



Northam Regional Land Supply Assessment

March 2025









Regional Land Supply Assessment



Acknowledgement of country

The Department of Planning, Lands and Heritage acknowledges the Aboriginal people as the traditional custodians of Western Australia. We pay our respects to the Ancestors and Elders, both past and present, and the ongoing connection between people, land, waters and community. We acknowledge those who continue to share knowledge, their traditions and culture to support our journey for reconciliation. In particular, we recognise land and cultural heritage as places that hold great significance for Aboriginal people.

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Executive Summary

Located approximately 100 kilometres north-east of Perth, Northam is one of the oldest townsites in Western Australia. It is the largest town in the Wheatbelt region and the largest town between the Perth metropolitan area and Kalgoorlie.

Northam serves as one of the primary service and commercial centres for the Wheatbelt region, with regional offices for State Government agencies, a hospital, high schools, TAFE and various recreational amenities.

Northam's beautiful natural surroundings, relative proximity to Perth and abundance of amenities make it an appealing place to live for those seeking a rural lifestyle while staying connected to urban-based employment and services.

Population growth in Northam has been relatively low compared to the rest of Western Australia, however, since 2020 there has been a noticeable increase, primarily driven by migration from other parts of WA.

Northam's property market has performed strongly in recent years. Both median house prices and monthly property sales increased significantly in the Shire during the year to May 2024.

Future population growth in the Northam local government area is expected to be concentrated in the Northam townsite as well as rural living estates in Bakers Hill and Wundowie. All significant residential development areas identified in this assessment are located in the Northam townsite.

Sufficient stocks of undeveloped residential land are identified to support long-term growth, even with a significant population increase. The release of much of this land is, however, dependent on the provision of enabling infrastructure, particularly sewer.

Although large volumes of land are identified for residential purposes in the local planning scheme a relatively small number of residential lots have been created, averaging just six final subdivision approvals per year over the past decade. Key factors

contributing to this include low population growth and large stocks of vacant residential lots across the Shire, many of which have been vacant for a long time.

In addition to the stock of undeveloped residential land and vacant lots identified in this report, there is potential for urban infill through the subdivision of existing lots. Realising this development potential is, in many cases, dependent on the provision of service infrastructure, as well as meeting requirements related to environment, heritage and bushfire risk.

In addition to the stock of residential land identified in the report, approximately 5,120 hectares of rural living zoned land was identified in the Shire, approximately 800 hectares (16 per cent) of which is undeveloped. The largest stocks of undeveloped rural living land in the Shire were in Bakers Hill and Wundowie. Based on existing zonings, there is collective capacity to create approximately 825 additional rural living zoned lots through subdivision.

The largest volume of developed industrial land is in the Northam Industrial Area, however, the area has limited potential for further expansion. Sizeable stocks of undeveloped industrial land are available to the town's east in the Avon Industrial Park (210 hectares) and to the west in Wundowie (40 hectares). The Shire of Northam's Local Planning Strategy identifies additional industrial land in the townsite's east (currently zoned rural or rural residential) for future light and service industrial purposes.

Northam is a key economic and social hub, servicing the agricultural sector across much of the Wheatbelt. Most commercial land in the Shire is located in the Northam townsite. Commercial activities will remain concentrated in the Northam town centre, along Fitzgerald Street, on land zoned commercial or mixed use. Future commercial uses may also be encouraged in larger settlements, such as Wundowie and Bakers Hill, through the introduction of rural townsite zones.

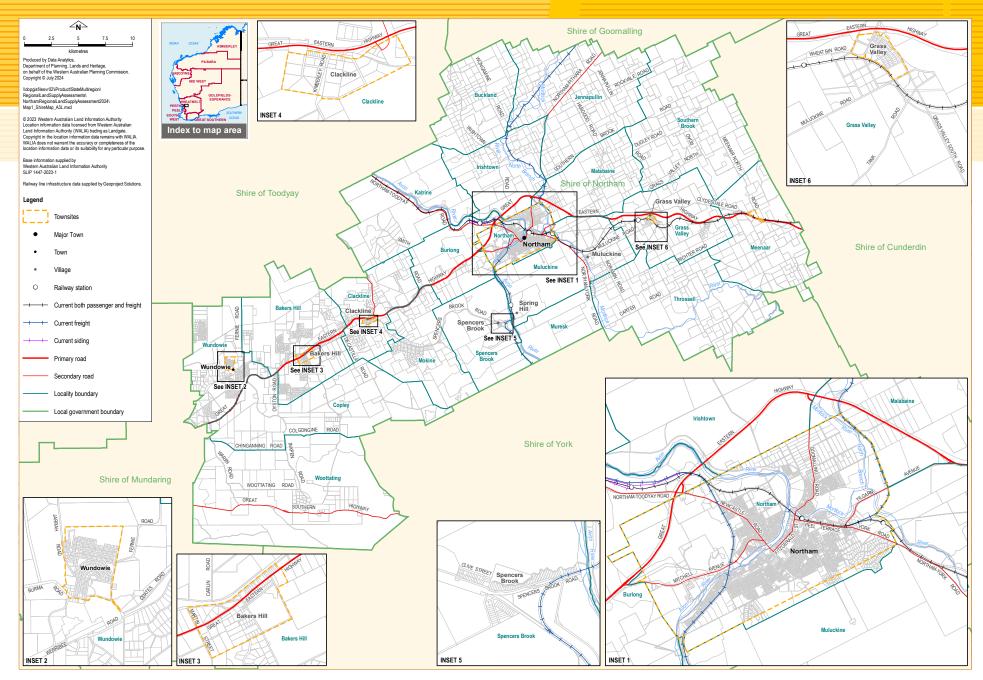
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1 Introduction

The Department of Planning, Lands and Heritage's (the Department) Urban Development Program (UDP) monitors land, lot and housing supply in Western Australia. The UDP incorporates the Regional Land Supply Assessment series of publications, which provide a snapshot of residential, industrial and commercial land supply across selected regional centres in Western Australia.

The UDP is prepared by the Department for and on behalf of the Western Australian Planning Commission (WAPC) to fulfil the WAPC's functions, as outlined in Section 14 of the Planning and Development Section 2005. The UDP's purpose is to provide a robust and transparent evidence base for decision-making relating to land use planning, land development as well as infrastructure planning and coordination.

This Regional Land Supply Assessment Report (the report) has been prepared for the Local Government Area (LGA) of Northam. The LGA of Northam comprises 20 localities. Northam is part of the Avon Arc sub-region which, along with three other sub-regions, forms part of the Wheatbelt region.



Map 1: Shire of Northam

2 Population

Key points

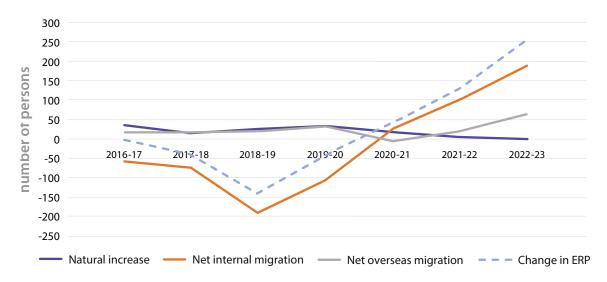
- The Shire of Northam (the Shire) covers 1,443 square kilometres of land.
- More than half of the population live in the Northam townsite, from which the local government takes its name.
- As at 30 June 2023, the Shire recorded an Estimated Resident Population (ERP) of 12,193 people, which constitutes 16 per cent of the Wheatbelt region's total population. Over the past 10 years, the population has increased at an average of 72 people per year.
- The Shire exhibits a considerably older age profile compared to that of Western Australia.
- The projected population for Northam under the WA Tomorrow Band E forecast is 12,360 at 2031. This represents an average annual growth rate of 0.62 per cent, which is lower than the forecast average annual growth rate for WA (1.61 per cent).
- WA Tomorrow predicts the current ageing demographic profile will continue to 2031, with considerably higher proportions of persons aged 70 and above, compared to 2016.

2.1 Population profile

The Australian Bureau of Statistics' (ABS) ERP is the official estimate of the Australian population, which links people to a place of usual residence within Australia. As at 30 June 2023, the Shire recorded an ERP of 12,193, which is 16 per cent of the Wheatbelt region's total population.

Over the 10 years to 2023, the Shire's population increased at an average annual rate of 0.62 per cent (an average annual increase of 72 people). This was lower compared to the State, with an average annual rate of 1.49 per cent. More recently however, the Shire's ERP has recorded significant growth from 2020-21 onwards. **Figure 1** illustrates this growth is mostly attributed to higher internal net migration during COVID-19.

Figure 1: Components of population change - Shire of Northam



Source: Australian Bureau of Statistics (2023) Estimated resident population and components of change.

In 2021, Northam's median age was 43, slightly higher than the State's at 38. **Figure 2** indicates the Shire exhibited a considerably older age profile compared to that of WA, with a significant underrepresentation of persons aged between 20 and 44. This is not uncommon in regional areas and can be attributed to the working-age population seeking alternative education, services and employment opportunities more commonly found in metropolitan areas.

2.2 Population projection

WA Tomorrow is a series of trend-based population forecasts, by age and sex, for WA and its subregions from 2016 to 2031. The WA Tomorrow forecasts represent a best estimate of future population size and age-sex structure if trends in fertility, mortality and migration continue. Temporary residents are not factored into the development of, or represented in, the WA Tomorrow forecasts.

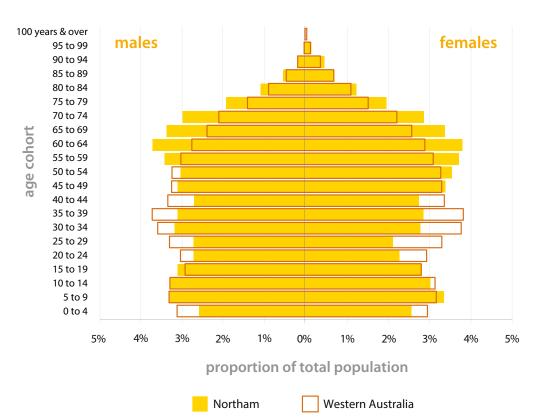


Figure 2: Population profile (2021 Census) - Shire of Northam and Western Australia

Source: Australian Bureau of Statistics (2023) Census of Population and Housing 2021.

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They do, however, generate impacts for the delivery of housing and other services in an area, which may be different to impacts generated by the resident population.

Northam's ERP as of 30 June 2023 is tracking in line with Band E of the WA Tomorrow forecasts (**Table 1** and **Figure 3**). The projected population for Northam under the Band E forecast is 12,360 at 2031. Achieving this population from a 2016 baseline requires an average annual increase of 73 people, or an average annual growth rate of 0.62 per cent. This is lower than the forecast average annual growth rate for WA (1.61 per cent).

To achieve a Band E population from the ERP's 2023 baseline would require an average annual growth rate of 0.15 per cent (average annual increase of 21 people).

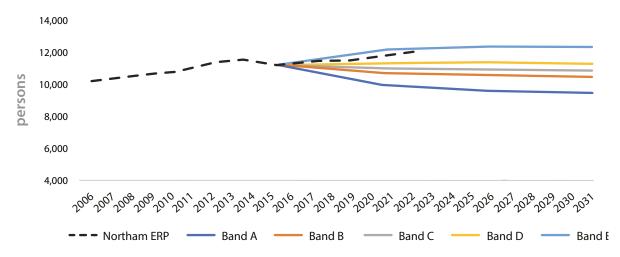
The demographic profile of the Shire is anticipated to change slightly by 2031. **Figure 4** shows the population profile at the 2016 Census and the WA tomorrow Band E projections. The Shire's older age profile is predicted to continue, with the 70 and above age cohort accounting for the largest proportion of the population in 2031, compared to the 55-59 and 60-64 year age cohorts in 2016.

Table 1: Estimated resident population growth - Shire of Northam and WA Tomorrow

Northam /LCA		,	WA Tomorrov	V	
Northam (LGA)	Band A	Band B	Band C	Band D	Band E
Population					
2016	11,265	11,265	11,265	11,265	11,265
2021	9,940	10,740	11,045	11,360	12,200
ERP (30 June 2023)					12,193
2026	2,800	3,305	3,545	3,750	4,310
2031	2,890	3,420	3,695	3,925	4,560
Average annual gr	owth rate (201	6 to 2031)			
Northam (LGA)	-1.14%	-0.47%	-0.23%	0.03%	0.62%
Wheatbelt	-2.42%	-0.93%	-0.34%	0.17%	1.41%
Western Australia	1.32%	1.49%	1.61%	1.73%	1.89%

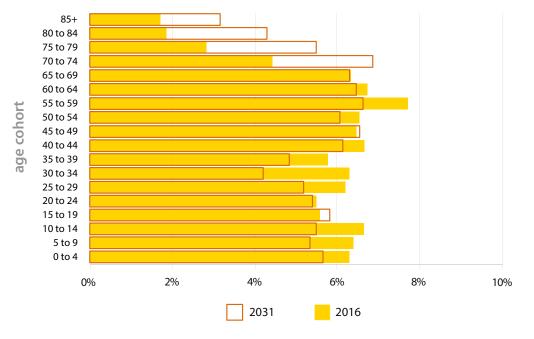
Source: WAPC (2018) WA Tomorrow No. 11 & Australian Bureau of Statistics (2023) Regional Population Growth.

Figure 3: Estimated resident population growth Shire of Northam and WA Tomorrow



Source: Australian Bureau of Statistics (2023) Estimated resident population and components of change.

Figure 4: Demographic profile 2016 and 2031 forecast (Band E) - Shire of Northam



Source: WAPC (2018) WA Tomorrow No. 11.

3 Economy and employment

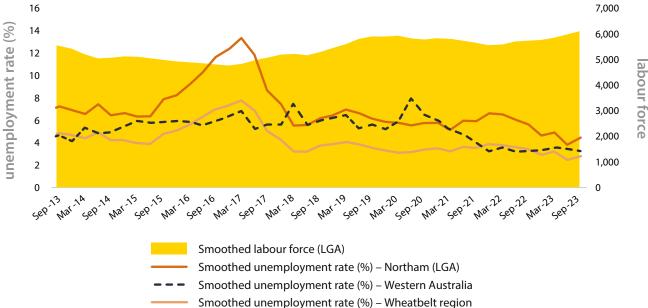
Economic conditions and employment opportunities are fundamental drivers of population growth and consequently, demand for land and housing. Northam serves as the Wheatbelt's primary service and commercial centre, due to its location between the Perth metropolitan area and surrounding agricultural communities and town centres. The Shire's well developed transport networks, such as road and rail, allow for the distribution of agricultural products and the supply of essential services to the broader Wheatbelt community. Northam's diverse range of businesses, services, education and amenities solidify its position as a key economic and social hub for the region.

Figure 5 shows unemployment rates for the Shire, Wheatbelt region and WA from September 2013 to September 2023. Apart from two quarters in 2018 and 2020, Northam has consistently recorded a

higher unemployment rate compared to that of the State. In the September 2023 quarter, the Shire recorded an unemployment rate of 4.5 per cent. This is somewhat higher than the unemployment rate for the State (3.3 per cent) and the Wheatbelt region (2.8 per cent). The Shire's unemployment rate increased dramatically between 2015 and 2017, reaching a peak of 13 per cent in the March 2017 quarter.

Throughout the decade, the Shire's labour force accounted for between 14-20 per cent of the Wheatbelt's total labour force, which was the highest of any Shire in the region. This reflects Northam's role as a major service and commercial centre (**Figure 5**).

Figure 5: Unemployment rates and labour force (2013 - 2023) – Shire of Northam,
Wheatbelt region and Western Australia



Source: Jobs and Skills Australia (2023) Small Area Labour Markets.

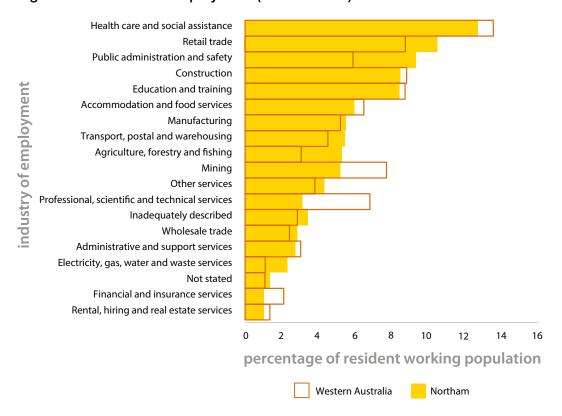
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As with many local governments in the Wheatbelt region, the Shire's economy has traditionally been driven by the agricultural industry. While agriculture is still the primary driver, the Shire's economy appears to be diversifying, with industries such as construction, manufacturing and public administration increasingly considered major contributors.

