

Tomorrow's
Kwinana



Draft Local Planning Strategy

2022
-2036

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The City of Kwinana acknowledges the Traditional Custodians of the land in which we live, work and play, the Nyoongar people, and we pay our respect to Elders past and present.



Message From The Mayor



MESSAGE FROM THE MAYOR

I am pleased to present the City of Kwinana's Local Planning Strategy which builds upon Kwinana's rich planning history and provides the guiding vision for Kwinana's growth and development over the next 15 years.

The Local Planning Strategy is vital in providing a long-term strategic planning direction on how Kwinana will meet its vision of being "a unique and liveable City, celebrated for and connected by its diverse community, natural beauty and economic opportunities" (Strategic Community Plan 2021-2031). The Local Planning Strategy aims to reflected the City's vision through the planning of innovative and quality development in a sustainable manner.

Kwinana as we know it today has its origins in the 1950s when the State Government appointed one of Western Australia's first qualified town planners, Margaret Feilman, to prepare plans for a townsite to accommodate the workforce for the BP refinery and the many other industries being planned for this area. Feilman based her design on what was then a new style of planning, which involved designing communities so that local shops and community facilities were within a walkable distance and retain major bushland and landscape features.

This commitment to environmental conservation in the design of Kwinana is still evident today, almost 70 years after the area was first developed. Kwinana now projects a sense of place with undulating landscape, mature native trees and bushland. These principles of creating neighbourhoods within bushland and natural landscape have been entrenched in this Local Planning Strategy to ensure that Kwinana's natural heritage is preserved for future generations.

Within the timeframe of this strategy, the Outer Harbour, supporting industries and transport freight corridors will be developed. The development of the Outer Harbour will trigger a new era of growth and development in Kwinana. An important function of this Strategy is to ensure the land requirements of the supporting industrial areas and transport corridors are planned in an orderly and proper manner and, just as importantly, that Kwinana prospers from this period of growth.

The Local Planning Strategy has been five years in the making, based on in-depth community and stakeholder consultation, paired with comprehensive research and analysis of current needs and projected future trends.

The Local Planning Strategy is a first step in the ongoing process of refining and detailing planning within Kwinana. It will be reviewed after five years and ongoing refinement will continue through the local planning scheme, strategies, policies, structure planning, subdivision and development.

The challenge now is to implement the Local Planning Strategy effectively. While the City will take the lead, effective implementation can only be achieved through a whole of-community commitment. This is critical, as plans are only as good as the will to implement their vision on behalf of communities, now and into the future.

**Carol Adams OAM,
City of Kwinana Mayor**

Executive Summary

The City of Kwinana's (the City) Local Planning Strategy sets out strategic Directions and Actions for land use planning and development for a 15 year horizon (2036). During this period there will be high growth in Kwinana's residential population and considerable change and expansion to Kwinana's industrial areas.

The Local Planning Strategy has been developed and informed by the following set of integrated planning principles which are aimed at guiding our community, economy and environment towards a sustainable future. This follows extensive community consultation undertaken by the City to find what the community considers to be important.

LIVEABILITY

Ensure communities are safe, enable an active healthy lifestyle and offer a high quality of life and amenity.

CHARACTER

Promote and celebrate natural and cultural assets and landscape elements that are synonymous with the character and identity of Kwinana.

PROSPERITY

Maintain a strong and sustainable local, regional and international economy with a range of business and employment opportunities.

ACCESSIBILITY AND CONNECTIVITY

Focus on safe efficient and effective movement networks that improve legibility and permeability, link places and spaces through an enhanced pedestrian and cycle network at the local level and connect regional facilities.

SUSTAINABLE DEVELOPMENT

Incorporate sustainable development principles into everyday practices so that there is a balance between development and conservation to ensure the needs of future generations can be met.

RESILIENCE

Ensure that communities have the capacity to adapt and respond flexibly to future challenges and opportunities.

The focus on these sustainability principles to inform and guide Kwinana's growth and development is fundamental to the vision of the Local Planning Strategy. These principles apply across the four key elements addressed in the Strategy being community, economy, environment and infrastructure.



Community

Kwinana's population is anticipated to grow by approximately 45,000 additional people and 15,000 new dwellings over the next 15 years. By 2036, the population of Kwinana is expected to be about 85,000 people.

Not only will the population grow during this time but Kwinana's population will change to include a growing number of multi-generational households and single person households, as well as family households

With a view to accommodating this growth and change, liveability is a defining principle in the Local Planning Strategy. A key direction of the Strategy is to enhance and develop Kwinana's local and neighbourhood activity centres as 'urban villages' within the suburban landscape, with a focus on walking and cycling to the centres for daily shopping needs and as meeting places.

The community's housing needs will be more diverse as the population grows over the next 15 years and

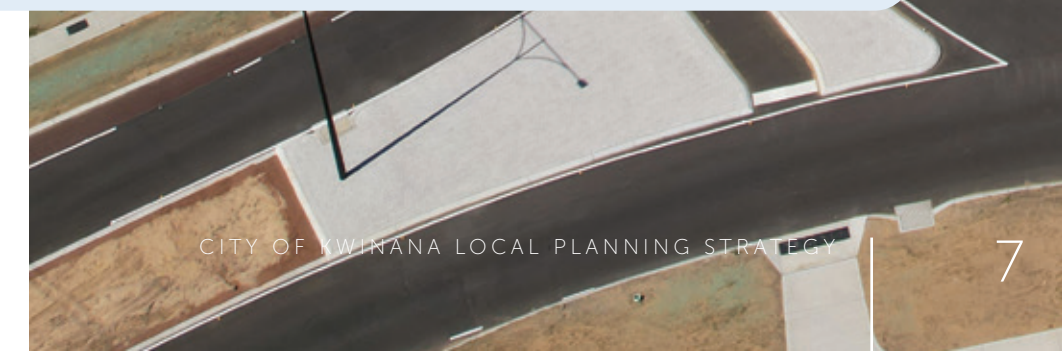
offering a choice of housing types is a key direction of the Local Planning Strategy. The intent is that neighbourhood centres and the City Centre will be the location of more diverse housing types within walking distance of the centres. This will reinforce and support these centres with an increased population and opportunities for housing choice close to shops and transport. This would include housing for singles and couples as well as families and the elderly to allow residents to stay and live in Kwinana as they age. Key actions of the Local Planning Strategy include precinct planning for neighbourhood centres to determine how best to provide housing diversity within walkable catchments.

Another key action of the Local Planning Strategy is to ensure that the natural amenity and character of the neighbourhood centres and surrounding residential environment is retained and enhanced. This is particularly important for established heritage areas such as Medina and

Calista but should also apply to new growth areas in Kwinana. The City will establish and apply policies to retain urban landscape, protect street trees and promote unique and sustainable built form within new urban areas.

Providing open space and facilities to accommodate programs and services for our growing and changing community in an equitable and financially sustainable manner is also a key focus of the Local Planning Strategy.

There are large areas of land on the eastern side of the Kwinana Freeway which are set aside for rural living (Special Rural and Rural Resource zoned land). This type of land use facilitates natural bushland retention and groundwater protection which aligns with the City's sustainable vision. The Local Planning Strategy is supportive of rural living continuing in the long term.





Economy and Employment

The most significant economic driver for Kwinana, is its current and potential future industrial estates. These include the heavy industrial land in the Kwinana Industrial Area, the adjacent light and general industrial land and spin off industries that will be associated with the future Outer Harbour.

A key Direction of the Local Planning Strategy is to ensure that industrial areas are adequately separated from sensitive land uses, such as residential areas. This will enable industry to grow but will also protect residential areas from potential adverse impacts of industry.

Kwinana's industrial areas form part of the broader Western Trade Coast. It is critical (particularly with the proposed development of the Outer Harbour) that comprehensive master planning takes place for the entire Western Trade Coast. The last comprehensive study of the Western Trade Coast was the Fremantle Rockingham Industrial Area Regional Strategy (WAPC, 1999). The existing core of heavy industry areas in the Kwinana Industrial Area is rapidly filling and a master plan should be prepared to optimise the use of the Kwinana Industrial Area to resolve strategic land use issues such as the impact of the future Outer Harbour and the supply of heavy industrial sites. Also requiring clear foresight is the most appropriate location of storage, freight, logistics and office uses which should be located close

to 24/7 freight links with easy access to customers and suppliers and not on core heavy industry sites. A study is also required to inform light industrial land uses that will support core industrial land uses and provide future employment opportunities.

The growth of the City Centre as the primary activity centre in Kwinana is a priority for the City. The Local Planning Strategy focuses on enhancing its position as the pre-eminent place for retail shopping, commercial, educational, civic and recreational activities as well as entertainment.

Other activity centres include the future Wandii District Centre as well as smaller neighbourhood and local centres, all of which will provide convenient accessible services for the local community. The City supports the planning and development of service commercial precincts which take advantage of Kwinana Freeway interchange locations at Thomas Road and Anketell Road. A key action is to investigate the feasibility of a large mixed use/office based precinct at the southern side of Thomas Road/ Kwinana Freeway interchange (for a range of office, commercial and residential uses) and its integration with the Kwinana Train Station.

While Kwinana's industrial areas produce a significantly higher proportion of jobs in the manufacturing sector than other areas of Perth, most of these jobs

are filled by people living outside the City of Kwinana. It is evident that employment self-sufficiency is less than that of the surrounding south west metropolitan region and amongst the lowest in the Perth metropolitan area. Employment growth has levelled out while population growth continues to increase, so new and diverse employment opportunities are required within Kwinana.

An important objective of the Local Planning Strategy is to identify land uses which will improve local employment opportunities. While the growth of the Kwinana Industrial Area and future Outer Harbour will provide jobs for skilled workers, research shows that industries such as retail, accommodation, health and food services provide unskilled and youth employment. The development of service commercial precincts at the Kwinana Freeway interchanges and mixed-use activity within the City Centre and neighbourhood centres would promote greater employment diversity.

The potential for more home businesses and new training/ education facilities are also opportunities for employment and will be pursued.



Environment

A key element of the Local Planning Strategy in terms of sustainable development, liveability, character and resilience is the environment. This ranges from enhancing and retaining tree canopy cover in suburban areas, to the protection of ecological linkages and adapting to climate change.

Key directions of the Local Planning Strategy are to:

- enhance and retain tree canopy cover to cool residential streets and open spaces during extreme heat, provide shade to encourage walking and cycling, create leafy neighbourhoods, and enhance local biodiversity; and
- identify ecological linkages which link locally and regionally

significant natural areas and provide stepping stones for flora and fauna. These linkages would support the ongoing management of regional sites and provide opportunities for integrated walking trails with interpretive signage.

The Local Planning Strategy recommends updating the City's draft Local Biodiversity Strategy (2013) to provide a framework for the protection and management of significant local natural areas in Kwinana, in addition to those areas already set aside for protection by the State Government (eg. Leda Reserve and The Spectacles).

The large areas of 'Special Rural' and 'Rural Resource' zoned land, on the eastern side of the Kwinana Freeway, also represent an opportunity to

retain biodiversity and maintain the rural living lifestyle. It is important that clearing and degradation of bushland is limited in these areas to maintain biodiversity. However, the needs to be adequate bush fire management to protect the safety of people and property.

Western Australia, particularly the State's south-west, is vulnerable to the impacts of climate change. The City has recognised its responsibility to act on climate change and has adopted a Climate Change Plan (2021-2026). With an increasing population within Kwinana, climate change adaptation and improving community resilience are an important part of land use and infrastructure planning under the Local Planning Strategy.



Infrastructure

Typical of Perth's outer suburbs, residential and commercial development within Kwinana is low density and spread out and Kwinana's residents are largely dependent on private vehicles to travel to schools, shops, services, places of employment and recreation.

In terms of a sustainable urban form and resilience, access and connectivity will be critical. The connections to local centres, neighbourhood centres and the Kwinana City Centre will be crucial to creating vibrant 'urban villages'.

The City adopted the Bike and Walk Plan (2018) to create a safe network of cycle routes and walking paths that are convenient for people of all ages and abilities to ride or walk to local destinations such as schools, shops, parks, bushland, bus stops and train stations. The intention is to create communities where cycling and walking are the preferred choices for short trips and everyone has the opportunity to choose a healthy

lifestyle. The Local Planning Strategy will promote the continued roll out of the Bike and Walk Plan.

An integrated transport network to distribute traffic within Kwinana and to provide linkages to other parts of the metropolitan region is crucial in facilitating regional access for the residents of Kwinana. Encouraging public transport and the provision of a high quality integrated train and bus system is important to the community and was a particularly common theme during the City's community consultation process. The Local Planning Strategy seeks to reinforce public transport usage and will advocate for the best bus services possible with links to the train stations.

The movement of freight through Kwinana provides essential economic benefits to the overall Western Australian economy and is a key consideration in terms of the overall efficiency and viability of the Western Trade Coast and future

Outer Harbour. The efficiency of freight movement is reliant on the provision of designated road and rail corridors that are separated from local traffic and are not restricted due to their potential impact on the amenity of incompatible land uses. The City will manage land use conflict in the vicinity of freight corridors by designating adjoining land uses appropriately and by ensuring sensitive land uses are adequately buffered from vehicle noise and vibration impacts.

It is anticipated that there will be an increasing transition towards electric vehicles and automated vehicles over the next 15 years. Considerations for Kwinana include requirements for electric vehicle charging facilities in new developments and decreased requirements for public and private car parking spaces as the car share economy grows.

1 Introduction

1 Introduction

1.1 Purpose of the Local Planning Strategy

The purpose of the Local Planning Strategy is to:

- identify land use planning issues and opportunities;
- outline the strategic land use development directions and actions within Kwinana until 2036, having regard to the City's Strategic Community Plan (2021-2031);
- link strategic planning in Kwinana with State and regional planning, including current strategies, structure plans and strategic development initiatives;
- coordinate the existing plans and strategies adopted and developed by the City;
- set a strategic framework for the establishment of a new local planning scheme along with rationale for the zoning and reservation of land and for the provisions of the scheme relating to development and development control;

- provide a strategic framework for assessment and decision-making in relation to proposed scheme amendments, subdivision and development;
- identify the need for further studies or investigation to address longer-term strategic planning and development issues within Kwinana; and
- outline how the Strategy will be implemented including reference to the development of any local planning mechanisms, including policies and guidelines which may be required.

1.2 How the Local Planning Strategy has been prepared

The Local Planning Strategy has been developed in accordance with the statutory requirements of the *Planning and Development Act 2005*, the *Planning and Development (Local Planning Schemes) Regulations 2015* and with regard to the Local Planning Manual (WAPC, 2021).

The Local Planning Strategy was prepared in the following three stages:

Stage One – Understanding where we are now

In order for the City to develop a comprehensive understanding of the important elements that affect Kwinana, it was necessary to undertake detailed studies on the following topics:

HOUSING STUDY

The focus of this study was to recognise the land-use impacts of Kwinana's growing and changing demographics and population growth. This study identified changing residential and lifestyle requirements in the community.

INTEGRATED LAND USE AND TRANSPORT STUDY

This examined the transport needs for the community and includes an analysis of the City's land use changes and how these may affect connectivity, accessibility, traffic and parking requirements now and in the future.

EMPLOYMENT AND ECONOMIC DEVELOPMENT ANALYSIS

This study focused on analysing the local economy and identified the relationship between population and industry, employment deficits and opportunities for economic growth and additional employment.

LOCAL BIODIVERSITY STUDY

This study examined the extent and existing protection of Kwinana's natural bushland and wetland biodiversity.

RURAL LANDS STUDY

This study examined the stock of rural lands and identified competing contemporary land-use and environmental challenges.

Furthermore, the City was able to draw upon a range of existing studies and adopted strategies to inform the existing context and future implications. These include:

- *Access and Equity Policy (2015)*
- *Bike and Walk Plan (2018)*
- *Climate Change Plan (2021-2026)*
- *Community Infrastructure Plan (2011 – 2031)*
- *Disability Access and Inclusion Plan (2019 – 2021)*
- *Eastern Residential Intensification Concept (2005)*
- *Hope Valley Wattleup Redevelopment Project Master Plan (2005)*
- *Kwinana City Centre Master Plan and Design Guidelines (2019)*
- *Kwinana Parks Upgrade Strategy (2019 – 2029)*
- *Local Biodiversity Strategy (Draft 2013)*
- *Local Commercial and Activity Centres Strategy (2014)*
- *Medina Residential Design Guidelines (2009)*
- *Medina Neighbourhood Centre Revitalisation Strategy (2010)*
- *Multicultural Action Plan 2017 – 2020*
- *Parks Upgrade Strategy (2019/2029)*
- *Postans Precinct Study (2011)*
- *Public Health Plan (2019 – 2023)*
- *Sustainable Water Management Plan (2018)*
- *Strategic Community Plan (2021 – 2031)*
- *Westport Future Recommendations – Stage 2 Report (2020)*

Those planning strategies, background studies and analysis of planning matters contributed to preparation of the Local Planning Strategy, and are outlined in Part 2 through:

- A synopsis of the relevant State and regional planning context explaining the planning framework to which the Local Planning Strategy, and other local planning documents, must respond.
- An analysis of relevant local government documents that inform the City's position and local profiles.
- A description of the major physical, social, economic, environmental and infrastructure elements.
- Outlines of the key issues and description of the most effective strategies to be considered.

