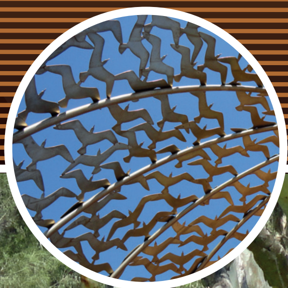
Mid West

Geraldton

Regional Land Supply Assessment

July 2017



GOVERNMENT OF WESTERN AUSTRALIA

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Gordon Stephenson House
140 William Street
Perth WA 6000

Locked Bag 2506
Perth WA 6001

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website: www.dplh.wa.gov.au
email: info@dplh.wa.gov.au

tel: 08 6551 8002
fax: 08 6551 9001
National Relay Service: 13 36 77

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1 Regional Land Supply Assessments and the Urban Development Program

Regional Land Supply Assessments are prepared as a component of the Western Australian Planning Commission's (WAPC) Urban Development Program (UDP), which tracks and models land supply as per the requirements outlined in the *Planning and Development Act 2005*. The role of the WAPC includes developing models to better understand land supply and development, to promote this understanding as part of the land use planning and development process and better align the provision of infrastructure.

Regional Land Supply Assessment reports assess land for future residential, industrial and commercial uses, providing context for the land use planning and infrastructure provision required to meet demand across selected regional centres. This report provides information on:

- demand drivers specific to Geraldton, including the major economic factors that influence employment and population growth, and therefore, the demand for land and housing
- zoned land supply for residential, commercial and industrial uses
- development constraints
- recent and future land development activity
- existing and required physical infrastructure.

The *Central Regions Land Capacity Analysis* (CRLCA) documents, prepared by the Department of Planning, Lands and Heritage, are broad overviews of land supply in settlements of the Mid West, Gascoyne and Goldfields-Esperance regions. The CRLCA documents aim to identify and analyse existing and future land supply and are available online at *www.planning.wa.gov.au/8268.aspx*. This Regional Land Supply Assessment report provides a more comprehensive analysis of land supply in the Geraldton urban area and takes into account recent lot activity and dwelling approvals, current residential densities, specific constraints to development and the potential timing of future land releases.

2 Executive summary

The Geraldton urban area covers approximately 270 square kilometres of Western Australia's Mid West region. It extends from Oakajee in the north to Cape Burney in the south. The majority of the Geraldton urban area falls within the boundaries of the City of Greater Geraldton, with the exception of Oakajee, Buller, White Peak and part of Waggrakine, which form part of the Shire of Chapman Valley. The Geraldton city centre is located 424 kilometres north of Perth and forms the commercial and administrative centre of the City of Greater Geraldton and the broader Mid West region. At the 2011 Census, the Geraldton Significant Urban Area (SUA) recorded a population of 35,479 persons, making it the second most populous urban area outside of the Perth and Peel regions and the most populous urban area north of Perth.

The City of Greater Geraldton was formed in 2011 as a result of an amalgamation between the City of Geraldton-Greenough and the Shire of Mullewa. The City of Geraldton-Greenough was previously formed in 2007 as a result of a prior amalgamation between the City of Geraldton and the Shire of Greenough. The City of Greater Geraldton is the most populous local government area in the Mid West region, with an estimated resident population (ERP) of 41,223 at June 2015. This accounted for 71 per cent of the total ERP for the Mid West region at June 2015.

The majority of residents living in the City of Greater Geraldton reside within the Geraldton urban area. Australian Bureau of Statistics (ABS) data indicates that the Geraldton SUA has experienced substantial population growth in recent years, with the ERP increasing by 19.8 per cent over the 2005-2015 period. This is considerably higher than the population growth rates recorded for the City of Greater Geraldton (17.7 per cent) and the Mid West region (13.9 per cent), but significantly lower than Western Australia (28.8 per cent) over the same period. The Geraldton SUA accounted for 93 per cent of the Mid West region's total population growth over the 2005-2015 period; its ERP at June 2015 was 39,825.

The Geraldton SUA is comprised of four Statistical Area Level 2 (SA2) areas: Geraldton, Geraldton-East, Geraldton-North and Geraldton-South. The majority of dwellings constructed since 2000 are located in the Geraldton-East and Geraldton-North SA2s, which have experienced the highest rates of population growth over the past decade.

Development activity in the Geraldton urban area has remained somewhat stable since 2012, after a low in the number of dwelling approvals in the September 2011 quarter. Residential developments at Glenfield, Sunset Beach, Deepdale and Wonthella accounted for a large share of dwelling approvals in 2014/15. Strong residential growth in the short term is expected to occur in Glenfield, Karloo, Moresby, Sunset Beach, Utakarra, Waggrakine and Wandina. For the medium to long term, growth is expected to occur in the Geraldton-East and Geraldton-North SA2s, where the bulk of undeveloped residential zoned land is located.

Residential zoned land in the Geraldton SA2 is predominantly zoned R30 and upwards under the local planning scheme. In the suburbs of Geraldton and Beachlands, the majority of residential land is zoned R40; however, dwellings within these areas are likely to be single, detached houses. As such, many residential lots within the Geraldton SA2 have been identified as being capable of yielding two lots or more through further subdivision. The *City of Greater Geraldton Local Profile and Context Report* (2015) state that further consideration to the delivery of incentives to encourage infill development should be considered.

Analysis on the adequacy of residential land supply in the Geraldton urban area is predicated upon an average household size of 2.6 persons per dwelling, and that existing rates of dwelling occupancy (at the 2011 Census) will be maintained. Analysis was carried out for the Geraldton SUA and the Geraldton, Geraldton-East, Geraldton-North and Geraldton-South SA2s.

Geraldton (SUA)

Based on the median (Band C) *WA Tomorrow* population forecasts, there are sufficient stocks of land identified to meet population growth into the long term, exceeding anticipated demand. A hypothetical temporal land supply of 84 years (90 years if the stock of vacant lots is included in the supply capacity) has been identified. This supply has the capacity to support a resident population of approximately 92,000.

Geraldton (SA2)

The Geraldton SA2 includes the suburbs of Beachlands, Beresford, Bluff Point, Geraldton, Spalding, Webberton and Wonthella. Based on the median (Band C) *WA Tomorrow* forecasts, there are sufficient stocks of land identified to meet anticipated population growth. A hypothetical temporal land supply of 23 years (33 years if the stock of vacant lots is included in the supply capacity) has been identified. This supply has the capacity to support a resident population of approximately 14,000.

Geraldton-East (SA2)

The Geraldton-East SA2 includes the suburbs of Deepdale, Karloo, Meru, Moonyoonooka, Narngulu, Rangeway, Rudds Gully, Utakarra and Woorree. Based on the median (Band C) *WA Tomorrow* forecasts, the stock of land identified for residential development greatly exceeds what is likely to be required for an extended period. A hypothetical temporal land supply of 100+ years (including the stock of vacant lots) has been identified. This supply has the capacity to support a resident population of approximately 22,000.

Geraldton-North (SA2)

The Geraldton-North SA2 includes the suburbs of Buller, Drummond Cove, Glenfield, Moresby, Sunset Beach, Waggrakine and White Peak. Based on the median (Band C) *WA Tomorrow* forecasts, the stock of land identified for residential development greatly exceeds what is likely to be required for an extended period. A hypothetical temporal land supply of 100+ years (including the stock of vacant lots) has been identified. This supply has the capacity to support a resident population of approximately 42,000.

Geraldton-South (SA2)

The Geraldton-South SA2 includes the suburbs of Cape Burney, Mahomets Flats, Mount Tarcoola and Wandina. Based on the median (Band C) *WA Tomorrow* forecasts, there are sufficient stocks of land identified to meet anticipated population growth. A hypothetical temporal land supply of 27 years (34 years if the stock of vacant lots is included in the supply capacity) has been identified. This supply has the capacity to support a resident population of approximately 13,000.

Urban growth summary

Urban expansion within the Geraldton urban area has largely taken advantage of its coastal location. Geraldton's urban form has evolved into a relatively north-south lineal shape, extending from Oakajee and Buller in the north to Cape Burney in the south. In recent years, urban development has also occurred in the eastern parts of the Geraldton urban area, extending towards the Moresby Range, Geraldton Airport and the Narngulu industrial area.

The *City of Greater Geraldton Local Planning Strategy* (2015) state that there is sufficient urban land to accommodate substantial population growth, even at relatively low densities. Despite the sizeable stocks of land available for development, the Local Planning Strategy advocates for a more efficient approach to future growth, based on more intensive development around a series of activity centres, generally located within a north-south corridor in proximity to the coastline. This pattern of future growth provides an opportunity for a more efficient public transport system and the potential to optimise use of existing service infrastructure. Encouraging more intensive residential development around activity centres is preferred, as it can achieve better utilisation of established and planned community services.

Short-term urban growth in the Geraldton urban area is expected to be realised by the continuation of development at Glenfield, Karloo, Moresby, Sunset Beach, Utakarra, Waggrakine and Wandina. The majority of urban growth in the medium to long term is expected to occur within the Geraldton-East and Geraldton-North SA2s, where the bulk of undeveloped residential zoned land is located; however, relatively little residential development is underway.

The City of Greater Geraldton holds the largest stock of vacant residential lots outside of the Perth and Peel regions, with a total of 1,847 residential lots identified as vacant. There are 1,979 vacant residential lots within the Geraldton urban area.

Rural living

Land zoned for rural living purposes covers approximately 3,800 hectares in the Geraldton urban area. All rural living land within the Geraldton urban area is located within the Geraldton-East and Geraldton-North SA2s.

Most of this stock is located within the Geraldton-North SA2, across the suburbs of Moresby, Waggrakine and White Peak. Rural living land within the Geraldton-East SA2 is located in Deepdale, Narngulu, Rudds Gully and Woorree.

Some opportunities exist for the development of additional land for rural living purposes. The *City of Greater Geraldton Local Planning Strategy* and the *Greater Geraldton Structure Plan* (2011) identifies a number of development investigation areas; some of which have been identified for future rural living. The Local Planning Strategy, however, does not support the creation of new rural living areas on higher versatility agricultural land, areas containing important basic raw materials, regionally significant landforms, environmentally sensitive areas or areas more suitable for future urban development.

Additionally, parts of rural living zoned land in Buller, Moresby and Waggrakine have been identified for future residential intensification by the *Greater Geraldton Structure Plan* and the Department of Planning, Lands and Heritage's *Central Regions Land Capacity Analysis* (2016). The *Greater Geraldton Structure Plan* states that the Waggrakine area is considered for future intensification due to its close proximity to existing urban areas and its ability to improve catchment areas in the northern corridor.

The *Greater Geraldton Structure Plan* also identifies substantial areas of current and future rural living land to the north east of the Geraldton urban area, within the Shire of Chapman Valley. These are located across the suburbs of Narra Tarra, Nanson, Yetna, Nabawa and Howatharra. While most of these areas have not been included in this report's development outlook and adequacy of supply analysis, they provide additional opportunities for further development in proximity to the Geraldton urban area.

Industrial

There are substantial stocks of land zoned for industrial purposes within the Geraldton urban area, covering approximately 4,450 hectares. The majority of this stock of industrial land is accounted for by the proposed Oakajee industrial estate, which covers approximately 2,332 hectares and a further 4,071 hectares of buffer area. Other areas containing industrial zoned land within the Geraldton urban area include Webberton, Wonthella, West End and Narngulu.

A small supply of undeveloped industrial land exists at the West End (Geraldton Port) area. The *City of Greater Geraldton Local Planning Strategy* states the importance of ensuring that this land is used for purposes directly associated with the operation of the port, and not for uses which can be accommodated in other industrial areas. The port's capacity has been significantly increased; however, there is insufficient land available at the port to accommodate for the anticipated ultimate needs of the iron ore industry. A deep-water port and industrial estate is planned at Oakajee to support the continued development of the Mid West.

The Narngulu industrial area also contains significant stocks of undeveloped industrial land, providing opportunities for further development of a range of light and general industry. Limited opportunities exist for the expansion of the Webberton/Wonthella industrial area, due to its proximity to residential areas.

Commercial

Commercial activity within the City of Greater Geraldton (and the wider Mid West region) is centred on the Geraldton city centre. Geraldton is the Mid West's regional hub for commercial and retail activity and administrative services. The Geraldton CBD is subject to a number of strategic planning initiatives, including the *Geraldton City Centre Vibrancy Strategy* (2012), the *City Centre Car Parking Management Plan* (2013) and the *City Centre Transport Planning & Car Parking Strategy* (2011). These strategies form part of an initiative to strengthen Geraldton's role as a regional hub for tourism, cultural and entertainment activities, while accommodating an increasing number of residents in higher density housing forms.

Infrastructure

Water

The Water Corporation operates the Geraldton Regional Water Supply (GWRS) Scheme, which covers approximately 1,000 square kilometres. It is the largest water supply scheme in the Mid West region. The historical average rate of service increase from 2005 has been two per cent. Service increase is expected to continue at this rate for the foreseeable future. The development of the Oakajee deep-water port and industrial estate will determine the projected water needs for industrial uses in the region.

The *Mid West Regional Water Supply Strategy* (2015) states that the expansion of the Allanooka and Mt Hill borefields, combined with water management, will secure water supplies for the next 30 years. The City of Greater Geraldton is also implementing pilot projects which examine the potential to harvest and redirect stormwater from urban catchments.

Wastewater

The Greater Geraldton Wastewater Scheme is serviced by four wastewater treatment plants (WWTP): Geraldton North, Geraldton No. 2, Narngulu and Greenough-on-Sea. There are 43 pump stations within the Greater Geraldton Wastewater Scheme, including numerous private pump stations. The four treatment plants consist of aerated and non-aerated pond systems.

An additional site is indicated in the *Greater Geraldton Structure Plan* for a wastewater treatment plant in the proposed Oakajee industrial area, north of the Buller River. A timeframe for the construction of the additional wastewater treatment plant is yet to be identified, and will require further investigation depending on the progress of the proposed Oakajee deep water port and industrial estate.

Energy

Western Power manages energy supply to the Geraldton urban area. Electricity in the Geraldton urban area is supplied via two single circuit 132 kilovolt transmission lines that extend from Three Springs to Geraldton. Western Power has recently completed the Mid West Energy Project (MWEP) Southern Section, which included a new 330 kilovolt terminal at Three Springs and a double circuit 330 kilovolt transmission structure from Pinjar to Three Springs. Western Power proposes to expand the MWEP as the need arises, with staged proposals to include a new 330 kilovolt terminal at Eneabba and the MWEP Northern Section. The MWEP Northern Section will increase the transfer capacity between Three Springs and Geraldton, and supports potential connection of new entrant generators and load north of Three Springs.

Transport

One of the most significant infrastructure provisions in the Geraldton urban area will be the proposed Oakajee Narngulu Infrastructure Corridor (ONIC), which is proposed to accommodate road, rail and utility services infrastructure. The ONIC will also provide a new outer freight bypass road around Geraldton, which will form part of the proposed future long-term State coastal route between Dongara and Northampton. The ONIC is a component of the broader Oakajee Mid West Development Project, which also includes establishing an integrated port and industrial estate at Oakajee. This forms part of a broader initiative to facilitate the development of the resources sector in the Mid West and to ensure the long term prosperity of the region.

3 Planning framework

3.1 State and regional planning

- The *State Planning Strategy*, released in 2014, provides an overarching strategic guide for land use planning across Western Australia.
- State Planning Policies are prepared and adopted by the WAPC under statutory procedures set out in Part 3 of the *Planning and Development Act 2005*. State Planning Policies are available online at www.dplh.wa.gov.au. Some of the most relevant State Planning Policies to land use planning and development in the Geraldton urban area include:
  - *State Planning Policy 2.5 Rural Planning*
  - *State Planning Policy 2.6 State Coastal Planning Policy*
  - *State Planning Policy 2.9 Water Resources*
  - *State Planning Policy 3 Urban Growth and Settlement*
  - *State Planning Policy 3.1 Residential Design Codes*
  - *State Planning Policy 3.6 Development Contributions for Infrastructure*
  - *State Planning Policy 3.7 Planning in Bushfire Prone Areas*
- The *Mid West Regional Planning and Infrastructure Framework* (2015) provides an overall strategic regional context for land use planning within the Mid West region, and identifies a number of priority initiatives required to facilitate comprehensive regional planning in order to guide sub-regional and local planning processes.
- The *Mid West Regional Blueprint* (2015), prepared by the Mid West Development Commission in collaboration with Regional Development Australia Mid West Gascoyne, sets out an aspirational vision for growth in the region.
- The *Greater Geraldton Structure Plan* (2011) modifies and consolidates several land use categories from the previous structure plan in 1999 and reflects the strategic intent of the relevant endorsed local planning strategies.
- The *Narngulu Industrial Area Strategic Land Use Directions* (2010) provides broad land use planning directions in the Narngulu industrial area, located approximately five kilometres south east of the Geraldton city centre.
- The *Geraldton Regional Flora and Vegetation Survey* (2010) provide a regional context for land use planning and the environmental impact assessment of proposals affecting native vegetation in the Geraldton region.
- The *Moresby Range Management Strategy* (2009) guides future development and land management activities in the Moresby Range.
- The *Mid West Infrastructure Analysis* (2008) provides government with recommendations to address the critical infrastructure issues facing the Mid West region, as well as issues anticipated by the industry and local communities.
- The *Geraldton Regional Centre Strategy* (2005) sets out the strategic plan that outlines the 30-year vision to secure the viability and attraction of the Geraldton regional centre as the primary commercial, community and tourist focus for the Mid West region.
- The *Geraldton Region Plan* (1999) provides the policy framework and strategic direction of development and land use planning for the City of Greater Geraldton (previously City of Geraldton at the time of publication).

3.2 Local planning

City of Greater Geraldton

- The *City of Greater Geraldton Local Planning Scheme No. 1* sets out the statutory framework for planning and development in the City of Greater Geraldton.
- The local planning scheme is supported by various local planning policies, which are available through the City of Greater Geraldton website.
- The *City of Greater Geraldton Local Planning Strategy* (2015) identifies the strategic objectives for urban growth in the City of Greater Geraldton.

- The *City of Greater Geraldton Public Open Space Strategy* (2015) provides guidance regarding the design, construction, maintenance and provision of public open spaces in the City of Greater Geraldton.
- The *City of Greater Geraldton Commercial Activity Centres Strategy* (2013) provides a strategic framework for managing future growth of commercial activity in the City of Greater Geraldton.
- The *City of Greater Geraldton Local Biodiversity Strategy* (2013) defines the most practical and effective actions to achieve biodiversity goals, derived from rigorous analysis of the ecological data, social values, implementation mechanisms and planning constraints.
- The *City of Greater Geraldton Residential Development Strategy* (2013) provides a logical, coherent, highly liveable and sustainable model for residential development in the City of Greater Geraldton to meet the needs of all residents and build strong communities.
- The *South Greenough to Cape Burney Coastal Planning Strategy* (2013) provides strategic guidance for the coastline between the coastal area west of Brand Highway and Company Road, extending from the Greenough River mouth at Cape Burney to the southern boundary of the City of Greater Geraldton.
- The *City of Greater Geraldton Strategic Community Plan 2013-2023* represents the community aspirations of the City of Greater Geraldton and articulates the vision of where the City would like to position themselves in 2023.
- The *Greater Geraldton Water Planning and Management Strategy* (updated by the City of Greater Geraldton in January 2014) provides a framework for the management and use of water resources within the City of Greater Geraldton, particularly in areas of land use change and development.
- The *City Centre Transport Planning and Car Parking Strategy* (2011) guides the decision making for car parking spaces and facilities in the Geraldton city centre, in order to develop an integrated public and private car parking network.
- The *Geraldton-Greenough Coastal Strategy and Foreshore Management Plan* (2005) guides decision making in relation to the management, protection and planning for foreshore and coastal areas in the City of Greater Geraldton.
- The *Geraldton City Centre Vibrancy Strategy* (2012) focuses on increasing vibrancy of Geraldton's city centre and proposes a number of strategies to achieve this.

Shire of Chapman Valley

- The *Shire of Chapman Valley Local Planning Scheme No. 2* sets out the statutory framework for planning and development in the Shire of Chapman Valley.
- The local planning scheme is supported by various local planning policies, which are available through the Shire of Chapman Valley website.
- The *Shire of Chapman Valley Local Planning Strategy* (2008) serves to address the future planning needs and direction for the whole of the Shire over the next 10-15 years.
- The *Shire of Chapman Valley Coastal Management Strategy and Action Plan* (2016) addresses the section of coastline from Drummond Cove at the southern boundary of the Shire to Woolawar Gully within the Shire of Northampton.

4 Population

4.1 Population profile

The Geraldton Significant Urban Area (SUA) (also referred to as the Geraldton urban area in this document) covers approximately 270 square kilometres of Western Australia's Mid West region.[1] The majority of the Geraldton SUA is located within the boundaries of the City of Greater Geraldton, with a small part of the SUA located within the boundaries of the Shire of Chapman Valley. The Geraldton city centre is located 424 kilometres north of Perth and services the Geraldton urban area, as well as the wider Mid West region.[2]

At June 2015, the Geraldton SUA had an estimated resident population (ERP) of 39,825 persons. This figure represents an average annual population increase of 659 persons from the ERP at June 2005, as well as an average annual growth rate of two per cent over the same period. The Geraldton SUA is the second largest urban area outside of the Perth and Peel regions, and the largest urban area north of Perth.

This document refers to population and other indicator data relating to Geraldton. Depending on the context and the source of data, different geographical extents are discussed. A list of the various geographic extents used to describe and compare the urban fabric of Geraldton is shown in Table 1.

Table 1: Local and geographical extents

Geography	Description	Population as at the 2011 Census	Area km^2
Mid West region	The Mid West region is comprised of 17 LGAs (including the City of Greater Geraldton).	53,677**	478,000
Local Government Area (LGA)	The City of Greater Geraldton is the most populous local government area in the Mid West region.	37,161***	9,889
Significant Urban Area (SUA)*	SUAs represent concentrations of urban development with populations of 10,000 or more.	35,749 (Geraldton SUA)	270 (Geraldton SUA)
Urban Centres and Localities (UCL)*	An Urban Centre is generally defined as a population cluster of 1,000 people or more. A 'bounded locality' is generally defined as a population cluster of between 200 and 999 people. It is important to note that the geographic extent of a UCL may change over time, as the urban build out expands.	31,349 (Geraldton UCL)	64 (Geraldton UCL)
Statistical Area Level 2 (SA2)*	The Geraldton SUA is comprised of four SA2s: Geraldton, Geraldton – East, Geraldton – North and Geraldton – South.	–	–
Statistical Area Level 1 (SA1)*	SA1s are the smallest geographic unit used for the processing and release of Census data. There are 89 SA1s in the Geraldton SUA.	–	–

Source: Australian Bureau of Statistics (2016) *Australian Statistical Geography Standard (ASGS). Catalogue No. 1270.0.55.001*

* Denotes ABS geographies.

** Denotes the combined population for all local government areas within the Mid West region at the 2011 Census.

*** Denotes the combined population for the City of Geraldton-Greenough and the Shire of Mullewa at the 2011 Census.

[1] Australian Bureau of Statistics (2011) *Census of Population and Housing: Basic Community Profile. Catalogue No. 2001.0*

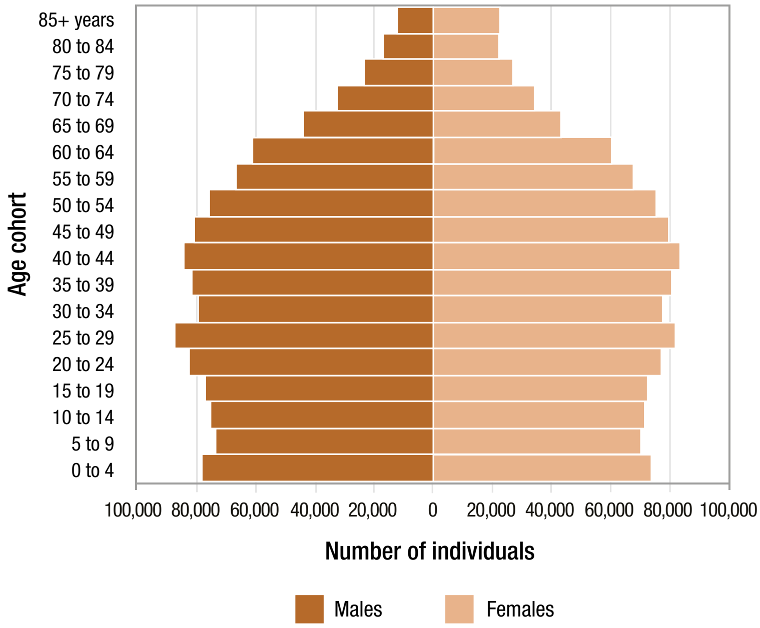
[2] City of Greater Geraldton (2015) *City of Greater Geraldton Local Planning Strategy*

Much of the population data discussed in this report refers to the Australian Bureau of Statistics ERP. The ERP is based on the Census of Population and Housing's usual residence counts, which is compiled for the 30 June of each Census year and updated between each Census reporting period. These intercensal estimates are updated each year, using administrative data from a variety of sources and are rebased each time a Census is conducted. Given the length of time between the 2011 Census and the most recent ERP update, regard should be given to the potential for revision following the 2016 Census.

At the 2011 Census, the median age for the Geraldton SUA population was 36 years, which is in line with the median age for Western Australia (36 years), but marginally lower than the national median age (37 years).[3] There is a large proportion of persons aged 19 years and under within the Geraldton SUA (30 per cent) when compared to Western Australia (26 per cent). Comparatively, there is a significant underrepresentation of persons aged 20-34 years (17.9 per cent) in the Geraldton SUA, compared to Western Australia (21.6 per cent) (Figures 1 and 2). This is characteristic of many regional areas in Western Australia, and can be attributed to young adults leaving the area after finishing school.

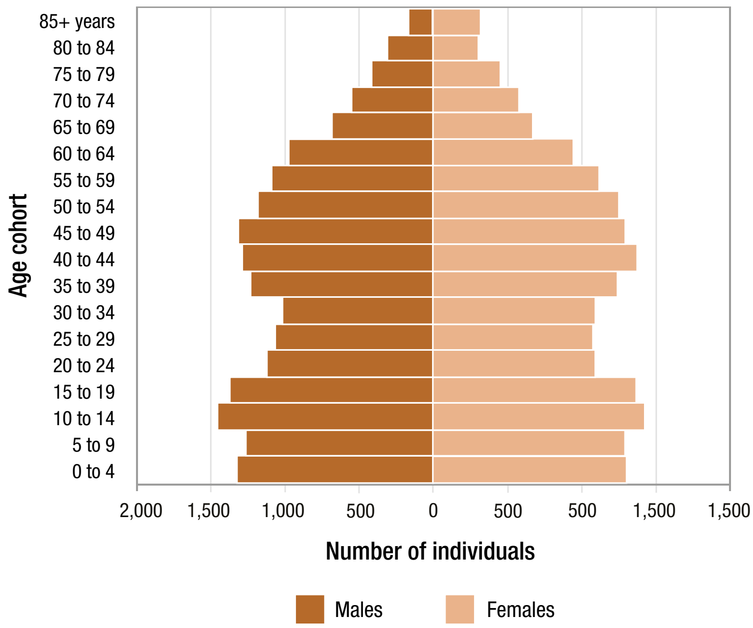
[3] Australian Bureau of Statistics (2011) *Census of Population and Housing: QuickStats*

Figure 1: Census 2011 Western Australia population profile

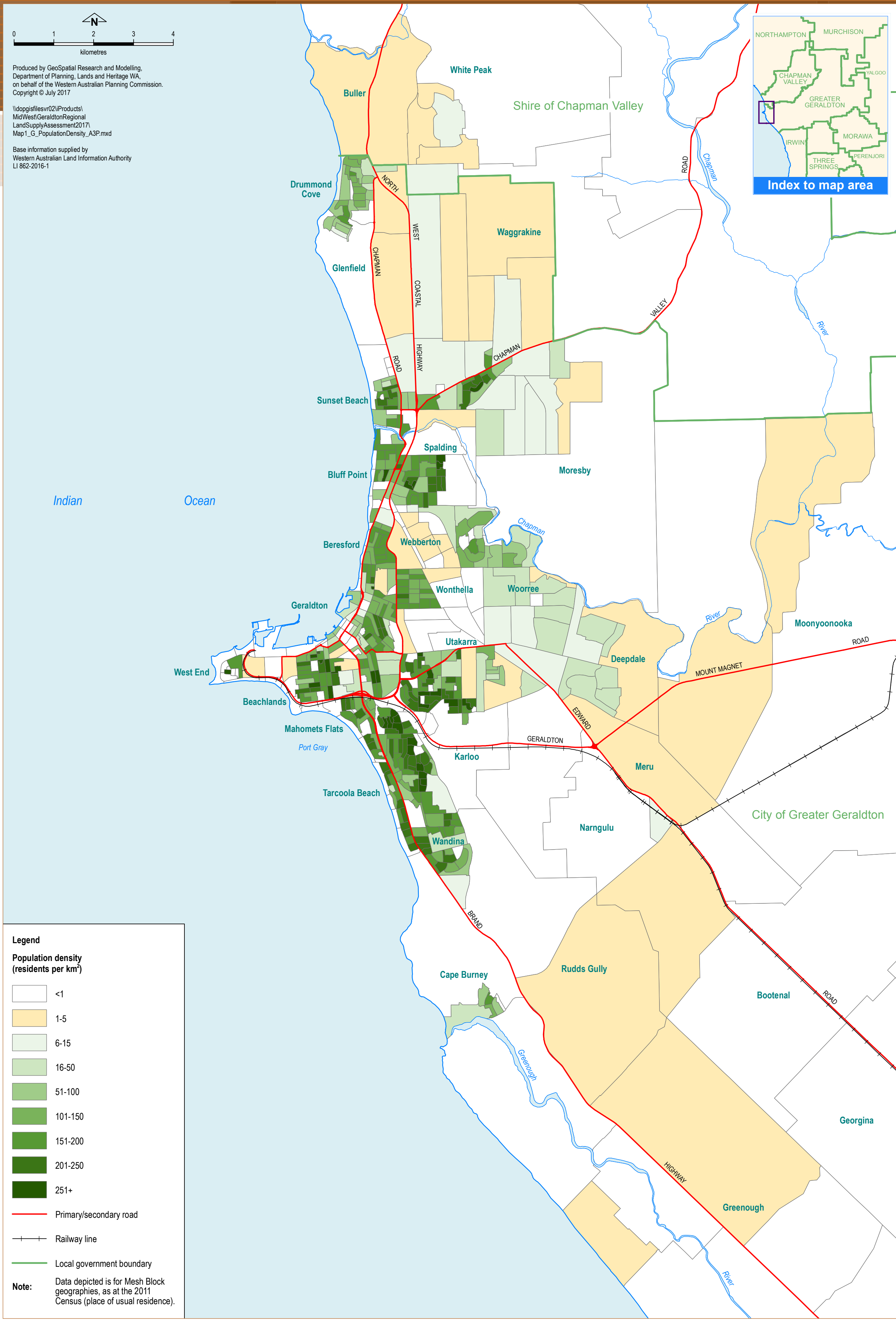


Source: Australian Bureau of Statistics (2011) *Census of Population and Housing: Basic Community Profile. Catalogue No. 2001.0*

Figure 2: Census 2011 Geraldton (SUA) population profile



Source: Australian Bureau of Statistics (2011) *Census of Population and Housing: Basic Community Profile. Catalogue No. 2001.0*



Map 1: Population density – 2011 Census (Mesh Block)

4.2 Population growth

Figure 3 shows the growth in the Geraldton SUA's ERP over the decade to June 2015. During this period, the Geraldton SUA experienced an average annual population growth rate of two per cent (an average annual increase of 659 residents). This is considerably higher than the average annual population growth rates recorded for the Mid West region (1.39 per cent), but significantly lower than Western Australia (2.88 per cent) over the same period. The Geraldton SUA accounted for 93 per cent of the Mid West region's total population growth over the 2005-2015 period.

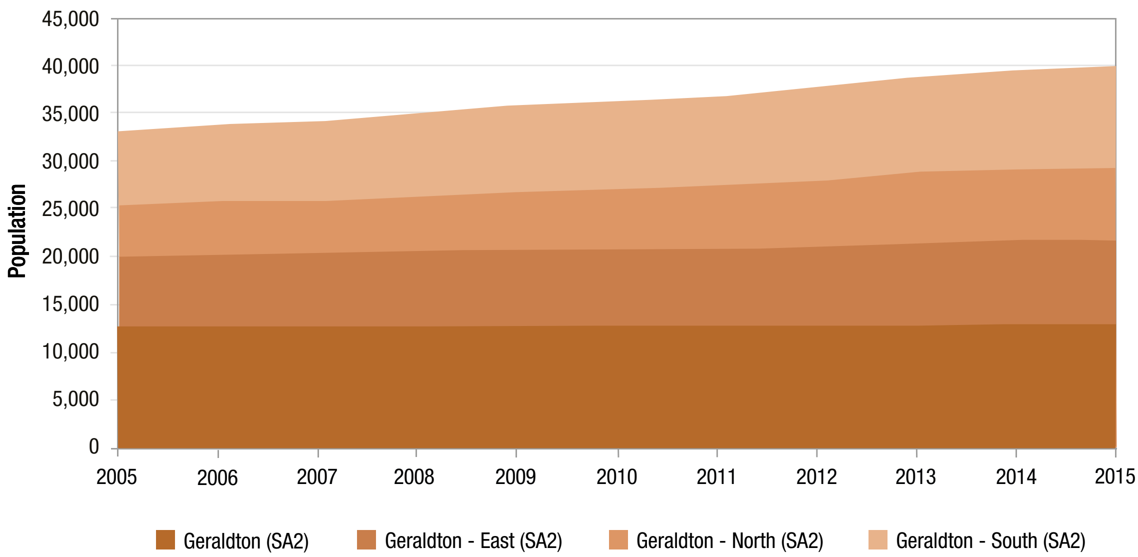
At June 2015, the Geraldton SA2 was the most populous SA2 within the Geraldton SUA, with an ERP of 12,992 persons. Despite being the most populous SA2, the Geraldton SA2 has experienced the lowest rate of population growth over the decade to June 2015, with an average annual growth rate of just 0.1 per cent. The Geraldton-North SA2 is the least populous SA2 within the Geraldton SUA with an ERP of 7,742 at June 2015, but has experienced the highest rate of growth over the same period, recording an average annual growth rate of 4.2 per cent. The Geraldton-East and Geraldton-South SA2s have also experienced relatively high population growth rates, with average annual growth rates of 2.1 per cent and 3.4 per cent respectively (Figure 5).

4.3 Population projections

WA Tomorrow forecasts, released in 2015, are prepared using 10,000 forecast permutations that emulate the variability in population change shown in historical data. Each permutation shows possible growth or decline in population, based on five variables (birth rate, death rate, net interstate migration, net intrastate migration and net overseas migration) that occur to varying degrees in each simulation.

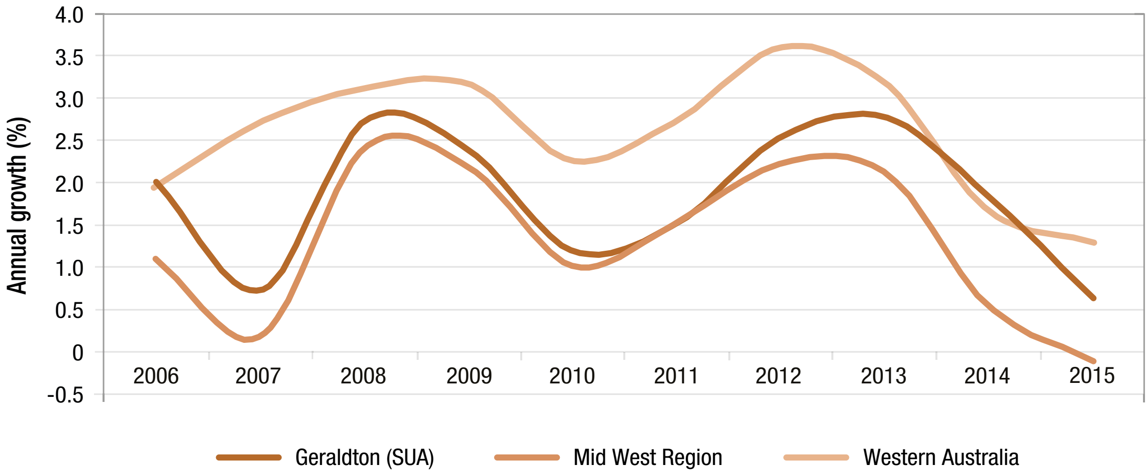
The range of *WA Tomorrow* forecasts are grouped into five 'bands', based on the projected rate of population change produced by each simulation. Each band includes one fifth of the permutations, with Band A representing the lowest quintile of projected population growth; Band C the median; and Band E

Figure 3: Estimated resident population – Geraldton (SUA)



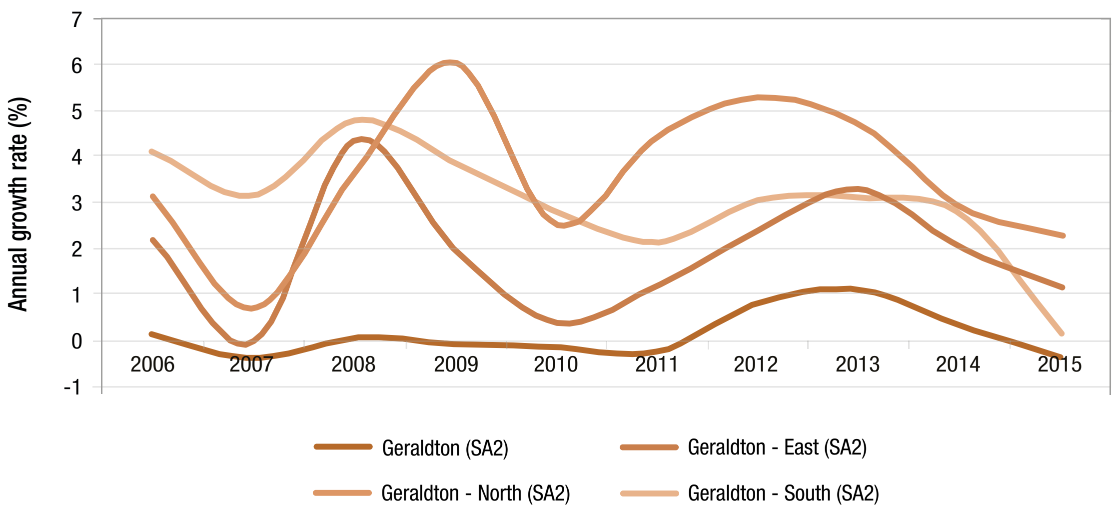
Source: Australian Bureau of Statistics (2016) *Regional Population Growth, Australia. Catalogue No. 3218.0*

Figure 4: Estimated resident population growth by year



Source: Australian Bureau of Statistics (2016) *Regional Population Growth, Australia. Catalogue No. 3218.0)*

Figure 5: Estimated resident population growth by year – SA2 extent



Source:Australian Bureau of Statistics (2016) *Regional Population Growth, Australia. Catalogue No. 3218.0* the highest. The *WA Tomorrow* documents publish the median value of each quintile to give five forecasts for each SA2 and local government area in Western Australia.

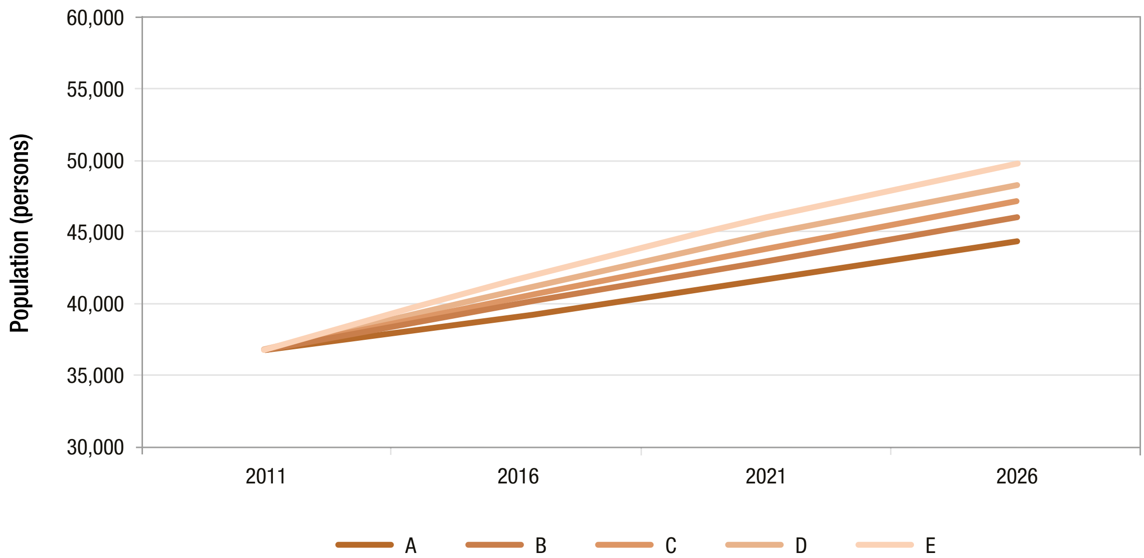
A more detailed description of the methods and outputs of the *WA Tomorrow* research is available online at www.planning.wa.gov.au/publications/6194.asp.

Figure 6 shows the *WA Tomorrow* forecast for the Geraldton SUA for Bands A to E. As *WA Tomorrow* forecasts are not produced for the SUA geographic extent, forecasts for the Geraldton, Geraldton-East, Geraldton-North and Geraldton-South SA2s have been combined to estimate the forecast for the Geraldton SUA.

The resulting projected population for the Geraldton SUA under the median (Band C) forecast is 47,110 persons in 2026. Achieving this population from a 2011 baseline will require an average annual population increase of 682 persons, or an average annual population growth rate of 1.8 per cent.

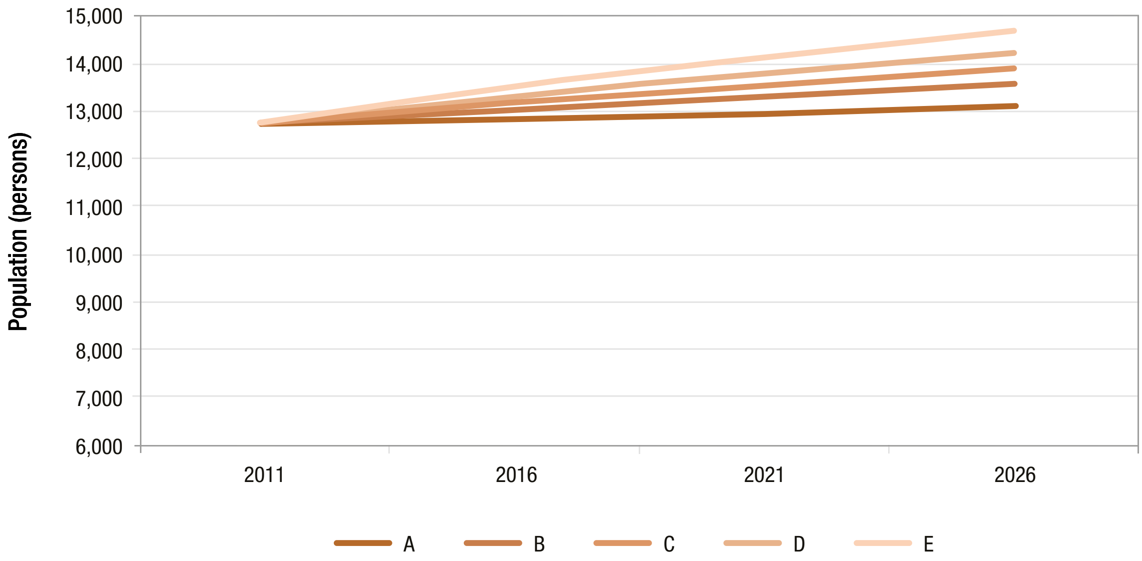
The *WA Tomorrow* forecasts for each of the four SA2 geographies for the Geraldton SUA are shown in Figures 7 to 10. Under the median (Band C) *WA Tomorrow* forecast, the Geraldton-North SA2 is forecasted to experience the highest rate of population growth of the four SA2s, with a projected average annual growth rate of 4.3 per cent from 2011 to 2026. This represents an average annual increase of 286 residents. Significant population growth is also forecasted for the Geraldton-East and Geraldton-South SA2s, with projected average annual growth rates of 1.7 per cent and 1.9 per cent (average annual increases of 137 and 183 residents) respectively. Band C growth for the Geraldton SA2 shows a projected average annual growth rate of 0.6 per cent or an average annual increase of 76 residents from 2011 to 2026.

Figure 6: Forecast population growth – Geraldton (SUA)



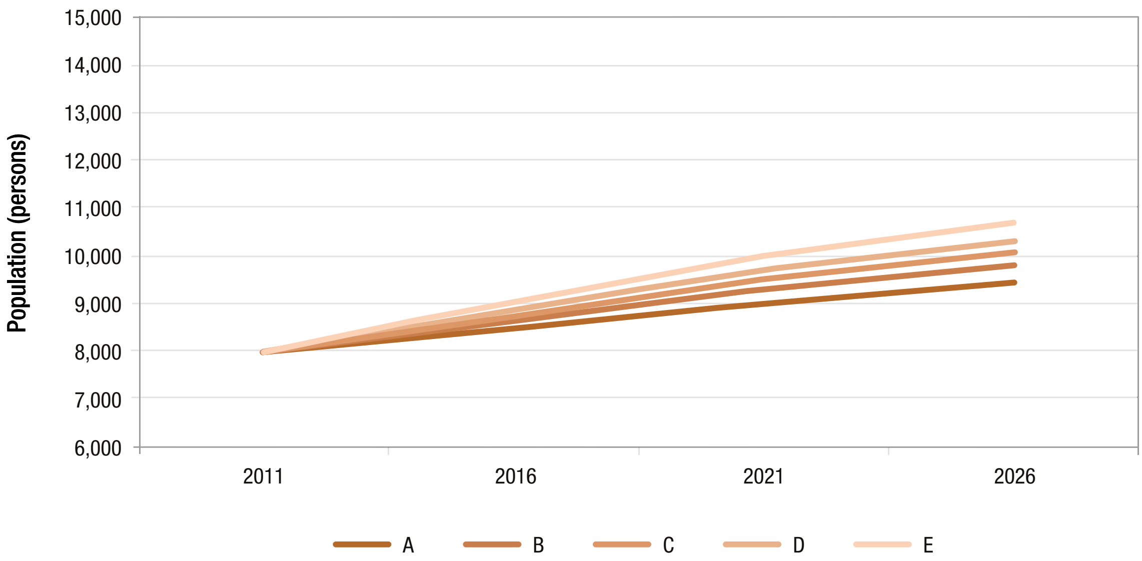
Source: Western Australian Planning Commission (2015) *Western Australia Tomorrow Population Report No. 10*

Figure 7: Forecast population growth – Geraldton (SA2)



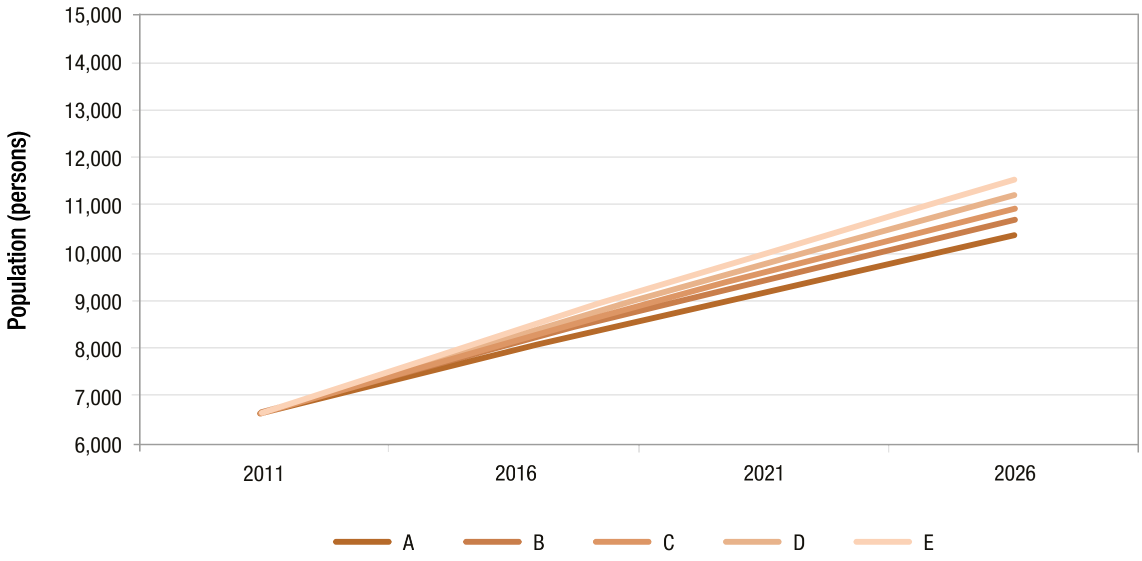
Source: Western Australian Planning Commission (2015) *Western Australia Tomorrow Population Report No. 10*

Figure 8: Forecast population growth – Geraldton-East SA2



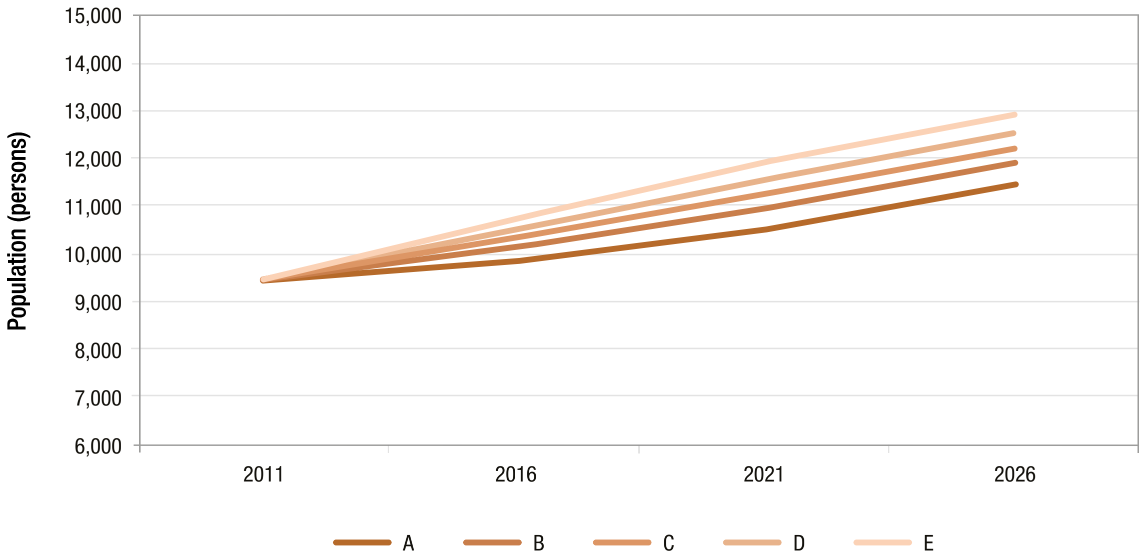
Source: Western Australian Planning Commission (2015) *Western Australia Tomorrow Population Report No. 10*

Figure 9: Forecast population growth – Geraldton-North SA2



Source: Western Australian Planning Commission (2015) *Western Australia Tomorrow Population Report No. 10*

Figure 10: Forecast population growth – Geraldton-South (SA2)



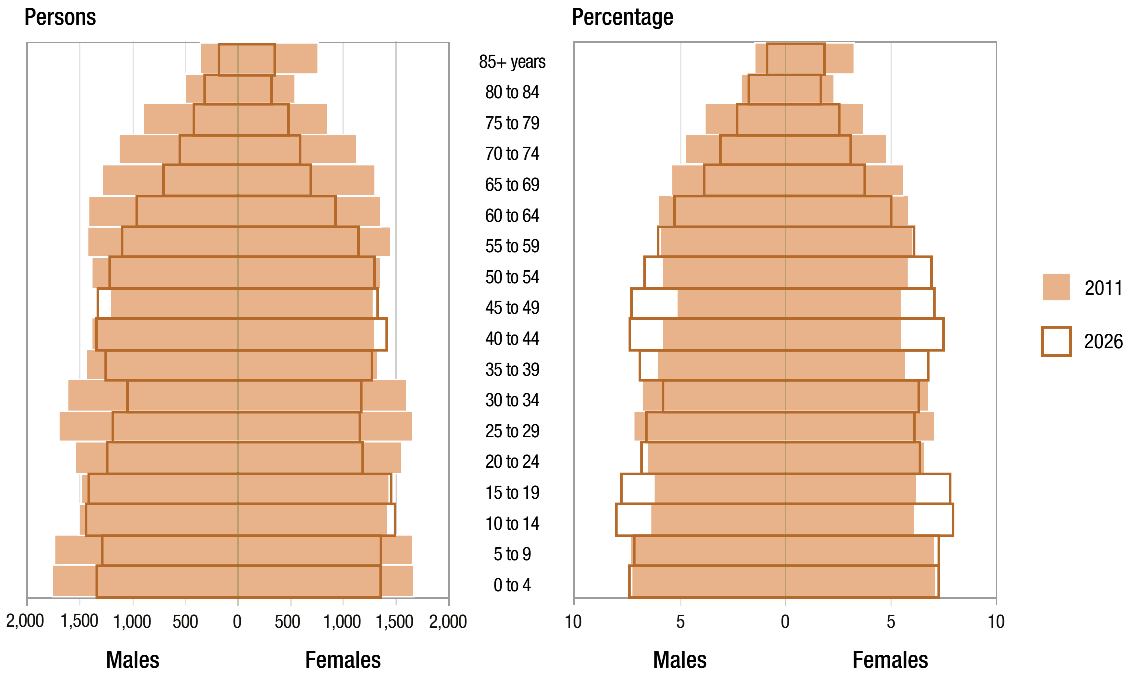
Source: Western Australian Planning Commission (2015) *Western Australia Tomorrow Population Report No. 10*

The demographic profile of the Geraldton SUA is anticipated to change significantly by 2026. Figure 11 shows the population profile of the Geraldton SUA at the 2011 Census and the *WA Tomorrow* median Band C forecast for the Geraldton SUA population at 2026. The age ranges that show the greatest percentage change under this growth scenario are persons aged 10 to 19 years, 40 to 49 years and 65 to 74 years.

For the Mid West region, the *WA Tomorrow* median (Band C) forecast projects a population of 67,130 at 2026. This would require an average annual population growth rate of 1.4 per cent per annum from 2011 to 2026, which is in line with the rate of growth over the past decade.

The *Mid West Regional Blueprint* aspires to a significantly higher rate of population growth, envisaging a population of 85,000 by 2025 and 190,000 by 2050. This would represent an average annual growth rate of 6.3 per cent to 2050. Achieving this population outcome is contingent on the success of proposed local and regional economic development initiatives, including the delivery of proposed strategic infrastructure and further economic diversification.[4]

Figure 11: Geraldton (SUA) demographic profile 2011 and 2026 forecast (Band C)



Source: Western Australian Planning Commission (2015) *Western Australia Tomorrow Population Report No. 10*

[4] Mid West Development Commission (2015) *Mid West Regional Blueprint*

4.4 Additional information

- Western Australian Planning Commission (2015) *Western Australia Tomorrow, Population Report No. 10, Medium-term Forecasts for Western Australia 2014-2026 and Sub-regions 2016-2026*. Available online at: www.planning.wa.gov.au/publications/6194.asp.
- Australian Bureau of Statistics (2011) *Census of Population and Housing: QuickStats*. Available online at: www.abs.gov.au.
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- Australian Bureau of Statistics (2016) *Regional Population Growth, Australia. Catalogue No. 3218.0*. Available online at: www.abs.gov.au.
- Mid West Development Commission (2015) *Mid West Regional Blueprint*. Available online at: www.mwdc.wa.gov.au.

5 Economy and employment

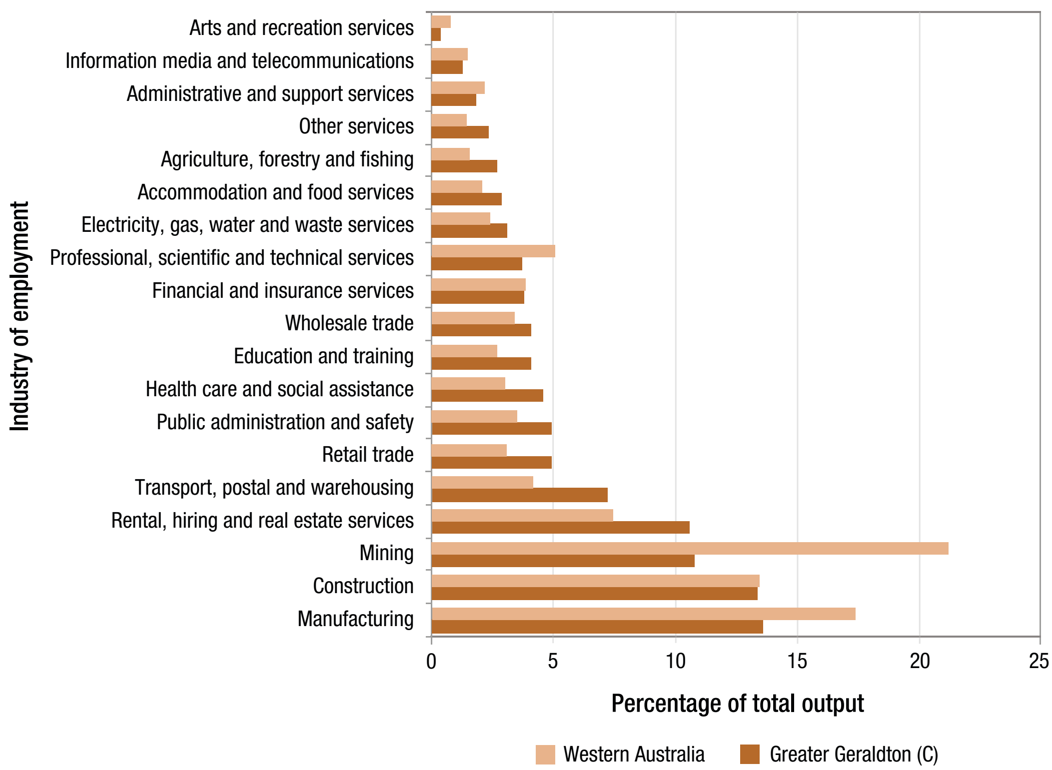
Economic conditions and employment opportunities are fundamental drivers of population growth and demand for land and housing. The City of Greater Geraldton's Gross Regional Product (GRP) is estimated to be at $2.9 billion, accounting for 57 per cent of the Mid West region's total GRP.[5] The Mid West region's GRP for the same period is estimated at $5.1 billion.

This section describes key sectors of Geraldton's economy and provides a brief employment profile of the community.

5.1 Major industries and economic outlook

The City of Greater Geraldton has a diverse economic base, with a number of key industries making significant contributions to the City's total industries output. Major contributors include the manufacturing, construction and mining sectors (Figure 12). The City's economy is also characterised by the strong performances of the agricultural, fisheries and tourism industries.

Figure 12: Percentage of total output by industry – City of Greater Geraldton



Source: City of Greater Geraldton (2016) *REMPLAN Economic Profile. Base data source: REMPLAN data incorporating Australian Bureau of Statistics' June 2015 Gross State Product, 2012/2013 National Input Output Tables and 2011 Census Place of Work Employment Data.* (Access date: August 2016).

[5] City of Greater Geraldton (2016) *REMPLAN Economic Profile. Base data source: REMPLAN data incorporating Australian Bureau of Statistics' June 2015 Gross State Product, 2012/2013 National Input Output Tables and 2011 Census Place of Work Employment Data*. (Access date: August 2016).

The manufacturing and construction sectors are significant contributors to the City of Greater Geraldton's total GRP, accounting for 13.6 per cent and 13.3 per cent respectively of the City's total industries output.

Increasing employment opportunities and expanding local industry will involve measures such as seizing significant shares of export markets for the agricultural, fishing and mining industries in response to a growing global demand. Other measures include capitalising on existing mineral resources, and diversifying the tourism industry in terms of accommodation and activity options.[6] Selected key industries in Geraldton are described in the following sections.

5.1.1 Agriculture

Latest figures for the City of Greater Geraldton's output by industry indicate that the agriculture, forestry and fishing sector generated an output of $147 million. This accounted for 2.7 per cent of the City's total industries output. The City's agricultural, forestry and fishing sector output accounted for 26.5 per cent of the Mid West region's total output for the same sector.[7]

The Geraldton urban area (and the wider City of Greater Geraldton area) forms part of the Northern Agricultural Natural Resource Management (NRM) region. The Northern Agricultural NRM region covers seven million hectares of land and extends from Gingin in the south to Kalbarri in the north, and out into the Wheatbelt region.[8] Both intensive and broadacre agricultural activities are undertaken in the Northern Agricultural NRM region; however, the area is dominated by broadacre agriculture activities,[9] as shown in Figure 13.

For 2014/15, broadacre cereal crops recorded a gross value of $852 million, accounting for 55 per cent of the total value of agricultural commodities produced within the Northern Agricultural NRM region (Figure 13). Other broadacre crops contributed $264 million (17 per cent) to the total value of agricultural commodities produced. Livestock slaughtering contributed $196 million (13 per cent) to the total value of agricultural commodities produced.

Prospects for the expansion of the agricultural industry within Geraldton and the wider Mid West region lie in the further development of intensive horticulture production. Horticulture currently generates an annual production value of $25 million within the Mid West, with 80 per cent contributed by vegetable production and the remaining 20 per cent from fruit.[10] Increasing average temperatures and decreasing rainfall presents a challenge for intensive horticulture; however, the *Mid West Regional Blueprint* has proposed for the development of a community/regional water infrastructure system to improve water supplies, with the cost to be shared between users.

5.1.2 Fisheries

For 2013/14, the Mid West region's fishing industry recorded a total production value of $161 million. This value accounted for 39 per cent of Western Australia's total fisheries production value at that time, making the Mid West region the largest contributor to the fishery sector's total state production value. The industry is largely dominated by rock lobster fisheries, followed by finfish and mollusc production. Other activities include fishing for prawns, scallops, abalone and pearling.[11]

Aquaculture is an emerging sector within the Mid West, and is expected to play a significant role towards the expansion of the fisheries sector. Located 65 kilometres west of Geraldton are the Abrolhos Islands, which have an established aquaculture sector as well as a number of commercial fisheries.[12] The Department of Primary Industries and Regional Development has proposed for the establishment of the Mid West aquaculture zone, which is inclusive of the Abrolhos Islands.[13] The proposed Mid West aquaculture zone covers 3,000 hectares, with the approved aquaculture method likely to be floating sea cages.

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6 Mid West Development Commission (2015) *Mid West Regional Blueprint.*

7 City of Greater Geraldton (2016) *Economic Profile – Output by Industry.* Available on *www.economicprofile.com.au/geraldton/economy*. (Access date: August 2016.

8 Natural Resource Management Program (2016) *Regional Groups. http://www.nrm.wa.gov.au.*

9 Mid West Development Commission (2015) *Mid West Regional Blueprint.*

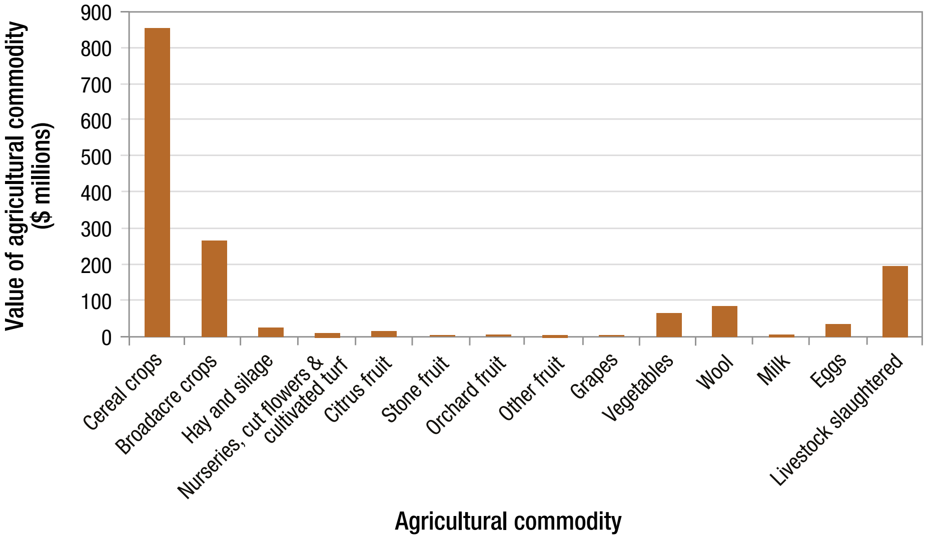
10 Mid West Development Commission (2015) *Mid West Regional Blueprint.*

11 Mid West Development Commission (2015) *Mid West Regional Blueprint.*

12 Mid West Development Commission (2015) *Mid West Regional Blueprint.*

13 Department of Primary Industries and Regional Development (2015) *Mid West aquaculture zone.*

Figure 13: Value of agricultural commodities produced 2014/15 – Northern Agricultural Natural Resource Management region



Source: Australian Bureau of Statistics (2016) *Value of Agricultural Commodities Produced, Australia, 2014-15. Catalogue No. 7503.0*

As global demand for seafood products continue to increase, Geraldton and the Mid West region are in a strategic position to take advantage of this global trend. The *Mid West Regional Blueprint* aspires for the Mid West region to be a major area for aquaculture, and seeks to promote the region's potential as an attractive investment opportunity for large-scale aquaculture projects.[14]

5.1.3 Mining

The mining industry has long been an important part of Geraldton's economy, functioning as a service centre and point of export for mines across the wider Mid West region. The City of Greater Geraldton estimates an output value of $595 million for the mining sector, accounting for 10.8 per cent of the City's total industries output. The City's mining exports were valued at $525 million, accounting for 31.9 per cent of the City's total export value across all sectors. At the 2011 Census, 862 residents living in the Geraldton SUA were recorded as being employed within the mining sector.

The wider Mid West region is considered to be one of Australia's most diverse mining provinces, with a variety of minerals extracted within the region. The largest categories of minerals produced within the Mid West are: iron ore; copper, lead and zinc; gold; and mineral sands.[15]

The majority of minerals extracted from the Mid West region are produced for export to other countries. Ninety- five per cent of the Mid West's iron ore is exported to China, with the remainder exported to South Korea, Taiwan and Japan. The majority of mining and mineral commodities are exported via the Geraldton Port.[16] Figure 14 displays the amount of copper and zinc, mineral sands and iron ore exported via the Geraldton Port. While subject to monthly variations, the amount of iron ore exported through the Geraldton Port has seen an overall slight decrease since 2013, whereas copper and zinc and mineral sands have experienced slight increases in export amounts.

[14] Mid West Development Commission (2015) *Mid West Regional Blueprint.*

[15] Mid West Development Commission (2015) *Mid West Regional Blueprint.*

[16] Mid West Development Commission (2015) *Mid West Regional Blueprint.*

Other commodities with significant regional potential include natural gas, which experienced a 166 per cent growth rate from 2009 to 2014. The proposed Oakajee industrial estate located at the northern periphery of the Geraldton urban area will also allow for greater capacities of mineral production, as well as potentially attracting overseas investments in Mid West resource projects by providing a gateway to the region.[17]

5.1.4 Tourism

Tourism Research Australia (TRA) estimates that over the four years to 2014, an average of 335,000 visitors per annum visited the City of Greater Geraldton, staying for a collective total of 893,000 nights. Domestic visitors accounted for 92 per cent of visitors to the area, staying for an average length of three nights. International visitors accounted for eight per cent of visitors to the area, staying for an average length of 11 nights.[18]

The City of Greater Geraldton estimates the output for the accommodation and food services sector at $160 million, accounting for 2.9 per cent of the City's total industries output. At the 2011 Census, the accommodation and food services sector employed 1,019 residents living in the Geraldton SUA, accounting for 6.2 per cent of the Geraldton SUA total resident workforce. The majority of workers within this sector (53 per cent) were employed on a part-time basis.[19]

As depicted in Figure 15, room occupancy rates as well as takings from accommodation are subject to seasonal variations. Occupancy rates and takings from accommodation reached peak levels during 2011/12, after which they subsequently decreased to a low of 43.4 per cent occupancy rate and $3.1 million in accommodation takings during the March 2014 quarter.[20] Such variations in occupancy rates and takings from accommodation have the ability to affect workforce requirements, which vary throughout the year.

Significant opportunities exist for Geraldton's tourism industry to experience further growth. While the number of domestic tourists visiting Geraldton and the Mid West region has increased in recent years, the number of international visitors to the region has decreased. The *Mid West Regional Blueprint* envisages for the region to attract greater numbers of international tourists. It proposes to achieve this through increasing the variety of tourist accommodation available, as well as encouraging the creation of new and unique tourism products. Opportunities also exist for the expansion of the domestic tourism market through increasing caravan/recreational vehicle amenities, as well as low cost accommodation options (e.g. camping) for travellers passing through the region who wish to stop overnight. The Blueprint envisions for the region to attract one million visitors per annum to the Mid West by 2050.

5.1.5 Commercial/retail

Geraldton is the regional centre and economic hub for the Mid West region and the largest commercial centre north of Perth. As the main commercial centre of the region, opportunities exist to capitalise on economic growth through the Mid West and beyond to further Geraldton's commercial and retail sector.

The output value of the City of Greater Geraldton's retail sector is estimated to be $272 million, which accounts for 4.9 per cent of the City's total industries output value. At the 2011 Census, 757 Geraldton SUA residents identified themselves as being employed within the retail sector, accounting for 8.6 per cent of the total Geraldton SUA resident workforce.

Increasing population growth within Geraldton and increasing tourist visitation to the area are major drivers of economic growth for the commercial/retail sector. From 2011 to 2026, the Geraldton SUA population is expected to increase by 10,230 persons to reach a population of 47,110 by 2026 (under the Band C scenario). Additionally, the *Mid West Regional Blueprint* states that retail turnover within the Mid West region has experienced steady annual growth over the past decade; increasing by an average of 5.2 per cent per annum.

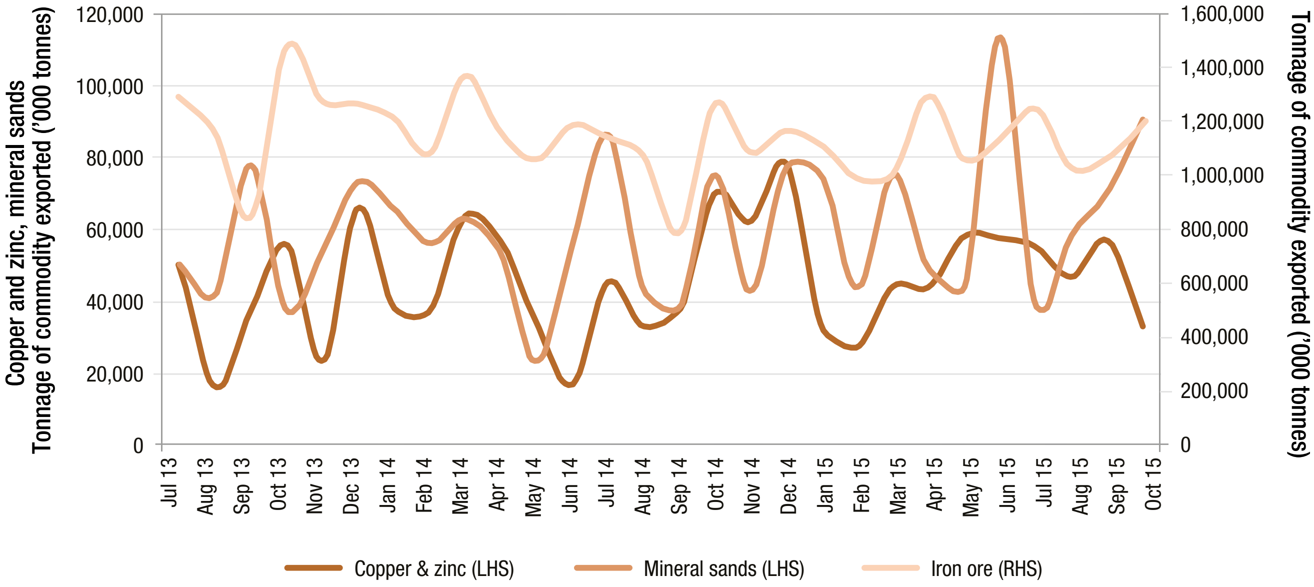
[17] Department of Jobs, Tourism, Science and Innovation (2015) *Oakajee Industrial Estate*

[18] Tourism Research Australia (2016) *Local Government Area Profiles – City of Greater Geraldton.* Available on *www.tra.gov.au/Tourism_in_Local_Government_Areas_2016/LGA_Profiles/index.html*

[19] Australian Bureau of Statistics (2011) *TableBuilder, Database 2011 Counting of Persons, Place of Usual Residence*

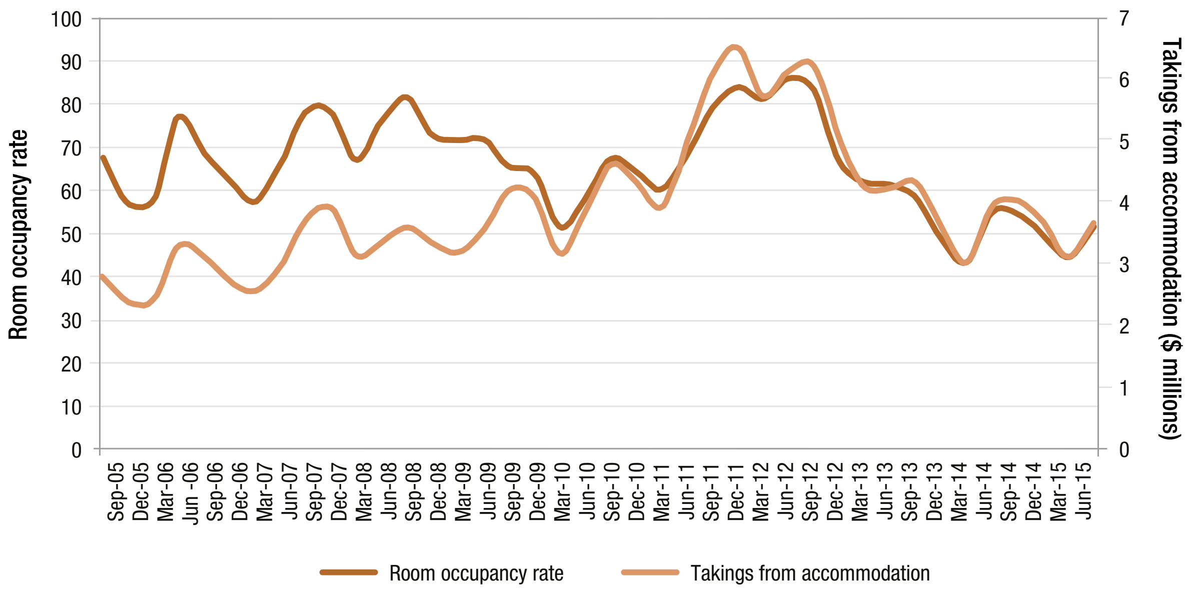
[20] Australian Bureau of Statistics (2015) *Tourist Accommodation, Australia. Catalogue No. 8635.0*

Figure 14: Mid West ports export trade statistics



Source: Mid West Ports Authority (2015) *Comparative Trade Statistics*

Figure 15: Room occupancy rates and takings from accommodation – Geraldton



Source: Australian Bureau of Statistics (2015) *Tourist Accommodation, Australia. Catalogue No. 8635.0*

5.2 Workforce

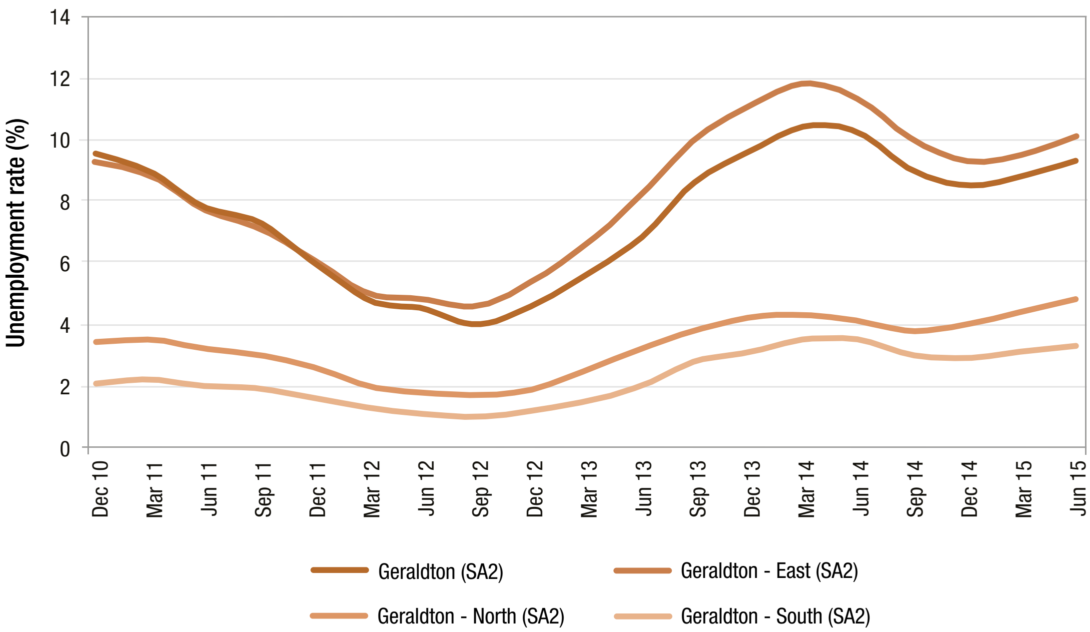
Since December 2010, the unemployment rate in the City of Greater Geraldton has experienced greater fluctuations than that of Western Australia (Figure 16). From the December quarter 2011 through to the March 2013 quarter, the City recorded lower unemployment rates than Western Australia. Following this period, the City's unemployment rate has remained higher than that of Western Australia's. For the March 2014 quarter, the City recorded an unemployment rate of 7.6 per cent, compared to the State's unemployment rate of 4.9 per cent.

Figure 17 shows unemployment rates for the four SA2s within the Geraldton SUA. The Geraldton and Geraldton-East SA2s have recorded consistently higher unemployment rates when compared to the Geraldton-North and Geraldton-South SA2s. Map 2 shows the locational distribution of unemployed residents of SA1 areas across the Geraldton SUA.

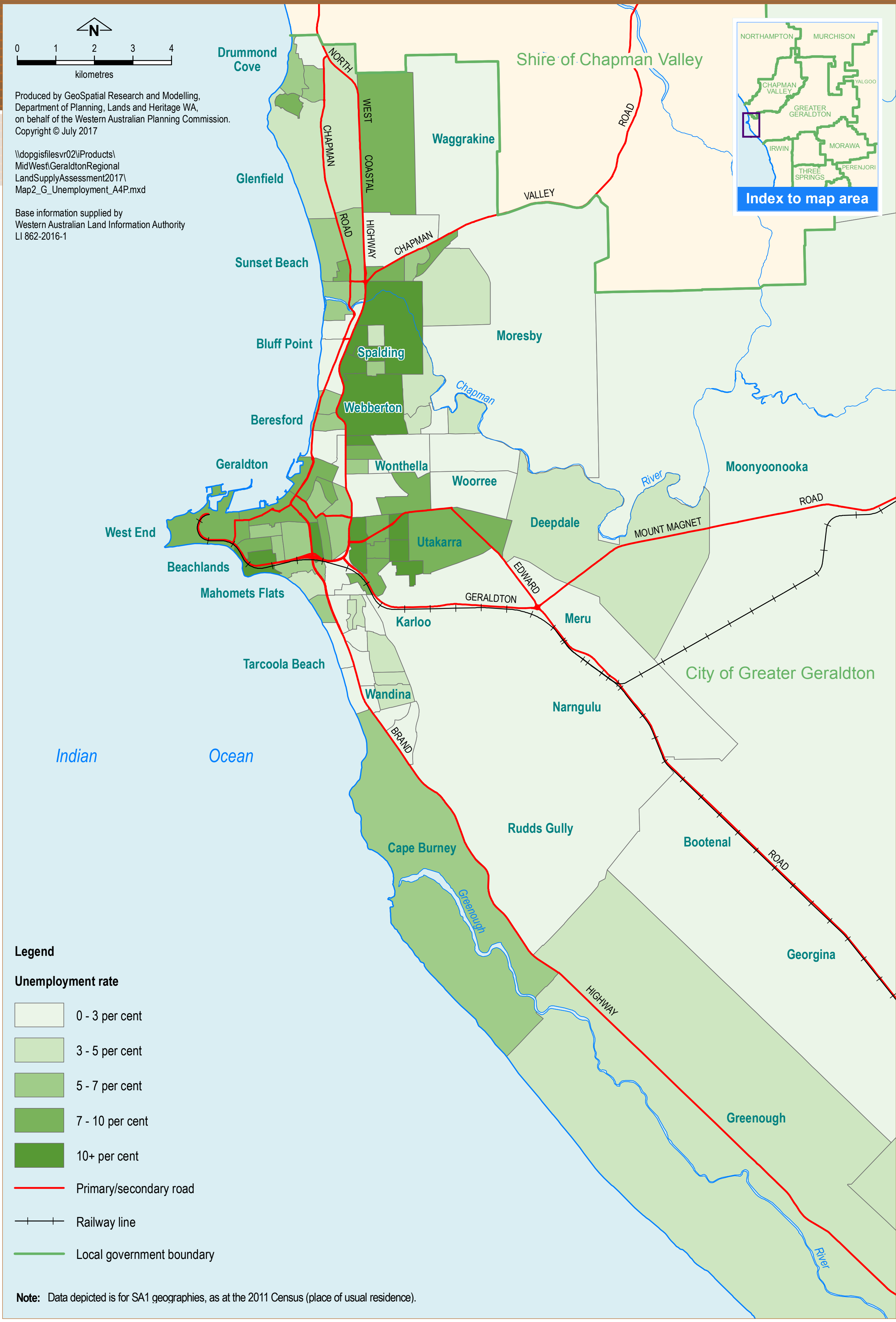
Figure 16: Unemployment rate – Greater Geraldton (C) and Western Australia

Source: Department of Employment (2015) *Small Area Labour Markets*

Figure 17: Unemployment rate – Geraldton (SUA) (SA2 level)



Source: Department of Employment (2015) *Small Area Labour Markets*

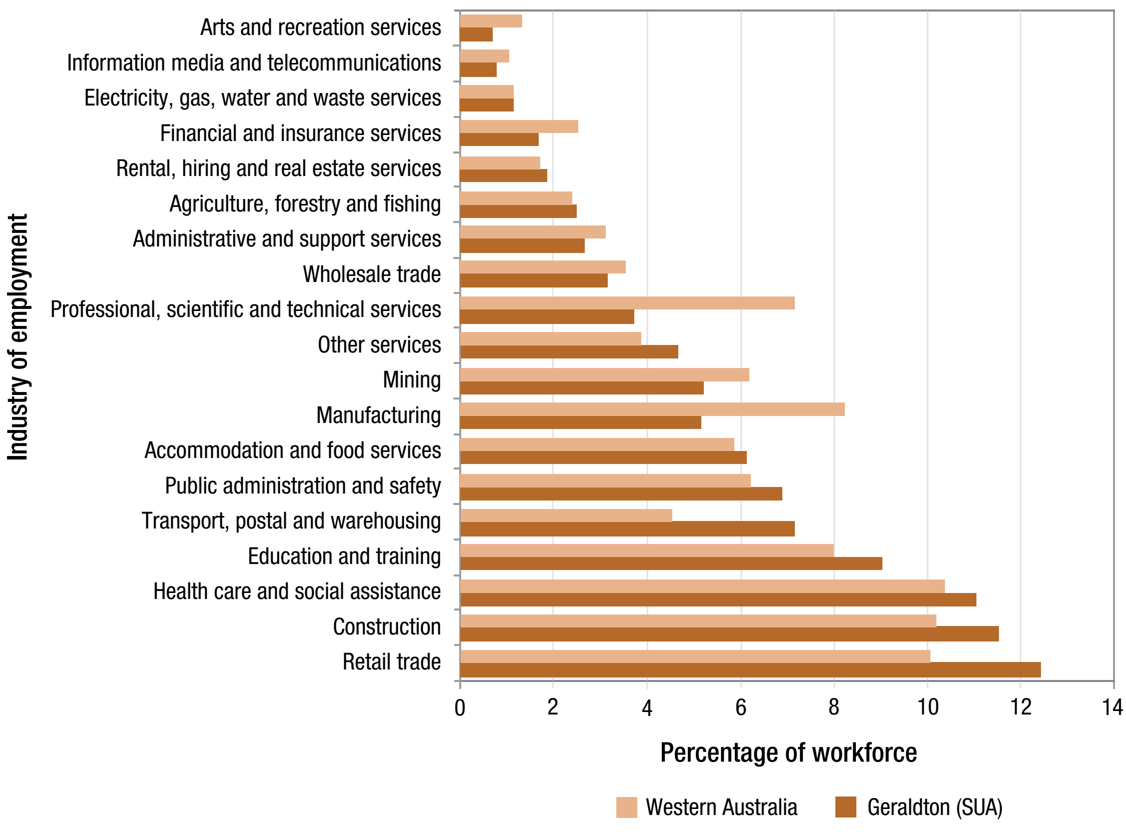


Map 2: Unemployment rate – 2011 Census (SA1)

5.3 Industry of employment

Employment data for the Geraldton SUA reflects its role as the main service centre for the City of Greater Geraldton and the wider Mid West region. At the 2011 Census, high proportions of residents worked in the retail trade, construction and health care and social assistance sectors (Figure 18).

Figure 18: Industry of employment – Geraldton (SUA) and Western Australia

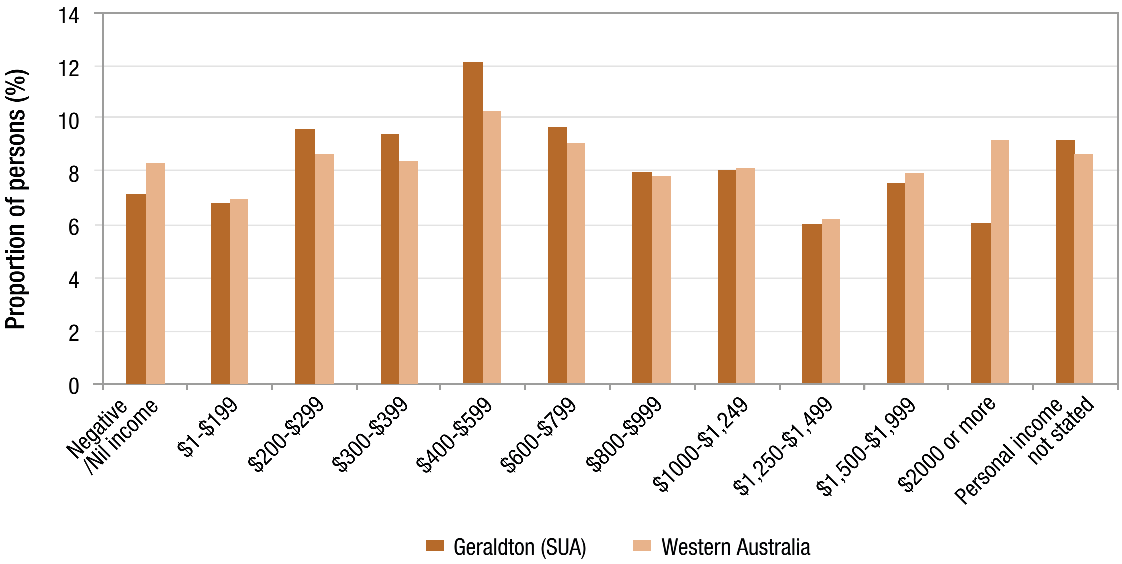


Source: Australian Bureau of Statistics (2011) *Census of Population and Housing: Basic Community Profile. Catalogue No. 2001.0*

5.4 Income

At the 2011 Census, the median weekly income for the Geraldton SUA residents aged 15 years and over was $604; this is less than the median weekly income recorded for Western Australia ($662). The majority of the Geraldton SUA residents with weekly incomes of $2,000 or greater are employed in the mining, construction and transport, postal and warehousing sectors. Generally speaking, incomes tended to be higher for residents living in Moresby, Wonthella and Tarcoola Beach (Map 3).

Figure 19: Income distribution – Geraldton (SUA) and Western Australia (2011 Census)



Source: Australian Bureau of Statistics (2011) *Census of Population and Housing: Basic Community Profile. Catalogue No. 2001.0*

Map 3: Income distribution – 2011 Census (SA1)

5.5 Regional Price Index

The Regional Price Index (RPI) is produced by the Department of Primary Industries and Regional Development. The project compares location-based prices for a common 'basket of goods' to create a spatial index measuring prices against the Perth metropolitan area, which has an index value of 100 for each category.

RPI data comparing Geraldton and the Mid West region to the Perth metropolitan region is shown in Table 2. Comparisons show that most living costs in Geraldton are reasonably consistent with those experienced in Perth (baseline index of 100). The greatest difference can be seen in the higher cost of clothing, which recorded an index of 121.8 in 2013. In contrast, costs associated with housing are lower in Geraldton than the Perth metropolitan area, recording an index of 97.0 in 2013.

5.6 Additional information

- Mid West Development Commission website: www.mwdc.wa.gov.au
- Mid West Workforce Development Alliance (2015) *Mid West Workforce Development Plan 2015-2018*. Available online at: www.dtwd.wa.gov.au
- Department of Primary Industries and Regional Development (2013) *Regional Price Index 2013*. Available online at: www.drd.wa.gov.au
- City of Greater Geraldton website: www.cgg.wa.gov.au

Table 2: Regional Price Index - Geraldton and the Mid West region

	Index numbers 2011		Index numbers 2013	
	Mid West	Geraldton	Mid West	Geraldton
Basket	102.2	101.7	102.8	102.4
Food	107.8	106.1	104.3	102.6
Cigarettes, tobacco, alcoholic drinks	102.9	102.1	104.6	103.5
Clothing	120.0	119.8	121.6	121.8
Housing	96.2	96.3	97.5	97.0
Household equipment and operation	105.2	104.1	104.1	103.7
Health and personal care	103.3	103.1	115.4	114.9
Transport	100.9	100.3	100.2	100.9
Recreation and education	101.6	101.8	104.4	104.7

Source: Department of Primary Industries and Regional Development (2013) *Regional Price Index 2013*

6 Residential land and housing

6.1 Overview

The *Greater Geraldton Structure Plan* (2011) provides a framework for coordinating development and managing growth within the Geraldton urban area. The *City of Greater Geraldton Local Planning Strategy* (2015) builds on the framework outlined by the *Greater Geraldton Structure Plan*, guiding long-term land use planning and providing the rationale for land use and development controls.

Geraldton's urban form has evolved into a somewhat north-south lineal shape, extending from Oakajee and Buller in the north to Cape Burney in the south. In recent years, development has also occurred in the eastern parts of the Geraldton urban area, extending towards the Moresby Range, Geraldton Airport and the Narngulu industrial area.

The most significant of the proposed urban growth areas identified by the *Greater Geraldton Structure Plan* and the *City of Greater Geraldton Local Planning Strategy* include the Waggrakine and Moresby-Moonyoonooka development investigation areas (DIAs), as well as rural land adjacent to the Moresby Range. The predominant current land use within the Waggrakine DIA is rural living; however, it is intended to be considered for future residential intensification. The rural land adjacent to the Moresby Range and the Moresby-Moonyoonooka DIAs is currently zoned 'Rural' under the local planning scheme; a scheme amendment and further planning are required prior to development.

6.2 Existing housing stock

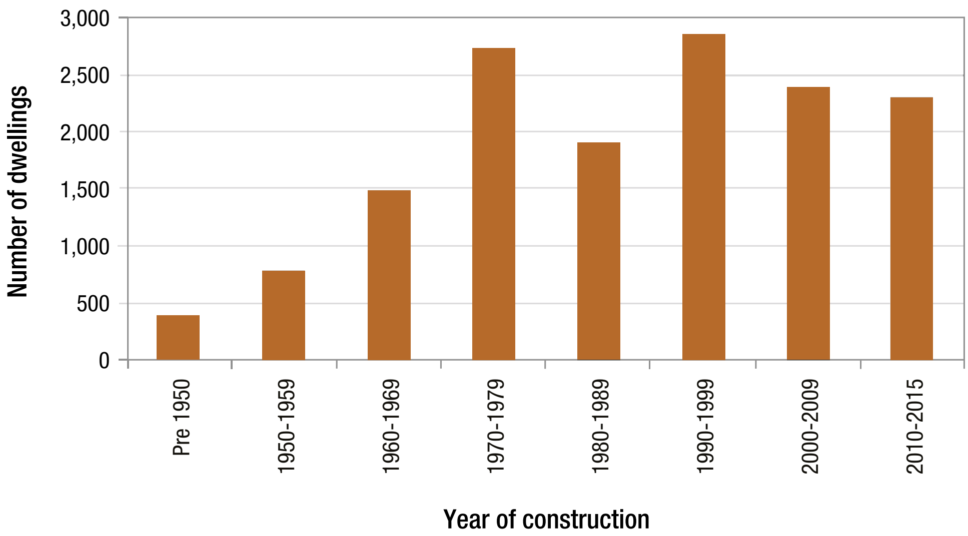
At the 2011 Census, a stock of 15,317 dwellings was recorded in the Geraldton SUA. Of these, 11.8 per cent were unoccupied, which is slightly lower than the rate for Western Australia as a whole (12.1 per cent). Eighty- eight per cent of dwellings in the Geraldton SUA are occupied private dwellings; this is in line with Western Australia's occupancy rate of 87 per cent. At SA2 level, occupancy rates are slightly higher for the Geraldton- East and the Geraldton-North SA2s with recorded occupancy rates of 91 and 90 per cent respectively.

Approximately 55 per cent of homes in the Geraldton urban area were constructed since 1990 (Figure 20). Compared to other regional centres, Geraldton contains a substantial stock of older dwellings.

At the 2011 Census, the majority of dwellings in the Geraldton SUA (86.0 per cent, compared to 80.4 per cent for Western Australia) were separate houses, with three-bedroom dwellings the most common (Table 3).

Approximately 49.4 per cent of dwellings in the Geraldton SUA were occupied by one or two residents, which suggest a mismatch between the stock and occupancy rates (Table 3). Therefore, there may be opportunities for the development of more diverse housing products.

Figure 20: Age of dwelling stock – Geraldton (SUA)

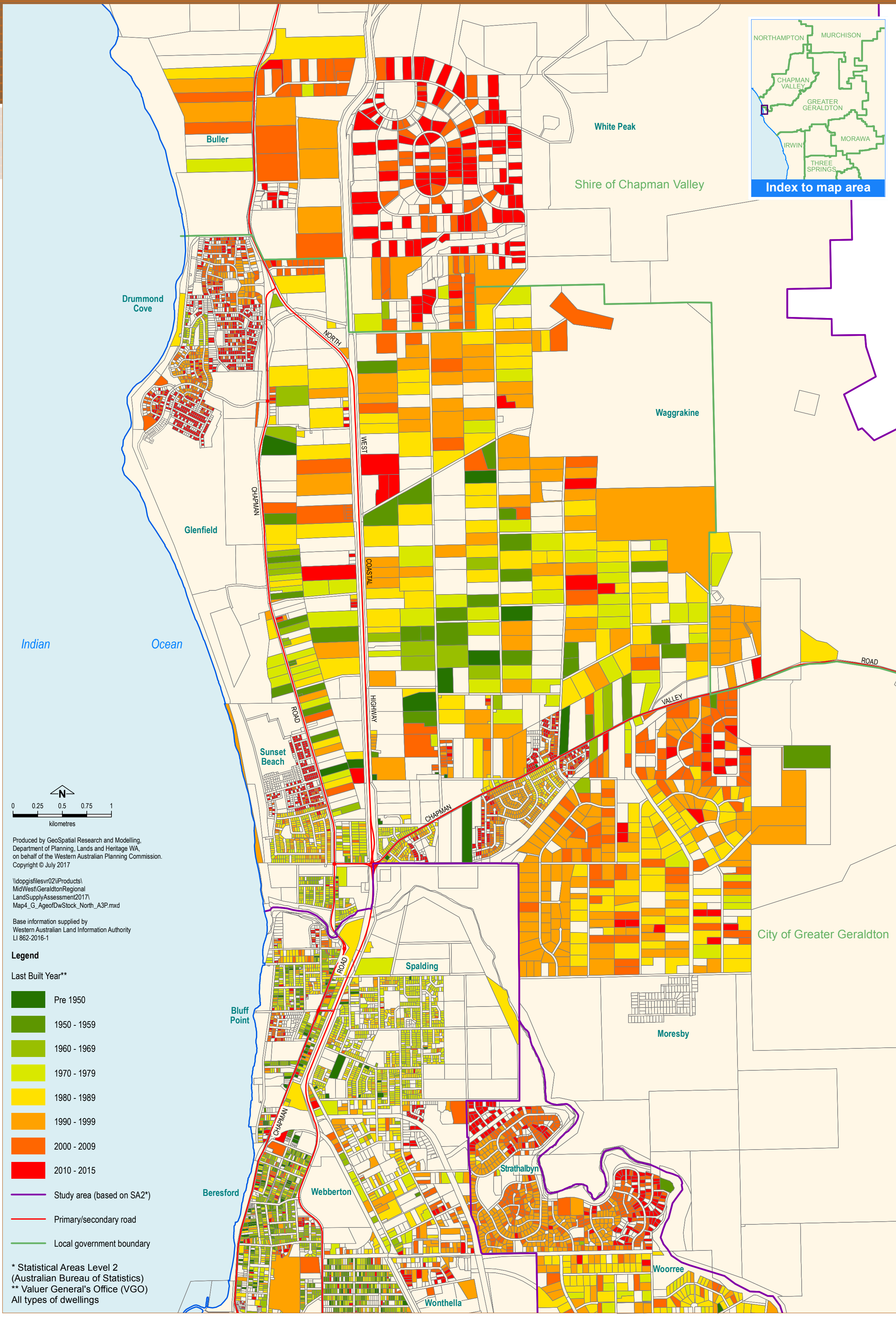


Source: Department of Planning, Lands and Heritage (2015) *Integrated Regional Information System*

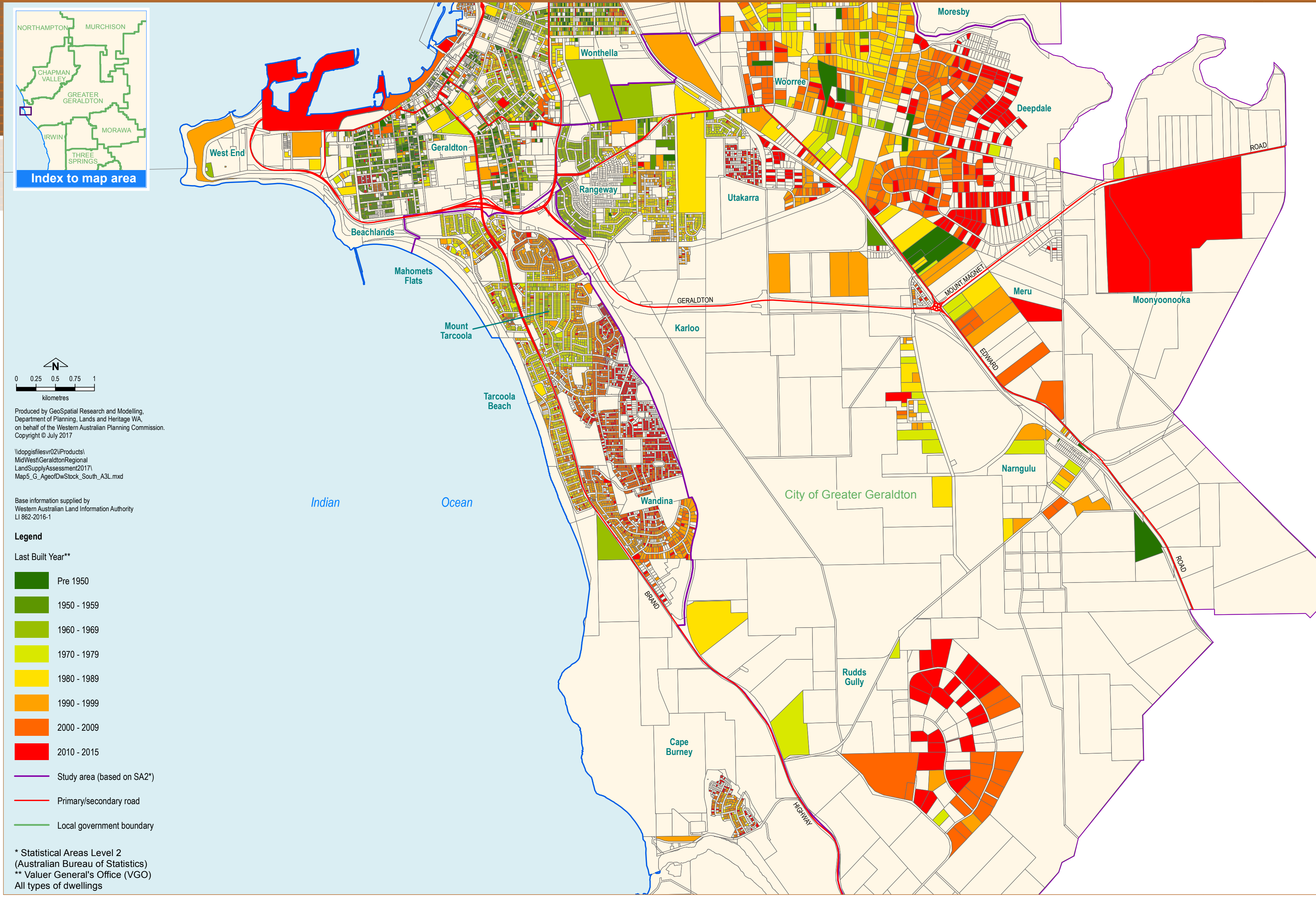
Table 3: Dwelling stock and number of residents – Geraldton (SUA) (2011 Census)

	Number of residents								
	1	2	3	4	5	6	7	8+	Not applicable
None (includes bedsitters)	30	15	0	3	0	0	0	0	79
One bedroom	345	84	14	7	3	0	0	0	116
Two bedrooms	844	587	124	46	13	10	0	0	38
Three bedrooms	1,323	2,154	936	684	221	78	20	18	74
Four bedrooms	446	1,386	794	1,040	508	141	44	28	53
Five bedrooms	33	91	84	100	73	54	21	12	3
Six bedrooms or more	0	17	7	10	14	11	7	8	0
Not stated	155	74	21	22	15	8	0	0	457
Not applicable	0	0	0	0	0	0	0	0	1,762

Source: Australian Bureau of Statistics (2011) *TableBuilder, Database: 2011 Counting of Dwellings, Location on Census Night*



Map 4: Age of Dwelling Stock - 1 of 2



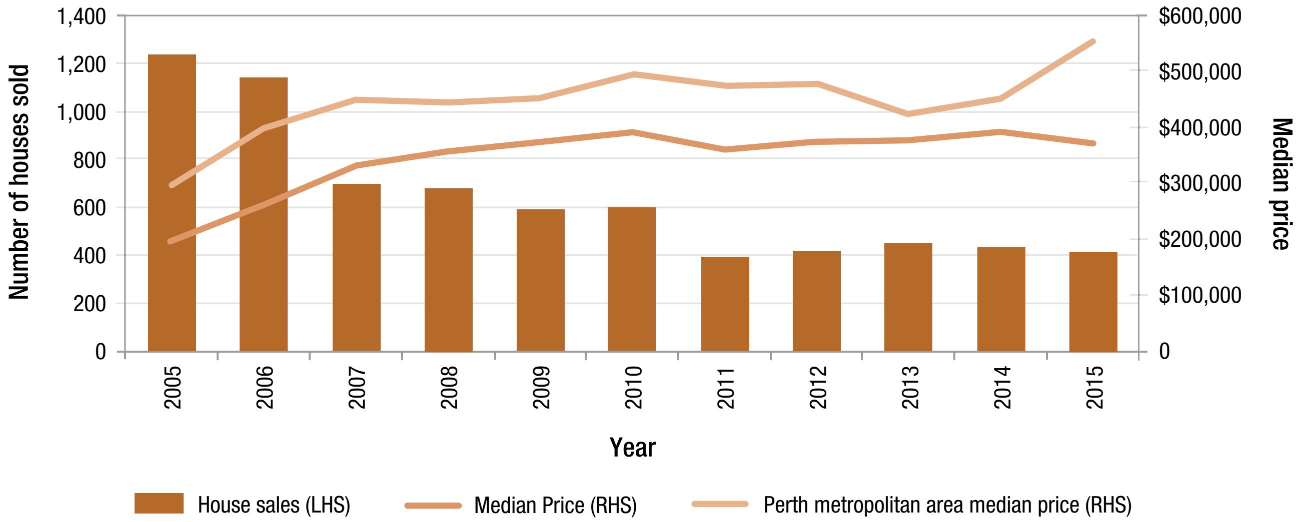
Map 5: Age of Dwelling Stock - 2 of 2

6.3 Local property market

Figure 21 shows the number of houses sold in the Geraldton/Greenough area during the 2005-2015 period on an annual basis, as well as median house prices at the June quarters of a particular denoted year. Since 2006, house sales have generally declined; however, the median house price substantially increased between 2005 and 2007. The median house price at June 2005 was $195,000 and increased to $330,000 at June 2007, representing growth of 69 per cent.

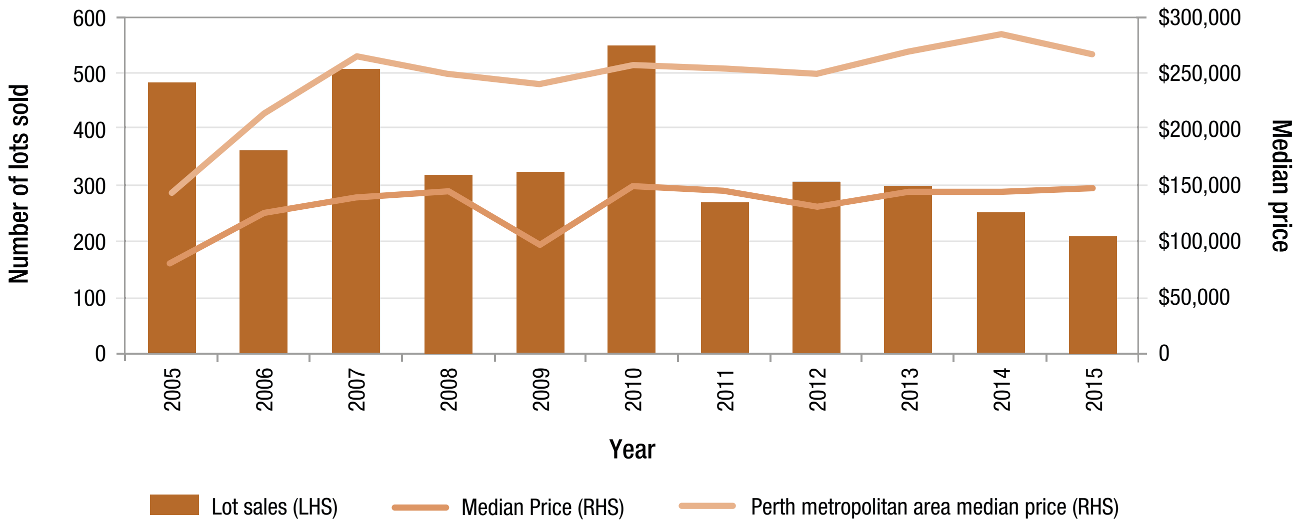
Figure 22 shows the number of lots sold in the Geraldton/Greenough area during the 2005-2015 period on an annual basis, as well as median lot prices as at the June quarters of a particular denoted year. During this period, lot sales peaked in 2010 with 550 lots sold during the year to June 2010. The median lot price plunged to $96,000 in June 2009 from $145,000 in June 2008. Following this period, Geraldton/Greenough's median lot price has remained somewhat steady. Geraldton/Greenough's median house and lot prices are lower than that of the Perth metropolitan area, as indicated by the Regional Price Index (Section 5.5).

Figure 21: House sales – City of Greater Geraldton 2005-2015



Source: Real Estate Institute of Western Australia (2015) *REIWA Market Update*

Figure 22: Lot sales – City of Greater Geraldton 2005-2015



Source: Real Estate Institute of Western Australia (2015) *REIWA Market Update*

6.4 Land identified in local planning strategies

The *City of Greater Geraldton Local Planning Strategy* identifies the strategic objectives for urban growth in the City of Greater Geraldton. It represents the land use planning response to the City's strategic community vision; to ensure a city-region capable of sustaining a population of 80,000-100,000. The Local Planning Strategy and the Greater Geraldton Structure Plan define the Geraldton urban area as being bounded by Oakajee to the north; the Moresby Range, Narngulu industrial area and the Geraldton Airport to the east; agricultural land to the south; and the Indian Ocean coastline to the west.

The Local Planning Strategy identifies eight development investigation areas (DIAs) within the Geraldton urban area (Table 4). DIAs 4 and 5 and their ultimate uses are already reflected in the local planning scheme with appropriate land use zonings in place. The remaining DIAs and their ultimate uses are yet to be reflected in the local planning scheme, with the majority of land currently zoned 'Rural'.

All DIAs listed in Table 4 have been identified in this report's development outlook analysis (Section 6.8).

6.5 Land zoned for residential purposes

The Geraldton urban area is covered by three local planning schemes, as listed below:

- *City of Greater Geraldton Town Planning Scheme No. 1* (covers the majority of the Geraldton urban area)
- *Shire of Greenough Town Planning Scheme No. 1A* (covers part of the suburb of Cape Burney)
- *Shire of Chapman Valley Local Planning Scheme No. 2* (covers the suburbs of Buller, Oakajee, White Peak and part of Waggrakine).

There are several land use zones under the above local planning schemes that permit residential development (rural living residential land is discussed in a later section). Residential land use zones included in this analysis are listed below:

- Residential
- Development
- Residential Development
- Urban Development.

Table 4: Development investigation areas

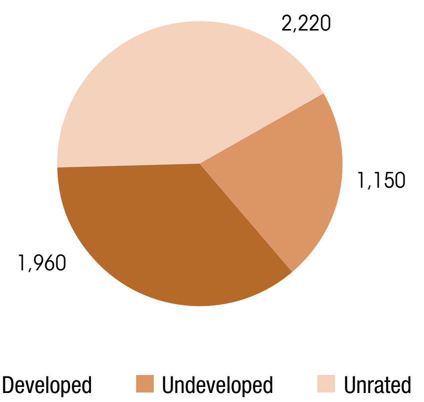
DIA	Name	Consideration of DIA for ultimate use	Map & site number*
DIA 1	Waggrakine	Urban	Map 8, GN150
DIA 2	Rural land adjacent to the Moresby Range	Rural Living	Map 8, GN151
DIA 3	Moresby–Moonyoonooka	Urban/Rural Living	Map 7, GN153
DIA 4	Webberton	Service Commercial, Commercial, Light Industry	Map 8, GN160
DIA 5	Geraldton Airport	Community/Public Purpose, Technology Park	Map 7, GN47
DIA 6	Narngulu	General Industry	Map 7, GN155
DIA 7	Rudds Gully	Service Commercial, Light Industry, Urban	Map 7, GN13
DIA 8	Cape Burney	Urban, District Centre, Community/Public, Purpose (WWTP)	Map 7, GN10

*Map and site number as according to development outlook analysis (Section 6.8).
Source: City of Greater Geraldton (2015) *City of Greater Geraldton Local Planning Strategy*

Using the Integrated Regional Information System (IRIS) land supply model, major residential land use zones are grouped together to provide a snapshot of residential land stocks. The model showed that, as at December 2015, land zoned for residential purposes covered 5,330 hectares. Approximately 37 per cent of this stock was considered to be developed (Figure 23). Lots identified as unrated are those that are zoned for development for the purpose of the specified primary land use category for which no vacant land or premises valuation information has been captured in Landgate's property valuation database. For the purposes of this document, unrated land zoned for residential development is considered to be available for future development. The majority of the stocks of undeveloped and unrated land are located in Waggrakine, Moresby, Rudds Gully, Cape Burney and Glenfield. A more detailed description of the IRIS modelling methodology is included in Appendix 2 of this document.

Figure 23 shows the stock of land zoned for residential purposes under the local planning schemes by development status. While primarily zoned for residential purposes, it is likely that some land within the 'Development', 'Residential Development' or 'Urban Development' zones will also be set aside for commercial or public purpose uses.

Figure 23: Stock of land (hectares) zoned for residential purposes – Geraldton urban area



Department of Planning, Lands and Heritage (2015) *Integrated Regional Information System*

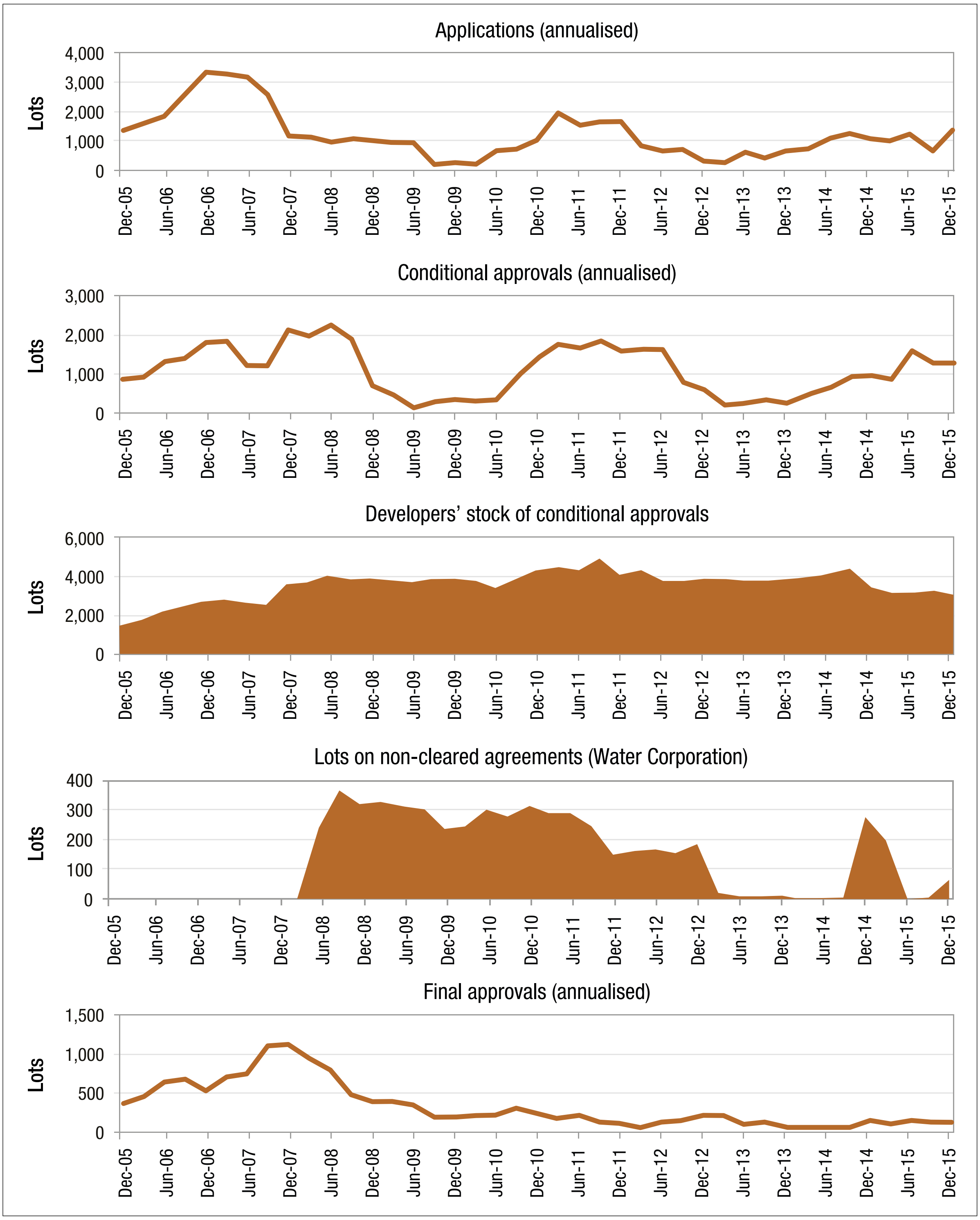
6.6 Lot supply pipeline

After several years of subdued subdivision activity in the Geraldton urban area, applications were lodged to create 1,351 residential lots in the City of Greater Geraldton during 2015, which is slightly above the City's ten-year annual average (1,192 lots). During the decade to December 2015, the number of lots in applications and the number of lots granted conditional subdivision approval has varied substantially. The developers' stock of conditionally approved lots, however, has remained relatively stable since 2008 (Figure 24).

The graph in Figure 24, titled 'Lots on non-cleared agreements' shows the stock of conditionally approved residential lots for which a service provision agreement has been signed by the developer and the Water Corporation. While a substantial stock of conditionally approved lots has been maintained, the stock of lots on non-cleared agreements is relatively small, with agreements signed to create just 65 lots at the end of 2015. The stock of lots on non-cleared agreements increased substantially during the December 2014 and March 2015 quarters, with agreements signed to create 281 and 202 lots respectively. Of these lots, only 118 have progressed to final approval.

Although applications have been lodged and conditional approval granted to create substantial numbers of residential lots in the Geraldton urban area over the decade to December 2015, relatively few have been created. Large numbers of approved subdivision applications have lapsed without progressing to final approval, with an average of just 127 residential lots per annum created in the past five years (during which time an average of 956 lots per annum have been granted conditional approval).

Figure 24: Residential subdivision activity and lot supply pipeline



Source: Western Australian Planning Commission (2015) *State Lot Activity* and Water Corporation (2015) unpublished data

No data is available for lots on non-cleared agreements prior to 2009.

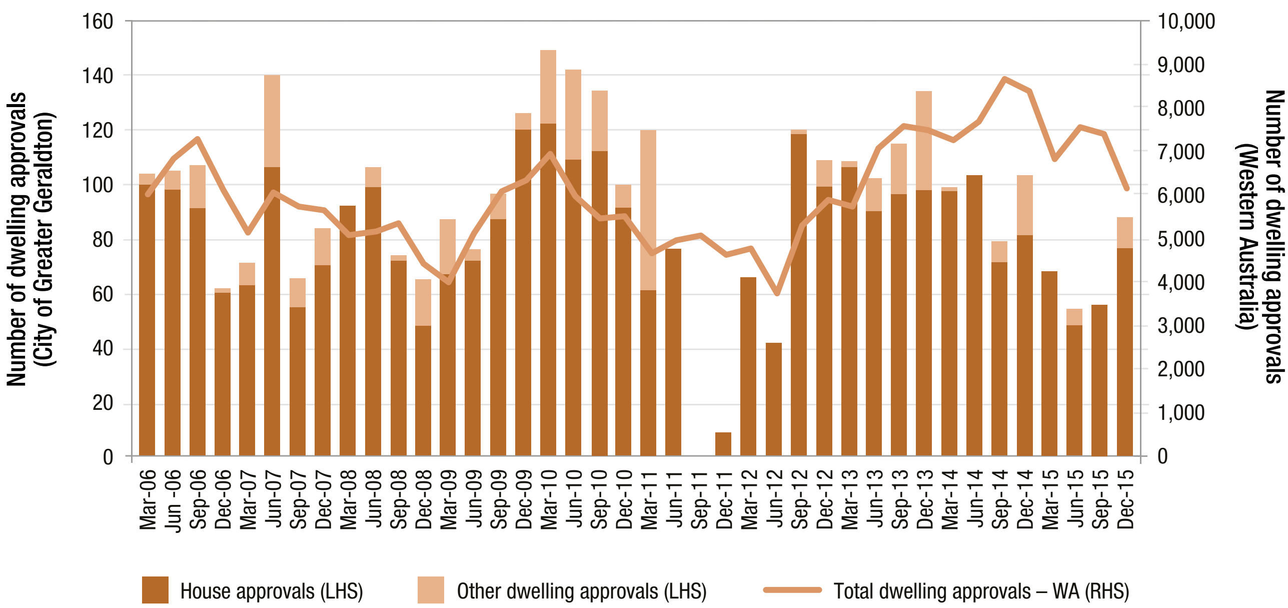
6.7 Dwelling approvals

Dwelling approvals are a key demand indicator, representing either owner-occupier demand or investor confidence. As most dwelling approvals proceed to construction and eventually completion, they also provide a leading indicator of dwelling supply.

In the decade to 2015, the City of Greater Geraldton experienced a peak period in dwelling approvals activity for the 2009/10 period; more pronounced than State averages. This was followed by a period of decreased activity, with only 10 dwellings approved for construction in the six months to December 2011. Although dwelling approval numbers have since recovered, recent activity has been relatively subdued, with 266 approvals in 2015 compared to the 10 year annual average of 364 approvals.

Map 6 shows the spatial distribution of dwelling approvals in the Geraldton SUA for the 2014/15 period. Areas with the greatest number of dwelling approvals during this time were Glenfield, Sunset Beach, Deepdale and Wonthella.

Figure 25: Dwelling approvals – City of Greater Geraldton



Source: Australian Bureau of Statistics (2015) *Building Approvals, Australia. Catalogue 8731.0*

Map 6: Dwelling approvals 2014–2015 (SA1)

6.8 Development outlook

Table 10 and Maps 7, 8 and 9 show possible development projects identified in the Geraldton urban area. Projects are included where intent has been demonstrated (by government or the development industry) to develop the site at some point in the future. Projects are identified through a variety of means including:

- local planning scheme zonings and amendments
- developer intentions
- consultation with local stakeholders
- subdivision applications/approvals
- local government development applications/approvals
- structure planning.

The majority of the identified growth areas are located within the Geraldton-North and Geraldton-East SA2s, which account for 65 per cent and 29 per cent respectively, of the entire stock of proposed dwellings in identified areas (Tables 5 to 9). The majority of short-term growth is expected to be realised by the continuation of development at Moresby, Wandina and Karloo. For the medium to long term, growth is expected to occur in Moresby, Cape Burney, Glenfield, Waggrakine and Rudds Gully.

Table 5: Estimated dwelling yield from identified future development areas - Geraldton (SUA)

SA2	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Total
Geraldton	69	156	510	735
Geraldton-East	779	539	5,358	6,676
Geraldton-North	1,160	2,321	11,855	15,336
Geraldton-South	555	1,004	630	2,189
Total	**2,563**	**4,020**	**18,353**	**24,936**

Source: Department of Planning, Lands and Heritage (2016)

Table 6: Estimated dwelling yield from identified future development areas – Geraldton (SA2)

Suburb	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Total
Beachlands	6	5	0	11
Beresford	5	9	103	117
Bluff Point	5	107	38	150
Geraldton	52	60	17	129
Spalding	58	28	43	129
Webberton	0	0	192	192
Wonthella	0	0	64	64
Total	**126**	**209**	**457**	**792**

Source: Department of Planning, Lands and Heritage (2016)

Table 7: Estimated dwelling yield from identified future development areas - Geraldton-East (SA2)

Suburb	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Total
Deepdale	162	22	0	184
Karloo	320	320	907	1,547
Meru	0	0	47	47
Moonyoonooka	0	0	0	0
Narngulu	0	0	44	44
Rangeway	0	51	94	145
Rudds Gully	0	0	3,423	3,423
Utakarra	270	16	940	1,226
Woorree	0	0	14	14
Total	**752**	**409**	**5,469**	**6,630**

Source: Department of Planning, Lands and Heritage (2016)

Table 8: Estimated dwelling yield from identified future development areas - Geraldton-North (SA2)

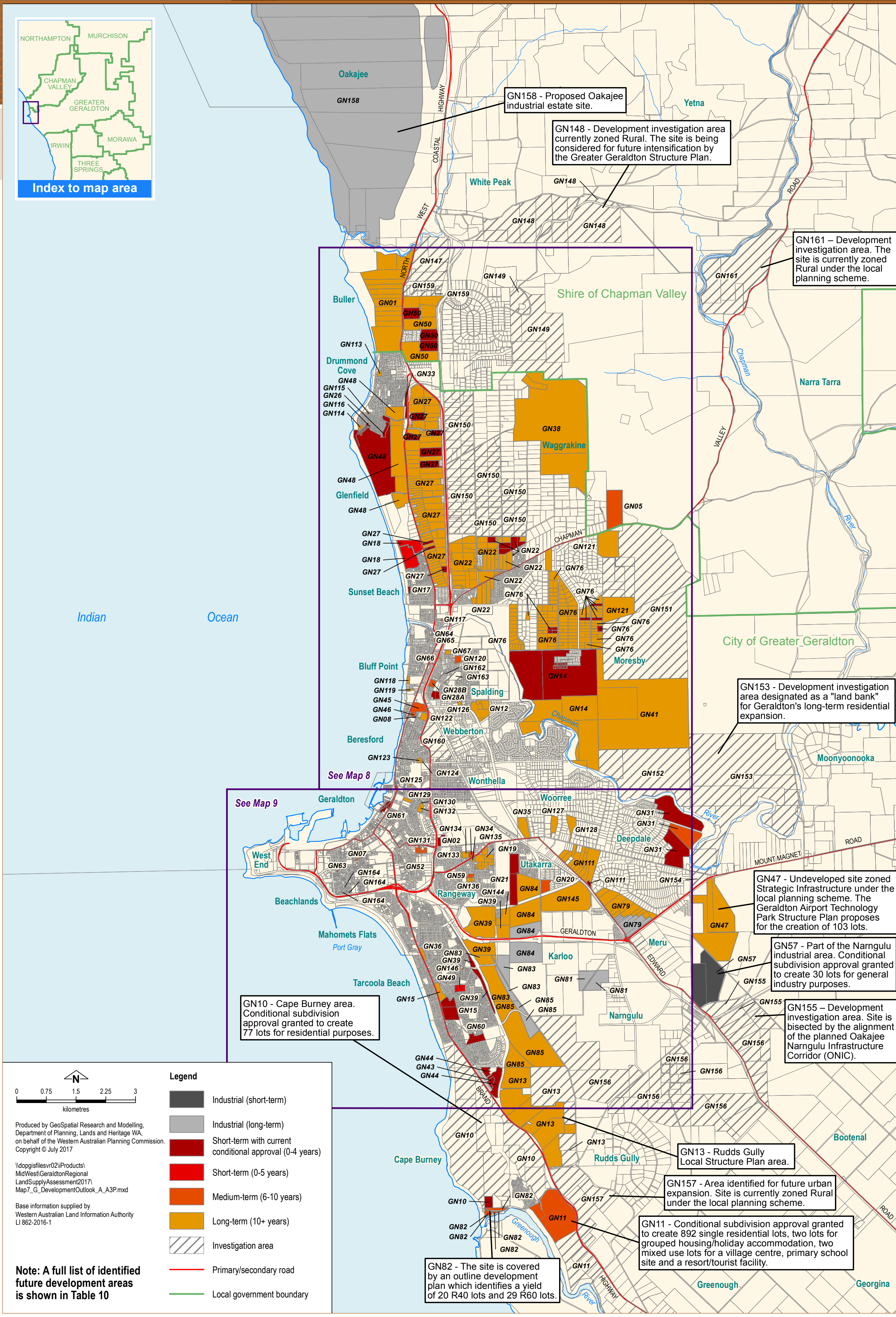
Suburb	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Total
Buller	33	0	845	878
Drummond Cove	28	0	19	47
Drummond Cove/Glenfield	207	0	2,106	2,313
Glenfield	55	10	5,278	5,343
Moresby	440	0	2,465	2,905
Sunset Beach	198	6	0	204
Waggrakine	186	13	3,447	3,646
White Peak	0	0	0	0
Total	**1,147**	**29**	**14,160**	**15,336**

Source: Department of Planning, Lands and Heritage (2016)

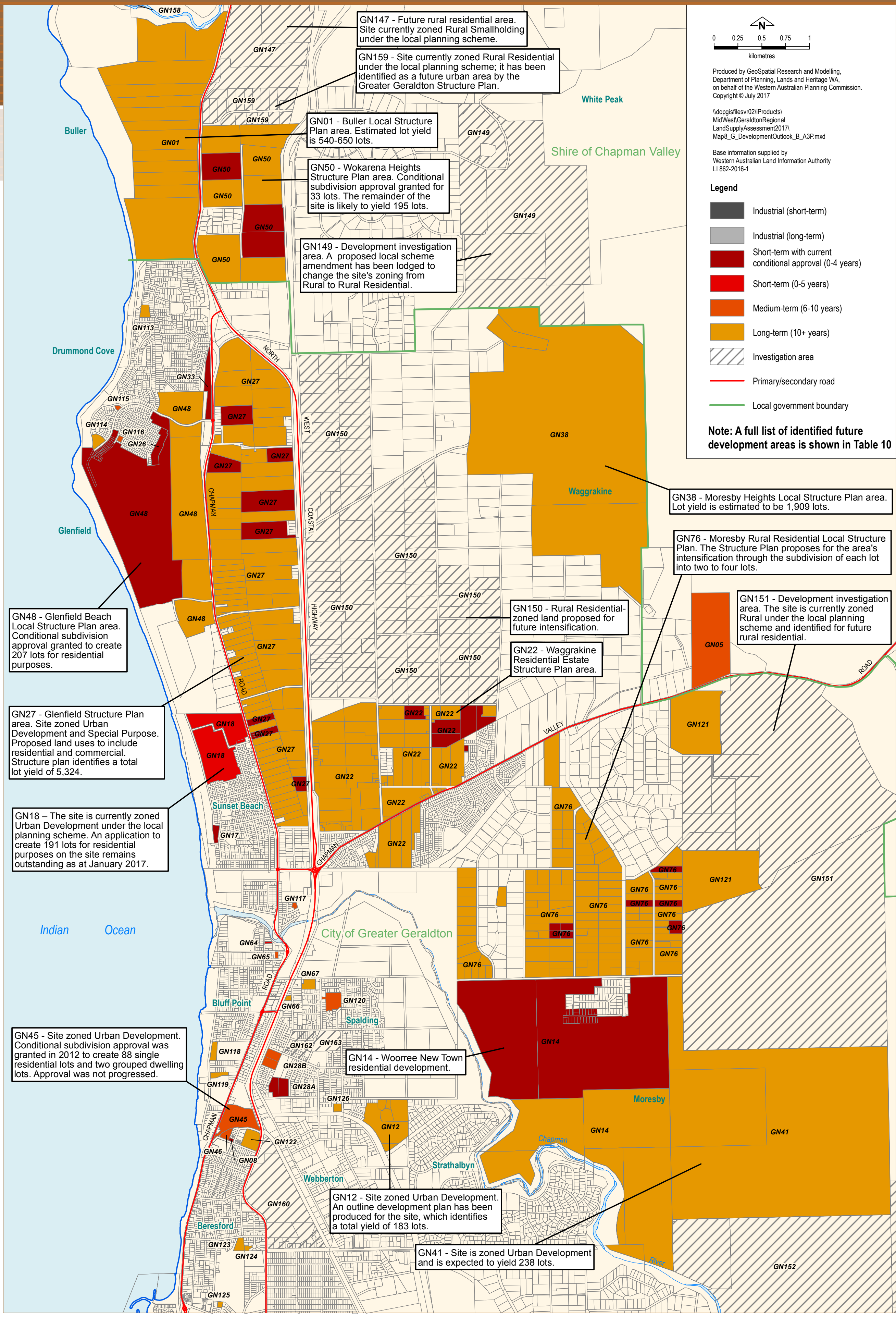
Table 9: Estimated dwelling yield from identified future development areas - Geraldton-South (SA2)

Suburb	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Total
Cape Burney	77	941	630	1,648
Mount Tarcoola	0	0	40	15
Wandina	417	7	40	465
Total	**494**	**948**	**711**	**2,153**

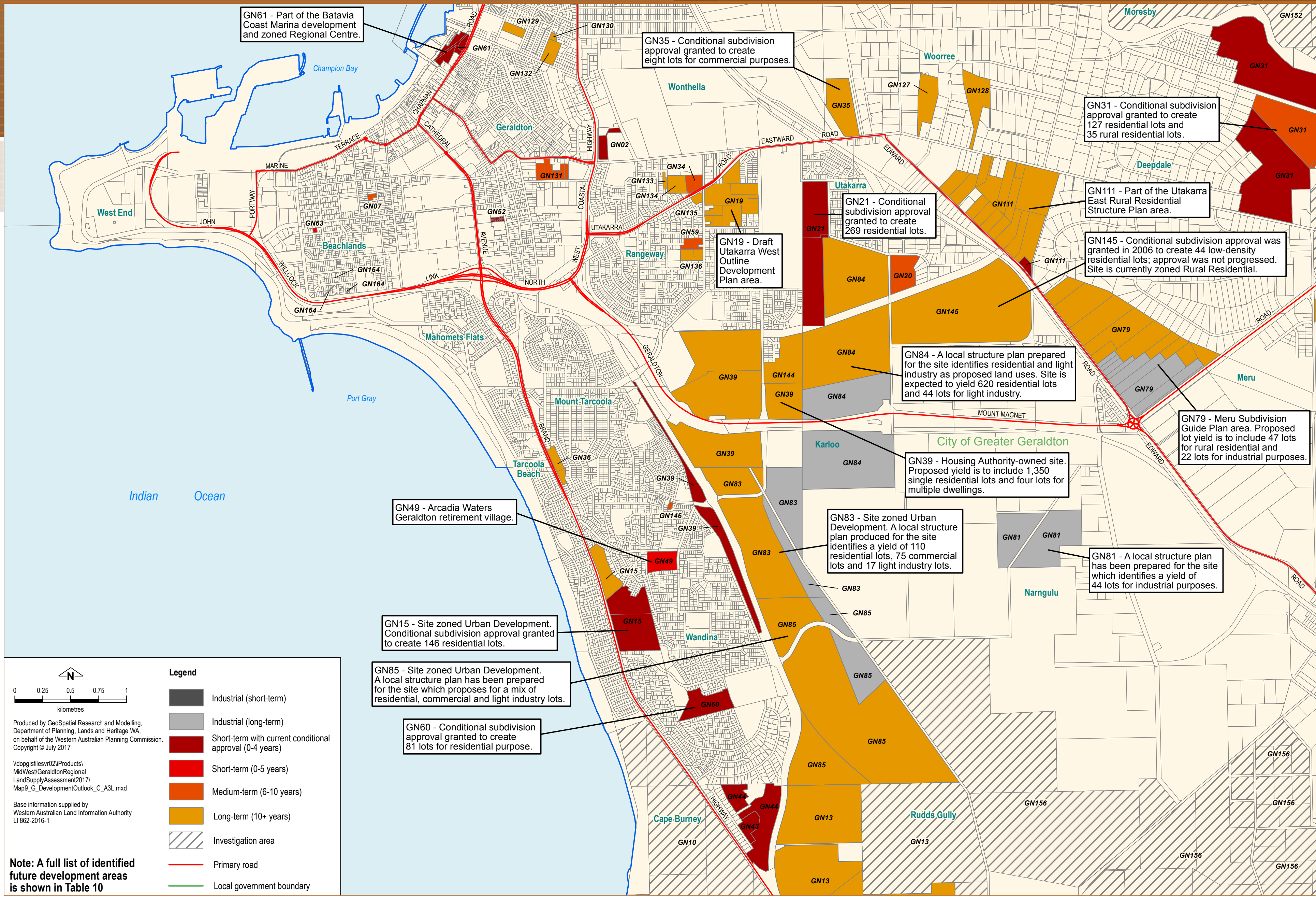
Source: Department of Planning, Lands and Heritage (2016)



Map 7: Development outlook (staging) A



Map 8: Development outlook (staging) B



Map 9: Development outlook (staging) C

Identifier	Location	Suburb	Map number in this document	Existing tenure[1]	Purpose	Zoning/planning			Area/yield[2]			Subdivision approvals[3]		Anticipated dwelling release[4] (commencing late 2015)			Constraints[5]			Comments
						Current zoning	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 yrs)	Medium-term (5-10 yrs)	Long-term (10+ yrs)	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite	
GN01	Lots 3, 7, 8, 9, 10, 11, 12, 15, 16, 17, 154, 156 & 1891 North West Coastal Highway	Buller	Map B	Numerous landowners	Residential	Development	No	Buller Local Structure Plan	196.9	650	650	0	0	0	0	650	E, L, MC, P, W			The site is zoned Development and is covered by an approved local structure plan. The structure plan identifies an estimated yield of 540–650 lots. The majority of lots will be R5/10 in density with some R10/15 lots proposed at the southern edge of the site. Lots are likely to be released over a broad timeframe due to the structure plan area being under multiple land ownership. The southern half of the structure plan area is considered likely to be developed ahead of the northern half, due to greater proximity to servicing and ability to connect into the local road network (as opposed to requiring a new highway intersection) when compared to the northern half.
GN02	Lot 3123 Pass Street	Wonthella	Map C	State of WA	Commercial	Service Commercial	No	Greater Geraldton Structure Plan	2.3	3	17	0	3	-	-	-	P			Conditional subdivision approval has been granted to create three lots for commercial purposes. Proposed development on the site to include a supermarket, three showroom units, eight warehouse units, a liquor store, a fuel station, a convenience store and two fast food outlets.
GN05	Lot 1455 Chapman Valley Road	Waggrakine	Map B	Frank Tomasi Nominees Pty Ltd	Rural Residential	Rural Residential	No	N/A	37.2	13	13	0	0	0	13	0	D, E, H, MC, TG, W			The site forms part of the Coffee Pot Estate rural residential development. Conditional subdivision approval was granted in 2009 to create 13 rural residential lots; however, subdivision was not progressed.
GN07	Lot 23 Gregory Street	Beachlands	Map C	L C Innes	Residential	Residential	No	N/A	0.4	5	5	0	0	0	5	0	E, MC, W			The site is a predominantly vacant lot zoned R40, with two existing dwellings occupying the north east and south east corners of the site. A subdivision application to create three lots ($602m^2$, $2,818m^2$ and $896m^2$) has been lodged. The existing dwellings occupy two of the smaller proposed lots. The largest of the proposed lots can potentially yield up to eight dwellings.
GN08	Lot 2 Ord Street	Beresford	Map B	Kalbarri River Developments Pty Ltd	Residential	Residential	No	N/A	0.2	5	5	0	5	5	0	0	E, MC, PW			The site forms the unsubdivided portion of a lot subject to an application which sought to create 12 residential survey strata lots and one lot for common property. Conditional approval was granted in 2013 and subdivision has been partly progressed with the release of seven lots. Five lots are yet to be released; however, there are three existing residential dwellings on the unsubdivided portion of lot, which will need to be demolished prior to development.
GN10	Numerous lots bounded by Brand Highway & Greenough River Road	Cape Burney	Map A	Bayform Holdings Pty Ltd, R & M Ramage Pty Ltd & State of WA	Residential	Residential, Residential Development, Dune Preservation, Parks and Recreation, Public Use, General Farming	Yes	Draft Greenough River Estate Structure Plan	86.0	77	77	0	77	77	0	0	E, S	MC, P, Z		The site falls under the boundaries of the Shire of Greenough Town Planning Scheme No. 1A. Conditional subdivision approval has been granted to create 77 residential lots on Lot 708 and part of Lot 4021. The Draft Greenough River Estate Structure Plan identifies a proposed yield of approximately 6,600 new dwellings for the combined areas of GN10 and part of GN11.
GN11	Lots 100 & 2466 Greenough River Road, Lots 2079, X20, X21 & X22 Brand Highway	Cape Burney	Map A	Citylink Enterprises Pty Ltd & Bayform Holdings Pty Ltd	Residential, Commercial, Tourist	Residential Development, Urban Development, Resort Development	No	Draft Greenough River Estate Structure Plan, Draft Southgate Dune Estate Preliminary Concept Plan	177.7	897	892	0	897	0	892	0	E, MC, S			Conditional subdivision approval has been granted to create 892 single residential lots, predominantly of R20 density. Conditional approval has also been granted to create two grouped housing/holiday accommodation lots at a density of R60, as well as two mixed use lots for a village centre, a primary school site, a resort/tourist facility and 16 hectares of public open space. The Draft Greenough River Estate Structure Plan identifies a proposed yield of approximately 6,600 new dwellings for the combined areas of GN10 and part of GN11.
GN12	Lots 20, 200 & 201 Koojarra Street, Lot 9000 Rosapark Boulevard, Lot 122 Boyd Street	Webberton	Map B	S J Backshall, B J Johnson, P T Johnson, M T Reale, B R Watson & City of Geraldton	Residential	Urban Development	Yes	Draft Spalding Locality Outline Development Plan	18.5	182	182	0	0	0	0	182	MC			The site comprises of multiple parcels of land zoned Urban Development. A draft outline development plan has been prepared for the site which identifies a total lot yield of 183 residential lots. A subdivision application to create four lots at Lots 200 and 201 Koojarra Road has been granted conditional approval; development of the site is likely to occur over the medium to long term depending on market conditions.

Table 10: Project summaries – Geraldton

Identifier	Location	Suburb	Map number in this document	Existing tenure[1]	Purpose	Zoning/planning			Area/yield[2]			Subdivision approvals[3]		Anticipated dwelling release[4] (commencing late 2015)			Constraints[5]			Comments
						Current zoning	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 yrs)	Medium-term (5-10 yrs)	Long-term (10+ yrs)	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite	
GN13	Lots 13, 14, 15, 17 & 117 Brand Highway, Lots 399 & 500 Rudds Gully Road, Lots 30, 477, 717 & 2705 Scott Road	Rudds Gully	Map A	Numerous landowners	Residential	Urban Development, Rural	Yes	Rudds Gully Local Structure Plan, Draft Lots 13, 14 & Pt 21 Verita Road/Brand Highway, Rudds Gully Local Structure Plan	358.2	3143	3143	0	0	0	0	3143	D, E, L, P, PW, S, W, Z	MC		Rudds Gully Local Structure Plan area. Conditional subdivision approval was granted in 2010 to create 692 residential lots on Lots 13 and 14; however, it was not progressed. The western part of the site is zoned Urban Development; Lots 399, 477, 717 and 2705 are zoned Rural and has been marked as Investigation Area.
GN14	Lots 398, 1883, 1884, 1885, 1954, 9500 & 9502 Fairfax Drive, Lot 198 Tobin Way	Moresby	Map B	C J Carter, W S H Hart, Batavia Vista Pty Ltd, Moresby Projects Pty Ltd, Poppy Corp Pty Ltd & Zarla Lane Pty Ltd	Residential	Urban Development	Yes	Woorree New Town Subdivision Guide Plan	419.8	2501	2501	0	184	434	0	2067	E, L, P	MC, S		Woorree New Town residential estate development. Conditional subdivision approval was granted to create 503 residential lots in 2010; subdivision was partly progressed with 49 lots released. In 2014, conditional subdivision approval was granted to create 204 residential lots. A bridge is also required to be constructed over the Chapman River.
GN15	Lots 103 & 9020 Brand Highway	Wandina	Map C	Paltara Pty Ltd	Residential	Urban Development	Yes	Revised Wandina Structure Plan	25.7	187	187	0	146	146	0	41	D, E, MC, S TG, Z			The site comprises of undeveloped land zoned Urban Development. Conditional subdivision approval has been granted to create 146 residential lots. A structure plan produced for the site identifies an additional yield of 41 lots, which are likely to be released in the medium to long term.
GN17	Lot 518 Triton Place	Sunset Beach	Map B	Jsd Investments Pty Ltd	Residential	Urban Development	Yes	N/A	1.0	7	7	0	7	7	0	0	E, P, S, TG, W			The site is a vacant block of land zoned Urban Development. Conditional subdivision approval has been granted to create seven residential lots and one lot for public open space.
GN18	Lot 9508 Chapman Road & Lot 9509 Swordfish Vista	Sunset Beach	Map B	Developments Sunset Beach Pty Ltd	Residential	Urban Development	Yes	Sunset Beach Structure Plan	31.0	191	191	191	0	191	0	0		E, MC, P, TG		The site comprises of undeveloped land zoned Urban Development. A subdivision application to create 191 residential lots has been lodged and is awaiting determination. Pending final determination, lot yield could be as proposed or less.
GN19	Numerous lots bounded by Utakarra Road, Abraham Street, Archer Street and Blencowe Road	Utakarra	Map C	Numerous landowners	Residential	Residential	No	Draft Utakarra West Outline Development Plan	18.1	297	297	0	0	0	0	297	MC			Draft Utakarra West Outline Development Plan area. The site is zoned Residential R30 and can potentially yield up to 297 lots.
GN20	Lot 27 Moloney Street	Utakarra	Map C	Topssip Transport Pty Ltd	Residential	Residential	No	N/A	7.1	16	16	0	0	0	16	0	MC, P, PW, TG, W			The site comprises of undeveloped land zoned Residential R2.5. Conditional subdivision approval was granted to create 16 lots for residential purposes; however, subdivision was not progressed.
GN21	Lot 2185 Alexander Street & Lot 1 Moloney Street	Utakarra	Map C	Mary Donald Nominees Pty Ltd	Residential	Urban Development	Yes	Lot 2185 Alexander Street and Lot 1 Moloney Street, Utakarra - Outline Development Plan	26.6	269	269	0	269	269	0	0	E, P, PW, S, TG, W	MC		The site comprises of undeveloped land zoned Urban Development. Conditional subdivision approval has been granted to create 269 residential lots; 144 of which will be developed at a density of R12.5, while the remaining 125 lots will be developed at a density of R20.
GN22	Numerous lots bounded by Beattie Road, North West Coastal Highway, Mary Street, Collins Road, Sutcliffe Road and Chapman River	Waggrakine	Map B	Numerous landowners	Residential	Residential, Urban Development	No	Waggrakine Residential Estate Structure Plan	202.8	1718	1724	0	181	186	0	1538	D, MC, PW, S, TG, W	L		The site comprises of the undeveloped portion of the Waggrakine Residential Estate Structure Plan area. Conditional subdivision approval has been granted to create 29 residential lots at Lot 6 Collins Road, and 152 lots on Lots 79, 80, 81, 82 and 9001 (bounded by Collins Road, Sutcliffe Road and David Road). Lot 442 Half Moon Drive is zoned R30 and proposed for grouped dwellings; it is estimated that six grouped dwellings will be built on this lot based on an average site area of 300 m^2 (one third of lot area excluded to account for common property). Lots are likely to be released over a broad timeframe due to a large number of different landowners.

Table 10: Project summaries – Geraldton

Identifier	Location	Suburb	Map number in this document	Existing tenure[1]	Purpose	Zoning/planning			Area/yield[2]			Subdivision approvals[3]		Anticipated dwelling release[4] (commencing late 2015)			Constraints[5]			Comments
						Current zoning	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 yrs)	Medium-term (5-10 yrs)	Long-term (10+ yrs)	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite	
GN26	Lot 9500 Corsair Ridge	Glenfield	Map B	Crosswest Corporation Pty Ltd	Residential	Urban Development	Yes	N/A	3.1	39	39	0	39	39	0	0	E, PW, S, W			Unsubdivided portion of Glenfield Beach Estate residential development. Conditional subdivision approval has been granted to create 39 lots for residential purpose, ranging in size from 550m² to 650m².
GN27	Numerous lots bounded by North West Coastal Highway, Chapman Road, Dulchev Way and Stella Street	Glenfield	Map B	Numerous landowners	Residential, Special Use, Mixed Use	Urban Development, Special Use	No	Glenfield Structure Plan	354.4	5324	5324	0	16	16	0	5262	D, E, H, L, P, PW, S, W	MC		Glenfield Structure Plan area. The site is zoned Urban Development and Special Purpose, with proposed land uses to include residential and commercial uses. The structure plan identifies a residential lot yield of 5,324 lots at a range of densities from R5 to R80. Current conditional approval exists for 16 lots to be created.
GN28A	Lots 819 & 820 Bedford Street	Spalding	Map B	119 Nicholson Road Pty Ltd	Residential	Urban Development	No	Strickland Street and Bedford Street Precinct, Spalding - Outline Development Plan - Draft	3.8	58	67	0	58	58	0	0				Undeveloped land zoned Urban Development. Conditional subdivision approval has been granted to create 58 lots for residential purposes; 55 for single residential and three for grouped housing.
GN28B	Lots 827 & 828 Strickland Street	Spalding	Map B	Joyne Pty Ltd	Commercial	Urban Development	Yes	Strickland Street and Bedford Street Precinct, Spalding - Outline Development Plan - Draft	2.8	2	2	0	45	-	-	-	MC			Undeveloped site zoned Urban Development. Conditional subdivision approval has been granted to create 45 lots for residential purposes; however, it has been indicated that residential subdivision will not be progressed, and that the site will be developed for commercial purposes.
GN31	Lot 9508 Horwood Road	Deepdale	Map C	P D Horwood & Aeges Pty Ltd	Residential, Rural Residential	Residential, Rural Residential	No	Lot 9000 Horwood Road, Deepdale - Structure Plan	154.1	184	184	0	162	162	22	0	E, MC			For the part of site zoned Residential, conditional subdivision approval has been granted in 2012 for the creation of 182 low density (R2.5 and R5) residential lots. Subdivision has been partly progressed with 55 lots already released, with the remaining 127 lots expected for release within the short term. Additionally, conditional subdivision approval has also been granted for the creation of 35 rural residential lots on the portion of lot zoned Rural Residential. The portion of proposed balance Lot 9507 zoned Rural Residential is expected to yield an additional 22 lots; likely to be released in the medium term.
GN33	Lot 52 Chapman Road	Drummond Cove	Map B	Utopia Property Group WA Pty Ltd	Residential	Residential	No	N/A	4.1	28	28	0	28	28	0	0	E			Conditional approval has been granted to create 28 residential lots of approximately 1,000m² in size. Lots are expected to be released in the short term.
GN34	Lot 110 Blencowe Road	Rangeway	Map C	AAA Nguyen WA Pty Ltd	Residential	Residential	No	N/A	2.1	24	30	0	0	0	24	0	E, MC			The site is an undeveloped portion of land zoned Residential R30. Conditional subdivision approval was granted in 2011 to create 24 lots for residential purposes; however, subdivision was not progressed.
GN35	Lot 206 Horwood Road	Woorree	Map C	CPG02 Pty Ltd	Commercial	Service Commercial	No	Geraldton Business Park - Lot 206 Horwood Road, Woorree - Outline Development Plan - Draft	10.8	8	8	0	0	-	-	-	MC			Conditional subdivision approval was granted in 2011 to create eight lots for commercial purposes; however, subdivision was not progressed. Development on the site is dependent on the progression of the proposed Geraldton North-South Highway. It is likely that development will take place in the long term.
GN36	Lots 219 & 220 Brand Highway	Mount Tarcoola	Map C	Cowdenbeath Nominees Pty Ltd	Residential	Residential	No	N/A	2.4	15	40	0	0	0	0	40	E, MC			Conditional subdivision approval was granted in 2009 to create 13 single residential lots and two grouped dwelling lots; however, it did not progress to final approval. It is expected that the grouped dwelling lots will yield a collective total of 25 dwelling units.

Identifier	Location	Suburb	Map number in this document	Existing tenure[1]	Purpose	Zoning/planning			Area/yield[2]			Subdivision approvals[3]		Anticipated dwelling release[4] (commencing late 2015)			Constraints[5]			Comments
						Current zoning	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 yrs)	Medium-term (5-10 yrs)	Long-term (10+ yrs)	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite	
GN38	Lots 80 & 81 Hackett Road, Lot 55 Cooper Street	Waggrakine	Map B	P J Dossetter, V C Neil, J M Newton, V J Newton, Portstyle Nominees Pty Ltd, Seatone Nominees Pty Ltd & Seventh Wave Enterprises Pty Ltd	Residential, Rural Residential	Urban Development	Yes	Moresby Heights Local Structure Plan	395.6	1909	1909	0	0	0	0	1909	E, MC			The Moresby Heights Local Structure Plan covers the entirety of the site area, and proposes for an estimated total lot yield of 1,909 lots to be developed at a range of densities from rural residential to R40.
GN39	Lots 11, 560, 561, 562 & 563 Geraldton-Mount Magnet Road	Karloo	Map C	Housing Authority	Residential	Urban Development	No	Karloo Local Structure Plan	128.5	1,354	1,400	0	105	105	0	1245	E, MC, S, W			The site is expected to yield 1,350 single residential lots and four multiple dwelling lots. Conditional subdivision approval has been granted to create 105 lots on Lot 560.
GN41	Lots 1 & 52 Fairfax Drive	Moresby	Map B	X T Hoang, H T Nguyen & Rentak Land Pty Ltd	Rural Living	Urban Development	Yes	N/A	416.3	238	238	0	0	0	0	238		P	L, MC, W	The site is currently zoned Urban Development and is expected to yield 238 lots. Lot sizes are likely to range from 2,000m^2 to four hectares. A bridge is required to be constructed over the Chapman River.
GN43	Lots 732 & 819 Evana Terrace	Wandina	Map C	G A Curran	Residential	Residential	No	N/A	3.0	35	35	0	35	35	0	0	E	S, W		Conditional subdivision approval has been granted to create 35 lots for residential purposes.
GN44	Lot 4 Verita Road	Wandina	Map C	Cocking Pty Ltd	Residential	Residential	No	N/A	17.7	155	155	0	155	155	0	0	MC	S, W		Conditional subdivision approval has been granted for the creation of 155 lots for residential purposes on the site.
GN45	Lot 400 Chapman Road	Bluff Point	Map B	WA Land Authority	Residential	Urban Development	Yes	Lot 500 Chapman Road, Bluff Point - Outline Development Plan	8.4	90	102	0	0	0	102	0	E, H, P	MC		Undeveloped parcel of land zoned Urban Development. Conditional subdivision approval was granted in 2012 to create 88 single residential lots and two grouped dwelling lots, amounting to a collective total of 102 dwelling units. Approval was not progressed. The timeframe of development is subject to market conditions.
GN46	Lot 9000 Ord Street	Beresford	Map B	CCPL Developments Pty Ltd	Residential	Residential	No	N/A	0.9	9	9	0	0	0	9	0	E, H, P			Conditional subdivision approval was granted to create nine residential lots ranging in size from 682m^2 to 1,001m^2 in 2011; however, subdivision was not progressed.
GN47	Lot 101 Deepdale Road, Lots 200 & 363 Geraldton-Mount Magnet Road	Moonyoonooka	Map A	City of Greater Geraldton	Strategic Infrastructure	Strategic Infrastructure	No	Geraldton Airport Technology Park Structure Plan	139.0	103	103	0	0	-	-	-	D, H, MC, P			Site is undeveloped and zoned Strategic Infrastructure. The Geraldton Airport Technology Park Structure Plan proposes for the creation of 103 lots in total; one 4.27 hectare lot for the City of Greater Geraldton depot site, one 7.53 hectare lot for proposed mining training site, one 1.44 hectare lot for a proposed motel site, and a further 100 lots ranging in size from 2,000m^2 and 5.15 hectares.
GN48	Lots 404, 1002 & 9501 Glenfield Beach Road, Lots 55, 500 & 5805 Chapman Road	Drummond Cove, Glenfield	Map B	ASDC Pty Ltd, Coles Group Property Developments Ltd, North Bay Developments Pty Ltd	Residential, Public Purpose, Commercial, Civic and Cultural	Urban Development	Yes	Glenfield Beach Local Structure Plan, Glenfield District Activity Centre Structure Plan	204.2	1,328	2,313	0	207	207	0	2,106	D, E, P, PW, S, W	MC		Undeveloped portion of the Glenfield Beach Local Structure Plan Area. Lots 55 and 500 Chapman Road are subject to the Glenfield District Activity Centre Structure Plan, which proposes for commercial development. Conditional approval has been granted to create 207 residential lots. The remaining residential lots are likely to be released over a broad timeframe to suit market conditions. Lot 1001 Glenfield Beach Drive has been identified as a possible site for a high school, pending detailed planning and investigation between the landowner and the Department of Education. A primary school is also proposed to be located within the southern half of the site.
GN49	Lot 500 Winnetta Ridge	Wandina	Map C	Arcadia Waters Midwest Pty Ltd	Retirement Village	Residential	No	N/A	4.7	82	82	0	0	-	-	-	MC			The site forms part of the Arcadia Waters Geraldton retirement village. Stage 1 of the development is now complete with 46 dwelling units already constructed. Stage 2 is currently in progress with construction of 19 dwelling units currently undertaken. Construction of Stage 3 is also expected to commence within the short term, comprising of a further 63 dwelling units.
GN50	Lots 1, 3, 4 & 5 North West Coastal Highway, Lots 6, 7, 8, 9, 10 & 11 Richards Road	Buller	Map B	Numerous landowners	Residential	Residential	No	Wokarena Heights Structure Plan	129.7	228	228	0	33	33	0	195	MC, PW, W			The site forms the unsubdivided portion of the Wokarena Heights Structure Plan area. Conditional subdivision approval has been granted to create a collective total of 33 residential lots on Lot 4 North West Coastal Highway and Lots 9 & 10 Richards Road. The remaining portion of the site not subject to conditional subdivision approval is likely to yield 195 lots. The site is currently zoned Residential R2.5.
GN52	Lot 872 Durlacher Street	Geraldton	Map C	Antipodean Surfaris Pty Ltd	Residential	Mixed Use	No	N/A	0.5	12	12	0	12	12	0	0	MC			Conditional approval has been granted to create 12 survey strata lots for residential purposes. The site is zoned Mixed Use with an R-Code of R80.

						Zoning/planning			Area/yield[2]			Subdivision approvals[3]		Anticipated dwelling release[4] (commencing late 2015)			Constraints[5]			
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GN57	Lot 1900 Moonyoonooka-Narngulu Road, Lot 9500 Arthur Road	Meru	Map A	K J Allen & Hampton Livestock Transport Pty Ltd	Industrial	General Industry	No	Narngulu Industrial Estate Buffer Precinct C Structure Plan	83.7	30	30	0	30	-	-	-	MC			The site forms part of the Narngulu Industrial Estate and is zoned General Industry. Conditional subdivision approval has been granted to create 30 lots for general industry purposes.
GN59	Lot 8058 Kenny Crescent	Rangeway	Map C	S V Koskelainen	Residential	Residential	No	N/A	1.8	27	27	0	0	0	27	0	MC			Conditional subdivision approval has been granted to create four lots for residential purposes (each lot is 827m^2 in area), as well as one balance lot of 1.4 hectares. Lot yield for the balance lot has been calculated based on a density of R30 (minimum lot area of 410m^2); yielding approximately 23 lots which may also be released in the short term.
GN60	Lot 9014 Wallabi Drive	Wandina	Map C	Housing Authority	Residential	Residential	No	Wandina Structure Plan	8.3	81	81	0	81	81	0	0	E, MC, S			Conditional subdivision approval has been granted to create 81 lots for residential purposes.
GN61	Lots 3 & 3066 Chapman Road, Lot 85 Foreshore Drive, Lot 2907 Forrest Street	Geraldton	Map C	Mid West Development Authority, State of WA & WA Land Authority	Residential, Mixed Use	Regional Centre	No	N/A	4.0	40	490	0	19	80	40	370	MC			Site forms part of the Batavia Coast Marina development and is zoned Regional Centre. Conditional subdivision approval has been granted to create 16 single residential lots and three lots for grouped dwelling purposes.
GN63	Lot 245 Dampier Street	Beachlands	Map C	Beachland Lots Pty Ltd	Residential	Residential	No	N/A	0.2	1	6	0	0	6	0	0				A total of six grouped dwelling units are expected to be constructed on the site.
GN64	Lot 106 Charles Street	Bluff Point	Map B	Greenspark Holdings Pty Ltd	Residential	Residential	No	N/A	0.2	1	5	0	0	5	0	0				A total of five grouped dwelling units are expected to be constructed on the site.
GN65	Lot 116 Crowtherton Street	Bluff Point	Map B	Dual Focus Pty Ltd	Residential	Residential	No	N/A	0.2	1	5	0	0	0	5	0	MC			A total of five grouped dwelling units are expected to be constructed on the site. There is currently an existing building that is yet to be demolished; construction is likely to start in the medium to long term.
GN66	Lot 100 Lawley Street	Spalding	Map B	J D Mitchell & Portfolio Sales and Marketing Pty Ltd	Residential	Residential	No	N/A	0.3	1	10	0	0	0	0	10	MC			Proposed development for the site to include the construction of 10 grouped dwellings.
GN67	Lot 838 Green Street	Spalding	Map B	Core International Pty Ltd & Sumbola Consultancy Pty Ltd	Residential	Residential	No	N/A	1.4	1	33	0	0	0	0	33	MC			Proposed development for the site to include the construction of 33 grouped dwellings on the site.
GN76	Numerous lots bounded by Chapman Valley Road, Goodwin Road, Moresby Road and Fairfax Drive	Moresby	Map B	Numerous landowners	Rural Residential	Rural Residential	No	Moresby Rural Residential Local Structure Plan	253.3	136	136	0	6	6	0	130		MC		The site is covered by the Moresby Rural Residential Local Structure Plan. The structure plan proposes for the majority of existing lots within its outlined area to be subdivided into two to four lots. As at February 2016, conditional subdivision approval has been granted for six existing lots to be subdivided into two lots each. The timeframe for the release of lots may vary, depending on landowners' wishes to subdivide, as well as market conditions.
GN79	Lots 2, 3, 4, 5, 7, 31, 32, 33, 41, 51, 54, 55 & 101 Edward Drive, Lot 61 Geraldton-Mount Magnet Road	Meru	Map C	Numerous landowners	Rural Residential, Industrial	Urban Development	Yes	Meru Subdivision Guide Plan	83.2	66	66	0	0	0	0	47	MC	L		The entirety of the site is covered by the Meru Subdivision Guide Plan. The Subdivision Guide Plan proposes for a yield of 47 lots for rural residential purposes and 22 lots for industrial purposes. Note that Lots 31, 32 and 33 Edward Road will not be subject to further subdivision; they have been subtracted from the total lot yield count. No application to subdivide has been lodged with the WAPC.
GN81	Lot 202 Meru Tip Road	Narngulu	Map C	Wandina Pty Ltd	Industrial	General Industry	No	Lot 202 Meru Tip Road, Narngulu - Local Structure Plan	33.5	44	44	0	0	-	-	-	D, S, W			A local structure plan has been created for the site, which identifies a lot yield of 44 lots for industrial purposes and one lot for drainage purposes.

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						Current zoning	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 yrs)	Medium-term (5-10 yrs)	Long-term (10+ yrs)	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite	
GN82	Lot 200 Greenough River Road	Cape Burney	Map A	City of Greater Geraldton	Residential	Urban Development	Yes	Lot 200 Greenough River Road, Cape Burney - Outline Development Plan	7.7	49	49	0	0	0	49	0	MC			An outline development plan has been produced for the site and endorsed by WAPC. It identifies a yield of 20 lots with R40 zoning and 29 lots with R60 zoning. Other proposed land uses on the site include tourism and commercial.
GN83	Lots 564 & 565 Scott Road	Karloo	Map C	Wandina Pty Ltd	Residential, Commercial, Industrial	Urban Development	Yes	Lot 21 Scott Road, Karloo - Local Structure Plan	78.5	201	201	0	0	0	0	110	MC			A local structure plan has been produced for the site, which proposes for land uses of residential, commercial and industrial. A total of 110 lots will be created for residential purposes (17 R10 lots and 93 R20 lots), 75 lots for commercial purpose and 17 lots for light industry purpose.
GN84	Lot 800 Moloney Street	Karloo, Utakarra	Map C	Wandina Pty Ltd	Residential, Industrial	Urban Development	Yes	Lots 23 & 800 Moloney Street - Utakarra - Local Structure Plan	103.8	620	620	0	0	0	0	620	E, MC			A local structure plan has been produced for the site, which proposes future land uses of residential and light industrial for the site. Proposed residential is to comprise of a mixture of Residential R10, R20 and R30 and is to be located on the northern half of the site; light industry will be located on the southern half of the site. The project is expected to yield 620 residential lots (26 lots R10, 511 lots R20, 83 lots R30); and 44 lots for light industry purposes with a minimum lot area of 5,000m^2.
GN85	Lots 566 & 567 Verita Road	Rudds Gully	Map C	City of Greater Geraldton	Residential, Service Commercial, Light Industry	Urban Development	Yes	Lot 9 Verita Road, Rudds Gully - Local Structure Plan	176.4	351	351	0	0	0	0	280	E, H, MC			Proposed land uses for the site as identified by the structure plan include residential, service commercial and light industry. The site is expected to yield 280 residential lots, with the majority to be developed at a density of R20 and a small proportion of lots to be developed at R40. The portion of site with proposed residential zoning is located on the south west corner of the site on existing Lot 567. Additionally, the site is also expected to yield 57 service commercial lots and 14 light industry lots, all with a minimum size of 5,000m^2.
GN111	Lots 31, 45, 60 & 81 Horwood Road, Lots 34, 35, 41, 42, 43 & 44 Edward Road	Utakarra	Map C	Numerous landowners	Rural Residential	Rural Residential	No	Utakarra East Rural Residential Structure Plan	54.8	24	24	0	1	1	0	23	MC	L, W		The site is part of an area covered by the Utakarra East Rural Residential Structure Plan. Existing Lot 31 is to be divided into three lots, Lot 45 is to be divided into three lots, Lot 60 is to be divided into two lots and Lot 81 is to be divided into two lots. Lots 34 and 35 are to be divided into three lots each, and Lots 41, 42, 43 and 44 are to be divided into two lots each.
GN113	Lot 9010 Estuary Drive	Drummond Cove	Map B	Third Meroo Pty Ltd	Residential	Residential	No	N/A	1.3	19	19	0	0	0	0	19	E, MC			The site is an undeveloped parcel of land zoned Residential R20. No application to subdivide the site has been lodged with the WAPC. Lot yield has been calculated based on an average lot size of 450m^2.
GN114	Lot 4 Glenfield Beach Drive	Glenfield	Map B	L S Lambrecht	Residential	Residential	No	N/A	1.4	16	16	0	0	0	0	16	E, MC			Much of the site is an undeveloped parcel of land zoned Residential R20. There is an existing dwelling occupying approximately 0.3 hectares of the 1.4 hectare site area. It is expected that the remainder of the lot will be subdivided in the future.
GN115	Lot 303 Surfside Terrace	Glenfield	Map B	H Cocking & R S Cocking	Residential	Residential	No	N/A	0.2	5	5	0	0	0	5	0	MC			The site is an undeveloped parcel of land zoned R20. A previous subdivision application for the site sought to create three lots on the site; compliant with the previous R15 zoning. Lot yield shown in this table has been calculated based on the current specified R20 density.
GN116	Lot 9501 Poseidon Drive	Glenfield	Map B	North Bay Developments Pty Ltd	Residential	Residential	No	Glenfield Beach Estate Subdivision Guide Plan	0.3	5	5	0	0	0	5	0	MC			The site is an undeveloped parcel of land zoned R20. The site is covered by the Glenfield Beach Estate Subdivision Guide Plan, which identifies a yield of five lots for the site.
GN117	Lot 2488 Guara Drive	Sunset Beach	Map B	State of WA	Residential	Residential	No	N/A	0.3	6	6	0	0	0	6	0				The site is owned by the State of Western Australia and is an undeveloped parcel of land zoned Residential R20. Lot yield has been calculated based on an average lot size of 450m^2 as per the specified R20 density; expected yield is six lots.
GN118	Lot 3029 Kempton Street	Bluff Point	Map B	State of WA	Residential	Residential	No	N/A	1.2	18	18	0	0	0	0	18	E, MC			The site is an undeveloped parcel of Crown land zoned Residential R25. A subdivision application to create 18 residential lots and one lot for public open space was lodged in 2014 but subsequently cancelled. The site is located within an area likely to be subject to coastal erosion and/or inundation over the next 100 years, as identified by the State Planning Policy 2.6 State Coastal Planning Policy.
GN119	Lot 500 Kempton Street	Bluff Point	Map B	Trustees of the Diocese of North WA	Residential	Residential	No	N/A	0.9	20	20	0	0	0	0	20	MC	E		The site is an undeveloped parcel of land zoned Residential R30. Based on an average lot area of 300m^2 as per the specified R30 density, the site is expected to yield 20 lots. It is located within an area subject to coastal erosion and inundation over the next 100 years, as identified by the State Planning Policy 2.6 State Coastal Planning Policy.

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						Current zoning	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 yrs)	Medium-term (5-10 yrs)	Long-term (10+ yrs)	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite	
GN120	Lot 9500 Tamblyn Road	Spalding	Map B	Geraldton Property Group Pty Ltd	Residential	Residential	No	N/A	3.0	28	28	0	0	0	28	0	D, MC			The site is an undeveloped parcel of land zoned Residential R20. Conditional subdivision approval was granted to create 28 lots on the site; however, subdivision was not progressed.
GN121	Lot 302 Chapman Valley Road	Moresby	Map B	Keywise Pty Ltd	Rural Residential	Rural Residential	No	N/A	75.9	30	30	0	0	0	0	30	MC, P			The site is zoned Rural Residential. Expected lot yield is 30 rural residential lots with an average size of two hectares.
GN122	Lot 9000 Ord Street	Beresford	Map B	Sunbelt Pty Ltd	Residential	Residential	No	N/A	3.2	63	63	0	0	0	0	63		MC		The site is an undeveloped portion of land zoned Residential R30. Lot yield has been calculated based on an average lot area of 300m^2 as per the specified R30 density.
GN123	Lot 962 Mark Street	Beresford	Map B	VESTING - City of Greater Geraldton	Residential	Residential	No	N/A	1.2	26	26	0	0	0	0	26	MC			The site is an undeveloped parcel of Crown land zoned Residential R30. Lot yield has been calculated based on an average lot area of 300m^2 as per the specified R30 density.
GN124	Lot 68 Cairncross Street	Beresford	Map B	Investwest Holdings Pty Ltd & Masterlink Pty Ltd	Residential	Residential	No	N/A	0.3	7	7	0	0	0	0	7	MC			The site is an undeveloped portion of land zoned Residential R30. Lot yield has been calculated based on an average lot area of 300m^2 as per the specified R30 density.
GN125	Lot 2744 Kononen Place	Beresford	Map B	State of WA	Residential	Residential	No	N/A	0.3	7	7	0	0	0	0	7	MC			The site is a parcel of vacant land zoned Residential R30. Lot yield has been calculated based on an average lot size of 300m^2, consistent with the specified R30 zoning.
GN126	Lot 92 Anderson Street	Webberton	Map B	City of Greater Geraldton	Residential	Residential	No	N/A	0.7	10	10	0	0	0	0	10	MC			The site is a parcel of vacant land zoned Residential R20. Lot yield has been calculated based an average lot size of 450m^2, consistent with the specified R20 zoning.
GN127	Lot 14 Horwood Road	Woorree	Map C	A G Williamson & H D Williamson	Rural Residential	Rural Residential	No	N/A	7.0	6	6	0	0	0	0	6	MC			Conditional subdivision approval was granted in 2007 for the creation of six lots for special rural purposes; however, subdivision was not progressed.
GN128	Lot 18 Horwood Road	Woorree	Map C	K Tyrrell	Rural Residential	Rural Residential	No	N/A	8.4	8	8	0	0	0	0	8	MC			The site is zoned Rural Residential and is capable of yielding up to eight rural residential lots with an average size of one hectare.
GN129	Lot 75 Bayly Street	Geraldton	Map C	Roman Catholic Bishop of Geraldton	Residential	Residential	No	N/A	1.6	17	17	0	0	0	0	17	MC			Part of the site is zoned Mixed Use/Residential R80, with the remainder of the site zoned Residential R40. Lot yield has been calculated for the portion of lot zoned R40 only. The Leaning Tree Community School is currently located on the site on the portion of lot zoned R80.
GN130	Lot 81 Ainsworth Street	Wonthella	Map C	City of Greater Geraldton	Residential	Residential	No	N/A	0.4	8	8	0	0	0	0	8	MC	S		The site is a vacant lot zoned Residential R30. The site is likely to yield up to eight lots, based on a minimum lot area of 425m^2.
GN131	Lots 16, 20, 23 & 123 Wells Street, Lot 166 Johnston Street	Geraldton	Map C	Rodale Nominees Pty Ltd	Residential	Residential	No	N/A	4.0	60	60	0	0	0	60	0	MC	TG		The site is comprises of multiple parcels of undeveloped land zoned Residential R40. An indicative yield of 60 residential lots has been identified, based on an average lot area of 220m^2. Half of the site area has been excluded from lot yield calculations due to the slope of the site.
GN132	Lot 502 Ainsworth Street	Wonthella	Map C	State of WA	Residential	Residential	No	N/A	2.5	56	56	0	0	0	0	56	MC	S, TG		The site is an undeveloped parcel of Crown land zoned R30. An indicative lot yield has been calculated based on an average lot area of 300m^2. The site is sloped and may be costly to develop.
GN133	Lot 4191 Carter Street	Rangeway	Map C	L K Maier & S E S Maier	Residential	Residential	No	N/A	0.5	8	8	0	0	0	0	8	MC			The site is an undeveloped parcel of land zoned R30. Lot yield has been calculated based on a minimum lot area of 410m^2; yield is likely to be eight lots.
GN134	Lot 111 Wandoo Street	Rangeway	Map C	P S Costantino	Residential	Residential	No	N/A	2.7	43	43	0	0	0	0	43		MC		The site is an undeveloped parcel of land zoned R30. Lot yield has been calculated based on a minimum lot area of 410m^2; the site can potentially yield up up to 43 lots. Development of the site will be dependent on market conditions.
GN135	Lot 140 Blencowe Road	Rangeway	Map C	P T Johnson	Residential	Residential	No	N/A	0.8	11	11	0	0	0	0	11	MC			The site is a parcel of vacant land zoned Residential R30. Conditional subdivision approval was granted in 2007 for the creation of 11 residential lots ranging in size from 669m^2 to 711m^2; however, subdivision was not progressed.
GN136	Lots 248 & 249 Blencowe Road, Lot 250 Curlewis Street	Rangeway	Map C	A J Adkins, M A Adkins, A Conti, C L Conti & M T Thompson	Residential	Residential	No	N/A	2.0	32	32	0	0	0	0	32	MC			The site comprises of three parcels of cleared vacant land zoned R30. Lot yield has been calculated based on a minimum lot area of 410m^2; the site can potentially yield up to 32 lots.
GN144	Lot 8072 Abraham Street	Karloo	Map C	Agland Direct Marketing Pty Ltd	Residential	Residential	No	N/A	11.5	87	87	0	0	0	0	87	MC			The site is an undeveloped parcel of land zoned Residential R20. Conditional subdivision approval was granted in 2002 to create 87 residential lots on the site; however, subdivision was not progressed.

						Zoning/planning			Area/yield[2]			Subdivision approvals[3]		Anticipated dwelling release[4] (commencing late 2015)			Constraints[5]			
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GN145	Lot 28 Stansfield Road	Narngulu	Map C	PEC Developments Pty Ltd	Rural Residential	Rural Residential	No	N/A	69.3	44	44	0	0	0	0	44	MC	E		Conditional subdivision approval was granted in 2006 to create 44 low density residential lots; however, subdivision was not progressed. The site is now zoned Rural Residential.
GN146	Lot 1369 Bronzewing Turn	Wandina	Map C	Housing Authority	Residential	Residential	No	N/A	0.2	1	7	0	0	0	7	0	MC, P			The site is an undeveloped parcel of land zoned Residential R40. The site is likely to yield seven dwellings.
GN147	Lots 16, 18, 92, 101 & 102 North West Coastal Highway	Buller	Map A	D M Dawson, A D Forth, D G Forth, G M Forth, R L Forth, C W Goddard, C N J Mills & J A Mills	Rural Residential	Rural Smallholding	No	Greater Geraldton Structure Plan	96.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site has been marked for future rural residential by the Central Regions Land Capacity Analysis. The site is currently zoned Rural Smallholding. A structure plan for the site will need to be produced and endorsed by WAPC prior to subdivision.
GN148	Lots 8, 9, 10, 11, 660, 2462 & 2949 White Peak Road	White Peak	Map A	R Allen, R Asmussen, V E Asmussen, G C Ivey, M E Napier, D M Radaich, T L Soutar, F Vinton, K M Vinton, H J Wallace, W B Wallace, K Weir & S Willcox	Rural Living	Rural	Yes	Greater Geraldton Structure Plan, Shire of Chapman Valley Local Planning Strategy, Moresby Range Management Strategy	353.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	TC	The site has been identified as an investigation area by the Central Regions Land Capacity Analysis. The Greater Geraldton Structure Plan also identifies the site as a development investigation area. The site is currently zoned Rural; however, it is predominantly used for rural lifestyle rather than general farming due to the existing lot sizes and topography. The structure plan indicates that the site is being considered for future intensification; however, a local planning scheme zoning amendment will be required. The site also forms part of the Special Control Area 2 - Moresby Ranges Landscape Protection as according to the Shire of Chapman Valley Local Planning Scheme No. 2. The northern boundary of this area abuts the proposed Oakajee Narngulu Infrastructure Corridor alignment; for which the acquisition of land is yet to be undertaken.
GN149	Lots 15, 16 & 17 Brown Lane, Lots 1, 8 & 18 David Road	White Peak	Map A	R E Eastough, J W Faichney, D G Le Fevre, K E Le Fevre, Water Corporation	Rural Residential	Rural	Yes	Greater Geraldton Structure Plan, Moresby Ranges Management Plan	244.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site has been identified as an investigation area by the Central Regions Land Capacity Analysis and the Greater Geraldton Structure Plan. A local planning scheme zoning amendment has been advertised, adopted by Council and submitted to WAPC for final approval for Lot 17 and part of Lot 18 to be rezoned from Rural to Rural Residential. Once the local planning scheme zoning amendment has been progressed, a structure plan is required to be prepared prior to subdivision.
GN150	Numerous lots bounded by Cooper Street, Hall Road, Tramway Road, Waggrakine Road, Sutcliffe Road, Albert Road, Chapman Valley Road, Collins Road, Mary Street & Beattie Road	Waggrakine	Map B	Numerous landowners	Rural Residential	Rural Residential	No	Waggrakine Rural Residential Structure Plan, Greater Geraldton Structure Plan	532.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site has been identified as an investigation area by the Central Regions Land Capacity Analysis. The Greater Geraldton Structure Plan identifies the site as Development Investigation Area 4. The site area comprises of over 100 landholdings. The Waggrakine Rural Residential Structure Plan proposes for the subdivision of each lot into two to four lots, with lot sizes raging between one and two hectares.
GN151	Lots 54 & 55 Mills Road, Lots 56, 57, 58, 59 & 302 Carnalea Road, Lot 51 Fairfax Drive	Moresby	Map B	Numerous landowners	Rural Residential	Rural	Yes	Greater Geraldton Structure Plan, Moresby Ranges Management Plan	714.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site has been identified as an investigation area by the Central Regions Land Capacity Analysis. The Greater Geraldton Structure Plan also identifies the site as Development Investigation Area 3. The site is currently zoned Rural and predominantly used for general farming. Parts of the site area has been identified as Special Control Area 1 - Moresby Range under the City of Greater Geraldton Local Planning Scheme No. 1; additional controls apply.
GN152	Crown Allotments 1011 & 28 (north of Chapman River)	Moresby	Map B	P Algie, L Horwood, P D Horwood, R Horwood & Sevane Pty Ltd	Residential	Rural, Urban Development	Yes	Greater Geraldton Structure Plan	257.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site has been identified as future residential by the Central Regions Land Capacity Analysis. The Greater Geraldton Structure Plan also identifies the site as Future Urban. Note that Lot 1011 is zoned Urban Development while Lot 28 is zoned Rural. A local structure plan for the site is yet to be prepared.

Identifier	Location	Suburb	Map number in this document	Existing tenure[1]	Purpose	Zoning/planning			Area/yield[2]			Subdivision approvals[3]		Anticipated dwelling release[4] (commencing late 2015)			Constraints[5]			Comments
						Current zoning	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 yrs)	Medium-term (5-10 yrs)	Long-term (10+ yrs)	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite	
GN153	Numerous lots bounded by Narra Tarra-Moonyoonooka Road and Chapman River	Moonyoonooka	Map A	Numerous landowners	Residential	Rural	Yes	Greater Geraldton Structure Plan	605.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site has been identified as an Investigation Area by the Central Regions Land Capacity Analysis and the Greater Geraldton Structure Plan. The structure plan identifies the site to be a "land bank" for Greater Geraldton's long term residential expansion. Parts of the site fall within the boundaries of Special Control Area 3 - Geraldton Airport; additionally, a small part of the site adjacent to Chapman River has been designated as Special Control Area 6 - Flood Prone.
GN154	Lot 104 Horwood Road	Moonyoonooka	Map A	D M Allen	Rural Living	Rural	Yes	Greater Geraldton Structure Plan	11.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The Greater Geraldton Structure Plan identifies the site as future rural living. The northern boundary of the site has been identified as a Designated Bushfire Prone Area under SPP 3.7. SPP 2.5 identifies the site as an Existing Agriculture Priority Management Area. The eastern portion of the site falls within the boundaries of Special Control Area 3 - Geraldton Airport.
GN155	Lot 20 Moonyoonooka-Narngulu Road, Pt Lot 12 & Lot 10313 Arthur Road, Lot 2 Brice Road	Narngulu	Map A	Numerous landowners	Industrial	Rural	Yes	Greater Geraldton Structure Plan, Narngulu Industrial Estate Future Land Use Directions, Narngulu Industrial Area Strategic Land Use Directions	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	TC	The Greater Geraldton Structure Plan identifies the site as Development Investigation Area 10. The site is bisected by the proposed Oakajee Narngulu Infrastructure Corridor. The Narngulu Industrial Area Strategic Land Use Directions document states that once the corridor alignment is finalised, the future use of adjacent land can be determined.
GN156	Numerous lots	Narngulu, Rudds Gully	Map A	Numerous landowners	Industrial	Rural	Yes	Greater Geraldton Structure Plan, Narngulu Industrial Area Strategic Land Use Directions	945.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The Greater Geraldton Structure Plan identifies the site for future industrial and service commercial use. The Narngulu Industrial Area Strategic Land Use Directions document identifies the site for future general industry. The document also indicates that a large portion of the site area on the southern side will be retained as general farming. The site is currently zoned Rural.
GN157	Lots 24 & 501 Jandanol Road, Lots 1, 2 & 20 Brand Highway	Rudds Gully	Map A	L G Matthews, G R G Cox, K M Cox, Maffescioni Pty Ltd, Town of Geraldton & Commissioner of Main Roads	Residential	Rural	Yes	Greater Geraldton Structure Plan	142.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The Greater Geraldton Structure Plan identifies the site as future urban. A lot yield for the site is yet to be identified. SPP 2.5 identifies the eastern portion of the site as an Existing Agriculture Priority Management Area. SPP 3.7 also identifies parts of the site as Designated Bushfire Prone Area.
GN158	Numerous lots	Oakajee	Map A	WA Land Authority	Industrial	Oakajee Industrial	No	Oakajee Industrial Estate Structure Plan	2367.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	TC	Proposed Oakajee industrial estate site area. Oakajee has been identified by the State Government as a Strategic Industrial Area with development to include the construction of a deep water port. The project faces numerous constraints, including servicing and lack of connection to the Geraldton Port, the Narngulu industrial estate and the regional rail network proposed to be built as part of the Oakajee Narngulu Infrastructure Corridor; for which acquisition of land is yet to be undertaken.
GN159	Lots 50-67 Eliza Shaw Drive	Buller	Map A	Numerous landowners	Residential	Rural Residential	Yes	N/A	35.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site is currently zoned Rural Residential under the Shire of Chapman Valley Local Planning Scheme No. 2; however, it has been identified as Future Urban by the Greater Geraldton Structure Plan.
GN160	Numerous lots bounded by Place Road, North West Coastal Highway and Railway Reserve	Webberton	Map B	Numerous landowners	Industrial	Light Industry, Service Commercial	No	Greater Geraldton Structure Plan	50.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site is currently zoned Light Industry and Service Commercial under the City of Greater Geraldton Local Planning Scheme No. 1. It has been identified as Development Investigation Area 5 under the Greater Geraldton Structure Plan and Development Investigation Area 4 under the City of Greater Geraldton Local Planning Strategy.

Table 10: Project summaries – Geraldton

Identifier	Location	Suburb	Map number in this document	Existing tenure[1]	Purpose	Zoning/planning: Current zoning	Zoning/planning: Amendment required	Zoning/planning: Other planning under way	Area/yield[2]: Area (ha)	Area/yield[2]: Yield (lots)	Area/yield[2]: Yield (units)	Subdivision approvals[3]: Approvals pending	Subdivision approvals[3]: Current approvals	Anticipated dwelling release[4] (commencing late 2015): Short-term (0-5 yrs)	Anticipated dwelling release[4] (commencing late 2015): Medium-term (5-10 yrs)	Anticipated dwelling release[4] (commencing late 2015): Long-term (10+ yrs)	Constraints[5]: Concern but resolution anticipated	Constraints[5]: Critical but resolution anticipated	Constraints[5]: Critical and resolution not definite	Comments
GN161	Lots 11, 5279 & 5280 Chapman Valley Road	Yetna	Map A	J P Collingwood & S Collingwood	Rural Living	Rural	Yes	Greater Geraldton Structure Plan	143.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	TC	The site has been identified as an investigation area by the Central Regions Land Capacity Analysis and the Greater Geraldton Structure Plan. The structure plan indicates that the site is being considered for future intensification; however, a local planning scheme amendment will be required. The Shire of Chapman Valley Local Planning Strategy proposes for the site to be developed for rural living purposes. The site is constrained by the Oakajee Narngulu Infrastructure Corridor and the planning for and delivery of this area is pending the acquisition of land for the corridor alignment.
GN162	Numerous lots bounded by Broome Street, Mitchell Street, Lawley Street, Sullivan Court and Bogle Way	Spalding	Map B	Housing Authority and numerous private landowners	Residential	Residential	No	N/A	7.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site comprises of an area of approximately 7.5 hectares, encompassing 51 single residential lots and three grouped/multiple dwelling lots. The site is zoned Residential R30 under the local planning scheme, allowing for redevelopment at higher densities.
GN163	Lot 500 Broome Street	Spalding	Map B	Housing Authority	Residential	Urban Development	No	N/A	5.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site comprises of an undeveloped lot zoned Urban Development under the local planning scheme.
GN164	Numerous lots bounded by Whitfield Street, Eliot Street, Crowther Street and Beachlands Primary School	Beachlands	Map C	Housing Authority	Residential	Residential	No	N/A	2.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	The site comprises of 31 single residential lots owned by the Housing Authority. The site is zoned Residential R40 under the local planning scheme, allowing for redevelopment at higher densities.

1 Organisation or individual/s
2 In some cases the yield for the project is indicative only. Final lot/dwellings yields will be determined by further detailed planning.
3 Refers to the number of lots/units with current subdivision or strata approval, and the number of lots/units for which a subdivision/strata application has been lodged but which is yet to be determined (pending). Does not include local government development approvals.
4 Estimate only. In most cases the precise timing of lot release is uncertain. This could be for reasons such as market conditions, demand/supply of services or a requirement to resolve issues and constraints.
5 Constraints and issues codes: Drainage (D), environmental (E), heritage (H), land assembly (L), market conditions (MC), planning (P), power (Pw), sewer (S), water (W), transport corridor (TC), topography and geology (TG), mining lease (M) and zoning (Z).

6.9 Vacant lots

Data from Landgate's property valuation database shows that there is a substantial stock of vacant lots on land zoned for residential purposes in the Geraldton urban area. At December 2015, 1,979 vacant lots were identified on land zoned for residential purposes, accounting for 12 per cent of the total stock of existing residential lots. At the local government level, the City of Greater Geraldton contains 1,847 vacant lots on land zoned for residential purposes; this forms the largest stock of vacant residential lots in any local government area outside of the Perth and Peel regions.

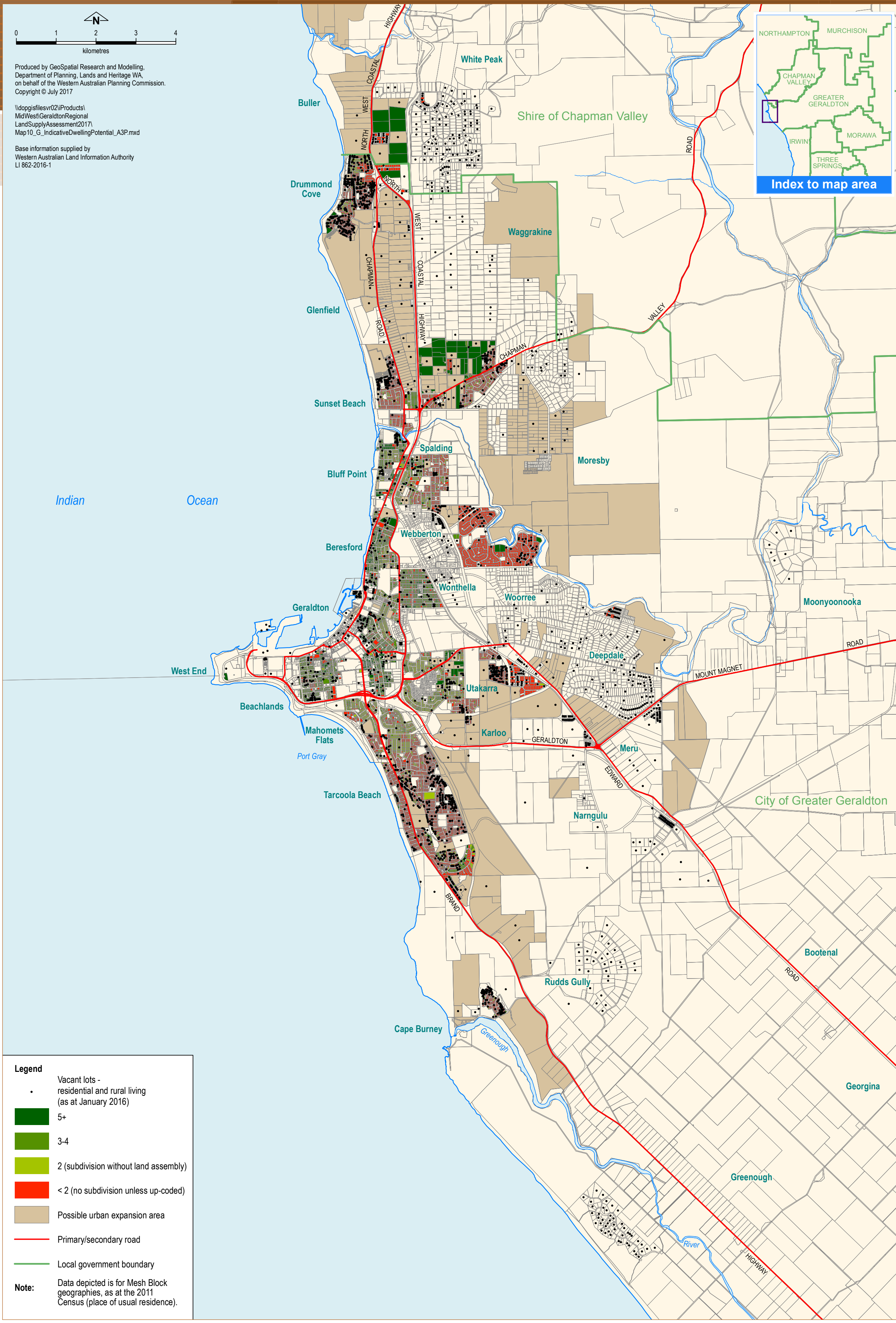
Table 11 shows the stock of vacant lots zoned for residential purposes in the Geraldton urban area. Within the Geraldton SA2, vacant lots are scattered fairly evenly across the SA2 with no particular concentrations. Within the outer SA2 areas, concentrations of vacant lots are located in Wandina, Drummond Cove and Utakarra. The distribution of vacant lots in the Geraldton urban area is shown in Map 10.

Table 11: Stock of vacant lots – Geraldton urban area

Suburb	Number of vacant lots
Beachlands	59
Beresford	54
Bluff Point	59
Buller	18
Cape Burney	81
Deepdale	23
Drummond Cove	258
Geraldton	84
Glenfield	122
Karloo	30
Mahomets Flats	18
Moresby	1
Mount Tarcoola	71
Rangeway	9
Spalding	39
Strathalbyn	32
Sunset Beach	92
Tarcoola Beach	37
Utakarra	148
Waggrakine	83
Wandina	300
Webberton	14
West End	3
White Peak	8
Wonthella	27
Woorree	37

Source: Landgate (2016) and Department of Planning, Lands and Heritage (2016)

Note: Data included lots on land zoned for residential and rural living purposes. Data shown in Table 11 has been filtered to exclude lots already included as part of development outlook projects.



Map 10: Vacant lots and Indicative dwelling potential (high)

6.10 Urban consolidation and infill

The Department of Planning, Lands and Heritage's Integrated Land Information Database (ILID) compares density outcomes with those set out by the R-Codes under local planning schemes. Using the ILID model, the latent development capacity of residential land stocks can be measured based on existing lot size and R-Code zonings.

The ILID model outputs for residential land in the City of Greater Geraldton are shown in Table 12. Table 12 shows ILID outputs for all areas with an R-Code within the local government area.

The 'additional dwelling potential' columns show the sum of possible net dwelling gains for each lot within an R- Code category. For example, a single 1,000 square metre lot with one dwelling in an area zoned R20 under the local planning scheme can be developed with two dwellings and would therefore contribute a value of one to the additional dwelling potential for lots zoned R20.

It must be noted that the data depicted in Map 10 and Table 12 is indicative only and should not be used as a definitive guide to development potential on a site-by-site basis. The model does not take into account factors such as heritage, environmental constraints or other provisions of the local planning scheme, which may mean that the additional potential shown in Map 10 cannot be realised.

The spatial distribution of lots with additional dwelling potential is shown in Map 10. Map 10 shows that there is potential for residential consolidation through subdivision within the Geraldton SA2 area as well as the suburbs of Glenfield, Karloo and Waggrakine. There is limited potential for residential consolidation through subdivision within the suburbs of Drummond Cove, Strathalbyn, Woorree, Spalding and Wandina.

Where potential for residential consolidation through subdivision exists within the Geraldton SA2 area, land is generally zoned R40 under the local planning scheme; the majority of these lots are capable of being subdivided into two or more lots.

Table 12: Dwelling density zonings and additional dwelling potential – City of Greater Geraldton

R-Code	Sum of Area (ha)	No. lots	Additional dwelling potential*	
R2.5	95	135	116	
R5	209	887	208	
R10	14	64	76	
R10/30*	44	337	94 (low)	734 (high)
R12.5	14	55	106	
R20	806	7,190	6,184	
R25	1	1	-	
R30	425	4,046	6,505	
R40	188	1,941	4,639	
R60	14	133	659	
R80	88	362	4,301	
R-AC3	57	383	-	

*Where split R-Codes apply (e.g. R10/30), additional dwelling potential (low) is calculated based on the lower density (R10 in this case). Additional dwelling potential (high) is calculated based on the higher density (R30 in this case.

Source: Department of Planning, Lands and Heritage (2016) *Integrated Land Information Database*

6.11 Adequacy of supply

Analysis on the adequacy of residential land supply in the Geraldton urban area is predicated upon an average household size of 2.6 persons per dwelling, and that existing rates of dwelling occupancy (at the 2011 Census) will be maintained. Analysis was carried out for the Geraldton SUA and the Geraldton, Geraldton-East, Geraldton-North and Geraldton-South SA2s. In addition to the identified dwelling yield shown in Tables 13 to 17, development outlook analysis (Section 6.8, Table 10) also identifies a number of investigation areas. Dwelling yields are not identified for investigation areas as the majority of these sites are yet to be zoned for urban development; therefore, investigation areas are not accounted for when analysing the adequacy of supply. Investigation areas can, therefore, extend the temporal land supply by a number of years.

Geraldton (SUA)

The median (Band C) *WA Tomorrow* population forecast for the Geraldton SUA shows an average annual population increase of 682 residents from 2011 to 2026. Population growth of this nature will require the construction of an additional 297 dwellings per annum (based on an average household size of 2.6 persons per dwelling and an occupancy rate of 88 per cent) in order to accommodate growth.

Under this growth scenario, there are sufficient stocks of land identified to meet population growth into the long term, exceeding anticipated demand. A hypothetical temporal land supply of 84 years (90 years if the stock of vacant lots is included in the supply capacity) has been identified. This supply has the capacity to support a resident population of approximately 92,000.

Geraldton (SA2)

The median (Band C) *WA Tomorrow* population forecast for the Geraldton SA2 shows an average annual population increase of 76 residents from 2011 to 2026. Population growth of this nature will require the construction of an additional 34 dwellings per annum (based on an average household size of 2.6 persons per dwelling and an occupancy rate of 86 per cent) in order to accommodate growth.

Under this growth scenario, there are sufficient stocks of land identified to meet anticipated population growth. A hypothetical temporal land supply of 23 years (33 years if the stock of vacant lots is included in the supply capacity) has been identified. This supply has the capacity to support a resident population of approximately 14,000.

Table 13: Adequacy of supply – Geraldton (SUA)

Timeframe	Estimated dwelling requirement	Identified dwelling yield
2015-2020	1,514	2,519
2020-2025	1,424	1,595
2025-2030	1,470	10,399
2030-2035	1,487	10,399
Total	**5,896**	**24,911**
Stock of vacant lots	**1,979**	

Source: Department of Planning, Lands and Heritage (2016)

Table 14: Adequacy of supply – Geraldton (SA2)

Timeframe	Estimated dwelling requirement	Identified dwelling yield
2015-2020	166	126
2020-2025	161	209
2025-2030	168	229
2030-2035	170	229
Total	**665**	**792**
Stock of vacant lots	**339**	

Source: Department of Planning, Lands and Heritage (2016)

Geraldton-East (SA2)

The median (Band C) *WA Tomorrow* population forecast for the Geraldton-East SA2 shows an average annual population increase of 137 residents from 2011 to 2026. Population growth of this nature will require the construction of an additional 58 dwellings per annum (based on an average household size of 2.6 persons per dwelling and an occupancy rate of 91 per cent) in order to accommodate growth.

Under this growth scenario, the stock of land identified is more than sufficient to accommodate anticipated population growth. A hypothetical temporal land supply of 100+ years (including the stock of vacant lots) has been identified. This supply has the capacity to support a resident population of approximately 22,000.

Table 15: Adequacy of supply – Geraldton-East (SA2)

Timeframe	Estimated dwelling requirement	Identified dwelling yield
2015-2020	318	752
2020-2025	249	409
2025-2030	279	2,735
2030-2035	290	2,735
Total	**1,136**	**6,630**
Stock of vacant lots	**414**	

Source: Department of Planning, Lands and Heritage (2016)

Geraldton-North (SA2)

The median (Band C) *WA Tomorrow* population forecast for the Geraldton-North SA2 shows an average annual population increase of 286 residents from 2011 to 2026. Population growth of this nature will require the construction of an additional 123 dwellings per annum (based on an average household size of 2.6 persons per dwelling and an occupancy rate of 89 per cent) in order to accommodate growth.

Under this growth scenario, the stock of land identified is more than sufficient to accommodate anticipated population growth. A hypothetical temporal land supply of 100+ years (including the stock of vacant lots) has been identified. This supply has the capacity to support a resident population of approximately 37,000.

Table 16: Adequacy of supply – Geraldton-North (SA2)

Timeframe	Estimated dwelling requirement	Identified dwelling yield
2015-2020	617	1,154
2020-2025	586	2,321
2025-2030	608	5,928
2030-2035	615	5,928
Total	**2,426**	**15,330**
Stock of vacant lots	**719**	

Source: Department of Planning, Lands and Heritage (2016)

Geraldton-South (SA2)

The median (Band C) *WA Tomorrow* population forecast for the Geraldton-South SA2 shows an average annual population increase of 183 residents from 2011 to 2026. Population growth of this nature will require the construction of an additional 79 dwellings per annum (based on an average household size of 2.6 persons per dwelling and an occupancy rate of 89 per cent) in order to accommodate growth.

Under this growth scenario, there are sufficient stocks of land identified to meet anticipated population growth. A hypothetical temporal land supply of 28 years (34 years if the stock of vacant lots is included in the supply capacity) has been identified. This supply has the capacity to support a resident population of approximately 13,000.

Table 17: Adequacy of supply – Geraldton-South (SA2)

Timeframe	Estimated dwelling requirement	Identified dwelling yield
2015-2020	395	494
2020-2025	412	948
2025-2030	399	356
2030-2035	395	356
Total	**1,601**	**2,153**
Stock of vacant lots	**507**	

Source: Department of Planning, Lands and Heritage (2016)

Adequacy of supply summary

Residential development is constrained in the Geraldton SA2, where almost all land zoned for residential purposes is considered to be developed. Residential expansion is also constrained in the Geraldton-South SA2, as it is bounded by productive agricultural land to the south.

Based on these scenarios, there are sufficient stocks of land identified for residential development in the Geraldton urban area to support growth well into the long term. The majority of growth in the short term is likely to be realised by the continuation of development at Moresby, Wandina and Karloo. For the medium to long term, growth is expected to occur in Moresby, Cape Burney, Glenfield, Waggrakine and Rudds Gully, where there are significant stocks of undeveloped residential land. In addition to land already zoned for urban development, a number of investigation areas have been identified, which can further extend the temporal land supply.

7 Rural living

7.1 Overview

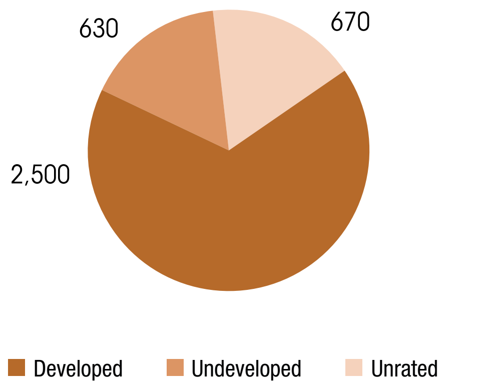
Within the Geraldton urban area, land zoned for rural living purposes covers approximately 3,800 hectares. All rural living land within the Geraldton urban area is located within the Geraldton-East and Geraldton-North SA2s. In the Geraldton-East SA2, rural living areas are located across the suburbs of Woorree, Deepdale, Narngulu and Rudds Gully. For the Geraldton-North SA2, the stocks of rural living land are located across Waggrakine, Moresby and White Peak.

7.2 Land zoned for rural living purposes

Using the IRIS land supply model, areas of land zoned for rural living purposes are assessed to provide a snapshot of rural living land stocks within the Geraldton urban area as at December 2015. Land zoned 'Rural Residential' and 'Rural Smallholding' are included in this analysis. A more detailed description of the IRIS modelling methodology is included in Appendix 2 of this document.

IRIS modelling showed that at December 2015, there were 1,756 lots zoned for rural living purposes within the Geraldton urban area, covering a total land area of approximately 3,800 hectares. The majority of this stock is located in the suburbs of Waggrakine, Moresby, White Peak and Buller; most of these lots are considered to be developed. The *Greater Geraldton Structure Plan* and *Moresby Rural Residential Local Structure Plan* indicate that rural living in Waggrakine and Moresby may be subject to further intensification. These areas have been included in this report's development outlook analysis (sites GN76 and GN150).

Figure 26: Stock of land (hectares) zoned for rural living purposes – Geraldton urban area



Source: Department of Planning, Lands and Heritage (2016) *Integrated Regional Information System*

7.3 Development activity

Figure 27 depicts data for rural living subdivision activity in the City of Greater Geraldton for the 2005-2015 period. Generally speaking, Figure 27 shows a reduction in subdivision activity since 2006/07, with 30 lots granted final approval in 2015, compared to 83 lots in 2007.

In Western Australia's regional centres, it is common for approval to be speculatively sought to subdivide land for rural living purposes; however, for various reasons, development is not progressed and the conditional approval lapses (usually after four years) without the creation of any lots. In the City of Greater Geraldton, approximately 68 per cent of rural living lots granted conditional approval during the 2005-2015 period have progressed to final approval

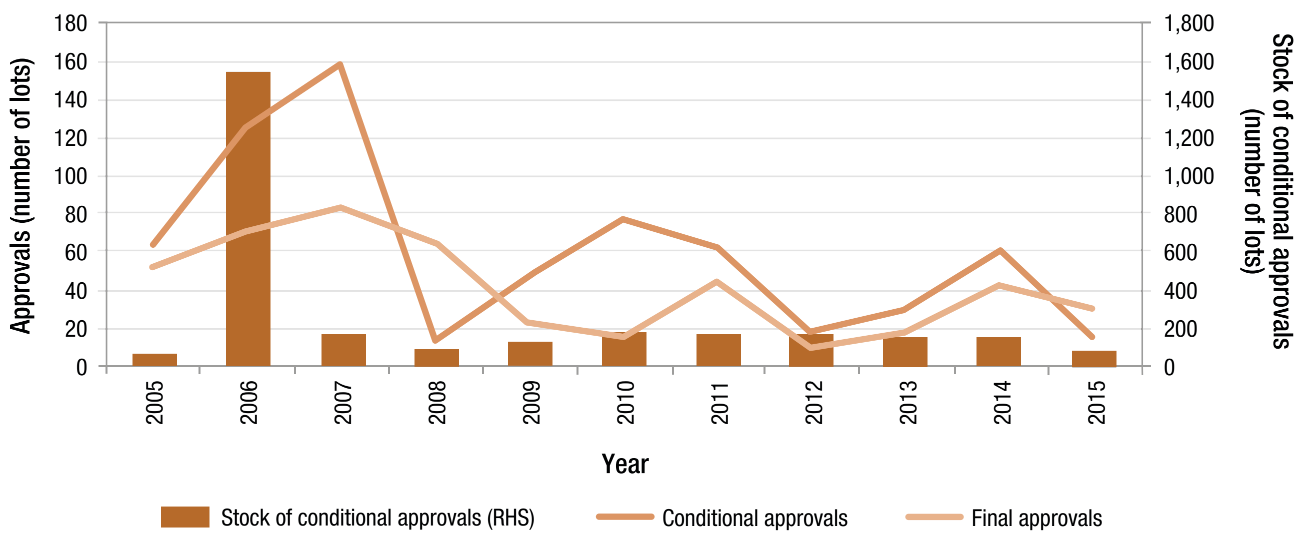
7.4 Summary

Rural living land within the Geraldton urban area is clustered into three main areas:

- Waggrakine, Moresby and White Peak
- Woorree, Deepdale, Narngulu
- Rudds Gully.

Approximately 2,500 hectares (66 per cent) of the total stock of rural living land is considered developed. Undeveloped and unrated land are scattered fairly evenly across the three main rural living clusters within the Geraldton urban area.

Figure 27: Rural living subdivision activity – City of Greater Geraldton (2005-2015)



Source: Western Australian Planning Commission (2015) *State Lot Activity* and Water Corporation (2015) unpublished data.

8 Industrial

8.1 Overview

Land zoned for industrial purposes in the Geraldton urban area covers approximately 4,450 hectares. This includes the site of the proposed Oakajee industrial estate, which covers approximately 2,332 hectares and a further 4,071 hectares of buffer area. Other areas containing significant stocks of land zoned for industrial purposes include Webberton, West End, Meru, Narngulu and Utakarra.

Geraldton Port

The Geraldton Port is located west of the Geraldton city centre, within the suburb of West End. Land in the Geraldton Port area is zoned 'Strategic Infrastructure', 'Special Use (SU4)' and 'Light Industry'. The majority of land in this area is considered to be developed, with industrial land uses directly associated with port operations being the predominant forms of activity. There is a small supply of undeveloped land at the Geraldton Port area; however, the *City of Greater Geraldton Local Planning Strategy* recognises the importance of ensuring that this land is used for purposes directly associated with the operation of the port, and not for uses which can be accommodated in other industrial areas.

Webberton/Wonthella

Significant stocks of industrial land are located across the suburbs of Webberton and Wonthella. This area contains a mix of general, light and service industrial development. The majority of industrial land in this area is considered to be developed, with undeveloped/unrated land located at the southern end of the precinct, in Wonthella. The *City of Greater Geraldton Local Planning Strategy* states that Webberton is likely to transition into a light and service industry precinct over time, due to its proximity to residential areas.

Narngulu

The Narngulu industrial area is located at the south eastern periphery of the Geraldton urban area. There are significant stocks of undeveloped and unrated industrial land within the area, providing significant opportunities for further development for a range of light and general industry. The *City of Greater Geraldton Local Planning Strategy* proposes for the continued development of general industry at the core of the industrial area. Under the strategy, light industry uses are to be located on the periphery of the industrial precinct to provide an improved interface with adjacent rural and residential areas.

Oakajee

The proposed Oakajee deep water port and industrial estate are located at the northern extent of the Geraldton urban area. It contains the largest stock of industrial zoned land within the Geraldton urban area, with almost all land considered unrated under IRIS modelling. The Mid West Ports Authority's *Oakajee Port Master Plan* and *LandCorp's Oakajee Industrial Estate Structure Plan* have been prepared to guide the future development of the Oakajee port and industrial estate respectively. Development at the site has the potential to generate substantial investment and drive population growth; however, the project faces numerous constraints, including servicing and lack of connection to the Geraldton Port, the Narngulu Industrial Estate and the regional rail network that require State Government acquisition of the Oakajee Narngulu Infrastructure Corridor, without which development is unable to occur.

8.2 Land zoned for industrial purposes

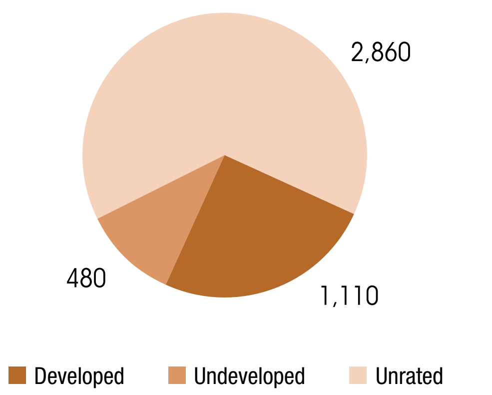
Using the IRIS land supply model, major industrial land use zones under the local planning scheme are grouped together to provide a snapshot of industrial land stocks in the Geraldton urban area as at December 2015. A more detailed description of the IRIS modelling methodology is included in Appendix 2 of this document.

The following industrial land use zones have been included in this analysis:

- General Industry
- Special Use
- Strategic Infrastructure
- Oakajee Industrial
- Light Industry.

IRIS modelling identified 835 lots on land zoned for industrial purposes in the Geraldton urban area, covering a total land area of 4,450 hectares. Approximately 1,110 hectares (25 per cent) of this stock is considered to be developed; 480 hectares (11 per cent) and 2,860 hectares (64 per cent) are deemed undeveloped and unrated respectively (Figure 28). A visual audit of unrated industrial land within the Geraldton urban area indicated that the majority of unrated land is essentially undeveloped; the large majority of this stock is located within the site of the proposed Oakajee industrial estate.

Figure 28: Stock of land (hectares) zoned for industrial purposes – Geraldton urban area



Source: Department of Planning, Lands and Heritage (2016) *Integrated Regional Information System*

8.3 Development activity

Figure 29 shows subdivision activity in the City of Greater Geraldton from 2005 to 2015. In 2010, conditional subdivision approval was granted to create 78 lots in Meru (Deepdale at the time), 29 of which were granted final approval in 2013.
The scale of investment in industrial projects is also a key indicator for industrial development activity. The ABS publishes data for the value of industrial construction approvals in the City of Greater Geraldton on a quarterly basis. Figure 30 shows the quarterly value of industrial buildings approved in the City of Greater Geraldton for the three years to June 2015. The largest investment in industrial construction during this period was approved in the September quarter 2013, most of which was for the construction of factories and other secondary production buildings.

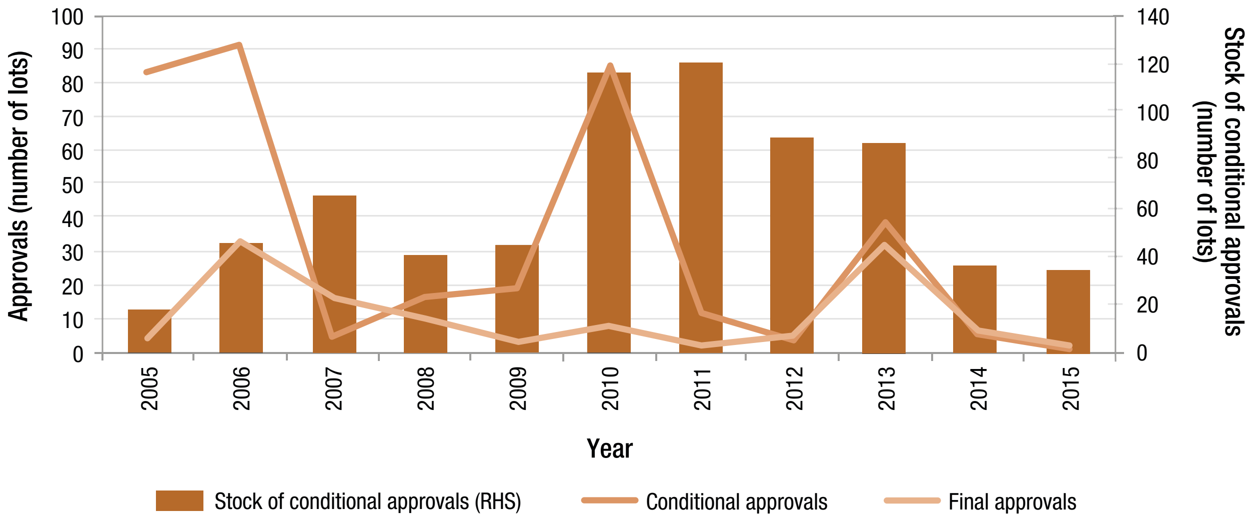
8.4 Summary

There are substantial stocks of land zoned for industrial purposes within the Geraldton urban area, covering a total land area of 4,450 hectares. Approximately 3,340 hectares of this stock is considered to be undeveloped or unrated. The majority of industrial zoned land deemed unrated forms the site of the proposed Oakajee industrial estate.

Over the past decade, industrial development activity peaked in 2013 with a total of 32 lots being granted final approval. Investment in industrial projects was also at its highest in 2013, with construction approvals for industrial buildings valued at $18.1 million.

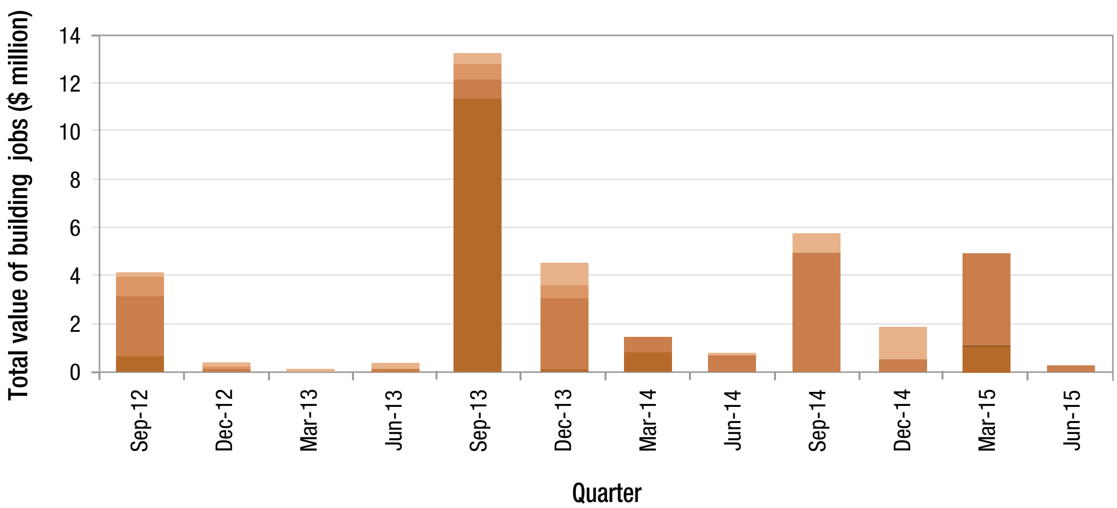
Aside from the proposed Oakajee industrial estate, the bulk of future industrial development within the Geraldton urban area will be accommodated by the Narngulu industrial area, with limited opportunities for development in Webberton/Wonthella.

Figure 29: Industrial subdivision activity – City of Greater Geraldton (2005-2015)



Source: Western Australian Planning Commission (2015) *State Lot Activity* and Water Corporation (2015) unpublished data

Figure 30: Value of industrial construction approvals – City of Greater Geraldton (2012/13-2014/15)



Source: Australian Bureau of Statistics (2016) *Building Approvals, Australia. Catalogue No. 8731.0*

9 Commercial

9.1 Overview

The *City of Greater Geraldton Commercial Activity Centres Strategy* provides a strategic framework for managing future growth in commercial activity in the City of Greater Geraldton. It identifies the Geraldton CBD as a regional centre. Four large neighbourhood centres are also identified, which are Sunset Beach, Bluff Point, Wonthella and Rangeway. The Commercial Activity Centres Strategy identifies eight neighbourhood centres and six local centres, as well as two proposed district centres to be located at Glenfield Beach and Southgates (indicative).

Regional centre

The Geraldton CBD services the City of Greater Geraldton area and the wider Mid West region. It is the largest multi-functional centre of activity, providing the most intensely concentrated development in the region. It has the greatest range of high order services and jobs, and the largest commercial component of any activity centre within the Mid West.

District centres (proposed)

The Commercial Activity Centres Strategy identifies two proposed district centres to be located at Glenfield Beach (within the Geraldton-North SA2) and Southgates (Geraldton-South SA2). District centres are multipurpose centres that provide a diversity of uses; however, they will serve smaller catchments than a regional centre. They offer a range of essential services, facilities and employment opportunities to support their sub- regional catchments.

Neighbourhood centres

The Commercial Activity Centres Strategy identifies eight existing neighbourhood centres, as well as four proposed neighbourhood centres to be located at Cape Burney, Moresby, Strathalbyn and Waggrakine. Neighbourhood centres have a greater focus on servicing the daily needs of residents and providing community facilities and a small range of other convenience services.

Local centres

Local centres provide for primarily daily household shopping needs and small range of other convenience services. The Commercial Activity Centres Strategy identifies four existing local centres (Beachlands, Drummond Cove, Mahomets Flats and Wandina) and proposes for an additional two local centres at Spalding and Woorree.

9.2 Land zoned for commercial purposes

Using the IRIS land supply model, major commercial land use zones under the local planning scheme are grouped together to provide a snapshot of commercial land stocks in the Geraldton urban area as at December 2015. A more detailed version of the IRIS modelling methodology is included in Appendix 2 of this document.

Commercial land use zones incorporated in this analysis include:

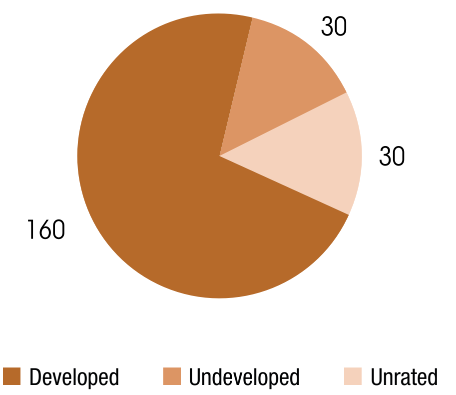
- Regional Centre
- Commercial
- Mixed Use
- Service Centre
- Tourism.

IRIS analysis identified 893 lots on land zoned for commercial purposes in the Geraldton urban area, covering a total land area of 220 hectares. Approximately 160 hectares is considered to be developed, with a further 60 hectares of land deemed undeveloped or unrated. The majority of commercial zoned land is located in, or within close proximity of the Geraldton CBD. The stock of undeveloped/unrated commercial land are scattered fairly evenly throughout the Geraldton CBD area. Outside of the Geraldton CBD, relatively small clusters of undeveloped/unrated commercial zoned land are located in Cape Burney, Wandina, Mount Tarcoola, Utakarra and Wonthella.

Figure 31 shows the stock of land zoned for commercial purposes in the Geraldton urban area by development status.

In addition to undeveloped and unrated land zoned for commercial purposes, future commercial development may also occur on land zoned Urban Development or Development under the local planning scheme.

Figure 31: Stock of land (hectares) zoned for commercial purposes – Geraldton urban area



Source: Department of Planning, Lands and Heritage (2016) *Integrated Regional Information System*

9.3 Development activity

Figure 32 shows data for commercial subdivision activity in the City of Greater Geraldton over the decade to December 2015. During this ten year period, a total of 37 lots were granted conditional approval, with 24 lots progressed to final approval.

A subdivision application was lodged in 2016 for the creation of three lots on a parcel of unrated commercial land in Wonthella. Proposed developments on the site include a supermarket, three showroom units, eight warehouse units, a liquor store, a fuel station, a convenience store and two fast food outlets. As at August 2016, the subdivision application has been deferred.

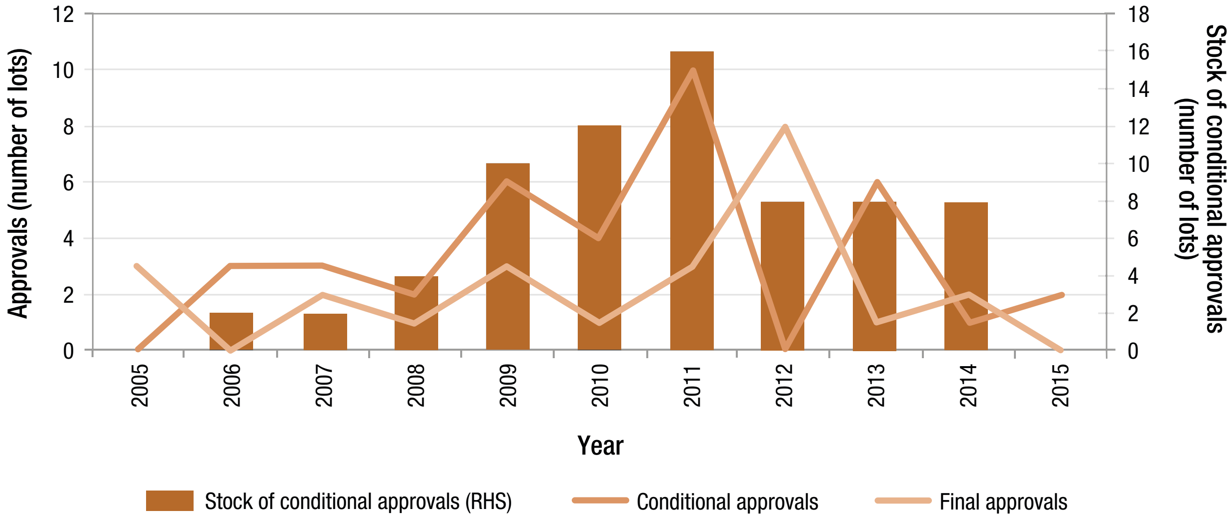
Approval was granted in 2014/15 to develop commercial buildings with a total value of $14.0 million; a slight increase from $13.2 million in 2013/14 and $11.5 million in 2012/13 (Figure 33).

9.4 Summary

The majority of commercial activity in the Geraldton urban area is located in or within close proximity to the Geraldton CBD, where the bulk of commercial zoned land is considered to be developed. Twenty-seven per cent of the total commercial zoned land within the Geraldton urban area is categorised as undeveloped or unrated. The bulk of undeveloped/unrated land is located within or near the Geraldton CBD, with small parcels located in Cape Burney, Wandina, Mount Tarcoola, Utakarra and Wonthella. There is capacity for an intensification of development in the CBD to support growth into the long term. Smaller activity centres will also be developed to meet demand, as set out in the *City of Greater Geraldton Commercial Activity Centres Strategy*.

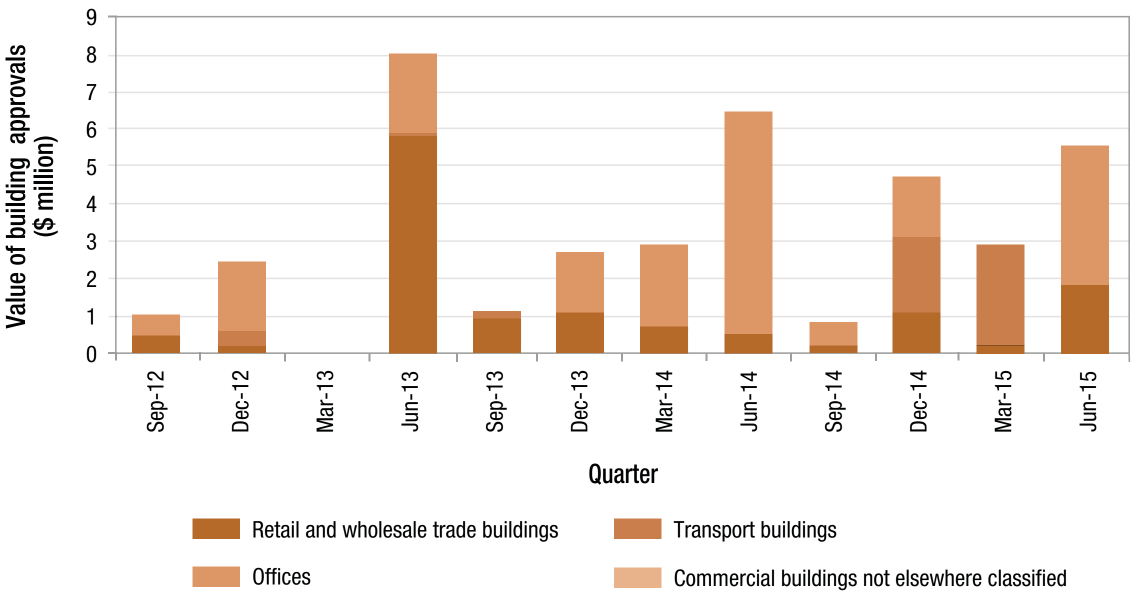
The annual value of commercial building approvals (by financial year) for the City of Greater Geraldton has experienced a steady increase over the past three years. The *City of Greater Geraldton Commercial Activity Centres Strategy* envisages for Geraldton to have the capacity to sustain a population of 80,000 to 100,000 people; with this growth target, the Strategy sets out to ensure the continued development of a strong, resilient network of activity centres.

Figure 32: Commercial subdivision activity – City of Greater Geraldton (2005-2015)



Source: Western Australian Planning Commission (2015) *State Lot Activity* and Water Corporation (2015) unpublished data

Figure 33: Value of commercial construction approvals – City of Greater Geraldton (2012/13-2014/15)



Source: Australian Bureau of Statistics (2016) *Building Approvals, Australia. Catalogue No. 8731.0*

10 Service infrastructure

The following section outlines the broad service infrastructure capacity for the Geraldton urban area and identifies upgrades that may be required to facilitate future residential, commercial and industrial growth in the Geraldton urban area.

10.1 Water

In Geraldton, groundwater is the source for drinking water supply. The Geraldton Regional Water Supply (GRWS) Scheme supplies drinking water to Geraldton, Dongara, Port Denison, Mullewa, Northampton, Eradu and the Narngulu industrial area. It is the largest scheme in the Mid West region, covering a total area of approximately 1,000 km^2. Water is drawn from the Allanooka and Mt Hill borefields, with the latter being used during periods of high demand. An expansion of the Allanooka and Mt Hill borefields took place during the late 1990s and early 2000s, and it now comprises of 19 production bores.

Water from the Allanooka borefield is disinfected and aerated to remove iron before being discharged into the Allanooka summit tank. The water gravitates to the Walkaway treatment plant, where water is disinfected and fluoride is added before entering the Geraldton distribution scheme. A booster pump station located at the Walkaway treatment plant is used during periods of peak demand.

According to the *Mid West Regional Water Supply Strategy*, an expansion of the Allanooka and Mt Hill borefields, combined with water management, will secure water supplies for the next 30 years. The City of Greater Geraldton is also implementing pilot projects examining the potential to harvest and redirect stormwater from urban catchments. Stormwater is currently harvested from grain storage sheds at the Geraldton Port, infiltrated into the superficial aquifer and used for irrigating public open space.[21]

The Water Corporation's long term regional water supply planning recognises the possible development of the Oakajee deep water port and industrial estate, and includes concepts for water transfer to future water storage at Oakajee.

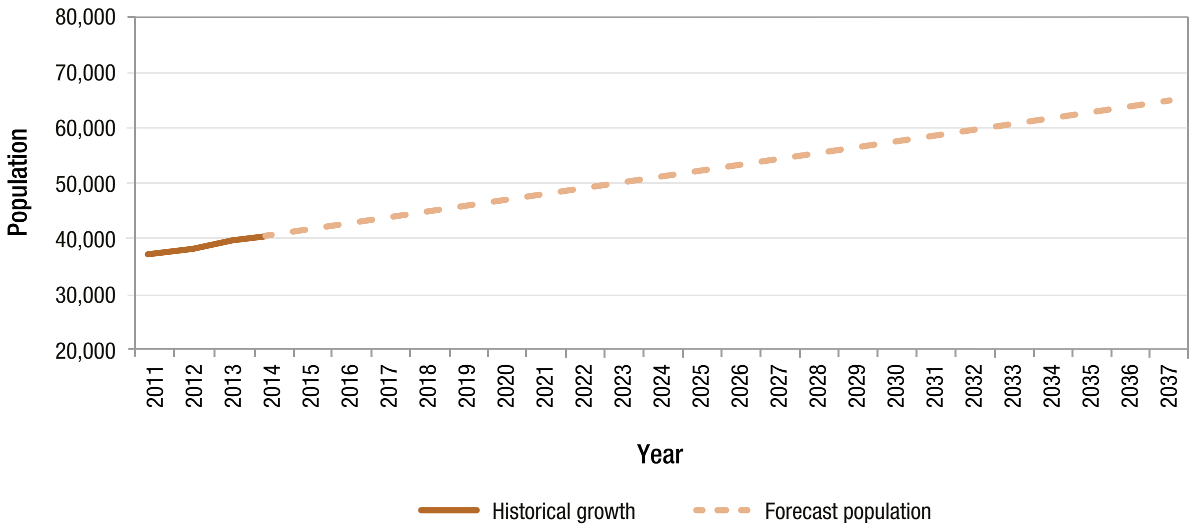
[21] City of Greater Geraldton (2014) *Towards a Water Sensitive City: Greater Geraldton Water Planning and Management Strategy* (prepared by ENV Australia Pty Ltd and Essential Economic Services)

The most recent Water Corporation forecast projects an average growth in the permanent resident population supplied by the scheme of two per cent per annum over the next 20 years, as shown in Figure 34.

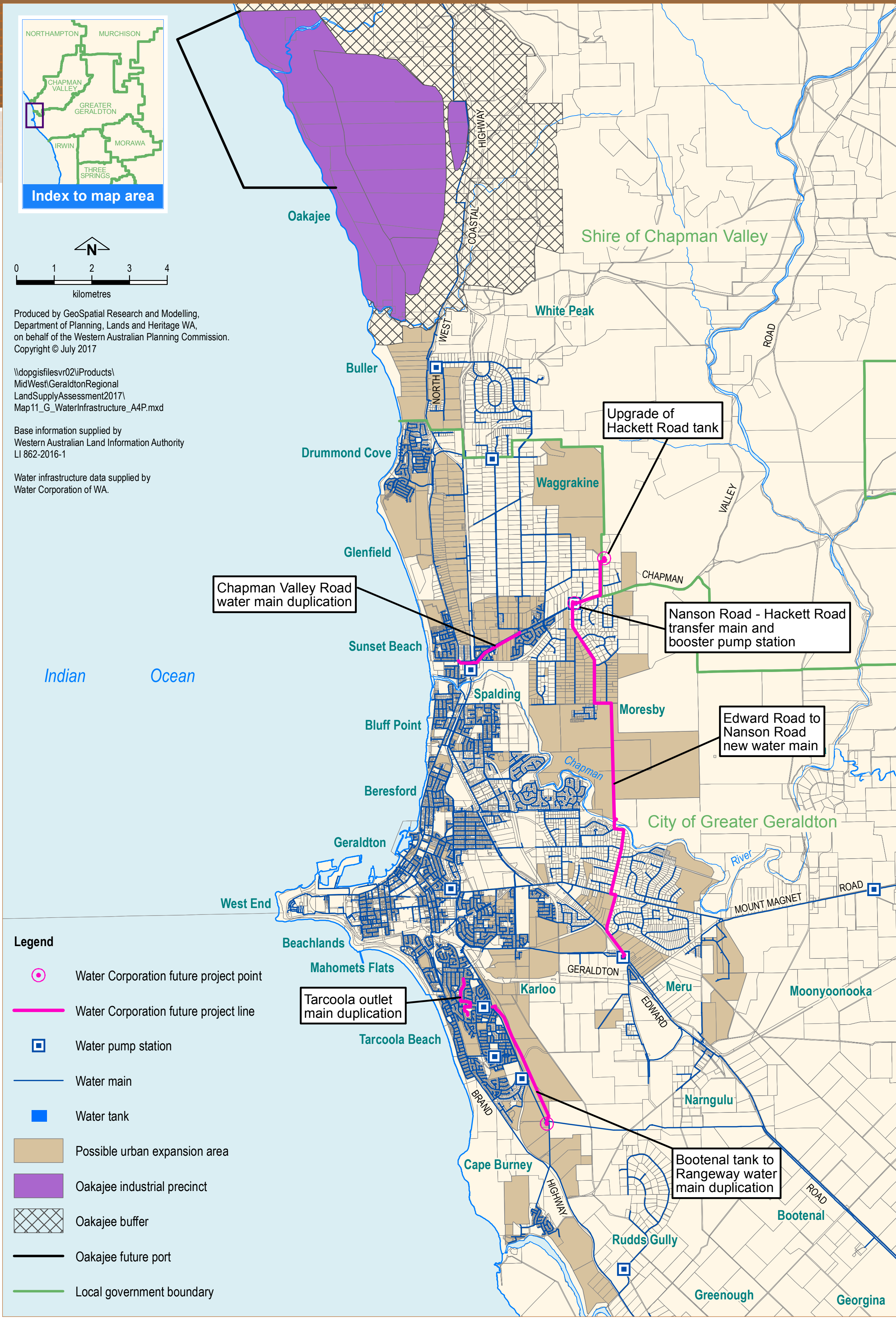
The Water Corporation's long-term planning for the GRWS Scheme identifies the need for capital investment in major upgrades and expansion of the water scheme including new source, water transfer, treatment and storage infrastructure. These upgrades will be staged according to demand and required system changes into the future, and are indicated on Map 11. The plan does not show the water reticulation upgrades and extensions that may be required to service new developments or rezoned areas located on the outer extents of the existing network, as these are usually funded by the developers.

The proposed long-term urban expansion and investigation areas do not currently form part of the Water Corporation's planning for source, conveyance and treatment. Substantial reviews of the Water Corporation's planning will therefore be required once the long-term strategic planning for the expansion of Geraldton is agreed.

Figure 34: Residential population – Geraldton Regional Water Supply Scheme



Source: Water Corporation (2016)



Map 11: Water infrastructure

10.2 Wastewater

The Greater Geraldton Wastewater Scheme is serviced by four wastewater treatment plants: Geraldton North, Geraldton No. 2, Narngulu and Greenough-on-Sea. There are 43 pump stations within the Greater Geraldton Wastewater Scheme, including numerous private pump stations. The four treatment plants within the Greater Geraldton Wastewater Scheme consist of aerated and non-aerated pond systems. All treated wastewater is infiltrated onsite, with the Geraldton No. 2 Wastewater Treatment Plant recycling its treated wastewater via indirect reuse.

The Geraldton North Wastewater Treatment Plant services most of Waggrakine and is an oxidation pond plant, with disposal of effluent achieved via evaporation and infiltration to groundwater. The Geraldton No. 2 Wastewater Treatment Plant is also an aerated pond plant. The Narngulu Wastewater Treatment Plant was the first high-performance aeration lagoon (HPAL) plant built by the Water Corporation. It is located in the Narngulu industrial estate. The Greenough-on-Sea Wastewater Treatment Plant services development in the Cape Burney area.

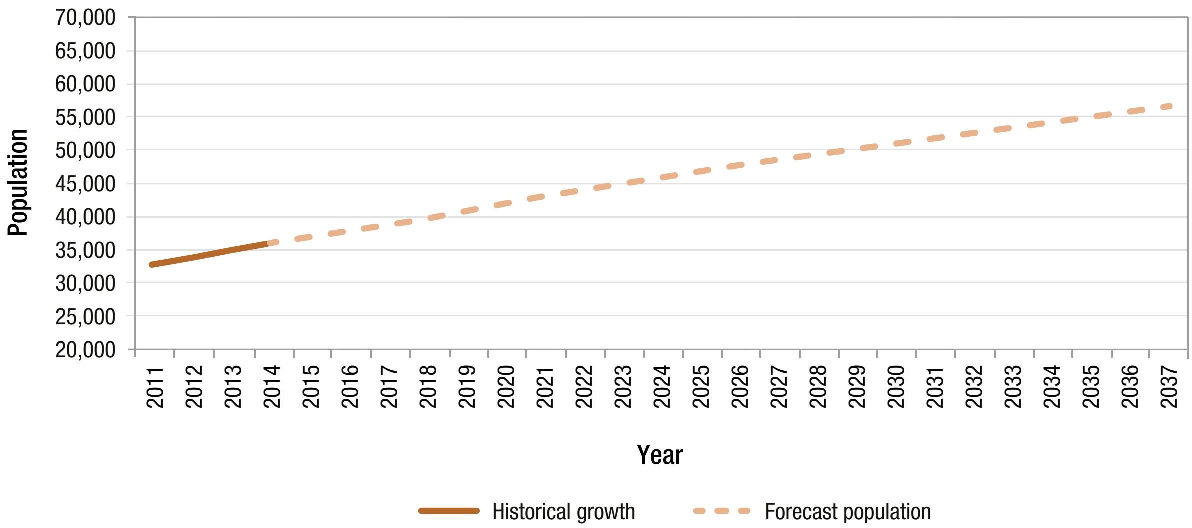
An additional site is indicated in the *Greater Geraldton Structure Plan* for a possible future wastewater treatment plant in the Oakajee industrial area, north of the Buller River. A timeframe for the construction of the new treatment plant is yet to be identified.

The most recent Water Corporation forecast projects an average growth in the permanent resident population serviced by the scheme of 1.9 per cent per annum over the next 20 years, as shown in Figure 35.

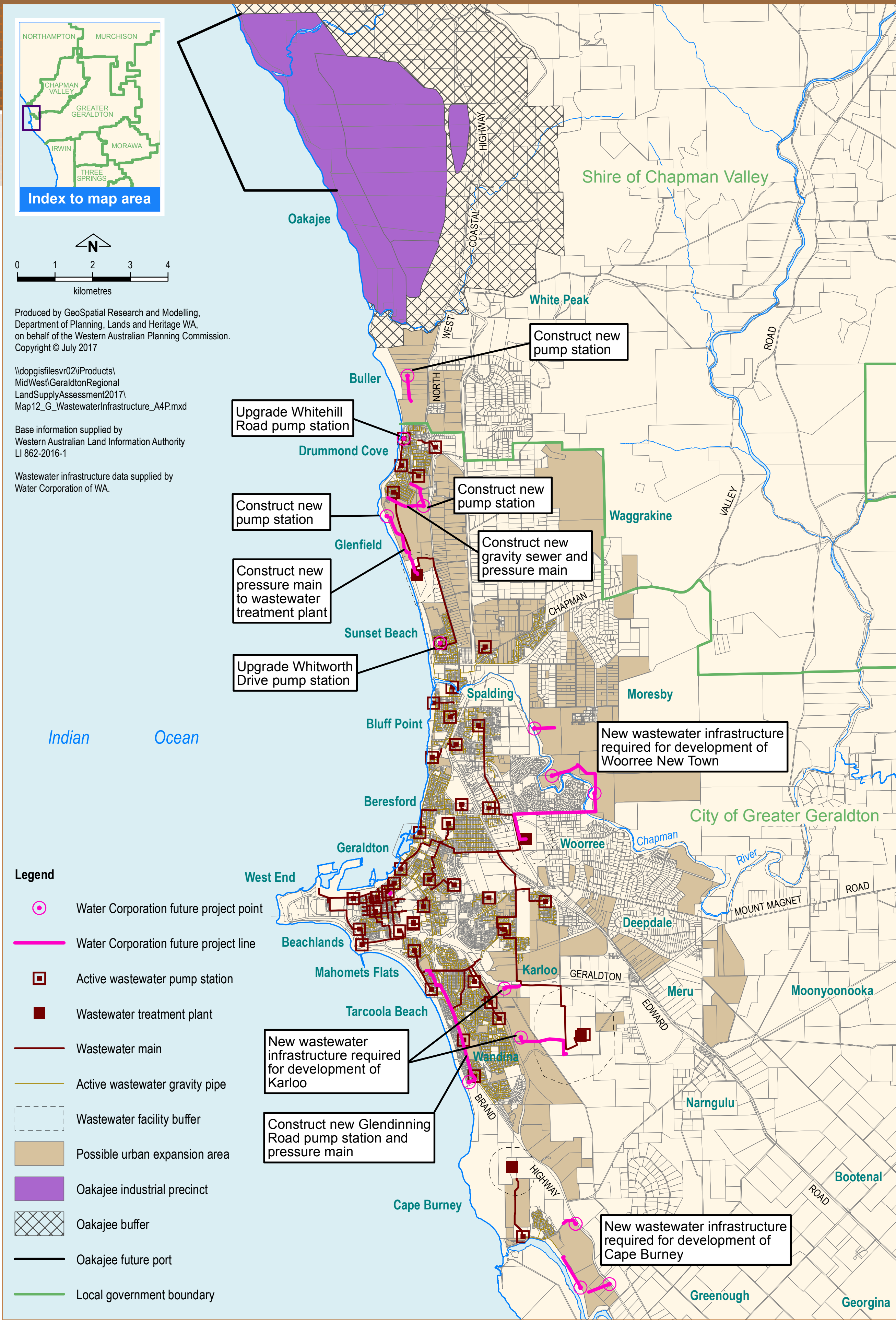
The Water Corporation's long-term planning for the Greater Geraldton Wastewater Scheme identifies the need for capital investment in upgrades and expansion of the wastewater scheme, including new pump stations and conveyance infrastructure. These upgrades will be staged according to demand and required system changes into the future, and are indicated on Map 12.

The proposed long-term urban expansion and investigation areas do not currently form part of the Water Corporation's planning for source, conveyance and treatment. Substantial reviews of the Water Corporation's planning will therefore be required once the long-term strategic planning for the expansion of Geraldton is agreed.

Figure 35: Residential population – Greater Geraldton Wastewater Scheme



Source: Water Corporation (2016)



Map 12: Wastewater infrastructure

10.3 Energy

Western Power manages energy supply to the majority of the Mid West region's Batavia Coast and North Midlands sub-regions. The Geraldton urban area is covered by the North Country load area, which extends from Pinjar and Muchea at the northern edge of the Neerabup terminal load area to Kalbarri at the northern extremity of the Western Power network.[22] Electricity in the Geraldton urban area is supplied via two single circuit 132kV transmission lines that extend from Three Springs to Geraldton.

Western Power has recently completed the Mid West Energy Project (MWEP) Southern Section. The project included a new 330kV terminal at Three Springs, and a double circuit 330kV transmission structure from Pinjar to Three Springs. To facilitate the connection of potential new entrant generation and block loads, Western Power is also proposing to expand the MWEP as the need arises. This staged proposal currently includes building a 330kV terminal at Eneabba, followed by the MWEP Southern Section (Stage 2) and the MWEP Northern Section. The MWEP Northern Section will increase the transfer capacity between Three Springs and Geraldton. This supports potential connection of new entrant generators and load north of Three Springs.

There are currently four substations within the Geraldton urban area: Geraldton, Chapman, Rangeway and Durlacher. Western Power has proposed to decommission the Durlacher substation due to it being in degraded condition. A third transformer is proposed to be installed at the Rangeway substation to accommodate the additional loads and increasing demand.

The Western Power Network Capacity Mapping Tool shows a fairly constrained supply at 2016 for much of the Geraldton urban area at 5-10 MVA. Supply is particularly constrained in Geraldton, Beachlands and West End at less than 5MVA. This is expected to be alleviated by the decommissioning of the Durlacher substation and the addition of a third transformer at the Rangeway substation. Energy supply at 2021 and 2026 is forecasted to be at 25-30 MVA for much of the Geraldton and Geraldton-South SA2s.

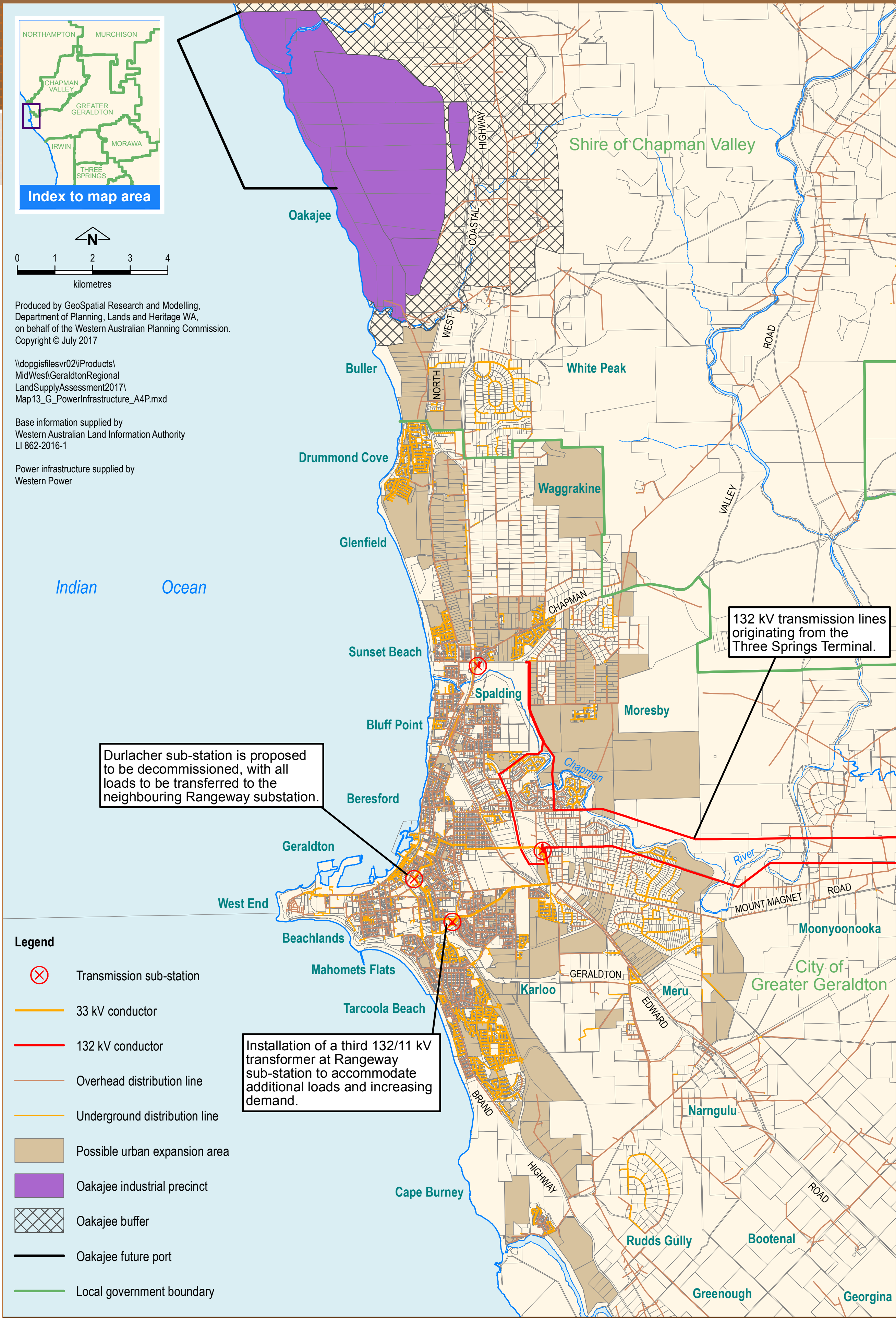
Renewable energy facilities such as the Alinta Wind Farm, Mumbida Wind Farm and Greenough River Solar Farm are located in the City of Greater Geraldton. These facilities produce a combined 155MW of green power. Expansions of renewable energy facilities are being considered, with the number of wind turbines in the area potentially increasing to 195 turbines; the Alinta and Mumbida wind farms currently comprise of 54 and 22 turbines respectively. This would create a potential 750MW of green power and increase solar energy production to 40MW. The Local Planning Strategy also states that the area has been identified for potential geothermal energy sources, wave energy and biomass.[23]

In July 2016, the Mid West/Wheatbelt Joint Development Assessment Panel approved an application for the development of a solar farm at Walkaway. The proposed solar farm is co-located with the Walkaway 2 Wind Farm, for which development approval was granted in 2009 by the City of Greater Geraldton. Construction of the Walkaway 2 Wind Farm is yet to commence. The solar farm is proposed to include approximately 170,000 solar panels. Once completed, the solar farm and the Walkaway 2 Wind Farm will be capable of generating up to 300,000MW hours per year.

ATCO Gas Australia manages gas supply to the Geraldton area. Geraldton is covered by the Mid-West and South-West Gas Distribution System (MWSWGDS), which also services the Bunbury, Capel, Brunswick, Harvey and Albany areas. The MWSWGDS is a covered pipeline and is subject to an Access Arrangement that is approved by the Economic Regulation Authority of Western Australia. The MWSWGDS contains more than 12,000 kilometres of gas distribution pipelines in its network and services over 700,000 residential and business customers.

[22] Western Power (2016) *Annual Planning Report 2015/16*

[23] City of Greater Geraldton (2015) *City of Greater Geraldton Local Planning Strategy*



Map 13: Power infrastructure

10.4 Transport

Road

The Geraldton urban area and the Mid West region is serviced with a network of major sealed roads, connecting Geraldton to Perth, the north-west of Western Australia as well as the hinterland surrounding Geraldton. Main Roads Western Australia is responsible for the main routes to and from Geraldton including Brand Highway, North West Coastal Highway and Geraldton-Mount Magnet Road. They are also responsible for other primary distributor roads within the urban area including John Willcock Link, Geraldton-Walkaway Road and Moonyoonooka-Yuna Road. These roads provide access for tourism to the Batavia Coast, freight to Geraldton Port and daily commute.

Stage 1 of the Geraldton Southern Transport Corridor project was completed in September 2005. This involved the construction of a single rail line from the Narngulu industrial area to the Geraldton Port.[24] Stage 2 was completed in December 2009, with the construction of an east-west road linkage connecting the port and the Geraldton Airport.[25] Construction of the Indian Ocean Drive, which was completed in 2011, provided an alternative route between Geraldton and Perth via coastal settlements such as Cervantes, Jurien Bay and Green Head.[26]

The proposed PortLink Inland Freight Corridor is a State Government initiative and seeks to establish integrated road and rail corridors linking resource-rich areas in the Mid West and Pilbara regions to export ports, such as the Geraldton Port and the proposed Oakajee port.[27]

The planned Oakajee Narngulu Infrastructure Corridor (ONIC) will provide a road, rail and utility services corridor linking the proposed Oakajee port and adjacent strategic industrial estate with the existing Narngulu industrial area and Geraldton Port. The envisioned corridor will be approximately 34 kilometres long and 250 metres wide and facilitate the coordinated delivery of transport and service infrastructure. The ONIC will also provide a new outer freight bypass road around Geraldton, which will form part of the proposed future long-term State coastal route between Dongara and Northampton.[28]

The Department of Transport's *Western Australian Regional Freight Transport Network Plan* (2013) identifies a number of strategic road priorities throughout the City of Greater Geraldton and the broader Mid West region, which focus on the safe movement of freight and passenger traffic. Within the Geraldton urban area, the Geraldton North-South Highway and the duplication of the North West Coastal Highway from Utakarra Road to Green Street are proposed to alleviate traffic congestion issues, consolidate access points and improve operational efficiency and road safety. Main Roads have to date initiated land acquisition for Stages 1 and 3 of the North West Coastal Highway duplication.

Rail

The rail network in the Mid West region is owned by the WA State Government and is managed and operated on a long-term lease by private company, Brookfield Rail until 2049.

Rail haulage in the Mid West consists of iron ore, grain and mineral sands and is critical to getting products to market and reducing road traffic. With the emergence of the Mid West as a prominent iron ore province, there has been a significant increase in demand for capacity on the rail network to transport product to export markets through Geraldton Port.

A significant proportion of the main line of the rail network was replaced by Brookfield Rail to support the increase demand on the network. The $550 million project, completed in October 2012, replaced approximately 184 kilometres of the rail network and related infrastructure from Perenjori through Mullewa and west to the Geraldton Port. Now a heavy haul railway, the network has the capacity to transport up to 25 million tonnes per annum (mtpa) and with further upgrades, a capacity of beyond 75mtpa.[29]
The railway line from Geraldton to Perth (Midland Rail Line) continues to operate, facilitating grain haulage.

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24 Main Roads Western Australia (2014) *Geraldton Southern Transport Corridor Stage 1*

25 Main Roads Western Australia (2014) *Geraldton Southern Transport Corridor Stage 2*

26 Main Roads Western Australia (2014) *Indian Ocean Drive*

27 Department of Transport (2015) *PortLink*

28 Main Roads Western Australia (2016) *Dongara to Northampton Coastal Route – Corridor Alignment Selection Study*

29 Mid West Development Commission (2015) *Mid West Regional Blueprint*

The main depot at Narngulu, 13 kilometres from the Geraldton Port, is the junction of the two railway lines that come from the south. Another line branches off at Dongara to service the mineral sand deposits at Eneabba. The planned Oakajee Narngulu Infrastructure Corridor (ONIC) includes provision for rail to link the proposed Oakajee port and industrial estate with the existing Narngulu industrial area and Geraldton Port.

Airport

The Geraldton Airport is owned by the City of Greater Geraldton and is located 9.5 kilometres south east of the Geraldton city centre. It consists of three runways, a car parking facility and passenger terminal, aircraft fuel storage facility and a number of private and local government-owned hangars. The airport is capable of servicing A320 and B737 aircrafts, and is designated as an alternate landing airport for a number of international airlines when they are unable to land at Perth. Commercial airlines such as Qantas, Virgin Australia and Skywest also provide daily scheduled services between Geraldton and Perth.

The Bureau of Infrastructure and Regional Economics (BITRE) report on domestic airline activity for 2014/15 state that the number of passengers carried on the Geraldton-Perth route fell from 131,000 in 2013/14 to 120,800 in 2014/15, representing a decrease of 8.4 per cent.

The *Geraldton Airport Master Plan 2012-2030* (2016) envisages the future development of a new runway with sufficient length and capacity to facilitate the operation of Code 4E aircraft types with international standard Runway End Safety Area (RESA) provisions. It is hoped that the runway and associated taxiway and aprons could include design features enabling restricted operation of Code 4F (A380) aircraft types, enabling such aircraft to land at Geraldton when they are unable to land at Perth. The new runway is anticipated to be constructed parallel to the existing main runway 03/21, and the existing runway would revert to use as a parallel taxiway.[30]

[30] City of Greater Geraldton (2016) *Geraldton Airport Master Plan to 2030* (Updated February 2016)

Port

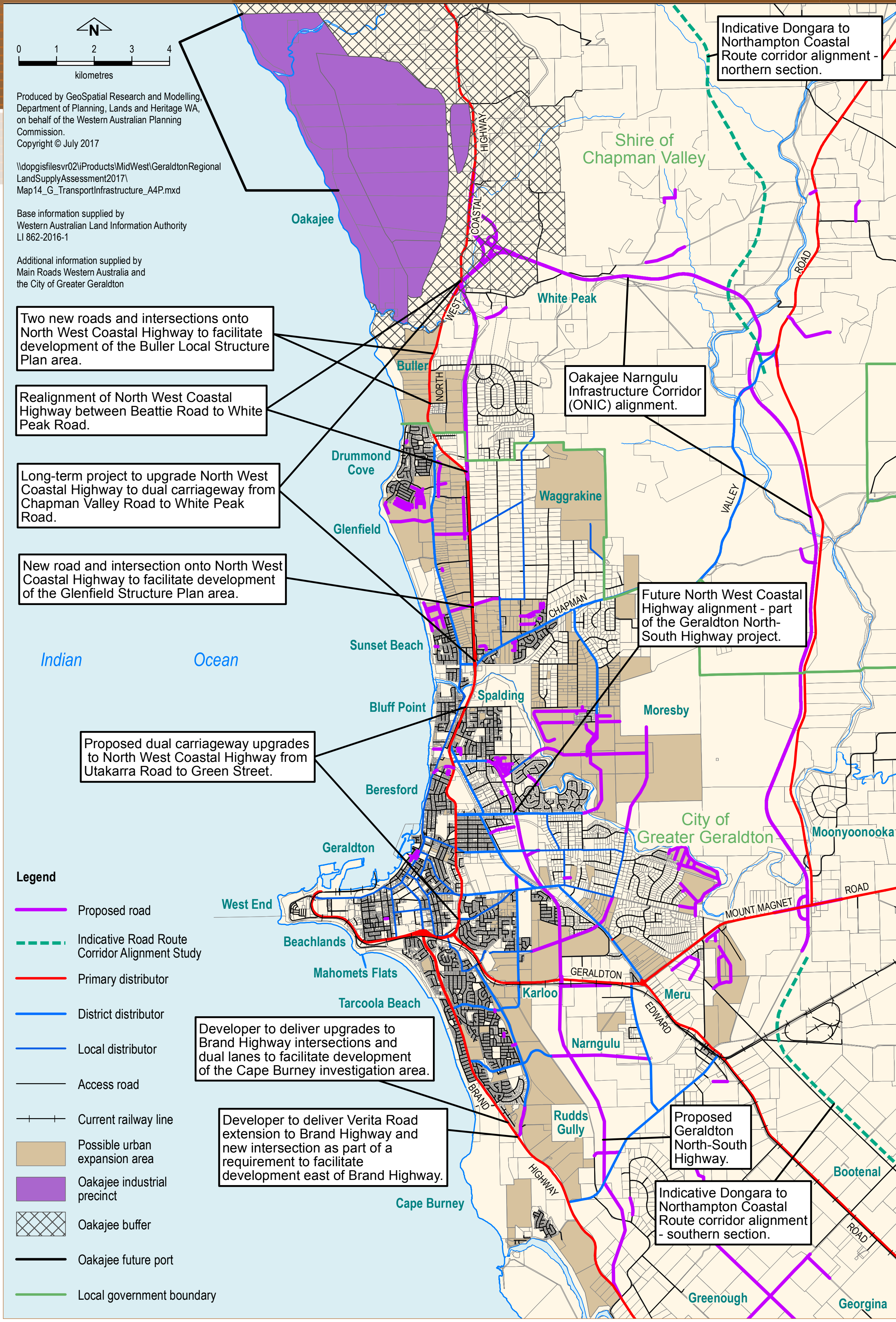
The Geraldton Port is located west of the Geraldton city centre, in the suburb of West End. It is managed by the Mid West Ports Authority, which is also responsible for the management of the proposed port of Oakajee.[31] The port has seven land-backed berths, and is one of the most diverse regional ports in Western Australia. A $103 million port enhancement and deepening of the harbour was completed in 2003, in response to the increasing iron ore trade within the region. A $35 million upgrade to Berth 5 was also undertaken with the purpose of establishing a dedicated iron ore berth capable of handling up to 10mtpa. Berth 7 is owned and operated by Karara Mining Pty Ltd, and is used to transport iron ore from the Karara mine.[32]

Iron ore continues to dominate trade, representing 77 per cent of total trade. In 2014/15, Geraldton Port recorded 16.9 million tonnes trade throughput, which was 8 per cent less than the 18.4 million tonnes recorded the previous year. This lower throughput resulted in some latent berth capacity.[33]

Imports through the port include petroleum products, phosphate, fertiliser and urea. Other exports include wheat and other grains, mineral sands, talc, stockfeed, livestock, copper and zinc and concentrates. Geraldton Port is currently capable of exporting more than 20mtpa.[34] With further infrastructure development, this capacity could be modestly increased.[35]

The proposed Oakajee deep water port is part of the multi-billion dollar Oakajee Mid West Development Project, which proposes to establish an integrated deep water port, 550 kilometres of heavy haulage rail and industrial estate to support the development of the resources sector in the Mid West. It is anticipated that the Oakajee port will be able to accommodate Capesize vessels (up to 180,000 dead weight tonnage), while the Geraldton Port can currently accommodate Panamax (70,000 dead weight tonnage) vessels. Under current planning, the proposed Oakajee port has an anticipated initial start-up capacity of up to 45mtpa with plans for further expansion as demand grows.[36]

[31] Mid West Ports Authority (2016)
[32] Mid West Ports Authority (2016) *Geraldton Port Facilities – Berth 7*
[33] Department of Transport (2015)
[34] The export capacity for iron ore alone is a minimum of 20 mtpa
[35] Mid West Development Commission (2015) *Mid West Regional Blueprint*
[36] Mid West Development Commission (2015) *Mid West Regional Blueprint*



Map 14: Transport infrastructure

Glossary

Building approvals

A **house** is a detached building primarily used for long-term residential purposes. It consists of one dwelling unit. For instance, detached 'granny flats' and detached dwelling units (for example, caretaker's residences) associated with a non-residential building are defined as houses. Also includes 'cottages', 'bungalows' and rectories.

Other dwellings include all dwellings other than houses. They can be created by: the creation of new other residential buildings (for example, flats); additions/alteration work to an existing residential building; either new or alteration/addition work on a non-residential building; conversion of a non-residential building to a residential one, creating more than one dwelling unit.

Population

Estimated resident population (ERP) - Available for local government areas and SA2 geographies, this figure represents the number of people counted in an area on 30 June. It is calculated by:

- adding the people who were temporarily absent from the area on census night;
- subtracting the overseas visitors counted in the area on census night;
- augmenting the figure for estimated net undercount in the census;
- adjusting for difference between census night and 30 June; and
- updating each year using administrative data from a variety of sources.

ERPs are the official population figures for Australia. They are widely used as a basis for Government decision-making, including the allocation of seats in federal parliament and distribution of Commonwealth grants.

Geography

The **Mid West region** is one of the nine regions of Western Australia, as defined by the Regional Development Commissions Act 1993. The region is comprised of 17 local government areas, including the City of Greater Geraldton and the Shire of Chapman Valley.

Significant Urban Areas (SUAs) represent concentrations of urban development with populations of 10,000 people or more using whole Statistical Areas Level 2 (SA2s). They do not necessarily represent a single Urban Centre, as they can represent a cluster of related Urban Centres with a core urban population over 10,000. They can also include related peri-urban and satellite development and the area into which the urban development is likely to expand.

Statistical Areas Level 1 (SA1s) have been designed as the smallest unit for the release of Census data. SA1s generally have a population of 200 to 800 persons, and an average population of about 400 persons. They are built from whole Mesh Blocks and there are approximately 55,000 SA1s covering the whole of Australia.

Statistical Areas Level 2 (SA2s) are a general-purpose medium sized area built from whole SA1s. Their aim is to represent a community that interacts together socially and economically. SA2s generally have a population range of 3,000 to 25,000 persons and have an average population of about 10,000 persons. The SA2 is the lowest level of the ASGS structure for which Estimated Resident Population (ERP), Health and Vitals and other non-Census ABS data are generally available. There are 2,196 SA2s covering the whole of Australia.

Statistical Areas Level 3 (SA3s) provide a standardised regional breakup of Australia. The aim of SA3s is to create a standard framework for the analysis of ABS data at the regional level through clustering groups of SA2s that have similar regional characteristics. SA3s are built from whole SA2s and in general have populations between 30,000 and 130,000 persons. They are often the functional areas of regional cities and large urban transport and service hubs.

Mesh Blocks are the smallest geographic region in the Australian Statistical Geography Standard (ASGS), and the smallest geographical unit for which Census data are available. Most residential Mesh Blocks contain approximately 30 to 60 dwellings. Mesh Blocks have been designed to be small enough to aggregate accurately to a wide range of spatial units and thus enable a ready comparison of statistics between geographical areas, and large enough to protect against accidental disclosure. Due to the small size of Mesh Blocks, data are confidentialised and are only released for Basic Person Counts and Dwelling Counts.

Subdivision approvals

Conditional approval is granted by the Western Australian Planning Commission (WAPC) for subdivision to begin subject to certain conditions being met. The approval is preceded by an assessment of the proposed subdivision plan by statutory referral agencies, including servicing authorities. On receipt of conditional approval, the proponent may commence subdivision development in accordance with the conditions of approval. A conditional approval remains valid for three years where five lots or less are approved and for four years where six lots or more are approved.

Current valid conditional approvals refer to those conditional approvals that are still valid but have not yet been issued with final approval. In general, these are approvals for which construction/servicing has not yet commenced or is currently under way (see **active conditional approvals**).

Active conditional approvals refer to conditionally approved lots where a servicing agreement (agreement to construct) has been signed between the Water Corporation and the developer. These are termed lots on non-cleared agreements.

Inactive conditional approvals are where conditional approval has been granted and the approval is still valid, but where a servicing agreement (agreement to construct) has not been signed between the Water Corporation and the developer.

Lapsed conditional approvals are those where the approval has expired and the conditions have not been met.

Final approval is the WAPC endorsement of the proponent's submitted plan/diagram(s) of survey describing the now complete subdivision; constructed in accordance with the conditions set down in the conditional approval. Final approvals are then registered with the Office of Titles where certificates of titles for the newly created lots can be issued.

Developers lodged application - subdivision application and its accompanying lots received by the WAPC for subdivision approval.

Application under assessment - is the number of applications and accompanying lots awaiting decision for subdivision. Statistics include deferred applications.

Planning

Local planning schemes are detailed planning schemes developed by local governments to identify the range of permitted land uses within specified locations. Within the Metropolitan Region Scheme and Peel Region Scheme areas, local planning schemes must be consistent with the provisions identified within the relevant region scheme where applicable.

Local planning strategies contain the strategic plan and policy context of a local planning scheme. The strategy sets out the general aims, intentions and desired outcomes for long-term growth and change, having regard to social, economic and environmental factors. An assessment of the capacity of infrastructure such as water, sewerage, electricity and roads is also usually considered in a local planning strategy. Residential densities and commercial centres may also be identified.

A **scheme amendment** is the process of changing zones or reservations from one use to another. The amendment process requires proposed amendments to be advertised for wider community and government comment. The amendment process is regulated by the ***Planning and Development Act 2005***, allowing for extensive community consultation to review the proposal before a final decision is made.

Structure plan refers to a document including spatial plans that details the proposed layout of a future development area. The preparation of a structure plan is one of the first steps in progressing proposals for the development of new areas. In addition to illustrating details such as road configuration and the location of retail and community facilities such as shops, schools and public open space, a structure plan can also show details such as housing density, land use classifications and buffer zones. Structure plans highlight opportunities and constraints in an area, and can provide the basis for amendments to local planning schemes. Structure plans can generally be categorised as region, district or local structure plans.

Temporal land supply is an estimate of the number of years it will take to completely consume land that is currently zoned for urban development. Temporal land supply can vary based on different development scenarios, particularly where different rates of density and infill are applied.

Underlying housing demand refers to the need for additional dwellings that will satisfy the requirements of a population (and population growth), irrespective of the demand actually expressed by the market.

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Appendix 1

Integrated Land Information Database (ILID)

ILID 2015 – Background:

The Integrated Land Information Database (ILID) is a net land-use assessment and capability model that is generated at a cadastral level for the whole of Western Australia. The database can be used to identify the current range of land uses within a number of predefined boundaries. It can also model future capability based on what is known about the current (or proposed) planning policies and statutory instruments.

The model is produced within a Geographic Information System by overlaying a variety of layers to compute the coincidence of two or more parameters. For example, if a dataset containing the locations of school sites is overlayed with another dataset that shows the areas that are within two kilometres of the coast, it is possible to generate a single dataset with schools that are within two kilometres of the coast. This process can be repeated with a variety of datasets in endless combinations to help with multi-criteria decision analysis through the process of elimination.

The ILID works by linking the spatial extent of many different input layers with all the unique cadastral identifiers that exists at a particular point in time. The result of this overlay process creates many versions of the cadastre attributed with discrete pieces of information i.e. cadastre version of the local planning scheme zones, region schemes, R-Codes and so on. The 'integrated' component of the database means that once all of the individual inputs have been identified, they can all be joined together using a tabular join through the common PIN number field across all datasets.

For this document, the ILID has been used to identify the lot potential and additional dwelling potential of all residential lots (with an R-Code identified in the *City of Greater Geraldton Local Planning Scheme No. 1, Shire of Greenough Town Planning Scheme No. 1A* or the *Shire of Chapman Valley Local Planning Scheme No. 2*) in the Geraldton urban area. Vacant lots were not included in this analysis.
ILID analysis in this document includes three key inputs: lot size, R-Code value and dwelling count/location. Constraints to subdivision such as heritage, infrastructure supply and environment are not variables included in this analysis, and as such, a significant proportion of the development potential may not be realised.

Definitions:

Lot potential is used to determine how many potential lots the R-Code intends to yield as a maximum. For example a lot that has an R-Code of R20 has a planned density of a single 450m^2 lot. Or a 900m^2 lot has the potential to create two 450m^2 lots. In any case the lot potential can only be calculated if there is an existing R-Code present.

Net dwellings, also known as **additional dwelling potential**, identifies the extra amount of dwellings a single lot can add on (disregarding the location of the current dwelling footprint and has a hundred percent take-up rate). This is determined by the size of the lot and the current lot potential based on the R-Code planning and any existing dwellings.

Appendix 2

Integrated Regional Information System (IRIS)

The sections of this report discussing the development status of land zoned for residential, rural living, industrial and commercial purposes draw heavily on the tiered land supply assessment model, the central output of the Integrated Regional Information System (IRIS). The model is a geographic information system (GIS)-based tool used to assess key measures of land use dynamics across Western Australia.

The IRIS model groups zones under all local planning schemes into primary, secondary and tertiary categories. This grouping of local planning scheme zones forms the zone 'catchment' for each category.

Tier one of the IRIS model groups local planning scheme zones into primary categories for analysis. The table below shows the groupings of the *City of Greater Geraldton Local Planning Scheme No. 1*, *Shire of Greenough Town Planning Scheme No. 1A* and the *Shire of Chapman Valley Local Planning Scheme No. 2*.

Primary category (IRIS analysis)	Local planning scheme category
Residential	• Residential • Development • Residential Development • Urban Development
Rural living	• Rural Residential • Rural Smallholding
Industrial	• General Industry • Special Use • Strategic Infrastructure • Oakajee Industrial • Light Industry
Commercial	• Regional Centre • Commercial • Mixed Use • Service Commercial • Tourism

Tier two of the IRIS model addresses the development status of each lot within the specified primary land use category. Each cadastre (lot) within each primary land use category is attributed one of three values (developed, undeveloped or unrated), based on information from the Valuer General's Office of Western Australia.

Developed refers to lots that are zoned for development for the purposes of the specified primary land use category for which premises information is captured in Landgate's property valuation database.

Undeveloped refers to lots that are zoned for development for the purpose of special residential and rural living that are recorded as vacant in Landgate's property valuation database.

Unrated refers to lots that are zoned for development for the purpose of the specified primary land use category for which no vacant land or premises valuation information has been captured in Landgate's property valuation database. This may include State or local government owned lots or premises exempt from rates, Crown allotments, common property within lots on survey, newly created lots on survey, land otherwise exempt from rates and some public roads which are zoned for the primary land use under the local planning scheme.

Tier three of the IRIS model refers to the nature of development by assessing the premises type against the land use as indicated by the local planning scheme. Tier three of the IRIS model has not been included in analysis for this report as sites with identified development potential are described detailed in Table 10 and Maps 7-9 of this document.