Figure 6 shows the industries of employment of the Shire's working population at the 2021 Census, compared to that of Western Australia.

The Shire exhibited a significantly higher proportion of the working population in retail trade; public administration and safety; and agriculture, forestry and fishing, compared to that of the State. This is unsurprising given agriculture remains a key driver for the Shire's economy and the Northam townsite's role as a major service and commercial centre for the Wheatbelt community.

Figure 6: Industries of employment (2021 Census) - Shire of Northam and Western Australia



Source: Australian Bureau of Statistics (2023) Census of Population and Housing 2021.

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For the continued growth of these industries and consequently the Shire's economy, the Shire of Northam Local Planning Strategy envisions future economic development to be driven through the following objectives:

- Protect and achieve ecologically sustainable use of all productive agricultural land whilst providing diverse and compatible development opportunities in agricultural areas which promote the local economy;
- Promote the diversification of the Shire's
 economy by supporting intensive agriculture,
 downstream processing of primary produce,
 diversified industries, and expanded tourism
 opportunities such as farm stay accommodation
 and ecotourism.
 - Ensure adequate buffers are maintained to minimise potential land use conflicts with surrounding broadacre agricultural activities.
- Development of a diversified range of commerce and industry in appropriate locations providing significant employment opportunities and reducing the local economy's dependency upon the agricultural sector.

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4 Residential land

Key points

- As at March 2024, there were approximately 4,064 lots on land zoned for residential purposes (excludes land for rural living purposes) under the Shire's Local Planning Scheme no. 6 (LPS6), covering a total land area of 1,064 hectares. Fifty eight per cent of which is developed and approximately 42 per cent of residential land is considered undeveloped.
- Over the decade to March 2024, subdivision applications were lodged to create an average of 13 residential lots were lodged in applications, six were granted conditional approval and two lots was granted final approval, per quarter.
- The development outlook analysis identified a total of 18 projects proposing 2,267 residential lots over an area of 478 hectares.
- Within the projects identified, 100 lots are likely to be available for release in the short-term, 1,382 lots in the medium-term and 785 in the long term. Residential project sites were located solely in Northam and accounted for 73 per cent of the Shire's total anticipated dwelling yield.
- The Northam South Local Structure Plan accounted for 37 per cent (845 lots) of the total projected lot yield in the Shire. This was the largest contribution of any identified project towards anticipated lot yields.
- Potential for urban consolidation is theoretically possible but is dependent on significant upgrades to sewer systems and other enabling infrastructure.
- As at 30 April 2024, 509 lots were identified as vacant, accounting for 13 per cent of all residential zoned lots in the Shire.
- Under Band E of the WA Tomorrow forecast, a hypothetical temporal land supply of more than 60 years has been identified, supporting a population of 16,500. When including vacant lots, temporal land supply is increased to more than 70 years, supporting a population of 17,600.
- Should proposed rural living lots be added to the abovementioned scenario, a hypothetical temporal land supply of over 80 years has been identified. This is increased to over 100 years temporal land supply when vacant rural living lots are added.

4.1 Land zoned for residential purposes under the local planning scheme

The Shire's LPS6 provides for residential development primarily through the residential zone. Other zones including commercial, mixed use, tourist, rural and development may also allow

for residential development. In these instances, approval is discretionary or dependant on the land uses permissibility within the scheme's zoning table.

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4.2 Development status of lots on land zoned for residential purposes under the local planning scheme

This section presents data on the development status of lots on land zoned residential under the Shire's LPS6. The latest available data on the development status of lots on land zoned for residential purposes is based on:

- Landgate data as of February 2024; and
- Local planning schemes data as of March 2024.

Data for section 4.2 has been derived from the Department's Integrated Regional Information System (IRIS) model. Lots are classified as developed or undeveloped based on Landgate's property valuation information. Landgate valuers

conduct independent and unbiased valuations of properties to determine the gross rental value and unimproved value.

For lots classified as undeveloped, it is important to note that not all lots classified as such will be available for development. This may be due to factors or constraints relating to environmental, heritage or servicing infrastructure.

As at March 2024, there were approximately 4,064 lots on land zoned for residential purposes under the Shire's LPS6, covering a total land area of 1,064 hectares. Of this:

- 617 hectares (58 per cent) was classified as developed; and
- 446 hectares (42 per cent) was classified as undeveloped.

Table 2 presents data on the development status of lots on land zoned residential under LPS6.

Table 2: Development status of lots zoned Residential

Suburb / Locality	Development statu	Total	
Suburb / Locality	Developed (ha)	Undeveloped (ha)	(ha)
Bakers Hill	28	3	32
Clackline	1	-	1
Grass Valley	11	1	12
Muluckine	7	2	10
Northam	531	431	962
Spencers Brook	9	2	11
Wundowie	29	7	36
Shire of Northam (LGA)	617	446	1,064

Source: Department of Planning, Lands and Heritage (2024) Integrated Regional Information System.

Note: Numbers may not sum due to rounding. Data is at March 2024.

Table 2 shows a significant capacity for additional growth in the locality of Northam, as this is where most undeveloped residential zoned land is located. Several of these large lots on the outskirts of the townsite contribute more than 50 hectares of undeveloped land to the total. The Shire supports the development of these lots with the Local planning strategy highlighting expansion of residential areas around the Northam townsite as a key objective for residential development. These large undeveloped lots have been identified in the Strategy and have subsequently been included in the Development Outlook (**Table 4**) as having development potential in the medium to long term.

4.3 Residential lot supply pipeline

Figure 7 shows subdivision activity in the Shire of Northam from the March 2015 quarter to the March 2024 quarter. Over the decade, applications were lodged to create a total of 507 lots for residential purposes (this does not include rural living lots). Over this period, 248 lots were granted conditional approval and 61 lots progressed to final approval¹.

- Over the decade to March 2024, an average of:
 - 13 residential lots per quarter were proposed for development through subdivision applications;

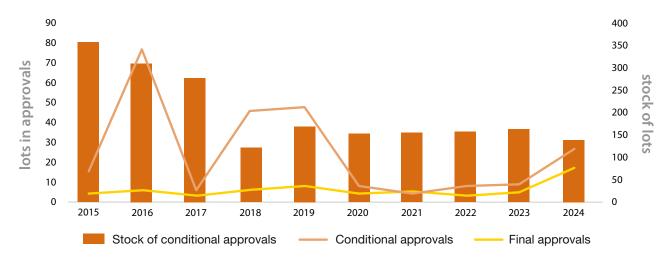


Figure 7: Residential subdivision activity and lot supply pipeline (March 2015 - March 2024)

Source: Western Australian Planning Commission (2024) State Lot Activity.

¹ The lower number of lots granted conditional approval, compared to those lodged in applications, may be due to refused applications, lapsed applications, cancelled applications, or recently lodged applications that are currently under assessment by the WAPC.

- six lots per quarter were granted conditional approval; and
- two lots per quarter were granted final approval.
- Residential lots granted conditional approval recorded highs between 2016 and 2018. This was attributed to two separate proposals within the Northam townsite. The peak in 2016 was the result of conditional approval granted to 57 lots for residential purposes in the Northam townsite.
- The stock of conditional approvals declined from 2015 to 2017. Stocks then fell dramatically by almost 200 lots in the March and June 2017 quarter and have remained relatively unchanged since.
- Compared to conditional approvals, lots granted final approval have remained consistently low throughout the decade. This is likely attributed to market conditions and challenges associated with the provision of service infrastructure (particularly connection to sewer).

4.4 Residential housing supply

4.4.1 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.

Over the decade to March 2024, a total of 512 dwelling units were granted approval in the Shire. Houses accounted for 98 per cent of approvals, with the remainder recorded as 'other residential buildings' (see glossary for definition). Dwelling approvals trended mostly downward between 2014-15 and 2018-19, with only 24 dwelling approvals recorded in 2018-19. Higher approval numbers in 2020-21 correspond with an increase in population (see **Figure 1**). This corresponds with broader national trends of increased migration to regional areas following the COVID-19 pandemic.

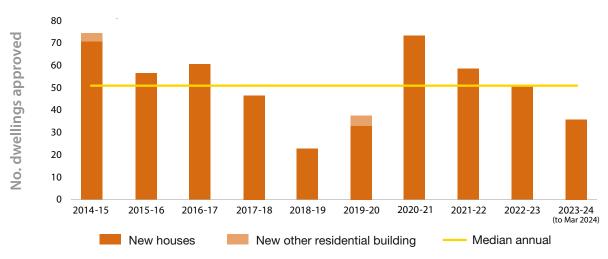


Figure 8: Dwelling approvals, 2014-15 to 2023-24 (to March 2024)

Source: Australian Bureau of Statistics (2024) Building Approvals, Australia. Catalogue No. 8731.0.

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4.4.2 Dwelling construction

Dwelling stocks within the Shire are older than most towns in Western Australia, with 37 per cent of dwellings constructed prior to 1960. Apart from a slight increase between 1980 to 1999, dwelling construction has remained relatively stable in the Shire. Only 26 dwellings were constructed in 2023, which was similar to the number of dwellings constructed in 2022 and 2021 (28 and 27 dwellings, respectively). The localities of Bakers Hill, Northam and Wundowie have consistently recorded the largest proportion of new dwellings constructed in the Shire. In more recent years, the share of total dwellings constructed in Wundowie declined, while Bakers Hill has recorded an increase.

4.4.3 Availability of housing stock

Median sales prices for properties in the Northam locality have undergone substantial growth since the COVID-19 pandemic. Median house prices have

risen an average of 14 per cent each year since 2021, while median land prices increased by 68 per cent, from \$25,000 in 2019 to \$42,000 in 2020.

Total sales volumes for properties have followed a similar trend to median sales prices, increasing considerably since the pandemic. Volumes did fall slightly in 2023, however have picked up in 2024, already exceeding the previous year. House sales have consistently accounted for between 70 to 85 per cent of total property sales, with land accounting for approximately 15 to 20 per cent.

As at May 2024, the median weekly rent price for a house in the Northam locality was \$410 and \$300 for a unit. In comparison, the median weekly rent price in the Perth metropolitan region for a house was \$650 and \$600 for a unit. In the year to May 2024, Northam locality recorded 10 properties available for rent, with only 11 properties available for rent in 2023.

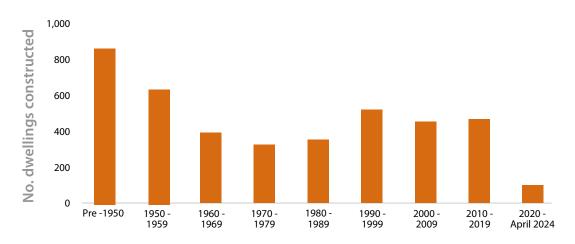


Figure 9: Age of dwelling stocks

Source: Department of Planning, Lands and Heritage (2024) Integrated Regional Information System. Data is at April 2024.



Figure 10: Sales volume and median sales price (Northam locality) - May 2015 to May 2024

Source: REIWA (2024).

4.5 Residential development outlook

Table 4, Maps 2 and **3** show possible residential development projects in the Shire. Projects are included where intent has been demonstrated (by government or the development industry) to develop the site in the future. Projects are identified through a variety of means, including:

- Local planning scheme zones and amendments
- Developer intentions
- Consultation with local stakeholders
- Subdivision applications/approvals proposing five or more lots
- Development Assessment Panel (DAP) applications/approvals
- Structure planning
- Strategic planning

The development outlook analysis identified a total of 18 projects proposing 2,267 residential lots over an area of 478 hectares. Within the projects identified, 100 lots are anticipated to be released in the short-term (one to five years), 1,382 lots in the medium-term (six to 10 years) and 785 in the long-term (10 or more years). Residential project sites were located solely in Northam and accounted for 73 per cent of the Shire's total anticipated dwelling yield.

Short-term

The development outlook analysis identified four projects contributing to the short-term dwelling yields in the Shire. Most of this yield is attributed to NOR46, a four-hectare site in the Northam townsite. The Shire has identified site NOR46 in the Shire's Local Planning Strategy (the Strategy) for residential infill, with an estimated potential of 83 lots based on the current density coding. Timing for the

Table 3: Estimated residential dwelling yield from possible development areas

Locality	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)
Northam	100	1,382	785
Local Government total	100	1,382	785

Source: Department of Planning, Lands and Heritage (2024).

Note: Based on planning progress. Subject to demand and servicing

development is suggested to be short-term however fragmented land ownership and abandoned buildings on site may impact development.

In addition, 40 survey strata lots for the purpose of a lifestyle village (WD06) have been granted conditional subdivision approval and are proposed to be developed in the next five years. As these lots are restricted to certain age groups, this yield has not been included in the estimated dwelling yield for the Shire.

Medium-term

More than 60 per cent of the anticipated residential dwelling yields are projected to occur in the medium-term, with development areas confined to the Northam townsite.

The most notable is within the Northam South Local Structure Plan (LSP) area, with the 100-hectare site (NOR05) allowing for approximately 845 future residential lots on the southern fringe of the townsite. The site is earmarked by the Shire for future residential expansion, however the requirement for proposed lots to be connected to service infrastructure (particularly sewer) will be a key requirement to facilitate much of this development potential.

Substantial dwelling yields are also proposed for sites NOR01 on the eastern side of the townsite and NOR20 on the western side. While structure planning may still be required, the current R15 and R30 density codes applicable to these residential zoned sites can provide for up to 221 and 153 lots, respectively. Additional sites zoned residential and identified in the Shire's Local Planning Strategy for infill include NOR11, NOR21 and NOR29. Combined, these three identified infill areas allow for up to 120 lots, based on the endorsed structure plan or the current density code.

Most of the proposed residential developments identified in **Table 4** are located outside of sewered areas and require connection to the sewer network, prior to lots being created. Water Corporation has advised that, based on current assumptions on future demand, there are no plans to widen the network. Subdivision and development of the abovementioned sites may, therefore, be contingent on developers extending existing water and sewer networks to service proposed lots.

Long-term

The development outlook analysis identified eight projects with long-term development potential, covering an area of 290 hectares. Significant opportunity exists for residential expansion through adjoining sites NOR16, NOR32 and NOR41 on

Regional Land Supply Assessment

the western fringe of the townsite. This has been recognised in the Shire's Local Planning Strategy via identification of the sites for residential or rural residential infill. Based on previously approved subdivision applications as well as current density codes, the three sites combined can allow development of up to 462 lots in the long-term. Timing of any future lot release is likely to be dependent on the provision of road access and servicing arrangements.

Three further sites (NOR36, NOR43 and NOR47) have been identified in the Local Planning Strategy for residential infill. NOR36, which is subject to the Morby Cottage Structure Plan, allows for up to 65 lots, however the delivery of lots is likely to be extended into the long-term due to significant constraints relating to lot layout and servicing infrastructure requiring resolution. While no structure plans are currently applicable to NOR43 and NOR47, the sites are covered by a density code, with a predicted dwelling yield of 19 and 53 dwellings, respectively.

The Development Outlook identified two large greenfield sites towards the western side of the townsite, with relatively high potential dwelling yields. Based on the current density coding, a combined 188 lots could be achieved on sites NOR44 and NOR45. The Local Planning Strategy acknowledges the significance of both sites, as a prospect for increased density or a key development opportunity. Future development of NOR44 and NOR45 may be impacted by land fragmentation as well as the requirement for structure planning to address concerns related to bushfire risk.

Investigation areas

Sites highlighted in the Local Planning Strategy for future residential infill, but not yet zoned for residential purposes have been acknowledged in the Development Outlook map and table as investigation areas (IA13, IA14, IA19, IA23 and IA28). These sites

are generally characterised as being relatively large lots adjacent to existing residential or rural residential zoned areas. Due to the uncertainty of land capability and servicing requirements, no lot yield or timing is provided for these projects.

Table 4: Development outlook - Shire of Northam

				ī		Zo	oning/plani	ning	Area	ı/yield	1		ıbdivision oprovals ²		ated dwelling ³ (commencir			
Identifier	liming	ocation	Suburb	Map number in this document	Purpose	urrent local planning cheme zone/reserve	mendment required	Other planning under way	Area (ha)	field (lots)	rield (units)	Approvals pending	Surrent approvals	Short-term (0-5 years)	Medium-term (6-10 years)	ong-term (10+ years)	Constraints ⁴	Comments
BH02	Short (with current conditional approval) & Medium	Lot 4229 Tames Rd		7	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	60.3		53	_			47		BP, D, E, TG	Subdivision to create 53 lots for rural residential purpose is currently active. Subject to the Tames Road Structure Plan.
BH05	Medium	Lot 8246 Chitty Rd	Bakers Hill	7	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	43.8	15	15	0	C	0	15	0	BP, E	The site is subject to the Chitty Road subdivision guide plan, allowing for 15 lots for rural residential purposes. Subdivision to create three lots has recently lapsed.
ВН06	Medium	Part Lot 7674 Carlin Rd	Bakers Hill	7	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	22.7	19	19	0	C	0	19	0	BP, E	The site is subject to the Carlin Rd Avon Loc subdivision guide plan, allowing for 19 lots for rural living purpose.
ВН07	Short (with current conditional approval)	Lot 4115 Jose Rd	Bakers Hill	7	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	37.1	34	34	0	34	34	0	0	BP, E	The site is subject to the Jose Road Structure Plan. Subdivision to create 34 lots for rural residential purposes expired in August 2024.
ВН09	Short (with current conditional approval) & Medium	Lot 1 & 2 Foundry PI	Bakers Hill	7	Rural living	Rural Residential, Rural Small Holding	No	Amendment to the Local Planning Strategy	61.0	9	9	0	2	2	7	0	BP, E	The site is subject to the Foundry Place structure plan. A subdivision application to create two lots for rural residential purpose is currently active on Lot 1, leaving seven lots remaining to be created on lot 2, as per the structure plan.
BH11	Medium	Lot 301 and 302 Chitty Rd and Lot 2 Augustini Rd	Bakers Hill	7	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	79.4	34	34	0	(0	34	0	E	The site is subject to Lot 1 Chitty Rd & Lot 2 Augustini Rd Subdivision Guide Plan, allowing for 34 lots for rural living purpose.

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ldentifier	Timing	-ocation	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	vmendment required	Other planning under way	Area (ha)	Yield (lots)	rield (units)	Approvals pending	Current approvals		Short-term (0-5 years)	Medium-term (6-10 years)	ong-term (10+ years)	Constraints ⁴	Comments
BH12	Medium		Bakers Hill		Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	40.9				_	O .	0	22	0	E, BP	The site is subject to a Subdivision Guide Plan allowing for 22 lots for rural living purpose.
BH13	Medium	Part Lot 2210 Great Eastern Highway and Part Lot 6808 Oyston Rd	Bakers Hill	7	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	42.2	25	25	6 (D	0	25	0	E,BP, S	Site is subject to the Avon Loc 2210 & Avon Loc 6808 Great Eastern Highway subdivision guide plan, allowing for 25 lots for rural living purpose.
BH14	Medium	Lot 16 Chitty Rd	Bakers Hill	7	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	131.4	55	55	5 (0	0	55	0	E,BP, S	Site is subject to the lot 16 Chitty Rd subdivision guide plan, allowing for 55 lots for rural living purpose.
IA01	Investigation area	Lot 7240 Fernie Rd	Bakers Hill	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	57.8	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA02	Investigation area	Numerous lots bounded by Tamm Rd, Chitty Rd, Newman St and Carlin Rd	Bakers Hill	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	307.7	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA03	Investigation area	Lots 101 Anderson Rd and Lot 10 Berry Brow Rd	Bakers Hill	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	136.4	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.

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Identifier	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 years)		Medium-term (6-10 years)	-ong-term (10+ years)	Constraints ⁴	Comments
IA04	Investigation area	Lot 102 Refractory Rd	Bakers Hill	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy		n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA05	Investigation area	Part Lot 6808 and Lot 2210	Bakers Hill	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	12.5	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA06	Investigation area	Lot 28291 Valencia Lane	Bakers Hill	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	31.0	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA07	Investigation area	Numerous lots bounded by Great Eastern Highway and Oyston Rd	Bakers Hill & Copley	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	255.4	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA08	Investigation area	bounded by	Bakers Hill & Wundowie	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	268.6	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA09	Investigation Area	Numerous lots bounded by Great Eastern Highway, Kimberley Rd and Benrua Rd	Clackline	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	146.3	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.

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Identifier	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 years)		Medium-term (6-10 years)	Long-term (10+ years)	Comments
IA10	Investigation Area	Lot 4029 Augustini Rd and Lot 20337 Refractory Rd	Bakers Hill	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	104.7			n/a	n/a	n/a	n/a	n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA11	Investigation Area	Lot 100 Tank St	Grass Valley	8	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	17.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA12	Investigation Area	Lot 103 and 501 Muluckine Rd	Grass Valley	8	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	99.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA14	Investigation area	Lot 5 Northam- Pithara Rd	Northam	8	Rural living	Rural	Yes	Amendment to the Local Planning Strategy	15.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Local Planning Strategy identifies site for future rural living purposes.
IA15	Investigation area	Lots 1790,113- 120, Lots 131- 135 and Lot 200 Great Eastern Highway	Northam	6	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	89.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area as part of rounding off of adjacent proposals.
IA16	Investigation area	Lot 50 & part lot 91 & part lot 94 Throssell st	Northam, Muluckine	2	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	105.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Local Planning Strategy proposes rezoning to residential.

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Identifier	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 years)		Medium-term (6-10 years)	Long-term (10+ years)	Constraints ⁴	Comments
IA19	Investigation area	Part lot 500	Northam	6	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	53.4	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	The Draft Local Planning Strategy identifies the site as a potential area for future rezoning to Rural Residential.
IA20	Investigation area	Lots 300 - 303 Chedaring Rd & 304 - 306 Werribee Rd	Wundowie	7	Investigation Area	Rural	Yes	Amendment 19 initiated and currently with the EPA	592.6	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA21	Investigation area	numerous lots bounded by Great Eastern Highway and Coates Rd.	Wundowie	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	100.8	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA22	Investigation area	Lot 100	Wundowie	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	13.7	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
IA23	Investigation area	Lot 120 Mitchell Ave	Northam	2	Investigation Area	Residential (R2.5 & R5)	No	Amendment to the Local Planning Strategy	39.0	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	The Local Planning Strategy identifies the site for low density residential/rural residential purposes. Future development of the site is subject to environmental considerations and structure planning. The site is partially affected by threatened and priority ecological communities vegetation. Contains a registered Aboriginal heritage site.

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Identifier	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 years)	(50)	Medium-term (6-10 years)	-ong-term (10+ years)	Constraints ⁴	Comments
IA24	Investigation area	Numerous lots abutting Lockyer Rd	Clackline	10	Investigation Area	Commercial, Parks and recreation, Residential (R5), Residential (R10)	No	Amendment to the Local Planning Strategy	1.8	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies the site for rezoning to Rural Townsite zone.
IA25	Investigation area	Numerous lots bounded by Wheatbin Rd, Vivian St, Swilson St and Carter St	Grass Valley	10	Investigation Area	Commercial, Conservation of Flora and Fauna, Parks and recreation, Residential (R10)	No	Amendment to the Local Planning Strategy	8.2	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies the site for rezoning to Rural Townsite zone.
IA26	Investigation area	Numerous lots along Great Eastern Hwy in the Bakers Hill town centre	Bakers Hill	10	Investigation Area	Commercial, Public Purposes, Residential (R10)	No	Amendment to the Local Planning Strategy	12.8	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies the site for rezoning to Rural Townsite zone.
IA27	Investigation area	Numerous lots along Banksia Av, Hovea Cr and Boronia Av in the Wundowie town centre	Wundowie	10	Investigation Area	Commercial, Public Purposes	No	Amendment to the Local Planning Strategy	3.2	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies the site for rezoning to Rural Townsite zone.
IA28	Investigation area	Numerous lots bounded by Crowea Tce, Grevillia St & Kuringal Rd	Wundowie	3	Investigation Area	Residential (R20)	No	Amendment to the Local Planning Strategy	11.7	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	Local Planning Strategy identifies the site for residential development subject to addressing the protection of significant vegetation and bushfire risk. Partly developed. 50 existing vacant UCL lots within site and 20 additional UCL lots that could be created to the east of the site. Partial rezoning and structure planning required.

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Identifier	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	field (units)	Approvals pending	Current approvals		Short-term (0-5 years)		Medium-term (6-10 years)	-ong-term (10+ years)	Constraints ⁴	Comments
IA29	Investigation area	Lot 401	Wundowie	10	Investigation Area		No	Amendment to the Local Planning Strategy	1.4	n/a		n/a	n/a	n/a	1	n/a	_	n/a	n/a	Local Planning Strategy identifies the site for rezoning to Rural Enterprise zone.
IA30	Investigation area	Lot 100 & lots 1 - 3 Kingia Rd	Wundowie	10	Investigation Area	Development, Light and service industry, Residential (R5)	No	Amendment to the Local Planning Strategy	15.1	n/a	n/a	n/a	n/a	n/a	l	n/a		n/a	n/a	Local Planning Strategy identifies the site for rezoning to Rural Enterprise.
IA31	Investigation area	Numerous lots bounded by Jordi Rd, Great Eastern Hwy and Martin St	Bakers Hill	10	Investigation Area	Rural Residential, Parks and recreation	Yes	Amendment to the Local Planning Strategy	12.2	n/a	n/a	n/a	n/a	n/a	l	n/a		n/a	n/a	Local Planning Strategy identifies the site for rezoning to Rural Enterprise.
IA32	Investigation area	Lot 10685 & partial lot 4117 Tames Rd	Bakers Hill	10	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	23.0	n/a	n/a	n/a	n/a	n/a	I	n/a		n/a	n/a	Local Planning Strategy identifies the site for rezoning to Rural Enterprise.
IA33	Investigation area		Bakers Hill	7	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	392.7	n/a	n/a	n/a	n/a	n/a	I	n/a		n/a	n/a	Local Planning Strategy identifies site as future rural living expansion area.
NOR01	Medium	Numerous lots bounded by Robinson St, James St and Fernie Street.	Northam	2	Residential	Residential (R30)	No	Amendment to the Local Planning Strategy	10.5	221	221	(0	0		221		W, S, MC, TG	The site is not subject to any structure plan, consequently, dwelling yields have been calculated based on the current LPS zoning. The Shire and MRWA owned land is being promoted for residential development as part of the Shire's Housing Strategy.
NOR05	Medium	Numerous lots south of the Northam townsite fronting Throssell St	Northam	2	Residential	Residential (R2.5), Residential (R15)	No	Amendment to the Local Planning Strategy	102.3	845	845	6 (0	0		845	0	D, L	The site is subject to the Northam South Local Structure Plan (LSP). No potential lot yield has been provided for the site in the LSP, therefore dwelling yields have been estimated based on the densities outlined in the LSP.

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<u> </u>		Ę		Map number in this document	ø	Current local planning scheme zone/reserve	ment required	Other planning under way	а)	ots)	nits)	Approvals pending	Current approvals	Short-term (0-5 vears)	Modium-term (6-10 years)	rm (10+ years)		Comments
Identifier	Timing	Location	Suburb		Purpose	Current scheme	Amendment	Other p	Area (ha)	Yield (lots)	Yield (units)		Current	Short-te		Long-term		
NOR11	Medium	Lots 16, 9501 Henty Rd & Lot 1004 Roediger Dr	Northam	2	Residential	Residential (R2.5)	No	Amendment to the Local Planning Strategy	11.3	20	20	0	C) (2	0 () E, L, S	The site is subject to the Henty Place Subdivision Guide Plan. The guide plan proposes 28 lots, however potential lot yield is lower as it has been calculated at the current LPS6 density code. A subdivision application to create 31 lots for residential purposes lapsed in 2013. Local Planning Strategy identifies the site for future residential purposes.
NOR16	Long	Lot 9000 Mount Ommanney Rd	Northam	2	Residential	Residential (R5)	Yes , if rezoning to Rural Residenti al zone.	Amendment to the Local Planning Strategy	50.7	125	125	0	C			0 125	D, E, S	A subdivision application to create 135 Lots for residential purposes was cancelled in July 2023. Future development of the site is subject to significant constraints being resolved. The potential lot yield as per the density coding has been lowered due to these constraints.
NOR20	Medium	Lot 9000 & Lot 424 Wood Dr	Northam	2	Residential	Residential (R15)	No	Amendment to the Local Planning Strategy	14.6	153	153	0	C) 15	3 (S	Subdivision to create 42 lots for residential purpose lapsed in 2017. The Local Planning Strategy identifies the site as future residential land, possibly for infill. The site is not subject to any structure plan, consequently, dwelling yields have been calculated based on the current LPS density.
NOR21	Medium	Lot 9000 Wood Dr	Northam	2	Residential	Residential (R40)	No	Amendment to the Local Planning Strategy	2.9	81	81	0	C) (0 8	1 (F, L, P, H	Subdivision application to create 33 lots for residential purposes has lapsed. A potential dwelling yield of 81 lots has been calculated based on the current LPS6 density. The Local Planning Strategy identifies the site as future residential land, possibly for infill purposes. The site contains two registered places of Aboriginal Cultural Heritage.

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	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 vears)	Medium-term (6-10 years)	Long-term (10+ years)	Constraints ⁴	Comments
NOR29	Medium	Lot 19 Charles St	Northam	2	Residential	Residential (R30)	No	Local Planning Strategy	1.0	19	19	0				0	NIL	The site falls under the Charles Street Development Guide Plan, which permits a potential yield of 19 residential lots. A proposed subdivision to create 8 residential lots was approved but subsequently lapsed in 2013
NOR32	Long	Lot 50 Mount Ommanney Rd	Northam	2	Residential	Residential (R5)	Yes , if rezoning to Rural Residenti al zone.	Local Planning Strategy	87.1	189	189	0	0	(0			The Local Planning Strategy identifies the site as a future low density residential zone or Rural Residential zone. Subdivision to create 189 lots for residential purposes lapsed in 2017. More detailed planning required.
NOR36	Long & Short (with current conditional approval)	Lots 18, 19 Moore St & 20 Katrine Rd & 38 - 40, 42, 43 Goomalling Rd	Northam	2	Residential	Residential (R15)	No	Local Planning Strategy	10.8	65	65	0	j	2	2 0	63		Subdivision to create two lots for residential purpose is currently active on lot 43. The site is subject to the Morby Cottage Structure Plan which allows for a total yield of approximately 65 lots. Timing of dwelling release is long term due to significant constraints. The site contains two registered places of Aboriginal Cultural Heritage.
NOR37	Medium	Lots 105, 106, 107 Frankish Rd & 100 Byfield St	Northam	2	Residential	Residential (R20)	No	Amendment to the Local Planning Strategy	3.0	48	48	43	5	;	5 43	0	E, P	A subdivision application to create 48 staged lots is currently outstanding on the site. An overlapping, previously approved subdivision application for the creation of five lots is already active on the site and forms part of stage 1.

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Identifier	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	rield (lots)	Yield (units)	Approvals pending	Current approvals		onor-term (v-5 years)	Medium-term (6-10 years)	ong-term (10+ years)	Constraints ⁴	Comments
NOR38	Short (with current conditional approval)	Lot 13 Henry St		2	Residential	Residential (R40)	No	Amendment to the Local Planning Strategy	0.2		5	0	5		5	0	0	Т	Subdivision to create five survey strata lots for residential purposes is currently active on the site.
NOR39	Long	Lot 250 Muluckine Rd	Grass Valley	8	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	31.1	3	3	0	3	3	3	0			Local Planning Strategy identifies site as future rural living expansion area. Subdivision to create three lots for rural living purposes is currently active.
NOR40	Medium	Lot 411 Northam- Pithara Rd	- Northam	6	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	159.9	50	50	0	C		0	50			The site is subject to the Northam-Pithara Road, Irishtown Subdivision Guide Plan, allowing for a yield of 50 lots for rural living purpose. The site contains a registered place of Aboriginal Cultural Heritage.
NOR41	Long	Lots 1, 19 & 1694 & 123 McMilan PI & 2, 11, 12, 500 & 1006 Newcastle Rd	Northam	2	Residential	Residential (R5), Rural Residential	No	Amendment to the Local Planning Strategy	66.6	148	148	0	C		0	0		BP, L, S	The Local Planning Strategy identifies the site as a future low density residential zone or rural residential zone. Approximately half of the site is zoned Residential, at an R5 density coding with the remaining site zoned Rural Living. Lot yield for the Residential zone has been calculated based on the current R5 density coding (138 lots). Lot yield for the Rural Residential zone has been calculated based on an average lot size of two hectares (10 lots).
NOR42	Long	Lots 108 - 110 Withers St	Northam	6	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	18.2	7	7	0	C		0	0	7	H, L,	The Local Planning Strategy designates the site as a potential future park estate, possibly integrated with the proposed adjacent Airpark. With its current Rural Residential zoning, lot yields have been calculated based on an average lot size of two hectares. Consideration of the interface with the nearby Northam Airport is necessary. Additionally, the site includes a registered Aboriginal heritage site that must be carefully managed

				ent		Zo	oning/plan	ning	Area	a/yield	l ¹		ıbdivision oprovals²		ated dwelling ³ (commenci			
Identifier	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	rield (lots)	rield (units)	Approvals pending	Current approvals	Short-term (0-5 years)	Medium-term (6-10 years)	-ong-term (10+ years)	0	Comments
NOR43	Long	Lot 442 York Rd			Residential	Residential (R2.5)	No	Amendment to the Local Planning Strategy	10.9	19	19	0	0	0		19	E, S	The Local Planning Strategy identifies the site as future residential land, possibly for infill. Lot yield has been calculated based on the current LPS6 density coding.
NOR44	Long	Lots 5, 408, 409, 341 Burn St & Lots 401 - 407 Spencer Brook Rd	Northam	2	Residential	Residential (R2.5)	No	Amendment to the Local Planning Strategy	48.8	85	85	0	0	0	0	85	BP, E, H, L, S	Large residential zoned site with subdivision potential. Local Planning Strategy identifies site for residential expansion. Structure Planning required.
NOR45	Long	Lots 123 & 124 Chidlow St	Northam	2	Residential	Residential (R30)	No	Amendment to the Local Planning Strategy	9.6	103	103	0	0	0	0	103	NIL	Large residential zoned site with subdivision potential. Local Planning Strategy identifies site for residential expansion. Structure Planning required. A subdivision application to create 103 lots for residential purpose lapsed in 2015.
NOR46	Short	Lots 27, 28, 386 Hutt St & lots 29, 28306 Inkpen St		2	Residential	Residential (R30)	No	Amendment to the Local Planning Strategy	3.9	83	83	0	0	83	0	C	H, L	Large residential zoned site with subdivision potential. Local Planning Strategy identifies site as future residential land, possibly for infill and as a key development opportunity.
NOR47	Long	Lot 50 & Lot 2 Throssell St	Northam	2	Residential	Residential (R15)	No	Amendment to the Local Planning Strategy	5.0	53	53	0	0	0	0	53	NIL	Large residential zoned site with subdivision potential. Local Planning Strategy identifies site as future residential land, possibly for infill and as a key development opportunity.

				ent		Zo	ning/planr	ning	Area	ı/yield	i ¹		bdivision pprovals ²		ated dwelling ³ (commencin	g		
Identifier	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Constraints ⁴	Comments
NOR48	Short (with current conditional approval)	Lot 800 Collins Place	Northam		Residential	Residential (R30)	No	Amendment to the Local Planning Strategy	0.2	5	5	0	5	5				Subdivision application to create five lots for residential purpose is currently active on the site.
NOR49	Long	Lots 56, 58 & Lot 80 Lunt St	Northam	6	Rural living	Special Use - Airpark	No	Amendment to the Local Planning Strategy	14.5	0	0	0	0	0	0	0	L, P,S, T	Local Planning Strategy identifies site for Special Use - Airpark or rural pursuit purposes. Scheme Amendment No. 3 for an aviation themed residential subdivision was approved for the site in 2016. Structure planning required to determine potential lot yield.
WD02	Medium	Lot 4 & Lot 20 Fernie Rd & Lots 5, 7, 2035, 2036 Golf Links Rd	Wundowie	7	Rural living	Rural Residential, Rural	Yes - for Rural zoned land	Amendment to the Local Planning Strategy	1127.9	406	406	0	0	0	406	0	ĺ	The site is subject to the Wundowie North West Precinct Structure Plan, which outlines a proposed yield of 406 lots for rural residential purposes and 43 lots designated for tourism (tourist lots are excluded from the total lot yield). The Local Planning Strategy identifies rural zoned land in the north west and eastern areas of the site as suitable for future rural living expansion
WD05	Short	Lot 9501 Mauravillo Blvd	Wundowie	7	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	93.4	63	63	63	0	63	0		BP, E, T	Subdivision to create 63 lots for rural living purpose is currently outstanding. The site is subject to the Wundowie North West Precinct Structure Plan.

				ent		Zo	ning/plann	ing	Area	a/yield	1		paivision provals ²		ated dwelling ³ (commencing			
Identifier	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	rield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 years)	Medium-term (6-10 years)	ong-term (10+ years)	Constraints ⁴	Comments
WD06	Short (with current conditional approval)	Lot 90 Jocoso Rise	Wundowie	3	Residential	Special Use	No	Amendment to the Local Planning Strategy	38.9	0	0	0	45	0	0	0 M B E	Ρ,	Subdivision to create 40 survey strata lots for aged care purposes is currently active in the northeastern corner of the site.
WD07	Medium	Lots 711 Great Eastern Hwy & 712 Hawke Av	Wundowie	7	Rural living	Rural Residential	No	Amendment to the Local Planning Strategy	62.1	30	30	0	0	0	30	0 B	, T	The site is subject to the Lot 5 & 6 Great Eastern Highway subdivision guide plan, allowing for 30 lots for rural residential purpose.

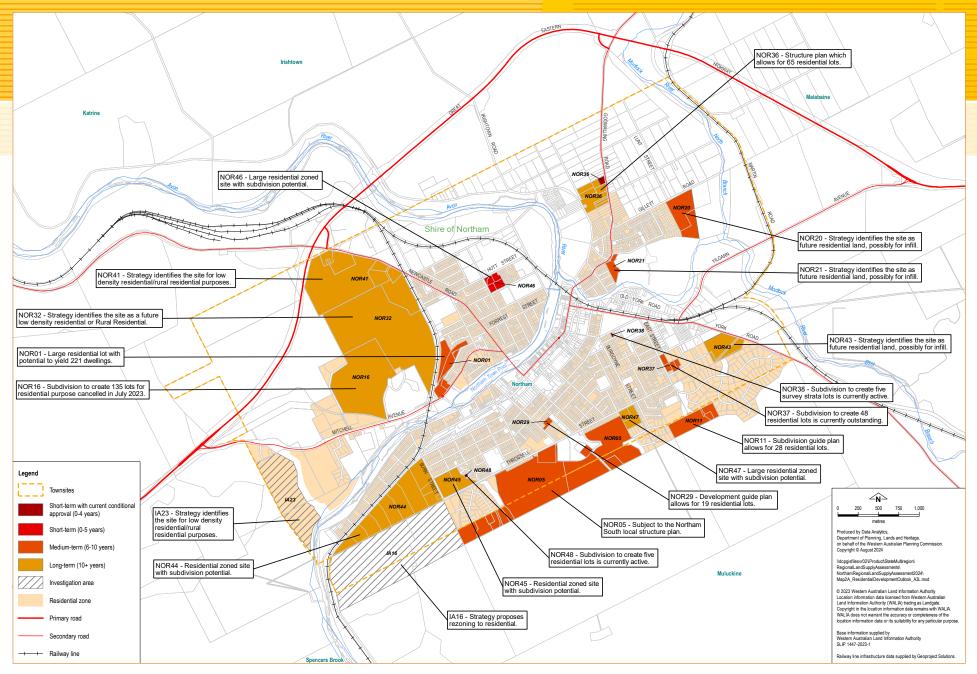
				ent		Zo	ning/planr	iing	Area	a/yielo	11		bdivision provals ²		ated dwelling ³ (commencii				
Identifier	Timing	Location	Suburb	Map number in this document	Purpose	Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Constraints ⁴	Comments	
Industrial	_	_	0,		_	Ο <i>ω</i>								208	2,092	792			
IND077	Medium	Lot 9003	Grass Valley	10	Industrial	General Industry	No	Amendment to the Local Planning Strategy	59.0	20	20	0	0	0	0		E, Ĥ,	The site is subject to Avon Industrial Park (AIP) Outline Development Plan. Two separate applications, one for the creation of two lots and one for the creation of 18 lots for industrial purposes are currently active on the site.	
IND327	Short	Lot 881 Yilgarn Av	Malabaine	9	Industrial	Light And Service Industry	No	Amendment to the Local Planning Strategy	59.5	7	0	0	7	0	0	0		Conditional subdivision approval was granted in October 2024 to create 7 lots for industrial purposes on the site.	
IA18	Investigation area	Lot 10 Great Eastern Hwy & Lot 351 Yilgarn Av	Muluckine	9	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	143.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Local Planning Strategy identifies the site for future light and service industrial/rural enterprise zoning.	
IA17	Investigation area	Lot 1 Yilgarn Av & Lot 2	Northam	9	Investigation Area	Rural Residential	Yes	Amendment to the Local Planning Strategy	35.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Local Planning Strategy identifies the site for future light and service industrial/rural enterprise zoning.	
IA34	Investigation area	Lot 3 Yilgarn Avenue	Northam	9	Investigation Area	Rural	Yes	Amendment to the Local Planning Strategy	9.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Local Planning Strategy identifies the site for future light and service industrial/rural enterprise zoning.	

¹ In some cases, the yield for the project is indicative only. Final lot/dwelling yields will be determined by further detailed planning.

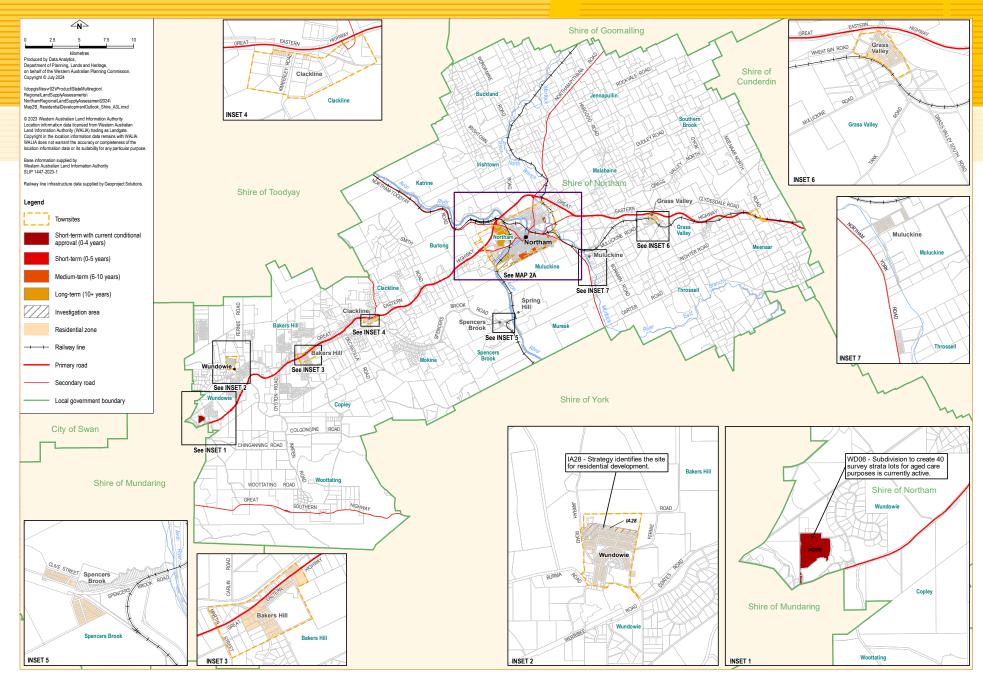
² Refers to the number of lots/units with current subdivision or strata approval, and the number of lots/units for which a subdivision/strata application has been lodged but which is yet to be determined (pending). Does not include local government

³ 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.

⁴ Constraints and issues codes: bushfire prone (BP), drainage (D), environmental (E), heritage (H), land assembly (L), market conditions (MC), native title (NT), planning (P), power (Pw), sewer (S), water (W), topography and geology (TG), mining



Map 2: Residential development outlook - Northam townsite



Map 3: Residential development outlook - Shire of Northam

4.6 Vacant lots and infill

Vacant residential lots

Data from Landgate's property valuation database identifies a substantial stock of vacant lots on land zoned for residential purposes in the Shire. As at 30 April 2024, 509 lots were identified as vacant, accounting for 13 per cent of all residential zoned lots in the Shire. This is significantly higher than Perth metropolitan and Peel regions, with only five per cent of residential zoned lots identified as being vacant. **Table 5** shows the stock of vacant lots on land

zoned for residential purposes in the Shire. Analysis of data provided by Water Corporation indicates that approximately 250 of these lots are serviced with inactive water meters.

The distribution of vacant lots in the Shire (based on data from the Valuer General's Office) is illustrated in Maps 4 and 5.

Table 5: Stock of vacant lots

Suburb / locality	Total (ha)
Bakers Hill	7
Clackline	-
Grass Valley	6
Muluckine	23
Northam	439
Spencers Brook	13
Wundowie	21
Total	509

Source: Department of Planning, Lands and Heritage (2024). Data is at April 2024.

Residential infill and constraints to further subdivision

The Department's Integrated Land Information Database (ILID) model compares density outcomes with those set out by applicable Residential Design density codes (R-Codes) under local planning schemes. Appendix A provides a detailed description of the ILID model and the methodology for its use. Using the ILID model, the latent development capacity of residential land stocks can be measured based on existing lot sizes and applicable density codes. The spatial distribution of lots with additional dwelling potential is also shown on Maps 4 and 5.

Table 6 shows the number of lots that could theoretically be produced and added to the stock of lots through subdivision, as permissible under R-Codes set out in LPS6. Where there is a split code, the potential is shown for both the high and low codes. ILID data indicates there is theoretically potential for an additional 6,816 lots in the Shire if the existing zoned area was developed to its maximum (high) density.

It must be noted that data depicted on Maps 4 and 5 and in **Table 6** is indicative only and should not be used as a guide to development potential on a site-by-site basis. The ILID model does not consider factors such as heritage, environmental and/or infrastructure constraints or provisions of the local planning scheme or Government policies. This means that the additional potential shown in **Table 6** and on Maps 4 and 5 is unlikely to be fully realised.

Using the ILID model, Map 4 identifies higher indicative dwelling potential in the fringes of the Northam townsite. This includes several larger lots on the western fringe of the townsite, with an R5 density coding. These lots are currently classified as bushfire prone under State Planning Policy 3.7 (SPP 3.7). Many of the residential lots within the Wundowie townsite (Map 5) show an indicative dwelling potential of two to four dwellings.

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However, similar to the abovementioned R5 coded lots in Northam, these lots in Wundowie are classified as bushfire prone.

Map 4 also identifies a cluster of residential zoned lots in the north-eastern corner of the townsite, zoned R15. While the ILID model shows an indicative dwelling potential of five or more lots, the area falls outside of the townsites reticulated sewerage network. Approval for further residential subdivision to an R15 capacity is therefore likely to be contingent on extending the current sewer network.

Outside of the Northam townsite, Wundowie and Bakers Hill townsites contain the highest number of lots with additional dwelling potential (Map 5). These same localities also contain some of the Shire's oldest stocks of dwellings. Sites in Bakers

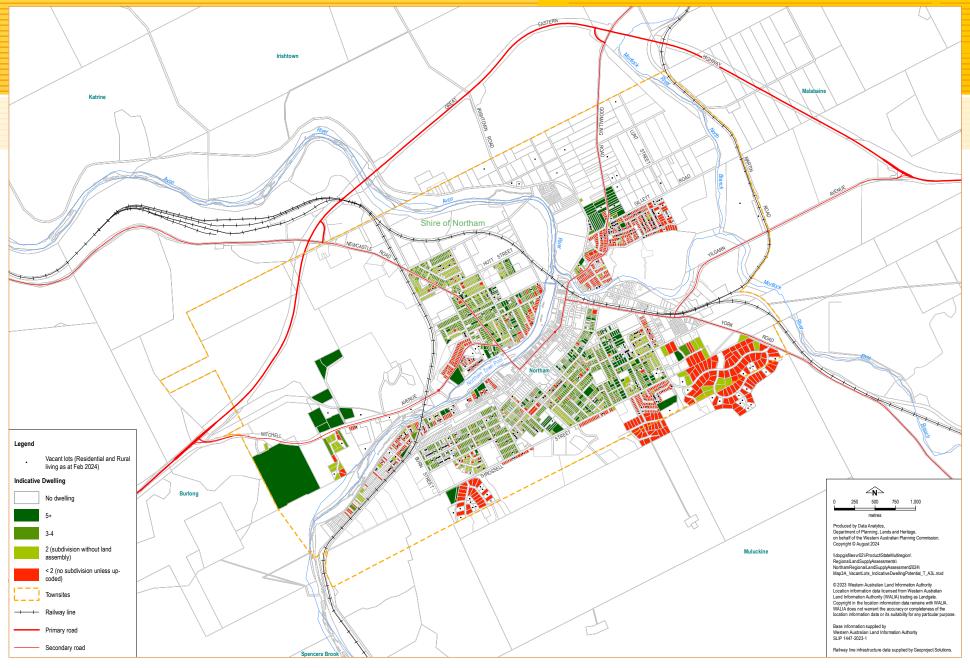
Hill showing high subdivision potential have been identified in the eastern and western parts of the townsite. Some of these lots, zoned at an R10 density, have been proposed in the Local Planning Strategy for rezoning to Rural Townsite.

Much of the urban consolidation potential identified in **Table 6** is dependent on the provision of sewer. The Government Sewerage Policy (GSP) requires that all newly created residential lots less than 1,000 square metres, should be connected to a reticulated sewer network. Many of the sites included in the table are located off the existing sewer network, which is only available in central Northam and the Wundowie townsite. Given the volume of existing vacant serviced lots and costs associated with extending the network, a shift in market dynamics may be required to drive the development of some of these areas.

Table 6: Infill capacity

R-Code	Lots	Dwellings	Additional dwelling potential (low)	Additional dwelling potential (high)
R10	451	267	477	477
R15	861	652	574	574
R15/30	71	64	47	200
R15/40	5	4	0	10
R2.5	181	154	48	48
R20	211	160	376	376
R20/30	121	124	112	234
R30	1,900	1,803	4,031	4,031
R40	144	135	552	552
R5	82	55	315	314
Total	4,012	3,418	6,531	6,816

Source: Department of Planning, Lands and Heritage (2024). Integrated Land Information System.



Map 4: Vacant lots and indicative dwelling potential - Northam townsite



Map 5: Vacant lots and indicative dwelling potential - Shire of Northam

4.7 Adequacy of residential land supply

Analysis on the adequacy of residential land supply for the Shire considers the following factors:

- the most likely scenario of projected population growth and/or aspirational population target
- the average household size; and
- the rate of dwelling occupancy.

For the assessment, analysis on the adequacy of residential zoned land supply is predicated on the average household size and dwelling occupancy rate of the Northam Local Government Area as at the 2021 Census.

To reach Band E of the Shire's WA Tomorrow forecast, an average annual growth of 0.62 per cent (average annual increase of 73 residents) is required. Assuming an average household size of 2.4 persons per dwelling and a dwelling occupancy rate of 84.4

per cent, an average of 36 dwellings per annum would be required to accommodate the projected population growth under this scenario.

Under this scenario, a *hypothetical* temporal land supply of more than 60 years has been identified, supporting a population of approximately 16,000. By including vacant lots into the scenario, the temporal land supply increases to more than 70 years, supporting a population of 17,000.

A higher average household size, or a higher rate of dwelling occupancy, would result in a lower number of additional dwellings required. This would subsequently extend the temporal land supply and increase the population that can be supported by the current residential land supply.

Table 7 shows the temporal land supply estimates for the Shire. Short-term supply and demand are closely matched and therefore determined to be sufficient. The stock of existing vacant lots provides an ample buffer to supply should demand increase

Table 7: Adequacy of supply

	Estimated	dwelling re	Identified	Surplus		
Timeframe	Band A (low)	Band C (median)	Band E (high)	dwelling yield	- Band E	
2016-2021	0	0	94	100	6	
2021-2026	0	0	_	1,382	1,382	
2026-2031	0	0	180	393	212	
2031-2036	0	0	180	393	212	
Total	0	0	454	2,267	1,813	
Stock of vacant lots	509					
Total surplus of dwellings accounting for vacant lots			2,318			

Source: Department of Planning, Lands and Heritage (2024).

Note: The stock of vacant lots shown in table 7 includes vacant lots on land for zoned residential, only. Based on planning progress. Subject to demand and servicing.

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significantly. A significant surplus of development capacity, beyond anticipated levels of demand, was also identified in both the medium and long-term.

It must be noted that the report's temporal land supply calculation is hypothetical. As mentioned in sections 4.5 and 4.6 of this report, large-scale residential development in the Shire will require a significant extension to the existing sewerage network. So, while Table 7 identifies a sufficient supply of zoned residential land, the delivery of key servicing infrastructure will still be required to deliver build-ready lots.

Inclusion of rural living lots into the temporal land supply

The above scenario is based on land zoned for residential purposes and does not consider land zoned for rural living purposes. Given the large number of rural living estates in Bakers Hill and Wundowie, there is potential for these sites to add to the Shire's temporal land supply. Should the rural living areas be included in the above scenario, a hypothetical temporal land supply of more than 80 years has been identified, that could accommodate a population of 17,600. If vacant rural living lots are included in the scenario, the theoretical land supply increases to more than 100 years, supporting a population of 19,000.

5 Rural living land

Key points

- The Shire's LPS6 provides for rural living development through the Rural Residential and Rural Smallholdings zones.
- The Shire contains 5,142 hectares of land zoned for rural living purposes, with the largest stocks found in the Bakers Hill and Wundowie localities.
- As at March 2024, 85 per cent of land zoned for rural living purposes is classified as developed and 15 per cent is undeveloped.
- Over the decade to March 2024, applications were lodged to create an average of seven rural living lots per quarter and three rural living lots per quarter.
- The development outlook analysis identified a total of 15 projects proposing 825 rural living lots over an area of 2,010 hectares. Within the projects identified, 108 lots are likely to be available in the short term, 710 lots in the medium term and seven lots in the long term.
- Rural living project areas are mostly located in Bakers Hill, Northam and Wundowie and account for 26 per cent of the Shire's total anticipated dwelling yield.
- The largest stock of proposed rural living lots in the Shire are derived from the Wundowie North West precinct structure plan (Mauravillo estate, WD02), which allows for a yield of 406 lots.
- The Strategy identifies 16 future rural living sites, covering approximately 2,240 hectares within Bakers Hill, Copley, Clackline and Wundowie localities.

5.1 Land zoned for rural living purposes under the local planning scheme

The Shire's LPS6 provides for rural living development primarily through rural residential and rural smallholdings zones.

Established rural living estates exist throughout the Shire in all major townsites. Lots with rural residential zoning are one to four hectares in size and account for over two thirds of all rural living land. The remaining rural living lots in the Shire are zoned rural smallholdings. Rural smallholdings lots are between four and 40 hectares in size and located in the Bakers Hill, Clackline, Mokine and Muluckine localities. Rural residential zoned lots are found in the remaining localities identified in **Table 8**.

5.2 Development status of lots on land zoned for rural living purposes under the local planning scheme

This section presents data on the development status of lots on land zoned rural residential and rural small holdings under the Shire's LPS6. The latest available data on the development status of lots zoned land is based on:

- Landgate data as of February 2024; and
- Local planning scheme data as of March 2024.

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As at March 2024, there were approximately 1,304 lots on land zoned for rural living purposes under the Shire's LPS6, covering a total land area of 5,042 hectares. Of this:

- 4,349 hectares (85 per cent) was classified as developed; and
- 792 hectares (15 per cent) was classified as undeveloped.

Just under 45 per cent of the total undeveloped rural living zoned land identified in the Shire was in Bakers Hill and 24 per cent in Wundowie. A significant number of these lots are covered by structure plans and therefore included in the development outlook as having subdivision potential (WD02, WD05, WD07, BH09, BH11). Approximately 80 per cent of rural living zoned land within these two localities,

was classified as developed. In contrast, Grass Valley recorded the lowest proportion of developed rural living zoned land, at slightly over 50 per cent.

Within the Shire, further analysis of developed, rural living zoned land identified approximately 30 per cent of lots as having additional subdivision potential. This is indicative only and does not consider factors such as heritage, environmental and/or infrastructure constraints or other provisions of the local planning scheme, which may influence additional potential.

Using the IRIS model, the number of vacant lots zoned for rural living purposes can also be identified. Within the Shire, 206 vacant lots were recorded as vacant. Half of these were in Wundowie, followed by Bakers Hill (71 lots) and Northam (23 lots).

Table 8: Development status of lots zoned for rural living purposes

Suburb / Locality	Development status - Rural small h	Total		
,	Developed (ha)	Undeveloped (ha)	(ha)	
Bakers Hill	1,441	350	1,791	
Clackline	558	51	509	
Copley	71	4	75	
Grass Valley	41	35	77	
Irishtown	160	-	160	
Mokine	364	58	421	
Muluckine	79	2	81	
Northam	272	105	377	
Wundowie	1,363	188	1,551	
Shire of Northam (LGA)	4,349	793	5,042	

Source: Department of Planning, Lands and Heritage (2024) Integrated Regional Information System.

Note: Numbers may not sum due to rounding. Data is at March 2024.

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5.3 Rural living lot supply pipeline

Figure 11 shows rural living subdivision activity in the decade to March 2024. Over this time, applications were lodged to create a total of 293 lots. Of these, conditional approval was granted to 272 lots and 125 (46 per cent) progressed to final approval.

- Over the decade to March 2024, an average of:
 - seven rural living lots per quarter were proposed for development in subdivision applications;
 - seven lots per quarter were granted conditional approval; and
 - three lots per quarter were granted final approval.
- Conditional approvals were highest between 2015 and 2017. These peaks were attributed to one proposed estate in Wundowie (Mauravillo Estate) and two estates in Bakers Hill (Oyston Road and Tames Road).

 The annual stock of rural living lots with conditional approval has experienced a sustained decline over the past 10 years, starting at 602 lots in March 2014 and falling to 41 lots in March 2024.

5.4 Rural living development outlook

Table 4 and maps 7-9 show potential rural living development projects in the Shire. Projects are included where intent has been demonstrated (by government or the development industry) to develop the site at some point in the future. Section 4.5 expands on the variety of means by which projects are identified.

The development outlook analysis identified a total of 15 projects proposing 825 rural living lots over an area of 2,010 hectares (Table 9). Within the projects identified, 108 lots are anticipated to be released

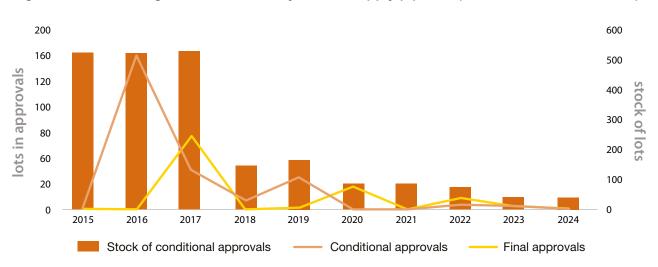


Figure 11: Rural living subdivision activity and lot supply pipeline (March 2015 - March 2024)

Source: Western Australian Planning Commission (2024) State Lot Activity

Table 9: Estimated rural living dwelling yield from possible development areas

Locality	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)
Bakers Hill	42	224	-
Grass Valley	3	-	-
Northam	-	50	7
Wundowie	63	436	-
Total	108	710	7

Source: Department of Planning, Lands and Heritage (2024).

in the short-term (one to five years), 710 lots in the medium-term (six to 10 years) and seven lots in the long-term (10 or more years).

Short-term

Two sites in Bakers Hill and Wundowie account for most of the proposed short-term rural living lot yields. Conditional approval granted to 34 lots east of the Bakers Hill townsite contribute to short-term dwelling yields in the Shire (BH07). Stage three of the Mauravillo Estate (WD05), north-west of the Wundowie townsite, provides for 63 rural living lots. While planned for in the Northwest Precinct LSP, the proposed lots are currently pending subdivision approval until appropriate bushfire risk mitigation measures are addressed.

Rural living estates across the Shire can often be in areas classified as bushfire prone and therefore subject to the provisions of SPP 3.7. The policy requires developers to engage a consultant to assess and identify ways to manage bush fire risk. Among other things, developers are required to mitigate bushfire risk through subdivision layout and

locating development in areas where bushfire hazard levels are low to moderate, provide two-way access in and out of the estate and ensure water supply is always available for firefighting purposes.

Medium-term and long-term

Lots for release in the medium-term are mostly identified as such due to a structure planned area not yet having progressed to the subdivision stage. Consequently, more than 80 per cent of the Shire's future rural living lots are categorised as medium term development.

As with short-term dwelling yields, the majority of rural living lots are proposed in the localities of Bakers Hill and Wundowie. In Bakers Hill, eight projects scattered throughout the locality propose a total of 170 future lots for rural living purposes. Notable sites include a group of endorsed structure plans along Chitty Road, to the east of the townsite (BH05, BH11 and BH14) which provide for 104 lots. In addition to these, sites BH02, subject to the Tames Road Structure Plan and BH12, covered by a subdivision guide plan proposes 69 lots to the south of the townsite.

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The largest stock of proposed rural living lots in the Shire are derived from the Wundowie North West precinct structure plan, otherwise known as Mauravillo estate (WD02). The expansion to the current estate covers 1,130 hectares of both rural and rural residential zoned land, allowing for a total of 406 lots for rural living purposes and 43 lots for tourist purposes. Further expansion of rural living areas in Wundowie includes site WD07, subject to a subdivision guide plan proposing 30 lots for rural living purposes.

The development outlook analysis identified seven rural living lots anticipated for release in the long-term. The site (NOR44) is identified in the Shire's Local Planning Strategy for rural living purposes and is zoned accordingly.

Investigation areas

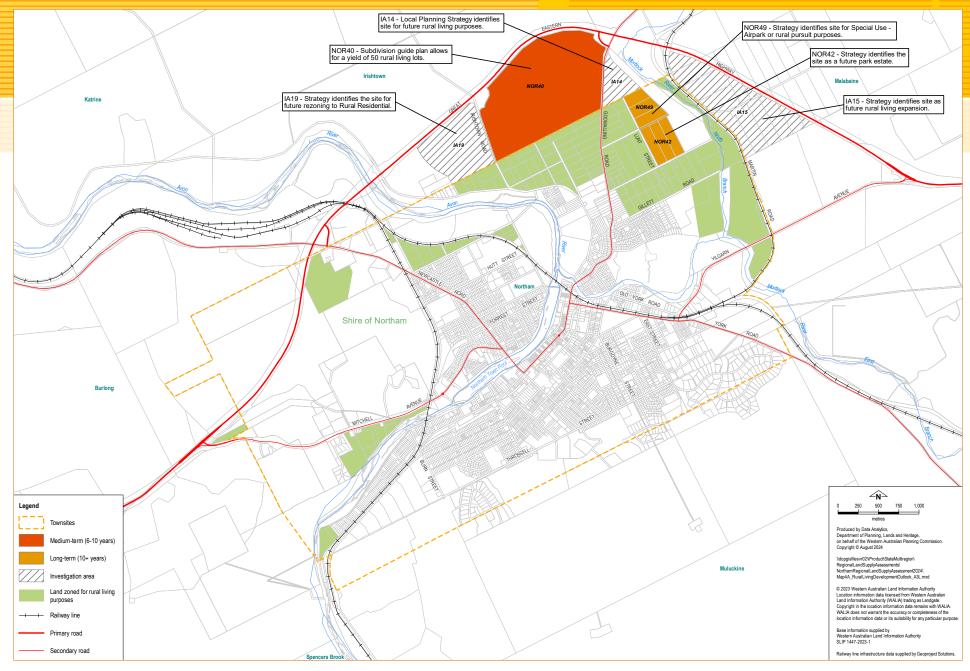
The Shire's Local Planning Strategy identifies a significant number of rural zoned lots in settlements outside of the Northam townsite as future rural living areas (IA01 – IA12, IA15, IA20 – IA22). The Shire has identified these sites to ensure future rural living developments do not impact agricultural or environmentally significant land, and land can be connected to service infrastructure. The proposed 16 rural living expansion sites cover approximately 2,240 hectares within Bakers Hill, Copley, Clackline and Wundowie localities.

The Local Planning Strategy also identifies rural residential zoned lots within the Northam townsite for rural residential or residential infill. The Shire aims to provide future housing choices for the growing aging population through these infill sites.

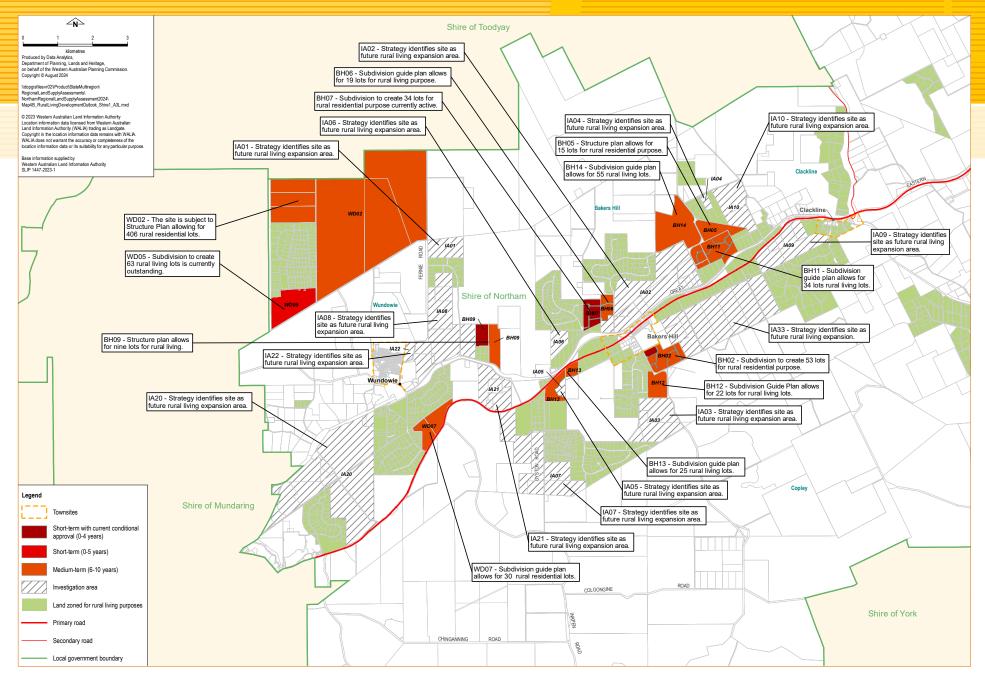
The three sites (IA13, IA14 and IA19) identified for rural residential or residential infill cover an area of 80 hectares within the Northam townsite.

In the development outlook, the abovementioned sites have been acknowledged and labelled as investigation areas in Maps 2A and 2B. Further investigation to assess the capability of land for

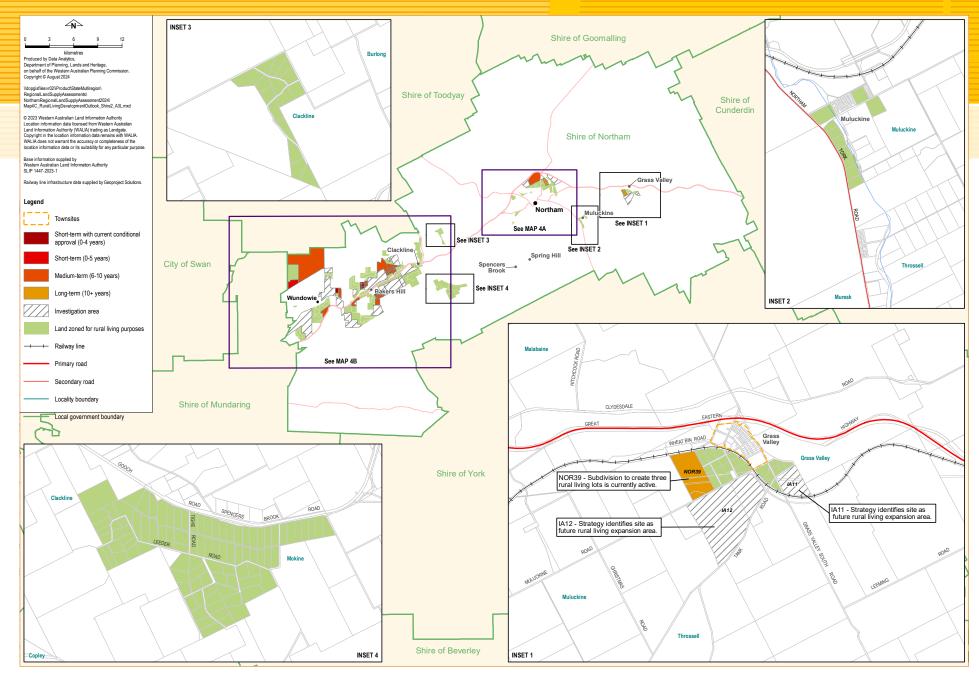
development would be required. Due to this uncertainty, no lot yield or timing is provided for these projects.



Map 6: Rural living development outlook - Northam townsite



Map 7: Rural living development outlook - Shire of Northam (1 of 2)



Map 8: Rural living development outlook - Shire of Northam (2 of 2)

6 Industrial land

Key points

- LPS6 allows for industrial development through the general industry and light industry zones.
- The Shire contains 673 hectares of industrial zoned land, with the largest stocks concentrated in Grass Valley (within the Avon Industrial Park), Northam and Wundowie.
- Forty-three per cent of land zoned for industrial purposes is considered developed, with the remaining half considered undeveloped.
- Over the decade to December 2023, subdivisions to create 68 lots for industrial purposes were lodged in applications. Eight lots progressed to final approval.
- The development outlook analysis identified 35 proposed lots in the Grass Valley and Malabaine localities as contributing to future industrial land stocks in the short and medium-term.
- An additional 120 hectares of potential light and service industry zoned land and 50 hectares of potential rural enterprise zoned land has also been identified through the development outlook analysis.

6.1 Land zoned for industrial purposes under the local planning scheme

The Shire's LPS6 provides for industrial development primarily through the general industry and light and service industry zones.

The rural zone may also allow for certain industrial land uses, such as extractive industries, rural industries, renewable energy facilities and transport depots. Approval is however subject to the Shire's discretion and generally requires advertisement of the proposed use.

A significant portion of the Shire's industrial zoned land (299 hectares) is situated in Grass Valley and subject to the Avon Industrial Park Structure Plan (AIP). Industrial land covered by the Structure Plan is zoned general industry. Industrial zoned land in the Northam locality (175 hectares) is concentrated in the eastern portion on the town centre, with some

individual, industrial zoned lots scattered throughout or on the outskirts of the centre. All industrial land stocks in the Northam locality are zoned light or service industry. Other notable industrial areas in the Shire includes 90 hectares of light and service industry zoned land south of the Wundowie town centre as well as 60 hectares in Malabaine (IND327).

6.2 Development status of lots on land zoned for industrial purposes under the local planning scheme

This section presents data on the development status of lots on land zoned service and light industry and general industry under the Shire's LPS6. As with section 4.2 and 5.2 of this report, data has been derived from the Department's IRIS model. Lots are classified as developed

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or undeveloped based on Landgate's property valuation information.

As at March 2024, there were approximately 225 lots on land zoned for industrial purposes under the Shire's LPS6, covering a total land area of 524 hectares. Of this:

- 299 hectares (57 per cent) was classified as developed; and
- 225 hectares (43 per cent) was classified as undeveloped.

Large stocks of undeveloped industrial zoned land in Grass Valley were attributed to lots within the AIP. Vacant lots within the industrial area constituted towards 77 per cent of the Shire's total stock of undeveloped industrial zoned land. A significant portion of this undeveloped land is owned and managed by the Co-operative Bulk Handling (CBH) Group. The largest developed industrial precinct is located in Northam.

Throughout the Shire, approximately 60 hectares of developed industrial land was identified as being utilised for hardstand purposes and consequently considered to have further development potential. Much of this land was concentrated in Malabaine due to hardstand associated with the Avon Logistics Hub (IND327).

Using the IRIS model, the number of vacant lots zoned for industrial purposes can also be identified. Within the Shire, a total of 37 lots zoned for industrial purpose are considered vacant. Of these, 11

Table 10: Development status of lots zoned for industrial purposes

Suburb / Locality	Development status and service i	Total		
,	Developed (ha)	Undeveloped (ha)	(ha)	
Bakers Hill	6	-	6	
Burlong	62	-	62	
Copley	2	-	2	
Grass Valley	38	202	240	
Malabaine	60	-	60	
Meenaar	7	-	7	
Northam	94	81	175	
Southern Brook	31	-	31	
Wundowie	50	40	90	
Shire of Northam (LGA)	350	264	614	

Source: Department of Planning, Lands and Heritage (2024) Integrated Regional Information System.

Note: Numbers may not sum due to rounding. Data is at March 2024.

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are zoned as general industry and 26 as light and service industry. All general industry zoned lots exist within the AIP, located in Grass Valley. The majority of vacant lots zoned light and service industry occur within industrial areas in the east and west of the Northam townsite. Wundowie contains the remaining four vacant lots zoned light and service industry.

The stock of industrial lots with conditional approval increased in 2016 because of a conditional subdivision approval granted for 25 lots within the AIP. Lots shown in the stock of conditional approvals from 2020 onwards are mostly attributed to a conditional approval granted in Avon Logistics Hub structure plan (IND327), which expired in July 2024.

6.3 Industrial lot supply pipeline

Figure 12 shows industrial subdivision activity in the Shire of Northam in the decade to March 2024. Over this time, 68 lots were lodged in applications, conditional approval was granted to create 48 lots and eight lots progressed to final approval.

6.4 Industrial development outlook

Table 4 and maps 9 and 10 show possible industrial development projects in the Shire. Projects are included where intent has been demonstrated (by government or the development industry) to develop the site at some point in the future. Section 4.5 expands on the means for which projects are identified.



Figure 12: Industrial subdivision activity and lot supply pipeline (March 2015 - March 2024)

Source: Western Australian Planning Commission (2024) State Lot Activity

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Short and medium-term

The development outlook analysis identified two projects contributing to future industrial lot supply in the Shire. In the short-term, future industrial land is provided in Malabaine via 15 proposed light and service industrial zoned lots (IND327). Additionally, there is further subdivision potential for industrial land in Grass Valley (IND077), with the AIP providing for up to 20 additional general industry zoned lots in the medium-term. Together, these two projects allow for approximately 120 hectares of future industrial land within the Shire, in the next five to 10 years.

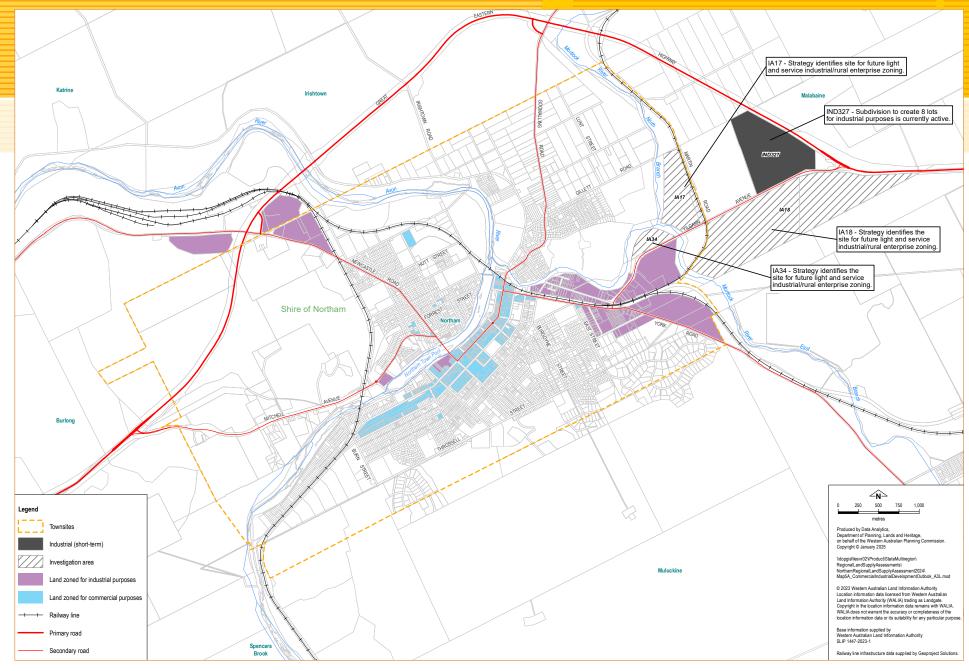
While not contributing to the supply of lots within the AIP, the amalgamation of four undeveloped lots for the purpose of facilitating the CBH Group's expansion has recently been finalised. The amalgamated lots will facilitate increased grain handling through the provision of additional grain storage and rail infrastructure.

Investigation areas

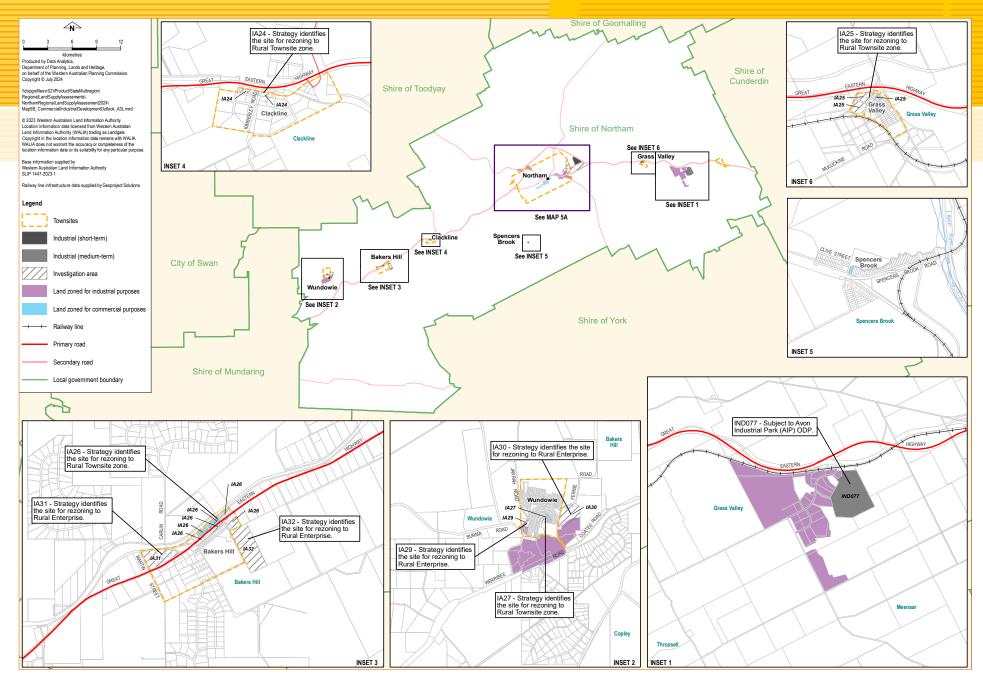
The Shire's Local Planning Strategy states industrial uses will continue to be focused within existing industrial zoned land in the Shire. Additional land for industrial purposes is, however, also supported by the Shire along Yilgarn Avenue in Northam (IA17) and Muluckine (IA18). These projects cover a total of 178 hectares and are highlighted in the Strategy as future light and service industry zoning or rural enterprise zoning.

The Local Planning Strategy's newly proposed rural enterprise zoning aims to allow for light and service industry where a business owner may operate a business and reside on site. These proposed areas cover a total of 50 hectares and are located in the Bakers Hill and Wundowie townsites, presenting an opportunity to establish new and diverse commercial businesses within the town centre.

Further investigation is still required to ascertain the feasibility of rezoning these lots. They are shown as 'Investigation areas' in Table 4, map 9 and map 10.



Map 9: Commercial and industrial development outlook - Northam townsite



Map 10: Commercial and industrial development outlook - Shire of Northam

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7 Commercial land

Key points

- The Shire's LPS6 provides for commercial development primarily through the commercial and tourist zones.
- The Shire contains 46 hectares of land zoned for commercial purposes, with the largest stocks concentrated in Northam and Wundowie localities.
- Ninety per cent of land zoned for Commercial purposes is classified as developed.
- The mixed use zone may also allow for certain commercial uses, in addition to residential uses. Lots zoned mixed use cover a total of 38 hectares.
- Over the decade to March 2024, conditional approval was granted to create 12 lots with 10
 of these progressing to final approval. The stock of conditional approvals has remained
 consistently low for much of the decade.
- The Shire's Strategy suggests a review into the feasibility of rezoning 30 hectares of commercial land to rural townsite, in the townsites of Bakers Hill, Clackline, Grass Valley and Wundowie.

7.1 Land zoned for commercial purposes under the local planning scheme

The Shire's LPS6 provides for commercial development primarily through the commercial and tourist zones.

More than half of all commercial zoned land is found within the locality of Northam. The remaining commercial zoned land is mostly split between the Wundowie and Bakers Hill townsites. Only two lots in Wundowie, previously utilised for the El Caballo resort and equine area are zoned tourist under LPS6.

In addition to the commercial and tourist zones, the mixed use zone also provides for certain commercial land uses, with the permissibility of such at the discretion of the local government. Lots zoned as mixed use are only found in the Northam town centre. It should be noted that a small percentage of mixed use zoned land contains residential dwellings, rather than commercial developments.

For this reason, a separate analysis is presented in sections 7.2 for data pertaining to the mixed use zone.

The Shire's Local Planning Strategy review proposes several changes to land zoned for commercial purposes in the Shire. The most notable change includes rezoning of commercial and mixed use zones within the Northam town centre to a regional centre zone. This allows for greater flexibility and growth for residential, commercial, tourism and community uses in the town centre. Also proposed is the deletion of the tourist zone in LPS6 as it only applies to the abovementioned El Caballo site.

In the Shire's smaller townsites and settlements, such as Bakers Hill, Wundowie, Grass Valley and Clackline, future commercial land has been identified through the proposed rural townsite zone. The benefit of the rural townsite zone would be to allow for further flexibility for the permissibility of various land uses in town centres.

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7.2 Development status of lots on land zoned for commercial purposes under the local planning scheme

This section presents data on the development status of lots on land zoned commercial and tourist under the Shire's LPS6. As with section 4.2 of this report, data has been derived from the Department's IRIS model. Lots are classified as developed or undeveloped based on Landgate's property valuation information.

As at March 2024, there were approximately 246 lots on land zoned for commercial purposes under the Shire's LPS6, covering a total area of 46 hectares. Of this:

- 42 hectares (91 per cent) was classified as developed, most of which was located in the Northam townsite; and
- Four hectares (nine per cent) was classified as undeveloped

Of the undeveloped land identified in the Shire, the largest concentration was found in Wundowie, through tourist zoned land.

Using the IRIS model, the number of vacant lots on land zoned for commercial purposes can also be identified. Of the total 245 lots zoned for commercial purposes, only 14 were classified as vacant. The majority of these were in the Northam locality.

Table 11: Development status of lots zoned for commercial purposes

Suburb / Locality	Development statu touris	Total		
,	Developed (ha)	Undeveloped (ha)	(ha)	
Bakers Hill	3	1	3	
Clackline	0	-	0	
Grass Valley	2	-	2	
Malabaine	3	-	3	
Northam	25	1	27	
Spencer Brook	0	-	0	
Wundowie	9	2	11	
Northam (LGA)	42	4	46	

Source: Department of Planning, Lands and Heritage (2024) Integrated Regional Information System.

Note: Numbers may not sum due to rounding. Data is at March 2024.

Mixed use

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As at March 2024, there were approximately 217 lots on land zoned for mixed use purposes under the Shire's LPS6, covering a total of 38 hectares.

- 32 hectares (84 per cent) was categorised as developed; and
- Six hectares (16 per cent) was categorised as undeveloped.

Lots on land zoned mixed use are mostly concentrated in the western end of the Northam town centre or surrounding the commercial zoned area along Fitzgerald Street. A handful of lots also exist in the townsite, north of the river. As mentioned in section 7.1, a small number of lots zoned mixed use contain residential dwellings. These lots are dispersed throughout the mixed use area, south of the Avon River.

7.3 Commercial lot supply pipeline

Figure 13 shows commercial subdivision activity in the Shire of Northam, in the decade to March 2024. Over this time, 15 lots were lodged in application. Of these, conditional approval was granted to 12 lots and 10 lots (83 per cent) progressed to final approval.

7.4 Commercial development outlook

Table 4, map 9 and 10 show possible commercial development projects in the Shire. Projects are included where intent has been demonstrated (by government or the development industry) to develop



Figure 13: Commercial subdivision activity and lot supply pipeline (March 2015 - March 2024)

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the site at some point in the future. Section 4.5 expands on the variety of means for which projects are identified.

In addition to 406 lots proposed for rural living purposes, the endorsed Wundowie North West Local Structure Plan – Mauravillo Estate (WD02) proposes 43 lots for tourist purposes, situated in the centre of the estate, surrounding an existing vineyard and olive groves. While the structure plan is endorsed, no subsequent applications to subdivide or rezone the land have been lodged. It is however uncertain that the proposed tourist lots would be supported outside of the Wundowie town centre.

Rural townsite zone

The Shire's Strategy supports the revitalisation and economic development of the Bakers Hill, Clackline, Grass Valley and Wundowie town centres through the establishment of a rural townsite zone. Lots which may be considered for rezoning from a commercial zone to a rural townsite zone have been identified in the development outlook (IA24 – IA27). Given the uncertainty of timing and feasibility, these projects have been illustrated as 'Investigation areas.'

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8 Service infrastructure

Key points

- Water Corporation owns and manages the potable water supply to the Shire via the Goldfields and Agricultural Water Supply Scheme (GAWSS).
- The GAWSS infrastructure extends to all residential townsites and most residential estates in the Shire.
- Existing water infrastructure is anticipated to be sufficient to meet long-term demand. Future usage is not predicted to increase beyond the capability of the existing infrastructure.
- Water Corporation owns and manages a reticulated sewerage disposal scheme within the inner residential areas of the Northam townsite and throughout the Wundowie townsite.
 Sewerage outside of these townsites is managed via effluent disposal through septic tanks, leach drains or alternate on-site disposal systems.
- There are currently no plans by Water Corporation to expand the reticulated sewerage network in the Shire. Achieving much of the residential development potential identified in this assessment is dependent on upgrades to the local sewer network.
- Western Power manages electricity supply to the Shire through the South West Interconnected System (SWIS).
- Western Power advises the current SWIS infrastructure network has the capacity to service the Shire's existing and future development in the medium to long term.
- The Shire also receives renewable energy from a 25-hectare ground mounted solar farm just outside the Northam townsite. In 2022, the Northam Solar Farm was aquired by Infinite Green Energy (IGE).
- The cost of providing new residential estates with a power supply remains significantly high and can therefore inhibit or delay future development.
- The Shire's road network plays an integral role in the transportation of tourists, agricultural products, general freight and basic raw materials.
- Future plans for Northam's road network includes the construction of the Perth-Adelaide National Highway (PANH), as part of the Eastlink project.
- The Shire's rail infrastructure is owned by the State and currently managed by Arc Infrastructure through a long-term lease agreement. The network is utilised for both freight and passenger transportation.
- Future improvements to the Shire's rail infrastructure network includes rail reconstruction and extensions to sidings, as well as the possibility of an intermodal site at the Avon Yard site.

This section outlines the broad infrastructure capacity for the Shire and identifies upgrades that may be required to facilitate future residential, industrial and commercial growth in the Shire.

8.1 Water

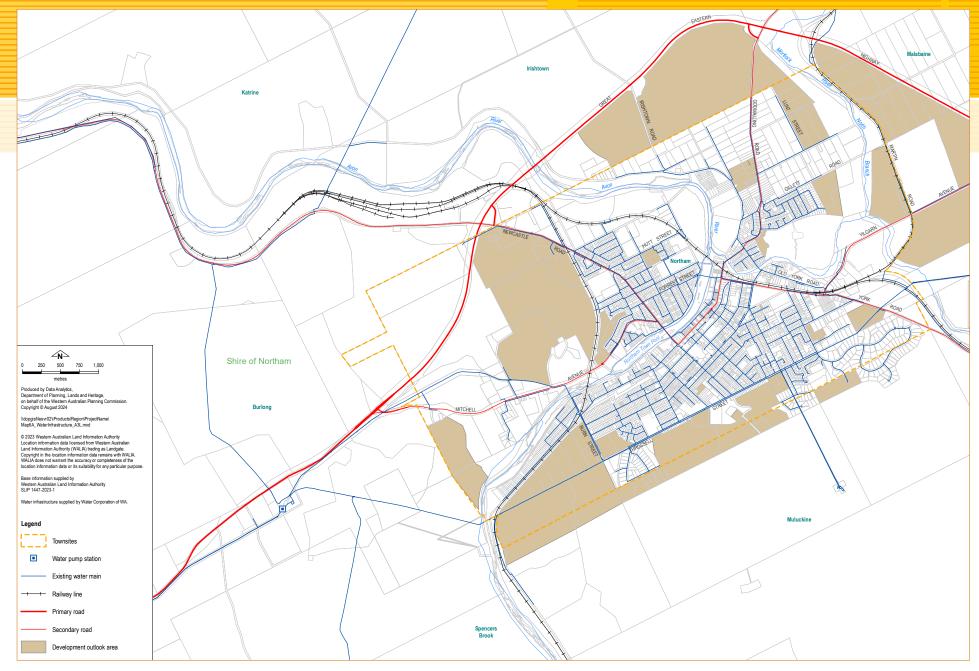
Water Corporation owns and manages the potable water supply to the Shire via the Goldfields and Agricultural Water Supply Scheme (GAWSS). Water is sourced from the Mundaring Weir and delivered to the Shire via the Mundaring to Kalgoorlie pipeline. Maps 6A and 6B show Water Corporation's infrastructure network across the Shire. Water pump stations exist in Grass Valley, Burlong, Bakers Hill and Wundowie, with water mains extending out from these to all townsites and residential estates within the LGA. For rural properties outside of these areas, on-site water tanks, farm dams, nearby catchments as well as water carting provides and delivers water to residents.

Water Corporation data indicates that, while potable water use in the Northam townsite is decreasing, usage in townsites outside of Northam is increasing. Notwithstanding this, trends show an overall reduction in residential water usage in the Shire. Advice from the agency states that any significant increase in water usage in the Shire will require investigation into possible upgrades to the existing water supply infrastructure. The Shire's Strategy predicts water usage will only moderately increase in congruence with population growth and changing climate conditions.

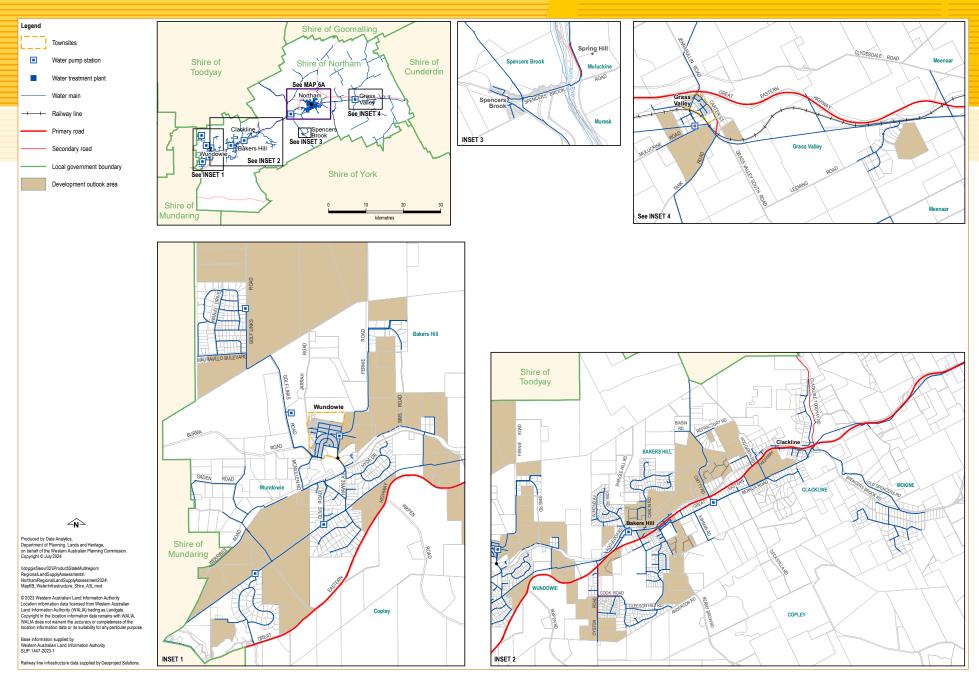
No major projects are planned for the Shire's water infrastructure network. Minor planned renewal works to occur in the next five years include water main pipe relining and replacement, however these are not anticipated to increase the level of water supply or capacity. Water Corporation has stated that future subdivision outside the current extent of the Northam townsite water infrastructure network will be assessed on a case-by-case basis having

regard to location and elevation of the subject land relative to the maximum supply level from the town's water storage tank, and capacity to service the new growth.

It should be noted that all projects outlined in the development outlook are located in areas with existing access to scheme water. Notwithstanding, for larger proposed subdivisions, extension of the existing water mains would be required for the connection of individual lots. Expansion of the network would involve water reticulation mains extensions constructed as part of any subdivision works.



Map 11: Water infrastructure - Northam townsite



Map 12: Water infrastructure - Shire of Northam

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8.2 Wastewater

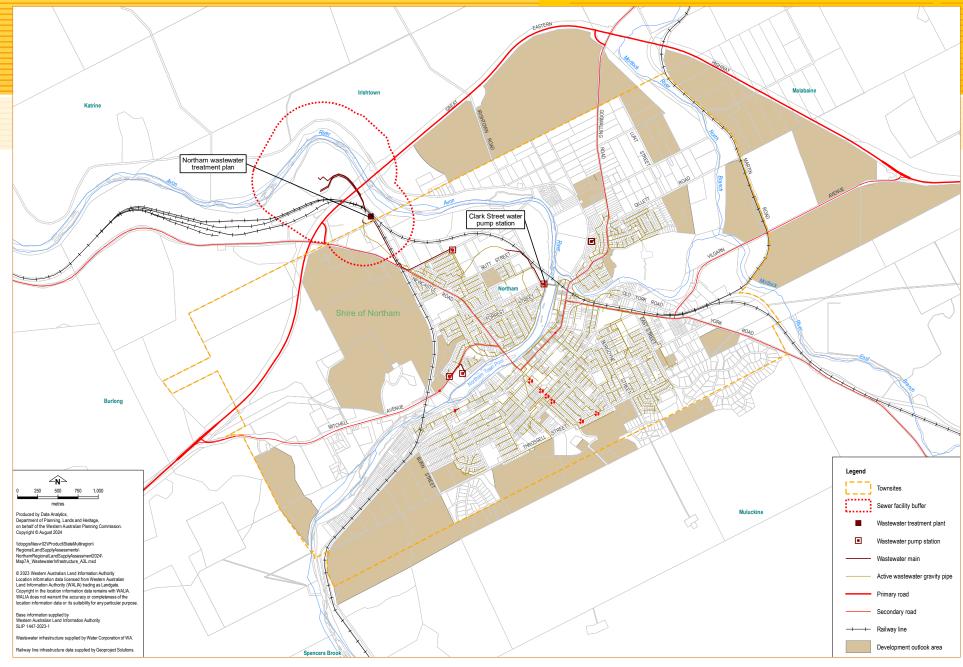
Water Corporation owns and manages the reticulated sewerage disposal scheme within the Wundowie townsite and the inner residential areas of the Northam townsite. Maps 7A and 7B shows the current wastewater infrastructure network in the Shire. In the Northam townsite, residents are provided with effluent disposal through a network of sewer mains gravitating toward three separate sewer pump stations and thereafter, a wastewater treatment plant located in Burlong. An additional wastewater treatment plant to the east of the Wundowie townsite provides effluent disposal to the Wundowie townsite via a reticulated sewerage disposal scheme. Both treatment plants can cope with the current capacity in the short term, however, will be required to undergo upgrades should any significant expansion to the townsites occur.

Reticulated sewerage is not available to residents outside of the abovementioned areas. Consequently, effluent disposal is undertaken through septic tanks, leach drains or alternate on-site disposal systems, where permitted.

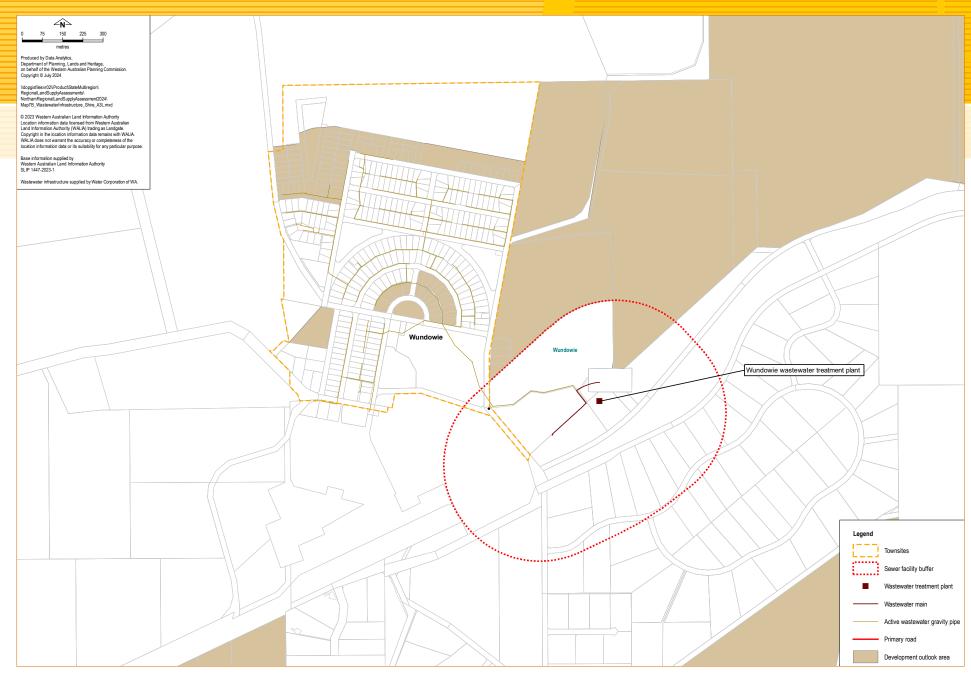
Water Corporation monitors the condition of assets and growth in wastewater catchments and prioritises upgrades to infrastructure when required. Upgrades are planned when the risk level of overflow is projected to reach a level that is not tolerable. Planned renewal works currently include sewer pipe relining or refurbishing as well as pump station and treatment plant upgrades. These are currently set to be undertaken sometime within the next five years; however, the timing is subject to change depending on actual growth in catchments.

While upgrades to existing sewered areas are planned, Water Corporation has advised there are no plans to extend the Shire's current reticulated sewerage network. As discussed in sections 4.5 and 4.6, sewer mains are required to be

extended as part of the subdivision or development works, which can often prove to be challenging. As a result, the Shire's limited reticulated sewer infrastructure network continues to constrain future residential development.



Map 13: Wastewater infrastructure - Northam townsite



Map 14: Wastewater infrastructure - Shire of Northam

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8.3 Energy

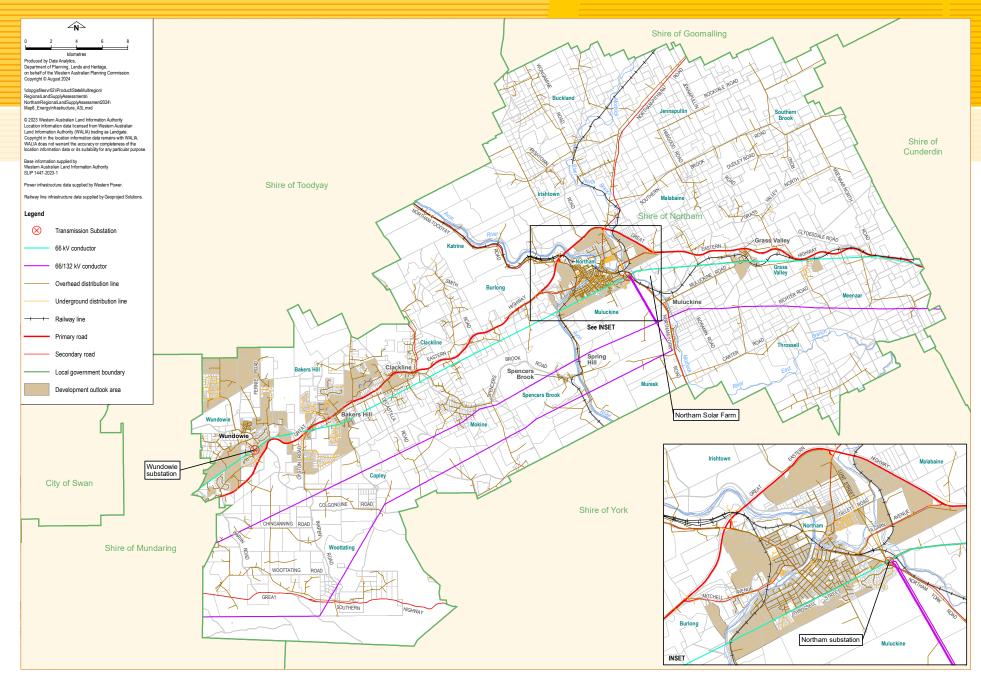
Western Power manages electricity supply to the Shire through the South West Interconnected System (SWIS). Two substations, one in Wundowie and one in the Northam townsite, receive power through transmission lines and distribute via both overhead and underground power lines, throughout the Shire.

Map 8 shows Western Power's current electricity infrastructure network. Western Power advises the current SWIS infrastructure network has the capacity to service the Shire's existing and future development in the medium to long term. In September 2023, Western Power released its Transmission System Plan, which provides a 10-year forward plan for investment in the transmission network. Service infrastructure in the Shire has been identified as part of the East Region Stage 1 project. The project aims to increase capacity while reducing overloading on the network between Mundaring and Kalgoorlie. Upgrades to transformers in the Northam substation are expected to be completed by the end of June 2024. Replacement of two transformers in the Wundowie substation is still in the planning phase and forecast to be completed by June 2027.

Future power supply to new large-scale developments in the Shire is also impacted by significant input costs for developers. These large-scale developments may require specialised infrastructure agreements and upgrades to accommodate additional power supply needs.

In addition to the SWIS power supply, the Shire also receives renewable energy from the Northam Solar Farm. The farm, located just east of the Northam townsite, is a ground mounted solar project, spread over 25 hectares. The infrastructure is expected to have a lifespan of 25 years and has capacity to supply enough energy to power 4,000 households.

A Development Assessment Panel application with plans to expand the current operation to include the production of renewable hydrogen was recently refused.



Map 15: Energy infrastructure

8.4 Transport

The Shire's transport network comprises road, rail and aviation infrastructure.

8.4.1 Roads

Maps 16 and 17 show the Shire's current road infrastructure network. Additionally, the maps identify future planned works in the Shire, through data provided by Main Roads Western Australia (MRWA) and Landgate. Road infrastructure in the Shire comprises local, regional and primary distributor roads. Local and regional distributor roads are owned and maintained by the Shire, while primary distributor roads are owned and maintained by MRWA. Primary distributor roads within the Shire include Great Eastern Highway, Northam-Cranbrook Road, Northam-Pithara Road and Northam-Toodyay Road.

- Great Eastern Highway traverses the Shire in an east-west direction, passing through all major townsites in the Shire. The highway is the predominant road link for the Shire, providing access to Perth in the west and Kalgoorlie in the east.
- Northam-Cranbrook Road runs in a southerly direction, extending from the Northam to Cranbrook townsite. The road provides access to 11 different Shires south of Northam and is commonly referred to as the Great Southern Highway
- Northam-Pithara Road runs in a mostly northerly direction from the Northam townsite. The road provides access to the Shire's of Goomalling, Wongan-Ballidu, Dalwallinu and Moora.
- Northam-Toodyay Road runs in a north-west direction, connecting the Northam townsite to the Shire of Toodyay. The road passes through Burlong, Katrine, and Dumbarton.

The abovementioned road infrastructure plays an integral role in the transportation of tourists, agricultural products, general freight and basic raw materials.

Plans for the Shire's road network include the construction of the Perth-Adelaide National Highway (PANH), as part of the Eastlink project. The proposed PANH will realign the Great Eastern Highway to pass through Gidgegannup, rather than Mundaring, to provide a safer and more efficient route from Midland to Northam. Current plans show the proposed PANH as being constructed north of the Great Eastern Highway, passing through the Wundowie townsite. However, the road is still in the initial planning and consultation phase.

8.4.2 Rail

Maps 9A and 9B show the Shire's current rail infrastructure network. The Shire's rail network is owned by the State and managed by Arc Infrastructure, through a long-term lease agreement. The network is utilised for both freight and passenger transportation, with railways extending roughly in a north to south and east to west direction, intersecting at the Avon Yard railway station, just outside of the Northam townsite. The freight rail network is predominantly used for transporting agricultural products, particularly grain, from the Shire's various grain receival points to ports.

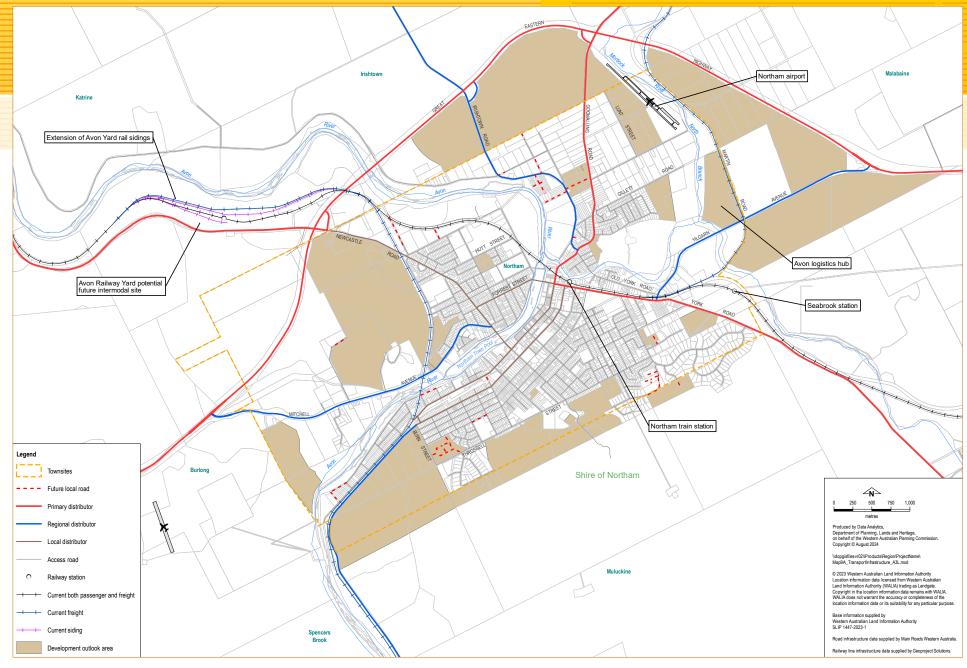
The Department of Transport's Revitalising Agricultural Region Freight (RARF) Strategy has identified rail upgrades to the Shire's rail network. Future works include proposed extensions to the current rail sidings at the Avon Yard site as well as upgrades to railways running in a north-south direction towards Goomalling and York. In addition to this, the RARF strategy has identified the Shire as a candidate for an intermodal site, aimed at facilitating packaging and transportation of multiple agricultural products.

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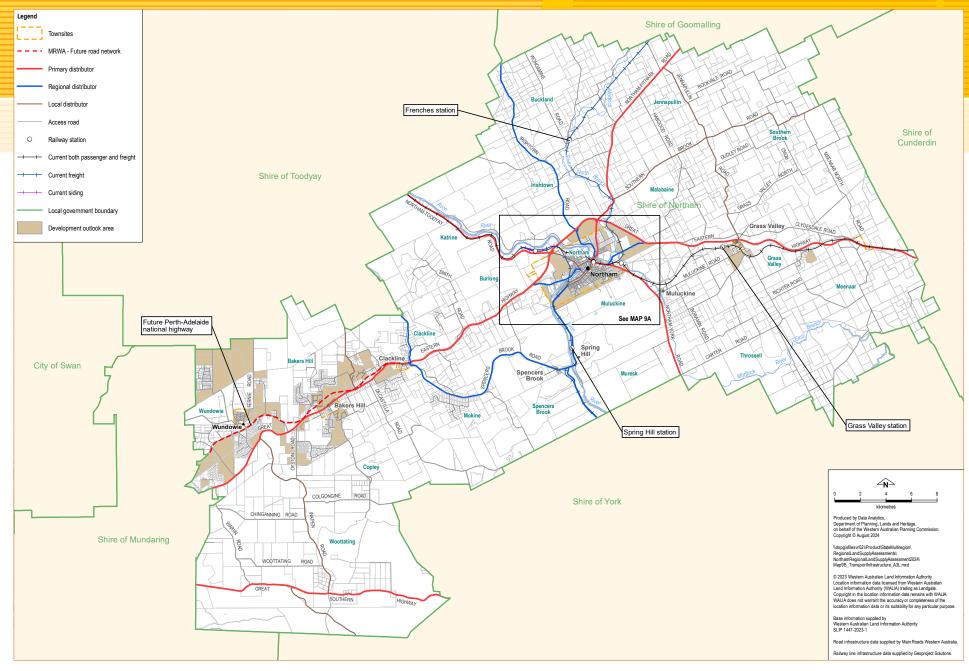
Passenger rail within the Shire is managed by TransWA, a division of the Public Transport Authority. The Avon Link, Merredin Link and Prospector services provide routes to and from Midland, Kalgoorlie and Merredin as well as the larger towns in between.

8.4.3 Aviation

The Northam Airport is located approximately three kilometres north-east of the townsite. While the airport is owned by the Shire, the Northam Aero Club (NAC) operates and manages the site. Recreational uses of the airport include NAC member conducted flights, tourist flights and hot air ballooning. The airport's commercial activities include ad-hoc business flights or as a refuelling stop for the China Southern Airlines' WA Flying College. The Royal Flying Doctor Service utilises the airport for transporting patients and the Department of Biodiversity, Conservation and Attractions and the Department of Fire and Emergency Services, for firefighting purposes. The Northam Airport Masterplan 2015 is due to be reviewed. Hangars belonging to the Northam Airport are currently at capacity and extensions to the hangars are required to be planned.



Map 16: Transport infrastructure - Northam townsite



Map 17: Transport infrastructure - Shire of Northam

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Abbreviations and acronyms

ABS Australian Bureau of Statistics

ASGS Australian Statistical Geography Standard

AIP Avon Industrial Park

CBH Co-operative Bulk Handling (CBH) Group

DAP Development Assessment Panel

The Department Department of Planning, Lands and Heritage

ERP Estimated Resident Population

ha Hectares

ILID Integrated Land Information Database

IRIS Integrated Regional Information System

LGA Local Government Area

LSP Local Structure Plan

MRWA Main Roads Western Australia

LPS6 The Shire of Northam Local Planning Scheme No. 6

PANH Perth-Adelaide National Highway

R-Codes Residential Design Codes

SPP State Planning Policy

The Shire The Shire of Northam

The Strategy The Shire of Northam Local Planning Strategy

TAFE Technical and Further Education

UDP Urban Development Program

WAPC Western Australian Planning Commission

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Appendices

Appendix A: Integrated Land Information Database

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 planning 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 overlaid 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 model 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, density coding (R-Code) and so on. The 'integrated' component of the database means that once all the individual inputs have been identified, they can all be joined together using a tabular join through the common parcel identification number (PIN) across all datasets.

For this document, the ILID model has been used to identify the lot potential and additional dwelling potential of all residential lots (with a density coding (R-Code) identified in the Shire of Northam Local Planning Scheme No. 6). Vacant lots were not included in this analysis.

ILID analysis in this document includes three key inputs: lot size, R-Code and dwelling count/location. Constraints to subdivision such as bushfire risk, heritage, infrastructure provision and environment are variables that are not 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 450 square metre lot. Or, a 900 square metre lot has the potential to create two 450 square metre 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 per cent 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.

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Appendix B: Integrated Regional Information System

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

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

Tier one of the IRIS land supply model groups local planning scheme zones into primary categories for analysis. The table below shows the IRIS land supply model primary and secondary categories and the local planning scheme zones (under the Shire of Northam Local Planning Scheme No. 6) that fall into the primary and secondary categories.

	LPS (Corporate)		
Primary	Secondary	Tertiary	Local Planning Scheme Zone
		Aged accommodation	Public purposes
	Other residential	Aged accommodation	Special use
Residential		Hostel / single persons quarters	Public purposes
	Residential	Residential	Rural residential
		Dural regidential	Rural residential
Residential	Rural living	Hurai residentiai	Special use
		Aged accommodation Hostel / single persons quarters	Rural smallholding
Industrial	General industry	mining industry /	Public purposes
in radotnai		General industry	General industry
	Light / commercial	Light / commercial	Light and service industry
		General commercial	Commercial
	Commercial / business	Mixed business	Special use
Commercial / business			Special use
	Commercial / business -	Attractions	Public purposes
	tourist	General tourist	Tourist

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Tier two of the IRIS land supply 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 unimproved), based on information from Landgate's property valuation database.

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

Undeveloped refers to lots that are zoned for development for the purposes of the specified primary land use category that are recorded as vacant in Landgate's property valuation database.

Unimproved 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 category under the local planning scheme. The unimproved lots have been assessed using aerial imagery to enable all lots to be allocated a development status of either developed or undeveloped.

Tier three of the IRIS land supply 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 land supply model has not been included in analysis for this report.