Product (GRP)[1], was estimated at $1.46 billion in 2005-06, accounting for 0.50% of the New South Wales Gross State Product (GSP) of $319.54 billion (see **Table 5.1**). In per capita terms, Clarence Valley records a lower ratio of $29,184 per capita relative to the State average of $46,801. This is explained by the fact that Clarence Valley accounts for 0.73% of the State's population compared with a lower 0.50% of its economic value adding.

The information & finance and resources-based industry groupings are where the main differences in the Clarence Valley economy lie when compared with the New South Wales economy. Compared with New South Wales, the Clarence Valley regional economy exhibits greater strength in the resources-based (7.0% versus 4.4%), commerce-based (18.1% versus 15.6%) and household-based (15.5% versus 12.4%) sectors. On the other hand, the regional economy exhibits less strength in the goods-based (19.6% versus 20.1%) and information and financed-based (28.1% versus 36.5%) sectors.

The analysis demonstrates the Clarence Valley economy is largely driven by resources and goods based industries (such as agriculture and associated manufacturing, particularly in the areas of sugar, beef, forestry and fishing), household based industries (such as tourism and services), government administration, health and education (mainly in the regional centre of Grafton) and property & business services (particularly in key coastal growth areas).

In terms of location quotients, which measure the relative significance of each individual industry in the Clarence Valley relative to a benchmark region (in this case New South Wales), Clarence Valley records considerably greater economic strength/reliance (i.e. where the quotient is highest) in the areas of agriculture, government, accommodation, retail, health, education and utilities. On the other hand, the region records less strength/reliance in the business and finance service sectors, mining and construction.

Table 5.1: Structure of the Clarence Valley Regional Economy, 2005-06

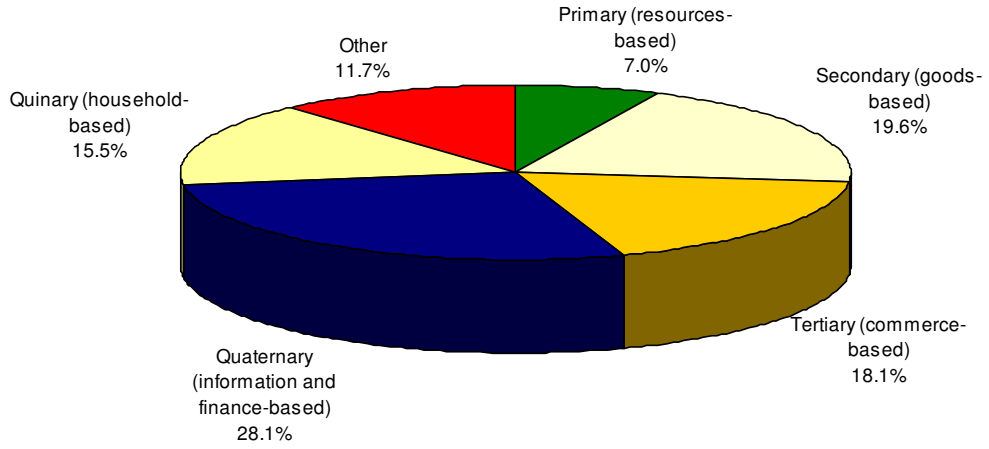
	Clarence Valley Factor Income			Location Quotient
Industry	**$m**	**Rank**	**%**	
Primary (resources-based)				
Agriculture	$89.0	6	6.9%	3.7
Mining	$1.2	19	0.1%	0.0
Sub-total	*$90.2*		*7.0%*	*1.6*
Secondary (goods-based)				
Construction	$57.1	11	4.4%	0.6
Manufacturing	$159.2	1	12.3%	1.1
Electricity, Gas & Water Services	$36.7	15	2.8%	1.3
Sub-total	*$253.0*		*19.6%*	*1.0*
Tertiary (commerce-based)				
Retail Trade	$111.8	3	8.7%	1.4
Transport & Storage Services	$50.0	12	3.9%	0.9
Wholesale Trade	$71.5	9	5.5%	1.0
Sub-total	*$233.3*		*18.1%*	*1.2*
Quaternary (information and finance-based)				

[1] The total market value of goods and services produced in the Clarence Valley within a given period after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital. Thus gross regional product, as defined here, is 'at market prices'. It is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services.

	Clarence Valley Factor Income			Location Quotient
Industry	**$m**	**Rank**	**%**	
Property & Business Services	$107.6	5	8.3%	0.6
Education	$78.9	7	6.1%	1.4
Government Administration & Defence	$77.3	8	6.0%	1.7
Finance & Insurance Services	$60.8	10	4.7%	0.4
Communications Services	$38.0	14	2.9%	1.1
Sub-total	*$362.6*		*28.1%*	*0.8*
Quinary (household-based)				
Health & Community Services	$110.0	4	8.5%	1.3
Accommodation, Cafes & Restaurants	$49.3	13	3.8%	1.5
Personal & Other Services	$24.8	16	1.9%	1.0
Cultural & Recreation Services	$16.3	18	1.3%	0.8
Sub-total	*$200.4*		*15.5%*	*1.3*
Other				
Ownership of Dwellings	$117.6	2	9.1%	1.0
General Government	$24.1	17	1.9%	1.0
Non Classifiable	$9.6		0.7%	1.0
Sub-total	*$151.3*		*11.7%*	*1.0*
Total Factor Income	***$1,290.8***		**100.0%**	***1.0***
Estimated Taxes Less Subsidies on Production and Imports	*$169.3*			
Statistical Discrepancy	*$2.1*			
Gross Regional Product	**$1,462.2**			

Note: (a) Location quotients are a measure of the relative significance of each industry in the regional economy against the benchmark of NSW and are calculated as a ratio between the % of the NSW total in that industry and the % of the NSW total in all industries. A ratio > 1 indicates the region is more reliant on that industry than the average for NSW.
Source: Clarence Valley Council

Figure 5.1. Structure of Clarence Valley Regional Economy, % of GRP (2005-06)



Source: Clarence Valley Council

5.2 Significance of Industrial Land Sector

The industrial land use categories can generally be described by the three broad industry sectors of manufacturing, wholesale trade and transport & storage. The total GRP of these sectors was estimated at $280.7 million in the Clarence Valley in 2005-06, accounting for 21.7% of total GRP (see **Table 5.2**). This percentage of economic

contribution was above the NSW average of 20.7% and highlights the importance of the sector to the regional economy. The contribution of manufacturing was the highest in relative terms with a location quotient of 1.1 and value added terms of $159.2 million. In employment terms, the industrial land sectors accounted for 17.0% of employment in 2001 of 4,638 persons. Providing an appropriate supply of industrial land across the Clarence Valley will provide further employment opportunities for the region.

Table 5.2: Economic Analysis of Industrial Land Categories in the Clarence Valley, 2005-06

	Clarence Valley Factor Income			State Factor Income	Location Quotient	Clarence Valley Employment[(a)]	
Industry	**$m**	**Rank**	**%**	**%**		**No.**	**%**
Manufacturing	$159.2	1	12.3%	11.1%	1.1	1,324	8.7%
Transport & Storage Services	$50.0	12	3.9%	4.2%	0.9	630	4.2%
Wholesale Trade	$71.5	9	5.5%	5.4%	1.0	627	4.1%
Industrial Total	**$280.7**		***21.7%***	**20.7%**	**1.0**	**4,638**	**17.0%**
Total Economy	**$1,462.2**		**100.0%**	**100.0%**	**1.0**	**15,559**	**100.0%**

(a) 2001 Census employment
Source: Clarence Valley Council

5.3 Industrial Business Sector Profile

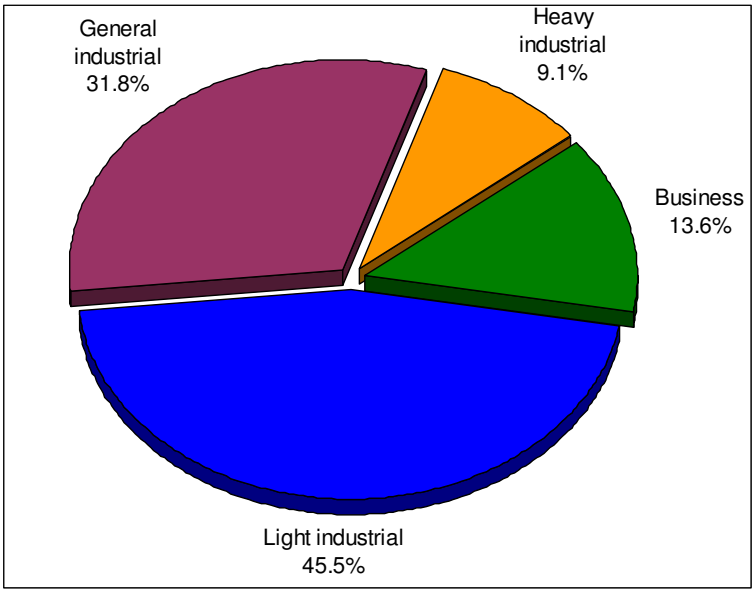
The Clarence Valley industrial market comprises mostly small businesses providing local trades and services to their surrounding residential communities. The larger businesses in the region are involved in saw milling and timber processing, marine and boat/ship manufacturing, and steel fabrication and engineering.

A summary of the key business trends is as follows:

- Light industrial is the most common industry classification of businesses that use industrial land in the Clarence Valley, followed by general industrial (see **Figure 5.2**). There are a small number of heavy industrial and business/commercial comprise the remainder of businesses;
- Most businesses have been operating in the region for a short period of time with all businesses having been established for less than 9 years. Businesses with operations spanning between 6-8 years were the most common with 60.7%. New businesses with operations under 4 years accounted for 28.6% of businesses;
- Industrial businesses that own their premises were the more common respondents accounting for 60.7% of the sample. Leasing comprised the remaining 39.3%;
- Businesses operating from a single site are most common at 82.1% according to the survey results;
- Businesses that established their operations on their current site were most common with 60.7% having never moved;
- Different vehicles access industrial sites in the Clarence Valley. Semi Trailers are very common on industrial sites with 73.3% visited by them. Smaller trucks including pick-ups (60.0%), garbage trucks (56.7%) and full-size vans (53.3%) all access more than half of all industrial sites;
- The majority of surveyed businesses indicated their main markets for their products and services was local (83.3%). A regional market (53.3%) around Northern NSW was also common for businesses. Businesses who serviced interstate markets were also common with 36.7%. Around one-quarter of survey respondents were national businesses with 13% being internationally orientated businesses; and
- The main sources of non-labour inputs varied between businesses. The local region and interstate markets were each important (36.7%). International (3.3%) and

national (10.0%) were not major source markets for businesses due to the abundance of resources and inputs on the Eastern Seaboard.

Figure 5.2: Industry Classification as % of Businesses



Source: AEC*group* Industrial Business Survey (2006)

5.4 Competitive Strengths and Weaknesses

The competitive position of the Clarence Valley as a place to invest in industrial development will be central to the future demand for industrial land. The region's competitive position can be assessed by an analysis of competitive strengths and weaknesses, and industrial land supply and demand trends versus other regions.

The business, land owner, developer and real estate agent surveys undertaken for this project provide some guidance to what existing market participants believe are the key competitive advantages of industrial land and doing business in the Clarence Valley. The following competitive advantages were most commonly perceived:

- Strategic location relative to Brisbane and Sydney;
- Coastal location alongside the Clarence River;
- Cost competitiveness of industrial land and occupancy;
- Supply of undeveloped industrial land;
- Relatively strong population growth in coastal areas;
- Competitive labour market and staffing costs;
- Access to road and sea transport infrastructure; and
- Secure water supply and other essential infrastructure services.

In summary, based on an independent review, the competitive advantages of the region centre around its strategic location between the metropolitan centres of Sydney and Brisbane, its comparatively cheaper land relative to metropolitan and other Mid North Coast centres, and its developed road transport infrastructure.

On the other side of the ledger, the main competitive disadvantages, and issues that are identified as constraining the growth of the Clarence Valley industrial market, are perceived as the following based on survey results:

- Planning approvals process and charges;
- Comparatively high sewerage levies;
- Local road network and internal town access;
- Commercial attractiveness and suitability of the supply of industrial land;
- Skills shortages in the local area;
- Slow market response from Council and developers;

- Conversion of investment interest into on-the-ground development; and
- Limited releases of new industrial land by Council.

In summary, based on an independent review and stakeholder opinion, the main competitive disadvantages revolve around the planning process and delays, charges and general issues, the road infrastructure in estates, the commercial attractiveness and suitability of vacant industrial land, and conversion of investment interest into development. These issues are considered to constrain growth and have resulted in some developer interest moving to other regions.

5.5 Specific Industry Growth Opportunities

It is necessary to identify and analyse the possible industry opportunities that would have a comparative and competitive advantage within the Clarence Valley and contribute to economic growth and the economic development agenda of Council following on from the *Clarence Valley Economic Strategic Plan*.

Economic growth can be defined as the increase over time in the capacity of an economy to produce goods and services. Economic growth is generally a function of population growth and skill base, utilisation of natural resources, capital availability, infrastructure development, technical innovation, attitudinal trends and external factors such as market forces, government policy and legislation.

Economic development in the Clarence Valley has traditionally relied on the development of infrastructure, population and services around the use or exploitation of specific resources and natural assets. This has included primary agricultural production, including sugar, forestry, fishing and aquaculture. With these resources moving to full development, without a specific development impetus, additional economic development can only be achieved through organic growth and expansion.

The ultimate goal of any policy or strategy for economic development is to generate and share wealth through the creation and rewarding of jobs. Strategically targeted investment facilitation is a key component of any efforts to generate wealth, and therefore jobs in a local or regional economy. The injection of new capital is a key driver of economic expansion and job growth. A suitable supply of industrial land development presents the opportunity to attract new investment and capital to the region.

Demand for industrial land is commonly divided into general services-based business and strategic export business. The demand for general services-based business is mainly linked to local population and employment growth and includes business driven by household consumption and local commercial trends. By comparison, strategic export industries are based on competitive advantages and need to be developed and promoted, often in partnership between the public and private sectors.

There are a number of industry sector opportunities within the Clarence Valley that could be further promoted through the adequate provision of industrial land. The *Clarence Valley Economic Strategic Plan* identified the following opportunities:

- Marine industry development;
- Processing facilities for timber, wood fibre and soy beans;
- Value adding activities for commercial fishing and aquaculture; and
- Transport and freight hub.

Each of the opportunities identified in the Economic Strategic Plan has been based on a rigorous analysis of competitive strengths and the capacity of the region. They align with many of the comments received from industry stakeholders, including:

- Marine industry development;
- Timber manufacturing expansion;
- Transport and freight hub;
- Food processing industries;
- Aquaculture industry;
- White soya bean processing;

- Timber and furniture manufacturing;
- Biotech development;
- Sugar and waste processing;
- Compost tea processing; and
- Commercialisation of agriculture research.

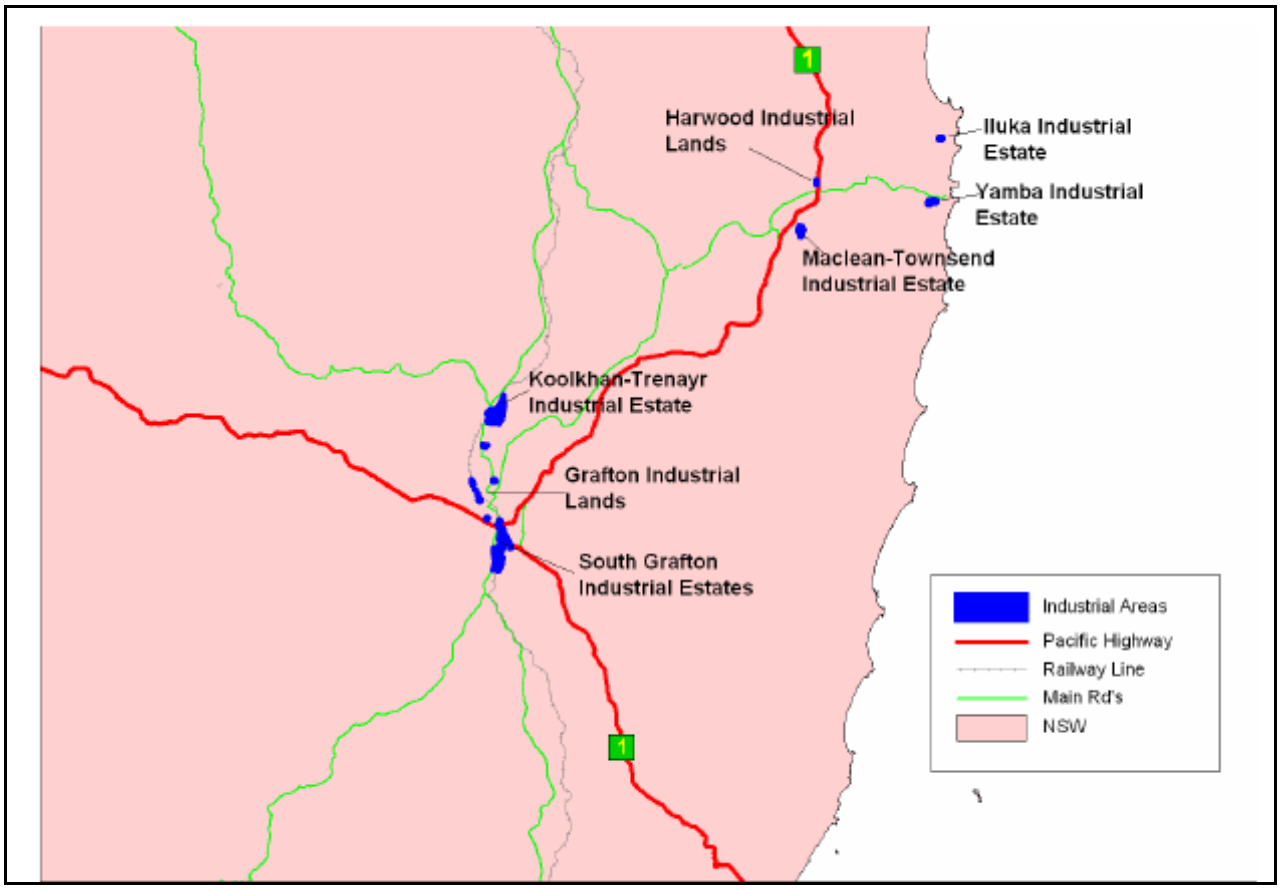
Land available for the development of these industries will be critical to the future economic development of the Clarence Valley. A key requirement of this study is to ensure suitable supply of industrial land to achieve established economic targets. On the basis of the above analysis, the key economic opportunities to be considered in the industrial land planning process include marine industry development, transport and freight hub, and land available for a range of local value adding industries.

6. Existing Industrial Land Supply

6.1 Industrial Areas

Clarence Valley records seven industrial areas having access to the Gwydir Highway, Pacific Highway, Summerland Way and North Coast rail line transport routes, power, water, sewage services and business development network options (see **Figure 6.1**). The largest industrial precinct in terms of area is Koolkhan-Trenayr located north of Grafton on the Summerland Way, while the largest in terms of occupancy is South Grafton. There are small industrial areas located in Maclean-Townsend and Iluka, with a more sizeable area at Yamba. There are scatterings of industrial land within Grafton.

Figure 6.1: Location of Industrial Areas in the Clarence Valley



Source: Clarence Valley Industrial Lands Audit

6.2 Business Activities

A brief overview of the size and activities in the main industrial areas is provided below:

- Iluka Industrial Estate – 6.3 ha: The existing developed lots include mini storage units, fish processing works, concrete batching plant, marine motor trimmer and fiberglass fabrication;

- Koolkhan–Trenayr Industrial Estate – 173.0 ha: The estate is dominated by large timber industry related and timber products manufacture establishments, including three large scale timber processing operations and a timber log preservation plant. Other uses comprise engineering works, concrete products manufacture, earthmoving contractors depot, foundry, panel beaters and vehicle smash repair workshops, plant nursery, tile display and sales centre, vehicle wreckers, second hand dealer, mini storage, logging contractors depot and Council works depot;

- Maclean-Townsend Industrial Estate – 23.8 ha: The range of industries includes transport contractors, a milk depot, fuel depots, car repair stations, an engineering works, mini storage units, and kitchen fabrication works. The area presents opportunities for industries requiring large areas of comparatively unconstrained land adjacent to a coastal growth area and access to the Pacific Highway;

- South Grafton Industrial Estate – 124.2 ha: Existing uses comprise sawmills, timber processing, timber sales, brickworks and brick and paving sales, sawmill equipment manufacture, monumental stone mason, glass and windscreen repair, joineries, building hardware and plumbing sales, smash repair and panel beating, vehicle repair workshops, transport depot, food wholesalers, electrical engineering workshop, truck repair and service workshop, hotel/motel, regional livestock selling centre, haulage company and furniture removalists, motor cycle repair workshop, mini storage, roof truss manufacture, taxi truck depot, fire wood depot, canoe sales and repairs, council depot, earthmoving contractors depot, dismantlers and wreckers yard, food processing factory, building display centre, furniture warehouse, fuel depot, cabinet makers, lattice and fence factory and sales, food distributor and bottled gas depot;

- South Grafton (Iolanthe Street) Industrial Estate – 6.1 ha: Existing uses comprise steel fabrication and welding workshop, wheel alignment and car repair workshops, rural produce store and rural machinery sales, caravan sales, shed manufacture and sales, fencing manufacture, building supplies, oil storage, and marine engineering, and others. Adjacent to the Pacific Highway, the area has been chosen for the siting of a Bunnings hardware store constructed in 2005;

- Yamba Industrial Estate – 20.0 ha: The range of industries includes building industry related activities such as timber yard, cabinet making, roof truss and frame manufacture, kitchen unit manufacture, boat building, plant hire and concrete batching plant. Service industries include car repair workshops, ice works, printery, upholstery and mini-storage units; and

- Harwood Industrial Estate – 0.67 ha: The range of industries is small and includes a farm machinery/mechanical repairs shop.

6.3 Development Status

The *Clarence Valley Industrial Lands Audit* estimated total zoned industrial land at 426.9 ha in the Clarence Valley in 2006 (see **Table 6.1**). Of this, an estimated 325.8 ha is occupied. This is a significant amount of occupied lands when compared with the region's population, which reflects the significant land areas of the sawmill and timber processing operators which are major export industries in the Clarence Valley.

There are approximately 100 ha of vacant undeveloped industrial land across Clarence Valley's existing industrial zones. South Grafton and Koolkhan-Trenayr industrial estates combined account for nearly 80% of the total vacant land area. However, in proportion to their actual land area, the industrial areas of Iluka (62.3%), Yamba (43.1%) and Maclean (44.1%) record the highest amount of vacant land. The lands in these three estates are relatively unconstrained and available for development. The Yamba vacant land is currently being developed, a new subdivision has been released for small tenants at Maclean-Townsend along with the likely establishment of a new depot.

The commercial attractiveness and suitability of the 100 ha of vacant undeveloped land has been questioned by market participants and suggests the need for new Greenfield land releases along with the revitalisation of existing industrial areas.

Table 6.1: Development Status of Industrial Land, Clarence Valley

	Iluka	Yamba	Harwood	Maclean-Townsend	Grafton	South Grafton	Koolkhan-Trenayr	Total
Total size (ha)	6.9	18.1	0.7	18.6	15.8	185.5	181.3	426.9
Total number of lots	25	49	2	35	45	219	55	430
Vacant developed (ha)	0.0	0.0	0.1	0.0	0.6	0.7	0.0	1.4
Vacant undeveloped (ha)	4.3	7.8	0.0	8.2	0.9	35.6	42.7	99.5
Occupied (ha)	2.6	10.3	0.6	10.4	14.3	149.0	138.6	325.8
Estimated floorspace used (ha)	2.0	4.8	0.3	7.9	10.3	89.4	127.2	241.9
Gap analysis FSR 0.5:1 (ha)	1.5	4.3	0.1	1.4	-2.4	3.3	-36.6	-28.4
Gap analysis FSR 0.7:1 (ha)	2.8	7.9	0.2	5.1	0.8	40.5	-0.3	57.0

Source: Clarence Valley Industrial Lands Audit (2006)

6.4 Access and Infrastructure Services

Businesses and the economy require essential infrastructure services to grow. The adequate funding of essential infrastructure can drive economic growth whilst limited or inadequate funding can discourage businesses from expanding or lead them to locate elsewhere. The consultation process highlighted concerns regarding the funding of new infrastructure and subsequent impacts on the viability of industrial land development, suggesting a review of infrastructure contribution arrangements.

The infrastructure service providers in the Clarence Valley are described below:

- Water: North Coast Water provides Clarence Valley's water supply for both industrial and residential uses. The system extracts water from the Nymbodia River. According to figures supplied by North Coast Water, industrial water use accounted for 1,723 Ml in 2006, or 22.6% of the total water supplied to the Clarence Valley;

- Broadband Access: Telstra currently provides broadband access to residential and industrial areas in the Clarence Valley;

- Electricity: Country Energy provides electricity throughout the Clarence Valley. Each industrial area has differing capacities and consumption of electricity depending on the mix of business activities. Planned future upgrading consists of the replacement of transformers and the provision of new and additional "feeders" – high voltage power lines between substations and consumers to cater for additional demand;

- Gas: Clarence Valley is not serviced by any natural gas reticulation services, however servicing by gas bottles is available; and

- Sewer: Council has developed a major capital upgrading program for its sewerage infrastructure in order to support population growth and increasing environmental management protocols. The following projects/schemes are underway: Junction Hill to North Grafton transfer, Grafton Sewerage Augmentation, Iluka Sewerage Scheme, Maclean, Lawrence, Townsend and Ilarwill Sewerage Scheme and Yamba Sewerage Augmentation.

Figure 6.2: Summary of Infrastructure Services by Industrial Area

	Infrastructure *(Current level of servicing, future improvements etc)*				
	Access	**Water**	**Electricty**	**Broadband**	**Gas**
Iluka	Single rd access, away from highway reduces visibility to passing traffic	Most distant point in system, pressure can be low a times. Plans to provide small booster to ensure supply at peak times	Limited capacity for more uses without major upgrades to system. Large industrial users not appropriate.	100% coverage.	Not connected to reticulated gas network. Gas bottles available
Yamba	A more intensified development my have impact on surrounding residential areas. Southern site has poor road access	Sufficient capacity for expansion of industrial activities	Significant capacity for increased usage	100% coverage	Not connected to reticulated gas network. Gas bottles available
Harwood	Excellent access via pacific hwy to markets north and south	Unknown, although adjoining areas capture water for irrigation	Very restricted capacity for future development	100% coverage provided from Harwood island exchange	Not connected to reticulated gas network. Gas bottles available
Maclean	Good access via Pacific Highway. Poor access via Jubilee Rd and Cameron St	Planned duplication of line from Grafton will create sufficient supply for development	System can cope with additional demand although a single large industrial user would not be appropriate.	100% coverage	Not connected to reticulated gas network. Gas bottles available
Grafton	Good arterial access, although access is limited to some sites due to neighbouring residential areas.	Sufficient capacity for expansion of industrial activities	The reconductor of the feeder servicing these sites will allow for future expansion	Coverage is available as sites are within limits of the Telstra's Grafton exchange	Not connected to reticulated gas network. Gas bottles available
South Grafton	The site is divided by the underutilsed railway line. Good road access via Pacific Hwy	Sufficient capacity in system for expansion, although intensified development may require reticulated sewerage	Ample capacity for future expansion	Broadband coverage only available as far as the abattoir south.	Not connected to reticulated gas network. Gas bottles available
Koolkhan	Vehicular access by Summerland way has sufficient capacity for future expansion. Rail line underutilised	Sufficient capacity in system for expansion, although intensified development may require reticulated sewerage	Limited capacity for an extra large industrial user of electricity. Smaller light industrial businesses appropriate.	Coverage is available as sites are within limits of the Telstra's Grafton exchange	Not connected to reticulated gas network. Gas bottles available

Source: Clarence Valley Industrial Lands Audit (2006)

6.5 Constraints Mapping

Constraints mapping for existing industrial areas is provided in **Annexure D**. The mapping includes analysis of the following issues/characteristics of each industrial area:

- Aerial photograph (with contours);
- Zoning;
- Wildlife corridors;
- Flooding;
- Bushfire;
- Acid sulphate soils; and
- DECC biodiversity mapping.

As a summary, industrial areas affected by flooding include Iluka, Yamba, Harwood, Grafton (partially) and South Grafton (partially), requiring consideration for mitigation measures. A small western portion of the industrial zone in Yamba (the south western zone under development) is affected by vegetation. There are some bushfire constraints at the same site in Yamba, South Grafton, Maclean/Townsend and Iluka, requiring specific development controls to be enforced. There are partial gradient issues identified at South Grafton (particularly the southern end of the estate) and Koolkhan-Trenayr requiring either consideration for other alternate uses (possibly as natural buffers) or cutting and filling to achieve developable land.

Table 6.2: Summary of Constraints by Industrial Area, Clarence Valley

Impact	Iluka	Yamba	Harwood	Maclean-Townsend	Grafton	South Grafton	Koolkhan-Trenayr
Flooding	Yes	Yes	Yes	No	Partially	Partially	No
Wildlife	No	Yes	No	No	No	No	No
Gradient	No	No	No	No	No	Partial	Partial
Bushfire	Yes	Partial	No	Yes	No	Partially	No
Contaminated	No	No	No	No	No	No	No

Source: Clarence Valley Industrial Lands Audit (2006), AEC*group*

6.6 Development Potential

Considering the conclusions of the *Clarence Valley Industrial Lands Audit* along with further independent assessment, the following comment is provided regarding the industrial land development potential within each industrial area:

- Iluka: There remain 4.3 ha of vacant undeveloped land in the estate, equating to 62% of the total zoned area. A review of the business activities in the estate indicates a role as a general service based industrial area serving the Iluka township. The role is not considered export focused given its size, access, location and mix of existing business activities. Additional demand for the industrial area will be sourced from local population growth in Iluka, which itself is dependent on the connection of sewerage services. If the population grows to the extent planned for in Council's Settlement Strategy, then the estate in its current size should be capable of meeting demand. However, real estate agents noted future supply might be restricted by inadequate uses and lack of available land for additional future development, suggesting that all sites should be used as per the zone's intentions. Consultation indicates the majority of the vacant land is Crown land but is subject to an Aboriginal Land Claim, it is recommended, as per Council's zoning, that the land be retained for industrial land purposes given the lack of alternative development sites in Iluka.

- Yamba: There are two separated industrial zones in Yamba. The main industrial zone (northern) is heavily developed with limited capacity for expansion. The current vacant undeveloped land parcels within the main estate are used mainly as ancillary storage areas for their adjacent uses. The development of the southern zone is currently underway through a local developer and will provide an additional 11.22 ha. The complete development of this site requires an alternative access route. Council has committed funds to both the design and construction of the new access road. The geographic isolation of Yamba and its industrial areas from the highway, along with the single lane access, could be an encumbrance for the future occupation of this area by export industries. In its current function, the area serves the township of Yamba. The projected population growth of Yamba, dependent to some extent on the LEP outcome for West Yamba, will necessitate further industrial growth. There are also indications of pressure from trades businesses located in commercial zones for expanded premises in industrial zones.

- Harwood: There is limited additional development potential at the two industrial land parcels in Harwood. The development potential of the southern site is limited by its size, adjacent residential development and poor location for alternative uses. The northern site sufficiently services the local population adequately.

- Maclean-Townsend: This industrial area is strategically located relative to the fast growing coastal areas of Yamba and Gulmarrad/Maclean close to the Pacific Highway and potentially closer to any realigned highway and its interchanges. There are 8.2 ha of vacant undeveloped land in the existing industrial estate, equating to more than 40% vacancy and unproven commercial demand for these parcels at this time. However, looking forward, the estate is considered to offer development potential for these remaining land parcels as an affordable alternative to the expensive industrial estates in Yamba and to service both additional locally driven growth from the Lower Clarence and strategic opportunities associated with the highway realignment. There is a subdivision underway on the northern side of the estate. There are also indications of expansion intentions of some trades based businesses from the traditional commercial areas in Maclean. Encroaching residential and rural residential development threatens the future development of the precinct, particularly the southern side of the estate. Access to the estate from the Highway is not optimal and the RTA is likely to require upgrades to the local road network to support intensified development and any expansion. There are investigation areas north and east of the estate that could be considered for rezoning should demand warrant it, particularly based on additional growth in the nearby areas of Townsend, Gulmarrad and more rural areas such as James Creek.

- Grafton: Of the five scattered industrial zones in Grafton, there is just 1.5 ha of vacant developed/undeveloped land. However, there are opportunities for redevelopment. The adaptive reuse of the former Tooheys Brewery indicates demand for smaller lot sizes within a cluster environment. There is the potential for a more orderly redevelopment of this site to accommodate further demand. The former Peters Ice Cream factory would also require demolition of the tower for any planned redevelopment. The adjacent rail line is underutilised by these sites. Encroachment of residential development and other mixed uses could threaten more intensive development of some of the areas. There are isolated land parcels which could be considered for rezoning over time to more appropriate uses, potentially residential.

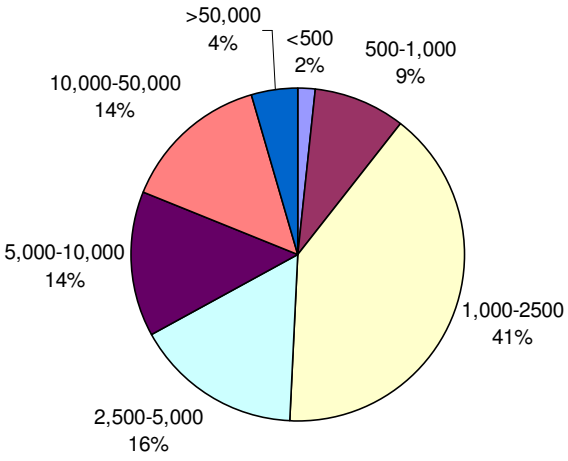
- South Grafton: The South Grafton industrial area is the largest in terms of occupied lands. However, there are still more than 35 ha of vacant undeveloped land, with little vacant developed land. The site is elongated with development aligning itself along the railway line. The site is fragmented with slope constraints affecting the southern portion of the site, making development difficult. This is reflected by slow development take-up in this area. There is potential to expand the estate to the east toward the Highway to provide new lands and greater choice to potential investors and business. Revitalisation of the precinct is needed to encourage improved presentation and development. There are interfaces between state and local controlled roads linking to the estate that require further consultation between Council and the RTA, funding commitments and the establishment of a developer contribution plan for any expansion.

- Koolhan-Trenayr: The largest industrial area records more than 40 ha of vacant undeveloped land. Although some of the larger sites appear to be relatively undeveloped, sawmilling activities require large expanses of area. Interest has been expressed in the potential of this site given it provides for large, flat tracts of land capable of catering for heavy industry and transport functions. The site's location on the Summerland Way connecting to the emerging industrial area of Bromelton in Queensland could provide a catalyst for demand. However, heavy trucks travelling to/from the south still require access through Grafton and long-term there would need to be a road bypass with bridge to facilitate further development. Expansion of the timber industry and other heavy, value-adding or processing industries would be well suited to this industrial area, particularly those require larger lots. The site is connected to rail. There are isolated land parcels which could be considered for rezoning to more appropriate uses, potentially residential.

6.7 Lot Sizes

In terms of the current distribution of industrial land lots, around 40% are between 1,000 and 2,500sqm in size (see **Figure 6.3**). Around 30% are larger than this but less than 1 hectare in size, while 14% are sized between 1 and 5 hectares and 4% larger than 5 hectares. Again, timber mills mostly occupy these large sites. Real estate agents report demand for larger lots, while the results of the business survey also suggests businesses seeking expansion are looking for lots exceeding 2,500sqm.

Figure 6.3: Breakdown of Industrial Land Supply by Lot Size



Source: Clarence Valley Industrial Lands Audit (2006), AEC*group*

An analysis of average lot sizes provides some indication as to the varying mix of lot sizes between each of the industrial areas in the Clarence Valley (see **Table 6.3**). The average lot size is largest at Koolkhan-Trenayr where there are mostly lots sized larger than 3 ha accommodating major timber manufacturers. South Grafton accommodates the next largest mix of lots sizes reflecting its heavy/general business activity mix. The smallest lot sizes are provided in the light industrial areas of Iluka and Yamba.

Table 6.3: Average Size of Lots by Industrial Area, Clarence Valley (sqm)

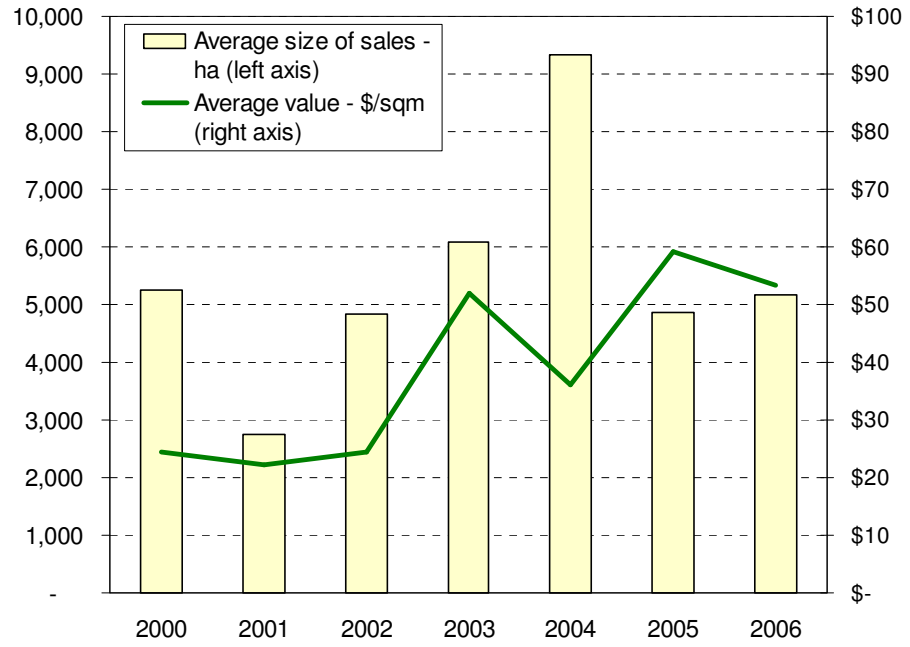
	Iluka	Yamba	Harwood	Maclean-Townsend	Grafton	South Grafton	Koolkhan-Trenayr	Total
Total size (ha)	6.9	18.1	0.7	18.6	15.8	185.5	181.3	426.9
Total number of lots	25	49	2	35	45	219	55	430
Average lot size (sqm)	2,760	3,694	3,500	5,314	3,511	8,470	32,964	9,928

Source: Clarence Valley Industrial Lands Audit (2006)

6.8 Land Values

The approximate land values and affordability of industrial land in the Clarence Valley can be gauged through analysis of the RPData land sales database. There have generally been around 15-20 industrial land sales in the Clarence Valley in each of the past 6-7 years. The value of these land sales was highest in 2003 at more than $9.0 million involving 18.86 ha of land. The average sales value in 2006 was $53/sqm down from $59/sqm in 2005 due to the larger sizes of the sales (see **Figure 6.4**). Local real estate agents commented there had been growth in land values of over 30% in the past 12 months with yields generally varying between 7% and 10%.

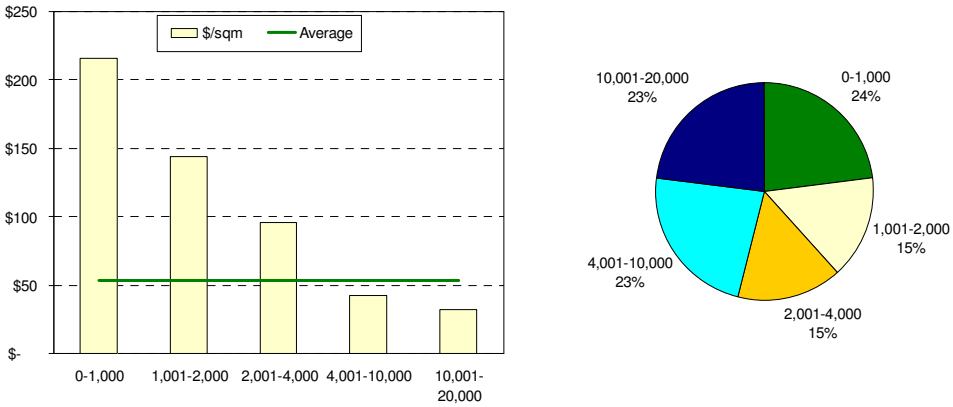
Figure 6.4: Average Size and Value of Industrial Zoned Lands Sales, Clarence Valley



Source: RPData (2007), AEC*group*

The higher average sales prices for smaller lots are reflected in **Figure 6.5**. The sale of lots sized less than 1,000sqm recorded average sales rates of above $200/sqm, with the average sales price declining to around $150/sqm for the standard 1,000-2,000sqm lot and $50-$100/sqm for lots up to 1 ha in size. In the coastal areas of Port Macquarie and Coffs Harbour, sales rates for lots less than 1,000sqm exceed $500/sqm, and generally average above $200/sqm for lots less than 1 ha in size.

Figure 6.5: Industrial Lands Sales by Lot Size (sqm), Clarence Valley 2006 (a) $/sqm (b) % of sales

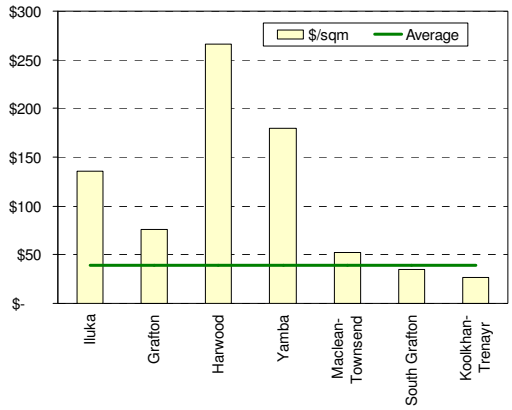


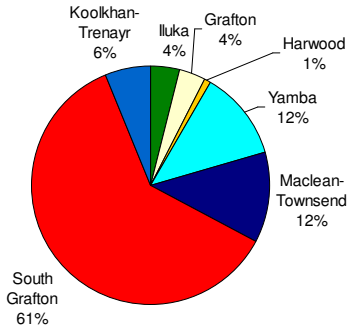
Source: RPData (2007), AEC*group*

There are significant differences in the price of industrial land across the 10 industrial precincts in the Clarence Valley due to their different competitive position, commercial attractiveness and mix of lot sizes. Real estate agents commented that vast differences in the quality of industrial land and buildings meant there is a wide array of land values and rents. Agents estimated land values in Yamba's industrial areas at between $350 and $450/sqm, with values in Maclean-Townsend generally less than half of those in Yamba.

The analysis presented in **Figure 6.6** is based on 2000-2006 data as a whole. South Grafton recorded 61% of the industrial land sales in Clarence Valley between 2000 and 2006. Harwood and Yamba recorded the highest average sales rates of above $150/sqm, while industrial estates elsewhere average closer to $50-$100/sqm.

Figure 6.6: Industrial Lands Sales by Precinct, Clarence Valley 2000-2006 (a) $/sqm (b) % of sales





Source: RPData (2007), AEC*group*

The benchmarking analysis of land values presented in **Table 6.4** clearly describes the competitive cost position in the Clarence Valley for industrial land. Land values are well below both regional and metropolitan benchmarks. The lower price of the land reflects the location of the Clarence Valley in a broader context, in addition to the lower quality of industrial land presently supplied to the market. This in turn has had the affect of reducing the demand for industrial land and further lowering prices. Redevelopment of existing industrial areas into more attractive investment locations is expected to increase both demand and prices at the same time, lifting the quality of industrial land supply.

Table 6.4: Comparison of Land Values, 2006

Region	0.25 ha ($/sqm)	1.6 ha ($/sqm)
Clarence Valley	$100-$220	$30-$100
Port Macquarie-Hastings	$240-$540	$80-$240
Brisbane	$315-$450	$275-$400
Sydney	$350-$1,000	$280-$800
Melbourne	$210-$670	$140-$535

Source: CBRE Market View Reports, AEC*group*

7. Projected Industrial Land Demand

7.1 Current Market Demand Trends

The real estate agent survey was used to gain an insight into industrial land take-up and demand trends across the Clarence Valley. All real estate agents reported demand for industrial land throughout Clarence Valley was strong. The general consensus was there is a significant undersupply of industrial land.

The characteristics of industrial land that was in high demand comprise:

- Large lots;
- Good access to the highway;
- Level land; and
- Sewered.

Areas identified as being in most demand included:

- Yamba;
- North Grafton;
- South Grafton; and
- Townsend.

Interest in industrial land in the Clarence Valley is high for businesses involved in:

- Light industrial;
- Commercial;
- Storage; and
- Distribution.

The agents report tenant demand is very high at the moment, with occupancy rates of quality buildings and suitable sites at close to 100%. Interest in developing industrial land is also reported as high. However, it is reported a lack of suitably zoned land is presently a problem that is constraining developers. In recent years there has also been interest in businesses buying land and building their own premises.

Council reports there has been approximately $3.84 million worth of industrial land development over the past 1-2 years, with a further $0.28 million approved and awaiting development. There are rezoning proposals on the Summerland Way, the current extension of the Yamba industrial estate, recent sales and development of land at the Maclean-Townsend industrial estate, industrial development in South Grafton with a new transport operator and interest in major land development in South Grafton.

7.2 Attitudes of Industry Participants

7.2.1 Business Confidence and Growth Prospects

Business confidence for the medium term was strong by those surveyed. Over 70% of businesses anticipate growth in the 3-5 years (see **Table 7.1**). A decline in business outlook was predicted by just 11.1% of respondents.

Table 7.1: Industrial Business Growth Forecasts for Next 3-5 Years

Outlook	% of Total
Decline	11.1%
Unchanged	18.5%
Steady growth	40.7%
Moderate growth	25.9%
Fast growth	3.7%
Total	**100.0%**

Source: AEC*group* Industrial Business Survey (2006)

Expectations relating to future employment were positive for industrial businesses in the Clarence Valley (see **Table 7.2**). Businesses expecting to increase employment in the future (40.7%) far outweighed those expecting a decrease (7.4%). Those forecasting for no change made up 40.7% of the total while the remainder where unsure.

Table 7.2: Industrial Business Employment Forecasts for Next 3-5 Years

Employment Change	% of Total
Increase	40.7%
Decrease	7.4%
Same	40.7%
Unsure/don't know	11.1%
Total	**100.0%**

Source: AEC*group* Industrial Business Survey (2006)

Real estate agents expect demand to remain strong in the region on the back of high population growth and a business trend to expand their operations. By comparison, developers expect that growth in the industrial sector in the Clarence Valley would be either slow or steady in the future. Reasons given for the limited expected growth comprise of a reduction in demand for major industries operating in the Clarence Valley that appears likely to continue and planning issues that restrict growth opportunities. This planning issue could, to some extent, be resolved by this industrial lands strategy.

7.2.2 Business Expansion and Relocation Intentions

Demand for new industrial land can be sourced from two channels: (1) expansion in the existing industrial sector; and/or (2) attraction of new businesses to the region. Plans by businesses to expand over the next 5 years are split relatively evenly. Businesses planning to expand account for 37.0% while those expecting to remain steady are slightly higher at 40.7% (see **Table 7.3**). Those currently unsure about their future make up the remaining 22.2%. The percentage of positive responses is a strong demand indicator for the future. Based on an estimated 250 businesses, this could translate to around 90-95 businesses considering expansion opportunities.

Table 7.3: Industrial Business Expansion Plans for Next 5 Years

Future Expansion	% of Total
Yes	37.0%
No	40.7%
Unsure	22.2%
Total	**100.0%**

Source: AEC*group* Industrial Business Survey (2006)

Of businesses looking to expand, 57.1% are located in lots that are between 1,000-2,500sqm (see **Table 7.4**). Required sites by businesses will be over 2,500sqm for 60.0% of these businesses. It is clear there is a demand for larger lots. Based on an average expansion of around 2,000sqm based on the survey results, this could translate into additional land demand of 19 hectares alone in the future.

Table 7.4: Lot and Unit Size Requirements of Industrial Business Expansion

Lot Size	Current	Future
<500	14.3%	0.0%
500-1,000	0.0%	0.0%
1,000-2,500	57.1%	40.0%
>2,500	28.6%	60.0%
Total	**100.0%**	**100.0%**

Source: AEC*group* Industrial Business Survey (2006)

Those businesses considering new sites in Clarence Valley would generally prefer to own their premises. Over 85% of businesses would prefer to own their premises which is almost 25% higher than those that currently do.

7.2.3 Landowner and Developer Intentions

The landowner survey indicated limited landowner intentions to develop industrial land in the short term. Additionally, there are only isolated development intentions from property developers in the Clarence Valley. The main interest/intentions relate to Swallow Road in South Grafton near the industrial road, along with interest in marine industry development in the Lower Clarence and Yamba industrial lands.

7.3 Projected Total Industrial Land Demand

In basic terms, industry is generated servicing the demands created by providing goods and services to the local population, value adding to locally generated products and value adding to products generated elsewhere in other regions.

Important demand drivers of industrial land demand include:

- Economic growth: The demand for goods and services stimulates investment in productive capacity, which in turn results in increasing demand for land to locate production facilities and accommodate employees;

- Labour productivity: There is a positive relationship between labour productivity and the demand for industrial land;

- Levels of employment: As economic prosperity rises so too does employment and assuming labour productivity remains strong, the level of production increases accordingly. Therefore, by predicting employment levels it is possible to estimate the demand for industrial land; and

- Changes in industry structure: Certain industries tend to locate within industrial estates and have different value adding outcomes. The significance of these industries to a region will in part determine the demand for industrial land.

Each of these factors is considered in the Queensland Department of State Development's model for determining land requirements for types of industrial land. The model represents the most comprehensive method of estimating industrial land requirements and involves the following estimation process:

- Projecting likely population growth into the future;
- Projecting employment demands of the projected population base;
- Determining the percentage of employment required for specific industry sectors;
- Using predetermined density benchmarks, calculating employees per unit areas; and
- Estimating likely spatial demand.

7.3.1 Population Projections

The *Draft Mid North Coast Regional Strategy* projects an additional 17,500 persons over the next 25 years whereas DIPNR projects an additional 8,000 persons. These projections were outlined in Section 2.2.

7.3.2 Workforce Availability Rate

The net available employment rate is the percentage of persons in the total Clarence Valley population employed in Clarence Valley i.e. the proportion of the total population seeking employment within the boundaries of Clarence Valley. It is calculated by multiplying the labour force participation rate, by the employment rate, by the retention rate of employees within the Council area. Based on this calculation for 2001 Census data, the net available workforce rate is 32.0% in Clarence Valley (see **Table 7.5**).

Table 7.5: Net Available Employment Rate, Clarence Valley

Indicator	%
Labour force (% of total population)	41.4%
Unemployment rate (% of labour force)	9.0%
Employees working in Clarence Valley (% of employees)	86.0%
Net available employment rate (% of total population)	32.0%

Source: ABS 2001 Census, ABS 2001 Journey to Work Data, DEWR Small Area Labour Market Data, AEC*group*

Adjustments to the net available workforce rate provides sensitivity analysis for increased economic concentration in the industrial land sector moving forward and opportunities to attract a greater share of export industry. For this reason, the future available workforce of Clarence Valley is based on the following scenarios:

- Base workforce availability of 32%;
- Base workforce availability plus 10% to generate a rate of 35.2%; and
- Base workforce availability plus 20% to generate a rate of 38.4%.

7.3.3 Employment Requirements for Specific Industry Sectors

Based on the 2001 percentage share of employment in each of the key industry sectors, and making an allowance for other support uses and categories, the projected number of employees in the sector moving forward is presented in **Table 7.6**. It should be noted these industrial land categories will be revised to those listed in the three broad industry categories of heavy general, modern general and transport, warehousing & storage. However, at this stage, the analysis below is closely indicative of projected demand.

Table 7.6: Projected Employed Persons, Clarence Valley

Region	% of total	2006	2011	2016	2021	2026	2031
Baseline							
Heavy Industry	1.2%	207	213	219	226	232	238
Modern General Industry	8.0%	1,325	1,363	1,402	1,443	1,484	1,521
Transport, Warehousing & Storage	8.0%	1,333	1,371	1,411	1,452	1,493	1,530
Supporting/Other Industry	4.0%	665	684	703	724	744	763
Total	**21.2%**	**3,529**	**3,630**	**3,735**	**3,844**	**3,953**	**4,052**
Baseline + 10%							
Heavy Industry	1.2%	228	234	241	248	255	262
Modern General Industry	8.0%	1,457	1,499	1,542	1,587	1,632	1,673
Transport, Warehousing & Storage	8.0%	1,466	1,508	1,552	1,597	1,642	1,683
Supporting/Other Industry	4.0%	731	752	774	796	819	840
Total	**21.2%**	**3,882**	**3,993**	**4,109**	**4,228**	**4,349**	**4,458**
Baseline + 20%							
Heavy Industry	1.2%	249	256	263	271	278	285
Modern General Industry	8.0%	1,589	1,635	1,682	1,731	1,781	1,825
Transport, Warehousing & Storage	8.0%	1,599	1,645	1,693	1,742	1,792	1,836
Supporting/Other Industry	4.0%	798	820	844	869	893	916
Total	**21.2%**	**4,235**	**4,356**	**4,482**	**4,613**	**4,744**	**4,863**

Source: ABS 2001 Census, ABS 2001 Journey to Work Data, DIPNR 2004 Population Projections, AEC*group*

7.3.4 Allowance for Other Supporting Industry

While it is accepted that not all businesses in the above sectors will locate in industrial estates it is reasonable to assume that a significant majority will. This is the same as making an allowance for the infiltration of bulky goods uses into industrial zones. Also, it is not uncommon for businesses from outside these industry sectors to locate in industrial estates in an effort to maximise linkages and synergies with other industries.

Examples of this might include:

- Depot and service facilities for the construction industry;
- Communications facilities (e.g. call centres);
- Retail outlets for manufactured goods or servicing the industrial estate;
- Financial and property service providers supporting industry; and
- Personal services.

It is difficult to determine the extent to which other sectors might locate on industrial estates, however previous studies have estimated that, in terms of employment, approximately 5% of other sectors locate in industrial estates, which is approximately 4% of the total employment (see 4.0% allowance in Table 7.6).

7.3.5 Employees per Land Area by Specific Industry Sector

Each of the categories of industrial land accommodates different levels of employment due to the differences in land use requirements. The generally adopted yields in the Queensland Department of State Development methodology for the categories are:

- Heavy General Industry employs 18 employees/ha
- Modern General Industry employs 30 employees/ha
- Transport, Warehousing & Storage employs 20 employees/ha
- Supporting land uses employ 20 employees/ha.

The Clarence Valley presently records a relatively low ratio of employees per ha of industrial land, particularly in the heavy industry category dominated by timber milling with large buffer areas. This is evidenced below by the comparison between the existing 325.8 ha of occupied industrial land in the Clarence Valley versus the projected 214 ha based on industry benchmarks. The Clarence Valley has an opportunity to improve its land use efficiency toward the benchmarks outlined above. Further discussion is provided in the sections below.

7.3.6 Allowance for Roads, Utilities and Open Space (Buffers)

Forward planning exercises for industrial land must also consider the accommodation of services (such as roads and utilities) and open space. Queensland benchmarks indicate requirements for services of between 5%-10% of the total industrial area (as such 7.5% will be used in this analysis) and open space equivalent to 30% of land used by industry. This open space represents an indicative allowance for buffering, although site specific developments will require more detailed buffering calculations depending on environmental studies, proposed uses, surrounding land uses and buffering technique.

7.3.7 Projected Land Demand by Specific Industry Sector

Based on the Queensland State Government methodology and analysis described above, the projected demand for industrial land in the Clarence Valley over the next 25 years is estimated at between 32 and 81 ha (see **Table 7.7**). The projected demand is highest in the transport, warehousing & storage sector (up to 25 ha).

The relatively low demand projection for the total industrial sector in 2006 is lower than that presently occupied (325.8 ha) due mainly to a lower heavy industry projection. Analysing the heavy industry figures suggests a lower employment density per land area in the Clarence Valley for these types of uses relative to industry benchmarks. This suggests opportunities for increased density, more efficient land use in existing industrial areas and a review of buffer areas. At the same time, it can suggest an additional allowance on top of these figures for heavy industry demand.

In per capita terms, the demand analysis suggests a ratio of around 3.0 ha of raw industrial land and 4.1 ha in total for every 1,000 persons in the Clarence Valley when accounting for services and open space.

Table 7.7: Projected Industrial Land Demand, DIPNR Population

Region	2006	2011	2016	2021	2026	2031	Additional
Baseline							
Heavy Industry	12	12	12	13	13	13	2
Modern General Industry	44	45	47	48	49	51	7
Transport, Warehousing & Storage	67	69	71	73	75	77	10
Supporting/Other Industry	33	34	35	36	37	38	5
Services (e.g. roads, utilities, etc)	12	12	12	13	13	13	2
Open Space	47	48	49	51	52	54	7
Total	**214**	**220**	**226**	**233**	**240**	**246**	**32**
Baseline + 10%							
Heavy Industry		13	13	14	14	15	3
Modern General Industry		50	51	53	54	56	12
Transport, Warehousing & Storage		75	78	80	82	84	18
Supporting/Other Industry		38	39	40	41	42	9
Services (e.g. roads, utilities, etc)		13	14	14	14	15	3
Open Space		53	54	56	57	59	12
Total		**242**	**249**	**256**	**264**	**270**	**56**
Baseline + 20%							
Heavy Industry		14	15	15	15	16	4
Modern General Industry		55	56	58	59	61	17
Transport, Warehousing & Storage		82	85	87	90	92	25
Supporting/Other Industry		41	42	43	45	46	13
Services (e.g. roads, utilities, etc)		14	15	15	16	16	4
Open Space		58	59	61	63	64	18
Total		**264**	**272**	**280**	**287**	**295**	**81**

Source: ABS 2001 Census, ABS 2001 Journey to Work Data, DIPNR 2004 Population Projections, AEC*group*

If the higher population projection of 17,500 additional persons were assumed as per the *Draft Mid North Coast Regional Strategy*, the industrial land demand would be much higher at an additional 72-129 ha over the next 25 years (see **Table 7.8**).

In terms of comparative demand figures, the *Draft Mid North Coast Regional Strategy* indicates minimum demand for an additional 22 ha of industrial land over the next 25 years. This is a relatively small percentage increase on the current zoned lands of 325.8 ha. Earlier analysis demonstrated an estimated 19 ha of expansion potential by existing businesses.

Table 7.8: Projected Industrial Land Demand, Draft Mid North Coast Strategy Population

Region	2006	2011	2016	2021	2026	2031	Additional
Baseline							
Heavy Industry	12	12	13	14	15	15	4
Modern General Industry	44	47	50	53	56	59	15
Transport, Warehousing & Storage	67	71	76	80	85	89	22
Supporting/Other Industry	33	35	38	40	42	44	11
Services (e.g. roads, utilities, etc)	12	12	13	14	15	16	4
Open Space	47	50	53	56	59	62	16
Total	**214**	**228**	**243**	**257**	**272**	**286**	**72**
Baseline + 10%							
Heavy Industry		14	14	15	16	17	5
Modern General Industry		52	55	58	62	65	21
Transport, Warehousing & Storage		78	83	88	93	98	31
Supporting/Other Industry		39	41	44	46	49	16
Services (e.g. roads, utilities, etc)		14	15	15	16	17	5
Open Space		55	58	62	65	69	22
Total		**251**	**267**	**283**	**299**	**315**	**101**
Baseline + 20%							
Heavy Industry		15	16	17	18	18	7
Modern General Industry		57	60	64	67	71	27
Transport, Warehousing & Storage		85	91	96	102	107	40
Supporting/Other Industry		43	45	48	51	53	20
Services (e.g. roads, utilities, etc)		15	16	17	18	19	7
Open Space		60	64	67	71	75	28
Total		**274**	**291**	**309**	**326**	**343**	**129**

Source: ABS 2001 Census, ABS 2001 Journey to Work Data, Draft Mid North Coast Strategy, AEC*group*

7.4 Projected General Service Industrial Land Demand

Land use and economic planning methodologies have tended to forecast indicative land supply requirements, rather than demand, for business and industry activities. These supply requirements are in terms of hectares per 1,000 persons of population. For instance, 3 ha per 1,000 persons are a common forecasting measure in Queensland. This measure, however, does not distinguish between local, district and regional needs or demand for business and industry lands. If land supply requirements are used, it can be assumed that of the 3 ha per 1,000 population, ½ to 1 ha might be to satisfy local demand, whilst the remaining 2 to 2 ½ hectares are to satisfy district and regional demand, or what could also be referred to as export land.

In determining local and district industry land requirements, one could then assume that 1 ½ ha of land per 1,000 persons (or 50% of the supply) should be provided for business and industry lands to meet local and district need and demand (or general service land demand). On this basis, projections can be prepared for the future demand for industrial land by locality and for the local service-based demand projection for the Clarence Valley. Based on 50% of the projected industrial land demand being representative of demand for general local services, the following general service-based land would be required across the Clarence Valley LGA in total by 2026:

- Baseline 16-36 ha;
- Baseline + 10% 28-51 ha; and
- Baseline + 20% 41-65 ha.

Based on DIPNR population projections for each of the former Council areas within Clarence Valley, **Table 7.9** outlines the projected general service based industrial land requirement in each of these former Council areas based on population shares of the total Clarence Valley LGA and 50% of projected industrial land demand allocated to general service-based industrial uses.

The following maximum thresholds are established for each former Council area:

- Grafton 17 ha;
- Maclean 26 ha;
- Copmanhurst 7 ha;
- Ulmurra 6 ha; and
- Nymbodia 9 ha.

The former Maclean Council area comprises Maclean-Townsend, Yamba and Iluka industrial areas. The area will also accommodate the future residential growth of Gulmarrad/James Creek. Based on the projected growth outlined in Council's Settlement Strategy, which is currently under review, the following indicative demand is established:

- Maclean-Townsend 4 ha;
- Yamba 14 ha;
- Iluka 2 ha;
- Gulmarrad and surrounds 3 ha; and
- Other 4 ha.

7.5 Projected Export Land Demand

In addition to general service industrial land, provision needs to be made for land capable of accommodating targeted export industries, as per discussions in Chapter 5. This is a major part of the current economic agenda in the Clarence Valley. The key export opportunities to be considered in the industrial land planning process include a marine industry cluster, transport and freight hub, and land available for a range of local value adding industries.

As a preliminary, based on 50% of the projected industrial land demand being representative of demand for regional level industries, up to 65 ha of this type of land would be required over the next 25 years. Increasing the industrial land demand projections beyond this point is generally the same as increasing the net available workforce rate or increasing the share of employment within the industrial lands sectors i.e. structural change to employment in the region due to new development.

The demand and take-up of industrial land will be closely tied to the market position of the Clarence Valley as a place to do business with market ready and affordable industrial land that meets the needs of the private sector. This will also be impacted by development in other locations and their market position in respect of these factors.

The *Draft Mid North Coast Regional Strategy* notes that the availability of affordable industrial land across the region is becoming scarce, particularly in the major coastal areas of Coffs Harbour and Port Macquarie. The Strategy comments that the major regional centres and major towns further from the coast have the capacity to provide the land and other infrastructure to support industrial development, especially for industry with an export focus. Grafton, Kempsey and Taree in particular have significant potential for employment lands development that can be explored.

The Regional Strategy indicates the minimum amount of additional industrial land needed in the Clarence Valley over the next 25 years is 22 ha, versus 83 ha in Coffs Coast, 82 ha in Hastings-Macleay Valley and 38 ha in Manning Valley-Great Lakes. The Regional Strategy indicates that when Councils choose new land they should consider the specific uses and have regard for changing market trends. The Strategy also recommends Council restrict bulky goods retailing in industrial zones.

There is a strong push for industrial development in Port Macquarie, Coffs Harbour, Ballina and Casino. The first two are presently undertaking/proposing industrial lands strategies similar to Clarence Valley. Port Macquarie, for example, is also actively targeting the development of a transport and freight hub, along with more general and heavy industry uses. It is believed that a number of transport operators are in discussions with Councils across the Mid North Coast, although there are no operators

exclusively discussing arrangements with a single Council area. The situation is shaping as first mover advantage for the region that can develop the land first.

One of the major developments in the north of the region is located in Casino, west of Ballina near Lismore. There is 130 acres of available land suitable for heavy industry with 24-hour operation. The development is accessible to both rail and road infrastructure and land prices are considered below other Northern Rivers areas and the metropolitan centres of Brisbane and Sydney. In terms of actively chasing developers and investment, Nambucca Heads and Kempsey are identified as two very proactive regions that are negotiating on fast planning processes, cheap land and rapid development.

7.6 Potential Demand for Specific Development Types

The following industry sectors were identified as having potential in Clarence Valley:

- Marine industry cluster;
- Timber manufacturing expansion;
- Transport and freight hub;
- Food processing industries;
- Aquaculture industry;
- White soya bean processing;
- Timber and furniture manufacturing;
- Biotech development;
- Sugar and waste processing;
- Compost tea processing; and
- Commercialisation of agriculture research.

The demand for many of these opportunities is linked to the economic and industry development processes prepared as part of Council's Economic Strategic Plan. Council's Action Plan is attempting to facilitate this investment. From an industrial land planning perspective, it is important sufficient and appropriately located land is provided to accommodate these potential uses as appropriate. This suggests the eventual quantum supply of land should provide some flexibility relative to the projected demand estimates above. In some cases, the provision of such land can be the deciding factor in proceeding with development/investment. Some of the development opportunities listed above would not necessarily require an industrial zoning.

7.6.1 Transport and Freight Hub

The potential for a transport hub in the Clarence Valley was assessed as a case study in the *Clarence Valley Economic Strategic Plan*. Council is commissioning a detailed feasibility study to further investigate the potential for a transport hub in the region, including the identification of suitable locations and sites. Some preliminary discussion is provided below regarding the transport hub concept.

As a starting point, a transport hub consists of a group of businesses located in the one precinct offering transport and related services, such as storage, freight logistics and mechanical services. A transport hub can be considered as "intermodal" if it combines one or more of road, rail, sea and air transport infrastructure in the same location. A transport hub is distinct from the role of a highway service centre which generally acts as a fuel and truck stop with patronage from both the passenger vehicle and trucking sectors. The types of transport services provided at a transport hub can include any of:

- Air freighting;
- Sea freighting;
- Rail freighting;
- Road freighting;
- Freight consolidation and distribution;
- Warehousing;
- Bond storage;
- On-shipment;
- Repacking;

- Product handling and innovation;
- Dangerous goods; and
- Refrigerated services.

The demand for a transport hub is closely tied to the aggregated import and export of goods into and across a region. It is noted that Clarence Valley produces a number of commodities that are transported to local and interstate markets including timber, live animals and manufactured products. However, there is currently no central point from which these goods are distributed even though freight volumes appear to be above required thresholds to justify the development of a hub. Additionally, the Clarence Valley contains a large, growing population catchment for the import and distribution of goods.

There has been a growing focus across the North Coast Region for the development of a transport and logistics hub to provide a central location for distribution of goods and take advantage of the region's strategic location on the Pacific Highway between the major capital cities of Sydney and Brisbane, one of Australia's main freight and trade routes.

There was a recent transport operator's workshop conducted in Grafton that indicated support for a new transport hub with existing transport operators willing to expand should appropriate land be made available. The existing transport sector in the Clarence Valley is largely privately driven and fragmented. The businesses engaged in this sector are mainly wholesaling firms distributing two hours to the north and south.

In terms of existing transport and freight infrastructure in the Clarence Valley, there are three main transport arterials: Pacific Highway; Gwydir Highway; and Summerland Way. The majority of road freight incoming to the Clarence Valley is received from Brisbane, Port Macquarie-Hastings and Sydney. Sea freight movements are conducted through the Port of Yamba, including timber, live animals and marine manufactured products. There is limited air freight through the Clarence Valley Regional Airport at Grafton.

In terms of current rail freight trends, the majority of freight on the north coast line as a whole is moved between the major cities of Sydney and Brisbane. While there is work currently underway by the Australian Rail Track Corporation (ARTC) to upgrade the Maitland-Queensland segment of the line to increase freight transport from 19% to 30% through reduced transport times, there remains limited indications to suggest investment in a new rail siding in the region would be viable, nor that the decision regarding the location of a new transport hub should be made with an overly great an emphasis on the ability to co-locate road and rail services on the same site.

Presently rail freight from and into the Clarence Valley is mainly associated with timber manufacturing at Koolkhan-Trenayr. Any additional heavy industry development in the Koolkhan-Trenayr industrial area would have the opportunity to make use of the existing rail infrastructure on site for exporting goods. The north coast rail line also passes in proximity to the South Grafton industrial area (further along Armidale Road) although there is no rail siding to load/unload freight. Any development of an intermodal transport hub at South Grafton could consider investment in a new rail siding.

The demand for a transport hub in the Clarence Valley would be based on:

- Markets to be serviced by a transport logistics hub;
- Size of the transport logistics sector in the region;
- Projected land demand for transport and storage services;
- Existing transport infrastructure in the region;
- Freight movements (in and out) and future growth trends;
- Site requirements of transport logistics providers; and
- Adequacy of existing industrial areas for such services.

The Clarence Valley is considered to be in a relatively strong competitive position to develop a transport hub in the northern end of the Mid North Coast /southern end of the Northern Rivers. The region already contains major transport operators looking to retain a local presence but take advantage of a new site on the Highway. The region presents a sizeable population and economic market for the transfer of goods and services. This position will be further tested in the transport hub feasibility study.

In terms of the size of any new transport logistics hub in the region, the analysis presented earlier in this chapter estimates demand for an additional 53 ha of transport, warehousing and storage land in the Clarence Valley over the next 25 years, of which around half (or 25-30 ha) could be considered for strategic exporting. Any relocation of transport and logistics operators from existing industrial areas in the region could be considered in addition to this demand. Therefore, there is the potential for up to 25-30 ha of such land to be clustered to form a transport hub.

In terms of site requirements, transport and access to the transport logistics hub is obviously a critical success factor. The land and facility requirements for transport logistics providers are broadly consistent with other industrial land uses. A site/location needs to provide (but not limited to):

- Good profile from major highways and road arterials;
- Adequate internal roads and access layouts;
- Truck stands for loading at various warehouses;
- Refrigeration storage facilities;
- Dangerous goods storage facilities;
- Adequate fencing and site security;
- Residential buffering allowing 24 hour, 7 days a week, operations;
- Warehouse space with adjoining office space for client contact;
- Truck turnaround areas;
- Fuel depots and stations; and
- Other loading docks.

It should again be noted that the above discussion is preliminary and the feasibility of a transport hub in the region and the most appropriate site will be more fully tested as part of a specific feasibility study into the potential for a transport hub. However, this Strategy needs to consider the provision of sufficient and suitable land for the potential development of a transport hub in a highly visible, accessible and master planned framework on major trucking routes, considering the planned realignment of the Pacific Highway, planned investment and upgrades to the north coast rail line and the viability of new rail infrastructure. The market situation in the region suggests the short-term development of this hub is needed to secure the Clarence Valley's position in this sector. The opportunity to co-locate this development within a broader industrial estate would be preferable, but will be further tested in the feasibility study.

7.6.2 Marine Industry Development

The Marine Industry is an important regional industry for the Clarence Valley, with the natural advantages of the region's position along the Clarence River and more than 80kms of pristine coastline creating a strong tradition of marine industry, and coastal living. Harwood Island, Iluka, Yamba and the community of Maclean support a range of activities from boat and yacht building and repairs, stevedoring, shipping, boat hire, marinas and retail boat sales. Yamba is also Australia's most easterly seaport, and is home to the State's second largest fishing fleet.

The Port of Yamba services the entire Northern Rivers region, as well as providing regular services to Lord Howe Island, with a variety of import and export goods being handled at the Port from Goodwood Island Wharf. The Yamba Boatharbour Marina encompasses 90 floating berth sites, a 35 tonne travel lift, 40 tonne ship lift, marine engineer and a marine forklift. There is also a major slipway located on the Clarence Valley at Harwood Island with a 1,000 tonne capacity for larger ships.

Whilst there is a relatively high number of industry participants, the industry is highly fragmented which often creates significant inefficiencies and resource shortages, with many producers working in isolation from each other with low levels of inter-business interaction. As such, within the Clarence Valley marine industry, it is likely that this dispersion of producers is limiting the business opportunities of producers, and their ability to compete on a national and international scale.

There are many forward and backward linkages that exist between businesses in the marine sector, with producers often alternating between upstream and downstream suppliers across a range of businesses. These strong and alternating linkages provide examples of the types of marine-related businesses that could benefit from clustering by generating efficiencies and additional economic activity. There is the opportunity to develop marine industry clusters as a means of increasing the support and resources available to this industry.

The NSW Department of State and Regional Development report 7-8 credible applications to create a marine industry cluster in the North Coast region in the past 2 years. Added to this, a number of major marine industry operators in the region have been expanding on the back of increased government and international contract work.

The development of marine industry clustering or similar in the Clarence Valley is likely to have significant benefits for both the marine industry and the Clarence Valley. Marine clustering in the Clarence Valley may offer economic benefits through the attraction of other marine businesses to the region as a result of the clustering. This would increase regional output through import substitution, as the new businesses bring additional business, income and employment to the region.

In summary, the marine industry along the Australian eastern coastline has been expanding at a rapid rate and is capturing significant domestic and international business in the light and heavy boat building sectors. There has been a significant push along the east coast for the development of new marine industry precincts, as evidenced on the Brisbane River, the Gold Coast and the interest expressed from many different groups in the Mid North Coast region of New South Wales.

The River access and established nature of the marine industry in the Clarence Valley provide an obvious opportunity for expansion. There is the potential to expand the current sector and to cluster supporting marine businesses in the Clarence Valley to respond to market trends.

7.7 Expressed Need for Additional Industrial Land Demand

As a summary of the demand and need for additional industrial land in the Clarence Valley, there is a clear theme that market ready land needs to be available in the short-term to encourage investment and meet Council's economic development agenda. This point is consolidated through the results of the industrial surveys indicating:

- Landowners – The overwhelming belief by landowners is that more industrial land is required in the Clarence Valley. The high population growth needs to be supported by growth in business and industry with developed land an important driver. It was pointed out that there are considerable vacancies in industrial land in certain areas where new land is not required. Overall, the fast population growth in the region was commonly mentioned as justification for increasing land development to attract new businesses. Availability of good quality developed industrial land is seen as one of the best ways of attracting new industries;

- Businesses – Opinions varied with some businesses indicating there is simply not enough suitable industrial land for them to expand into and that growth is being constrained. Businesses involved in the marine industry are particularly concerned with the availability of industrial land at the present time. A common belief is there is sufficient land area but it is simply unsuitable for occupation;

- Real estate agents – Real estate agents strongly believe new industrial land development is required in the Clarence Valley to cater for future growth; and

- Developers – Most developers believed that new industrial land development is required to cater for future industry growth. It is considered there may be suitable supply to cater for the short-term but not potentially for the medium-to-long terms.

8. Strategic Planning Context and Approach

8.1 Strategic Planning Context

The industrial land sector is an important economic contributor to the Clarence Valley and provides general service-based industry to support local population needs along with major value adding businesses to drive large-scale employment. The Clarence Valley is classified as a low socio-economic region and there has been a significant focus by Council and government to drive economic development and increase employment opportunities. Council's Economic Strategic Plan identifies a number of value adding, strategic export industry opportunities that would be accommodated on industrial land. The provision of market ready, attractive industrial land in the Clarence Valley would position the region more competitively for new investment in key competitive areas such as transport and freight, marine services and value adding to primary production.

While, in quantum terms, there appears sufficient vacant industrial land for expansion (approximately 100 ha in existing industrial zones), this land is, in most cases, considered either unsuitable for future industrial use due to site constraints, or unlikely to attract demand from developers and tenants in its current form. Many local industrial businesses express a desire to expand but are unable to do so due to a shortage of suitable land. There are also anecdotal reports that the Clarence Valley is losing potential industrial investment to other Northern Rivers and Mid North Coast regions due to a lack of market attractive land despite the relative affordability of industrial land in the Clarence Valley. Revitalisation processes for these lands are often lengthy and complex.

Based on the relationship between employment needs and land needs, there is projected demand for an additional 32-129 ha of industrial land in the Clarence Valley over the next 25 years (which includes an indicative allowance for buffering, roads, services and utilities). The upper supply requirement of 129 ha significantly exceeds the minimum allowance of additional industrial land presented in the *Draft Mid North Coast Regional Strategy* of 22 ha over the next 25 years. The projected demand will be spread across light, general and heavy industry servicing a range of local and export geographic markets. There is potential demand for a transport and freight hub, marine industry cluster, further heavy industry associated with value adding to primary production (including timber), and light/general industry to service anticipated population growth. It is argued that providing the required flexibility to accommodate major export industry requires an additional allowance of land beyond the 129 ha projection, particularly when considering the improving competitive position of the region.

The planning for industrial land supply requires a balanced, holistic and strategic view of a range of issues, including the current position of the industrial market (such as capacity pressures, suitability of existing sites and remaining development potential in existing areas), the most appropriate amount of land to supply to the market at any one time relative to projected demand, the different locational needs of and markets served by various industry types, the most appropriate spatial framework and distribution of land to ensure market strength and competitive position, and the impacts of new land releases on existing zoning and previous investment decisions. Additionally, the supply strategy should provide opportunities for industry clustering and consider the implications for the relationship between where people live and where they work.

Identifying the required amount of unconstrained land for industrial development in the Clarence Valley is challenging given the competition from competing land uses like residential and the environmental sensitivities in some areas. In particular, it is noted the coastal areas face significant limitations with regard to favourable land not impacted by flood or other encumbrances or currently under productive agricultural uses. However, compared with the regional coastal centres nearby, the Clarence Valley is well placed to provide larger-scale industrial land to meet strategic export industry opportunities. Preserving strategic land for future employment in a viable manner is central to this study and involves a shared role between Council and the private sector.

To ensure the continued growth of the sector and to position the region to take advantage of potential market opportunities, both new and redeveloped land will be required in suitable scales and locations. The preference, where possible, is for a consolidated approach with the clustering of industrial land in fewer key sites, particularly to accommodate larger, export orientated businesses and to, where possible, consolidate industrial development around existing zones. Such an approach can deliver a number of economic, social, environmental and town planning advantages for the region. The NSW Department of Planning requests any rezonings be made within a broader strategic planning framework. This Strategy seeks to provide this framework to support a range of industry types and enhance the economic competitiveness of the Clarence Valley.

8.2 Appropriate Planning Horizon

As a starting point, this Strategy adopts a long-term planning horizon of 25 years. The planning horizon for industrial land is typically longer than that of other land uses due to:

- Lengthy lead times required for major infrastructure headworks;
- Sizable capital costs and associated risks to financing;
- Planning, design and consent requirements for new development;
- Sensitive nature of industrial land uses and impacts on surrounding areas; and
- Required sizes of sites to concentrate the majority of the industrial activity.

Adopting a 25 year planning horizon provides the flexibility to study short-, medium- and long-term demand trends for industrial land, allows for the implementation of a performance based approach to ensure responsiveness to short-term surges and long-term possibilities, ensures new industrial land carefully considers the planning for new settlements and is consistent with the Department of Planning's 2031 population projections and *Draft Mid North Coast Regional Strategy* planning horizon.

8.3 Strategic Planning Framework

The strategic planning framework used to formulate this Strategy aims to take a balanced, holistic and strategic view of a range of key issues, including:

- Quantum of future industrial land required (supply versus demand);
- Locational criteria of industrial businesses serving different geographic markets;
- Locational criteria of industrial businesses with different services and impacts;
- Spatial distribution of industrial land (consolidated versus dispersed approach);
- Lot sizes based on current distribution and market demand trends;
- Synergies and positive benefits of business and industry clusters; and
- Journey to work times and energy efficiency.

These issues are discussed separately in the sections below.

8.3.1 Quantum of Future Industrial Land Required

Projecting demand is a separate issue to assessing what represents the appropriate supply of industrial land. The appropriate supply should consider existing take-up and vacant land, projected demand based on population and employment growth, the flexibility to respond to any surge in demand beyond that anticipated due to a structural change to the market, and the impacts on land values and affordability across the region. The majority of stakeholders believe there is inadequate industrial land to cater for future growth (both from internal and external forces) in the Clarence Valley.

There is no clearly or widely accepted definition of what constitutes an adequate supply of industrial land relative to projected demand. Both the State Governments in Victoria and South Australia have indicated that 15 years supply is sufficient to satisfy short-and long-term market demands for land. This timeframe recognises the lead-time required for identifying land suitable for industrial uses and the need to maintain the current stock of industrial land allowing for a variety of lot sizes and industry precinct types. For a local government example, the former Hastings Council, in the Mid North Coast Region of New

South Wales, resolved in 2003 that two times the 20-year projected industrial land demand should be supplied to the market within its planning process.

Considering the adopted 25 year planning timeframe, the strategic location, previous take-up rates and the settlement characteristics of the region, it is considered a 25-year supply of industrial land would be appropriate i.e. for supply to be equal to the 25-year demand projection. However, the quantum of supply should also consider any unprecedented take-up rate or structural change to the market that may result from:

- The attraction of major export industries and new investment;
- The region's forecast fast economic growth;
- Strategic location between Brisbane and Sydney;
- Improved positioning against regional counterparts;
- Possible greater regional decentralisation of industrial activities.

Additionally, this approach also:

- Improves the affordability in the future supply of land;
- Allows for surplus lands to be rezoned to other uses if required;
- Provides allowance for any greater than expected buffering as required;
- Provides for a greater range and choice of lands for the market; and
- Considers the uncompetitive and constrained nature of existing vacant lands.

Therefore, considering the need for flexibility for the above reasons, it is considered the identification of strategically located sites providing land beyond the 129 ha over the next 25 years which already includes allowances for land for buffers, roads and services is appropriate.

8.3.2 Distinction Between Local/Export Lands and Locational Needs

The next strategic planning consideration is the need to distinguish between general service based land needs and strategic export needs. Local service based industry needs to be accessible to the population centres and supplier markets in the local area. Often these businesses require street front exposure to passing trade and may retail goods and services from a shopfront or warehouse. The provision of land in local areas should be in accordance with projected population growth and appropriate supply for growth so as to not jeopardise the role of other industrial precincts.

The demand analysis in Chapter 7 estimated the largest industrial land demand for the faster growing former Maclean Council area, particularly the coastal area of Yamba. However, additional demand was also projected for Iluka, Maclean-Townsend, Gulmarrad and other parts of the former Council area. Where possible, any additional land supply should follow a compact land planning approach to concentrate future industrial activities and minimise land use conflicts. It is considered suitable that Grafton accounts for the projected additional industrial land demand for general services from the other former Council areas given their size and roles in the market.

Strategic export sectors, on the other hand, often have different location needs, often requiring direct access to their primary products, larger land areas for more significant operations, and access to major national and state transport infrastructure for access to markets outside the region. In many cases they do not rely on direct exposure to a local market since this is not a core market for their business. The location of new export land in the region will need to ensure that while remaining reasonably proximate to the local labour force, the area takes advantage of major transport infrastructure on large tracts of flat land capable of accommodating a wide range of larger businesses.

A range of strategic export opportunities have been identified and considered as part of the demand analysis, including a transport and freight hub, marine industry cluster and land supporting the value adding/processing of primary production sectors. The transport and freight hub case study suggests freight demand is likely to be strongest from the road sector along major trucking routes and its location should reflect that. The rail line is proximate to South Grafton and dissects the Koolkhan-Trenayr industrial areas, though only the latter has a rail siding and is a major timber exporter. Rail infrastructure at

Koolkhan-Trenayr could be used by expanded heavy industry in the area, while consideration for a new intermodal hub at South Grafton could consider investment in a new rail siding. Transport and logistics issues will be further investigated as part of a feasibility study into the potential for a transport hub in the region. Marine industry development would create new opportunities for local industry and allow for the sector's future expansion.

8.3.3 Distinction Between Different Industry Types and Locational Needs

The next strategic planning consideration is the need to distinguish between different industry types and their locational needs. For example, heavy industry has a greater social and environmental impact and requires more extensive buffering from residential and other conflicting urban land uses. Such industry can also create greater truck movements for heavy vehicles. This means these uses are often located away from population areas. The Koolkhan-Trenayr and South Grafton industrial areas have been preferred for these types of uses. General and light industries have lower impacts but still require buffs to residential areas. Often these uses are located closer to major population centres. Transport and storage businesses often operate 24 hours a day and require different access considerations. Again, they also generate heavy vehicle movements. These businesses often favour clustering with similar uses to increase competition and access to suppliers and flow-on services. The land supply strategy should attempt to reduce heavy traffic movements in urban areas and take greater advantage of industrial opportunities with immediate access to the Highway.

In terms of heavy industry, Koolkhan-Trenayr and South Grafton are the main locations to accommodate such uses. There are more than 40 ha of remaining vacant undeveloped land at Koolkhan-Trenayr that can cater for additional heavy industry development, including opportunities associated with, but not limited to processing primary production in the region. The area provides large tracts of flat land, highway and rail access, and already has an established timber industry. South Grafton also provides additional potential for this type of development, although the appropriateness of such development would need to be considered in light of other industry opportunities for this area. An expansion to this estate could facilitate such development.

The locational requirements of a transport and freight hub and marine industry cluster were discussed in Chapter 7. In terms of a transport and freight hub, there are a number of sites that could be considered, including Koolkhan-Trenayr, South Grafton, the Airport, Maclean-Townsend and interchanges on the realigned Pacific Highway. These sites each offer access to major transport infrastructure, and with the exception of the Airport, could form part of a larger industrial area. Marine industry development would preferably be located on the Clarence River in the Lower Clarence.

8.3.4 Spatial Distribution of Industrial Land (Coordinated versus Fragmented)

Another strategic planning consideration is determining the most appropriate spatial distribution for industrial land in the Clarence Valley. Developers often argue for increased land supply at their own development risk. However, in an industrial context, this would result in the proliferation of industrial activities across a range of precincts.

Fragmentation and proliferation of industrial areas can reduce the ability to create business clusters and attractive investment opportunities. This can also result in a lack of cost-effective infrastructure services through unnecessary duplication of investment for different sites i.e. a lack of efficiency of resource use. There can also be unnecessary impacts on adjacent land uses and the community.

Where possible, this Strategy supports a consolidated (or compact) planning approach versus a dispersed planning approach for the following reasons:

- Strengthen the market and key precincts;
- Improve business clusters, operating synergies and commercial attractiveness;
- Reduce duplication of often costly infrastructure services;
- Reduce conflicting land issues and impacts; and
- Reduces impacts and changes to current travel times and patterns.

The consolidation approach for industrial land relates to both existing and new industrial areas. Consolidation occurring in and around an existing industrial area is preferable. This requirement must, in some way, be balanced by the need for providing range and choice of industrial lands to provide competitive land supply.

8.3.5 Clustering of Industrial Activities

The consolidated planning approach recommended above links directly with the concept of business and industry clustering. A cluster can be defined as a:

> *"geographically bounded concentration of similar, related or complementary businesses with active channels for business transactions, communication and dialogue, that shares specialised infrastructure, labour markets and services and face common opportunities and threats."*

In other words, clusters are groupings of related firms within a particular geographical space, with the aim that this proximity to other firms will:

- Facilitate interaction between producers;
- Centralise labour and resources within one particular place; and
- Generate economies of scale (lower costs and improve efficiency).

There are opportunities for clusters within Clarence Valley including transport, marine, timber and other value adding sectors.

There are many different forms and types of clusters that may exist at a variety of levels – from the local, regional or international to even the virtual. Relationships between organisations within clusters may also be considerably different, with some clusters resembling a centre and periphery type model, while others can be more closely related to a web-like structure.

Despite the differences in the focus and location of clusters, all clusters are established with the key goals of:

- Facilitating greater levels of interaction between organisations; enabling greater:
    - *Sharing of knowledge*, resources, labour markets, skilled workers, know-how.
    - *Awareness* of *general* market opportunities and conditions.
    - *Competitiveness and efficiency* through related firms competing for the same resources and opportunities, particularly within the early stages of the cluster.
    - *Leverage and internal business opportunities*: Proximity to the skills, resources and *specialisations* of other firms within the cluster provides opportunities for firms to outsource elements of their production to local producers cutting down on (regional) imports.
- Establishing a critical mass of producers linked by proximity or commitment to the cluster facilities:
    - *Attraction to the region:* The concentration of infrastructure and high skill levels in one particular area may increase the attractiveness of the area for other producers, offering the opportunity to increase the cluster size, and further increase output in the regional economy.
    - *External business opportunities*: Customers will be attracted to the cluster as a single location capable of satisfying all of their needs. Firms are also able to collaborate on jobs, enabling increased output in isolation. In particular, a smaller regional market size becomes less of a constraint.

- *Stability:* Businesses within the cluster may not be so affected by seasonal variations in the demand for their particular product, and may be able to find opportunities for linking their specialisation with the needs of other producers.

It may take some time for these benefits to be realised initially, with often a role for governments in offering incentives for businesses to locate within these clusters. All clusters should be self generating; with the internal benefits of clustering able to attract new firms to the cluster, broadening the skills and specialisations of the cluster, providing greater opportunities for external trade and within cluster linkages, with these opportunities attracting new firms and so on. It is important to note that not all clusters do work, and often clusters may fail for many reasons related not only to the structure of the cluster, but also as a result of changes in international economic conditions.

This strategy therefore supports the creation of clusters and notes the role suitable industrial land supply can play in the creation of business and industry clusters.

8.3.6 Journey to Work and Energy Efficiency

A final key strategic planning consideration in the spatial distribution of the industrial land network and the identification of sites is the relative proximity and alignment of employment lands with the residential location of the workforce i.e. where they work and where they live. This is a key criteria of the RTA in particular.

Locating employment lands proximate to where the workforce lives benefits:

- Energy efficiency and carbon emissions;
- Travel to work times;
- Employee vehicle costs;
- Housing affordability and sustainability;
- Business-to-business costs; and
- Road safety and traffic movements.

This strategy seeks to, where possible, provide for employment land commensurate with population growth and employment demand in each of the areas of the Clarence Valley, which records a dispersed settlement pattern. In this respect, it is important for the strategy to consider the needs of both the Upper and Lower Clarence. Council's Settlement Strategy and the Draft Mid North Coast Regional Strategy have therefore informed the strategy, although the future growth areas are yet to be finalised.

8.3.7 Types of Industrial Sites for the Strategy to Identify/Include

Based on the strategic planning framework, this Strategy seeks to identify appropriate sites to meet the following future needs and requirements:

- Local services: Provision of land located proximate to future population and residential growth areas. The size of the industrial areas are to be in accordance with projected local services demand and consolidated, where capacity allows, as part of existing industrial areas and zones;

- General/mixed use industry: Provision of lands capable of catering for expanded general industry uses in a strategic location(s) to the sub-regional catchment proximate to major transport infrastructure and suitably removed from residential encroachment;

- Heavy industry: Provision of land suitable to cater for expanded heavy industry and economic/industry development opportunities in the region offering large flat tracts of land with larger lot sizes proximate to major transport infrastructure, including rail and road highway access, and suitably removed from residential encroachment;

- Transport hub: Provision of land suited to the development of a transport and freight hub located in a highly visible and accessible location, preferably as part of a broader

industrial area, proximate to major trucking routes and highways and with the potential to co-locate rail infrastructure;

- Marine industry: Support for the provision of lands located on the Clarence River to leverage competitive locational advantages and provide for industry expansion; and

- Timber industry: Provision of land suitable to cater for ongoing expansion of the region's timber industry, including value adding processes, located away from residential with access to both major road and rail infrastructure and export markets.

8.4 Site Selection Criteria

8.4.1 Site Selection Process

The identification of land for investigation has involved the following steps in consultation with Council and relevant stakeholders:

- Identification of areas with a non-residential/industrial zoning considered to offer some potential for future industrial development as identified by Council, stakeholders and the AEC*group*;

- Completion of preliminary desktop constraints analysis (see **Annexure D** and **E**) including aerial photographs, zoning maps, conservation lands, draft vegetation mapping, bushfire prone land analysis, acid sulphate soils analysis, coastal lands, minerals mapping, contours, natural drainage and flooding analysis; and

- Determination of investigation areas based on their consistency with the strategic planning framework and site selection criteria. Detailed environmental studies will be required to determine the capability and suitability of the investigation areas for future industrial use as part of the rezoning process. These assessments are presented in **Annexure B**.

8.4.2 Site Assessment Criteria

There are many factors to consider when identifying and assessing potential sites for industrial land development. Industrial businesses responding to the surveys indicated a range of different key factors to be considered when choosing an industrial land site.

8.4.2.1 Factors Considered Important From Business/Tenant Perspective

It is important to consider the site requirements of industrial businesses to ensure that commercial attractive industrial land is provided to the market. Industrial businesses responding to the AEC*group* survey indicated a range of different key factors to be considered when choosing an industrial land site.

In an unprompted situation, the location of the site was a key factor considered by 33% of businesses that wanted to be close to suppliers and be in a visible site with profile. The size of the land parcel was also very important to 30% of businesses to ensure sufficient land to meet their requirements and allow for expansion. Transport access (23%) and price (20%) were the next key factors to many businesses.

In a prompted situation, the importance of factors when choosing a site varied significantly between businesses depending on their operations (see **Table 8.2**). Over half of respondents indicated the size of the lot (59%) and the suitability (52%) were of the highest importance. Strategic location and transport access were also deemed as being important considerations. Factors of least importance to businesses were proximity to a rail network (60%) and proximity to an airport (56%).

Table 8.2: Important Factors When Choosing an Industrial Site from a Business Perspective

	Importance						Average
Factor	**1**	**2**	**3**	**4**	**5**	**N/a**	
Size of the lot or unit	3.7%	3.7%	7.4%	25.9%	59.3%	0.0%	**4.33**
Suitability of premises	7.4%	7.4%	7.4%	18.5%	51.9%	7.4%	**4.08**
Transport and access	7.1%	7.1%	14.3%	21.4%	46.4%	3.6%	**3.96**
Strategic location	11.1%	3.7%	11.1%	25.9%	44.4%	3.7%	**3.92**
Cost (rent or purchase)	7.4%	3.7%	22.2%	14.8%	37.0%	14.8%	**3.83**
Estate management	11.5%	7.7%	26.9%	38.5%	7.7%	7.7%	**3.25**
Proximity to customers	22.2%	11.1%	18.5%	22.2%	22.2%	3.7%	**3.12**
Proximity to labour force	15.4%	7.7%	38.5%	19.2%	11.5%	7.7%	**3.04**
Highway	14.8%	29.6%	11.1%	22.2%	14.8%	7.4%	**2.92**
Business clustering	25.9%	14.8%	14.8%	18.5%	14.8%	11.1%	**2.79**
Infrastructure services	29.2%	12.5%	25.0%	20.8%	8.3%	4.2%	**2.65**
Proximity to raw materials / other supplies	38.5%	3.8%	7.7%	11.5%	19.2%	19.2%	**2.62**
Sea port	46.2%	3.8%	3.8%	3.8%	19.2%	23.1%	**2.30**
Technology services	42.3%	0.0%	23.1%	15.4%	0.0%	19.2%	**2.14**
Airport	56.0%	4.0%	4.0%	8.0%	4.0%	24.0%	**1.68**
Rail	60.0%	4.0%	0.0%	4.0%	4.0%	28.0%	**1.44**

Source: AEC*group* Industrial Business Survey (2006)

8.4.2.2 Factors Considered Important From Developer/Investor Perspective

In addition to the businesses and tenants themselves, any industrial land also needs to be attractive to potential investors from a commercial perspective. This will be the key challenge for Clarence Valley in the current competitive context for the region.

Based on the developer survey, the location of a new site for industrial land development is believed to be contingent on several major factors:

- The land must be flood free in order for businesses to feel secure;
- Proximity to transport options including major roads and the port;
- Easy access for trucks into the site;
- The topography of the land for cost-effective development;
- Proximity to existing industrial land to allow for less impact on the region;
- Proximity to existing industrial land to allow industry clustering opportunities; and
- A buffer between the land and conflicting land uses such as residential.

When prompted with a range of potential factors, the developers indicated competitive position resulting from the development was the single most important factor with 80% of respondents identifying it as of the highest importance (see **Table 8.3**). Also important was commercial attractiveness, physical suitability and the availability of infrastructure services. Interestingly, town planning policy was the only factor with an average under 3 indicating that it was not considered a major issue by developers.

Table 8.3: Important Factors When Choosing an Industrial Site from a Developer Perspective

	Importance						
Factor	**1**	**2**	**3**	**4**	**5**	**N/a**	**Average**
Competitive position	0.0%	0.0%	20.0%	0.0%	80.0%	0.0%	**4.60**
Commercial attractiveness	0.0%	0.0%	20.0%	40.0%	40.0%	0.0%	**4.20**
Physical suitability of the site	0.0%	0.0%	40.0%	0.0%	60.0%	0.0%	**4.20**
Infrastructure services	0.0%	0.0%	25.0%	50.0%	25.0%	0.0%	**4.00**
Community acceptance	0.0%	0.0%	25.0%	50.0%	25.0%	0.0%	**4.00**
Accessibility and transport	0.0%	20.0%	20.0%	40.0%	20.0%	0.0%	**3.60**
Environmental issues	0.0%	25.0%	25.0%	25.0%	25.0%	0.0%	**3.50**
Business clustering	0.0%	20.0%	20.0%	60.0%	0.0%	0.0%	**3.40**
Adjacent land uses	0.0%	20.0%	40.0%	20.0%	20.0%	0.0%	**3.40**
Access to labour force	0.0%	50.0%	0.0%	25.0%	25.0%	0.0%	**3.25**
Technology services	0.0%	50.0%	0.0%	25.0%	25.0%	0.0%	**3.25**
Town planning policy	40.0%	20.0%	0.0%	20.0%	20.0%	0.0%	**2.60**

Source: AEC*group* Industrial Developer Survey (2006)

8.4.2.3 Factors Identified in Stakeholder Consultation

The stakeholder consultation process also raised a number of key considerations when selecting new industrial land. The following issues were raised:

- Clarence Valley Council – there is a need to provide commercially attractive and readily available land to take to the market. There is concern business is being lost to other regions due to the lack of appropriate industrial land. This therefore points to a strong consideration for the commercial realities of the situation and the end user needs. In addition to this, Council is undertaking the Industrial Lands Strategy to provide a structured approach to new site selection that carefully considers conflicting land issues and infrastructure services. The planning department is intent on ensuring new development does not encroach unduly on residential areas. Infrastructure services officers require sites with cost-effective outcomes.

- NSW Department of Planning – the Department will need to provide approval for any rezonings of new industrial land in Clarence Valley. The main criteria that needs to be satisfied from the Department's perspective is that new industrial land is located, where possible, in consistency with the criteria established in Clause 38 – Land Release Principles and Processes in the *North Coast REP*. These issues were described in the planning context for the project and mainly indicate that preference be given to development resulting in urban growth on land that adjoins other land which is already used for urban purposes and is the most economic service.

- NSW Roads and Traffic Authority – the RTA will also be required to provide approval for any new industrial land development and indicates it will consider access, traffic, safety and energy efficiency as its main factors when assessing proposals for new employment land development. This assessment is formulated from anticipated and forecast traffic and vehicle movements data, including the type of trucks etc. The RTA is likely to consider a total vehicle kilometres model. Interchanges and access points will consider highway speeds and delays.

8.4.2.4 Consideration of Sustainability Initiative

The *Clarence Valley Sustainability Initiative* highlights a number of principles and aspects that should be considered to ensure sustainable and appropriate development within the Clarence Valley, including selecting sites for new industrial land. The key goals from the *Clarence Valley Sustainability Initiative* relevant to site selection are considered to be:

- Economic factors:
  - Efficient resource use
  - Healthy economic activity
  - Meaningful work and employment
  - Efficient and effective transport access
  - Effective infrastructure and services;

- Social factors:
  - Quality built environment and places
  - Community health and wellbeing
  - Good community relations; and

- Environmental factors:
  - Protecting the land
  - Maintaining healthy waterways
  - Protecting biodiversity.

8.4.2.5 Site Assessment Criteria

This Strategy outlines the following industrial site evaluation framework to be utilised by Council when undertaking detailed assessment of the appropriateness of various sites (see **Table 8.4**). The framework follows a triple bottom line system and has been carefully aligned with the objectives of the *Clarence Valley Sustainability Initiative*.

Table 8.4: Industrial Land Site Selection Criteria

Guiding Principle	Category	Factor	Detailed Description
Economic	• Healthy economic activity	• Commercial attractiveness	• Land affordability • Profile of the site • Ability to attract tenants • Flexibility of site to accommodate tenants • Data technology capabilities • Ability to create an industry cluster • Development feasibility
		• Regional positioning	• Capacity to service intra region growth and development • Regional competitiveness (capacity to service competitive advantage)
	• Efficient and effective transport access	• Accessibility/ transport	• Access and profile to highway / major roads network • Access for consumers, workers and service vehicles (energy efficiency) • Access to export markets from airport, seaport and rail • Proximity to existing industrial areas • Proximity to education and training facilities • Access to tradewaste sites and transfer stations • Traffic implications and constraints • Access for B Double vehicles • Access costs to connect with the Highway network • Availability of public transport
	• Efficient resource use	• Cost-effective infrastructure and land use	• Existing investment in services and infrastructure • Upfront investment required in infrastructure and impact on viability • Impact on existing land uses and other industrial areas
	• Meaningful work and employment	• Employment impacts	• Direct and indirect employment generation • Proximity to labour force and vehicle kilometers
Governance	• Accountability and compliance	• Town planning	• Existing zoning and suitability of proposed land use • Planning direction of and support from Council and Dept. Planning • Potential for future expansion
	• Community health and well being	• Landowner views	• Willingness of owners to develop as industrial • Attitudes of and impacts on adjoining land holders
	• Good community relations	• Community acceptance	• Acceptable levels of impact on community amenity • Acceptable visual impacts and appropriate buffers
Human Habitat	• Quality built environment	• Physical suitability	• Proximity of residential areas and potential encroachment

Guiding Principle	Category	Factor	Detailed Description
	and places		• Ability to integrate with surrounding land uses • Proximity of areas of high environmental value • Convenience of workplace trips • Suitable size for intended role (i.e. large scale vs local) • Elevation of land and fill requirements

	• Effective essential services	• Infrastructure services	• Proximity to essential services:
			  ○ Water
			  ○ Sewer
			  ○ Electricity
			  ○ Broadband/technology

Ecology	• Healthy waterways	• Flood and water	• Flood levels • Catchment management • Waste water treatment
	• Protecting the land	• Geotechnical	• Contamination issues • Geotechnical issues • Soils testing • Vegetation
	• Protecting biodiversity	• Biodiversity	• Flora and fauna/wildlife corridors/threatened species • Other vegetation/conservation issues

Source: Clarence Valley Council, AEC*group*

8.5 Sites Options and Assessment

Investigations have been undertaken to identify those sites considered to be suitable for further investigation for industrial development/use. The sites have been identified following the supply planning process with input from the surveys, stakeholders and Council.

Annexure B presents the broad scoping, infrastructure servicing and preliminary desktop constraints analysis for each site relative to the strategic planning framework and site selection criteria. Based on this assessment, each site is categorised as either suitable or unsuitable for inclusion in the Strategy as potentially suitable for further investigation.

Preliminary constraints mapping for each site is presented in **Annexure D** and **E.**

9. Industrial Lands Strategy

9.1 Planning Principles

On the basis of the strategic planning framework and site selection criteria outlined above, the following planning principles are established to guide future industrial land development in the Clarence Valley over the next 25 years to 2031:

- Recognition of the industrial land sector's role in future economic prosperity;
- The total amount of future industrial land should consider a supply of industrial land equivalent to 25 years of projected demand with an additional allowance to provide for a flexible approach based on the following considerations:
    - To accommodate major export industries and new investment;
    - Account for the region's forecast fast economic growth;
    - Strategic location between Brisbane and Sydney;
    - Account for improved positioning against regional counterparts;
    - Account for possible greater regional decentralisation of industrial activities;
    - Ensure affordability in the future supply of land;
    - Allows for surplus lands to be rezoned to other uses if required;
    - Provide allowance for any greater than expected buffering as required;
    - Provide for a greater range and choice of lands for the market;
    - Consider the uncompetitive and constrained nature of existing vacant lands;
- The nature of the future supply of industrial land should:
    - Consider the distinction between general services and strategic export land needs with different market focuses and therefore different locational criteria;
    - Ensure suitable areas are available at a regional level for major export industries that have existing or planned access to strategic transport infrastructure as well as other key economic infrastructure;
    - Make adequate provision for accessible local service industry and support activities to both established and future residential/commercial areas;
    - Make the distinction between different industry types and their locational needs, including considering the nature of specific development opportunities and their relative requirements in regards to economic infrastructure;
    - Establish appropriate minimum lot sizes and consider the lot size and spatial requirements of specific industry tenants likely to be attracted to the region, plus those seeking expansion and/or relocation;
    - Establish high-outcome performance standards to improve the amenity and function for new industrial land development;
- The network and spatial distribution of future industrial lands should consider:
    - A preference for co-location and consolidation of industrial sites (both new and existing) in major key precincts;
    - The need for a smaller number of strongly performing industrial areas versus a larger number of weaker and fragmented industrial areas;
    - Likely improvement in the synergies and benefits that can be achieved from business clustering rather than fragmenting the industrial land market;
    - Likely benefits for cost-effective provision of infrastructure services achieved through a coordinated and consolidated network of industrial areas;

- The likely negative economic, social and environmental impacts created from unnecessary fragmentation and duplication of lands;
- The opportunity for master planning sites with flexibility to accommodate a range of uses as per projected demand and clustering requirements;
- The need to take advantage of major highways and the option to reduce heavy vehicle movements in traditional urban areas;
- The need to provide employment within appropriate distances from the workforce to reduce travel costs and times and increase energy efficiency;

- The timing of future industrial land should carefully consider the need to:
  - Alleviate short-term supply pressures as reported from industry participants and stakeholders, particularly in existing industrial areas;
  - Provide market ready and commercially attractive land in the short-term to position the region to take advantage of strategic export opportunities;
  - Identify requirements for the staging the future release of land and consider appropriate trigger points for new development; and
- In addition to their fit within the broader strategic planning framework, selection of industrial land should be based on a comprehensive assessment of all available industrial sites with regard to the following factors:
  - Healthy economic activity/commercial attractiveness;
  - Efficient and effective transport access/regional positioning;
  - Efficient resource use/cost-effective infrastructure;
  - Meaningful work and employment/employment impacts;
  - Accountability and compliance/town planning;
  - Community health and well being/land owner attitudes;
  - Good community relations/community acceptance;
  - Quality built environment and places/physical suitability;
  - Health waterways/flooding and water supply;
  - Protecting the land/bushfire and soil issues; and
  - Protecting biodiversity/wildlife corridors.

9.2 Industrial Lands Strategy

Based on the demand and need for industrial land in the Clarence Valley as determined by the strategic planning framework, the future Strategy is described as a strategy providing new land release within a compact planning approach that concentrates future major industrial land supply around existing industrial nodes.

9.2.1 Future Investigation Areas

The Industrial Lands Strategy identifies three new land release areas with total site area of approximately 150 ha to be considered for future investigation for the purpose of industrial rezoning and use (see **Table 9.1**). It should be noted that the identification of the sites does not necessarily mean they will be rezoned. Rather, detailed investigations are required to be undertaken to determine the appropriateness of any rezoning of that land. It should also be noted that total ha values may not equate to total ha yield values for the proposed purpose as yield will be impacted by the characteristics of the individual sites and will require additional investigations. The Strategy has included preliminary environmental and physical constraints mapping analysis.

The South Grafton industrial area would be expanded to the east to encompass an approximate 110 ha of land between Swallow Road, Tyson Street and the Pacific Highway. This expansion will provide a large tract of land to allow for the expansion of existing business by providing greater choice and improved quality, along with attracting

strategic export industry to the region through provision of more commercially attractive lands. There are no conflicting land use issues for the site. Strict guidelines would apply to development of the site to ensure a high standard development. From a strategic perspective, the land is well located relative to transport infrastructure and abuts a major existing industrial area. The spatial area and ownership pattern provides the opportunity to master plan a staged development featuring a range of sub-precincts/zones to accommodate a range of uses. Importantly, the site, along with the Airport in the long-term, presents the potential to locate a future transport hub. This will be further investigated as part of a feasibility study for a transport hub in the Clarence Valley.

There are 31 ha of future investigation area identified on the Summerland Way at Koolkhan at the former Koolkhan Power Station and an adjoining site. This land is already the focus of rezoning proposals and value adding projects using the infrastructure on site. The area is opposite and adjacent to existing industrial zones. A further 17 ha of land is identified in an expanded Maclean-Townsend industrial area to accommodate growth in the Lower Clarence, specifically Gulmarrad and Maclean-Townsend, along with providing increased lands for export industry in this area. The expansion would occur on land zoned for future investigation and represents a logical extension to the estate. Transport and access is provided to the site however a new access arrangement will not be considered prior to the finalisation of the Pacific Highway options.

Table 9.1: Inventory of Future Industrial Land Investigation Areas

Investigation Area	Role and Uses	Area (ha)	Timing (yrs)	Zone
Swallow Road, Tyson Street and Pacific Highway, South Grafton	• Major new land area for business expansion and export industry with different precincts and zones, including a transport hub. The site provides the flexibility to attract new industry/business, provide higher quality land development and provide greater market choice and range for industrial lands.	~110	<5	IN1-3
Summerland Way sites, Koolkhan	• New industrial land on former power station and adjoining site to provide opportunity for value adding from existing infrastructure.	~31	<5	IN1
Maclean-Townsend Industrial Estate	• Expansion of the existing industrial estate to provide increased and affordable land supply for the fast growing Lower Clarence.	~17	5-10	IN1-2

Note: IN1 – General Industrial, IN2 – Light Industrial, IN3 – Heavy Industrial
Source: AEC*group*

9.2.2 Existing Industrial Areas

In terms of the quantum of land supply, the three areas identified above total approximately 150 ha of land area subject to future investigation not inclusive of lands identified surrounding the Grafton Airport. The Airport represents a long-term strategic area and regionally significant area for future large-scale industrial development in the Clarence Valley following the construction of the realigned Pacific Highway and should be considered for land banking so as to preserve the lands for this opportunity. The strategic significance of this land is when the highway is developed and after the consolidation of the existing and other short-term release industrial areas. The Airport is one of the sites subject to a current feasibility study relating to transport hubbing options in the Clarence Valley, therefore providing an additional allowance to cater for export industry.

In addition to the identified future release and investigation areas, there are 100 ha of vacant undeveloped land within the existing industrial zones. While much of this land is constrained for a range of reasons, particularly the southern portion of the existing South Grafton industrial area and the fragmented lands in Grafton, the existing vacant land provides further development opportunities and supply in the areas of Iluka, Yamba, Maclean-Townsend and Koolkhan-Trenayr. The revitalisation of these industrial areas has the potential to increase land use efficiency, lift amenity and development standards, and improve the commercial attractiveness of the vacant lands for future development.

Vacant industrial lands in Iluka, in combination with improved enforcement of use, are considered sufficient to meet projected local services demand. The staged development of the vacant land at Yamba is underway and will be sufficient to meet future local and district level demand in this growing area. Maclean-Townsend still provides vacant land to meet future local growth with current subdivision. This capacity will be enhanced by an expansion to the estate. Koolkhan-Trenayr will continue to provide large tracts of land for heavy industry. Vacant land and development opportunities created through revitalisation of the South Grafton industrial area will provide for local and district services demand in the Upper Clarence, including the areas of Nymbodia, Copmanhurst and Ulmarra.

9.2.3 Summary of Strategy by Types of Industrial Sites Sought

The industrial land strategy has been developed based on the strategic planning framework which sought to identify the following sites/lands:

- **Strategic Intent I – Local services:** Provision of land located proximate to future population and residential growth areas. The size of the industrial areas are to be in accordance with projected local services demand and consolidated, where capacity allows, as part of existing industrial areas and zones:
    - Yamba – There is projected demand for up to 14 additional ha of industrial land in Yamba to meet general service needs, assuming the adoption of the West Yamba LEP. This demand will be catered for through development of the southern industrial zone (11 ha) which is under construction. Any additional demand would be encouraged to locate in industrial lands nearby, including the major town of Maclean.
    - Iluka – There is projected demand for up to 2 additional ha of industrial land in Iluka to meet general service needs. This demand can be catered for within the existing industrial zone with a vacant 4.3 ha available for development. This requires the enforcement of industrial uses in the zone given non-industrial uses current occur on vacant sites. The vacant land is Crown land but currently is the subject of an Aboriginal Land Claim. The land's intended use as industrial should however be retained irrespective of ownership. In summary, the existing zone is considered sufficient to cater for projected local demand.
    - Maclean/Townsend – There is projected demand for up to 4 additional ha of industrial land in Maclean-Townsend to meet general service demand. In addition to this, there is projected demand of up to 3 ha of industrial land from Gulmarrad and the surrounding area. This demand can be catered for within the existing industrial zone with a vacant 8.2 ha available for development. Added to this, there is up to 17 ha of vacant land in adjacent parcels that could be rezoned to industrial. There may also be long-term opportunities for additional lands in the Gulmarrad/James Creek area.
    - Grafton/South Grafton – There is projected demand for an additional 17 ha of general service based industrial land in the Upper Clarence. To cater for this demand, there is the potential to revitalise parts of the remaining vacant land in the South Grafton estate of 35.6 ha along with a 110 ha investigation area. It is considered the South Grafton estate could also cater for local services demand generated from the nearby Copmanhurst, Ulmurra and Nymbodia to concentrate industrial zoning and land supply.
- **Strategic Intent II – General/mixed use industry:** Provision of lands capable of catering for expanded general industry uses in a strategic location(s) to the sub-regional catchment proximate to major transport infrastructure and suitably removed from residential encroachment:
    - South Grafton – The industrial area is already the largest industrial area in terms of occupancy and records a wide mix of business activities. An expansion to the estate provides the ability to concentrate future industrial

activity in a single location. Providing higher quality land development within the future investigation area, along with revitalisation of the existing zone, presents the potential for a significant industrial area proximate to the regional centre of Grafton close to major transport infrastructure.

- Maclean/Townsend – The industrial area provides the potential to expand the existing industrial zone by up to 17 ha and cater for additional demand relating to general services in the fast growing Lower Clarence region, along with strategic export opportunities that may arise from improved position due to the planned highway realignment. The option would provide an affordable industrial land supply for the future growth of the Lower Clarence. Providing the additional land also considers a potential new depot in the existing zone.

- Summerland Way – The industrial area will provide more than 30 ha of land to facilitate the development of general industry, value adding initiatives around underutilised infrastructure. The site is located adjacent and opposite an existing industrial area and will provide local employment opportunities.

- Airport: Employment lands within close proximity to the Pacific Highway are in high demand and this location is viewed as being strategically aligned in the long-term to future demand in the region for large-scale industrial land and regionally significant development. The strategic significance of the site is dependent on the construction of the realigned Pacific Highway.

- **Strategic Intent III – Heavy industry:** Provision of land suitable to cater for expanded heavy industry and economic/industry development opportunities in the region offering large flat tracts of land with larger lot sizes proximate to major transport infrastructure, including rail and road highway access, and suitably removed from residential encroachment:

  - Koolkhan-Trenayr – Heavy industry development would continue to be promoted in the Koolkhan-Trenayr industrial area where there is already a developed cluster of these uses away from residential planning conflicts and with rail access on site. The estate is capable of providing the flexibility for Council to cater for major value adding opportunities to primary production. There could also be some subdivision around these uses to add further opportunities for small value adding businesses.

  - South Grafton – the investigation and potential release of approximately 110 ha of land east of the existing South Grafton industrial zone provides a master planning opportunity to incorporate heavy industry. There is already heavy industry located within the South Grafton estate and there are no residential encroachment issues for the new release area. Importantly, the site is strategic for heavy industry in that it provides rail access, large tracts of land and is located on the Pacific Highway side of Grafton, thereby reducing heavy vehicle movements through the city of Grafton.

- **Strategic Intent IV – Transport hub:** Provision of land suited to the development of a transport and freight hub located in a highly visible and accessible location, preferably as part of a broader industrial area, proximate to major trucking routes and highways and with the potential to co-locate rail infrastructure (to be further tested as part of a feasibility study for a transport hub in the Clarence Valley):

  - South Grafton – Transport and logistics uses would be encouraged to locate in a dedicated precinct in South Grafton to provide access to both road and rail infrastructure. This precinct would be designed as part of a master plan for the new release area directly to the east of the existing zone. There is already a major transport operator establishing adjacent to this release area. The area provides access to both the Pacific Highway and rail.

  - Airport: Employment lands within close proximity to the Pacific Highway are in high demand and this location is viewed as being strategically aligned in the long-term to future demand in the region for transport, logistics,

warehousing and support service hubbing. The strategic significance of the site is dependent on the construction of the realigned Pacific Highway.

- **Strategic Intent V – Marine industry:** Support for the provision of lands located on the Clarence River to leverage competitive locational advantages and provide for industry expansion:

    - The River access and established nature of the marine industry in the Clarence Valley provide an obvious opportunity for expansion. There is the potential to expand the current sector and to cluster supporting marine businesses in the Clarence Valley to respond to market trends. The preferred area for marine sector development and marine support services would be in the Lower Clarence close to existing industry, skilled labour force and with access to the Clarence River.

- **Strategic Intent VI – Timber industry:** Provision of land suitable to cater for ongoing expansion of the region's timber industry, including value adding processes, located away from residential with access to both major road and rail infrastructure and export markets:

    - Koolkhan-Trenayr – Timber value-adding would continue to be promoted in the Koolkhan-Trenayr industrial area where there is already a developed cluster of these uses away from residential planning conflicts with rail access on site and road access via the Summerland Way.

9.3 Consistency with Relevant Planning Strategies

Relevant Council and regional planning strategies have informed the development of the industrial lands strategy. The supply strategy is considered consistent with these instruments as follows:

- Economic Strategic Plan: The industrial lands strategy provides the appropriate scale, mix and location of industrial land to facilitate the key economic development initiatives outlined in the Economic Strategic Plan and facilitate employment growth and the achievement of economic targets. Importantly, the strategy seeks to provide an improved range and a higher standard of industrial land to allow for local business growth along with the attraction of new and strategic export industry to the region.

- Settlement Strategy: The industrial lands strategy has based the future supply of industrial land within each of the sub-regions of the Clarence Valley on existing settlement patterns and anticipated future population growth as outlined in Council's Settlement Strategy. This ensures there are future employment opportunities located appropriately for each settlement area, which has subsequent benefits for journey to work, energy efficiency and housing affordability. The strategy has considered the dispersed settlement pattern of the region and has provided both local and strategic lands in the Upper and Lower Clarence.

- Sustainability Initiative: The site selection and assessment criteria developed for the industrial lands strategy has been aligned with Council's Sustainability Initiative. Therefore, each of the critical sustainability variables across the economic, social and environmental spheres has been carefully considered in the identification and assessment of the future network of industrial precincts.

- Draft Affordable Housing Strategy: The industrial lands strategy is consistent with the Clarence Valley Affordable Housing Strategy in that consideration of the footprint of any future development has been a factor of both strategies and that affordable housing will be placed in close proximity to potential employment opportunities.

- Draft Mid North Coast Regional Strategy: The industrial lands strategy has responded to the strategic regional direction outlined in the *Draft Mid North Coast Regional Strategy*. The strategy has identified lands for future industrial activity to support employment growth, noting the strategic importance of the Clarence Valley in this market as industrial land shortages intensify in the other regional centres of the Mid

North Coast. The strategy has provided opportunities for industrial development in the Major Regional Centre of Grafton and the Major Town of Maclean. In particular, the Regional Strategy indicates Grafton has land and infrastructure available to greatly increase its industrial capacity and the industrial lands strategy responds to this capacity and opportunity. The strategy has also considered the preliminary agreed growth areas for future urban growth.

9.4 Implementation Program

The implementation program for the Strategy is outlined in **Annexure C**. The implementation of the Strategy requires the following actions and considerations:

1. Landowner consultation:
    - Initiate consultation with all affected landowners of the future investigation (or new land release) areas;

2. Further technical investigations:
    a. Detailed investigations are required to be undertaken to determine the appropriateness of rezoning of the future investigation areas in:
        i. Koolkhan-Trenayr
        ii. Maclean-Townsend
        iii. South Grafton;

3. Planning amendments and controls:
    a. Transfer to the new standard LEP template
    b. Preparation of a structure plan for South Grafton land release area
    c. Outline and implement strict development controls in DCP
    d. Consider minimum lot sizes of 1,000sqm or within a master plan
    e. Prohibit commercial development within industrial zones
    f. Implement contribution plans for industrial areas
    g. Consider alternative uses and rezoning for select sites;

4. Land release and timing schedule:
    a. Implement the land release schedule;

5. Land banking:
    a. Council's planning and facilitation role is to focus on:
        i. Establishing planning controls and investment environment
        ii. Consultation with affected/relevant land owners
        iii. Identifying development opportunities and marketing
        iv. Providing market intelligence and analysis
        v. Investment and business attraction strategy
        vi. Business conversion and approvals facilitation
    b. Council's role to extend to banking of strategic long-term lands as follows:
        i. Summerland Way
        ii. South Grafton
        iii. Airport
        iv. James Creek

6. Developer contributions and infrastructure financing:
    a. Review developer contribution plans as part of LEP review process
    b. Establish development contribution plans in new precincts
    c. Council engage more broadly with RTA regarding state/local road interfaces
    d. Council identify the required standard for road infrastructure upgrades
    e. Council commit funding toward the upgrade of road infrastructure;

7. Revitalisation techniques:
    a. Focus on the South Grafton industrial area
    b. Implement infrastructure contribution plans
    c. Identify site consolidation and redevelopment opportunities
    d. Undertake signage and streetscape improvement projects;

8. Business investment and attraction:

a. Prepare inward investment strategy and marketing materials
b. Undertake investment strategy to attract developers/investors
c. Consider financial incentives to attract new investment and industry;

9. Performance measurement:
    a. Review the Strategy in 5 years; and

10. Regional land monitor:
    a. Annual updating of the industrial land database to meet reporting requirements from the Department of Planning, to better inform future planning and land take-up and assist business investment attraction.

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