RESIDENTIAL LAND SUPPLY & DEMAND ASSESSMENT

City of Greater Shepparton

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EXECUTIVE SUMMARY

The following report provides a detailed assessment of the historic, current and future assessment of residential land supply and demand across Greater Shepparton. This assessment is at September 2021 and is an update to the previous assessment that was as at March2019

Historic Population Growth

Population Growth

Historically, population growth for the City of Greater Shepparton has been modest - an average annualized growth of 0.8% from 2016 to 2020. For the period of 2019 to 2020, population grew by 0.9%, illustrating an increasing growth rate compared to the previous years.

There has been a decrease in population growth in Australia and Victoria in 2019-20 that can be attributed to Covid. However, it is suggested that regional centres such as Shepparton, have been more resilient to the impacts of Covid compared to the average for Victoria or for Melbourne.

Residential Development Activity Residential Building Approvals

The Building Approval statistics collected by the ABS for Victoria for the financial year 2020/2021 reveal several interesting trends brought on by the Covid19 pandemic. For Victoria, building approvals have increased from 60,000 to 67,600 over the year to July 2021, a substantial increase of 12.7%.

As measured over the two financial years, residential building approval activity has significantly increased across regional Victoria, increasing by 51% (from 12, 300 approvals to 18,540). In comparison, metropolitan Melbourne over the same time period increased by 3%.

Residential building approval has significantly increased across virtually all regional municipalities. Greater Shepparton has illustrated significant growth in building approval activity, increasing by 64%, from 346 approvals to 624 in 2020/21.

Residential Lot Construction

Over the last three financial years residential lot construction activity has averaged around 360 lots per annum, in 2020/21 405 residential lots were constructed.

Of the lot construction activity measured over the last three financial years:

- 3% was aged/lifestyle lots (12 lots per annum);
- 4% was dispersed/minor infill lots (13 lots per annum);
- 13% was rural residential lots (48 lots per annum); and
- 80% was greenfield lots (290 lots per annum).

Over the last three years, there has been a significant shift in the composition of residential subdivision activity. Rural residential lot construction and associated dwelling construction has increased from around 2% of total development activity to around 13%. In addition, there is a marked shift to smaller rural residential lots from 4,000 sgm to around 2,100 sqm.

Residential lot construction activity as measured over the last three financial years was concentrated within the urban centre of Shepparton/Mooroopna at 87% of all lot construction activity or 300 lots per annum. Of the remaining lot construction activity:

- 7% was located in the township of Tatura (average of 26 per annum); and
- 5% outside of township boundaries (17 per annum).



Of the broadhectare lot construction activity over the last three financial years (excludes LDRZ):

- 1% were compact suburban (sized less than 300 sqm);
- 3% were suburban (sized 300 to 500 sqm);
- 77% were large suburban (500 to 1,000 sqm); and
- 19% low density suburban (over 1,000 sqm).

The median sales price of a vacant residential lot in 2020 was:

- \$146,000 Greater Shepparton;
- \$149,000 in Wodonga;
- \$150,000 in Wangaratta;
- \$152,000 in Campaspe;
- \$160,000 Bendigo;
- \$195,000 in Ballarat; and
- \$197,000 across regional Victoria (this is heavily influenced by peri-urban municipalities and Geelong);

Vacant Residential land sales values across the municipal area of Greater Shepparton has relatively only moderately increased over-time, in addition residential sales values are currently relatively affordable to both regional Victoria and other major regional centres.

Residential Land Supply Broadhectare Land Stocks

In total, Greater Shepparton currently has capacity for the future provision of approximately 11,000 additional dwellings (including areas that are as yet not zoned for residential development purposes), on broadhectare sites.

This capacity is comprised of:

- 7,468 unzoned broadhectare lots (68% of supply); and
- 3,450 zoned broadhectare lots (32% of supply).

Based on existing planning permits, recent construction activity and Council/Development Industry feedback it is anticipated that over the next two years, on average, **487 lots/dwellings** per annum will be constructed within existing zoned broadhectare sites across the municipality.

Further analysis has been undertaken to assess the composition of the land stocks anticipated to be developed over the next two years. The information was sourced from the development industry, council permit information, related planning/land development consultants and independently verified by Spatial Economics.

Of the 973 greenfield lots anticipated to be constructed over the next two years:

- 1. 51% or 510 lots have been pre-sold; and
- 2. 64% or 630 lots have current preliminary sub-division approval, of which the vast majority are currently under construction.

Rural Residential

Currently across the City of Greater Shepparton there was a total stock of 1,351 rural residential allotments. Of this stock, only 119 lots (9%) were vacant. Vacant rural residential lots as a supply type are comparatively low across the City of Greater Shepparton when compared to other regional municipalities in Victoria.



There are significant stocks of land identified for future rural residential use/zoning. There is a total of 2,011 hectares of land identified for future rural residential zoning, of which, 989 hectares is identified for future Low Density Residential (LDRZ) and 1,022 hectares for future Rural Living (RLZ).

The outlook for the demand for smaller rural residential allotments is likely to continue based on current and proposed development activity levels. There is currently a marginal stock of vacant rural residential lots and limited supply for larger/estate like subdivision projects. However, there is significant stock identified for future rural residential rezoning.

Projected Housing Demand

Spatial Economics have presented three projected demand scenarios based on the most recently available evidence. These demand scenarios are outlined below.

Spatial Economics have prepared three growth scenarios by five year intervals from 2021 to 2051 for the municipal area of Shepparton, these include:

- VIF2019 (modified and extended), State Governments official projections;
- Higher growth scenario; and
- Lower growth scenario.

From 2021 to 2036, the above growth scenarios result in:

- VIF2019, an average annual dwelling requirement of 372 (1.2% growth per annum);
- High growth, an average annual dwelling requirement of 505 (1.6% growth per annum); and
- Low growth, an average annual dwelling requirement of 301 (1.0% growth per annum).

Adequacy of Land Stocks

Years Supply - Broadhectare

In terms of zoned broadhectare residential land stocks it is estimated based on the identified supply and projected demand scenarios, there are sufficient land stocks to satisfy between 8 to 14 years of demand across the Greater Shepparton municipality.

In addition, there are sufficient unzoned broadhectare residential land stocks to satisfy over 25 of demand (18 years based on the high growth scenario).

Spatial Economics consider the above measure over-states the years of undeveloped greenfield supply. If it is assumed that the majority of land stocks identified to be developed over the next two years is achieved, the lot potential identified in the 11+ years and the No-Timing category is excluded (as these land parcels have significant land development constraints, fragmentation, planning issues, existing uses etc) - the adequacy of undeveloped land stocks significantly declines. This would result in a remaining adequacy of around five years zoned supply.

Spatial Economics recommend:

- 1. Increasing the stock of zoned broadhectare land for the urban centre of Shepparton-Mooroopna in the short term.
- 2. Increasing the stock of zoned broadhectare land for the township of Tatura in the short-term.



1.0 Introduction

1.1 Context

The following report is a residential land supply and demand assessment for the City of Greater Shepparton as at September 2021. The previous residential land supply assessment was at March 2019.

The current assessment examines historical trends, however, this assessment provides particular attention to both land development outcomes/changes over the last three years.

The assessment includes:

- the identification of historical and current residential lot construction activity by supply type and location;
- identification of all zoned and unzoned broadhectare residential land supply stocks including estimates of lot yields on a project by project basis;
- identification of anticipated broadhectare residential lot construction activity (development timing);
- estimation of the stock (lots) of rural residential land;
- examination of the quantum of future residential demand;
- · presentation of potential future demand scenarios; and
- estimation of the years of supply of undeveloped broadhectare residential land stocks.

The following provides a robust and transparent assessment of the supply and demand for residential land across Greater Shepparton. The assessment will facilitate informed decision making in terms of the existing and future broadhectare residential land supply requirements.

In addition, the information will be of assistance to other related planning processes such as infrastructure and service planning.

1.2 Purpose

The monitoring of land supply is a key tool to assist in the management and development of growth across the municipal area of Greater Shepparton. The primary purpose of monitoring residential land supply is to improve the management of urban growth by ensuring that council, public utilities, government and the development industry have access to up-to-date and accurate information on residential land availability, development trends, new growth fronts, and their implications for planning and infrastructure investment.

The following report provides accurate, consistent and updated intelligence on residential land supply, demand and consumption. This in turn assists decision-makers in:

- · maintaining an adequate supply of residential land for future housing purposes;
- providing information to underpin strategic planning in urban centres;
- linking land use with infrastructure and service planning and provision;
- taking early action to address potential land supply shortfalls and infrastructure constraints;
 and
- contributing to the containment of public sector costs by the planned, coordinated provision of infrastructure to service the staged release of land for urban development.



2.0 Approach & Scope

The following provides a brief outline of the major methodologies and approach in the assessment of recent residential lot construction, residential land supply stocks, dwelling demand scenarios and determination of assessing adequacy of residential land stocks.

The methodology that Spatial Economics has employed for this project is based on the simple premise of matching the supply type with demand. This methodology assesses recent construction and future supply using the same criteria with the supply type definitions based on outcomes and on a lot by lot basis rather than administrative boundaries.

The methodology used by Spatial Economics is consistent with other State Government methodologies around Australia, including the Victorian State Governments Regional Urban Development Program. The criteria used to define the supply types are explained below.

Future Dwelling Requirements

The Victorian State Government population and household projections undertaken by the Department of Environment, Land, Water & Planning (VIF2019) are used as a basis for determining future population/dwelling requirements.

Spatial Economics have modified the VIF2019 Forecasts based on recent and updated population estimates from the Australian Bureau of Statistics and recent land development outcomes.

In addition, an alternative dwelling demand scenario is presented based on the potential of a) higher sustained growth and b) lower growth – the purpose is to provide sensitivity testing of the adequacy of residential land stocks.

Land Supply Type Definitions

- 1. **Broadhectare** is defined as residential development on greenfield sites (sites that have not been used previously for urban development purposes or previously subdivided for normal/urban density development) and typically located on/or near the urban fringe.
- 2. **Dispersed Infill** is from a lot/dwelling construction perspective, residential development occurring within the established urban area (not on broadhectare sites) that yield less than 10 dwellings per individual construction project. Typically, it entails 'backyard' style subdivision projects.
- 3. **Lifestyle/Aged Care** is from a lot/dwelling construction perspective, housing outcomes that are specifically targeted for aged persons/households. Typically (in the case for Shepparton) these are detached dwellings within lifestyle villages.
- 4. **Rural Residential** is from a dwelling construction perspective, all activity on land zoned Rural Living and Low Density Residential.



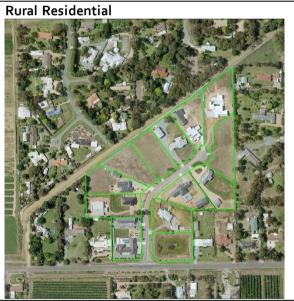
The images below illustrate the supply types.

Image 1: Residential Land Supply Types

Broadhectare







Geography

The following geographic areas are utilised for the land supply assessment and demographic analysis.

Townships: Township boundaries are sourced from the City of Greater Shepparton Municipal Strategic Statement. These boundaries represent the urban centre/township geographic extent. .

ABS Suburbs: Are an ABS approximation of localities gazetted by the Geographical Place Name authority in each State and Territory. Gazetted Localities are the officially recognised boundaries of suburbs (in cities and larger towns) and localities (outside cities and larger towns).

Residential Lot Construction

Residential lot construction has been determined via the assessment of the residential cadastre and the application of this cadastre to the land supply types identified above.



A constructed lot is defined by the year of construction and the finalisation of certificate of title.

Lot construction is only captured if it is for residential purposes.

It is noted, where new lot construction occurs (typically within mixed use type zones) and one lot results in multiple dwellings, the dwelling count is collected. Lot construction from the following assessment will largely result in one net additional dwelling.

Construction activity has been assessed on an annual financial year basis from 2008 to September 2021.

Lot and dwelling construction have been undertaken for the following supply types:

- Rural Residential;
- Dispersed Infill;
- · Lifestyle/Aged Care; and
- Broadhectare.

Lot Yields

Lot yields on a site basis has been undertaken for only broadhectare and rural residential supply types.

In establishing the lot yield for each individual land parcel, the following information was used: incidence and location of native vegetation, zoning, natural features such as creeks, escarpments, floodways, localised current/recent market yields, ability to be sewered, existing studies such as structure plans.

In addition to site specific issues, 'standard' land development take-outs are employed, including local and regional. The amount/proportion of such take-outs are dependent on the land parcel i.e. a 1ha site will have less take-outs than say a 5oha site. Further intelligence and verification are sourced from the local land development industry and Council officers.

Years of Supply

With the amount of supply and demand estimated, adequacy is described in years of supply. For example, it can be stated that there are X years of supply based on projected demand within a given geographic area.

In assessing the number of years of broadhectare residential land supply, only a component of the total projected demand is apportioned to estimate future demand. The remainder is apportioned for future demand of other forms of residential supply such as dispersed infill and rural residential.



3.0 Population Trends & Projections

Key Findings

Historically, population growth for the City of Greater Shepparton has been modest - an average annualized growth of 0.8% from 2016 to 2020. For the period of 2019 to 2020, population grew by 0.9%, illustrating an increasing growth rate compared to the previous years.

There has been a decrease in population growth in Australia and Victoria in 2019-20 that can be attributed to Covid. However, it is suggested that regional centres such as Shepparton, have been more resilient to the impacts of Covid compared to the average for Victoria or for Melbourne.

In terms of estimating future growth, Spatial Economics believes that current best practice is to utilise a realistic range of growth scenarios when preparing medium and longer-term strategic plans.

Spatial Economics have prepared three growth scenarios by five year intervals from 2021 to 2051 for the municipal area of Greater Shepparton, these include:

- VIF2019 (modified and extended), State Governments official projections;
- Higher growth scenario; and
- Lower growth scenario.

From 2021 to 2036, the above growth scenarios result in:

- VIF2019, an average annual dwelling requirement of 372 (1.2% growth per annum);
- High growth, an average annual dwelling requirement of 505 (1.6% growth per annum); and
- Low growth, an average annual dwelling requirement of 301 (1.0% growth per annum).

The 2021 census has only just been undertaken and won't be published until mid-2022. Consequently, we are now near the end of the five yearly inter-censal cycle when population estimates are most reliant on changes in Medicare registrations rather than census counts. The population estimates for 2017 onwards will be revised in mid-2022 once 2021 census data become available.

3.1 Recent Population Growth Trends

Greater Shepparton's growth rate has varied since the turn of the century. Between 2006 and 2016 it was similar to the average for Regional Victoria. Since 2016 the growth rate has slowed while Regional Victoria's has increased, mainly due to increased spill overs from Melbourne into adjacent LGAs beyond the Greater Melbourne boundary. Greater Geelong has experienced a remarkable rejuvenation attracting more migrants from overseas, interstate, other parts of Regional Victoria and, most significantly, from Melbourne, thereby pushing up Regional Victoria growth rate.



Table 1: Long Term Population Growth: Average Annual Population Growth Rates (%), 2001-2020

	2001-06	2006-11	2011-16	2016-20
Greater Shepparton	0.4%	1.0%	1.1%	0.8%
Greater Bendigo	1.2%	1.5%	1.9%	1.7%
Albury & Wodonga	1.0%	1.0%	1,5%	1.4%
Mildura	0.7%	0.5%	1.1%	0.6%
Ballarat	1.0%	1.9%	1.7%	1.9%
Greater Geelong	1.0%	1.5%	2.1%	2.6%
Regional Victoria	0.6%	1.0%	1.3%	1.3%
Greater Melbourne	1.5%	2.1%	2.5%	2.3%
Victoria	1.2%	1.8%	2.2%	2.1%
Australia	1.2%	1.8%	1.6%	1.5%

Source: ABS.net (Beta)

Table 2: Impacts of Covid? Short Term Population Growth: Average Annual Population Growth Rates (%), 2016-20

	2016-17	2017-18	2018-19	2019-20
Greater Shepparton	0.7%	0.7%	0.8%	0.9%
Greater Bendigo	1.6%	1.7%	1.8%	1.6%
Albury & Wodonga	1.7%	1.4%	1.4%	1.3%
Mildura	0.9%	0.7%	0.5%	0.3%
Ballarat	1.9%	1.8%	2.0%	1.7%
Greater Geelong	2.6%	2.7%	2.7%	2.3%
Regional Victoria	1.3%	1.3%	1.4%	1.3%
Greater Melbourne	2.8%	2.5%	2.3%	1.6%
Victoria	2.4%	2.2%	2.1%	1.5%
Australia	1.7%	1.6%	1.5%	1.3%

Source: ABS.net (Beta)

The decrease in growth in Australia and Victoria in 2019-20 can be attributed to Covid. However the above comparisons suggest that regional centres such as Shepparton, have been more resilient to the impacts of Covid compared to the average for Victoria or for Melbourne. This presumably reflects the attractiveness of regional cities for the population of Australia's capital cities during a period of Covid outbreaks and lockdowns.

Sources of population growth

Owing to international border closures and varied length of lockdowns in different parts of Australia, Covid has disrupted regular sources of population change. As noted above, Covid has primarily impacted on Melbourne rather than Victoria's regional centres. For several decades, overseas migration gains to Victoria have been heavily biased towards Melbourne.

Pre Covid 92% of overseas arrivals to Victoria settled in Melbourne. Closed international borders cut those gains and are therefore the main reason why Melbourne's population has declined for the first time in living memory. But longer lockdowns in Victoria compared to other states has led to Victoria



losing population to other states, a reversal of trends of the last 25 years. But Melbourne's long lockdowns and changed work regimes have also led to a greater flight of people from Melbourne to regional Victoria and to fewer people such as students, job seekers and urban lifestyle seekers moving to Melbourne.

Table 3: Internal Migration, Regional Victoria, 2006-2021

Year to March qtr	Net Intrastate Migration	Net Interstate Migration	Net Internal Migration
2006-2011	5,049	-1,340	3,709
2011-2016	5 , 585	-22	5 , 563
2016-2017	8,873	1,805	10,678
2017-2018	13,824	8 ₇₅	14,699
2018-2019	14,211	229	14,440
2019-2020	11,186	-828	10,358
2020-2021	19,678	-5,666	14,012

Source: Provisional Regional Migration Estimates, ABS, August 2021

The result is that Regional Victoria's population growth been little affected by Covid – lower overseas gains and higher interstate losses have been cancelled out by greater net movements of people from Melbourne to Regional Victoria

Since 2016, the ABS has published annual estimates of the components of population growth for Local Government Areas. The following table shows the balance sheets of population gains and losses for Greater Shepparton.

Table 4: Components of population change, Greater Shepparton 2016-20

	Natural Increase	Net migration within Australia	Net overseas migration	Total population growth
2016-17	345	-406	543	482
2017-18	424	-514	544	454
2018-19	307	-355	541	493
2019-20	361	-189	397	569

Source: Provisional Regional Migration Estimates, ABS, August 2021

The position for Greater Shepparton is similar to that of regional Victoria. Population losses to Melbourne and other parts of Regional Victoria (principally Geelong and Bendigo) have been reduced, compensating for lower gains from overseas.

Population changes within Shepparton

The ABS publishes annual population estimates for SA2s which are areas defined by the ABS to assist with local planning and service delivery. There are five SA2s in and around Shepparton. Their external boundaries are different to the municipal boundary of Greater Shepparton.



Table 5: Population Growth within the Shepparton Region: Average Annual Growth Rates

	2001-06	2006-11	2011-16	2016-20
Mooroopna	0.2%	0.3%	0.2%	0.3%
Shepparton North	o.6%	1.3%	1.5%	0.7%
Shepparton South	0.7%	2.2%	1.5%	1.2%
Shepparton Region - East	-0.9%	-0.2%	-0.4%	-0.4%
Shepparton Region - West	-0.2%	0.3%	0.6%	0.7%
Greater Shepparton	0.4%	1.0%	1.1%	1.1%

Source: ABS.net (Beta)

Table 6: Population Growth within the Shepparton region: Average Annual Population Growth

,	2001-06	2006-11	2011-16	2016-20
Mooroopna	16	26	19	26
Shepparton North	99	219	277	139
Shepparton South	137	449	331	290
Shepparton Region - East	-38	-8	-15	-4
Shepparton Region - West	-23	30	57	68
Greater Shepparton	216	611	666	500

Source: ABS.net (Beta)

Population projections - A Review

Should population projections for Greater Shepparton be revised to take account of recent events? In other jurisdictions (eg Australia, Victoria, Greater Melbourne), population projections have had to be revised to take account of the dip in population growth resultant of Covid. The Commonwealth and the Victorian Governments have both assumed, in budget papers and policy statements, that Covid will have two to three year impact on population growth before normal service (i.e. pre-Covid trends) are resumed.

In the case of Greater Shepparton and most other parts of Regional Victoria, the evidence suggests that there is no need to update population projections at present. In less than a year's time, 2021 census data will become available (see note below). This will trigger revisions to the ABS's national and state population projections and DEWLP's *Victoria in Future* population, household and dwelling projections. By then it should become a little clearer what the longer term impacts of Covid will be. Will greater and more permanent working from home arrangements lead a more sustained decentralisation of people and jobs out of Melbourne? If so, to what extent will this happen and to where in Regional Victoria will this growth be channelled?

An important note for users

Data on population growth is subject to changes. At the current stage of the census cycle, we are most vulnerable to adjustments which can quickly alter population trends and the population projections which are based on such trends. When 2021 census data is published in July 2022, population estimates between 2017 and 2021 will be revised. These can be significant and change one's understanding about the extent and source of population growth.

The Estimated Resident Population or ERP is the official population figure most used by government. It is used to determine allocation of funding of Local and State Government by the Commonwealth Government. It is also used to determine the distribution of electorates. Population projections made by the ABS, the DELWP and by consultants use the ERP.



The ERPs are used for a wide range of planning purposes – financial, land use, education, health, transport etc.

The ERP is published by the ABS, quarterly for States and Territories and annually for regions, Local Government Areas and for State and Territories. . The annual estimate is for the 30th June, the end of the financial year. The finest geographical level for which ERPs are published is the SA2. There are 461 SA2s in Victoria. There are five SA2s in Greater Shepparton although external boundaries do not align exactly with the municipal boundary.

The ERP is based on census counts. The five yearly census is undertaken in early August. ABS then backdates the population estimate to the previous 30th June. This is done in a number of steps:

- 1. It takes the usual resident population as recorded in the census. This excludes census night visitors but includes people who were elsewhere in Australia on census night and allocates them 'back home'.
- 2. It includes the ABS's estimate of the census undercount (ie people missed by the census)
- 3. It takes out people born between 30th June and census night but includes people who died between 30th June and census night
- 4. It includes people who were overseas at the time of the census but who normally live in Australia and allocates them to the place where they normally live. Nationally this can amount to several hundred thousand people, although will be a lot less in 2021 than in 2016 owing to Covid.

The ABS then updates ERPs each year relying on births and deaths data and Medicare data.

The latest 'preliminary' population estimate for Greater Shepparton was for 30th June 2020, which was published in March 2021. Next March this will be updated with an estimate for 30th June 2021. But this estimate will still be based on the 2016 census. With the publication of the 2021 census next July, the ABS will publish 'final' ERPs for each year from 2017 to 2021.

The revisions to population estimates following a census can be significant. Following the 2016 census the 2016 ERP for Victoria was revised upwards by over 100,000, resulting in changed trends and changed prospects for future growth across Victoria.

In November 2021, we are currently in the most vulnerable part of the five yearly cycle. The current 2020 estimate and the new 2021 estimate to be published in March 2022, are subject to change. No one knows whether estimates will be revised upwards to downwards or the extent of these changes.

The census also provides important information about the characteristics and sources of population growth and household formation. It is the kicking off point for updating our understanding of the dynamics of population change and the way that population organises itself into households that consume housing. Consequently it is the trigger for updating projections.

As of November 2021, the best advice to users is to (a) be aware of these issues, (b) keep a watching brief on revisions and, (c) be prepared to adjust business models once 2021 census data becomes available and projections are revised.

The Commonwealth and State Governments' views on the impact of Covid:

In December 2020 the Commonwealth Government's Centre for Population published a preliminary view on the impacts of COVID:

"The impact of COVID-19 is expected to be long lasting. Australia's population is expected to be smaller and older than projected prior to the onset of the pandemic.

Australia's population is estimated to be around 4 per cent smaller (1.1 million fewer people) by 30 June 2031 than it would have been in the absence of COVID-19. The population will also



be older as a result of reduced net overseas migration and fewer births. Despite COVID-19, Australia's population is still growing and is expected to reach 28 million during 2028–29, three years later than estimated in the absence of COVID-19.

COVID-19 is projected to slow population growth across all geographic areas analysed, with the duration and magnitude linked to the importance of net overseas migration to different parts of the country.

Capital cities are projected to bear the heaviest impacts, with total population across capital cities estimated to be around 5 per cent lower by 30 June 2031 than in the absence of COVID-19. By contrast, population outside the capital cities is estimated to be around 2 per cent smaller than it would otherwise have been.

The number of people migrating interstate is projected to fall by 12 per cent in 2020–21. This would be the largest year-on-year drop in interstate migration in 40 years and would lead to the lowest rate of interstate migration as a proportion of the population on record.

Melbourne is projected to overtake Sydney to become Australia's largest city in 2026–27, with a population of 6.2 million by 2030–31, compared to 6.0 million in Sydney."

In summary, Covid makes a dent in ongoing population growth from which it will take a long time to recover.

In June 2021, the Commonwealth Treasury published its update of the intergenerational report. One notable feature was the lower 40 year population growth projections. Even if, optimistically, Australia (and the World) can quickly recover from the Covid with life and the economy returning to 'pre COVID normal', that population dent will endure into the future.

In May 2021, the Victorian Treasury published its budget papers which included a four year forecast of population growth which accounted for the impact of Covid:

The Victorian Treasury's short term forecasts

Year	Forecast population growth rate, Victoria
2020/21	0%
2021/22	0.3%
2022/23	1.2%
2023/24	1.7%
2014/25	1.7%

Source: Budget Paper no. 2, page 22, Victorian Treasury, May 21

The Victorian Treasury view mirrors that of the Commonwealth Government: that Covid produces a two-three year dent in population growth. By 2023/24 Victoria population growth is forecast to return to its pre-Covid projections rate i.e. that used in *Victoria in Future 2019*.

3.2 Demographic Projections

The population, household and dwelling growth assumptions used in assessing the adequacy of greenfield residential land stocks for the municipal area of Shepparton are drawn from the Victorian Government's official population projections 'Victoria in Future 2019' (VIF 2019). This publication sets out population, household and dwelling growth projections to 2036 for all regions and local government areas in Victoria.

For the City of Greater Shepparton VIF 2019 forecasts average annual population growth of 0.9%, or a



total population increase of 9,930 people, from 2021 to 2036. VIF 2019 also forecasts an additional 5,367 households in the City of Greater Shepparton by 2036.

VIF 2019 also presents population and dwelling forecasts for sub-areas within Local Government Area boundaries.

3.2.1 Should a single growth forecast be relied upon for longer term strategic planning?

VIF2019 are undertaken and approved by the State Government and are prepared using a well-established and accepted methodology and incorporate sound assumptions.

However, it is reasonable to question whether a single set of growth forecasts should be used in assessing medium to longer-term adequacy of residential land stocks given the inherent uncertainty surrounding future growth.

Spatial Economics believes that current best practice is to utilise a realistic range of growth scenarios when preparing medium and longer-term strategic plans. This has the advantage of recognising the inherent uncertainty involved in any medium to longer-term forecast. It also allows the strategy to be 'stress tested' and helps ensure that land use and infrastructure plans have the flexibility to cope with unexpected changes in growth rates.

The inherent uncertainty associated with any medium to longer-term forecast of population growth is widely accepted.

For example, VIF2019 presents a range of growth forecasts for Victoria and, in its introduction says:

"Population projections are estimates of the future size, distribution and characteristics of the population. They are developed by applying mathematical models and expert knowledge of the likely population trends to the base population.

Projections provide information about population change over space and time but they are not predictions of the future. They are not targets nor do they reflect the expected effects of current and future policies.

The projections give an idea of what is likely to happen if current trends continue. They may indicate a need to manage change to achieve preferred outcomes or to mitigate the impacts of no-preferred outcomes"

In relation to growth projections for Victoria as a whole VIF2019 says:

"Under the VIF2019 assumptions Victoria is projected to add 4.7 million people from 2018 to 2056, reaching a population of 11.2 million. This represents annual average growth of 125,000 people, at a rate of 1.5% per annum.

Conditions and trends may change in the future, however, and if other assumptions were used, different growth levels would result. Migration levels are more sensitive to changes in policy or economic conditions than births or deaths. Graph 2 (see below) shows population growth outcomes with different migration assumptions, illustrating average annual growth in each scenario, not the volatility of growth in individual years."



13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
ABS Estimates
VIC2019 Projection
Range of outcomes

Graph 1: Projected population, Victoria" range of outcomes

4.0

2006

The unavoidable uncertainly associated especially with assumptions regarding the rate of net overseas migration is very clearly illustrated by the current experience with the impact of the Covid19 pandemic on migration and population growth. As a result of a drastic fall in overseas migration growth rates for Australian, Victorian and regional areas will be substantially reduced for, at least, two years.

2026

2021

VIF2019 does not present multiple growth scenarios for individual regions or municipal areas. This presumably reflects a judgement that to do so would be likely to lead to confusion and could result in 'projection shopping' by those seeking to advance particular points of view either in favour of or expressing concern regarding future growth.

However, the decision to present only a single set of projections in VIF2019 does not remove the uncertainty associated with regional and municipal projections. Instead it avoids addressing the issue. Indeed, the smaller the forecast area (e.g. region as against State, municipal as against region) the greater the uncertainty that is unavoidably associated with any medium or longer-term growth projection.

The question must still be addressed - how robust can we expect population projections for a regional municipality the size of Greater Shepparton to be?

Demographer Tom Wilson of Charles Darwin University has reviewed state government prepared population projections for sub-state regions and municipalities in Australia. He has done so with both the benefit of hindsight and with local and regional population estimates that the ABS has published since the time projections were prepared. His conclusions were as follows:

- Five year projections were better than ten year projections;
- Large area projections were a lot better than small area projections;
- While small area projections have large errors, for places of more than 100,000 people most projections were within 5% for a ten year period;
- For areas under 10,000 people, projections were highly error prone.
- For places over 25,000 people, the correct direction of change (i.e. gain or loss) was projected in 90% of cases;
- For places under 2,000 people, 60% of projections did not project the correct direction of



2056

2051

population change.

These findings correspond with similar research undertaken in the UK. This led Wilson to suggest a realistic 'shelf life' for projections.

Table 7: Shelf life of population projections

Place size (pop'n)	Shelf life of population projections (years)
<2,500	3
2,500 – 10,000	7
10,000 - 50,000	12
50,000 - 100,000	14
>100,000	15

Source: Tom Wilson, Paper presented to Australian Population Association conference, 2016

For the current purpose the key point is that longer term projections are inherently problematic and this needs to be taken into account in sound strategic planning.

Spatial Economics has therefore chosen to utilise a range of growth forecasts in assessing the adequacy of residential land supplies in Greater Shepparton.

3.3 A realistic Range of Growth Scenarios

The growth projections (or scenarios) prepared by Spatial Economics are for the Greater Shepparton municipality.

Spatial Economics projections build on the VIF2019 projections for population, households and dwellings. They do not contradict the VIF2019 projections in any way.

Instead Spatial Economics has expanded VIF2019 projections in three ways. Firstly, we have extended the VIF19 projections from 2036 to 2051. VIF2019 projected that Greater Shepparton population would grow by 0.9% in that final year (i.e. 2035/36). Spatial Economics has assumed this 0.9% annual rate of growth will continue through to 2051. Secondly, we have updated actual estimated resident population for the years of 2019 and 2020. Thirdly, we have developed two alternative population growth scenarios, one higher, one lower. Both the higher and lower projections are based upon what Spatial Economics believes are <u>potentially</u> realistic alternative assumptions regarding future growth trends in Greater Shepparton-.

These alternate growth scenarios are not what we forecast <u>will</u> occur. Instead they are used to demonstrate the impact of possible different growth rates on the demand for dwellings and residential land. Like all projections, the growth scenarios presented in this report should be seen as a way to help better inform decision making.

Spatial Economics' high growth scenario assumes that Greater Shepparton-'s population growth rate rises in 2021 to 1.3% per year – the rate of growth that Albury-Wodonga has experience over the last ten years – and remains at that rate until 2051.

The low growth scenario assumes that Shepparton-Mooroopna's growth drops to 0.7% per year in 2021 and remains at that rate until 2051. This is the rate of growth that Greater Shepparton experienced mid last decade

It will, no doubt, be argued by some that our suggested higher growth scenario is too modest. Higher growth rates experienced in some other regional cities (such as Bendigo or Geelong), or short-term upturns in demand and development activity in Greater Shepparton may be quoted in support of such a view. However, the evidence from across Victoria and New South Wales is clear – growth rates are strongly influenced both by city size (larger cities grow faster) and by distance from the state's main



metropolitan area (cities closer to Melbourne or Sydney benefit most from 'overflow demand' from the higher priced metropolitan area).

Furthermore, VIF 2019 already assumes that, over time, the Shepparton region gains rather than loses people to other parts of Victoria. This compensates for lower and even negative natural increase as the population ages.

In this context the VIF2019 projection, and our two additional scenarios, represent a likely realistic range of future growth for Greater Shepparton.

The projected population and dwelling numbers associated with each of the three (VIF 2019 plus Spatial Economics higher and lower) scenarios are summarised below.

Table 8: VIF2019 extended/modified – Greater Shepparton-projected population and dwelling change from 2021

	2021 to 2026	2026 to 2031	2031 to 2036	2036 to 2041	2041 to 2046	2046 to 2051
Population	3,293	3,345	3,272	3,416	3,567	3,724
Dwellings	1,836	1,912	1,838	1,495	1,561	1,630

Table 9: Higher growth - Greater Shepparton-projected population and dwelling change from 2021

	2021 to 2026	2026 to 2031	2031 to 2036	2036 to 2041	2041 to 2046	2046 to 2051
Population	4,513	4,814	5,135	5,477	5,843	6,233
Dwellings	2,355	2,555	2,667	2,397	2,557	2,728

Table 10: Lower growth - Greater Shepparton-projected population and dwelling change from 2021

	2021 to 2026	2026 to 2031	2031 to 2036	2036 to 2041	2041 to 2046	2046 to 2051
Population	2,401	2,486	2,574	2,666	2,760	2,858
Dwellings	1,456	1,535	1,523	1,167	1,208	1,251

Table 11: Average annual dwelling change – Greater Shepparton, by growth scenario

	2021 to 2026	2026 to 2031	2031 to 2036	2036 to 2041	2041 to 2046	2046 to 2051
VIF2019 (extended)	367	382	368	299	312	326
High	471	511	533	479	511	546
Low	291	307	305	233	242	250

In summary the higher scenario implies an approximately 49% increase in terms of total dwelling demand to 2051 when compared to the 'medium level' VIF2019 projection. The lower scenario results in an approximate 21% reduction in total dwelling demand to 2051 when compared to VIF2019.



Key Issues

Should population projections for Greater Shepparton be revised to take account of recent events? In other jurisdictions (eg Australia, Victoria, Greater Melbourne), population projections have had to be revised to take account of the dip in population growth resultant of Covid.

In the case of Greater Shepparton and most other parts of Regional Victoria, the evidence suggests that there is no need to update population projections at present. In less than a year's time, 2021 census data will become available (see note below). This will trigger revisions to the ABS's national and state population projections and DEWLP's *Victoria in Future* population, household and dwelling projections. By then it should become a little clearer what the longer term impacts of Covid will be.



4.0 Recent Residential Development Activity

Key Findings

The Building Approval statistics collected by the ABS for Victoria for the financial year 2020/2021 reveal several interesting trends brought on by the Covid19 pandemic. For Victoria, building approvals have increased from 60,000 to 67,600 over the year to July 2021, a substantial increase of 12.7%.

As measured over the two financial years, residential building approval activity has significantly increased across regional Victoria, increasing by 51% (from 12, 300 approvals to 18,540). In comparison, metropolitan Melbourne over the same time period increased by 3%.

Residential building approval has significantly increased across virtually all regional municipalities. Greater Shepparton has illustrated significant growth in building approval activity, increasing by 64%, from 346 approvals to 624 in 2020/21.

Over the last three financial years residential lot construction activity has averaged around 360 lots per annum, in 2020/21 405 residential lots were constructed.

Of the lot construction activity measured over the last three financial years:

- 3% was aged/lifestyle lots (12 lots per annum);
- 4% was dispersed/minor infill lots (13 lots per annum);
- 13% was rural residential lots (48 lots per annum); and
- 80% was greenfield lots (290 lots per annum).

Over the last three financial years there has been a significant composition change in the lot construction supply mix as compared to the longer-term average. There has been an increase in rural residential lot construction (in real terms and as a proportion of the total) and a decrease in minor infill construction within the established urban area.

Residential lot construction activity as measured over the last three financial years was concentrated within the urban centre of Shepparton/Mooroopna at 87% of all lot construction activity or 300 lots per annum. Of the remaining lot construction activity:

- 7% was located in the township of Tatura (average of 26 per annum); and
- 5% outside of township boundaries (17 per annum).

Of the broadhectare lot construction activity over the last three financial years:

- 1% were compact suburban (sized less than 300 sqm);
- 3% were suburban (sized 300 to 500 sqm);
- 77% were large suburban (500 to 1,000 sqm); and
- 19% low density suburban (over 1,000 sqm).



Section 4.0 of this report details the recent activity of residential lot construction and dwelling approvals across the City of Greater Shepparton. Residential lot construction activity is detailed from July 2008 to September 2021.

This section of the report details residential lot construction by location, supply type, achieved densities, project size/yield and sales pricing of constructed residential lots.

Where appropriate, comparisons to other regional Victorian jurisdictions are included.

4.1 Residential Building Approvals

Building Approval Activity in Context

The Building Approval statistics collected by the ABS for Victoria for the financial year 2020/2021 reveal several interesting trends brought on by the Covid19 pandemic. For Victoria, building approvals have increased from 60,000 to 67,600 over the year to July 2021, a substantial increase of 12.7%.

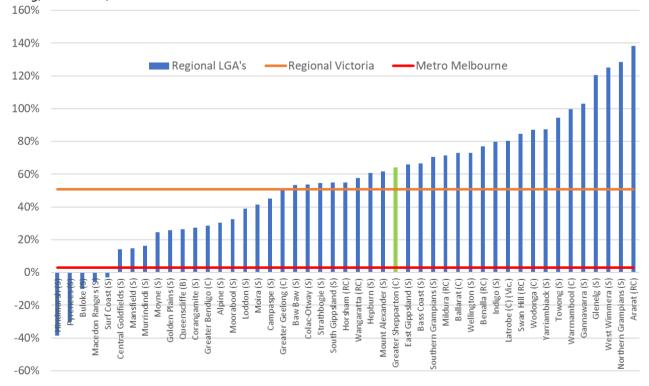
As measured over the two financial years, residential building approval activity has significantly increased across regional Victoria, increasing by 51% (from 12, 300 approvals to 18,540). In comparison, metropolitan Melbourne over the same time period increased by 3%.

As a share of total activity, regional Victoria has jumped from 20% of all new dwellings to 28% in one year. The share going to regional Victoria peaked around 2006 and declined until around 2017. The share for regional Victoria had been rising in the last few years in part because of the rise of Geelong before the spike brought on by the pandemic

Residential building approval has significantly increased across virtually all regional municipalities.

Greater Shepparton has illustrated significant growth in building approval activity, increasing by 64%, from 346 approvals to 624 in 2020/21.

Graph 2: Percentage Change in Residential Building Approval Activity by Regional Municipal Areas, 2019/20 to 2020/21



Source: Australian Bureau of Statistics

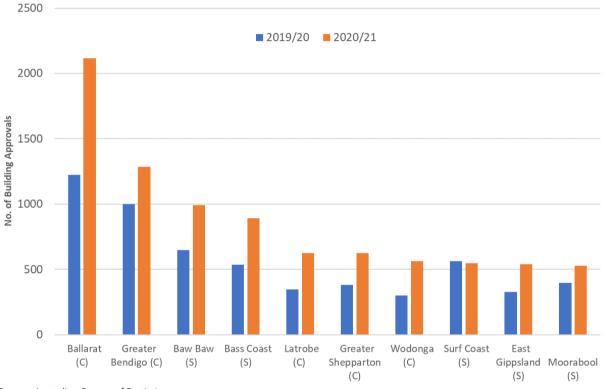


Graph 3 below illustrates the quantum of residential building approval activity for the top ten regional municiopalities as measured in volume in 2020/21. The City of Greater Geelong has been excluded from this graphic

In 2020/21, the City of Greater Shepparton had a comparable contribution of building approval activity to that of Latrobe at 624 approvals. The City of Greater Shepparton had substantially more approval activity compared to:

- Wodonga (560 approvals);
- Surf Coast (546);
- East Gippsland (541); and
- Moorabool (526).

Graph 3: Volume of Building Approvals - Top Ten Regional Municipalities



Source: Australian Bureau of Statistics **Note** Excludes City of Greater Geelong

The large increase in demand for housing across regional Victoria will put significant pressure on local economies to be able to deliver the housing stock. The sharp hike in residential building activity will put additional pressures on supply chains, sourcing labour and associated civil works requirements.

The pandemic and the subsequent work from home phenomenon is having significant impacts on the residential construction industry. With presales in greenfield estates extending out further than ever before, sometimes into multiple years' worth of supply, there will be a backlog of construction requirements.

City of Greater Shepparton

As measured from 2001/02 to 2020/21, residential building approvals within the City of Greater Shepparton averaged 394 per annum. Of which, 95% were for separate dwellings whilst 5% were for medium density housing. In recent years there has been a light increase in the proportion of medium density dwelling construction at around 7% of the total volume of building approvals.



Between 2001 and 2017, the annual number of residential buildings approved has gradually declined, with an average of 427 per annum between 2001 to 2009, down to an average of 340 from 2010 to 2017. During this period, volumes of residential building approvals have "tested new lows" – the lowest being 269 in 2016/17.

However, since 2017, residential building approval activity has illustrated sustained and increasing levels of activity. Over the last four years, residential building approval activity has averaged nearly 450 per annum.

In the last financial year of 2020/21, building approval activity peaked at 623, a 64% increase from the previous financial year.

700 600 2017 to 2020 2002 to 2010 Avg 390 pa Avg 427 pa 500 2011 to 2017 **Building Approvals** Avg 340 pa 400 300 200 SeperateHouses Medium Density --- Average 100 0

Graph 4: Residential Building Approvals by Type – City of Greater Shepparton, 2001 to 2021

Source: Australian Bureau of Statistics

4.2 Residential Lot Construction

Analysis has been undertaken to determine, on a lot by lot basis, the location, supply type and quantum of residential lot construction across the City of Greater Shepparton by financial year from 2008 to September 2021. Lot construction activity has been classified into distinct supply types and/or supply locations.

Compared to building approvals, residential lot construction is markedly more cyclical.

Over the last three financial years residential lot construction activity has averaged around 360 lots per annum, in 2020/21 405 residential lots were constructed. Whilst in comparison to residential building approval activity over the last three years averaged 470 per annum. This average was significantly influenced by an all-time peak of 23 approvals in 2020/21

This 'imbalance' of subdivision activity relative to building approval activity indicates a proportion of housing construction is occurring on existing vacant residential lots:

Of the lot construction activity measured over the last three financial years:



- 3% was aged/lifestyle lots (12 lots per annum);
- 4% was dispersed/minor infill lots (13 lots per annum);
- 13% was rural residential lots (48 lots per annum); and
- 80% was greenfield lots (290 lots per annum).

Over the last three financial years there has been a significant composition change in the lot construction supply mix as compared to the longer-term average. There has been an increase in rural residential lot construction (in real terms and as a proportion of the total) and a decrease in minor infill construction within the established urban area.

Greenfield activity, as a proportion of total activity has remained constant.

4.3 Location of Residential Development Activity

Residential lot construction activity as measured over the last three financial years was concentrated within the urban centre of Shepparton/Mooroopna at 87% of all lot construction activity or 300 lots per annum. Of the remaining lot construction activity:

- 7% was located in the township of Tatura (average of 26 per annum); and
- 5% outside of township boundaries (17 per annum).

There was minimal to no residential lot construction activity within the remaining townships within the municipality of Shepparton.

4.4 Lot Construction by Supply Type

Broadhectare residential lot construction has been and is currently the dominant form of residential development activity. Since 2008, this form of development activity has averaged 80% of the total. This trend has been relatively consistent

As will be detailed later in the report, it is not expected that the reliance of broadhectare development activity will change in the short to medium term.

Dispersed infill development has consistently delivered approximately 11% of all lot construction activity. This is an important supply source, as it provides:

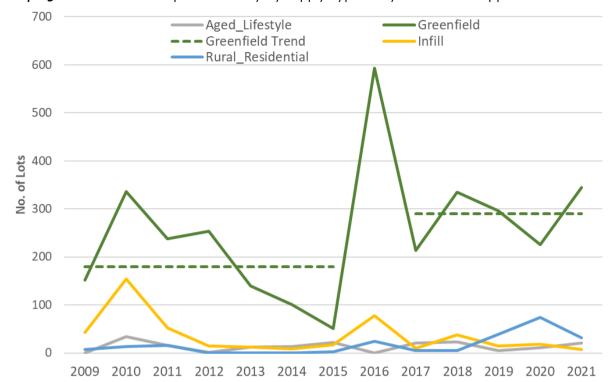
- a wide range of residential land products;
- a major land supply source within the smaller townships;
- · distributed widely across the established urban area; and
- contributes to urban containment/development of under-utilised land parcels.

Although, over the last three financial years, the contribution of minor infill development has declined in terms of the proportion of total development (4% of total activity) and in terms of actual construction (averaging 13 lots per annum compared to the long term average of 36 lots).

The contribution of rural residential lot construction activity historically was more sporadic and its contribution as a residential supply source was negligible – contributing typically around 5% of lot construction or 17 lots per annum. However, over the last three financial years rural residential lot construction activity has significantly increased, averaging around 50 lots per annum or 13% of total development activity

Graph 5 below illustrates the continued dominance of broadhectare lot construction activity.





Graph 5: Residential Development Activity by Supply Type - City of Greater Shepparton

Source: Spatial Economics Pty Ltd

4.5 Broadhectare Lot Construction

Broadhectare or greenfield lot construction activity has averaged:

- 252 lots per annum from 2009 to 2021;
- 180 lots per annum from 2009 to 2015; and
- 334 lots per annum since 2016.

Over the last three financial years greenfield residential lot construction activity has averaged 290 per annum and 335 lots constructed in 2021

As outlined previously broadhectare lot construction represents approximately 80% of all residential lot construction activity across the municipality over the last three financial years.

This contribution measured over-time has been relatively consistent. Spatial Economics based on 1) the existing composition of demand and 2) the existing and planned composition of residential land stocks, consider that the contribution of broadhectare development will remain at these levels for the medium to longer term.

Over the last three years, the vast majority (94%) of broadhectare lot construction activity was located in the township boundary of Shepparton/Mooroopna and 5% located in Tatura.

Tatura historically contributed around 11% of all greenfield lot construction across the municipality. The significant decline is directly attributable the lack of undeveloped zoned greenfield land supply stocks.

Within the township boundary of Shepparton/Mooroopna the majority of development activity was located in the suburb of Kialla (127 lots per annum), followed by:

- Shepparton (59 lots per annum);
- Shepparton North (43 lots per annum); and



• Mooroopna (33 lots per annum).

4.5.1 Broadhectare Lot Construction - Diversity

Lots constructed from broadhectare supply sources across the City of Greater Shepparton are typically larger in size when compared to other comparable regional Victorian urban centres. Graph 6 below illustrates the diversity of broadhectare lot construction.

Of the broadhectare lot construction activity over the last three financial years:

- 1% were compact suburban (sized less than 300 sqm);
- 3% were suburban (sized 300 to 500 sqm);
- 77% were large suburban (500 to 1,000 sqm); and
- 19% low density suburban (over 1,000 sqm).

The construction of larger lots has been a response by the development industry to consumer preferences. Through consultation with the local land development industry, it was constantly stated that there was "minimal consumer demand for smaller lots sized below 500 sqm."

In recent years, the construction of larger broadhectare lots has increased, conversely, the proportion of smaller to mid-sized lots has decreased.

Graphs 6 and 7 below illustrate both the median size and diversity of broadhectare residential lot construction. The median lot size of constructed broadhectare lots has remained relatively consistent over-time, varying from 720 sqm to 826 sqm. There is a general trend of decreasing densities of broadhectare lot construction activity.

Across the majority of major regional urban centres in Victoria, the median lot size of constructed broadhectare lots is: a) rapidly declining; and b) significantly lower than compared to Shepparton. The declining densities of constructed broadhectare lots in other major urban centres is largely driven by affordability/consumer pricing points and to a lesser degree changing demographic characteristics.

Across the City of Greater Shepparton however, broadhectare lot construction has: a) maintained relative and absolute levels of broadhectare land affordability, in the context of providing consumers their preferred land product (larger lots) and b) provided small lot products within urban lifestyle villages, to respond to the demands of the changing demographic composition.



45% ■ 2009 to 2018 ■ 2019 to 2021 40% 35% 30% Proportion of Lots 25% 20% 15% 10% 5% 0% Less than 300 300 to 500 700 to 800 800 to 1,000 1,000 sqm + 500 to 600 600 to 700

sqm

Graph 6: Broadhectare Lot Construction Size Distribution – City of Greater Shepparton

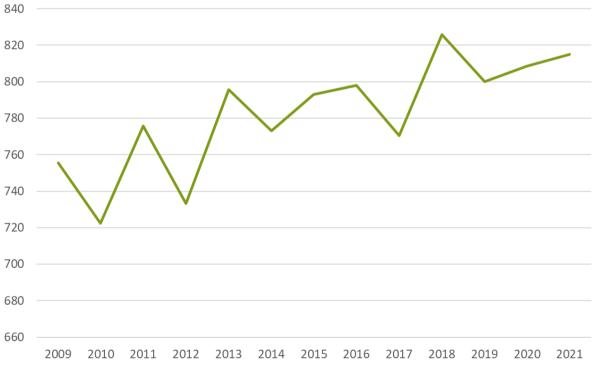
Source: Spatial Economics Pty Ltd

sqm

Graph 7: Median Lot Size (sqm) – Broadhectare Lot Construction

sqm

sqm



Source: Spatial Economics Pty Ltd

4.7 Rural Residential Lot Construction

Rural residential lot construction activity since 2009 has represented 5% of all lot construction activity across the municipal area – or 17 lots per annum



sqm

sqm

Rural residential lot construction over the last three financial years has significantly increased, increasing to an average annual lot production of nearly 50.

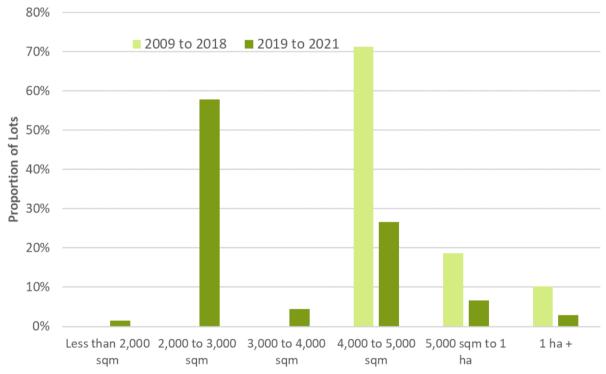
As measured over the last three years the vast majority (93%) of rural residential lot construction was zoned Low Density (LDRZ) and the residual zoned Rural Living (RLZ).

Over the last three years, nearly 75% of rural residential lot construction was located in the surrounding suburbs of Shepparton, development activity was particularly concentrated in Shepparton North. There was substantial rural residential subdivision activity located in Tatura

Over the last three years there has been a significant change in both the quantum and composition of rural residential subdivision activity. Not only has rural residential subdivision activity substantially increased in terms of its' total contribution, but there has also been a marked shift in terms of its lot size outcomes.

Specifically, regarding Low Density Residential (LDRZ) lot construction, historically the typical lot size constructed was between 4 to 5,000 sqm. Over the last three years there has been a significant shift to smaller lots, sized from 2 to 3,000 sqm that are serviced with hydraulic land development infrastructure. This is an emerging trend across regional Victoria.

Graph 8: Low Density Residential (LDRZ) Lot Construction Size Distribution – City of Greater Shepparton



Source: Spatial Economics Pty Ltd

4.8 Vacant Residential Lot Sales Pricing

The sales value of vacant residential lots is a prime outcome indicator of the 'state of the land supply' market. It is a simple measure that captures both supply and demand dynamics.

As measured over the longer term from 2009 to 2020 the median sales price of vacant residential lots has increased on an average annual bass by 3.0% in Greater Shepparton, compared to 6.2% in Ballarat, 5.3% in Bendigo and 5.4% across regional Victoria. This illustrates for Greater Shepparton that sufficient residential land was released relative to demand levels.



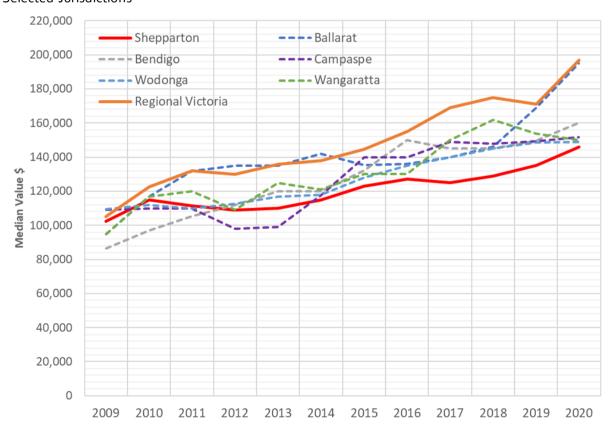
However, over the last three years as measured from 2018 the median sales price of vacant residential land has increased by 4.2% per annum compared to 10.1% in Ballarat, 3.3% in Bendigo and 4.0% across regional Victoria. Sales pricing of vacant residential lands across Shepparton in recent years has accelerated, however, the level of price escalation is in line with regional Victoria and must be interpreted in the context of the recent rapid escalation in expressed demand for residential land and housing.

The median sales price of a vacant residential lot in 2020 was:

- \$146,000 Greater Shepparton;
- \$149,000 in Wodonga;
- \$150,000 in Wangaratta;
- \$152,000 in Campaspe;
- \$160,000 Bendigo;
- \$195,000 in Ballarat; and
- \$197,000 across regional Victoria (this is heavily influenced by peri-urban municipalities and Geelong);

Vacant Residential land sales values across the municipal area of Shepparton has relatively only moderately increased over-time, in addition residential sales values are currently relatively affordable to both regional Victoria and other major regional centres.

Graph 9: Median Sales Values – Vacant residential lots, 2009-2020 – Greater Shepparton Vs Selected Jurisdictions



Source: Valuer General Victoria

The volume of residential lot sales has significantly increased across Greater Shepparton, increasing by 58% as measured from 2019 to 2020. In 2019 there were 349 sales of vacant allotments



increasing to 553 in 2020. For regional Victoria, the volume of sales activity over the same period was 45%.

Analysis of vacant residential land sales values by locality illustrates the differences within Greater Shepparton. Kialla has generally attracted a premium over other localities in the municipality. However, due to the substantial low density subdivision activity in Shepparton North consequently has attracted a higher premium price and therefore has influenced the median sales value outcomes.

From 2015 onwards, the median values of vacant residential lots in Kialla and Shepparton trended closely to the median values in Greater Shepparton as a whole. Shepparton North is the only locality to experience a slight drop in its median value during this period going from \$129,000 in 2007 to \$115,000 in 2017. The localities of Mooroopna and Tatura share a similar pattern of growth between 2007 and 2017 and have had some notable increase from 2012 onwards.

In the first quarter of 2021, the median sales value of a vacant residential lot by suburb was:

- Shepparton North \$197,800
- Kialla \$150,500;
- Shepparton \$142,500;
- Mooroopna \$130,000; and
- Tatura \$96,000.

From a pure price perspective, the broadhectare land market throughout Greater Shepparton has provided affordable land products in the context of providing typically 'larger' allotments.

Key Issues

There has been heightened residential development activity across regional Victoria, including significant growth in activity across Greater Shepparton. This has been measured in terms of building approvals, sales volumes and subdivision activity.

This is in the context of a) the Covid pandemic; b) subdued growth across metropolitan Melbourne and c) minimal overseas migration.

The key issue is to whether this surge of development activity will be sustained or whether it is a short-term trend.

Results from the 2021 Population and Housing Census released mid 2022 will provide some insights to this trend. However, it highlights the importance pf planning for a range of plausible demand scenarios.

Over the last three years, there has been a significant shift in the composition of residential subdivision activity. Rural residential lot construction and associated dwelling construction has increased from around 2% of total development activity to around 13%. In addition, there is a marked shift to smaller rural residential lots from 4,000 sgm to around 2,100 sgm.



5.0 Residential Land Supply

Key Findings

As at September 2021, there was a residential lot capacity within zoned broadhectare sites of approximately 3,500 across the municipal area of Shepparton.

Over 94% of the zoned broadhectare land stocks are located within the urban centre (township boundary) of Shepparton/Mooroopna. Within the urban centre of Shepparton/Mooroopna the zoned broadhectare lot supply is located in:

- Shepparton -1,985 lots;
- Kialla -751 lots;
- Shepparton North 290 lots; and
- Mooroopna 211 lots.

In addition, there are approximately 1,267 hectares of land (with an estimated yield of 7,468 dwellings) identified for potential future broadhectare residential development across the municipal area as at September 2021. The vast majority of this identified land is located in Shepparton/Mooroopna and to a lesser degree Tatura.

Based on existing planning permits, recent construction activity and Council/Development Industry feedback it is anticipated that over the next two years, on average, **487 lots/dwellings** per annum will be constructed within existing zoned broadhectare sites in Shepparton/Mooroopna.

This level of anticipated lot construction is significantly higher than both a) previous assessments undertaken regarding anticipated future lot construction activity and b) historical actual lot construction activity. However, it is highlighted that this level of anticipated lot construction activity closely correlates to:

- 1. Current levels of building approval; activity (623 for 2020/21); and
- 2. Recent sales activity of vacant residential lots (553 completed sales in 2020).

Further analysis has been undertaken to assess the composition of the land stocks anticipated to be developed over the next two years. The information was sourced from the development industry, council permit information, related planning/land development consultants and independently verified by Spatial Economics.

Of the 973 greenfield lots anticipated to be constructed over the next two years:

- 3. 51% or 510 lots have been pre-sold; and
- 4. 64% or 630 lots have current preliminary sub-division approval, of which the vast majority are currently under construction.

Currently across the City of Greater Shepparton there was a total stock of 1,351 rural residential allotments. Of this stock, only 119 lots (9%) were vacant. Vacant rural residential lots as a supply type are comparatively low across the City of Greater Shepparton when compared to other regional municipalities in Victoria.

There are significant stocks of land identified for future rural residential use/zoning. There is a total of 2,011 hectares of land identified for future rural residential zoning, of which, 989 hectares is identified for future Low Density Residential (LDRZ) and 1,022 hectares for future Rural Living (RLZ).



Section 5.0 of the report details the stock (measured in lots) of broadhectare residential land supply across the municipal area of Greater Shepparton as at September 2021.

In addition, it provides an overview of current rural residential land stocks.

For broadhectare land supply areas, anticipated lot construction timing is presented. This refers to the likely timing of lot construction, not dwelling construction. It is highlighted and highly recognised that the timing presented is a guide, it will not equate to full completion of activity, but rather a guide to likely broad development construction initiation.

The location of the anticipated lot construction activity illustrated will generally commence development (e.g. o-2 years), although complete 'build-out' may not be achieved within the stated time-frames.

5.1 Stock of Zoned Broadhectare

As at September 2021, there was a residential lot capacity within zoned broadhectare sites of approximately 3,500 across the municipal area of Shepparton.

Nearly 90% of the zoned broadhectare land stocks are located within the urban centre (township boundary) of Shepparton/Mooroopna. Within the urban centre of Shepparton/Mooroopna the zoned broadhectare lot supply is located in:

- Shepparton -1,985 lots;
- Kialla -751; lots
- Shepparton North 290 lots; and
- Mooroopna -211 lots.

Maps 1 to 7 illustrates the location/distribution of residential land stocks across the Shepparton/Mooroopna urban centre (zoned and unzoned).

Maps 8 to 17 illustrates the location/distribution of residential land stocks across the settlements outside of Shepparton-Mooroopna (zoned and unzoned).

Table 12 identifies the lot yield and estimated development timing of zoned broadhectare land stocks.

Table 12: Anticipated Broadhectare Lot Construction Activity, 2021

	0-2	3-5	6-10		No	Total Zoned	UGZ - Potential PSP		
Township/Suburb	years	years	years	11+ years	Timing	Stocks	Residential		Total Lots
Merrigum						0	27		27
Murchison	5					5			5
Shepparton East			15		14	29			29
Tatura	24			6	144	174	1068		1242
Undera	5					5			5
Shepparton/Mooroopna	939	418	307	263	1310	3237	5373	1000	9610
Congupna						0	840		840
Grahamvale						0	1160		1160
Kialla	461	78	67	103	42	751	82	1000	1833
Mooroopna	132			70	9	211	791		1002
Shepparton	294	170	240	90	1191	1985	2500		4485
Shepparton North	52	170			68	290			290
City of Greater Shepparton	973	418	322	269	1468	3450	6468	1000	10918

Source: Spatial Economics Pty Ltd

Based on existing planning permits, recent construction activity and Council/Development Industry feedback it is anticipated that over the next two years, on average, **487 lots/dwellings** per annum will be constructed within existing zoned broadhectare sites across the municipality.



This level of anticipated lot construction is significantly higher than both a) previous assessments undertaken regarding anticipated future lot construction activity and b) historical actual lot construction activity. However, it is highlighted that this level of anticipated lot construction activity closely correlates to:

- 3. Current levels of building approval; activity (623 for 2020/21); and
- 4. Recent sales activity of vacant residential lots (553 completed sales in 2020).

It is noted that not all building approvals and residential land sales are greenfield lots, however, the vast majority will be from residential greenfield lands.

Further analysis has been undertaken to assess the composition of the land stocks anticipated to be developed over the next two years. The information was sourced from the development industry, council permit information, related planning/land development consultants and independently verified by Spatial Economics.

Of the 973 greenfield lots anticipated to be constructed over the next two years:

- 5. 51% or 510 lots have been pre-sold; and
- 6. 64% or 630 lots have preliminary sub-division approval, of which the vast majority are currently under construction.

This highlights to a high degree of certainty that the levels of anticipated lot construction activity will likely occur over the next two years. Spatial Economics perceive this will be highly dependent of the ability of the civil works industry to deliver the required work requirements to meet the anticipated increased levels of demand

It is anticipated that in Shepparton /Mooroopna within the 3 to 5 year anticipated development timing category only 418 lots are identified for development, representing only 140 lots per annum. This is significantly below the previous five year average for greenfield lot construction, at around 285 lots per annum (ignoring the current and anticipated increase in construction rates).

It could be presented that the greenfield lot capacity identified in both the 6 to 10 years and 11+ years anticipated development timing category could be brought forward to meet anticipated demand to the 3 to 5 year demand/supply category. Spatial Economics view that a proportion will be brought forward and larger proportion will not due to a variety of factors.

These factors include:

- 6-10 years only 307 lots have been identified to be developed in the 6 to 10 year category, of this lot potential nearly 80% is located in the Shepparton North East Structure Plan area. This potential is currently under ownership of one active developer and would require the land to the west of this parcel to be largely fully developed to access land development dependent hydraulic infrastructure; and
- 11+ years: land identified to be developed in the next 11 + years category in nearly all cases are either highly fragmented, have an existing use/s and local knowledge indicating the land owner does not have active development intention. Spatial Economics include these sites as potential development sites as it is believed that in the fullness of time they will be fully developed.

Table 13 below summarises the above issue in more detail. The table illustrates development intentions over the next ten years and excludes zoned undeveloped residential broadhectare land stocks that are either a) pre-sold; and or b) currently with preliminary subdivision approval for construction. Key highlights include:

In total there are limited zoned broadhectare lots across key greenfield land release areas;
 and



2. In some key greenfield land release suburbs there are limited to zero undeveloped zoned broadhectare land stocks.

Specifically, by key greenfield land release suburbs, the current stock of zoned undeveloped greenfield lands that is not pre-sold or currently under construction include:

- zero supply in Mooroopna;
- zero supply in Tatura;
- 170 lots in Shepparton North;
- 264 lots in Kialla; and
- 513 lots in Shepparton.

The above outcomes illustrate that unless additional greenfield lands are rezoned in the short-term in total and across the differing geographical housing sub-markets, industry competition will be limited. Consequently, this will likely result in restricted supply and upward price pressures on residential retail lots.

Table 13: Anticipated Broadhectare Lot Construction Activity – excluding pre-committed land stocks, 2021

Township/Suburb	0-2 years	3-5 years	6-10 years	Total Zoned Stocks
Congupna	0	0	0	0
Grahamvale	0	0	0	0
Kialla	119	78	67	264
Mooroopna	0	0	0	0
Shepparton	103	170	240	513
Shepparton North	0	170	0	170
Shepparton/Mooroopna	222	418	307	947
Tatura	0	0	0	0

Source: Spatial Economics Pty Ltd

Note: Pre-committed includes lots that are either pre sold or lots with preliminary subdivision approval

In addition to the identified zoned broadhectare land stocks with an estimated development timing, there is broadhectare land stocks where a no timing status and in some cases no yield have been established. This is primarily due to the identified site being highly likely to be developed at some point however, due to for example existing or underutilised uses, the likely development timing is highly speculative.

Of the development sites with an estimated lot/dwelling yield (with a No-Timing status), the majority are located within the urban centres of Shepparton/Mooroopna and Tatura. It is estimated that these sites will yield approximately 1,300 lots/dwellings in Shepparton/Mooroopna and 144 lots/dwellings in Tatura. Of the lot potential in Shepparton. 1,050 lots are located in the recently rezoned Shepparton North East Structure Plan area.

Besides the lot potential located in the Shepparton North East Structure Plan area, these development sites are characterised with existing low-density residential uses, significant planning issues (airport buffers) and in many instances low demand areas that are unlikely to see significant subdivision activity. With these sites, there can be no certainty to the eventual timing of redevelopment or likely development yields/density.

There are a further 38 sites with a No Timing status (with no estimated yield estimates) with a total area of 330 hectares. These sites are typically located within the small settlements across the municipal area, in summary these include:



- Murchison 156 hectares (6 sites);
- Merrigum 60 hectares (8 sites);
- Undera 47 hectares (5 sites);
- Kialla 26 hectares (4 sites);
- Dookie 17 hectares (8 sites);
- Tallygaroopna 13 hectares (1 site);
- Katandra West 6 hectares (3 sites);
- Tatura 2hectares (1 site);
- Shepparton North 1 hectare (1 site); and
- Mooroopna 1 hectare (1 sites).

5.2 Stock of Un-Zoned Broadhectare Land

Analysis has been undertaken in conjunction with Council planning officers to identify the location and expected lot yield of currently unzoned residential land stocks. Sites for future residential development are identified within various Council strategy planning documents. Structure planning, and rezoning processes are required before residential development can proceed on such sites.

There are approximately 1,268 hectares of land (with an estimated yield of approximately 7,500 dwellings) identified for potential future broadhectare residential development across the municipal area. The vast majority of this identified land is located in Shepparton/Mooroopna and to a lesser degree Tatura. By suburb, the stock of potential (unzoned) broadhectare land are located in:

- Shepparton 2,500 lots (352 hectares);
- Grahamvale -1,160 lots (128 hectares);
- Kialla 1,082 (444 hectares);
- Tatura -1,068 lots (134 hectares);
- Congupna -840 lots (97 hectares);
- