MRS AMENDMENT PRE-LODGEMENT ADVICE REQUEST CARDUP URBAN

CARDUP URBAN

Harley Dykstra®

PLANNING & SURVEY SOLUTIONS

DOCUMENT CONTROL

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DISCLAIMER

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1 INTRODUCTION

1.1 Purpose

Harley Dykstra on behalf our client, the Cardup Landowner Group, are pleased to present to the Western Australian Planning Commission this Metropolitan Region Scheme Pre-Lodgment Advice Request to rezone the subject site from 'Industrial' and 'Rural' to 'Urban' with a concurrent amendment to the Shire of Serpentine-Jarrahdale Local Planning Scheme No. 3 (TPS 3) to rezone the land from 'Rural' and 'Industrial Development' to 'Urban Development'.

1.2 Executive summary

The Cardup Industrial zone was initiated approximately 15 years ago and has undergone rezoning and structure planning processes. However, due to the development of the surrounding area and changes in the planning framework, the location is no longer suitable for general industrial land uses. Further, the significantly larger and better placed West Mundijong Industrial Area had not commenced any planning process at the time that the Cardup Industrial area was rezoned, and now West Mundijong is well advanced with all approvals in place, including a subdivision, and some developments.

Landowners of the Cardup Business Park (CBP) face major challenges in attracting operators due to issues with connecting roads and restricted truck routes. Additionally, given amenity impacts, applications within CBP for industrial uses attract significant opposition from the nearby residents. Further, the West Mundijong Industrial Area (WMIA) is the preferred location for industrial operators, with a number of landowners within CBP indicating they are considering and progressing opportunities to relocate to WMIA.

Considering these circumstances, implementing an urban zoning for Cardup is highly appropriate. An urban zoning would align with the evolving planning framework, complement the expanding growing Byford and Mundijong urban areas and benefit from the forthcoming rail infrastructure to Byford.

1.3 Proposal Background

This particular request is a result of a number of years of consultation which began with an initial meeting with the Western Australian Planning Commission (WAPC) Chairman in December of 2019 to introduce the proposal. Since then, further consultation occurred with senior planners from WAPC as well consultation with the Shire of Serpentine Jarrahdale over a number of years to discuss the merit of a potential rezoning to urban and what considerations on a strategic level would need to be addressed.

2 SITE DETAILS & CONTEXT

2.1 Land Ownership

The subject site is made up of multiple privately owned landholdings, who have come together to form the Cardup Landowner Group. The owners of Lot 41 are currently not part of the landowner group, however, there is ongoing liaison with these owners in relation to this proposal. The legal information of the lots within the subject site are detailed in Table 1 below:

LOT NUMBER:	Registered Proprietor/s	Certificate of Title Details	Lot Area
Lot 41	CC Wormall Pty Ltd	1455/96	4.7158ha
Lot 1	Bristile Holdings Ltd	1482/82	0.7869ha
Lot 7	Samantha Rachel Spillmann Brian John O'Neil Diane Shirley Bosveld Elizabeth Oetje Bosveld Intrepid Bay Pty Ltd Cooljade Pty Ltd	1763/506	20.01ha
Lot 6	Cardup Industrial Land Holdings Pty Ltd	1772/111	26.9374ha
Lot 1	Redire Pty Ltd	1421/503	29.9925ha
Lot 10	Silvagold Corporation Pty Ltd	1863/686	29.1968ha
Lot 21	Jetstar Enterprises Pty Ltd	1684/388	35.6438ha
Lot 60	Kandalee Pty Ltd/Mecca Holdings Pty Ltd	2672/275 & 2672/276	47.3903ha

Table 1 Legal Description

2.2 Location & Context

The Subject Site comprises a total land area of approximately 194ha and is located to the south of Byford and is approximately 50 km south of the Perth CBD. The site is bound by South Western Highway to the east, Norman Road to the south, Soldiers Road to the west and Cardup Siding Road to the north and comprises approximately 165ha of Industrial land and 29ha of Bush Forever.

The subject site is located within close proximity to future transport infrastructure, strategic industrial precincts and future residential area including:

- The site is located 10km south of the Armadale Strategic Activity Centre;
- The site is located 2.8km South of the Byford District Centre;
- The site is located 6km north of the Mundijong District Centre;
- Approximately 3km south of the future Byford Station;
- Located 2km east of the future West Mundijong Industrial area; and
- Future residential development 750m south in Whitby.

Refer to site context map (figure 1) and Aerial Photo (figure 2).

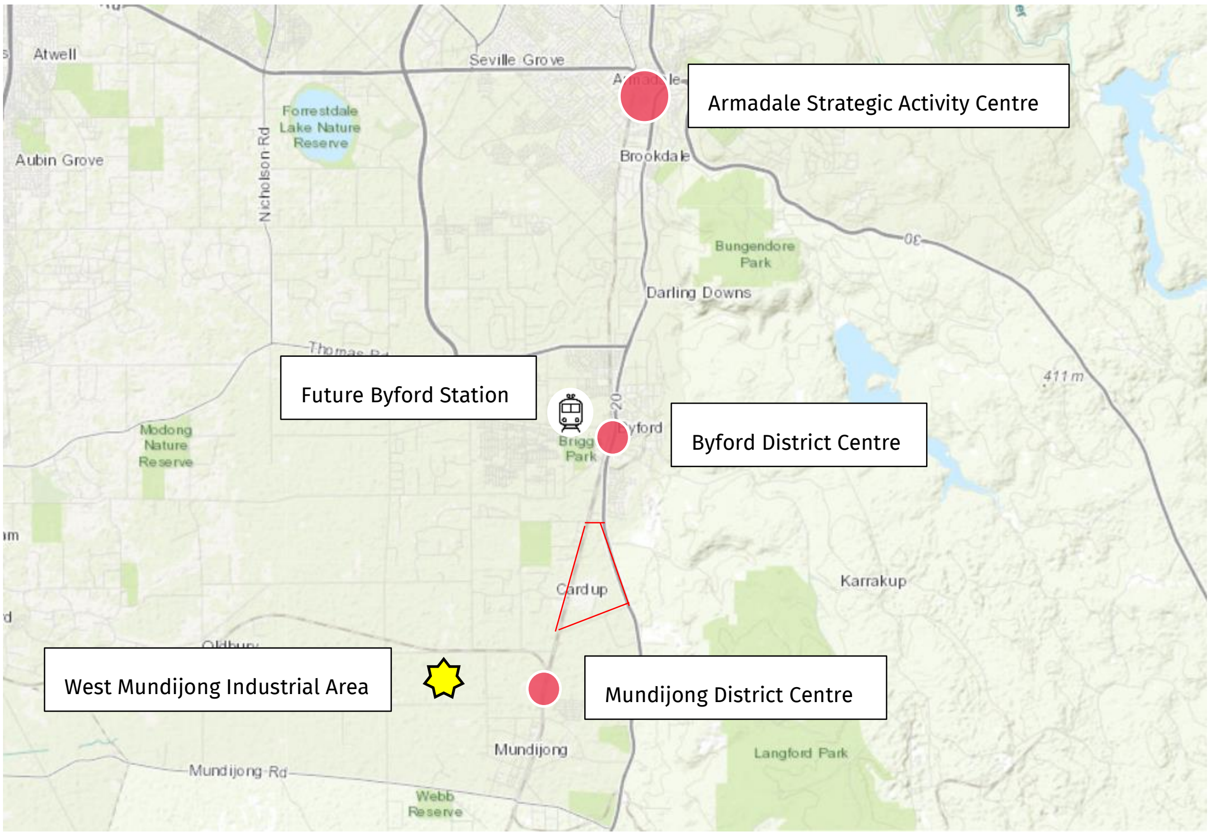


Figure 1Site Context Map

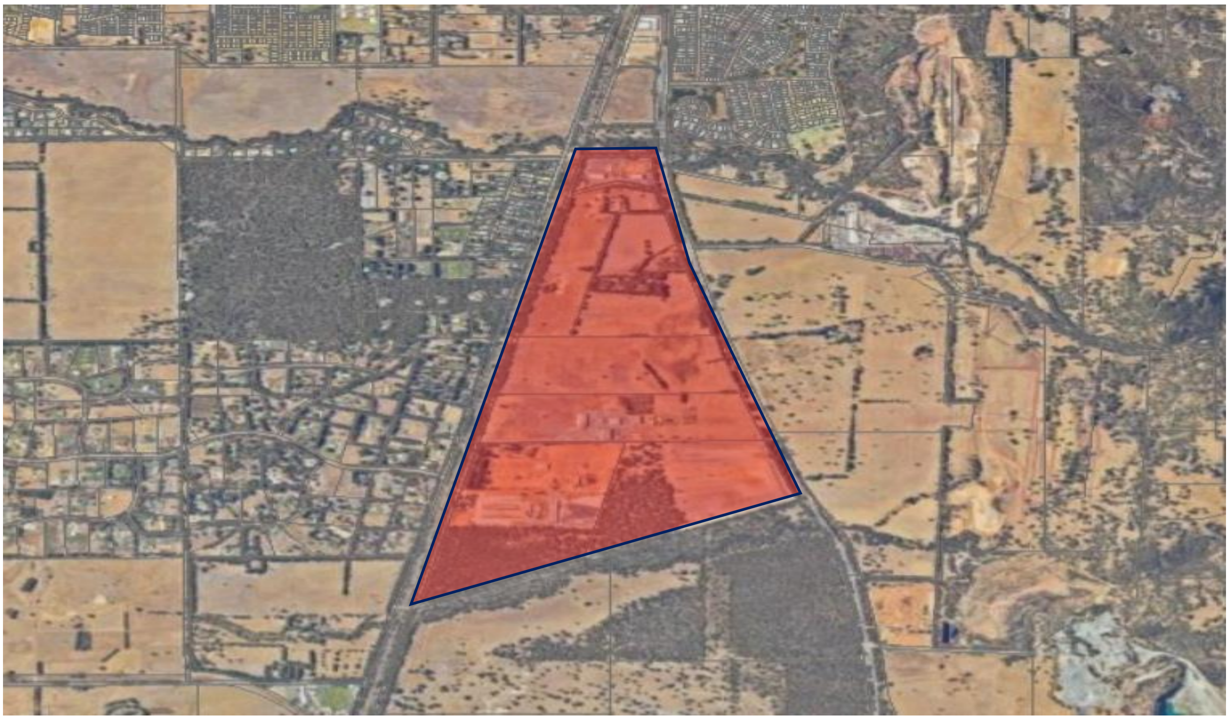


Figure 2 Aerial Photo

3 PLANNING FRAMEWORK

3.1 State Planning Framework

3.2 Directions 2031 and Beyond

Directions 2031 and Beyond is a high-level strategic plan for the Perth and Peel regions that establishes a vision for future growth – creating a world-class city that is green, vibrant, more compact and accessible and with a unique sense of place.

Additionally, the plan seeks to address the relationship between where people live and where they work with the aim of reducing commuting time and cost through the delivery of improved employment self-sufficiency across the outer sub-regions.

3.3 Perth and Peel @ 3.5 million

The Perth and Peel @ 3.5 million builds on the vision set out in Directions 2031 and Beyond and provides a link across the four sub-regional land use planning and infrastructure frameworks that define the Perth and Peel spatial plan for the next 30 years. The frameworks adhere to the principles detailed in Directions 2031 and Beyond and are to be taken into account when preparing and reviewing strategies, policies and plans. The matters outlined within the framework have been considered and addressed as part of this MRS Amendment pre-lodgement request.

3.4 South Metropolitan Peel Sub-Regional Planning Framework

The South Metropolitan Peel Sub-Regional Planning Framework (the framework) aims to establish a long-term, integrated planning framework for land use and infrastructure to guide future growth across the sub-region.

The framework provides strategic guidance to government agencies and local governments on all aspects of land use and infrastructure provision in the South Metropolitan Peel sub-region.

The subject site is currently identified as 'Industrial' under the framework, the framework also encourages arrangements being made for the long-term protection of Bush Forever site 361.

3.5 Metropolitan Region Scheme

The subject land is primarily zoned 'Industry' under the Metropolitan Region Scheme (MRS) with a portion of land to the south of the subject site zoned 'Rural', the rural zoning relates to Bush Forever site 361. Land north of the site is zoned 'Urban' with the lots directly east and west of the site zoned 'Rural' and land directly south of the site is zoned Parks and Recreation and covers Bush Forever Site 354.

3.6 State Planning Policies

3.6.1 State Planning Policy 2.8 – Bushland Policy for the Perth Metropolitan Area

The aim of State Planning Policy 2.8 – Bushland Policy for the Perth Metropolitan Area (SPP 2.8) is to provide a policy and implementation framework that will ensure bushland protection and management issues in the Perth Metropolitan Region are appropriately addressed and integrated with broader land use planning and decision-making and will secure long-term protection of biodiversity and associated environmental values.

The site contains Bush Forever Site 361, as such, future structure planning will need to carefully consider the interaction between any proposed development and Bush Forever Site 361 to ensure the long-term protection of the site.

3.6.2 State Planning Policy 3.0 – Urban Growth and Settlement

State Planning Policy 3.0 – Urban Growth and Settlement (SPP 3) sets out the principles and considerations which apply to planning for urban growth and settlement within Western Australia. The objectives of the urban growth settlement policy are to promote sustainable and well-planned settlements in the state, providing sufficient land for diverse housing, employment, recreation facilities and open space. The policy aims to strengthen existing communities by investing in services and infrastructure, improving the quality of life. It also focuses on managing urban growth in line with social, economic, environmental and heritage considerations.

Future structure planning for this proposed urban precinct is to be developed in accordance with the key requirements of sustainable communities as outlined within SPP 3.

3.6.3 State Planning Policy 3.7 – Planning in Bushfire Prone Areas

The Western Australian Planning Commission's State Planning Policy 3.7 – Planning in Bushfire Prone Areas (SPP 3.7) and accompanying Guidelines for Planning in Bushfire Prone Areas sets out specific guidelines and requirements for development in order to preserve life and reduce the impact of bushfire on property and infrastructure. The subject site is identified as being within a bushfire prone area, it is therefore anticipated that the preparation of a Bushfire Management Plan will be required to accompany the preparation of a structure plan.

3.6.4 State Planning Policy No. 5.4 – Road and Rail Transport Noise

State Planning Policy 5.4 (SPP5.4) provides guidance on how proponents and decisions can minimise the impact of road and rail noise on noise-sensitive land uses. This policy seeks to ultimately ensure that communities are protected from transport noise and that a reasonable level of amenity adjoining regional transport corridors is maintained, whilst also ensuring the future operations of these transport corridors.

The subject land adjoins South Western Highway and the railway line, and is within the trigger distance, and as such will be affected by noise. Currently, it is unknown what sensitive land uses might be located within the trigger distance area. As such, it is considered appropriate that an acoustic assessment that determines the level of noise exposure and subsequent noise mitigation measures that would need to be implemented in order for the future structure plan to comply with SPP 5.4.

3.7 Local Planning Framework

3.7.1 Shire of Serpentine-Jarrahdale Local Planning Strategy

The Shire of Serpentine-Jarrahdale Local Planning Strategy was endorsed by the Western Australian Planning Commission and aims to provide the Shire of Serpentine Jarrahdale with a coordinated strategic planning framework, capturing the long-term vision of the Shire and guiding its future growth and development. The purpose of the Local Planning Strategy includes the following:

- *To establish a vision for the Shire;*
- *Coordinate the existing plans and strategies that have been developed for the Shire and surrounding region;*
- *Identify issues and constraints for the future development of the Shire and propose strategies to address them;*

- *To set out a 10-year framework for the Shire's future planning and development, and in doing so set a strategic basis for the establishment of the Shire of Serpentine Jarrahdale Local Planning Scheme No. 3;*
- *Review existing land use and development appropriateness based on strategic planning recommendations;*
- *Identify the need for further studies and investigations within the Shire to address longer-term strategic planning and development issues; and*
- *Identify future growth areas.*

The subject site is identified as industrial within the Local Planning Strategy map in accordance with the Cardup Industrial Park Local Structure Plan. Any amendment to the MRS and Local Planning Scheme would need to be accompanied by a modification to the Local Planning Strategy.

3.7.2 Shire of Serpentine-Jarrahdale Local Planning Scheme No. 3

The subject site is zoned 'Rural' and 'Industrial Development' under the Shire of Serpentine-Jarrahdale Local Planning Scheme No. 3

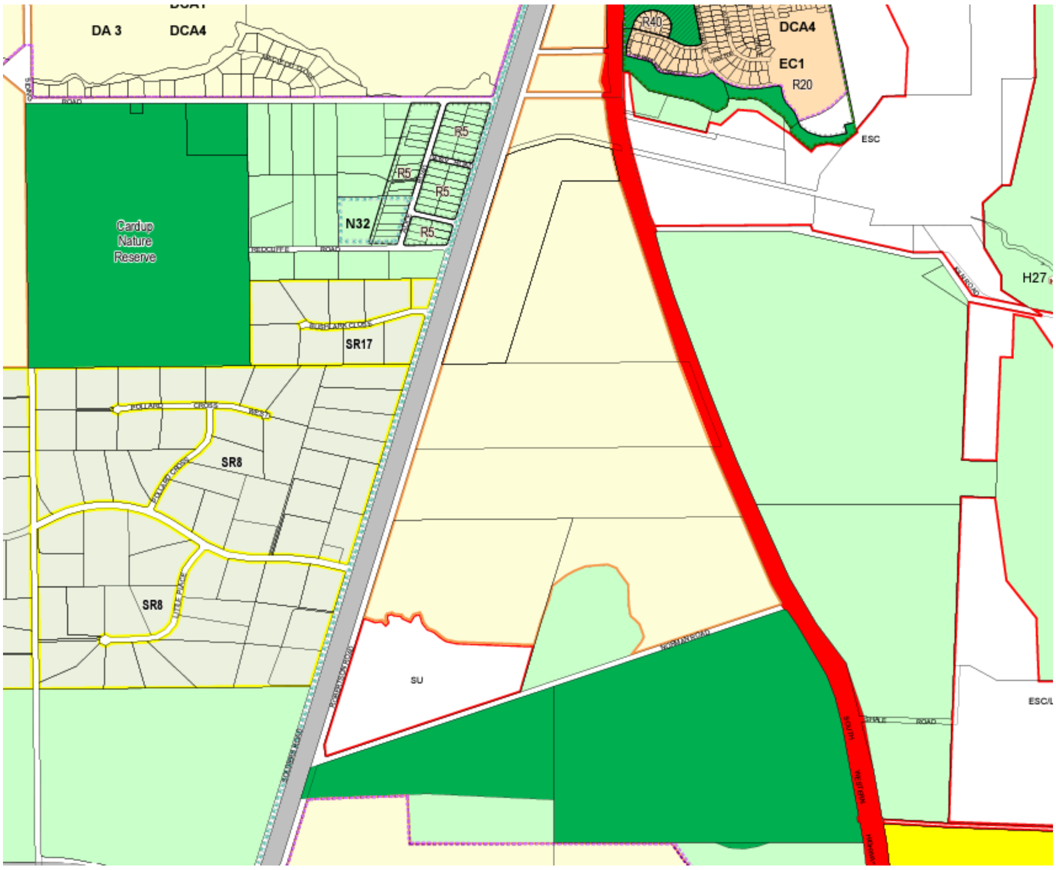
The proposed MRS Amendment request seeks to simultaneously rezone the subject site to 'Urban Development' to facilitate future urban uses over the site. The objectives of the 'Urban Development' zone are as follows:

- *To provide an intention of future land use and a basis for more detailed structure planning in accordance with the provisions of this scheme.*
- *To provide for a range of residential densities to encourage a variety of residential accommodation.*
- *To provide for the progressive and planned development of future urban areas for residential purposes and for commercial and other uses normally associated with residential development.*
- *To provide an intermediate transitional zone following the lifting of an urban deferred zoning within the Metropolitan Region Scheme.*

If a rezoning to 'Urban Development' is achieved, detailed structure planning will need to be undertaken in accordance with the objectives of the Urban Development zone, to inform and provide a range of residential densities and the provision of urban uses associated with residential development in accordance with the above-mentioned objectives.