Stage Two – Identify Issues and Opportunities

The City undertook extensive community consultation in the development of the Local Planning Strategy and the community's feedback formed the basis of Local Planning Strategy. Engagement with the community and stakeholder groups included:

1. Making available to the community the draft planning studies and related discussion papers.
2. Undertaking a survey focused on the key topics raised in the studies and discussion papers as well as raising some broader questions about the community's planning vision for Kwinana.
3. Facilitation of:
 - four workshops;
 - two information sessions for specific Stakeholder Groups;
 - focus sessions with an Aboriginal Community Group and a Youth Group; and
 - A *Getting to Know Your Community Event* held at the Market Place.

The Focus Group Sessions sought responses from the community and stakeholder groups and were structured around the following five broad strategic planning issues:

- Responding to population growth and the changing residential and lifestyle needs of the community by addressing housing issues such as density, diversity, built form and residential character;
- Supporting local employment and the economy by considering the land use requirements for economic growth and additional employment and identifying opportunities;
- The synergy between transport, traffic, travel, and parking requirements of the community now and in the future;
- The protection of Kwinana's environment (including biodiversity and heritage); and
- Effective use of rural lands in the context of competing, contemporary environmental issues and challenges.

The community's feedback has informed and shaped the Local Planning Strategy.

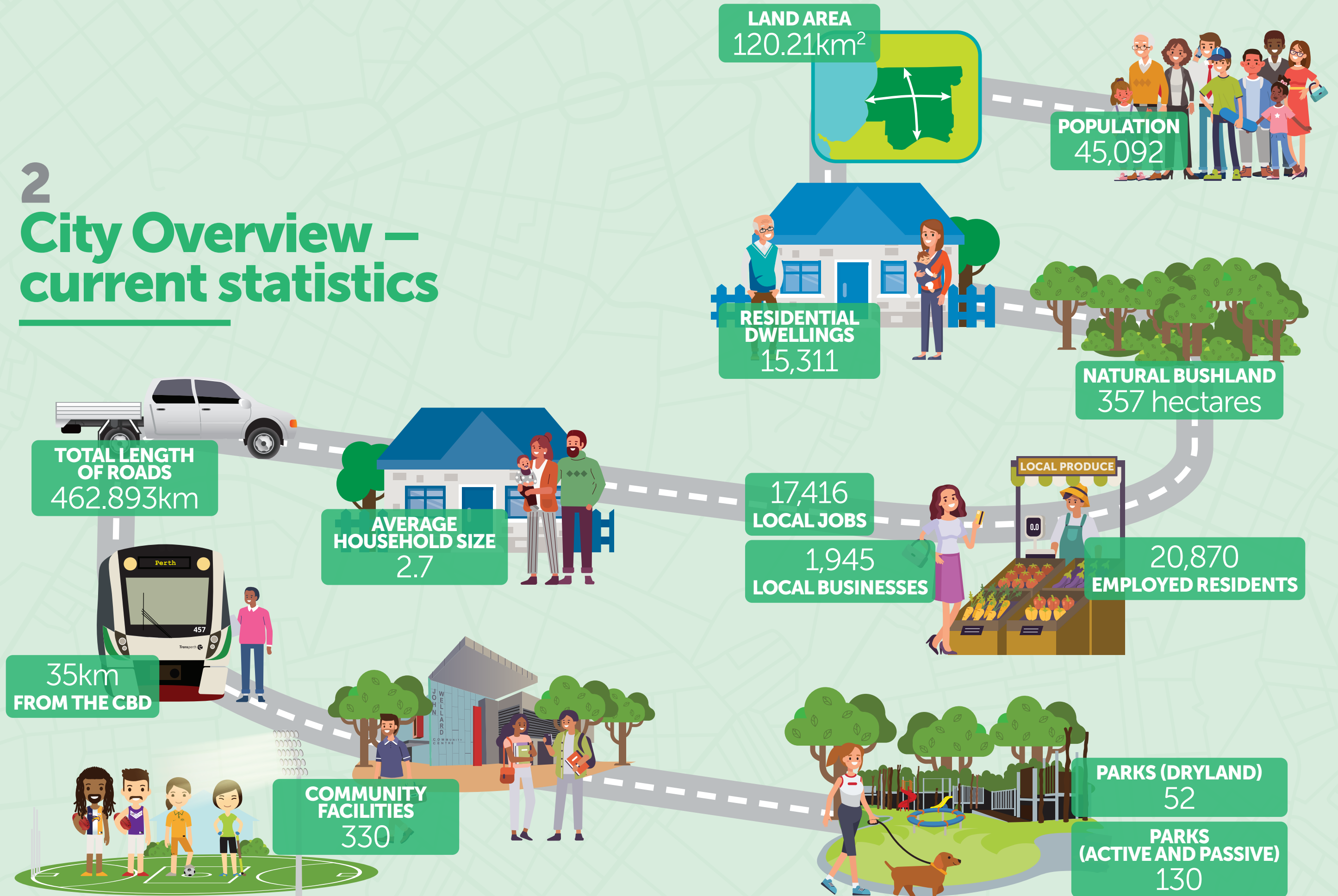
Stage Three – Directions and Actions for the Future

Following consultation with the community and key stakeholders, a series of workshops were undertaken with the City's Elected Members to establish planning principles and the Directions and Actions of the Strategy.

The planning principles guide and underpin all future land use planning and decision making and the actions set out specific ways the City will achieve the Directions.

2 City Overview — current statistics

2 City Overview – current statistics



3 The City's Vision And Principles

3 The City's Vision And Principles

3.1 Our Sustainable City 2021 - 2036

The City of Kwinana's vision as stated in the Strategic Community Plan (2021-2031) is "A unique and liveable City, celebrated for and connected by its diverse community, natural beauty and economic opportunities" and represents the community's aspirations and captures the essence of what it will be like to live in Kwinana in the future. This Local Planning Strategy sets Directions and Actions focused on realising this vision.

The Local Planning Strategy has been prepared using the key themes of Community, Economy, Environment and Infrastructure. It is through implementation of the Local Planning Strategy that a sustainable future for Kwinana will be achieved.

The Local Planning Strategy will be continuously improved to align future land use planning and development with the community's aspirations and long term vision as set out in Strategic Community Plans. The alignment of the themes used in the Local Planning Strategy with the objectives set out in the current Strategic Community Plan are summarised in Figure 1.

3.2 Local Planning Strategy Principles – An Integrated Approach towards Sustainability

In addition to the objectives of the Strategic Community Plan (2021-2031), the Local Planning Strategy has been developed and informed by the following set of integrated planning principles which are based on social, economic and environmental objectives aimed at guiding our community, economy and environment towards a sustainable future. The sustainability principles upon which the Local Planning Strategy is based are:

LIVEABILITY

Ensure communities are safe, enable an active healthy lifestyle and offer a high quality of life and amenity.

CHARACTER

Promote and celebrate natural and cultural assets and landscape elements that are synonymous with the character and identity of Kwinana.

PROSPERITY

Maintain a strong and sustainable local, regional and international economy with a range of business and employment opportunities.

ACCESSIBILITY AND CONNECTIVITY

Focus on safe efficient and effective movement networks that improve legibility and permeability, link places and spaces through an enhanced pedestrian and cycle network at the local level, and connect regional complexes.

SUSTAINABLE DEVELOPMENT

Incorporate sustainable development principles into everyday practices and so that there is a balance between development and conservation to ensure the needs of future generations can be met.

RESILIENCE

Ensure that communities have the capacity to adapt and respond flexibly to future challenges and opportunities.

Figure 1: Summary of Themes and Objectives

Themes derived from the Strategic Community Plan(2021-2031)	Objectives derived from the Strategic Community Plan (2021- 2031)
<div> Community</div> <ul style="list-style-type: none">• Housing and Population Diversity• Character Identity and Urban Design• Public Open Space and Community Facilities	<p>Maintain infrastructure, playgrounds, parks and reserves to a high standard through sustainable maintenance and renewal.</p> <p>Enhance opportunities for community to meet, socialise, recreate and build local connections.</p>
<div> Economy</div> <ul style="list-style-type: none">• Industry and the future Outer Harbour• Kwinana City Centre and other Activity Centres• Employment• Education and Training• Agriculture	<p>Enable a thriving and sustainable local economy that supports and sustains quality jobs and economic opportunities.</p>
<div> Environment</div> <ul style="list-style-type: none">• Protection of Local Natural Areas, Landscapes and Ecological Linkages• Climate Change Mitigation and Adaptation	<p>Retain and improve our streetscapes and open spaces, preserving the trees and greenery that makes Kwinana unique.</p> <p>Maintain and enhance our beautiful, natural environment through sustainable protection and conservation.</p>
<div> Infrastructure</div> <ul style="list-style-type: none">• Transport• Cycling and Walking Network• Utilities	<p>Provide for an accessible and well-connected City by integrating public transport and improving safe streets for driving, walking and cycling. <i>(this is an example of the different emphasis between the LPS and SCP – infrastructure connection)</i></p> <p>Create strong regional connections that will improve the ability for residents to access jobs, training and goods and services.</p> <p>Develop quality, affordable infrastructure and services designed to improve the health and wellbeing of the community.</p>



4 Local Planning Strategy Map

- Existing Urban
- Future Urban
- Rural Living
- Regional Parks
- Local Parks
- Park & Reserve Investigation
- Industry
- Hope Valley Wattleup Redevelopment Area
- Improvement Plan 47
- Service Commercial
- Station Precinct Investigation Area
- Existing Activity Centres
- Proposed Activity Centres
- Secondary
- District
- Neighbourhood
- Local
- Walkable Catchment Area
- Schools
- Proposed schools
- Recreational Facility
- Community Facility
- Proposed Recreation Facility
- Proposed Community Facilities
- Water Treatment
- Casuarina Prison
- Westport
- Rail Yards
- Planning Area 1 - Long Term Urban Investigation Area
- Planning Area 2 - Freeway Interchange Planning Investigation Area
- Planning Area 3 - Environmental Investigation Area
- Planning Area 4 - Character Investigation Area
- Train Station
- Local Government Boundary
- Primary Regional Road
- Other Regional Road
- Planning Control Area 156
- Planning Control Area 157
- BushForever09a



5 Community

5 Community

5.1 Housing and Population Diversity

An understanding of the characteristics of Kwinana's future population is essential to planning for the housing needs of future residents.

Kwinana has undergone rapid population growth in recent years and is forecast to grow by approximately 45,000 people (to a total population of 85,000) by 2036 (forecast .id), requiring approximately 15,000 additional dwellings. The majority of these dwellings will be located in the future suburbs of Casuarina, Anketell, Wellard and Mandogalup, and based on current trends these areas will be occupied predominantly by couples and families.

The majority of dwellings across Kwinana are family homes (3-4 bedrooms) set on residential lots. This type of housing will continue to be in strong demand, however, there is a need to provide a diversity of dwelling options (particularly more one and two bedroom dwellings) to accommodate the growing number of smaller households.

By 2036, there will be more than 3,900 additional seniors (70-84 years old) and elderly (85 years old and over) living in Kwinana, the majority of whom will reside in the established suburbs.

The City will encourage a greater

range of housing types to be developed in established areas close to the City Centre and neighbourhood centres, where there is convenient access to the services needed by seniors and the elderly such as shopping, social services, medical facilities, community facilities and public transport. The aim is to develop these centres as 'urban villages', with a focus on walking and cycling to activity centres for daily shopping needs and as meeting places. This will support the provision of diverse types of housing and also contribute to the transformation of these neighbourhood centres into vibrant, mixed-use community hubs that meet the infill target set by the *Perth Peel Sub-regional Framework* of 1,365 dwellings to be built within the established areas of Kwinana by 2050.

The City will prepare precinct plans to ensure the additional infill dwelling types and lot sizes take into account residential character and proximity to retail outlets, community facilities, business services, social services, health services and public transport.

Affordable housing options are available in Kwinana with low to moderate income households comprising the largest proportion of all households. Although the existing housing stock in Kwinana is less expensive than other parts of the metropolitan area, affordable housing should continue to be dispersed in appropriate areas to accommodate low income households.

Kwinana is amongst the most

culturally and linguistically diverse municipalities in the Perth metropolitan area with more than 40% of all residents born overseas and nearly 30% speaking a language other than English at home.

In the past decade, there has been a decrease in the proportion of people of English and Australian ancestry and a notable increase in the proportion of people of Filipino, Indian and Chinese ancestry, particularly in the newer suburbs. Kwinana has a higher number of people than the Perth average who identify as Aboriginal and Torres Strait Islanders. The City recognises the need to encourage a diverse range of dwellings including larger houses for extended families.

The Rural Living areas (1-4ha lots) are highly valued by the community and provide an important rural lifestyle opportunity and an alternative housing option within Kwinana. These areas preserve amenity and retain natural bushland to create areas with rural character and provide an appropriate land use transition from urban residential lots to rural land on the eastern side of Kwinana. However, there is a need to manage the interface between the urban and rural areas to reduce the impact of urban development where it is in close proximity to rural living lots. A graduation of larger residential lot sizes adjacent to rural lots and landscaping provisions are methods that can be implemented through the planning process to ameliorate the impact of residential development on nearby rural areas.



Strategic Directions

Promote activity centres as key nodes for shopping, entertainment, community facilities and where appropriate business services, social services, health services and housing diversity.

Ensure a range of lot sizes and dwelling types for a diversity of households, allowing residents to stay in their communities as they age as well as providing a range of housing options for young people and families with a high level of amenity.

Encourage high quality housing developments targeted to households at different life stages and income levels, including a mix of lower to moderate income groups.

Strategic Actions

1. Prepare precinct structure plans for the City Centre, district and neighbourhood centres to activate and enhance the viability of these centres by:
 - providing diverse, high quality housing types within walkable catchments of the City Centre, District and Neighbourhood Centres;
 - optimising accessibility to and around each activity centre via cycle routes and walking paths; and
 - facilitating an appropriate mix of land uses within activity centres.
2. Encourage a diverse range of high quality housing suitable for the changing needs of the community, dispersed within the walkable catchments of activity centres, including:
 - smaller and accessible dwellings for an aging population and people with disabilities;
 - larger houses for extended families and other household types; and
 - supporting initiatives geared towards the provision of special needs housing including good quality - affordable housing, social housing and housing for the age.
3. Monitor housing need and supply within Kwinana every two years to determine if further interventions are required through appropriate planning mechanisms.
4. Develop planning controls that implement best practice sustainable development principles for climate responsive site and building design, energy efficiency, waste and recycling and water management.
5. Ensure 'Special Rural' lots are not fragmented through subdivision and that development intensity is minimised to protect environmental values and lifestyle.

5.2 Character, Identity and Urban Design

There are areas within Kwinana which have distinct characteristics:

- To the west is the industrial landscape of the Kwinana Industrial Area situated along the shore of Cockburn Sound. This industrial landscape is visible from Fremantle to Rockingham along the coast.
- To the east, behind a natural limestone ridge are the leafy established character suburbs of Kwinana set amongst areas of bushland. The Spectacles wetlands and Bollard Bulrush wetland provide large natural bushland that break up the urban landscape. Thomas Road and Anketell Road are surrounded by bushland and provide natural green entry points to Kwinana.
- Further east are new suburbs in close proximity to the Kwinana Freeway and Perth Mandurah

Kwinana as we know it today has its origins in the 1950s, when the WA Government entered into an agreement with the Anglo-Iranian Oil Company (now known as BP) to construct an oil refinery on the shores of Cockburn Sound. To complement this industrial development, the State Government appointed WA's first qualified town planner, Margaret Feilman, to prepare the plans for Medina and Calista to accommodate the refinery's workforce and their families. The characteristics of the built form within the established parts Kwinana reflect the prevailing architectural forms and subdivisional design at the time of their development, including larger residential lots, large front yards, wide streets and retention of native trees. Early planning for Kwinana also provided a bushland greenbelt around a large part of Kwinana, creating a distinct community surrounded by bushland.

Train Line. The areas east of the Kwinana Freeway include new residential areas with rural living further east, depicting a rural character and rural lifestyle.

The challenge is to ensure the character of parts of the established areas of Kwinana such as Medina and Calista is retained for the future generations and natural bushland and landscapes are retained in new growth areas. This involves retaining prominent or distinctive landscape elements (e.g. ridge-lines, topography, views and vistas, vegetation texture in the landscape) and heritage sites that are valued by the community.

Medina was declared a *Historic Precinct* by the National Trust in May 2007, on the basis that it was specifically built to support the development of the Kwinana Industrial Area and has retained its original design principles and character.

To ensure the character of Kwinana's established suburbs is retained, the City intends to review its Residential Design Guidelines 2009 (Local Planning Policy) for the established areas of the City to determine how effective the policy has been and ensure new development is respectful to existing character in terms of built form, appearance and impact on the streetscape and adjoining properties.

The Wellard East Planning Investigation Area (shown in the South Metropolitan Peel Sub-Regional Planning Framework and Perth and Peel@3.5million Planning Investigation Areas Update, WAPC 2022) is identified as Planning Area 1 on the Local Planning Strategy map for the purposes of long term urban expansion. The Investigation Areas Update states that the following key considerations are to be addressed through further detailed planning for Urban Expansion areas:

- road transport infrastructure coordination and staging (at a regional and district level)
- servicing infrastructure coordination and staging
- Protection of significant environmental values
- land to be set aside for flooding and drainage
- sand fill required to provide separation to groundwater and flood levels (including estimated volumes, resource locations and transport)
- interface with the adjoining Urban Investigation area at North-East Baldivis.



Strategic Directions

Recognise and strengthen Kwinana's unique cultural, natural and built identity to foster a sense of place in existing and future residential areas

Strategic Actions

- Develop planning measures for providing guidance and/or incentives for the protection of heritage-listed properties, where appropriate.
- Develop planning measures to ensure new development contributes to:
 - intended future character of new and future suburbs is respectful to setbacks, site coverage and built form; and
 - the character of established areas in terms of built form, landscape, appearance and impact on the streetscapes and adjoining properties.
- Review the City of Kwinana's Medina Neighbourhood Centre Revitalisation Strategy and Residential Design Guidelines 2009 (Local Planning Policy) as part of the preparation of the Medina precinct structure plan and include appropriate elements of the *Medina Place Plan*.
- As part of a review of the City of Kwinana's Residential Design Guidelines 2009 undertake a character assessment of Medina and Calista (with potential inclusion of Orelia, Parmelia and Leda) to determine what elements should be retained in established areas to ensure new developments complement and enhance the established character of the area.
- Identify the Wellard East 'Planning Investigation Area' (as shown in the South Metropolitan Peel Sub-Regional Planning Framework and Perth and Peel@3.5million Planning Investigation Areas Update) as Planning Area 1 in the Local Planning Strategy for long term urban expansion.
- Introduce provisions into the City of Kwinana's *Local Planning Scheme* to prevent incremental development (such as sheds and garages) in rural areas and local natural areas, particularly within the Jandakot Groundwater Protection Area.
- Include appropriate provisions in the planning framework to ensure that subdivision and development is site responsive, incorporates site features, includes interconnected grid based road and active transport networks that maximise connectivity, accessibility, choice, and legibility, and are aligned to take advantage of views and create vistas to important buildings and spaces.
- Undertake a *Visual Landscape Assessment* and investigate planning measures that will protect the amenity of the rural landscape and land use conflicts are minimised at the interface between urban and rural land uses.
- Maintain and enhance the appearance and treatment of gateway points into Kwinana and their importance in contributing to character and identity (Rowley Road, Anketell Road, Thomas Road, Mortimer Road, Gilmore Road and Rockingham Road).



5.3 Public Open Space and Community Facilities

Public open spaces and community facilities bring people together, maintain quality of life and develop the skills, networks and relationships essential to building strong communities. Investing in community infrastructure is essential for the health, wellbeing and economic prosperity of communities.

There are significant differences in the forecast age profile and household types between the newer suburbs on the eastern side of

Kwinana and the older established areas on the western side of Kwinana which will influence the type of community infrastructure and services that will be required in these areas. The young families in the newer residential areas will need playgrounds, sporting grounds and community facilities and services. In the older established suburbs on the western side of Kwinana the population is aging and there will a greater need for health services and programs which provide the opportunity to interact and connect with others.

The City has prepared a Community Infrastructure Plan to guide the planning, development of open space and community facilities (libraries, community centres and recreation centres) within Kwinana.

The Community Infrastructure Plan will be regularly reviewed to provide a range of multi-purpose community and recreation facilities that meet the changing needs of the community and support healthy and socially connected communities. A key premise of the plan is to ensure community facilities and public open space are provided as part of the shared use agreements with school sites and/or other facilities.

It is also important to identify infrastructure needs to enable development contribution plans to be prepared for community infrastructure. This ensures that developments will contribute to the provision of the essential community infrastructure required to sustain communities.

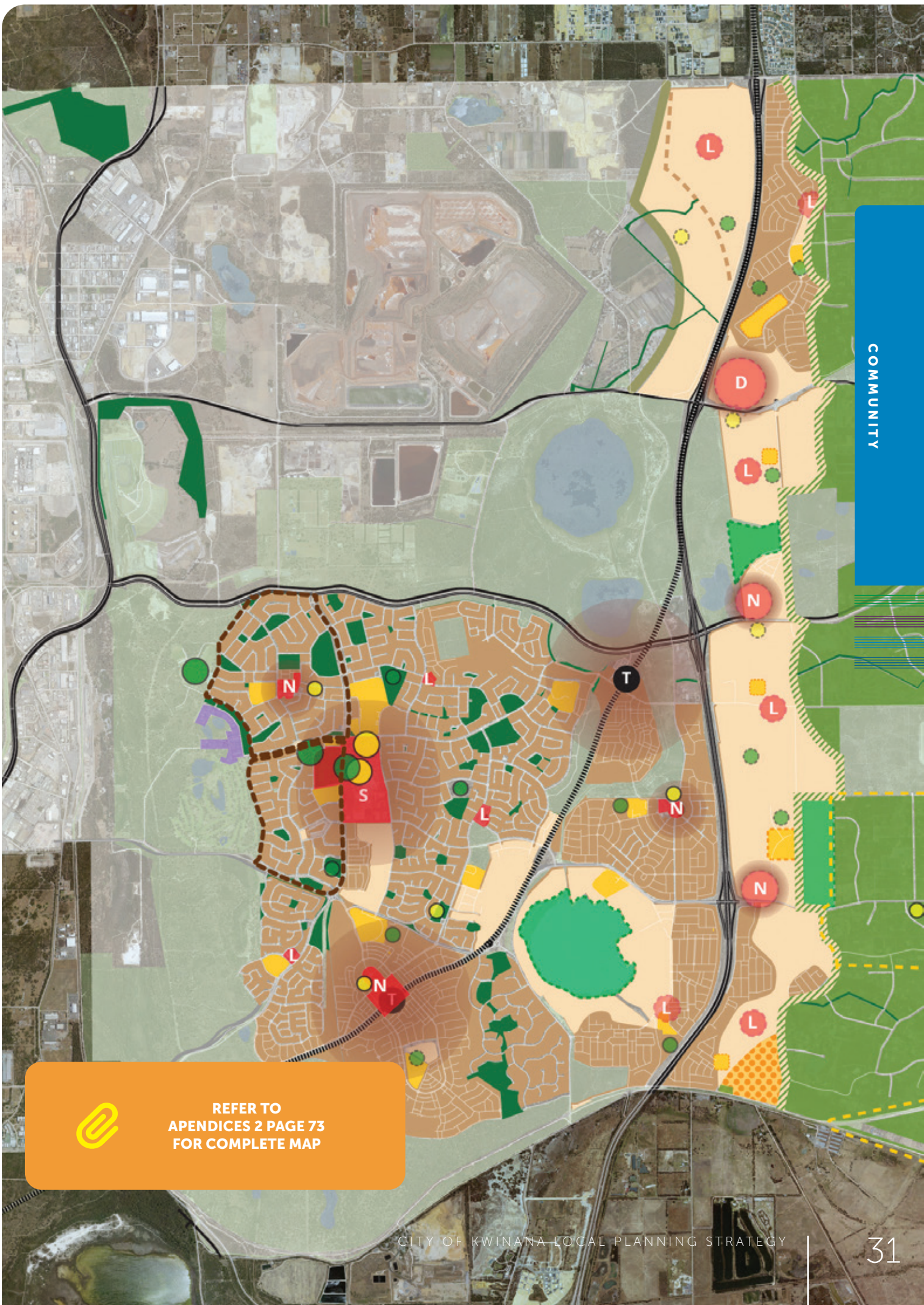


Strategic Directions

To deliver an equitable distribution of accessible and integrated multi-functional public open spaces, community infrastructure and recreation facilities that supports healthy and socially connected communities.

Strategic Actions

- Regularly review the City of Kwinana's Community Infrastructure Plan to provide a range of multi-purpose community and recreation facilities that meet the changing needs of the community and support healthy and socially connected communities in a financially sustainable manner. Any consideration of a regional recreation facility should have regard to the needs and requirements of the south-west metropolitan region.
- Pursue development contributions for community, public open space, social, road and other infrastructure items for improvement or provision as appropriate, in accordance with the City of Kwinana's Community Infrastructure Plan and approved local structure plans.
- Implement, and regularly review, the City of Kwinana's development contribution plans in accordance with State Planning Policy 3.6 - Development Contributions for Infrastructure.
- Promote cultural heritage and history through the design of public open space, public facilities and public art to foster a sense of belonging and connection.
- Negotiate memorandums of understanding with the Department of Education to permit the shared use of selected school ovals and other government owned land equitably, to optimise the use of open space areas for community recreational purposes.
- Investigate prospects for coastal recreation opportunities having regard to the future Outer Harbour whilst recognising the potential impacts of sea level rise.



6 Economy



6 Economy

6.1 Industry and the future Outer Harbour

The City of Kwinana's Gross Regional Product is estimated to be \$3.77 billion (2018) with much of this economic base heavily concentrated in the Kwinana Industrial Area.

The Kwinana Industrial Area is the largest and most complex heavy and general industry site in the State and is of critical importance to the prosperity of the State and the Perth metropolitan area. It also includes key port facilities for industry, particularly bulky goods trade. The State Government announced its intention in 2020 to develop the Outer Harbour in the Kwinana Industrial Area as the State's new container port.

The *Hope Valley Wattleup Redevelopment Act 2000 Area* (Latitude 32) is partly located in Kwinana and while the Flinders Precinct was developed over the past decade, much of the Latitude 32 area remains undeveloped. Latitude 32 is situated immediately adjacent the Kwinana Industrial which form a significant part of the Western Trade Coast (encompasses industrial land within the City of Rockingham and City of Cockburn). Additional land for industry has also been identified in Mandogalup and Postans which will add to industrial land supply in Kwinana.

The economy of the Kwinana Industrial Area and broader Western Trade Coast will continue to grow in the next two decades and beyond. The challenges are to ensure that this growth is optimised and occurs in a well-planned and integrated manner to maximise the strategic value of the locality for the State and Kwinana.

Key to this is orderly planning for the Western Trade Coast, particularly in relation to the future Outer Harbour, is to ensure that there is an adequate separation distance between industry and sensitive land uses (residential dwellings) and that this is maintained and reinforced as part of future planning. This will protect industrial growth and ensure that Leda, Calista and Medina are not exposed to the adverse air quality, odour and noise emissions from industry.

It is also appropriate that a comprehensive master plan be prepared by key agencies, including local governments, for the Western Trade Coast. Not since the Fremantle Rockingham Industrial Area Regional Strategy, prepared two decades ago, has any comprehensive planning for the Western Trade Coast and its component parts been undertaken. Given the strategic importance and complexity of this locality, it is considered crucial that key stakeholders re-engage and prepare a master plan.

A masterplan is particularly relevant given the transport and land requirements of the future Outer

Harbour. The master plan would then inform statutory planning instruments including the City's local planning scheme to guide optimal outcomes.

The master plan should consider:

- separation of industry from sensitive land uses;
- industrial land use types and future need such as the;
 - supply of high impact heavy industry sites given the existing core of heavy industry areas in the Kwinana Industrial Area A (largely west of Rockingham Road) is rapidly filling. Additional sites need to be considered for expansion, possibly parts of Latitude 32 at Wattleup.
 - most appropriate locations of storage, freight and logistics and office uses which need not be located on core heavy industry sites but further afield close to 24/7 freight links and easy access to customers and suppliers
 - form and function of the future Industrial Areas including Postans and Mandogalup.
- key transport links including freight links to the future Outer Harbour and intermodal facilities as well as the function and connectivity of local road network;

- strategic funding opportunities and seed funding to open up areas constrained by land assembly issues; and
- staging and implementation plans across the Western Trade Coast.

The Local Planning Strategy recognises that the future Outer Harbour will be operational by 2036. The provision of freight corridors to connect the future harbour to the broader metropolitan transport network requires a number of east-west links to be upgraded. Anketell Road will be the major freight route to the Outer Harbour and Rowley Road, Thomas Road and the Fremantle Rockingham Controlled Access Highway will also be important links to the Kwinana Industrial Area and port areas.

The Outer Harbour and heavy freight vehicles will operate 24 hours a day

and planning for the land adjacent to the heavy freight corridors should take into consideration the potential impact of noise emissions from heavy vehicles (particularly Anketell Road).

Postans, which comprises 87ha of land to the west of the proposed Fremantle Rockingham Controlled Access Highway and 50ha of land on the Alcoa Residue Disposal Area, is recognised as an Industrial Expansion Area in the Perth Peel Sub-regional Framework which is reflected in the Local Planning Strategy. Draft structure planning for this precinct was undertaken by the then Department of Planning, Landcorp and City of Kwinana in 2012 and recognised the strategic value of the site.

There is an opportunity for Kwinana to serve as a residential and service location for personnel involved with the defence assets maintenance

phase at the Australian Marine Complex and for any expansion of Navy operations at Garden Island. The Australian Defence Force will also require significant parcels of appropriately located land in the medium and longer term.

There is 6.27ha of 'Light Industry' zoned land located in Medina surrounded by Parks and Recreation reserves and Kwinana Golf Club. This industrial area contains 42 lots with area ranging from 728m² to 2,750m² and which have an assortment of light industrial activities. The location of this light industrial zoned land is a historical legacy and remains a local employment and service hub for the community. Consideration should be given to the long term potential for alternative land uses in the Medina Light Industrial Area.



Strategic Directions

Recognise the importance of the Kwinana Industrial Area and future Outer Harbour to secure future employment opportunities for Kwinana residents.

Expand land use options for a range of industrial land uses to be located in Kwinana having regard to land use compatibility.

Strategic Actions

21. Advocate for the development of a comprehensive masterplan for the Western Trade Coast (including the Alcoa Residue Disposal Area and future Outer Harbour) to facilitate a more proactive approach to industrial land use planning and provide an ongoing supply of industrial land to cater for employment in Kwinana.

22. Include provisions in the City of Kwinana's *Local Planning Scheme* to protect the Kwinana Industrial Area from encroachment by incompatible development and sensitive land uses. The area to be protected should be based on the following reviews:

- Review of the Kwinana Air Quality Buffer – Position Paper (2008); and
- Kwinana Air Quality Review: Options and

Recommendations for a Revised Buffer for Areas 5 and 9 (2010) (adopted by the WAPC in 2011).

23. Review and adopt the City of Kwinana's Postans Study with consideration to land requirements for light industrial and service commercial land uses and the long term future of the Medina Light Industrial complex.

24. Review the future industrial land requirements including the:

- potential to zone appropriate parts of the Alcoa Residue Disposal Area for 'General Industry'; and
- optimal use of the 'Service Commercial' zone on the east and west side of Rockingham Road, Naval Base (between Lionel Street and Beard Street).



6.2 Kwinana City Centre and other Activity Centres

The City Centre, and a network of activity centres and service commercial precincts are important economic drivers for Kwinana and will be focal points for retail and commercial growth, over the next 15 years.

Kwinana City Centre

The City Centre is designated as a Secondary Centre in the City's Local Commercial and Activity Centres Strategy (2014) and the Southern Metropolitan Peel Sub-regional Planning Framework.

The City Centre is to remain the largest activity centre in the City. It contains significant retail, commercial, educational, civic, cultural and recreational activities. The ongoing growth and development of the City Centre is a key focus of the Local Planning Strategy.

The City Centre has been guided by the Kwinana Town Centre Master Plan and Design Guidelines and

Local Planning Scheme No. 3. It is recommended that the Master Plan continue to serve as the primary guiding plan for the City Centre but the master plan and Local Planning Scheme 3 be reviewed and updated into contemporary planning mechanisms..

The City Centre is evolving, and is faced with a number of challenges, including:

- lack of a developed Main Street;
- lack of entertainment facilities available in the evening;
- separation from open space and residential areas to the west;
- high number of vacant tenancies; and
- large expanses of car parking.

There are currently about 1,850 people employed in the City Centre, which could potentially double by 2036. The development of the Outer Harbour and the Australian Defence Force maintenance facilities at the Australian Marine Complex and Garden Island may provide development opportunities within the City Centre, such as the potential to develop training facilities. The City is also a significant landowner in the City Centre which provides

opportunities for new development at strategic sites.

The City will review the Local Commercial and Activity Centres Strategy (2014) to facilitate the development of retail, entertainment, child care, health, education, training and community facilities in the City Centre.

Activity Centres

A key objective of the Local Planning Strategy is to facilitate the development of neighbourhood and local centres into vibrant urban villages that meet the day to day needs of residents and are places where people can meet. The enhancement of neighbourhood centres will contribute in many ways to community and it is important that every support be given to the economic growth of the centres. The focus is on more intensive and diverse housing within and in close proximity to the City Centre, districts centre and neighbourhood centres creating housing choices that are accessible to shops, local jobs and transport links. This will facilitate a local and sustainable approach to urban form.

Precinct centre planning for district and neighbourhoods will be undertaken over the course of the Local Planning Strategy's implementation to identify opportunities for each activity centre to inform planning measures and controls. Master plans will be prepared to address issues such as connectivity, car parking and landscaping.

Kwinana City Centre and Wellard Village offer great opportunities for mixed development and serve important transport functions for the community. It is important the right balance is achieved for these centres so they serve the local community and provide appropriate transport services for the wider community.

As part of the Local Planning Strategy, the City will investigate the potential for a mixed use office based precinct occupying an area spanning from the Kwinana Freeway and Thomas Road intersection to the Kwinana Train station. Much of the site is vacant urban land with areas of bushland set aside for conservation. The intent is to capitalise on the following locational advantages:

- spatial location along the Kwinana Freeway which provides good locational access

across the Perth metropolitan area from the Perth CBD to Mandurah;

- traffic volumes passing the site on a daily basis along the freeway and using Thomas Road (movement economy) of the site;
- Kwinana train station providing access to the Perth CBD in 30 minutes;
- attractive outlook over The Spectacles, a large conservation estate;
- immediate link with growing service commercial land uses on the eastern side of the Kwinana Freeway / Thomas Road interchange; and
- opportunity to attract offices across the southern part of Perth metropolitan area but also those which may be located in the Western Trade Coast as that area gradually develops for general industry.

The Kwinana Freeway provides opportunities for car based bulky and white good land uses that have a metropolitan wide catchment. The City supports the planning and development of service commercial precincts to take advantage of Kwinana Freeway interchange

locations at Thomas and Anketell Roads. The City will explore the opportunity for a service commercial based precinct in Mandogalup on the north western corner of the Anketell Road interchange with the Kwinana Freeway.

The Local Commercial and Activity Centres Strategy (2014) provides a detailed list of actions for each activity centre and has guided the City's decision making in relation to the preparation and assessment of local structure plans and development applications.

The Local Planning Strategy seeks to review the:

- hierarchy as identified in the *Local Commercial and Activity Centres Strategy* to reinforce the viability and vibrancy of the existing centres;
- opportunity for a mixed use - office based activity centre at both the Anketell Road and Thomas Road interchange west of the Kwinana Freeway; and
- Promote and develop service commercial precincts which take advantage of Kwinana Freeway interchange locations at Thomas and Anketell Roads.





Strategic Directions

To define the role and extent of the City's activity centres hierarchy to establish network of shopping, recreation and entertainment requirements for residents and provide employment, community meeting places and associated land uses.

Strategic Actions

25. Review the City of Kwinana's Local Commercial and Activity Centre Strategy (2014) to define:
- an appropriate hierarchy of mixed use activity centres that meet the everyday shopping, recreation and entertainment requirements of residents and provide local employment;
 - appropriate land uses (commercial / office) at each of the employment nodes / interchanges along the Kwinana Freeway; and
 - downgrade Leda neighbourhood centre to a local centre
26. Promote the City Centre as the primary centre within the City of Kwinana and prepare and implement a City Centre Precinct Structure Plan to:
- optimise the potential of the City Centre as a key location for retail, restaurant, entertainment (night and day), arts, childcare, housing, education, health services, social services and short term accommodation;
 - investigate options for high density residential development and short-term accommodation;
 - review the design of Chisham Avenue so that it will function as a 'Main Street';
 - investigate the potential for strategic sites within the City Centre to lead investment
- and redevelopment within Kwinana; and
- review the function of Gilmore Road;
 - differentiate the City Centre by creating and enhancing links to the local bushland and open spaces; and
 - develop advocacy and partnership plans to support the City Centre development.
27. Prepare precinct structure plans for each of the district and neighbourhood centres that:
- support a mix of land uses to activate and enhance the viability of these centres;
 - maximise access to and within activity centres by walking, cycling and public transport; and
 - ensure development within the activity centre is well designed cohesive and functional.
28. Include appropriate provisions in the City of Kwinana's *Local Planning Scheme* to:
- facilitate the establishment of local retail uses in local centres for the convenience of local residents; and
 - ensure the primacy of the Kwinana City Centre is reinforced and out-of-centre development that undermines the hierarchy of activity centres is discouraged.
29. Limit the extent of commercial incursion into residential and industrial areas by appropriately designating industrial and commercial land to meet the demand for such land uses to 2036.
30. Prepare a master plan for the Bertram Neighbourhood Centre to provide a framework for public realm improvements including pedestrian access, disability access, car parking, landscaping, street furniture, wayfinding and the design of public spaces.
31. Encourage redevelopment of the following local centres:
- Orelia local centre - facilitate mixed use redevelopment
 - Calista local centre - rezone the site to residential development.
 - Summerton Road - rezone the site to residential development.

6.3 Employment

Businesses within the City of Kwinana are a key generator manufacturing and construction industries jobs for the Perth metropolitan area. This is illustrated in Figure 2 below, which compares overall employment generated in the City against jobs

created elsewhere across greater Perth. Also evident, is that the City has comparatively fewer jobs in retail trade, health care and professional and technical fields.

The historic presence of industrial, manufacturing and construction jobs plays a key role in the growth of these industries which are of value to the State both as a strategic economic base and employer and is promoted

as part of the Local Planning Strategy.

There will be increasing automation of industry, particularly manufacturing and transport logistics and a reduction in lower skilled employment in such industries. While manufacturing will continue to grow, employment numbers will not necessarily be growing at the same rate.

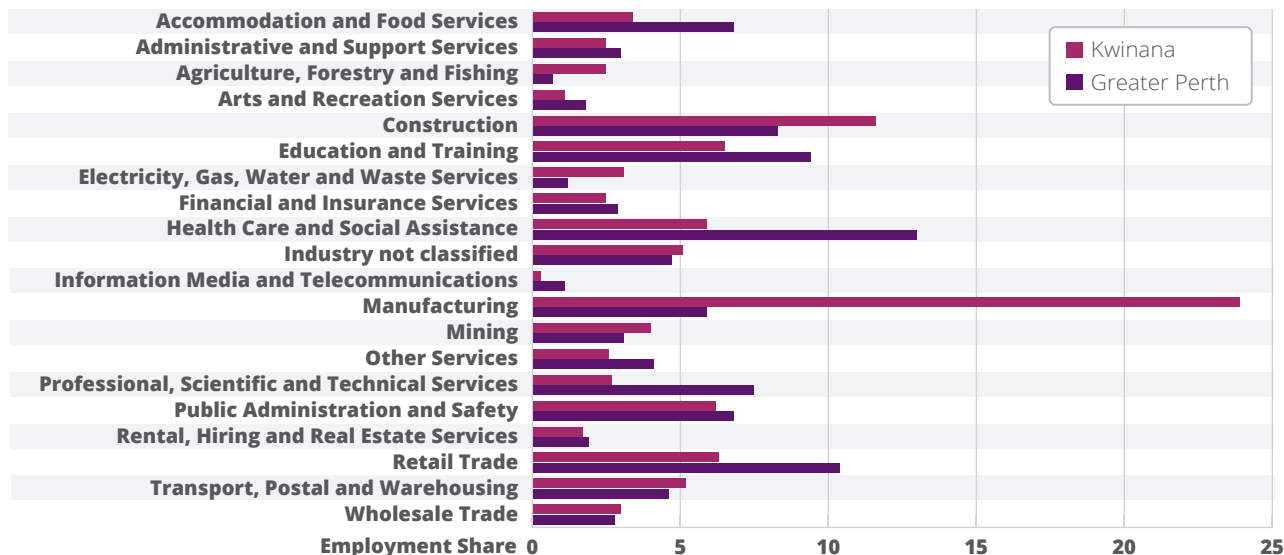


Figure 2: Overall Employment in the City of Kwinana

Employment Self-Sufficiency and Self Containment

Most of the manufacturing and construction industry jobs in Kwinana are filled by people living outside the City and it is evident that Kwinana's employment self-sufficiency (measure of local residents working in local jobs) is less than that of the surrounding south west region and amongst the lowest in the Perth metropolitan area. The major reasons for Kwinana's resident workers

seeking employment outside of Kwinana could be the nature of employment opportunities versus the residents skills and qualifications; transport options available and commuting times; relationship between wages and salaries (people will travel further for higher paid jobs); and house prices in the local area.

The size of the City of Kwinana's total labour force in 2016 was 18,829, which includes all persons aged above 15. Overall, 89.2% of the labour force was employed and

10.8% unemployed. When added to the people looking for work, either full or part-time, 21.6% of the labour force is not in work.

While there has been some recent growth in employment in Kwinana in recent years, employment is not keeping pace with the rapid population growth. As can be seen in Figure 3 between 2006 to 2018, employment in Kwinana has remained steady at around 15,500 jobs, while the population has increased from 24,000 to over 42,000 over the same time period.

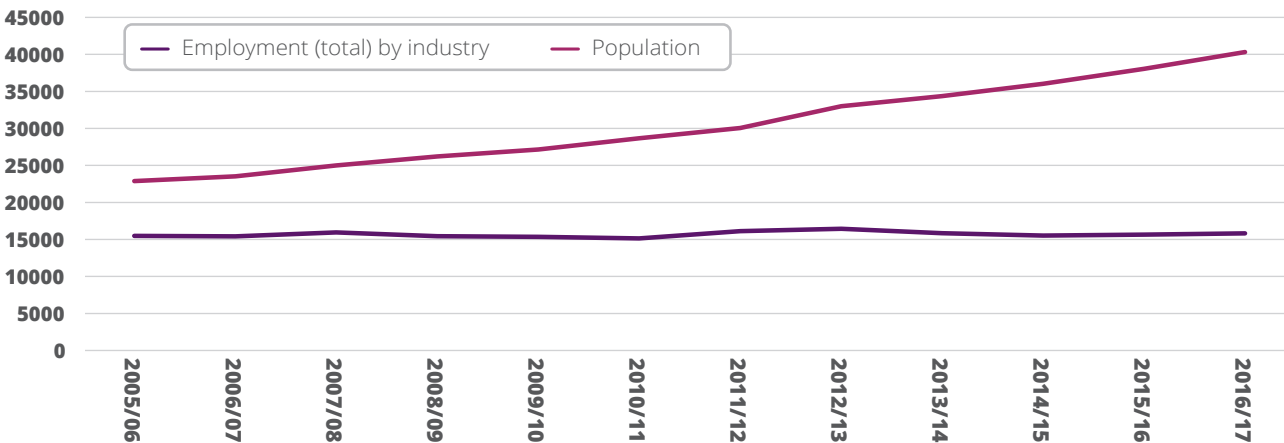


Figure 3: Kwinana Employment Growth

New Employment Opportunities

The challenge for the City is to consider opportunities for job creation for the local population as part of long term planning so that it better matches population growth and population skills and training. Figure 4 shows an assessment of the gap and the distribution of jobs types to 2036, and, some strategic direction as to how the gap could be breached.

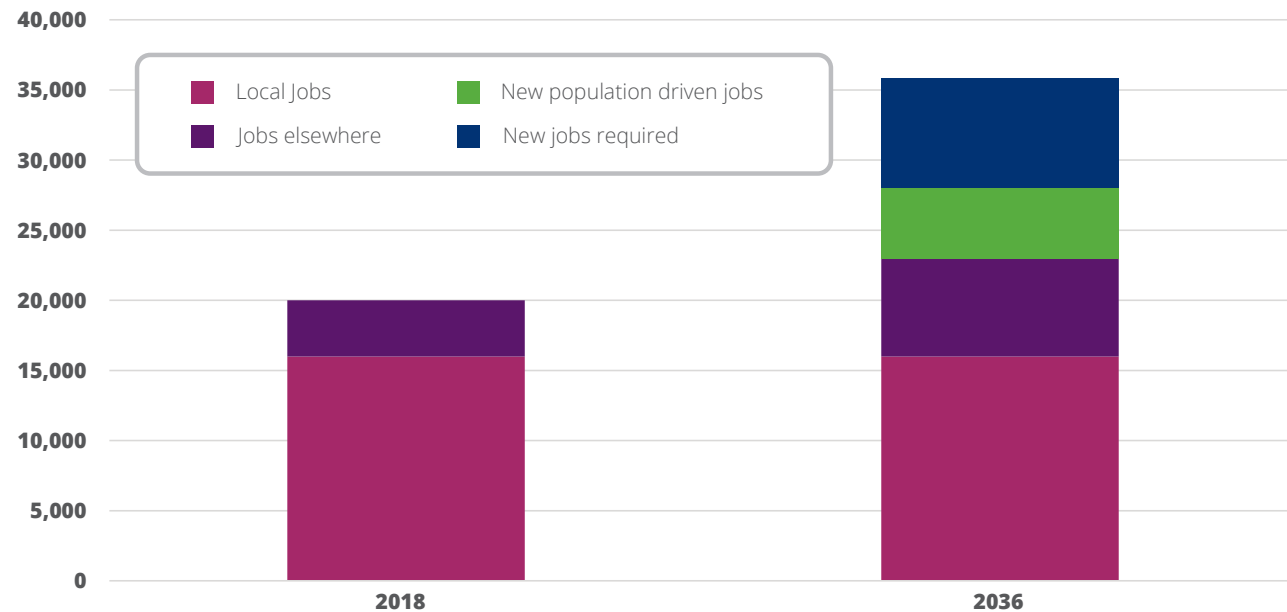


Figure 4: Employment Self-Sufficiency

It assumes that a proportion of local residents will travel to work outside of the City and it is important that transport systems and opportunities are supporting people travelling out of Kwinana and into the Perth CBD to work.

Further, it assumes that a proportion of these jobs (around one-third) will be population-driven jobs that arise to directly service the local population. They include local retail and business services, health services, education services (particularly primary and secondary education) and personal services.

An analysis of the jobs held by the resident population in the City in 2016 shows the three most popular industry sectors were:

- Health Care and Social Assistance (1,973 people or 11.7%)
- Retail Trade (1,808 people or 10.8%)
- Construction (1,780 people or 10.6%)

It can be expected that the number of people employed in these sectors will grow as the population of Kwinana and the region grows but it is critical that future planning seeks to maximise employment in these areas.

Employment in retail and services is very important to the employment prospects of Kwinana residents and is particularly important given that there is a gap of approximately 7,000 jobs that would need to be found within the City by 2036. Figure 5 below highlights employment by employment categories. The blue arrows identify the higher proportion of jobs for youth and unskilled persons in 'retail trade' and 'accommodation and food services'. This is relevant given unemployment in younger age groups which is well above the Perth average in Kwinana. Opportunities for expanded retail and entertainment uses such as café and restaurants as well as service commercial uses should be explored in the City's Centres and other key locations. The increases in small, often home based business over the past decade also provides an opportunity for a range of employment in the City, particularly in the provision of professional services, information technology, home based food business and many other services.

Enabling the growth of such industries and businesses to will provide employment opportunities for Kwinana residents is fundamental to the Local Planning Strategy and ensuring sufficient land is available for industry and local businesses.

Health Services

Between 2016 and 2036, Kwinana's population in the 70–84 age group will increase by approximately 3,100 and by 835 persons in the 85 and above age group. Kwinana's expanding aged population will increase the demand for health services and generate the need for at least 2-3 additional aged care facilities plus in-home services. These are large employers - the aged care workforce could almost double by 2036.

An expanding population will also mean increased demand for community based health services which should locate within the City Centre.

Service Commercial

As previously noted, the Local Planning Strategy seeks to promote Service Commercial precincts to take advantage of the location and exposure of the Kwinana Freeway interchanges. These sites provide the best strategic opportunity to close the gap between employment growth and population growth. Provided they are appropriately managed under the new local planning scheme, their presence would have minimal effect on existing activity centres, including the City Centre itself. The development of these precincts takes

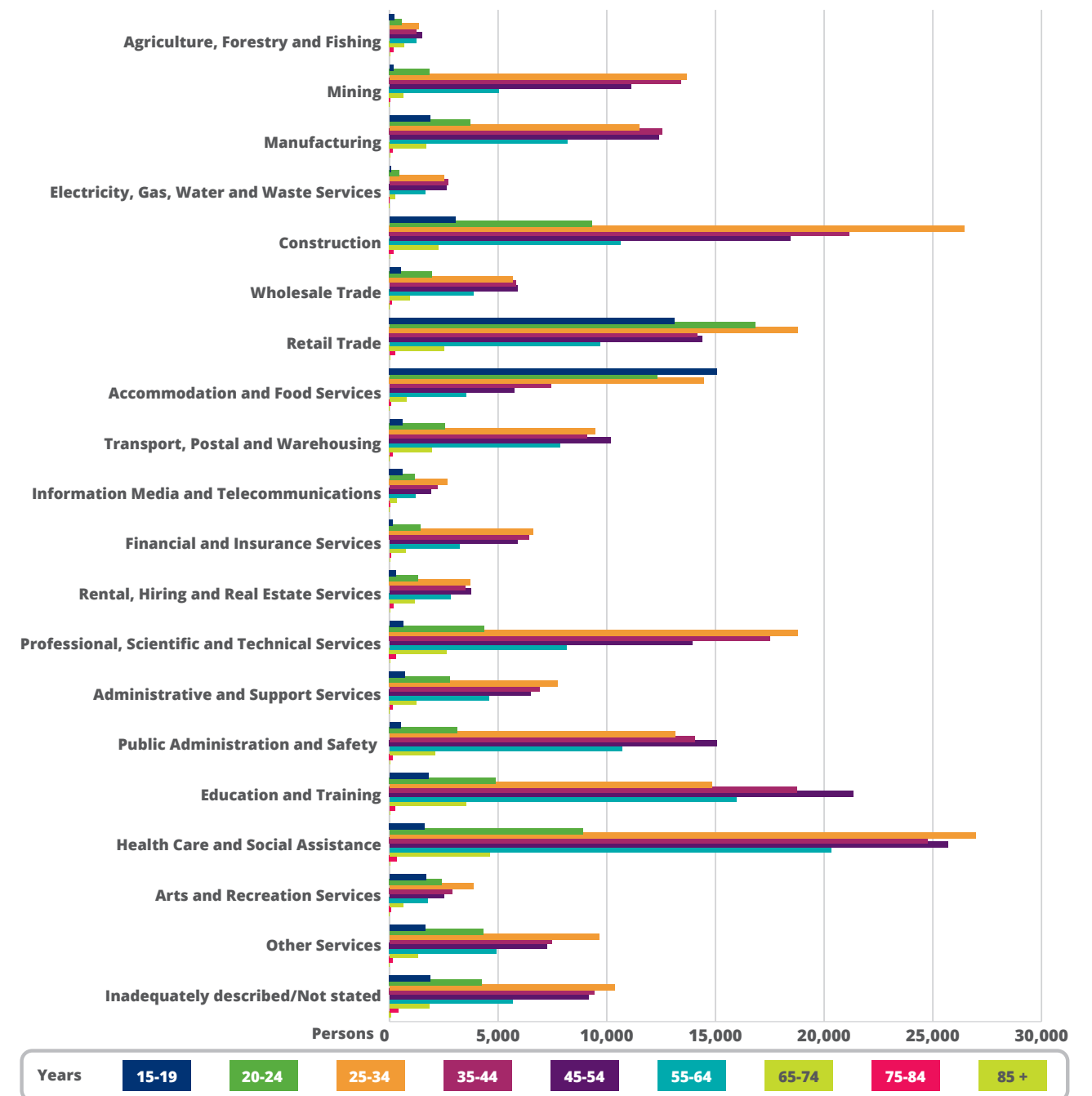


Figure 5: Youth Employment in the Perth Metropolitan Area

advantage of the proximity of these sites to the Kwinana Freeway.

There are opportunities for Service Commercial Precincts to the:

- east side of the Thomas Road and Kwinana Freeway interchange where land has already been approved under structure plans for service commercial land uses. This area has considerable potential for development into a large service commercial area offering a range of bulky and white goods retail services.
- east side of Anketell Road - Kwinana Freeway interchange

where the future Wandil District Centre is located (with the long term potential to develop the Anketell Road Train Station).

- west side of the Anketell Road - Kwinana Freeway interchange in Mandogalup where service commercial uses would be an appropriate interface between Anketell Road and future urban land uses.

Mixed Use - Office Based Precinct

The City will investigate the feasibility of two mixed use-office based precincts to the

- south-west of the Thomas Road / Kwinana Freeway interchange with integration to the Kwinana Train Station; and
- Anketell Road - Kwinana Freeway interchange in Mandogalup..

The two centres may be suitable for a range of office, commercial and residential uses. The opportunity is for a centre which provides a range of employment opportunities including professional and administrative jobs which can attract business into the City from further afield.

Tourism

The Spectacles, Kwinana Loop Trail, Tramways Trail and the Wildflower Walk provide unique opportunities to walk and cycle through bushland areas within the metropolitan area. The general public may not be aware of these areas and the City will investigate opportunities for eco-tourism within Kwinana to provide employment opportunities and promote environmental stewardship. The ecological links between the reserves combined with cycle and walking paths provide an opportunity for local tourism unique to Kwinana.

The opportunity for heavy Industry focused tourism opportunities should not be underestimated with many countries actively promoting industrial tourism. There is a market for people interested in learning about a range of industries with the Kwinana Industrial Area from major processing plants, power plants, desalination plants and waste to energy plants. An integrated masterplan for the Kwinana Industrial Area and the City's future Economic Development Strategy will provide a key platform for such opportunities into the future.

Small Business

There are a total of 1,945 businesses in the City and while there are many large businesses located in Kwinana, approximately 1,851 of these, or 95%,

are small businesses. In fact, despite Kwinana appearing to be the home of large industries, there are only 68 businesses based in Kwinana that employ over 20 people.

The major areas of small business operations are in the roles of:

- Transport, Postal and Warehousing;
- Construction; and
- Professional Scientific and Technical Services.

During 2019, businesses grew at over 2 per week to 134 new businesses commencing in Kwinana, appearing to be exclusively small businesses. Most of the new businesses established in 2019 were in the following industries:

- Transport, Postal and Warehousing;
- Administrative and Support Services; and
- Rental, Hiring and Real estate services.

Additionally, there are a total of 97 home based businesses that operated in Kwinana in 2019, predominantly within Wellard, Bertram, Wandi and Parmelia. The City will optimise the potential of home based businesses as an employment growth sector to improve self-employment opportunities in Kwinana. The City has the capacity to reduce barriers to home based business via reduced

administrative overheads and integrated assessment processes.

Manufacturing and Industry

Industry remains an important employer for the City's residents and its growth will benefit the local community. This includes heavy to light Industrial land uses and there is considerable potential for significant expansion into the longer term in Latitude 32 and Postans. There are opportunities for Light Industry/Service Commercial uses in particular, to expand into the Postans locality providing local employment opportunities.

The Thomas Road - Kwinana Freeway interchange (west and east of the Kwinana Freeway) has been identified as Planning Area 2 in the Local Planning Strategy to ensure that the following characteristics of the area are considered during subsequent stages of the planning process:

- the advantages of being located along the Kwinana Freeway including:
 - good locational access across the Perth metropolitan area from the Perth Central Business District to Mandurah.
 - the immediate traffic volumes passing the area on a daily basis along both the Freeway and Thomas Road.
- integration with the Kwinana train station;
- providing for expanding or relocating office and business uses from the Kwinana Industrial Area, which would free up sites in industrial areas for industrial uses and provide employment at this location which is much better served by public transport;
- regionally and locally significant environmental values;
- proximity to the service commercial area and neighbourhood centre on the eastern side of the Thomas Road - Kwinana Freeway interchange;
- short-term accommodation and conference centre options; and
- traffic flow and safety of the transport network.



Strategic Directions

To create diverse employment opportunities for local residents and maintain sustained economic growth by ensuring that suitable serviced employment land is available.

Strategic Actions

- Identify the Thomas Road - Kwinana Freeway interchange (west and east of the Kwinana Freeway) as Planning Area 2 so that the City's planning framework and subsequent stages of the planning process consider:
 - the advantages of being located along the Kwinana Freeway including:
 - good locational access across the Perth metropolitan area from the Perth Central Business District to Mandurah.
 - the immediate traffic volumes passing the area on a daily basis along both the Freeway and Thomas Road.
 - integration with the Kwinana train station;
 - providing for expanding or relocating office and business uses from the Kwinana Industrial Area, which would free up sites in industrial areas for industrial uses and provide employment at this location which is much better served by public transport;
 - regionally and locally significant environmental values;
 - proximity to the service commercial area and neighbourhood centre on the eastern side of the Thomas Road - Kwinana Freeway interchange;
 - short-term accommodation and conference centre options; and
 - traffic flow and safety of the transport network..
- Investigate the viability and suitability of Service Commercial (Bulky/White Good) precincts at key Kwinana Freeway interchanges at Anketell Road and Thomas Road. Investigate the north western corner of Anketell Road - Kwinana Freeway interchange for service commercial land uses.
- Investigate opportunities for eco-tourism within Kwinana to provide employment opportunities and promote environmental stewardship as part of the City of Kwinana's future Economic Development Strategy, including the development of an eco-tourism centre alongside established natural attractions such as The Spectacles, Kwinana Loop Trail, Tramways Trail and the Wildflower Walk.
- Optimise the potential of home based businesses as a key employment growth sector.
- Investigate options for an integrated development process across the City of Kwinana administration (Planning, Building, Health, Environment, Communities and Engineering) to streamline social, economic and environmental processes and considerations across the agency.





6.4 Education and Training

Opportunities for attracting education and training facilities into the City should be explored to boost

the local economy but also to provide local youth with skills relevant to local jobs and employment generally.

The Australian Defence Force's plans to establish an office/training facility easily accessible to the Australian Marine Complex provides

employment opportunities within Kwinana. There may also be the potential for the Kwinana South Metropolitan TAFE campus to expand to provide semi-professional and trade training for the defence industry and the Kwinana Industrial Area.



6.5 Agriculture

Until recently large parts of Kwinana were rural, however following the extension of the Kwinana Freeway and the Perth-Mandurah Train Line, areas east of the Freeway have been rezoned to facilitate the establishment of new suburbs. This has occurred in Wandi, Anketell, Casuarina, Wellard and Mandogalup. Urban development will continue to expand in these areas for several decades. The last remaining rural areas are situated further east of the Kwinana Freeway and are zoned 'Rural A', 'Special Rural' and 'Rural Water Resource'.

As a result of the zoning and land use changes over the past two decades, the role of agriculture in the City's

economy has declined and many rural industries have relocated.

The South Metropolitan Peel Subregional Planning Framework identified part of the rural area to the east of the Kwinana Freeway and south of Casuarina Prison as a Planning Investigation Area (Urban Expansion). This includes part of the last remaining 'Rural A' zoned areas with the City of Kwinana.

The Western Australian Planning Commission will determine the outcome of the urban expansion areas (identified as Planning Area 1 on the Local Planning Strategy map) through detailed planning investigations. The City will also investigate the preferred long term use of land within the remaining 'Rural A' zone area in *Local Planning Scheme No. 2*. In view of its objectives

to retain biodiversity and manage and minimise water quality impacts on both the Jandakot Groundwater Mound and drainage catchment of the Peel - Harvey Estuarine System.

There are a number of agricultural businesses operating under non-conforming uses rights within areas set aside for future urban development or in localities where environmental legislation has changed over the past decades meaning that the use may no longer be appropriate if new approval was sought today. These uses may ultimately seek to relocate away from constraints but efforts should be made by the City to seek to incorporate these uses into Service Commercial areas where possible.



Strategic Directions

The community has a choice of quality public and private facilities to meet their education and training needs.

Strategic Actions

37. Investigate appropriate locations for education land as part of the preparation of precinct structure plans for the City Centre, district and neighbourhood centres.
38. Introduce provisions in the City of Kwinana's *Local Planning Scheme* to allow for training needs of the community within Neighbourhood, District and the City Centres.
39. Advocate for the establishment of training facilities within Kwinana to provide semi-professional and trade training for the defence industry and other industries with the Kwinana Industrial Area.



Strategic Directions

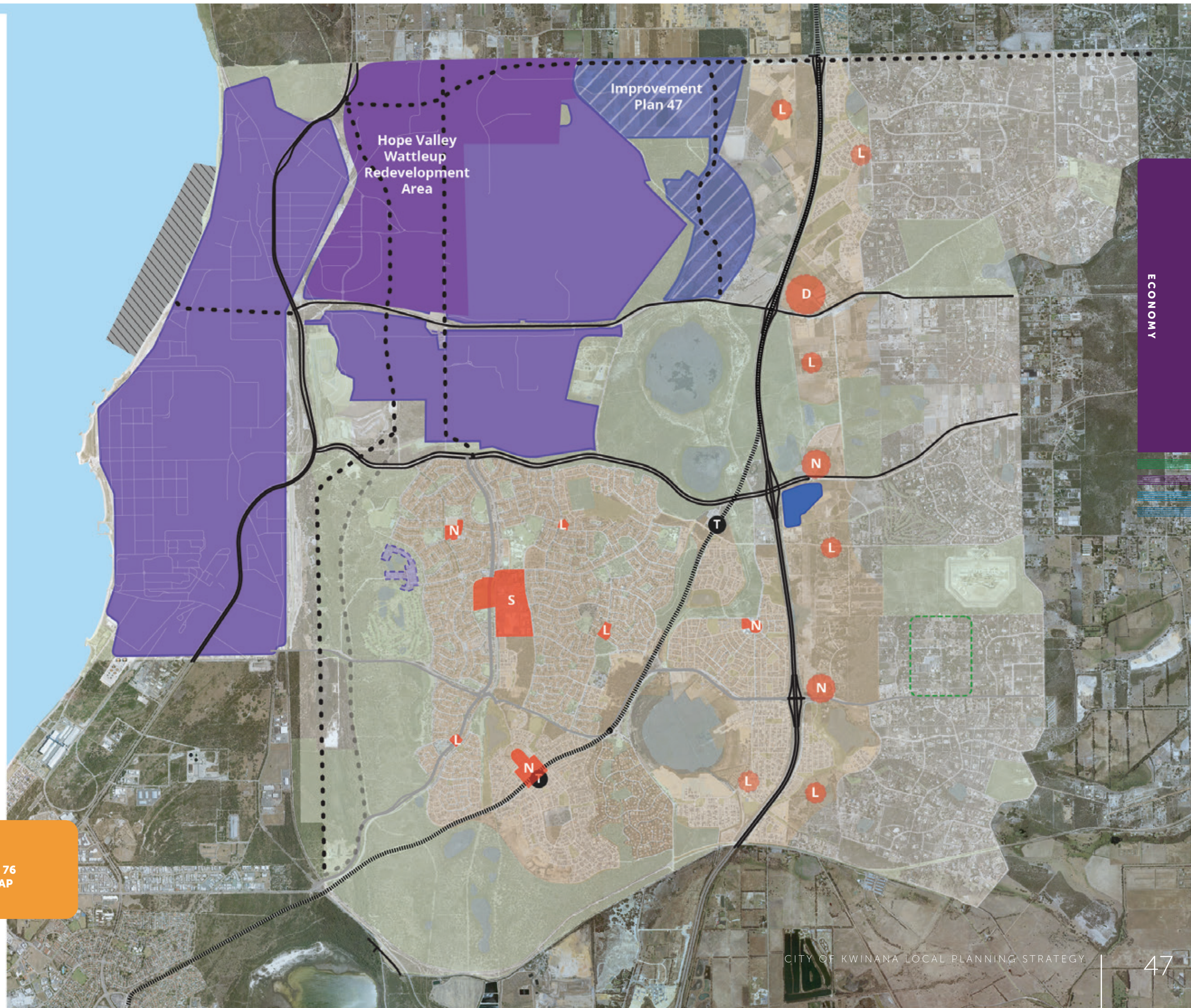
To review the City's rural land use with a view to medium and long term opportunities.

Strategic Actions

40. Investigate the long term future of the remaining 'Rural A' zoned land in the City of Kwinana Local Planning Scheme in view of its identification as an Investigation Area (Urban Expansion) in the South Metropolitan Peel Sub-Regional Planning Framework and the City's objectives to retain biodiversity and manage and minimise water quality impacts on both the Jandakot Groundwater Mound and drainage catchment of the Peel - Harvey Estuarine System.
41. Where feasible, seek to incorporate agricultural uses operating under non-conforming use rights into 'Service Commercial' zones.

KEY

-  Westport
-  Industry
-  Improvement Plan 47
-  Hope Valley Wattleup Redevelopment Area
-  Future Roads
-  MainRoads WA proposed future roads
-  Existing Activity Centres
-  Proposed Activity Centres
-  Secondary
-  District
-  Neighbourhood
-  Local
-  Improvement Plan 47
-  Service Commercial
-  Rural Investigation area
-  Primary Roads
-  Secondary Roads
-  Train Station
-  Proposed Train Station
-  Commuter Rail



REFER TO
APENDICES 3 PAGE 76
FOR COMPLETE MAP

7 Environment

7 Environment

7.1 Local Natural Areas, Landscapes and Ecological Linkages

Bushland, wetlands and landscape features contribute significantly to a sense of place and quality of life within Kwinana's urban and rural areas, and provide important habitats to sustain unique ecosystems and support biodiversity.

Kwinana's population and housing forecasts indicate significant growth over the next 15 years. This will place considerable pressure on the local environment and present ongoing challenges associated with the retention of bushland, wetlands and landscapes if not properly managed. It is important that future population growth in Kwinana does not impact on bushland and wetlands and that areas of significant vegetation are protected.

Prior to European settlement there was nearly 12,000ha of native bushland (including wetlands) within Kwinana, of which approximately 45% remains (20% of which is protected through Bush Forever and State Government conservation reserves). Figure 6 below identifies significant areas of local bushland within each of the major vegetation complexes. These bushland areas are of

regional and/or local environmental significance and are under threat from subdivision and development approvals.

Lot 123 Mortimer Road, Casuarina has been identified as Planning Area 3 in the Local Planning Strategy map on the basis that there is a large area of bushland (and wetlands) in excellent condition on the property which contains a diverse range of rare or threatened flora, fauna and ecological communities. The purpose of identifying Lot 123 as a Planning Area is to ensure that the environmental values of the site are recognised in future in the area protected during subsequent stages of the planning process.

The Local Planning Strategy will ensure the city's draft *Local Biodiversity Strategy* (2013) is updated to provide a framework for the protection and management of significant local bushland in Kwinana that are not currently designated for conservation purposes.

Kwinana's leafy suburban character needs to be protected and enhanced. The City has an established street tree planting policy which has been in place since 1992 and has contributed to an 8% increase from bare ground to green cover since 2016 and is an important ongoing program to retain and where possible expand tree canopy cover to:

- cool residential streets and open spaces during extreme

heat;

- contribute to a green leafy neighbourhoods;
- provide shade to encourage walking and cycling; and
- enhance local biodiversity.

The interface between the urban and rural areas is an important planning consideration for areas east of the Kwinana Freeway as identified in Section 5.

Ecological Linkages

Ecological Linkages connect locally and regionally significant natural areas and provide stepping stones for flora and fauna. Ecological connectivity is vital to the long-term viability of native flora and fauna, and is recognised as one of the most effective tools available for conserving biodiversity.

A number of ecological linkages are identified in the City's draft Local Biodiversity Strategy (2013) as shown in Figure 6.

RE-ALIGNMENT OF THE FREMANTLE - ROCKINGHAM PRIMARY REGIONAL ROAD

This proposed freight corridor is intended to provide efficient, high-capacity, free-flow connection from the Kwinana Freeway through the Kwinana Industrial Area and the future Outer Harbour.

The City will advocate to Main Roads Western Australia to realign the

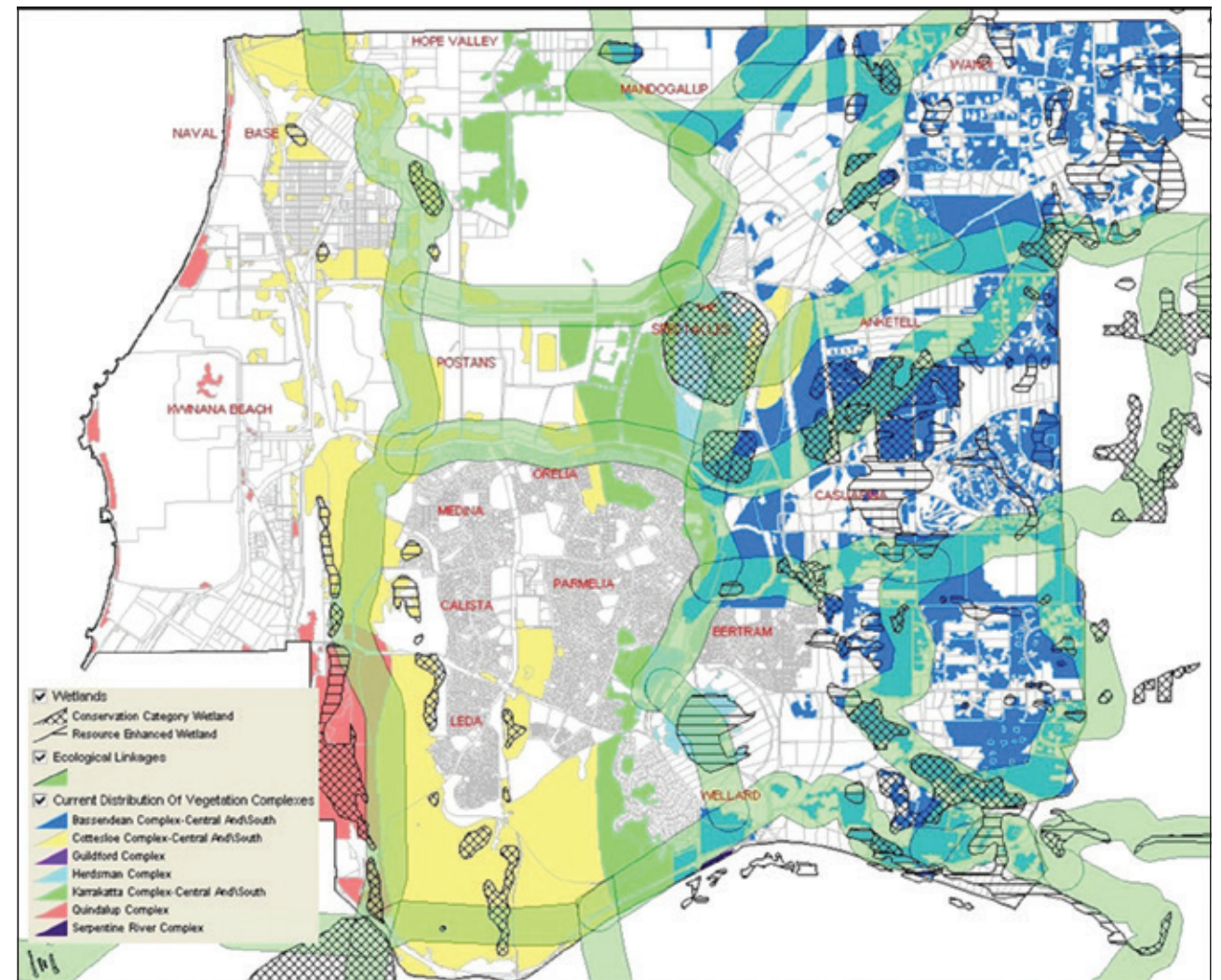


Figure 6: Vegetation complexes and Ecological linkages within Kwinana

Fremantle-Rockingham Primary Regional Road to protect significant environmental values and maintain the green belt as a buffer between residential areas and industrial development.

Land use and development within the City is influenced by water related issues. The Jandakot Water Mound, Peel Estuary Serpentine River Catchment, wetlands and seasonal expression of ground water in areas with high ground water tables have been considered as part of the preparation of the Local Planning Strategy. Increasingly, sea level rise and coastal recession will require consideration of planning conditions that limit time or particular land uses.

BUSHFIRE MANAGEMENT

The majority of rural land within Kwinana is classified as bushfire prone. Land use and development in rural areas therefore needs to respond to the threat of bushfire, balancing the potential impact of bushfire risk management regimes

on the environment and natural resources. Specific planning and building requirements apply to developments within designated bushfire prone areas in accordance with the *Planning and Development (Local Planning Schemes) Regulations*

2015 and State Planning Policy 3.7 Planning in Bushfire Prone Areas. The City has a responsibility to ensure sensitive or potentially hazardous land uses do not increase the risks on life and property.





Strategic Directions

To identify, permanently protect and enhance Kwinana's natural environment which is critical to the maintenance of ecological processes and biodiversity.

Strategic Actions

42. Advocate for the inclusion of areas of significant environmental value within the Parks and Recreation reserve in the Metropolitan Region Scheme.
43. Advocate to the Federal and/or State Government for the protection, and where appropriate, management of nationally or regionally significant areas.
44. Adopt a Local Biodiversity Strategy which prioritises natural areas requiring conservation, and protects significant landscape features and ecological linkages.
45. Include provisions in the City of Kwinana's Local Planning Scheme to protect environmental values, significant landscape features, significant trees and ecological linkages consistent with an adopted Local Biodiversity Strategy.
46. Regularly update the City of Kwinana's Natural Areas Management Plan.
47. Review all public open space under the management of the City of Kwinana to ensure vesting is consistent with conservation objectives (Local Reservation categorisation, Management Orders and title classification).
48. Identify Lot 123 Mortimer Road, Casuarina as Planning Area 3 to ensure that the significant environmental values of the site are recognised in the City's planning framework and protected during subsequent stages of the planning process.
49. Implement the City of Kwinana's Streetscape Upgrade Strategy (2019 -2029).
50. Prepare and implement the City of Kwinana's Urban Forest Strategy.
51. Develop planning mechanisms to:
 - ensure high quality bushland remnants are prioritised for retention as part of any structure planning for new areas;
 - require all new industrial and commercial developments to retain existing trees and plant mature trees where appropriate; and
 - develop strategies to promote the retention of street trees by the community and raise community awareness and encourage community participation in biodiversity protection.
52. Explore programs that will assist landholders to enhance the condition and on-going conservation of Local Natural Areas.
53. Develop measures for ecological corridors, outlining revegetation, restoration and landscaping standards expected of developers, and requirements for other landscape elements to strengthen connections, such as wider verges and median strips to accommodate street trees.
54. Ensure that an emphasis is placed on the separation of land uses with off-site odour, noise, air-quality impacts to sensitive land uses.
55. Ensure future planning and development appropriately manages bushfire risk, which may include the development of local planning controls for bushfire management.
56. Apply Water Sensitive Urban Design principles where compatible with other design objectives.
57. Investigate the cumulative impact of native vegetation clearing and appropriate measures to reduce clearing and reinstate native planting.
58. Advocate to Main Roads Western Australia to realign the Fremantle-Rockingham Primary Regional Road to protect significant environmental values and maintain the green belt as a buffer between residential areas and industrial development.

7.2 Climate Change Mitigation and Adaptation

Western Australia, particularly the south-west, is vulnerable to the impacts of climate change, including:

- increases in average annual temperatures, leading to an increase in the number and severity of heatwaves and an increase in the number of high fire risk days and potential severe bushfires;
- reductions in average annual rainfall, causing environmental stress and potential death of native vegetation;
- sea level rise, with increased erosion along coastal areas and potential inundation of low lying coastal areas during severe storm events; and
- changes in the frequency and severity of storm events with a predicted trend for an increase in extreme events.

The City has recognised its responsibility to act on climate change and has adopted a Climate Change Plan (2021-2026). The major climate change risks relevant to the City's operations identified in the Climate Change Plan are temperature



change, reduced rainfall, rising sea levels and extreme weather events.

With an increasing population within Kwinana, climate change adaptation and improving community resilience will be important part of land use and infrastructure planning. The City notes the risk of the increasing heat island effect, which is exacerbated by vegetation clearing for development and road expansion. Strategies to reduce the urban heat island effect can include increasing landscaping and tree canopy cover.

Reduced water availability is being addressed through the City of Kwinana's Sustainable Water Management Plan which was developed at the same time as this Local Planning Strategy. The following goals for water use reductions are set out in the plan:

- Reduce scheme water consumption by 5% on 2016/17 levels by 2023; and
- Maintain groundwater abstraction at 2016/17 levels until 2023.

Significant climate modelling work has been undertaken by agencies such as CSIRO and robust trend data has been established to support the case to adapt settlements to cope with expected changes in sea level, temperature, rainfall, bushfire and storm events and to determine suitable responses to enable this. This has implications for the City as, within its boundaries, the coast will be subject to rising sea levels and there are areas that are prone to bushfire.



Strategic Directions

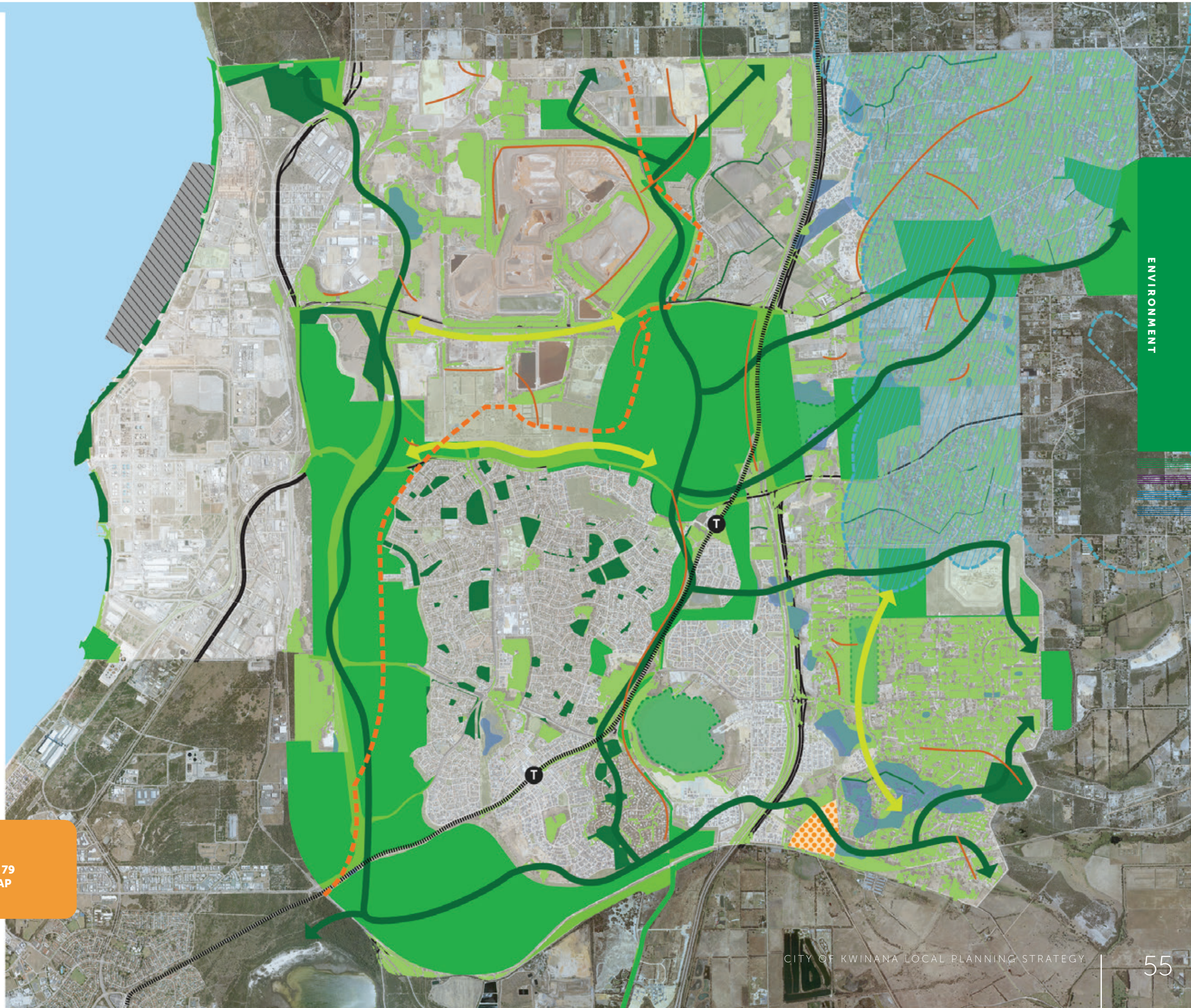
Promote planning measures that encourage climate change adaptation and mitigation to ensure our communities are both resilient and liveable.

Strategic Actions

59. Prepare a sea level rise policy based on the adaptation options for vulnerable areas outlined in the Cockburn Coastal Vulnerability Values and Risk Assessment to enable land use planning to respond to coastal hazard risks.
60. Implement planning mechanisms that support the outcomes of the City of Kwinana's Climate Change Plan.
61. Manage and protect water resources in urban environments in accordance with the planning framework set out in the State Government's Better Urban Water Management Guidelines.

KEY

-  Ecological Corridors
-  Proposed Ecological Corridors
-  Sub-regional Open Space
-  Park and Reserve Investigation
-  Regional Parks
-  Local Parks
-  Local Natural Areas
-  Wetland Conservation
-  Public Drinking Water Source
-  Holding yard buffer
-  Prominent Ridgeline
-  Westport
-  EPP 1999 Kwinana Atmospheric Areas
-  Primary Roads
-  Secondary Roads
-  Commuter Rail
-  Existing Train Station
-  Proposed Train Station



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FOR COMPLETE MAP

8 Infrastructure

8 Infrastructure

8.1 Transport

Typical of Perth's outer suburbs, residential and commercial development within Kwinana is low density and spread out and Kwinana's residents are dependent on private vehicles to travel to schools, shops, services, employment and recreation.

An integrated transport network to distribute traffic and to provide linkages to other parts of the metropolitan region is crucial for the residents of Kwinana.

The City aims to make it safer and more convenient for all residents of varying incomes, needs and abilities to walk, cycle, use public transport and drive within Kwinana on an integrated network of paths, roads and public transport routes.

Access to regional roads and the freight rail network also provides opportunities for industries, businesses and the future Kwinana Outer Harbour to be well-connected to markets and suppliers.

Cycling and Walking

The City adopted the Bike and Walk Plan (2018) to provide a safe network of cycle routes and walking paths that are convenient for people of all ages and abilities to ride or walk to local destinations such as schools, shops, parks, bushland, bus stops and train stations. The intention is to create communities where cycling

and walking are the preferred choices for short trips and everyone has the opportunity to choose a healthy lifestyle.

The Bike and Walk Plan also integrates the local network of cycling routes and walking paths with the regional cycling and walking network to connect with areas beyond Kwinana.

The Local Planning Strategy draws upon the Bike and Walk Plan to prioritise pathways that support and link activity centres.

Metronet and Transperth

The City of Kwinana is serviced by the Mandurah Train Line, stopping at Kwinana Train Station and Wellard Train Station.

The Kwinana Train Station is located to the north and west of the nearest residential and commercial zones, reducing its local catchment by at least 50%. This creates a high demand for the park 'n' ride service even from the surrounding residential development. The Local Planning Strategy seeks to support access to the train stations by advocating for more frequent bus connections to the trains station as opposed to increased parking. Furthermore, investigation into the potential land uses in and around the train station seeking to intensify development and ensure convenient access to train services.

The South Metropolitan Peel Sub-Regional Framework identifies two strategic bus corridors through Kwinana as described below:

- A High-Frequency Transit Corridor running between Kwinana Train Station and Wellard Train Station via the Kwinana City Centre. This could support increased land use density as an Activity Corridor, or maintain consistent mobility goals as a Transit Corridor.
- A High-Priority Transit Corridor between Rockingham and Fremantle via the Kwinana City Centre. This would improve direct access to Kwinana, but is primarily intended to be an efficient commuter service delivering employees to destinations along the coast, including the future Outer Harbour and supporting industry. This corridor is likely to require bus priority in the form of queue facilities or partial bus lanes to maintain consistent times.

Freight Network

The movement of freight through Kwinana provides essential economic benefits to the overall Western Australian economy and is a key consideration in terms of the overall efficiency and safety of the Western Trade Coast and the future Outer Harbour.



The efficiency of freight movement is reliant on the provision of designated road and rail corridors that are separated from local traffic and are not restricted due to their potential impact on the amenity of incompatible land uses.

The Local Planning Strategy aims to manage land use conflict in the vicinity of the freight corridors by designating adjoining land use appropriately and by also ensuring sensitive land uses are adequately buffered from vehicle noise and vibration impacts.

Gilmore Avenue

Gilmore Avenue functions as an important regional route between Kwinana and Rockingham, but this role conflicts with its role as a local access route to the City Centre. The high traffic volume reduces opportunities for pedestrians crossing making it difficult to walk or cycle to the City Centre.

As traffic continues to grow, and particularly if Gilmore Avenue were to be extended, the use of Gilmore Avenue by regional traffic can be expected to increase. This will impinge upon its function as a key public transport corridor and reduces the potential for activity along the edge of the City Centre. As such, a strategic view of the function of this road in the context of the Kwinana City Centre is required, weighing up the various needs and prioritising the value of activity, local access and regional purpose, public, private and active transport.

Autonomous, Electric vehicles and Ride Share Services

It is anticipated that there will be an increasing transition towards electric vehicles and automated vehicles within the next five to ten years. The uptake of electric vehicles in the future will have significant

implications for future transport planning. Considerations for Kwinana include requirements for electric vehicle charging facilities in new developments, and decreased requirements for public and private car parking spaces as the car share economy grows.

In the long term, driverless shuttles are likely to be able to support residential connections to train stations, maybe replacing residential coverage bus services to train stations. This is true even where low density residential development is retained.

Undergrounding Overhead Power Lines

The City will liaise with Western Power to prioritise the undergrounding of overhead power lines to ensure Kwinana's valued tree lined streets are protected and to improve the character of Kwinana's suburbs.



Strategic Directions

To create a well-connected community with a safe, high-quality, integrated, multi-modal transport network that makes it easy, safe and convenient for our community to access activity centres, schools, services, recreation and entertainment facilities.

Strategic Actions

62. Create a safe network of shaded cycle routes, walking paths and recreational trails in accordance with the City of Kwinana's Bike and Walk Plan that connect people with activity centres, schools, services, recreation and entertainment facilities.
63. Facilitate the integration of the Bike and Walk Plan into precinct structure plans.
64. Investigate the potential for a high frequency bus route between Kwinana Train Station and Wellard Train Station via the Kwinana City Centre.
65. Advocate for the Public Transport Authority to improve public transport services including bus sizes, scheduling (late night) and route planning.
66. Review planning requirements within the City of Kwinana's Local Planning Scheme for onsite car parking and end of trip facilities for the purpose of:
 - supporting a transition to more sustainable forms of transport; and
 - ensuring new commercial and mixed use developments make alternative private (electric vehicles) and active travel modes (cycling/walking) a more attractive travel option.
67. Implement the Parking Strategy for the Kwinana City Centre which prioritises active travel modes and supports economic activity and/or development.
68. Protect Strategic Freight Routes from sensitive and incompatible land uses whilst mitigating the impacts of freight movements on the community, local roads and the environment.
69. The City of Kwinana to consider including requirements for electric vehicle charging facilities in new developments, and decreased requirements for public and private car parking spaces as the car share economy grows.
70. Continue the cooperative arrangements between the State Government, Western Power and the City of Kwinana to progressively replace the overhead electricity distribution network in residential areas with underground power and support the development of a new approach to identifying and prioritising areas for investment in underground power, particularly in areas with a high electricity network need and lower economic capacity. The approach should also ensure Kwinana's valued tree lined streets are protected and improve the character of the Kwinana's residential areas.
71. Manage land use and development through local planning controls to minimise conflict between infrastructure and sensitive land uses.
72. Maintain efficient functioning of Kwinana's freight routes by ensuring there is effective access control via the use of service roads or other measures.



INFRASTRUCTURE



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9 Implementation

9 Implementation

The Local Planning Strategy will need to respond to future changes in State and regional policy as well as any changes to local circumstances and priorities. This may be done through occasional updates as well as periodic comprehensive review.

A comprehensive review of the Local Planning Strategy should be undertaken at least every five years in conjunction with a scheme review. It is recommended that background information be updated on a more frequent basis in response to the availability of information or changes which may not have been foreseen at the time of formulating the original Strategy.

Modifications to the Local Planning Strategy should be undertaken in response to significant changes in circumstances in the period between comprehensive reviews, for example, in the event of major economic development or major infrastructure projects which were not addressed in the endorsed Local Planning Strategy.

The procedure for review or amendment of the Local Planning Strategy is generally the same as that for the preparation of the Local Planning Strategy except that, in the case of an amendment, it is only the changes that are subject to advertisement, assessment and endorsement by the Western Australian Planning Commission.

The focus of monitoring and review should be on the extent to which the Local Planning Strategy has been successful in:

- articulating and achieving the planning objectives of state and local government; and
- effectively guiding land use and development decisions to achieve the outcomes of the Local Planning Strategy.

The City will also report to Elected Members annually on the progress of implementing the actions listed in the Local Planning Strategy.



10 References

City of Kwinana documents

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- Bike and Walk Plan (City of Kwinana, 2018)
- City of Kwinana Health and Wellbeing Profile (SMPHU, 2013)
- Climate Change Plan 2021-2026 (City of Kwinana)
- Community Infrastructure Plan (City of Kwinana, 2011 – 2031)
- Disability Access and Inclusion Plan (2019 – 2021)
- Employment and Economic Analysis (ID, 2020)
- Heritage List 2021
- Kwinana City Centre Master Plan (2019)
- Kwinana Parks Upgrade Strategy (City of Kwinana, 2019 – 2029)
- Kwinana Town Centre Master Plan and Design Guidelines
- Local Biodiversity Strategy (Ironbark, 2013)
- Local Commercial and Activity Centres Strategy (2014)
- Local Heritage Review (2021)
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- Local Planning Policy – Development within the Special Rural Zones
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- Sustainable Water Management Plan (City of Kwinana, 2018)
- Strategic Community Plan (City of Kwinana, 2021 – 2031)
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Other documents

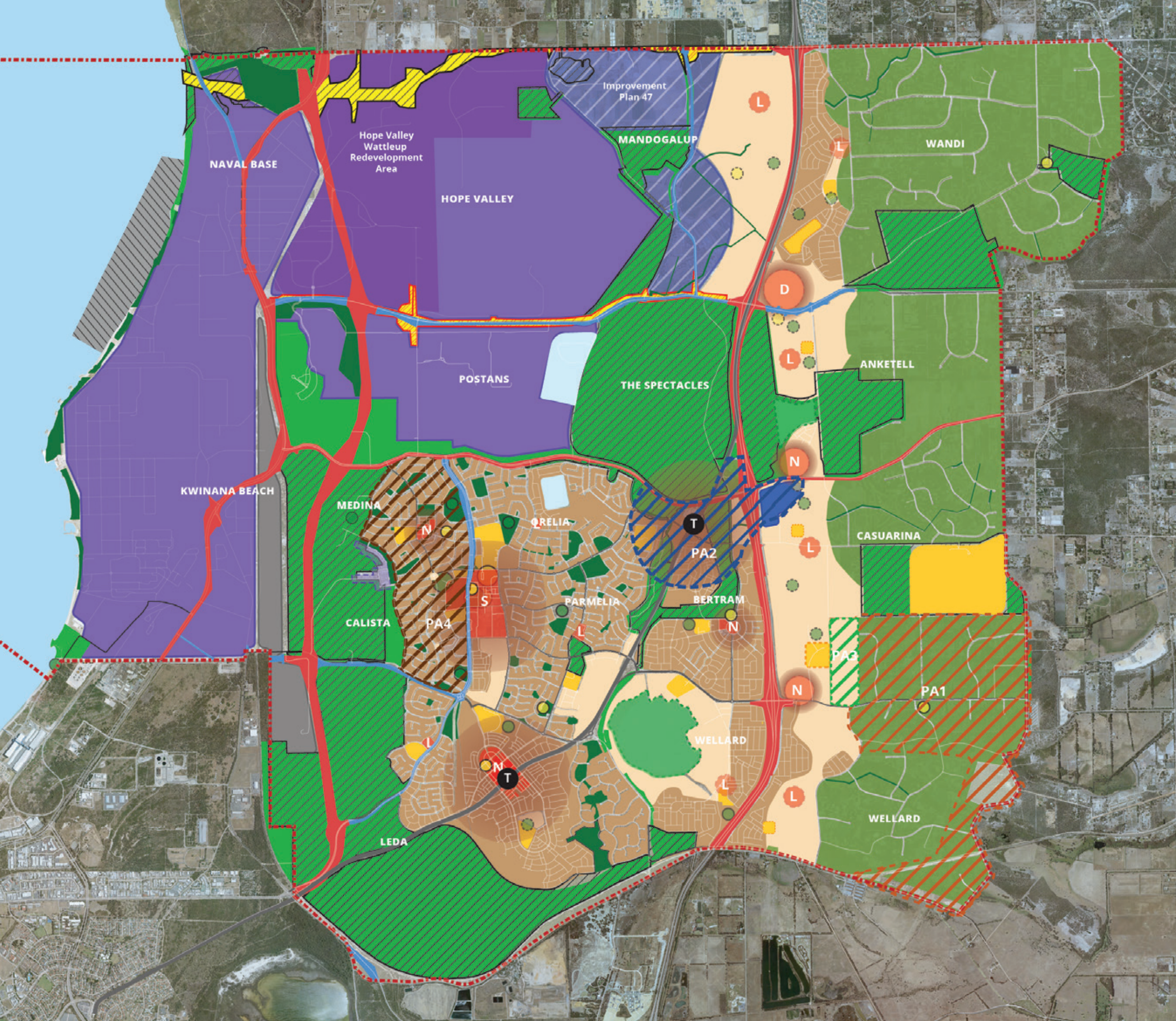
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- Draft Liveable Neighbourhoods (WAPC, 2015)
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- Perth and Peel@3.5million Planning Investigation Areas Update (WAPC, 2022)
- Pathway to a Healthy Community - A Guide for Councillors' (DoH, 2010)
- Perth and Peel @ 3.5 million (WAPC, 2018)
- Southern Metropolitan Peel Sub-regional Planning Framework (WAPC, 2018)
- WA Bicycle Network Plan (DoT, 2020)
- Sense of Place - a response to an environment: the Swan Coastal Plain, Western Australia (George Seddon, 1972)
- State Planning Policy No. 1 – State Planning Framework (WAPC date)
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- State Planning Policy No. 2.9 - Water Resources (WAPC date)
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- State Planning Policy No. 3.6 - Infrastructure Contributions (WAPC)
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Appendices

Appendices 1

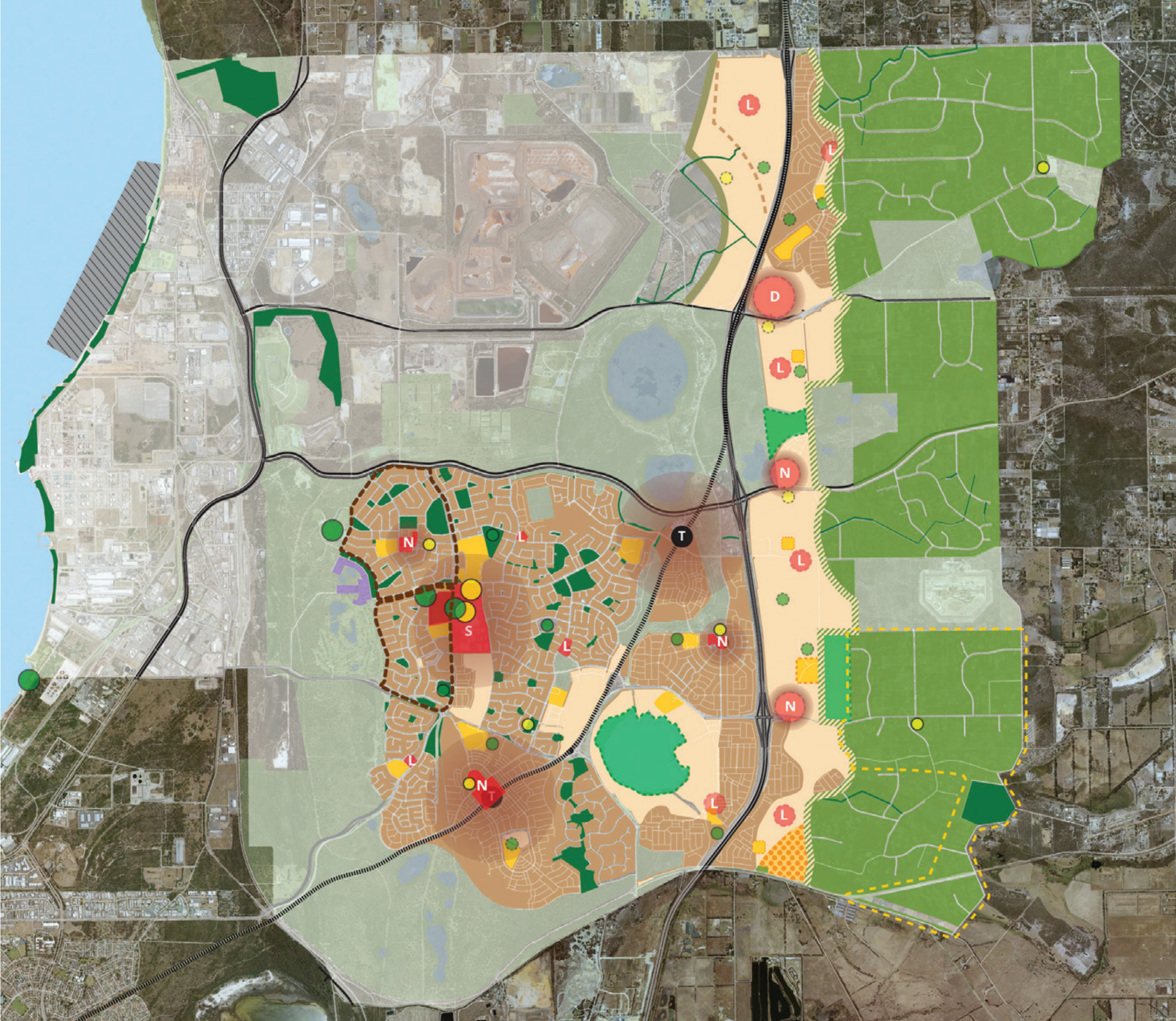
Local Planning Strategy Map

- KEY
- Existing Urban
 - Future Urban
 - Rural Living
 - Regional Parks
 - Local Parks
 - Park & Reserve Investigation
 - Industry
 - Hope Valley Wattleup Redevelopment Area
 - Improvement Plan 47
 - Service Commercial
 - Station Precinct Investigation Area
 - Existing Activity Centres
 - Proposed Activity Centres
 - Secondary
 - District
 - Neighbourhood
 - Local
 - Walkable Catchment Area
 - Schools
 - Proposed schools
 - Recreational Facility
 - Community Facility
 - Proposed Recreation Facility
 - Proposed Community Facilities
 - Water Treatment
 - Casuarina Prison
 - Westport
 - Rail Yards
 - Planning Area 1 - Long Term Urban Investigation Area
 - Planning Area 2 - Freeway Interchange Planning Investigation Area
 - Planning Area 3 - Environmental Investigation Area
 - Planning Area 4 - Character Investigation Area
 - Train Station
 - Local Government Boundary
 - Primary Regional Road
 - Other Regional Road
 - Planning Control Area 156
 - Planning Control Area 157
 - BushForever09a



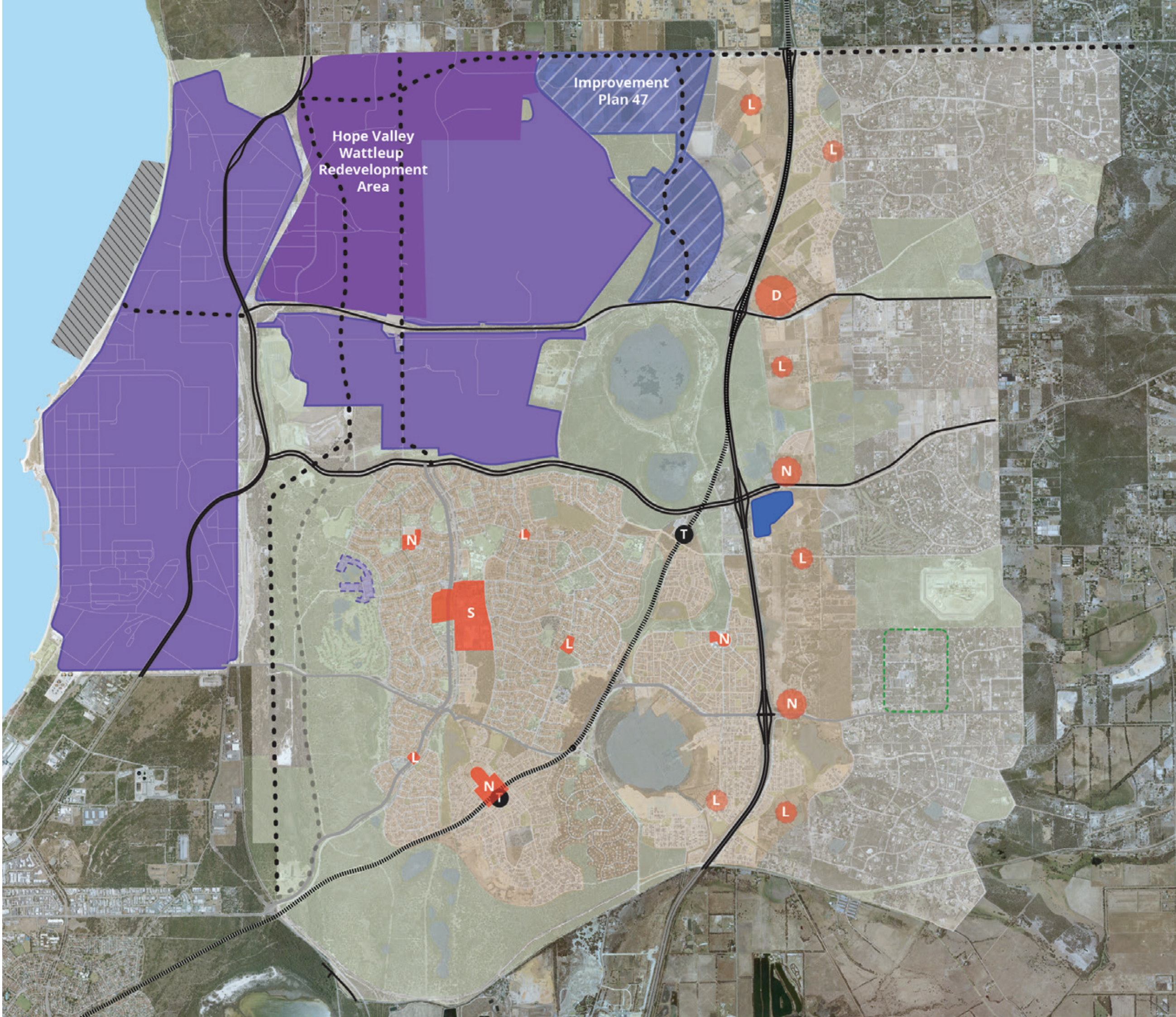
Appendices 2 Community Strategy Map

- KEY
- Existing Urban
 - Future Urban
 - Rural Living
 - Medina Light Industrial
 - Local Parks
 - Existing Activity Centres
 - Proposed Activity Centres
 - Secondary
 - District
 - Neighbourhood
 - Local
 - Recreation Facility
 - Community Facilities
 - Proposed Recreation Facility
 - Proposed Community Facilities
 - Park & Reserve Investigation
 - Schools
 - Proposed schools
 - Holding yard buffer
 - Westport
 - Rural to Urban Interface
 - Sub-regional framework investigation area
 - Industry/Urban Transition
 - Walkable Catchment Area
 - Character Investigation Area
 - Primary Roads
 - Secondary Roads
 - Commuter Rail
 - Train Station
 - Train Station Proposed



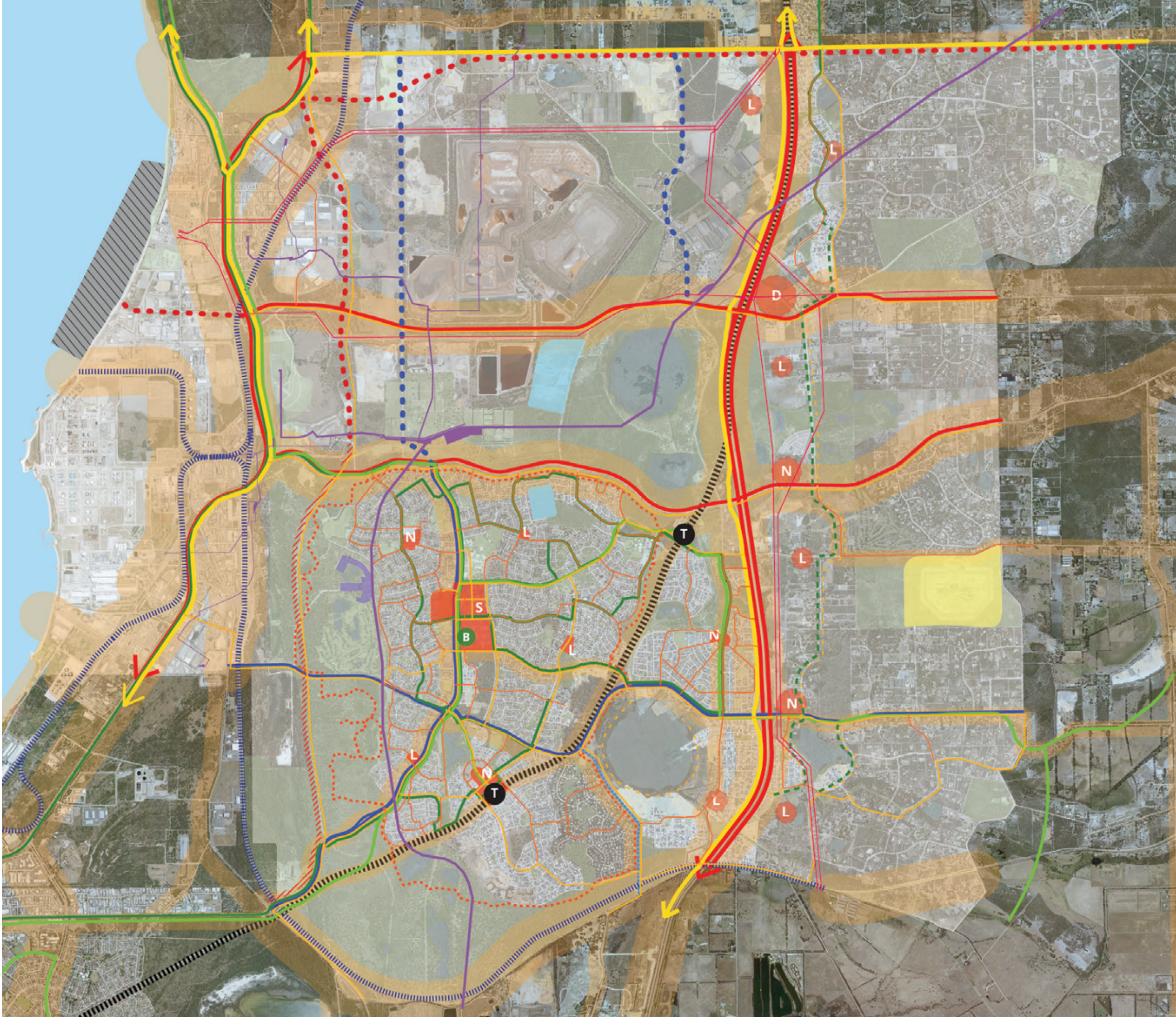
Appendices 3 Economy Strategy Map

- KEY
- Westport
 - Industry
 - Improvement Plan 47
 - Hope Valley Wattleup Redevelopment Area
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 - Proposed Train Station
 - Commuter Rail



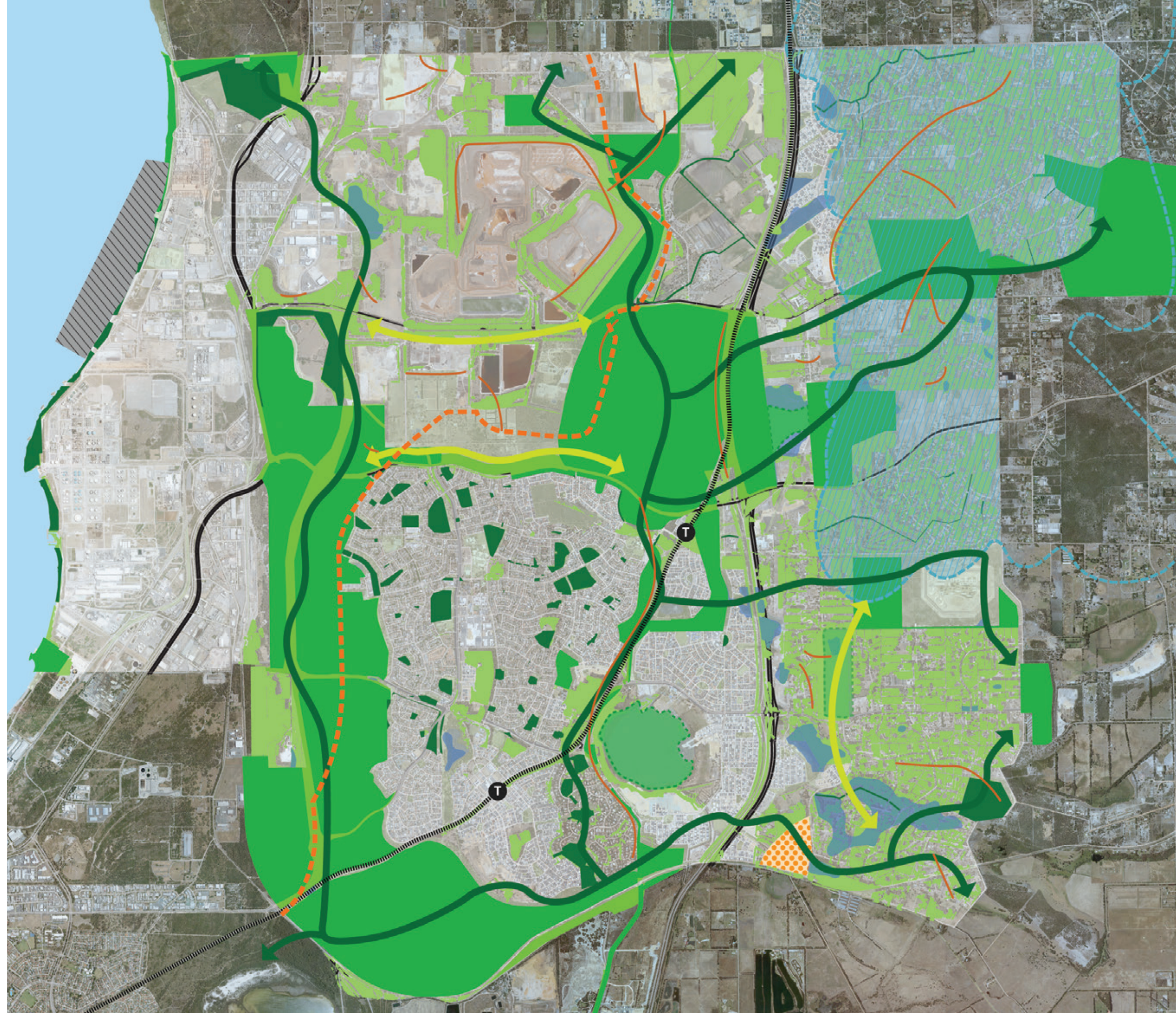
Appendices 4 Infrastructure Strategy Map

- KEY
- Proposed Primary Roads
 - Fremantle-Rockingham Primary Regional Road Investigation
 - Proposed Secondary Roads
 - Primary Roads
 - Secondary Roads
 - Kwinana Loop Trail
 - Primary Cycle Routes
 - Secondary Cycle Routes
 - Local Cycle Routes
 - Commuter Rail
 - Train Station
 - Bus Station
 - Local Bus Routes
 - Freight rail
 - Water Treatment
 - Casuarina Prison
 - Regional Bus Route
 - Westport
 - DBNGP Easements
 - High Voltage Overhead Transmission Lines
 - SPP 5.4 Quiet House Design



Appendices 5 Environment Strategy Map

- KEY
- ↔ Ecological Corridors
 - Proposed Ecological Corridors
 - Sub-regional Open Space
 - Park and Reserve Investigator
 - Regional Parks
 - Local Parks
 - Local Natural Areas
 - Wetland Conservation
 - Public Drinking Water Source
 - Holding yard buffer
 - Prominent Ridgeline
 - Westport
 - EPP 1999 Kwinana Atmospheric Areas
 - Primary Roads
 - Secondary Roads
 - Commuter Rail
 - Existing Train Station
 - Proposed Train Station





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