3.7.3 Shire of Serpentine-Jarrahdale Town Planning Scheme No.2

The subject site is largely zoned 'Urban Development' under the Shire of Serpentine-Jarrahdale Town Planning Scheme No.2 with a portion of Lot 60 Robertson Road zoned 'Special Use' and portion of Lot 21 Norman Road zoned 'Rural'.



TPS 2 Map

4 SITE ANALYSIS

4.1 Topography

The topography of the site is undulating, with a general slope to the west. The natural surface height ranges from its lowest elevation of 48 m Australian Height Datum (m AHD) in the south west corner to its highest elevation of approximately 80 m AHD in the south east corner, resulting in a generally western aspect. The slope of the land is relatively even across the site, with an average slope of 2%.

4.2 Landform and soils

A geotechnical investigation was completed by Galt Geotechnics in 2013. The site was identified as being categorized into the following geological areas:

- A thick lateritic gravel horizon overlain by sand and clayey sand within the western and central portion of the site.
- Thick lateritic gravels overlying clayey sand / sandy clay within the southern portion of the site
- Sand and clayey sand overlying clayey lateritic gravels within the eastern and northern portions of the site.

4.3 Acid Sulfate Soils

Acid sulfate soils (ASS) is the name commonly given to naturally occurring soils and sediment containing iron sulphide (iron pyrite) materials. Available information from the Department of Water and Environmental Regulation (DWER) indicates that the majority of the site has 'no known risk of ASS occurring within 3 m of the natural soil surface'. A portion of the site, located along the south-eastern boundary is classified as having 'low to moderate risk' of ASS.

ASS is only likely to be a potential risk where civil construction works extend below the seasonally dry soils (i.e below the permanent groundwater table and is typically associated with the installation of deep sewer) and can be appropriately managed through the subdivision process.

4.4 Biodiversity and Natural Areas

The biodiversity values of the site have been determined based on a number of site-specific investigations undertaken as part of the previous rezoning and structure planning, including:

- Cardup Business Park Spring Flora and Vegetation Survey and Wetland Assessment.
- Fauna Assessment of Cardup Business Park.

The majority of the site has been historically cleared for agricultural uses, predominately grazing, and is generally characterised by cleared paddocks with scattered paddock trees and therefore contains limited flora, vegetation and fauna values. An area of remnant vegetation is located within the southern portion of the site and contains conservation significant vegetation values, such as a threatened ecological community (TEC), namely 'Corymbia calophylla – Eucalyptus marginata woodlands on sandy clay soils of the southern Swan Coastal Plain', and black cockatoo foraging and potential breeding and roosting habitat. This vegetation forms part of Bush Forever Site 361 and is proposed to be protected and enhanced as part of the proposed development.

In addition, a regional ecological linkage has been identified adjacent to the southern, western and northern boundaries of the site and is associated with the surrounding Bush Forever sites and link eastward to the Darling Range Regional Park. Ecological linkages are typically arbitrarily identified as 500 m wide corridors, with the intention to create interconnected networks of vegetation through the Perth metropolitan region. The proposed urban zoning does not prevent these linkages occurring and supports their provision through the retention of Bush Forever Site 361.

4.5 Groundwater

Site specific groundwater monitoring has been undertaken for the site by Cardno 2009 **Appendix C and** indicates that for the majority of the site, groundwater is located six meters or more below the natural ground surface. Within the central-eastern portion of the site, groundwater was identified between zero to four meters below the natural ground surface.

4.6 Surface Water

The site is located within the Peel-Harvey catchment, specifically the Serpentine sub-catchment. A constructed open drain runs east-west through the central portion of the site and conveys water from the land east of South Western Highway through the site, to the wetland within the rail reserve west of the site. Cardup Brook, a minor natural waterway, is located adjacent to Cardup Siding Road, found directly north of the site.

4.7 Wetlands

A review of the Geomorphic Wetlands of the Swan Coastal Plan dataset (DBCA 2018) indicates that the majority of the site is mapped as a number of multiple use wetland (MUW) (namely wetlands with the following unique feature identification number (UFI# 15382; UFI#12161, UFI#14543 and UFI#15383).

A conservation category wetland (CCW) (UFI#14505) is identified adjacent to the western boundary of the site, within the rail reserve and Bush Forever Site 350. As part of the proposed development within the site, the current local structure plan includes provision of a buffer to the CCW to be accommodated adjacent to the western boundary of the site. Structure planning pursuant to the urban development zone would also need to respond appropriately to this wetland.

4.7.1 Indigenous heritage

The classification and general location of all known Aboriginal heritage sites is made publicly available through the Department of Planning, Lands and Heritage (DPLH) Aboriginal Heritage Inquiry System (AHIS) online database. Based on a review of the AHIS online database (DPLG 2018), no registered Aboriginal heritage sites were identified within the site, though one registered Aboriginal heritage site, Site 16108 Cardup Brook (classified as a 'Mythological' site), was identified adjacent to the northern boundary of the site.

Under the new Aboriginal Cultural Heritage legislation taking affect in July 2023, further consultation with the Local Aboriginal Cultural Heritage Service will be required.

4.7.2 Non-indigenous Heritage

A search of the Shire of Serpentine Jarrahdale Municipal Heritage Directory (SoSJ 2018), the State Heritage Office database (Heritage Council 2018) and the Australian Heritage Database (Department of the Environment 2018) indicated that no registered heritage sites have been identified within the site.

One nationally listed place of significance, Cardup Bushland, occurs 900 m to the west of the site. It is described as part of the remnant bushland of the eastern Swan Coastal Plain and is found close to the foot of the Darling Scarp. A stand of redgum trees located approximately 260 m to the west of the site is listed on the Shire of Serpentine Jarrahdale's municipal inventory as a significant vegetation historic site.

4.8 Existing Land Uses

Historically and at present the majority of the site has been used for rural and legacy industrial purposes, grazing of livestock or uses associated with growing and treating timber, wood chips and saw dust. Specific uses include:

- Lot 7 South Western Highway historically contained an airstrip and was used the purposed of building and flying ultra-light aircraft.
- Lot 10 Robertson Road currently has an industrial land use and is primarily used for timber distribution and roofing truss manufacture. In the past this lot was used as timber mill, however no milling is currently undertaken.
- Lot 60 Robertson Road contains two operating businesses. One business manufactures and treats a range of plantation pine log products for use in fencing, landscaping and horticultural applications. The other business is concrete product manufacturing. The operation consists of significant infrastructure, including a large storage yard, several sheds, large storage tanks and workshops. The facility contains a large workshop, a small sealed and an unsealed storage yard. The southern portion of this lot is fenced and consists of remnant and regrowth native vegetation.
- Lot 21 Norman Road is predominately cleared and includes Bush Forever Site 360, the site is currently in the process of being used as a hardstand storage area for concrete products.
- Lot 41 is used by Wormall Civil.

4.9 Nearby Land Uses

The site is located nearby to:

- Areas of proposed conservation, associated with a number of Bush Forever Sites located adjacent to the northern, western and southern boundaries of the site.
- Urban development, with development to the south and south-west part of the large Whitby-Mundijong District Structure Plan area which is a large urban cell proposed to support residential development in the area. To the north, the land is associated with the future Byford Town Centre, which will include commercial and urban land uses.
- A freight and passenger rail, located adjacent to the western boundary of the site. Rural residential development is located further to the west of the rail and includes a number of lifestyle lots used for a range of different pursuits.
- South Western Highway, located adjacent to the eastern boundary of the site and is a major arterial road for the Perth Metropolitan region. Further east of South Western Highway are rural land uses, largely associated with grazing, as well as basic raw material extraction (predominately for clay and hard rock).

4.10 Traffic and Access

4.11 Servicing

4.11.1 Power

Western Power owned and operated electricity distribution assets have been identified around the perimeter of and within the subject site area. Further study and a feasibility study is recommended at future structure planning stage identify future upgrade requirements and if current Western Power infrastructure can accommodate the proposed development.

4.11.2 Water

Reticulated water supply is available to the north of the subject land within the "Byford by the Scarp" residential development. Preliminary consultation with the Water Corporation indicates that service extension from this existing residential development southward along South western Highway would be possible and would be subject to further design and consultation with the Water Corporation and the project engineers.

4.11.3 Sewer

Preliminary consultation with the Water Corporation and the project engineers confirms that sewer capacity within the Byford Urban area to the north west of the subject site is limited, and whilst some capacity may exist for connection of the proposed Cardup Urban precinct into the existing system, there would need to be further detailed design and consultation with the Water Corporation to determine appropriate catchments and capacity. The Water Corporation also advises that the land at Lot 33 Cardup Siding Road approximately 1.6km (west of the site) is also zoned Urban and will need to be included within a proposed sewer wastewater pump station catchment. The future "Byford WWPS – B" may need to be repositioned from its original planned location and have the overall catchment plan adjusted accordingly.

4.11.4 Gas

The servicing report provided by JDSi for the Cardup Business Park Structure Plan identified by ATCO Gas indicates there is gas infrastructure that runs along the eastern side of Soldiers Road adjacent to Robertson Road. Additionally, there is Gas infrastructure located along the southern side of Cardup Siding Road and runs down the western side of South Western Hwy. As demonstrated, any potential urban development can be connected to existing gas infrastructure. Further detailed servicing report will need to be conducted at future structure planning stage.

4.11.5 Telecommunications

The subject site is bounded by existing telecommunications infrastructure owned and operated by Telstra with all lots having separate existing service connections. Given an Urban zoning would likely create more than 100 lots, it is likely a National Broadband Network connection would be required and would require further investigation at a more detailed design stage.

5 CARDUP URBAN MRS PROPOSAL

5.1 Overview

Planning for the Cardup Industrial Precinct began 15 years ago and resulted in the rezoning of the land from rural to industrial with a subsequent structure plan for an industrial business park (Cardup Business Park). Since then, there have been significant changes to the planning framework for the surrounding area in addition to significant development within the locality which has effectively rendered the industrial land use for the subject site no longer appropriate.

One major challenge faced by landowners within the subject site is the difficulty in attracting industrial operators due to constraints with connecting roads and restrictions on RAV 4/7 truck routes. Additionally, development applications for industrial land uses have faced significant opposition from the surrounding residential community. These factors have made the subject site an unfavorable option for industrial land uses and has led to the West Mundijong Industrial (WMIA) area being the more favorable option.

Furthermore, the growth of Byford and Mundijong urban area is continuing with further urban development for Whitby just south of the subject site. The imminent rollout of metro rail to Byford, as well as ongoing plans for further metro rail into Mundijong further support the need for strategic planning considerations that consider an urban rezoning for the subject site.

Given these circumstances, an urban zoning is highly desirable for Cardup. A zoning change to urban would align with the evolving planning framework, accommodate the expanding Byford and Mundijong urban areas and leverage the forthcoming metro rail infrastructure.

Overall, an urban zoning offers several benefits over the current industrial zoning. The shift to an urban zoning is supported by the evolution of the surrounding area, the constraints faced in attracting industrial operators and the preference for industrial activities in the WMIA.

5.2 Consultation

Cardup Landowner Group and Harley Dykstra have, since 2019, undertaken a number of consultation meetings with WAPC and the Shire of Serpentine Jarrahdale in relation to the proposal. The history of consultation since 2019 has been summarized below:

1. A meeting was held with WAPC Chairman David Caddy to introduce the idea of rezoning the Cardup Business Park from the Industrial Zone to the Urban Zone. Harley Dykstra presented the recent planning history over the site, namely the strategic planning for Cardup Industrial which began over 15 years ago and how the planning framework for the locality has changed since that time and why the proposed rezoning could be suitable under the new framework.

   It was suggested by the WAPC Chairman that a meeting be scheduled with Senior DPLH Planners to ascertain in more detail what would be required to support an Urban Re-zoning.

2. Discussions took place with Senior Planners from DPLH who expressed that the critical consideration is employment, and employment self-sufficiency of the Cardup Precinct, within its current/future context, Regional context for Mundijong and Byford and the broader Perth and Peel @ 3.5 million context. DPLH Planners indicated any future application to amend the site from Industry to Urban would require a comprehensive analysis of employment self-sufficiency on these three levels and demonstrate that an Urban Zoning would result in no net loss of jobs. Ultimately, it was stressed by DPLH that an economic analysis be undertaken and reviewed collectively to achieve an appropriate outcome for the South East corridor.

3. Urbis (Economic & Employment specialists consultants) prepared a study to analyse and evaluate the economic and employment impact of changing the subject site from industry to urban under the MRS.

4. A meeting with Shire of Serpentine Jarrahdale Planning and Development Director was held to discuss his thoughts on the Economic and Employment study and his thoughts on the proposal. The Shire Planning Director indicated that the Shire would likely be open to the prospect of an Urban zoning under the Region Scheme subject to a favorable indication from DPLH in relation to the economic and employment opportunities that are available under urban in comparison with Industrial.

5. A further meeting was held with DPLH to discuss the economic and employment study that was prepared and what further information would be required. Discussions centered around the importance of maintaining a healthy supply of industrial jobs and land within the South East sub region and that lifting of Cardup Industrial will not negatively impact industrial land supply (and associated employment opportunities) within the South East Sub region. DPLH staff advised that further investigation was required to understand the impacts of lifting of the Industrial Zone on Industrial Land supply and employment. It was advised that the economic analysis would need to demonstrate this and subsequently be presented to DPLH and Shire staff.

6. Urbis undertook additional research and reporting in response to the DPLH and Shire feedback, and provided updated report (copy at Appendix A).

7. A meeting was which included DPLH staff and Shire of Serpentine Jarrahdale planning staff, Harley Dykstra presented giving a brief background on the strategic planning that occurred over the last 15 years which saw the land rezoned to Industrial, Urbis also presented their updated economic analysis. Discussions then shifted to the planning merits of keeping Cardup as Industrial, particularly in the context of the West Mundijong Industrial Area. Discussions then turned towards the prospect of Cardup as Urban and that there could be a composition of uses including light industrial to the North to act as a buffer to the Wormall Industrial Site (Lot 41 Cardup Siding Rd), composite residential/industrial adjacent to the railway, service commercial as well as residential.

   Overall, discussions were encouraging and there was agreement that there are significant constraints with proceeding with an Industrial Zone over Cardup. DPLH staff strongly recommended that a MRS Amendment Pre-Lodgment advice request be submitted in the first instance, so that the WAPC committee could be introduced to the proposal along with formal advice from DPLH.

5.3 Justification – Economic and Employment

Industrial land plays a curial role in fostering employment and economic growth in Western Australia, making it an integral component of the state's social and economic well-being. It is imperative to ensure there is a sufficient and well-equipped supply of strategically located industrial land to support the diverse range of industries that drive the state. A proposal to change industrial zoned land to Urban would need to give due regard to wider strategic implications on economic and employment within the South East sub region. Careful consideration has been given over the past years through extensive consultation with DPLH and resulted in an Economic Analysis of the Cardup Business Park **(Appendix A)** being undertaken. The economic analysis has highlighted several key factors that have led to the conclusion that the current industrial zoning under the MRS is no longer suitable and no longer necessary, with an urban zoning being an appropriate alternative. The key findings of the economic analysis have been outlined below:

Industrial Land Demand and Supply

Industrial land forecasts demonstrate there will be sufficient industrial land in the SE Sub-region by 2050 without CBP. Urbis modelling suggests there will be 41.3 years of industrial land supply in the South East Sub-region beyond 2050 and represents an excess of supply given industrial land supply policies nationally generally require 20-30 years of supply in the pipeline. Additionally, if CBP were to be removed as industrial land from the South Metropolitan Sub-region there would still be 30 years of industrial land supply compared to 32 years if CBP remains.

Site Assessment

West Mundijong Industrial Area (WMIA) is more appropriately positioned to facilitate a range of industrial land uses than CBP given:

- WMIA has better access and road connections to Tonkin Hwy, Perth Airport and Greater Perth.
- WMIA has less constraints on industrial land uses due to, more appropriate and compatible surrounding land uses.
- WMIA has a larger scale for development that facilitates agglomeration and growth stimulus for industry and employment.

Key issues for current CBP tenants

In order to expand their businesses, two of the four existing CBP tenants have strongly expressed their desire to relocate to WMIA and recently purchased a large lot within the new industrial area. The key factors influencing this decision are:

- Unsuitable road network preventing some types of work from being undertaken;
- Surrounding land use including the Bush forever and residential limit expansion; and
- The scale of land available is insufficient.

Future Cardup Land uses

Development of CPB for industrial land is limited by surrounding urban land uses, Bush Forever land and the surrounding road and rail network. However, it has the capacity to accommodate other employment intensive land uses that are more compatible with the surrounding area. Therefore, the subject land has the ability to perform a valuable role in taking up service commercial and population-driven employment land uses other than industrial land uses.

5.4 Additional Planning Rationale

Whilst the Cardup industrial zone was initiated approximately 15 years ago, due to the increased development of the surrounding area and changes in the planning framework, the Cardup location is no longer suitable for general industrial land uses. The expansion of Urban development associated with both the Byford and Mundijong District Structure plans is "pressing in" on the ability for Cardup to function effectively as a genuine industrial development precinct.

Landowners within the Cardup Business Park Precinct have over the past number of years faced major challenges in attracting operators due to the constraints associated with suitable connecting truck routes and connecting roads. Additionally, applications for industrial uses within the Cardup precinct have attracted significant opposition from nearby residents and have often resulted in non approvals or constraints on the operations. This has also resulted in the existing legacy industries that have occupied land within the Cardup area for many years now seeking to relocate out of the Cardup precinct and into areas such as the West Mundijong industrial area.

In terms of the future allocation of Cardup as an urban expansion area, an Urban zoning under the MRS with a simultaneous Urban Development zone under the Local Scheme, will facilitate a Local Structure Plan process. A Local Structure Plan would be able to properly plan for suitable interfaces with the surrounding land uses and transport systems as well as the environmental factors that influence the subject land. A concept land use plan has been included at Appendix B illustrating a possible land use layout that will achieve compatible arrangements and interfaces surrounding land uses, roads, rail and environments. This plan also illustrates the ability for future Urban development to be designed in a manner that either retains compatibility with the existing Wormall industry located on Cardup Siding Road in the north, or its eventual transitioning to a more Service commercial or other Urban land use. The details of such transitional land use options and interfaces with the adjoining railway line and the bush forever site etc will be subject to further detailed design during the Local Structure Plan process.

6 CONCLUSION

This potential MRS Scheme amendment – request for pre-lodgment advice – has provided the supporting rationale for preliminary assessment to have the MRS amended to show the subject land changed from Industrial to Urban. This request is also supported by an economic and employment study undertaken by Urbis in consultation with Local and State Planning authorities.

The information provided throughout this report is considered to constitute a comprehensive analysis of the opportunities and constraints that will need to be addressed towards the ultimate rezoning and structure planning of the subject site.

It is respectfully requested that the proposal included within this report be viewed upon favourably, and that pre-lodgment advice be provided to the applicant in order to facilitate subsequent stages of the planning process.

Appendix A Economic Analysis:

URBIS

CARDUP BUSINESS PARK ECONOMIC ANALYSIS

UPDATE - DRAFT

Prepared for Harley Dykstra
February 2023

CONTENTS

EXECUTIVE SUMMARY

Key Findings

The assessment has found that rezoning Cardup Business Park from industrial to other land uses is unlikely to negatively impact the industrial land supply to the South-East Sub-region in the future.

Site Assessment

West Mundijong Industrial Area (WMIA) is better positioned to accommodate a range of industrial land uses than Cardup Business Park (CBP).

- WMIA road connections to Tonkin Hwy to ports, Perth Airport and Greater Perth, and the potential for an intermodal terminal offers a high value proposition for tenants that cannot be met by CBP (see Section 2 – Site Assessment).
- The structure of WMIA provides more adequate buffers for industrial land uses and dedicated land for supporting service commercial development.
- WMIA is well-positioned to be a successful industrial precinct, and has strong support from the local government.

Industrial Land Demand and Supply

There is sufficient industrial land supply in the South Metropolitan Peel Sub-region and the South East Sub-region to provide between 76 years and 135 years of supply (see Section 3 – Industrial Land Supply and Demand).

- In the SE Sub-region under a baseline demand forecast based on the last 22 years of historical demand, there would be 77 years of industrial land supply.
- If 25% of the demand resulting from the complete development of industrial land in the Central Sub-region were referred to the SE Sub-region, there would still be sufficient industrial land supply in the SE Sub-region for 41 years beyond 2050.
- Industrial land supply policies nationally typically require 20-30 years of supply in the pipeline. This indicates some excess of future supply in the South East Sub-region.
- If CBP were removed as industrial land from the South Metropolitan Sub-region there would be 30 years of industrial land supply, compared to 32 years if CBP remains.

Future Cardup Land Uses

Development of CBP is limited by the surrounding road and rail network, Bush Forever land, and surrounding urban land uses (see Section 4 – Key Issues and Recommendations).

- Current industrial enterprises are unable to adequately expand their businesses on CBP due to these constraints and would prefer to move to WMIA to accommodate their growing business needs.
- The large land area at Cardup has the capacity to accommodate employment-intensive land uses more compatible with the surrounding area than the existing land-intensive industrial uses.
- CBP is well-positioned to perform a valuable future role in taking up service commercial and population-driven employment land uses for the catchment area that do not require an industrial zoning under the MRS. CBP is a more appropriate area for these land uses than WMIA and will better leverage the transport and other infrastructure within and around WMIA.

Key Recommendations

- Consideration should be given to removing the industrial land zoning over CBP and focusing industrial development activity for the area on WMIA.
- Alternative land uses that can be accommodated at CBP should be explored. A highest and best land use approach should be taken, with a key consideration being providing land for complimentary non-residential uses to ensure population-driven land uses are located near resident populations and are not taking up valuable industrial land within WMIA.

01

INTRODUCTION

INTRODUCTION

Report Purpose and Background

Urbis was engaged to undertake an economic assessment of the merits of rezoning Cardup Business Park (CBP) from industrial to urban under the Metropolitan Region Scheme (MRS). Instigated by a majority group of landowners, this rezoning will allow a range of different land uses to be developed within the CBP including commercial, service commercial, residential, education and light industrial.

CBP is a 194.71 ha* (inclusive of Bush Forever Area 361, of 30.18 ha) industrial area located in Cardup, bordered by the South Western Hwy and freight rail line. It is located within 2 km of the 474.34 ha* West Mundijong Industrial Area (WMIA), for which the Draft District Structure Plan was endorsed by the Shire of Serpentine Jarrahdale for public comment in March 2021. There are several industrial land uses which have been located in the **Cardup Business Park** for decades.

The close co-location of two significant industrial areas brings into question the viability of both developing into successful precincts that can contribute meaningfully to the local and regional economy.

This report seeks to understand and analyse:

- The comparative suitability of Cardup Business Park and West Mundijong Industrial Area for a successful industrial precinct;
- The balance of supply and demand for industrial land in the SE corridor of the Perth metropolitan area, and the long-term future outlook;
- The best practice for ensuring industrial areas are successful; and
- The potential impacts of developing a mixed use precinct on the Cardup Business Park in the short and medium term on SE corridor employment self-sufficiency.

This will demonstrate the overall sufficiency of light and general industrial land supply in the South-East Sub-region if Cardup Business Park changes from all industrial zoned land to a mix of land uses.

Note:

**Land areas from local structure plans*

Report Structure

This report includes the following sections:

- **Introduction;**
- **Site Assessment;**
- **Industrial Land Supply and Demand;**
- **Key Issues and Future Considerations; and**
- **Glossary.**

METHODOLOGY

Land Use Assessment

To understand whether **Cardup Business Park** is required to remain as industrial zoned land or whether the sub-region is better served by rezoning as a mixed use precinct, assessment of the following was undertaken:

- **Industrial land success factors** – given the close proximity of Cardup and West Mundijong and the relatively undeveloped nature of both, is one of the industrial areas more suitable for industrial development than the other?
- **Supply and demand factors** – what is the current and projected future supply and demand situation in the South East Sub-region, and the context of this within the Perth and Peel Regions?
- **Industrial development best practice** – how can new or undeveloped industrial areas be best positioned to attract a range of industrial enterprises leading to strong employment outcomes and a meaningful contribution to the local or sub-regional economy?
- **Impacts of the land use change** – what is the likely impact of the change of land uses for the local and sub-regional economy?

Following the assessment a recommendation will be made on the best use of CBP land for the sub-region in the future.

Assessment Process

INDUSTRIAL LAND SUCCESS FACTORS	Includes factors such as proximity to clients, supply chains, transport infrastructure and a skilled workforce.
SUPPLY AND DEMAND FACTORS	Reviews current and future industrial land supply, projected demand for industrial land, and recent industrial land take-up rates (i.e. actual demand).
INDUSTRIAL DEVELOPMENT BEST PRACTICE	Reviews some key best practice principles for ensuring new or undeveloped industrial areas are provided with the best chance for success in terms of attracting an agglomeration of economically viable tenants.
IMPACTS OF THE LAND USE CHANGE	Tests the expected impact of the zoning change in terms of employment outcomes.

REGIONAL CONTEXT

South East Sub-region

The role of industrial areas and centres in the South West and Peel sub-regions provides important context for the South East Sub-region.

Planning Framework Sub-regions

CBP is located in the South East sub-region (SE Sub-region) under the *Perth and Peel@3.5million Sub-regional Planning Framework*. The supply and demand outlook for industrial land in the SE Sub-region is set out in the *South Metropolitan Peel sub-regional planning framework*.

Within the frameworks, industrial land is classified as:

- **Industrial;**
- **Industrial expansion; or**
- **Industrial investigation.**

The vast majority of industrial and industrial expansion land is located within the South West Sub-region (SW Sub-region), with some industrial expansion in Peel.

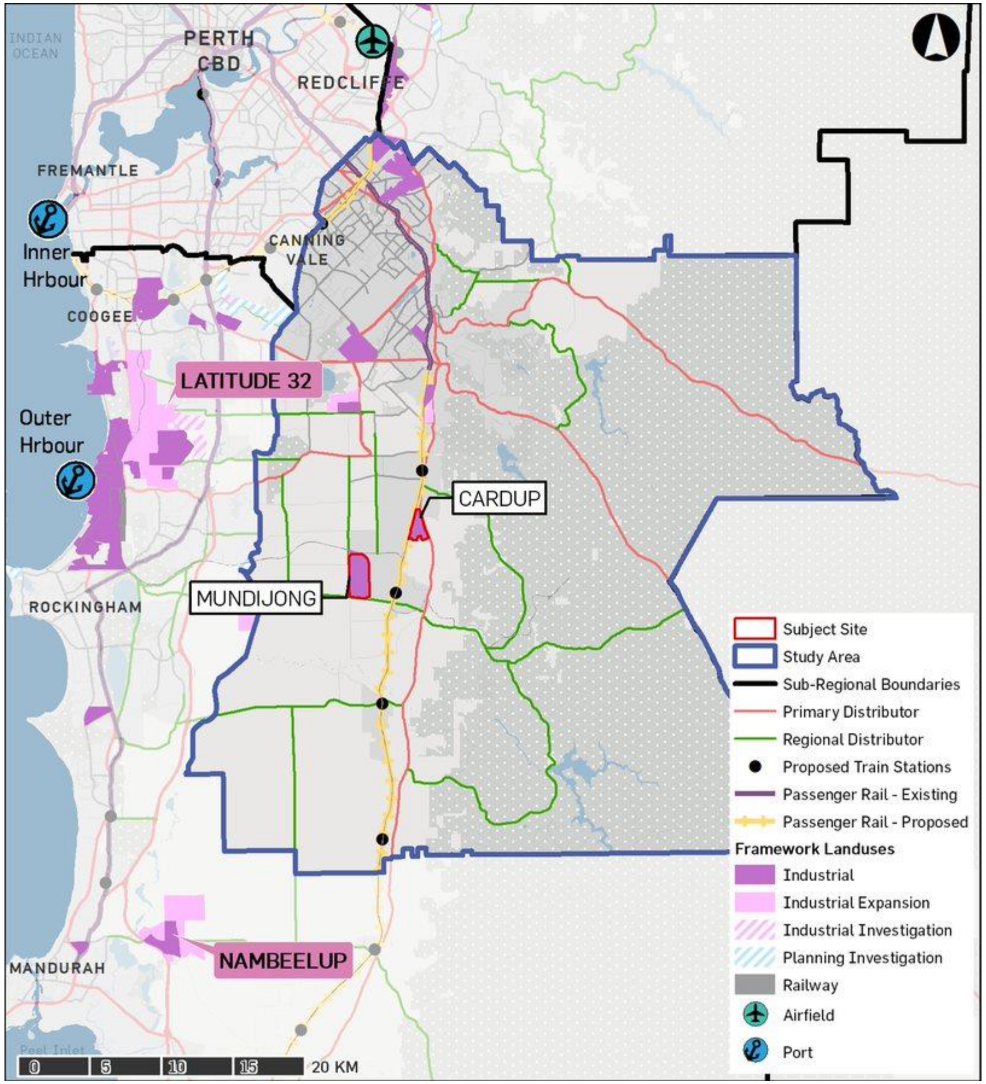
South East Sub-region

The SE Sub-region is comprised of the local government areas of the City of Armadale, City of Gosnells and Shire of Serpentine Jarrahdale. Of key significance is the linkage of CBP to the seaports and airport.

Major freight transport routes connecting the SE Sub-region to include:

- Railway line from the south west to the intermodal terminals in Welshpool and Forrestfield;
- Tonkin Hwy (to be extended to Mundijong Industrial Area) connecting to the intermodal terminals, Perth Airport and the Perth Central and Northern Sub-regions;
- South West Hwy connecting the City of Armadale and Shire of Serpentine Jarrahdale to Pinjarra and the south west;
- East-west connectors to the coast, Fremantle Port and Kwinana Industrial Area / Latitude 32, and planned expansion to the Kwinana outer harbour including Armadale Rd, Thomas Rd, Rowley Rd and Mundijong Rd (to be upgraded);
- Albany Hwy and Brookton Hwy connecting the City of Armadale to the south west and south east of the State.

Regional Context Map



KEY EXISTING INDUSTRIAL AREAS – SOUTH WEST AND PEEL

South West Sub-region

The South West sub-region (SW sub-region) is comprised of the local government areas of the City of Cockburn, City of Kwinana and City of Rockingham.

The SW sub-region is highly urbanised with a well-developed population base. It is also the location of the Western Trade Coast, an agglomeration of strategic industrial estates which support a range of key industries for the Perth and Peel Regions. The area largely serves a regional catchment, with a small proportion of land serving the sub-region or a local catchment.

Industrial estates include[1]:

- **Kwinana Industrial Area** – 2,400 ha with key tenants in heavy industry, power stations, chemical plants, cement works, supporting industries.
- **Rockingham Industrial Zone / Naval Base** – 1,150 ha with key tenants in defence, fabrication, transport depots, warehousing, construction supply.
- **Latitude 32 Industry Zone** – 1,400 ha with key tenants in transport, storage, laydown areas, supporting industries.
- **Australian Marine Complex** – key tenants in shipbuilding, marine engineering, manufacturing, defence services, technology, general engineering. Significant areas of land are available for development.

As well as the existing zoned industrial land the SW sub-region has significant land planned for industrial expansion and industrial investigation within the current planning framework (see table below). These are expected to continue to support strategic industrial land uses in the future.

1. westerntradecoast.wa.gov.au
2. developmentwa.com.au

SUB-REGION	INDUSTRIAL LAND (HA)	INDUSTRIAL EXPANSION (HA)*	INDUSTRIAL INVESTIGATION (HA)
South West	4,108	2,259	464
South East	1,971	254	106
Peel	3,811	974	1,998

Source: Perth and Peel@3.5million planning frameworks, Urbis
Note Industrial Expansion includes former PIA East of Kwinana zoned to industrial.*

Peel Region

The two key industrial areas in the Peel Region are the long-established heavy industrial area Pinjarra Alcoa Alumina Refinery, and the recently developed Peel Business Park in Nambeelup. The former serves a regional catchment, while the latter serves the sub-region and has some space that can be use for local catchment industrial land uses due to shortage of such land in Mandurah.

After decades of planning, the 11 ha first stage of the 1,000 ha Peel Business Park has been fully serviced and almost sold out all lots[2]. The focus for the industrial area is on technology-driven agri-food and agri-processing operators, as well as ancillary light industry, general transport and support industries.

The location of Peel Business Park adjacent to the Kwinana Fwy / Forrest Hwy provides high quality road access to the agriculture producing Peel Food Zone and the South West of WA as well as major sea and airports, supporting the intended purpose for agribusiness operations. The scale of the park is sufficient to site a more significant agglomeration of agribusinesses and related businesses than can be accommodated within West Mundijong or Cardup Business Park.

KEY EXISTING INDUSTRIAL AREAS – SOUTH EAST AND WESTPORT

South East Sub-region

The SE Sub-region is the key focus for this analysis. Key drivers for industrial development in the SE sub-region have historically been the population base, with existing developed industrial areas located in Armadale, Maddington and Gosnells providing primarily population-driven functions on small industrial lots, each area serving a largely local catchment.

Historically there has been minimal industrial zoned land in the Shire of Serpentine Jarrahdale, with no land designated as industrial in the 2010 planning framework, *Directions 2031 and Beyond*. Despite this several of the current tenants of Cardup Business Park have been located on the site for around 30 years.

The rapidly expanding population base in the Shire is expected to be a key driver for industrial land needs in the southern part of the SE sub-region. The positioning of the Shire on the fringe of Perth's urban area and near the rural land in the Peel Region as well as the major road access to the Shire from these areas means there is potential for a small proportion of strategic industrial land uses. The recently zoned WMIA is well-positioned with appropriate scale and transport connections to serve the local and sub-regional catchment.

Westport

The planned expansion of Kwinana Outer Harbour (Westport) to replace the existing port operations at Fremantle will be a key driver for new industrial tenants in the SW sub-region. Located in Kwinana on the Western Trade Coast, Westport is a once in a century investment which entails the construction of a new container port which will provide transport links to handle the growing trade task.

Westport will act as a major employment node and is expected to create an additional 11,000 jobs, doubling the number of workers within the Western Trade Coast (Trade Flows and the Development of Westport, 2018). This will provide a key competitive advantage for the area. Additional strategic business opportunities are expected to arise due to the concentration of industries in the area.

The 2022-23 State Budget allocated $11.55 million to Westport Feasibility Studies. This includes a business case for the new port and integrated road and rail network. The 2022-23 State Budget outlines that the estimated expenditure in 2021-22 for Westport land acquisition was $9.6 million for the Port and Environment Strategy.

West Mundijong Industrial Area will have strong transport links to Westport via the upgraded Thomas Road / Tonkin Hwy extension and the existing and planned freight rail network[4], with the Kwinana-Mundijong rail junction key existing infrastructure with potential to be leveraged[5]. Mundijong has been proposed as an option for an intermodal freight terminal / landside logistics to support Westport and allow sufficient land for complementary land uses to develop[6].

The key benefits from Westport are expected to result in additional land required at West Mundijong, while the potential for Cardup Business Park to benefit is likely to be more limited due to the lack of road upgrades allowing larger trucks to enter and exit the Cardup industrial area, lack of planned freight rail access, and focus being on developing West Mundijong as the prime new industrial area for the SE sub-region.

3. 2022-23 WA State Budget https://www.ourstatebudget.wa.gov.au/2022-23/budget-papers/bp2/2022-23-wa-state-budget-bp2-vol2.pdf
4. Anketell-Thomas Road Freight Corridor Planning https://westport.wa.gov.au/media/4qyfdeb1/anketell-thomas-factsheet-and-timeline.pdf
5. The Westport Program https://westport.wa.gov.au/media/yszhlxdf/westport-stage-3-overview-fact-sheet.pdf
6. Landside Logistics Opportunities Study https://westport.wa.gov.au/media/ercdo0nu/westport-landside-logistics-opportunity-study-fact-sheet-october-2022.pdf

LOCAL CONTEXT

Local Context

Cardup Business Park

CBP is a 194.71 ha* industrial area located in the suburb of Cardup, Shire of Serpentine Jarrahdale, between South West Hwy and the passenger railway line. As this area is inclusive of the 30.18 ha Bush Forever Area 361, only 164.53 ha of the land is developable.

The area is indicated as industrial under the *Perth and Peel@3.5million Sub-regional Frameworks* and zoned industrial under the MRS. The local structure plan for CBP was approved in March 2019 and provides for land to be zoned 'Industry General' under the local planning scheme.

The 2012 *Economic and Employment Lands Strategy: non-heavy industrial* identified CBP as a potential medium term non-heavy industrial area for the next 4-10 years.

West Mundijong Industrial Area

CBP is located 2 km from West Mundijong Industrial Area (WMIA). WMIA is a 474.34 ha* industrial area located in the suburb of Mundijong, Shire of Serpentine Jarrahdale, west of the planned Tonkin Hwy extension and north of Mundijong Rd.

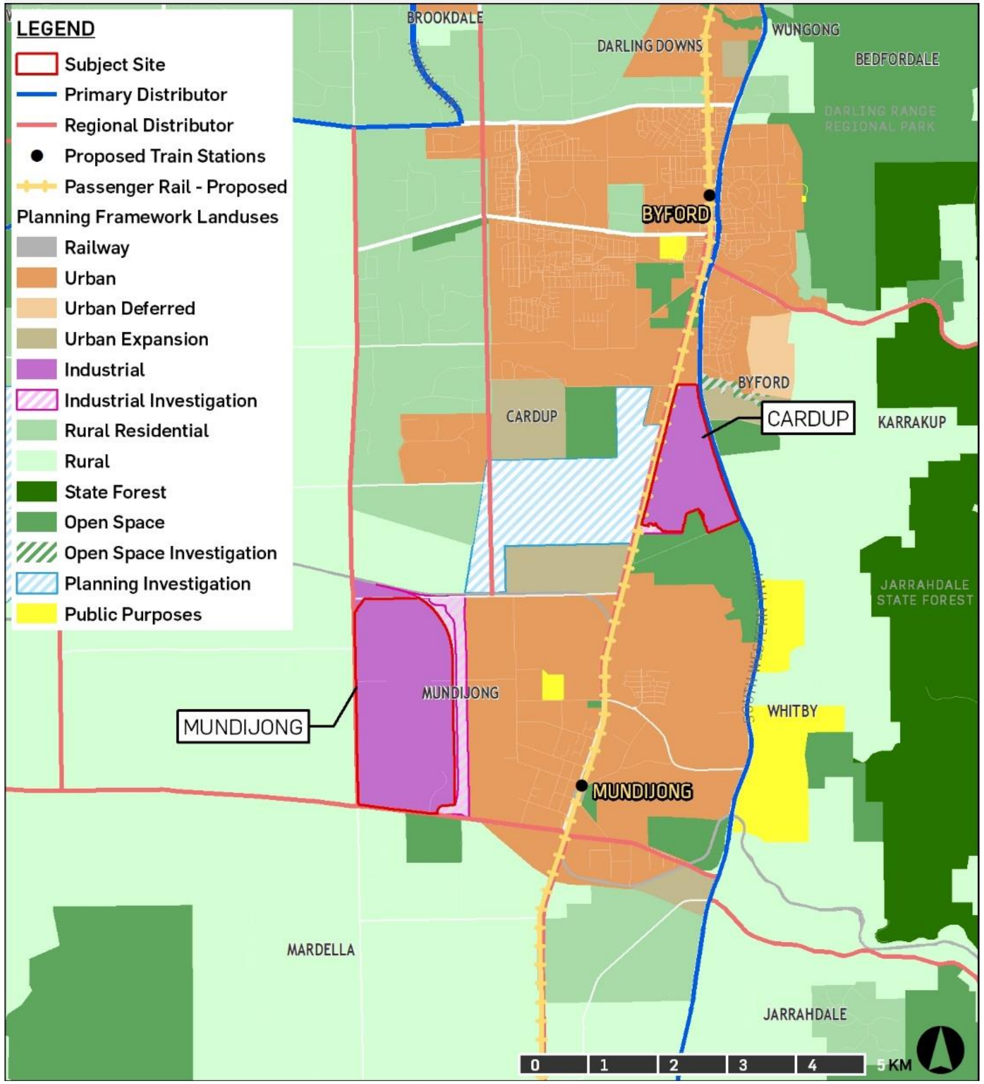
The area is indicated as industrial under the *Perth and Peel@3.5million Sub-regional Frameworks* and zoned industrial under the MRS. The local structure plan for WMIA was endorsed by the Shire of Serpentine Jarrahdale in March 2021, which provides for the land to be zoned 'General Industry' and 'Light Industry' under the local planning scheme.

The 2012 *Economic and Employment Lands Strategy: non-heavy industrial* identified CBP as a potential medium term non-heavy industrial area for the next 4-10 years. It also identifies the potential for an intermodal freight terminal to connect to the existing Kewdale-Hazelmere facility and the planned Kwinana intermodal facilities, once the Tonkin Hwy extension is completed in 2024[1] and the long-term plan to realign the freight rail route out of the developing Mundijong town centre and along the boundary of WMIA is undertaken[2].

1. https://www.mainroads.wa.gov.au/projects-initiatives/projects/metropolitan/tonkin-highway-extension/
2. West Mundijong Industrial Area Local Structure Plan, pg. 19.

Note:
**Land areas from local structure plans*

Local Context Map



02

SITE ASSESSMENT

SUMMARY

EFFECTIVENESS OF CARDUP BUSINESS PARK FOR INDUSTRIAL DEVELOPMENT

The zoning of West Mundijong Industrial Area less than 2 km from Cardup Business Park may result in sub-optimal development outcomes as both areas will compete for industrial enterprises.

A comparison of key industrial area success criteria indicates that WMIA has some significant advantages over CBP. These include:

- Direct access to Tonkin Hwy, providing heavy vehicle access to Kwinana and Fremantle ports, Perth Airport and interstate highways;
- Fewer constraints on industrial land uses due to buffers, more suitable adjacent land uses, and less limitations imposed by the surrounding road and railway network;
- Larger scale area at West Mundijong can support an agglomeration of industrial land uses, with dedicated land for service commercial support.

These key success criteria can provide competitive advantages to West Mundijong which will bring forward and potentially increase overall employment generation, productivity and knowledge generation. This can have significant positive flow-on impacts to the local and sub-regional economy.

KEY OUTCOMES

JOBS SOONER

AGGLOMERATION BENEFITS

LOWER IMPACTS ON RESIDENTIAL

SITE ASSESSMENT - CONTEXT

Success Factors for Industrial Areas

Purpose

Developing a successful industrial area or precinct which contributes meaningfully to the local or regional economy is dependent on the area meeting the majority of a number of key success factors. Without these key factors, an industrial area cannot attract sufficient businesses or the businesses which do locate there will face challenges in their own success.

The majority of these factors are associated with the location of the industrial area in relation to their supply chains, logistics networks and skilled workforce. Others relate to the capability of the area to accommodate industrial land uses.

Cardup and West Mundijong Comparison

The criteria used to assess and compare CBP and WMIA have been guided by the standard Urbis industrial area assessment criteria, as well as the criteria used in the *Industrial Land Capacity Assessment* prepared in the development of the *Economic and Employment Lands Strategy: non-heavy industrial* (Department of Planning 2009).

Independent Assessment

As an alternative independent approach to site assessment we have also reviewed the work done as part of the 2009 Industrial Land Capacity Assessment report (ILCA) which undertook site assessments for all key industrial sites across the Perth Metropolitan area. This assessment has been reviewed and updated scores put in to allow for more recent changes.

Site Assessment Process

INDUSTRIAL LAND CAPACITY ASSESSMENT

Key outcomes:
- Evaluate the suitability of current and proposed sites for industrial developments

CARDUP BUSINESS PARK SITE ASSESSMENT

Key outcomes:
- Strengths
- Weaknesses
- Site suitability

WEST MUNDIJONG INDUSTRIAL AREA SITE ASSESSMENT

Key outcomes:
- Strengths
- Weaknesses
- Site suitability

COMPARATIVE ANALYSIS

Key outcomes:
- Understand the relative advantages of each site
- Understand the positioning of each site to take up local demand
- Comment on the implications for confidence in future industrial investment

URBIS INDUSTRIAL AREA SUCCESS FACTORS

Ranking Success Factors

An independent and in-depth assessment of the CBP and WMIA has been undertaken to allow comparison of the two.

The criteria used include Urbis' standard industrial area success factors, and have been informed by the criteria used in the ILCA (see following page).

These criteria have been used to provide a current and future rating for the CBP and WMIA. Each criteria has been ranked based on a scale of 1 (site is poorly aligned with the criteria) to 4 (site offers optimal alignment with the criteria). The score for each criteria has been multiplied by a weighting factor, then a total score calculated for each site.

Maximum score: 40

Maximum weighted score: 100

Rating and Scoring Criteria

CURRENT OR FUTURE RATING	SCORE
Poor	1
Average	2
Good	3
Excellent	4

KEY INDUSTRIAL AREA SUCCESS FACTORS

CRITERIA	ASSESSMENT	HIGH SCORE REQUIREMENTS	WEIGHTING
Proximity to Clients	▪ Ease of accessing client markets ▪ Ease in which client can access / visit the business	▪ *Close proximity to catchment markets* ▪ *Direct road access*	3
Proximity to suppliers or support businesses	▪ Ease of accessing raw materials or input access to support businesses ▪ Adjacency to other sites or operations of the business	▪ *Close proximity to relevant producer regions, support businesses*	3
Proximity to freight transport networks / links and terminals	▪ Access to main roads / routes, rail or port terminals ▪ Ability to avoid stop / start traffic (e.g. traffic lights, residential areas) ▪ Ease of getting in and out of industrial areas ▪ RAV Network capacity	▪ *Within 1 km of major transport route/s suitable for freight* ▪ *Minimal conflict with residential traffic* ▪ *Access to multiple transport modes available or direct links via major freight routes* ▪ *RAV Network access level*	3
Proximity to home / workforce or public transport	▪ Ease of getting staff to / from work (major roads, public transport) ▪ Potential to lose staff if move too far away ▪ Access to skilled workforce	▪ *Large scale local population catchment* ▪ *Public transport available within walkable catchment (400 m for bus, 800 m for rail)* ▪ *Close proximity to major roads*	3
Adequate buffers to sensitive uses	▪ Avoid safety concerns ▪ Less restrictions on operations	▪ *Residential and urban areas buffered by road reserves, low-emitting industrial land uses, nature reserves, drainage / landscape zones*	3
Access to service infrastructure	▪ Water, sewerage, power	▪ *Area is fully serviced*	3
Employment potential	▪ Co-location with existing developed industrial sites and infrastructure to create an industrial cluster ▪ Can be expanded into subsequent stages	▪ *Within 2 km of an existing fully developed industrial area* ▪ *Adjacent land offers potential for area to be expanded in future stages*	2
Visibility and exposure	▪ Help advertising and raise profile	▪ *Location offers visibility from major transport route/s*	1
Site suitability	▪ Area is of sufficient scale for a critical mass of industrial land ▪ Suitable site conditions (zoned for industrial, consideration of development costs, drainage, soils, topography) ▪ Avoidance of environmental and heritage values, prime agricultural land	▪ *Area is at least 200 ha, or provides a mix of lot sizes* ▪ *Cost of land preparation is minimal* ▪ *Adverse outcomes to land values avoided*	2
Competition	▪ Proximity to competing industrial areas – undeveloped industrial areas in close proximity will compete for tenants, which negatively impacts the development of both	▪ *Not located within 2 km of an undeveloped / poorly developed industrial area*	2

CARDUP SITE ASSESSMENT

Cardup Business Park has been assessed against the industrial area success criteria to understand the likely success of the area, and allow comparison to West Mundijong.

Cardup Business Park was assessed to have an overall current score of 22, expected to change to 20 in the future. This means the suitability of Cardup for industrial land uses will be somewhat reduced in the future.

CRITERIA	ASSESSMENT	RATING	SCORE	WEIGHTED SCORE
Proximity to Clients	▪ Located between the growing residential catchments of Byford and Mundijong in the Shire of Serpentine Jarrahdale, which is expected to grow from the current 34,000[1] residents to 63,000[2] residents by 2031. The local residents will drive some light industrial land uses, although these could also be accommodated in service commercial zoned land. ▪ Cardup is accessible via the South West Hwy, linking the area with the population and commercial centre of Armadale 10 km north, and the mining hub around Pinjarra 50 km south. ▪ Latitude 32 industrial precinct is accessed indirectly via South West Hwy and Mundijong Rd.	CURRENT: AVERAGE	2	6
		FUTURE: AVERAGE	2	6
Proximity to suppliers or support businesses	▪ Cardup is located within 2 km of the Hanson Quarry and Batching Plant, and Austral Bricks. These may present some minor opportunities for supply chain links. ▪ Cardup is located 2 km from the planned West Mundijong Industrial Area, which has the capacity to accommodate a large range of general and light industrial land uses across the 414 ha of available industrial land. There is potential for suppliers and support businesses to be located here in the future.	CURRENT: POOR	1	3
		FUTURE: AVERAGE	2	6
Proximity to transport networks / links and terminals	▪ Cardup is directly accessible via the South West Hwy, which goes through Byford and Armadale and connects to Tonkin Hwy, a key connection to Perth Airport. The route through Byford and Armadale is not ideal for trucks, contains a number of traffic lights, and in many parts is speed limited to 60 km/hr. ▪ Access to Cardup is restricted to RAV Network 4 vehicles and below. ▪ The planned Tonkin Hwy extension to Mundijong Rd will be indirectly accessible by heading south via South West Hwy and Mundijong Rd. While this route is less direct than South West Hwy, the route is more suited to heavy vehicles and generally speed limited to 100 km/hr. ▪ The increase in residential density to the south in Mundijong and north in Byford will increase the traffic on South West Hwy, creating a less favourable transport route for heavy vehicles.	CURRENT: AVERAGE	2	6
		FUTURE: AVERAGE	2	6
Proximity to home / workforce or public transport	▪ The resident population catchment in the Shire of Serpentine Jarrahdale, estimated at 33,346 residents in 2021, provides a local workforce for industrial areas. The future population is estimated to grow to 63,000[2] residents by 2031. ▪ Cardup is within 10 km of the much larger population catchment of the City of Armadale, estimated at 97,650 residents in 2021[1]. Bus services run from Armadale Station along Soldiers Rd, providing some access to Cardup although this is limited by the railway line located between Soldiers Rd and Cardup. ▪ The future City of Armadale population is estimated to grow to 127,000 residents by 2031. The METRONET passenger rail link to Byford Town Centre may improve accessibility to Cardup for the workforce if bus links are also provided.	CURRENT: AVERAGE	2	8
		FUTURE: GOOD	3	12

Notes:
1. 2021 ABS Estimated Resident Population (ERP)
2. WA Tomorrow Band C

CARDUP SITE ASSESSMENT

CRITERIA	ASSESSMENT	RATING	SCORE	WEIGHTED SCORE
Adequate buffers to residential areas or other sensitive uses	▪ Cardup is bordered to the north by land zoned Urban under the MRS and planned to be developed for low density residential land uses. The southern border is buffered by Bush Forever land. The east and west borders are currently zoned Rural under the MRS, with the west planned to become transitional very low density residential land uses, and the east to remain rural.	CURRENT: GOOD	3	9
		FUTURE: AVERAGE	2	6
Access to service infrastructure	▪ Close proximity to utility infrastructure. ▪ A local water management strategy has been prepared as part of the LSP.	CURRENT: GOOD	3	9
		FUTURE: GOOD	3	9
Employment potential	▪ Not located near any existing developed industrial areas. ▪ No ability to be expanded into subsequent stages due to the constraints of the road and rail network.	CURRENT: POOR	1	2
		FUTURE: POOR	1	2
Visibility and exposure	▪ The site fronts South Western Hwy which experiences an average of 8,370 vehicles (South of Kiln Road) Monday to Friday of which 77.5% are cars and 22.5% trucks. ▪ The Bush Forever Site however poses some limitations to visibility as well no direct access to Norman Road from the south. ▪ The planned Tonkin Hwy extension to Mundijong will increase traffic volumes to this area.	CURRENT: AVERAGE	2	2
		CURRENT: AVERAGE	2	2
Site suitability	▪ The land is of sufficient scale and land is relatively flat, however there are some Bush Forever constraints. ▪ No heritage sites.	CURRENT: AVERAGE	2	4
		FUTURE: AVERAGE	2	4
Competition	▪ No existing developed competing industrial areas ▪ Located 2 km from the newly zoned West Mundijong Industrial Area. Co-location with another undeveloped industrial area may result in slower development for both due to both competing for tenants.	CURRENT: EXCELLENT	4	8
		FUTURE: POOR	1	2
Overall	▪ Overall, the subject land, while possessing some attributes desired by industrial land users, is not ideal. Employment potential, transport connections, scale, competition and buffers were determined to be of particular concern. ▪ There is also potential for conflict with residential land to the north, Bush Forever land to the south, and rural residential uses to the west. Residents will have expectations of a level of amenity synonymous with the rural landscape, such as a lack of noise, odour and traffic.	CURRENT:	22	55
		FUTURE:	20	52

Sources: Cardup Business Park Local Structure Plan, Economic and Employment Lands Strategy, Urbis

WEST MUNDIJONG SITE ASSESSMENT

West Mundijong Industrial Area has been assessed against the industrial area success criteria to understand the likely success of the area, and allow comparison to Cardup.

West Mundijong was assessed to have an overall current score of 21, expected to change to 27 in the future. The current weighted average score was 53, with an expected weighted future score of 71.

CRITERIA	ASSESSMENT	RATING	SCORE	WEIGHTED SCORE
Proximity to Clients	▪ Located near the growing residential catchments of Byford and Mundijong in the Shire of Serpentine Jarrahdale, which is expected to grow from the current 34,000[1] residents to 63,000[2] residents by 2031. The local residents will drive some light industrial land uses, although these could also be accommodated in service commercial zoned land. ▪ West Mundijong is accessible via Bishop Rd, Tonkin Hwy (extension) and Mundijong Rd, linking the area with Perth Airport and Welshpool Industrial area, and the mining hub around Pinjarra 50 km south. ▪ Latitude 32 industrial precinct is accessed by Mundijong Rd.	CURRENT: AVERAGE	2	6
		FUTURE: GOOD	3	9
Proximity to suppliers or support businesses	▪ Whilst the site is currently undeveloped and not co-located with any industrial uses or supporting businesses, the development of this site will create up to 880 industrial lots and an intermodal transport facility that can attract large scale industrial businesses across various industries such as freight and logistics, recycling operations, food processing / agribusiness, waste to energy plants, civil engineering and building companies, vehicle sales and repairs, manufacturing and high technology industries.	CURRENT: POOR	1	3
		FUTURE: GOOD	3	9
Proximity to transport networks / links and terminals	▪ Extension of the Tonkin Hwy and the realignment of the freight rail line in Mundijong will provide access to the site as well as link Serpentine Jarrahdale to existing industrial freight infrastructure in Welshpool, Perth and Jandakot Airports, Fremantle Port and the planned Kwinana outer harbour port. ▪ Mundijong Road (east of King Road) gets an average of 5,167 vehicles between Monday to Friday, of which 14% are trucks. ▪ The West Mundijong structure plan allows for development of an intermodal facility accommodating up to RAV Network 7 vehicles.	CURRENT: AVERAGE	2	6
		FUTURE: EXCELLENT	4	12
Proximity to home / workforce or public transport	▪ The resident population catchment in the Shire of Serpentine Jarrahdale, estimated at 33,346 residents in 2021, provide a local workforce for industrial areas. The future population is estimated to grow to 63,000[2] residents by 2031. ▪ West Mundijong is within 14 km of the much larger population catchment of the City of Armadale, estimated at 97,650 residents in 2021[1]. Bus services run from Armadale Station along Soldiers Rd, providing some access to West Mundijong. ▪ The future City of Armadale population is estimated to grow to 127,000 residents by 2031. The METRONET passenger rail link to Byford Town Centre is may improve accessibility to West Mundijong for the workforce if bus links are also provided.	CURRENT: AVERAGE	2	8
		FUTURE: GOOD	3	12

Notes:
1. 2021 ABS Estimated Resident Population (ERP)
2. WA Tomorrow Band C

WEST MUNDIJONG SITE ASSESSMENT

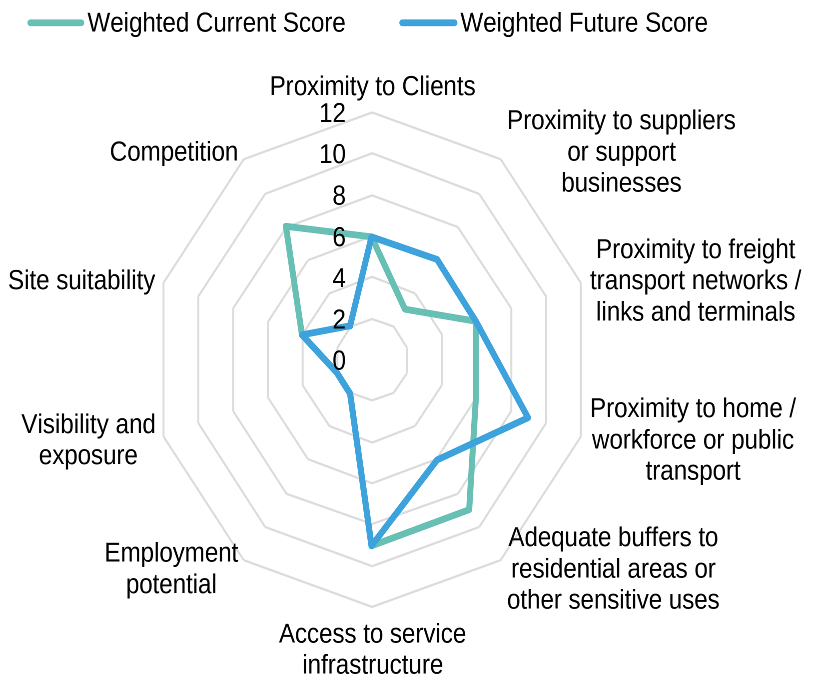
Sources: West Mundijong Local Structure Plan, Economic and Employment Lands Strategy, Urbis

CRITERIA	ASSESSMENT	RATING	SCORE	WEIGHTED SCORE
Adequate buffers to residential areas or other sensitive uses	▪ The site is bordered to the north, west and south by land zoned Rural under the MRS and Urban to its east. The surrounding area is buffered from industrial land uses by road reserves, ecological and drainage corridors, and service commercial precincts.	CURRENT: GOOD	3	9
		FUTURE: GOOD	3	9
Access to service infrastructure	▪ Close proximity to utility infrastructure (power and water services available). ▪ Appropriate water management investigations should be conducted by the proponent in accordance with Better Urban Water Management (WAPC 2008).	CURRENT: GOOD	3	9
		FUTURE: GOOD	3	9
Employment potential	▪ Located near Cardup Business Park, however this has seen minimal development. ▪ The Shire of Serpentine Jarrahdale have indicated there is potential to expand West Mundijong in the future.	CURRENT: AVERAGE	2	4
		FUTURE: GOOD	3	6
Visibility and exposure	▪ The site fronts Mundijong Road which experiences an average of 5,167 vehicles (east of King Road) Monday to Friday. ▪ Several upgrades and construction of new roads will increase traffic volume capacity to this area. Upgrades include of Mundijong Road between Tonkin Highway and Kargotich Road to the west. Kargotich Road is currently rural in nature with narrow single carriageway and there are plans to widen it for easy access, providing exposure in the future.	CURRENT: AVERAGE	2	2
		FUTURE: AVERAGE	2	2
Suitable site profile	▪ The total land area within WMIA is 474.34 ha*, of which 410 ha* is designated general or light industrial, or service commercial, and which can support a range of lot sizes with flexibility in configuration of developments proposed on the site. This scale is large enough to accommodate light, general industrial and service commercial land uses, as well as drainage, ecological and multiple use corridors. ▪ There may be minor heritage and environmental constraints for some sites.	CURRENT: AVERAGE	2	4
		FUTURE: AVERAGE	2	4
Competition	▪ Limited existing competition besides Cardup. ▪ Located 2 km from the Cardup Industrial Area. Co-location with another undeveloped industrial area may result in slower development for both, due to both competing for tenants.	CURRENT: AVERAGE	2	4
		FUTURE: POOR	1	2
Overall	▪ Overall good site for industrial with potential for future expansion which can accommodate the growing industrial demand. ▪ The site is highly accessible, has suitable infrastructure in place and has high future prospects with the ongoing infrastructure investment to road connections that will create efficient transport connections, access to other businesses and proximity to the workforce.	CURRENT:	21	53
		FUTURE:	27	71

Note:
**Land areas from local structure plans*

SITE COMPARISON

Cardup Business Park



Site Assessment Conclusion

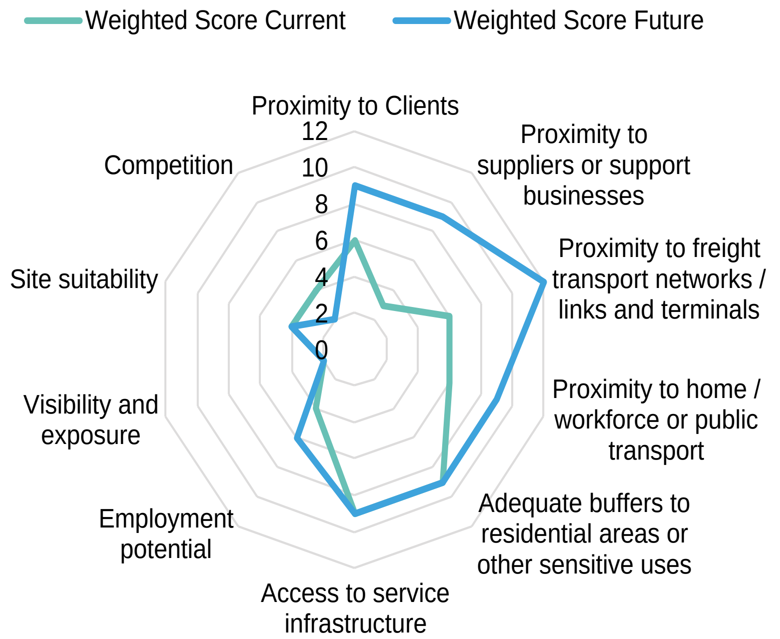
The key current and future strengths of CBP are in access to service infrastructure and freight networks, and the suitability of the site for industrial land uses.

The industrial area scale is ultimately limited by the transport network and surrounding land uses (urban, bush forever). The types of land uses will also be limited by the freight network when compared to the network planned for West Mundijong.

In the future Cardup will benefit from a larger local workforce as the Serpentine Jarrahdale population grows.

In the future Cardup will face increasing competition from West Mundijong for tenants as this site is the key focus for industrial development in the area, and the surrounding Urban land may lessen the attractiveness of the site.

West Mundijong Industrial Area



Site Assessment Conclusion

West Mundijong's key current and future strengths are in the access to service infrastructure and freight networks, buffers from residential land uses, and the suitability of the site for industrial land uses.

The industrial area offers a wide range of lot sizes, and is one of three options to accommodate an intermodal terminal to service Westport. Given this may increase the strategic importance of the area, the Shire have considered there is potential for West Mundijong to expand in the future to accommodate additional industrial land demand. The planned freight rail realignment and Tonkin Hwy extension will significantly improve the transport access, and will have the capacity to accommodate much larger vehicles than Cardup.

In the future it will benefit from a larger local workforce as the Serpentine Jarrahdale population grows. Competition from Cardup for tenants is a potential challenge for West Mundijong, however West Mundijong offers potential for greater proximity to suppliers and support businesses from within the industrial land allocated for service commercial, light industrial and general industrial.

INDUSTRIAL LAND CAPACITY – SITE ASSESSMENT REVIEW

Industrial Land Capacity Report – Site Assessment Criteria

As an alternative independent approach to site assessment we have also reviewed the work done as part of the 2009 Industrial Land Capacity Assessment report (ILCA) which undertook site assessments for all key industrial sites across the Perth Metropolitan area. This allowed existing and potential sites to be evaluated for their suitability for industrial development.

Assessment Methodology

A two-fold assessment criteria process was used to first filter out potential sites capable of industrial development, then undertake a detailed assessment using eight industrial land suitability criteria. The assessment process and criteria are detailed in pages 11-14 of the ILCA, and the results in the appendices.

Recent Changes

Since the Industrial Land Capacity Assessment report was produced in 2009 the comparative status of West Mundijong and Cardup has changed. Urbis have used the scoring methodology to update the assessment to reflect the following changes:

- The approval of the West Mundijong Structure Plan;
- The extension of Tonkin Hwy to West Mundijong Industrial Area;
- The plans to shift the freight railway line to West Mundijong to create an intermodal freight terminal; and
- The increased residential development in Whitby (immediately south of Cardup) and Byford (immediately north of Cardup) likely to increase noise and traffic conflicts between Cardup Business Park and the residents.

These changes to the transport network, surrounding residential development and resolving of the land status challenges would result in West Mundijong scoring higher than previously, and Cardup scoring lower.

Sources: Industrial Land Capacity Assessment Final Report 2009, Industrial Land Capacity Assessment Final Report Appendices.

Cardup and West Mundijong Site Assessments

	CRITERIA	WEIGHTING	ORIGINAL ASSESSMENT (AURECON)		UPDATED ASSESSMENT (URBIS)	
			CARDUP	WEST MUNDIJONG	CARDUP	WEST MUNDIJONG
Raw Score	Strategic Employment Potential		3	3	3	3
	Social Impacts		3	3	2	3
	Environmental Issues		2	3	2	3
	Serviceability		2	2	2	2
	Transport Linkages		4	4	3	4
	Compatibility / Synergies with Current Land Use		3	3	3	3
	Land Status		3	2	3	3
	Access to Workforce		3	3	3	3
Weighted Score	Strategic Employment Potential	1.0	3	3	3	3
	Social Impacts	2.2	6.6	6.6	4.4	6.6
	Environmental Issues	2.8	5.6	8.4	5.6	8.4
	Serviceability	5.2	10.4	10.4	10.4	10.4
	Transport Linkages	5.2	20.8	20.8	15.6	20.8
	Compatibility / Synergies with Current Land Use	5.8	17.4	17.4	17.4	17.4
	Land Status	7.6	22.8	15.2	22.8	22.8
	Access to Workforce	10.0	30	30	30	30
Total			117	112	109	119

03

INDUSTRIAL LAND SUPPLY AND DEMAND

SUMMARY

INDUSTRIAL LAND FORECAST

Industrial land forecasts demonstrate there will be sufficient industrial land in the SE Sub-region by 2050 without Cardup Business Park.

Key data points for this are:

911*	HA OF INDUSTRIAL LAND SUPPLY IN SOUTH EAST SUB-REGION
8.5	HA OF INDUSTRIAL LAND DEMAND P.A.
77.5	YEARS OF INDUSTRIAL LAND SUPPLY IN SOUTH EAST SUB-REGION BEYOND 2050 (URBIS BASELINE MODELLING)
41.3	YEARS OF INDUSTRIAL LAND SUPPLY IN SOUTH EAST SUB-REGION BEYOND 2050 (URBIS EXPANDED DEMAND MODELLING)
32	YEARS OF INDUSTRIAL LAND SUPPLY IN SOUTH EAST SUB-REGION WITH CARDUP (FRAMEWORKS DEMAND MODELLING)
30	YEARS OF INDUSTRIAL LAND SUPPLY IN SOUTH EAST SUB-REGION WITHOUT CARDUP (FRAMEWORKS DEMAND MODELLING)

Note Excluding undeveloped land in Cardup*

KEY OUTCOMES

SUFFICIENT INDUSTRIAL LAND SUPPLY

BASELINE AND HIGH DEMAND SCENARIOS TESTED

INDUSTRIAL LAND SUPPLY AND DEMAND - CONTEXT

Understanding the Industrial Land Planning Process

Industrial Land Assessments

While there are a number of different ways to understand supply and demand for industrial land, in general determining the future need for industrial land requires an assessment of the following:

- **Demand** – take-up and development trends of industrial land within a sub-region or region;
- **Supply** – amount of industrial land zoned for immediate, future or potential industrial purposes within a sub-region or region; and
- **Context** – population growth within close proximity to industrial areas, suitability of the land for industrial development, relevant micro and macroeconomic trends, function and scale of other industrial areas within the sub-region or region (e.g. light/general/heavy industrial zones, strategic vs. population driven focus, overall amount of industrial land within a single or adjacent industrial areas, range of lot sizes, etc.).

Appropriate Supply Levels

Some key assumptions need to be made in determining the appropriate number of years of **industrial land supply** in the pipeline to ensure an adequate supply buffer and enable land to be made development-ready. National examples include:

- The Perth and Peel@3.5million planning frameworks provide sufficient supply of industrial land to last 33 years (2017-2050) with the assumption that by 2050 the supply will have run out. This does not appear to reflect a supply pipeline based on annual demand but rather the amount of supply that can be used annually given the overall supply. The methodology is not provided;
- 20-30 years long-term supply of immediately available and future planned industrial land is suggested in the ILCA and EELS;
- At least 30 years supply is suggested in the *Melbourne Industrial and Commercial Land Use Plan* guiding principles, along with recommendations for planning for strategic industrial sites; and
- NSW supply standards in the *Employment Lands Development Monitor 2020* recommend 20 years supply of potential future employment (industrial) land, and 8-10 years supply of undeveloped zoned employment land.

Demand Factors

INDUSTRIAL LAND TAKE-UP

Data Sources:

- Land sales volumes and price movements (Landgate/PriceFinder)
- Land development (GIS survey)

INDUSTRIAL FLOORSPACE TAKE-UP

Data Sources:

- Land Use and Employment Survey (DPLH, 2015)

Supply Factors

INDUSTRIAL LAND SUPPLY

Data Sources:

- Perth and Peel@3.5million frameworks

Context Factors

POPULATION GROWTH

LAND SUITABILITY

RELEVANT ECONOMIC TRENDS

FUNCTION / SCALE OF OTHER INDUSTRIAL AREAS

INDUSTRIAL LAND FORECASTS AND ASSESSMENT PROCESS

Methodology

This analysis is examining the need for industrial land within a local government area with reference to the wider sub-region needs, and the capacity of each industrial area to deliver industrial land which is well-placed to meet the needs of sub-region industries and residents, and which can encourage economic development and growth while meeting the contemporary challenges facing industrial areas.

Datasets

A range of different datasets have been used to demonstrate the supply and demand situation. These are:

- **Demand** – average annual industrial land sales from 2000 to 2019 (Landgate / Pricefinder); and
- **Supply** – land zoned industrial, future industrial and industrial investigation under the Perth and Peel@3.5million framework (DPLH).

In addition, the following has been used to provide context to the likely industrial land needs within the South East Sub-region:

- **Suitability and focus** of the industrial areas at Cardup Business Park and West Mundijong Industrial Area, and in the South West and Peel Sub-regions;
- **Population** – historical growth (ABS Census and ERP), population projections (WA Tomorrow Population Forecasts Band C);
- **Market trends** – price trends (Pricefinder / Landgate);
- **Floorspace Take-up** – calculate industrial employment and floorspace by LGAs in the South East Sub-region, industrial floorspace per employee, percentage occupied and the percentage vacant using the Land Use Employment Survey (LUES) over several years including 1993, 1997, 2002, 2008 and 2017.

Supply Pipeline

The supply pipeline until 2050 has been estimated to align with the Perth and Peel@3.5million frameworks.

Industrial Land Forecast

TOTAL SUPPLY – ANNUAL DEMAND = INDUSTRIAL LAND FORECAST

INDUSTRIAL LAND SUPPLY

INDUSTRIAL SUPPLY IN PERTH AND PEEL BY SUB-REGION

Industrial Land Supply

The supply of industrial land across Perth and Peel is documented in the Frameworks (table, right).

The **Metro Central Sub-region** is considered to be fully developed and cannot accommodate any additional industrial land supply. However, over time the types of industrial land in this sub-region tend to require smaller lots and more intense development as the value of the land increases and only land uses which require close proximity to their catchment population and do not present land uses conflicts occupy these areas. Subdivision of larger industrial lots as these land uses move outwards will therefore result in some increase in the number of businesses accommodated in this sub-region.

The remaining outer suburban sub-regions cater for population growth across Perth and Peel, as well as strategic industrial development.

Strategic industrial development is largely located within the **Metro South West Sub-region**, already the location of the two metropolitan ports, key shipbuilding and defence installations, the Kwinana Refinery and associated strategic industries. This sub-region also has vast supplies of undeveloped industrial land, as well as industrial expansion and investigation land.

The **SE Sub-region** industrial land is largely catering to the existing and growing population. Only a small proportion of the industrial land is likely to cater for strategic land uses due to the location and access to infrastructure.

Perth and Peel Industrial Supply (ha)

<table>
<tr><th>REGION</th><th>INDUSTRIAL</th><th>UNDEVELOPED INDUSTRIAL LAND</th><th>INDUSTRIAL EXPANSION</th><th>INDUSTRIAL INVESTIGATION</th><th>TOTAL FUTURE SUPPLY</th></tr>
<tr><td>Metro Central</td><td>1,804</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Metro North East</td><td>1,330</td><td>494</td><td>897</td><td>944</td><td>2,334</td></tr>
<tr><td>Metro North West</td><td>1,140</td><td>676</td><td>0</td><td>1,443</td><td>2,119</td></tr>
<tr><td>Metro South East</td><td>1,281</td><td rowspan="3">1,157</td><td>165</td><td>69</td><td rowspan="3">5,093</td></tr>
<tr><td>Metro South West</td><td>2,670</td><td>1,468</td><td>301</td></tr>
<tr><td>Peel</td><td>2,477</td><td>633</td><td>1,298</td></tr>
<tr><td>Total in Perth and Peel</td><td>10,702</td><td>2,327</td><td>3,164</td><td>4,055</td><td>9,546</td></tr>
</table>

Source: Urbis, Perth and Peel@3.5million Sub Regional Planning Frameworks
Note Gross land areas (supply) from the frameworks in the table above have been to converted to net saleable area (NSA). To allow for the provision of roads, POS, bush forever and other undevelopable land, an estimate for NSA was derived based on the assumption that it is 65% of the gross land area. This allows for a comparison to land demand figures in the following two sections (as measured by land sales and airport take up).*

EXISTING AND FUTURE SUPPLY – SE SUB-REGION

Supply

The supply of industrial land in the SE Sub-region is documented in the Frameworks. This data has been augmented by an aerial photograph analysis of undeveloped industrial, as the Frameworks did not provide a breakdown of this by the SE, SW and Peel Sub-regions.

There is a large supply of industrial land in the SE Sub-region estimated at 1,803 ha (excluding Cardup). With the inclusion of Cardup there is an estimated 1,968 ha. There is considerable vacant and under developed land in Kenwick and Forrestdale, in addition to Mundijong.

There is additionally 360 ha of industrial investigation and industrial expansion land. There is significant road infrastructure investments in these areas which will support industrial demand in these locations.

Undeveloped Industrial – SE Sub-region

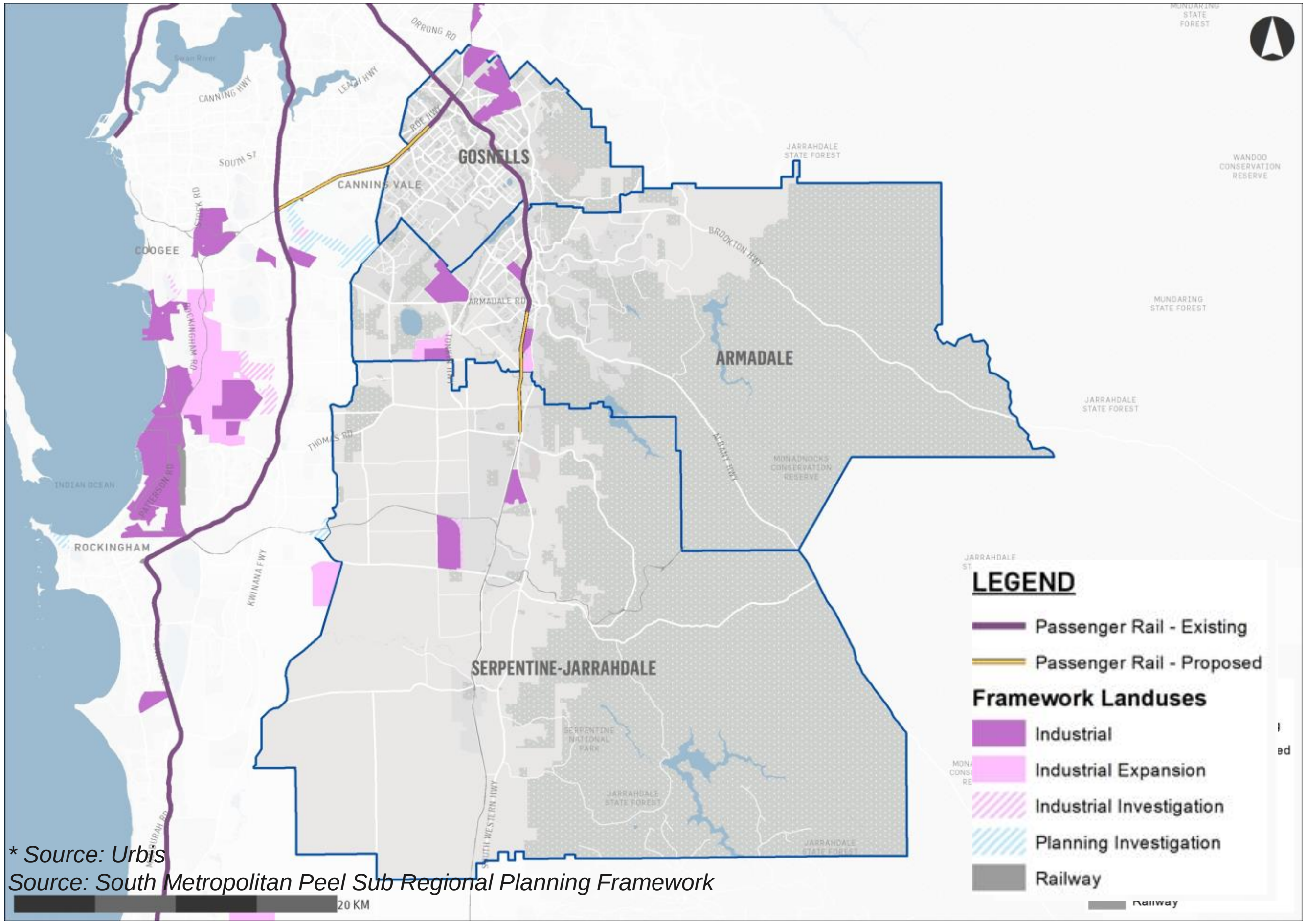
LOCATION OF INDUSTRIAL LANDUSE	SITE AREA (HA)	UNDEVELOPED (HA)
Kenwick	454	231
Forrestdale	327	177
Kelmscott	47	0
Armadale	50	0
Cardup	107	78
Mundijong	268	268
Total	1,253	754

Source: Urbis

Existing and Future Industrial Supply NSA (ha) in South East Sub-region

REGION	INDUSTRIAL	INDUSTRIAL EXPANSION	INDUSTRIAL INVESTIGATION	TOTAL FUTURE SUPPLY	UNDEVELOPED LAND*
City of Armadale	426	165	0	165	177
City of Gosnells	463	0	0	0	231
Shire of Serpentine - Jarrahdale	284	0	69	69	346
South East Sub-Region (Ha)	**1,172**	**165**	**69**	**234**	**754**

Source: South Metropolitan and Peel Sub Regional Planning Framework



** Source: Urbis*
Source: South Metropolitan Peel Sub Regional Planning Framework

INDUSTRIAL LAND DEMAND

PERTH AND PEEL INDUSTRIAL DEMAND

Land Sales

Total land sales across Greater Perth were analysed to understand recent demand trends and the average annual demand for industrial land overall and by sub-region.

Average annual industrial land sales across Perth and Peel from 2000 to 2022 were 75.0 ha / annum. This includes periods of high sales volumes in the mining boom years and very low sales volumes following the GFC and post mining boom between 2015 and 2018.

The average annual sales demand for the South Metropolitan and Peel was 32.7 ha / annum in the same period, with average annual sales demand in the South East Sub-region only 8.5 ha / annum.

Historically total sales demand has been highest in the South West Sub-region driven by the high volume of land supply and concentration of strategic industrial tenants and key infrastructure, such as ports. Sales demand has been lowest in Peel followed by the South East Sub-region, with a lower population base and fewer strategic demand drivers.

Vacant Industrial Land Developer and Other 1st Sales (ha), Perth and Peel

Source: Urbis, Landgate
Note: There may be additional sales for 2022 as not all settlements are complete as at January 2023.

Vacant Industrial Land Developer and Other 1st Sales (Average No. Sales and Size), Perth and Peel

YEAR	CENTRAL		NORTH EAST		NORTH WEST		PEEL		SOUTH EAST		SOUTH WEST		PERTH AND PEEL	
	Avg No. Sales	Avg. Land Area (ha) Sold	Avg No. Sales	Avg. Land Area (ha) Sold	Avg No. Sales	Avg. Land Area (ha) Sold	Avg No. Sales	Avg. Land Area (ha) Sold	Avg No. Sales	Avg. Land Area (ha) Sold	Avg No. Sales	Avg. Land Area (ha) Sold	Total No. Sales	Avg. Land Area (ha) Sold
2000 -'04	53	23	45	22	25	13	7	3	15	8	22	24	168	94
2005 - '09	40	15	19	11	49	19	6	3	8	4	68	29	191	82
2010 - '14	25	9	10	4	46	17	3	2	24	10	32	24	140	66
2015 - '19	30	16	8	8	29	12	2	2	17	9	10	16	95	62
2020 - '22	12	4	11	20	26	13	3	5	23	13	17	10	92	65
Avg Total 2000 - '22	34	14	19	12	36	15	5	3	17	8	31	21	141	75

Source: Urbis, Landgate
Note: There may be additional sales for 2022 as not all settlements are complete as at January 2023.

SOUTH METRO AND PEEL INDUSTRIAL DEMAND

Land Demand Trends

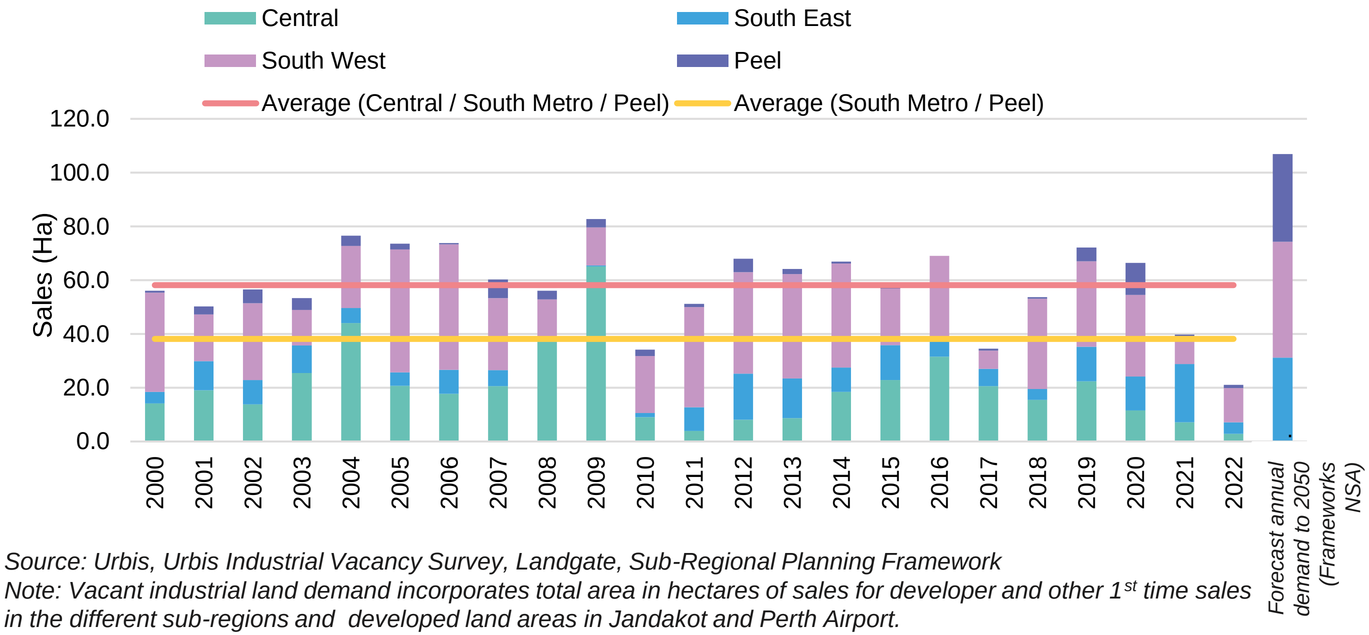
Total land demand across Central and South Metropolitan Peel was analysed using land sales and take up at the Jandakot and Perth airports to understand recent demand trends and the average annual demand for industrial land overall and by sub-region within the corridors. Gross land areas from the frameworks have been to converted to net saleable area (NSA). To allow for the provision of roads, POS, bush forever and other undevelopable land, an estimate for NSA was derived based on the assumption that it is 65% of the gross land area. This allows for a comparison to land demand figures (as measured by land sales and airport take up).

Demand for industrial land in the SE Sub-region has been considered in the context of the surrounding sub-regions. Demand from the Central Sub-region has been included to demonstrate the potential for additional referred demand to other sub-regions, including the South East, that may occur once land within the Central Sub-region has been fully developed.

During the time period measured, the South West Sub-region has been the key consumer of industrial land demand. The agglomeration of strategic industrial land uses and presence of transport and other specialised infrastructure are the drivers for this, with the availability of land supporting this demand.

Average annual industrial demand across the South Metro Peel and Central Sub-regions from 2000 to 2022 were 58.2 ha / annum. The Perth and Peel@3.5million frameworks annual demand forecast for the South Metro Peel Sub-regions of 106.9 ha / annum NSA equivalent provides sufficient land to meet this demand with a substantial proportion to allow for increased demand due to strategic drivers, referred demand from elsewhere or reductions in the developable area of industrial land.

Vacant Industrial Land Demand, Central and South Metropolitan Peel



Source: Urbis, Urbis Industrial Vacancy Survey, Landgate, Sub-Regional Planning Framework
Note: Vacant industrial land demand incorporates total area in hectares of sales for developer and other 1st time sales in the different sub-regions and developed land areas in Jandakot and Perth Airport.
There may be additional sales for 2022 as not all settlements are complete as at January 2023.

Average Annual Demand (ha) by Sub Region, Central and South Metropolitan Peel

DEMAND	CENTRAL	SOUTH EAST	SOUTH WEST	PEEL	TOTAL
Average Annual Demand Ha (2000-23)	20.0	8.5	26.8	2.9	**58.2**
Forecast Annual Demand Ha (Framework NSA)	-	31.1	43.2	32.6	106.9
Difference	-	22.7	16.3	29.7	48.7
Average Annual Demand proportion of Frameworks Forecast	-	27%	62%	9%	54%

Source: Urbis, Landgate, Sub Regional Planning Framework

SOUTH METRO AND PEEL INDUSTRIAL DEMAND - CONTINUED

Land Demand Trends

The average annual demand in the SE Sub-region from 2000 to 2022 was 8.5 ha / annum, with highest peak of 21.7 ha in 2021. If 50% of the demand from the Central Sub-region were referred to the SE Sub-region this would equate to a total of 18.5 ha / annum. The Frameworks have forecast 31.1 ha / annum forecast to 2050 for the SE Sub-region.

The South East Sub-region has historically averaged 22% of the demand in the South Metro Peel corridor, with the South West Sub-region taking up 70% of the total corridor demand.

In contrast the Frameworks show the proportion of industrial land demanded in the South East Sub-region at 29% of the South Metro Peel Corridor, with the South West Sub-region being 40%. While an increase in the demand for industrial is expected in the South East Sub-region due to the rapidly growing resident population, such a significant shift is unlikely to eventuate due to the very large agglomeration of strategic industrial tenants and infrastructure, as well as the vast tracts of industrial land supply in the South West Sub-region.

The projected future demand in the frameworks appears to provide sufficient land to ensure that the southern sub-regions have capacity to take up any referred demand from the Central Sub-region once the industrial land within the Central Sub-region is fully developed. As planning and development of the southern sub-regions proceeds, there are greater levels of certainty around the level of industrial land required and the locations which are best placed to serve the needs of emerging industries.

Given the planned development of Westport at Kwinana a large proportion of increased industrial land demand driven by strategic industry development is likely to be located in the SW Sub-region. There is the opportunity for an intermodal facility connected to Westport to be located in the SE Sub-region at West Mundijong Industrial Area, which has the ability to expand beyond the current planned boundaries if additional land is required. If an intermodal facility is developed at West Mundijong there is a question of whether there will be flow-on land demand impacts at Cardup. Given the road network capacity of the two industrial areas and surrounding land uses, Cardup is likely to be better positioned to take up service commercial and population-driven employment land uses than equivalent industrial land uses that will be accommodated at West Mundijong.

SOUTH EAST SUB-REGION – INDUSTRIAL FLOORSPACE TAKE-UP

Key Insights

Industrial floorspace take-up shows demand for developed industrial buildings, and provides some insights into demand for industrial land, particularly for floorspace-intensive industrial land uses typically seen on smaller lots and in industrial estates serving a local population catchment.

Industrial floorspace trends in the local catchment-focused SE Sub-region have been shown from 1993 to 2017. There has been a trend over time towards higher levels of floorspace per employee and per capita.

Overall, industrial floorspace has increased over time but the majority of this has been developed in existing industrial areas in the Cities of Armadale and Gosnells, rather than in new industrial areas in the Shire of Serpentine Jarrahdale.

Increasing floorspace intensity in established industrial areas has allowed a level of demand to be met within existing industrial areas.

Industrial Employment and Floorspace by LGA in South East Sub-region, 1993-2017

YEAR	REGION	POPULATION	EMPLOYMENT	FLOORSPACE (SQ.M NLA)	FLOORSPACE PER EMPLOYEE (SQ.M)	FLOORSPACE PER CAPITA	SITE AREA PER CAPITA (SQ.M)
1993	City of Armadale		1,304	151,732	116.4		
	City of Gosnells		3,824	369,995	96.8		
	Shire of Serpentine - Jarrahdale		285	31,607	110.9		
	Total SE Region		**5,413**	**553,334**	**102.2**		
	Perth Metro	**1,266,704**	**106,117**	**9,506,454**	**90**	**7.5**	***40.1***
1997	City of Armadale		1,234	164,550	133.3		
	City of Gosnells		4,120	408,573	99.2		
	Shire of Serpentine - Jarrahdale		220	26,128	118.8		
	Total SE Region		**5,574**	**599,251**	**107.5**		
	Perth Metro	**1,366,707**	**112,941**	**10,620,788**	**94**	**7.8**	***41.5***
2001	City of Armadale	52,391	1,428	216,463	151.6	4.1	
	City of Gosnells	83,662	4,244	503,887	118.7	6.0	***32.2***
	Shire of Serpentine - Jarrahdale	11,733	90	45,629	507.0	3.9	
	Total SE Region	**147,786**	**5,762**	**765,979**	**132.9**	**5.2**	***27.7***
	Perth Metro	**1,396,174**	**115,878**	**13,160,294**	**114**	**9.4**	***50.3***
2008	City of Armadale	55,809	1,824	214,806	117.8	3.8	
	City of Gosnells	101,907	5,772	599,471	103.9	5.9	***31.4***
	Shire of Serpentine - Jarrahdale	15,224	101	57,091	565.3	3.8	
	Total SE Region	**172,940**	**7,697**	**871,368**	**113.2**	**5.0**	***26.9***
	Perth Metro	**1,605,132**	**160,784**	**16,030,089**	**100**	**10.0**	***53.3***
2017	City of Armadale	84,669	3,357	401,286	119.5	4.7	
	City of Gosnells	122,847	6,896	732,540	106.2	6.0	***31.8***
	Shire of Serpentine - Jarrahdale	29,355	196	55,453	282.9	1.9	
	Total SE Region	**236,871**	**10,449**	**1,189,279**	**114**	**5.0**	***26.8***
	Perth Metro	**1,937,125**	**190,002**	**20,224,611**	**106**	**10.4**	***55.8***

Source: Department of Planning Land Use Employment Survey (LUES) 1993, 1997, 2002, 2008, 2017

INDUSTRIAL LAND FORECAST

SOUTH METRO PEEL INDUSTRIAL LAND FORECAST

Key Findings

The future take-up of industrial land for the South Metro Peel Sub-region was forecast using the Frameworks supply and the average annual historical demand between 2000 – 2022.

Baseline Demand Forecast

Demand for industrial land across the South Metro Peel Sub-region averaged approximately 38.2 ha per annum. Assuming supply consists of undeveloped zoned industrial land, industrial expansion and investigation land this would result in 2,739 ha of industrial land still available by 2050. Under this scenario only the remaining supply of already zoned industrial land is used.

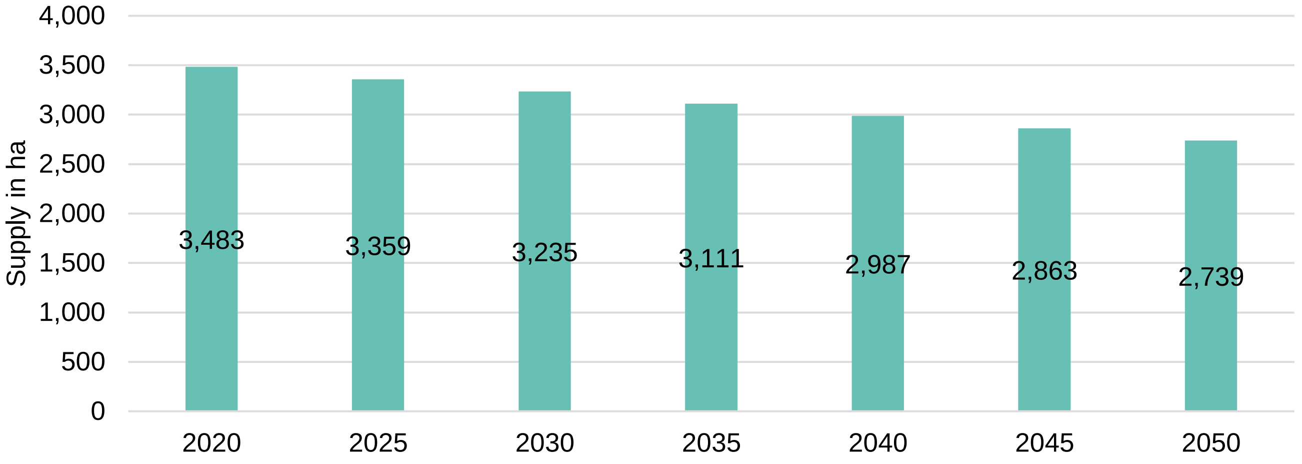
This would leave an additional 71.7 years of industrial land supply beyond 2050.

Expanded Demand Forecast

A scenario was tested where forecast demand includes 50% of historical Central Sub-region demand referred to the South Metro Peel Sub-region from 2035 onwards. This assumes Central Sub-region historical demand is split evenly between the southern and northern sub-regions once the Central Sub-region industrial land is fully developed.

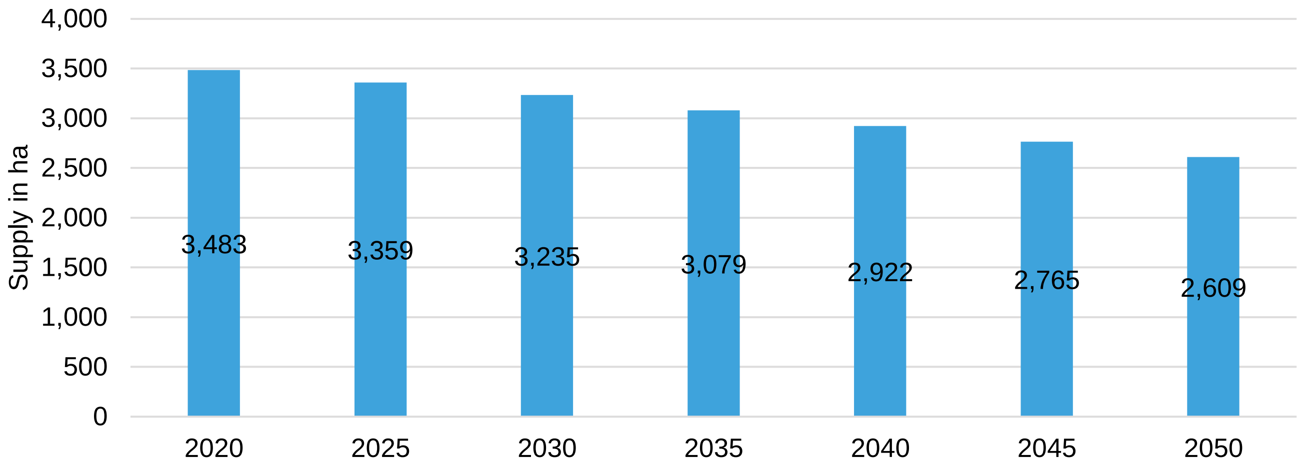
Under this scenario, demand across the South Metro Peel sub-regions could reach 48.2 ha per annum. By 2050 the remaining industrial land would be 2,609 ha. Under this scenario some industrial investigation / expansion land would need to be used. This would leave an additional 54.1 years of supply beyond 2050.

South Metro Peel Sub-region – Baseline Demand Forecast to 2050 (ha)



Source: Urbis, Landgate, Sub Regional Framework

South Metro Peel Sub-region – Expanded Demand Forecast to 2050 (ha)



Source: Urbis, Landgate, Sub Regional Framework

SOUTH EAST SUB-REGION INDUSTRIAL LAND FORECAST

Key Findings

The future take-up of industrial land for the SE Sub-region was forecast using the Frameworks supply and the average annual historical demand between 2000 – 2022.

Baseline Demand Forecast

In the SE Sub-region demand for industrial land has averaged 8.5 ha per annum between 2000 and 2022. Assuming supply consists of undeveloped zoned industrial land, industrial expansion and investigation land this would result in 657 ha of industrial land still available by 2050. Under this scenario only the remaining supply of already zoned industrial land is used.

This would leave an additional 77.5 years of industrial land supply beyond 2050.

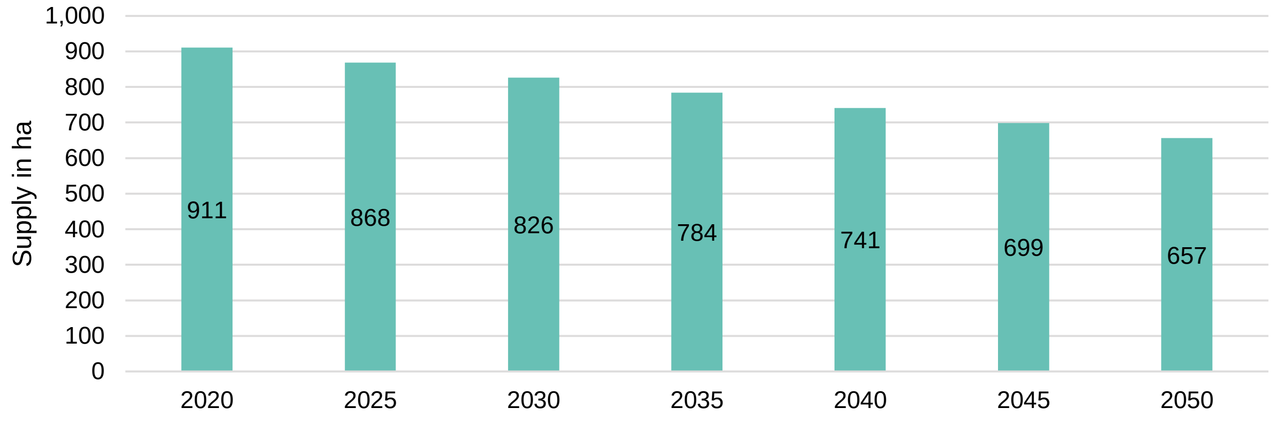
Expanded Demand Forecast

A scenario was tested where forecast demand includes 25% of historical Central Sub-region demand referred to the SE Sub-region from 2035 onwards. This scenario assumes the SW and northern sub-regions accommodate the remainder of Central Sub-region demand.

Under this scenario, demand across the sub-region could reach 13.5 ha per annum. By 2050 the remaining industrial land would be 556 ha. Under this scenario only the remaining supply of already zoned industrial land is used. This would leave an additional 41.3 years of supply beyond 2050.

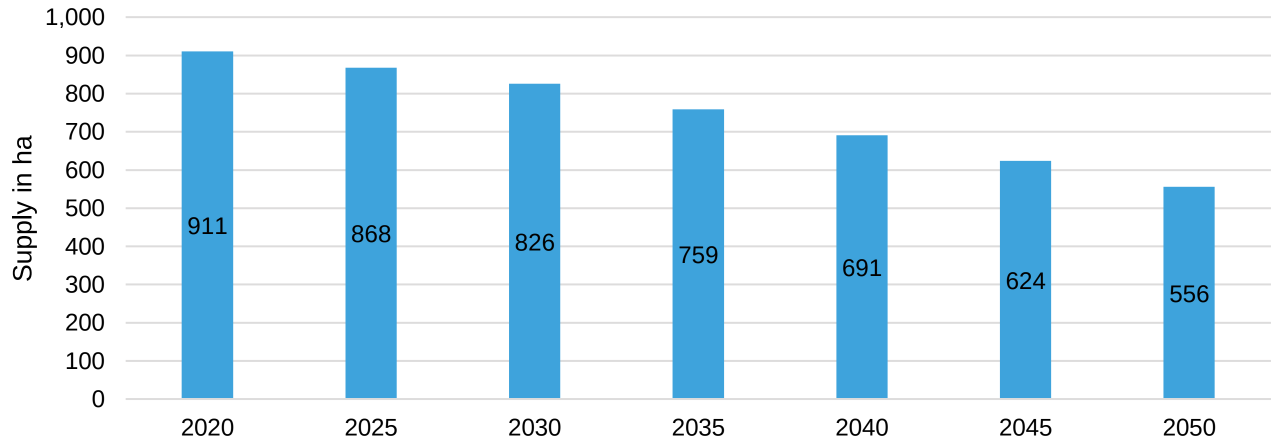
Given some industrial land needs to locate near their catchment market and CBP is on the outer suburban fringe it is likely other industrial areas would better serve Central Sub-region demand.

South East Sub-region – Baseline Demand Forecast to 2050 (ha)



Source: Urbis, Landgate, Nearmap, Sub Regional Framework

South East Sub-region – Expanded Demand Forecast to 2050 (ha)



Source: Urbis, Landgate, Nearmaps, Sub Regional Framework
Note: As the Frameworks do not provide a breakdown of the undeveloped industrial land for the SE Sub-region, but rather the SE, SW and Peel combined as the South Metro Peel Sub-region, Urbis undertook aerial photography analysis to determine the level of undeveloped industrial zoned land in the SE Sub-region.

INDUSTRIAL LAND FORECASTING

Forecast Context

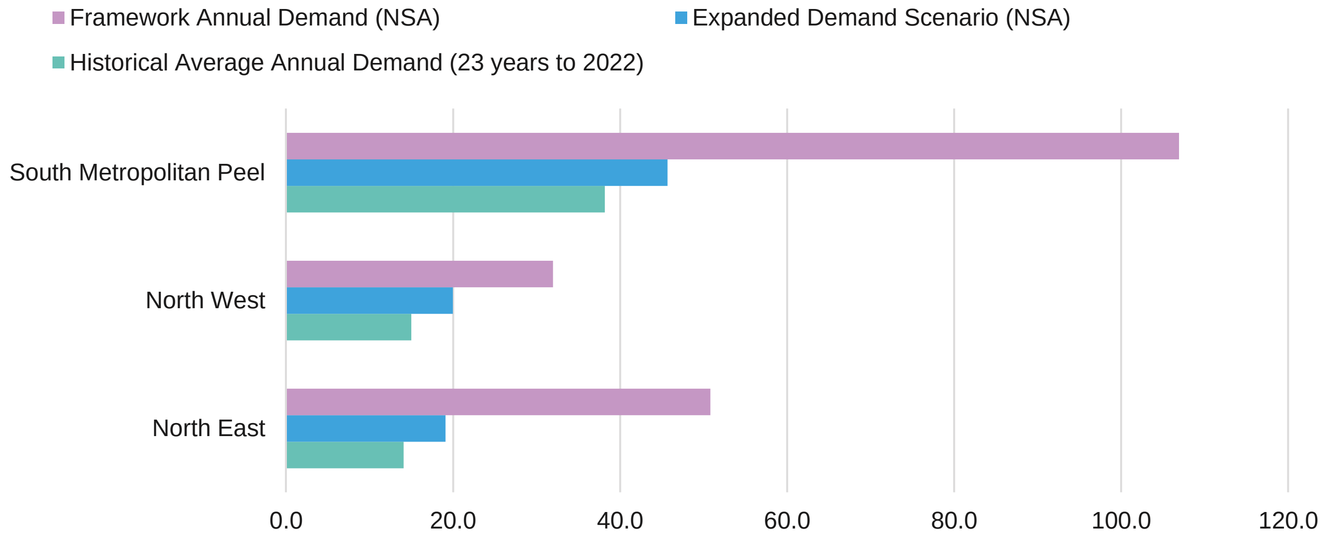
The Frameworks document provides a forecast for future take-up (demand) for industrial land across Perth and Peel. The forecasting methodology is not provided in the Frameworks, however we have estimated average annual demand using net saleable area and GIS analysis and converted the gross land area from the Frameworks to enable comparison.

Based on the NSA estimates derived from the framework, historical average annual demand is 33% of the Frameworks forecast for the South Metro Peel Sub-region, 47% of the forecast for the North West Sub-region and 34% of the forecast for the North East Sub-region. In the SE Sub-region the forecast demand in the Frameworks is three times higher than historical demand.

Given the significant difference (comparison, top right) between the estimated annual NSA demand forecasts derived from the Frameworks and the average annual demand in the last 20 years in the same areas, there appear to be generous allocations of land set aside for industrial land uses across the Perth metropolitan area.

Given the relatively small amount of land within the CBP using the Frameworks forecasts there would be sufficient industrial land supply in the SE Sub-region to last for 32 years (with CBP) or 30 years (without CBP). This is a higher pipeline of supply than any of the other growth sub-regions within the Frameworks under either scenario.

Perth and Peel Industrial Demand Forecast Comparisons (ha)



Source: Urbis, Perth and Peel@3.5million Sub Regional Planning Frameworks
Note: Vacant industrial land demand incorporates total area in hectares of sales in the different sub-regions and leased area in Jandakot, Perth Airport and Perth Airport lands (Hazelmere).

Years of Industrial Land Supply – Frameworks (inc. CBP)

SUB REGION	AVERAGE ANNUAL DEMAND (FRAMEWORKS NSA)	FUTURE SUPPLY (INC. INDUSTRIAL UNDEVELOPED AND EXPANSION) (NSA EST.)	NUMBER OF YEARS OF SUPPLY (INC. INDUSTRIAL UNDEVELOPED AND EXPANSION)	TOTAL FUTURE SUPPLY (INC. INDUSTRIAL INVESTIGATION) (NSA EST.)	NUMBER OF YEARS SUPPLY (INC. INDUSTRIAL INVESTIGATION)
Metro North East	50.8	1,391	27	2,334	46
Metro North West	32.0	676	21	2,119	66
South Metropolitan and Peel	106.9	3,424	32	5,093	48
Total in Perth and Peel	**189.7**	**5,491**	**-**	**9,546**	**-**

Source: Urbis, Perth and Peel@3.5million Sub Regional Planning Frameworks, Perth and Peel@3.5 million Planning Investigation Areas Update

04

KEY ISSUES AND FUTURE CONSIDERATIONS

SUMMARY

KEY ISSUES FOR CURRENT CBP TENANTS

Two of the four existing CBP tenants have expressed a strong desire to relocate to enable expansion of their businesses, with West Mundijong Industrial Area the preferred new location. Rezoning CBP to urban would provide them with an exit strategy.

Key drivers for this are:

- Unsuitable road network preventing some types of work from being undertaken;
- Surrounding land uses (e.g. Bush Forever, residential) limit expansion; and
- Scale of the land available is insufficient.

These factors are expected to also play a role in determining the take-up of land in CBP in the future, with West Mundijong offering a much more attractive value proposition. This has been reinforced by the high support from the Shire of Serpentine Jarrahdale for WMIA, who are actively advocating for and seeking tenants to locate within the area to promote success.

KEY OUTCOMES

LIMITED ATTRACTIVENESS FOR TENANTS

HIGHER SUPPORT FOR WEST MUNDIJONG

EXISTING CARDUP TENANTS

Permacast and Permapole

Permacast and Permapole are partner companies currently located on a 23.7 ha of land at the south-west of CBP. This is the useable site area, with the remaining 24 ha of the lot being taken up by Bush Forever land to the south and east.

Permacast currently employ 40 staff, while Permapole employ an additional 40 staff (total of 80 staff).

They are interested in expanding their business, however state that they are unable to do so within CBP for the following reasons:

- Lack of space to expand operations adjacent to the current site;
- Bush Forever land within their site restricts production and their ability to modify factory and storage layouts;
- The road intersection access on Robertson Rd restricts the types of heavy vehicles which can enter the site, and therefore prevents some types of work from being undertaken; and
- Existing infrastructure is reaching the end of its useful lifetime and will require redevelopment in the near future.

Relocation of both businesses to WMIA is the preferred solution for both businesses, as this location will offer:

- Tonkin Hwy access suitable for all heavy vehicles expected to require access to the businesses;
- Lower traffic impacts on the surrounding residential areas;
- Port access via Tonkin Hwy allowing new opportunities to be pursued; and
- Sufficient land to expand business operations (an additional 50 ha of land is required for Permapole and additional 40 ha for Permacast).

The positive impacts for both businesses are expected to include:

- An additional 60-110 employees for Permacast and 35-60 for Permapole (net increase of 95-170 jobs);
- New and modern infrastructure developed onsite, providing local jobs during the construction period and upgrading operations with current technology;
- Ability to pursue harvest waste product repurposing due to the port access; and
- Ability to pursue additional business opportunities currently on hold.

Colli Timber and Hardware

Colli Timber and Hardware are currently located on a 29.2 ha site traversing the centre of the CBP, although less than 50% of the site has been developed for industrial purposes.

They will consider relocating to an alternative industrial estate, such as West Mundijong, should CBP be rezoned for urban land uses.

Wormall Civil

Wormall Civil are currently located on a 4.7 ha site at the northern boundary of CBP. Their development uses the land at a much higher intensity (i.e. greater proportion of floorspace to site area) than the other existing CBP tenants.

They intend to maintain their presence on the site and have been incorporated into the concept plan.

Undeveloped Land

The remainder of the site is undeveloped for industrial purposes.

WEST MUNDIJONG INDUSTRIAL AREA PROFILE

OVERVIEW

Location: Positioned west of the Mundijong town site. Framed by Mundijong Road (south, Tonkin Highway road reserve (east), Kwinana freight rail (north) and Kargotich Road (west).

Area: 474.34 hectares of total land area with 80% of the area developable which yields an approximate 950 lots.

Purpose: A future industrial area that could provide an intermodal terminal that improves connectivity to other key industrial areas such as Westport.

Current Status: First major subdivision commenced in mid 2022. This includes the subdivision of 8 industrial lots by the Fowler Group.

Description:

The West Mundjong Industrial Area Local Structure Plan outlines the area as a future industrial precinct. The Shire of Serpentine-Jarrahdale estimates that this industrial area will create 10,000 jobs, $600 million in export value and an economic output of $5.5 billion. Objectives of the West Mundijong Industrial Area are to provide a well located supply of industrial land, encourage growth, development and diversification of the local economy, facilitate local employment opportunities, create sustainable industrial developments that utilise innovative technologies and, develop a well designed industrial area with a high level of local amenity.

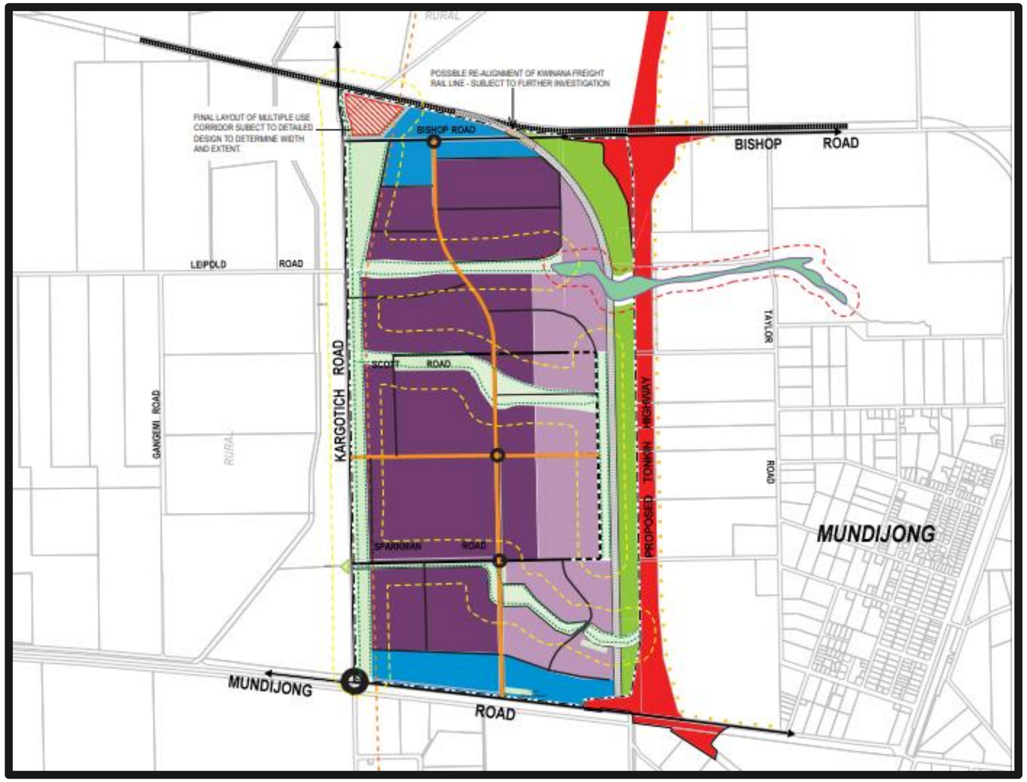
KEY CHARACTERISTICS

1. West Mundijong is ideally situated to provide an intermodal transport hub that will link Serpentine-Jarrahdale to existing industrial freight infrastructure.
2. Strong transport links with the Tonkin Highway extension and relocated rail freight line to increase connectivity in the area.
3. Significant land holding with the potential to expand the area

STRATEGIC ALIGNMENT

Development of West Mundijong is important to the development of Westport. Westport - Mundijong has been proposed as an option for an intermodal freight terminal / landside logistics to support Westport and allow sufficient land for complementary land uses to develop. West Mundijong offers strong transport connections to Westport with the Tonkin Highway extension and relocated rail freight line.

STRUCTURE PLAN



POTENTIAL FUTURE USES FOR CARDUP

Suitable Future Land Uses

If Cardup Business Park is to be converted from being solely industrial zoning, future zoning and land uses should demonstrate they are better suited to than the current.

Potential future land uses can be assessed in terms of the highest and best land uses, with the following criteria key considerations:

- Adequate buffers between sensitive land uses (e.g. residential);
- Proximity to transport networks;
- Proximity to amenities and supportive land uses;
- Employment potential and requirements;
- Site / land suitability;
- Competitive environment;
- Access to service infrastructure;
- Demand for the land uses; and
- Proximity to catchment populations (e.g. residential, businesses).

Given the very high population growth rates across the Shire of Serpentine-Jarrahdale there is expected to be a continued need for goods, services and employment within the Shire. Cardup is well-positioned between the growing areas of Byford and Whitby-Mundijong, the latter of which has capacity for an additional 30,00 - 40,000 people[1]. The large land area at Cardup has the capacity to accommodate employment-intensive land uses more compatible with the surrounding area than the existing land-intensive industrial uses.

1. Mundijong / Whitby District Structure Plan

05

GLOSSARY

GLOSSARY AND TERMS

ABS – Australian Bureau of Statistics

CBP – Cardup Business Park

Frameworks – Perth and Peel@3.5million land use planning and infrastructure frameworks

Airport Take Up – land take up at the Perth and Jandakot airport has been measured based on the completion year of new buildings and based on the land area utilised for each new building. See appendix methodology section for additional details on the methodology for this analysis.

Gross developable area – Total size of a selected parcel/s of land or geography in hectares

Net Saleable Area – To allow for the provision of roads, POS, bush forever and other undevelopable land, an estimate for NSA was derived based on the assumption that it is 65% of the gross land area.

SE Sub-region – South East Sub-region

South Metro Peel – South Metropolitan and Peel Sub-region (comprise of the South East, South West and Peel Sub-regions)

SW Sub-region – South West Sub-region

Vacant Industrial Land Demand – Refers to the total area in hectares of sales in the different sub-regions and leased area in Jandakot (South West Corridor), the Perth Airport (Central Sub-region), Hazelmere (North East).

WMIA – West Mundijong Industrial Area

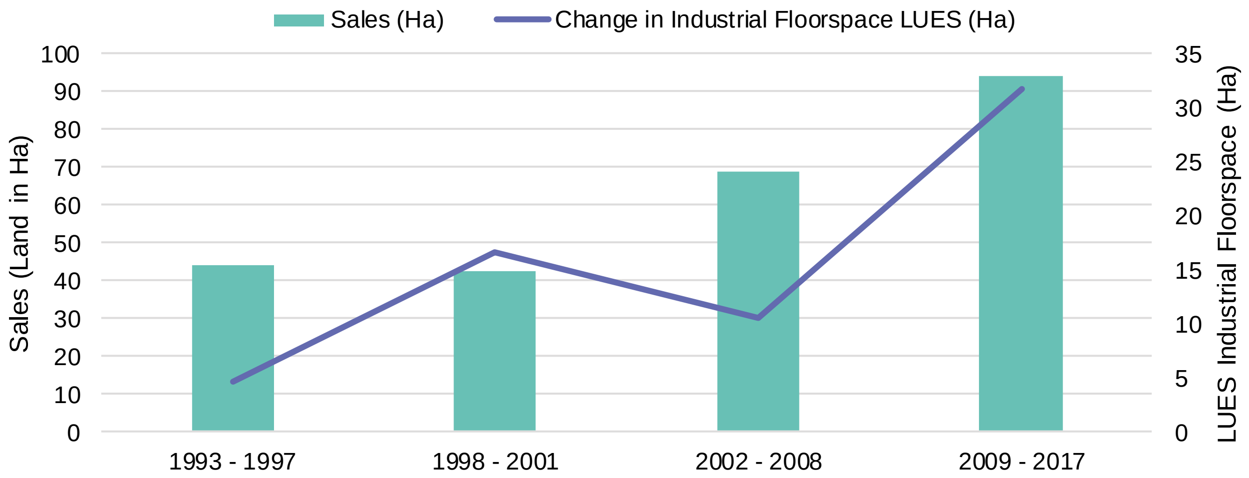
06

APPENDICES

APPENDIX A: ADDITIONAL DATA

COMPARISON OF LAND SALES AND LUES DATA

Land Sales vs LUES Industrial Floorspace (ha)

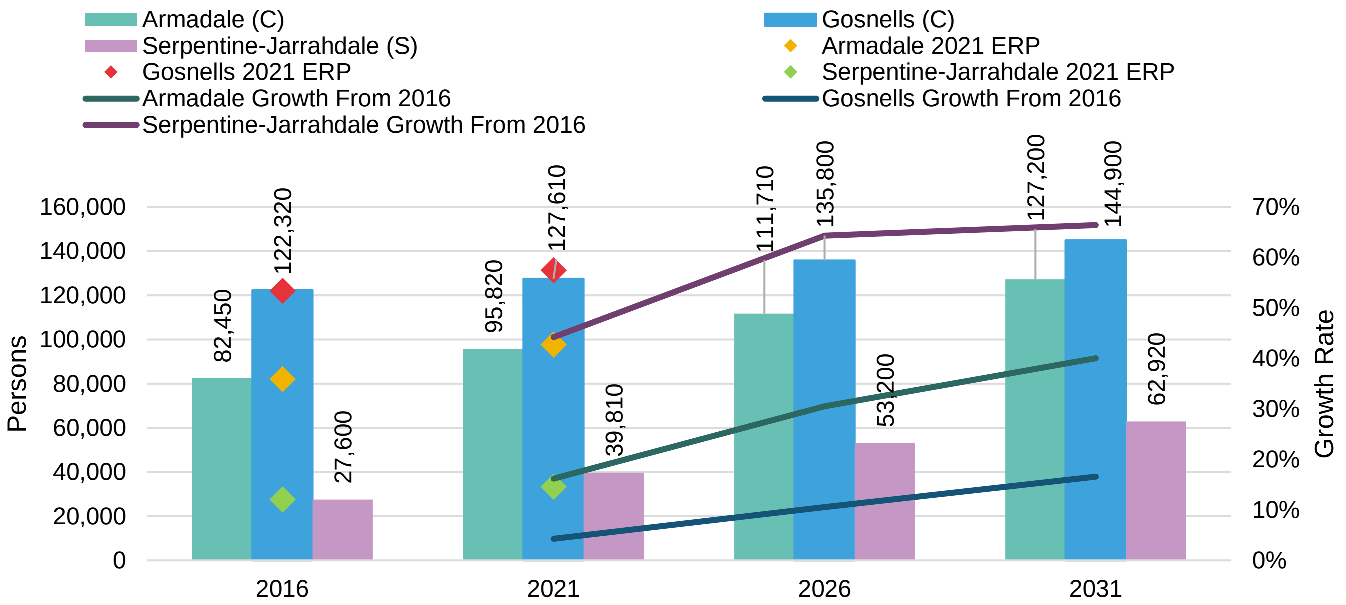


YEAR	SALES (HA)	LUES INDUSTRIAL FLOORSPACE (HA)	CHANGE IN INDUSTRIAL FLOORSPACE LUES (HA)
1993 - 1997	44	60	5
1998 - 2001	43	77	17
2002 - 2008	69	87	11
2009 - 2017	94	119	32

Source: Landgate, LUES (1997, 2002, 2008, 2017)

POPULATION FORECASTS

Population Forecasts by LGA – WA Tomorrow



Population Forecasts by LGA - EELS

SUB-REGIONS	2010 ERP	2016 ABS	2021 ERP	WA TOMORROW PROJECTIONS 2031 (2005)	WA TOMORROW PROJECTIONS 2031 (2018) BAND C
Central	767,452	781,965	866,460	910,000	932,910
North West	203,073	342,659	260,035	395,000	505,300
North East	312,799	229,461	381,525	258,000	334,620
South East	188,309	224,500	262,377	228,000	335,020
South West	225,682	268,505	310,464	278,000	408,880
Peel	90,380	101,654	118,171	133,000	147,610
Total Metro	1,787,695	1,948,744	2,199,032	2,202,000	2,664,340

Source: EELS Report, ABS, ABS Census 2016, WA Tomorrow Population Forecast 2018

APPENDIX B: AIRPORT LAND DEMAND METHODOLOGY

METHODOLOGY

Industrial land development at Perth and Jandakot Airports has been occurring over a number of years for a range of light industrial purposes.

As the airports are Commonwealth administrated land with long term leased to the airport operators. Land sales data therefore could not be used to determine demand. Analysis of time series ariel photography was utilised to assess the annual take-up of land, with airside land excluded from this analysis. Due to the limitations of the aerial photography this analysis has been carried out since 2008. In the case of Jandakot airport all development has been carried out since 2008 and at Perth airport the majority of development has been since 2008.

Methodology

1. The geographic areas chosen for analysis were the areas within the boundaries of the airports head leases.
2. The lot land areas were estimated by mapping out polygons using Nearmaps. The lot boundaries were defined by the fence boundaries and road overlays as shown on Nearmaps.

COVID-19 AND THE POTENTIAL IMPACT ON DATA INFORMATION

The data and information that informs and supports our opinions, estimates, surveys, forecasts, projections, conclusion, judgments, assumptions and recommendations contained in this report (Report Content) are predominantly generated over long periods, and is reflective of the circumstances applying in the past. Significant economic, health and other local and world events can, however, take a period of time for the market to absorb and to be reflected in such data and information. In many instances a change in market thinking and actual market conditions as at the date of this report may not be reflected in the data and information used to support the Report Content.

The recent international outbreak of the Novel Coronavirus (COVID-19), which the World Health Organisation declared a global health emergency in January 2020 and pandemic on 11 March 2020, has and continues to cause considerable business uncertainty which in turn materially impacts market conditions and the Australian and world economies more broadly.

The uncertainty has and is continuing to impact the Australian real estate market and business operations. The full extent of the impact on the real estate market and more broadly on the Australian economy and how long that impact will last is not known and it is not possible to accurately and definitively predict. Some business sectors, such as the retail, hotel and tourism sectors, have reported material impacts on trading performance. For example, Shopping Centre operators are reporting material reductions in foot traffic numbers, particularly in centres that ordinarily experience a high proportion of international visitors.

The data and information that informs and supports the Report Content is current as at the date of this report and (unless otherwise specifically stated in the Report) does not necessarily reflect the full impact of the COVID-19 Outbreak on the Australian economy, the asset(s) and any associated business operations to which the report relates. It is not possible to ascertain with certainty at this time how the market and the Australian economy more broadly will respond to this unprecedented event and the various programs and initiatives governments have adopted in attempting to address its impact. It is possible that the market conditions applying to the asset(s) and any associated business operations to which the report relates and the business sector to which they belong has been, and may be further, materially impacted by the COVID-19 Outbreak within a short space of time and that it will have a longer lasting impact than we have assumed. Clearly, the COVID-19 Outbreak is an important risk factor you must carefully consider when relying on the report and the Report Content.

Where we have sought to address the impact of the COVID-19 Outbreak in the Report, we have had to make estimates, assumptions, conclusions and judgements that (unless otherwise specifically stated in the Report) are not directly supported by available and reliable data and information. Any Report Content addressing the impact of the COVID-19 Outbreak on the asset(s) and any associated business operations to which the report relates or the Australian economy more broadly is (unless otherwise specifically stated in the Report) unsupported by specific and reliable data and information and must not be relied on.

To the maximum extent permitted by law, Urbis (its officers, employees and agents) expressly disclaim all liability and responsibility, whether direct or indirect, to any person (including the Instructing Party) in respect of any loss suffered or incurred as a result of the COVID-19 Outbreak materially impacting the Report Content, but only to the extent that such impact is not reflected in the data and information used to support the Report Content.

This report is dated **February 2023** and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (Urbis) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of **Harley Dykstra** (Instructing Party) for the purpose of a **Cardup Business Park Economic Analysis** (Purpose) and not for any other purpose or use. Urbis expressly disclaims any liability to the Instructing Party who relies or purports to rely on this report for any purpose other than the Purpose and to any party other than the Instructing Party who relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events including wars, civil unrest, economic disruption, financial market disruption, business cycles, industrial disputes, labour difficulties, political action and changes of government or law, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or made in relation to or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

Urbis has made all reasonable inquiries that it believes is necessary in preparing this report but it cannot be certain that all information material to the preparation of this report has been provided to it as there may be information that is not publicly available at the time of its inquiry.

In preparing this report, Urbis may rely on or refer to documents in a language other than English which Urbis will procure the translation of into English. Urbis is not responsible for the accuracy or completeness of such translations and to the extent that the inaccurate or incomplete translation of any document results in any statement or opinion made in this report being inaccurate or incomplete, Urbis expressly disclaims any liability for that inaccuracy or incompleteness.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading bearing in mind the necessary limitations noted in the previous paragraphs. Further, no responsibility is accepted by Urbis or any of its officers or employees for any errors, including errors in data which is either supplied by the Instructing Party, supplied by a third party to Urbis, or which Urbis is required to estimate, or omissions howsoever arising in the preparation of this report, provided that this will not absolve Urbis from liability arising from an opinion expressed recklessly or in bad faith.

Urbis acknowledges the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.

We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

Urbis staff responsible for this report were:

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Project code	P0032033
Report number	DRAFT 1 - 10/5/2021
	DRAFT 2 – 25/5/2021
	FINAL – 27/5/2021
	DRAFT 3 – 02/02/2023

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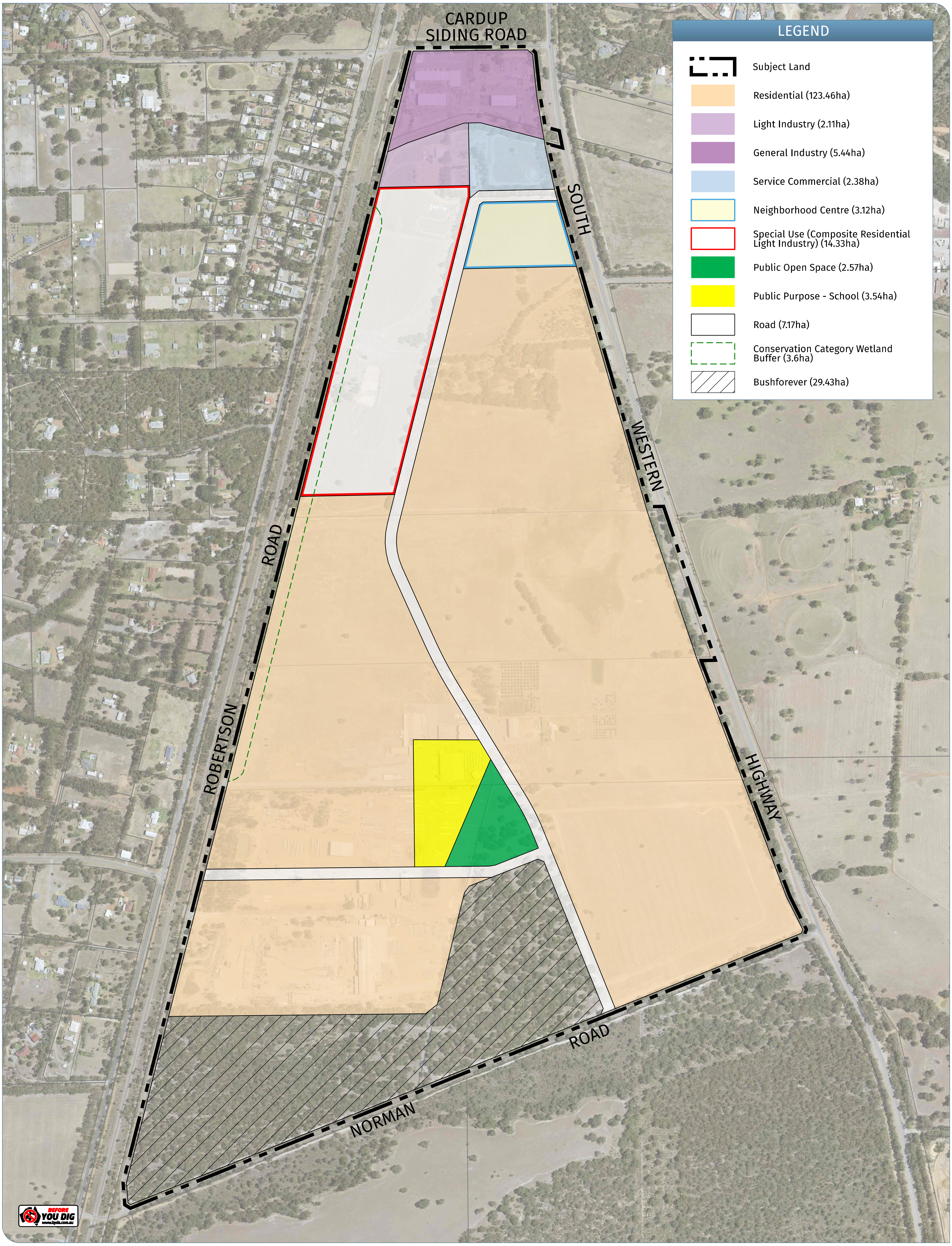
Appendix B Concept Land Use Plan:



CONCEPT LAND USE PLAN

URBAN PROPOSAL CARDUP

Plan No. | 21228-16
Date | 08/06/23
Drawn | NP
Checked | HD
Revision | B
Scale | 1:7500@A3

0 100m 200m

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NOTE: This plan has been prepared for planning purposes. Areas, Contours and Dimensions shown are subject to survey

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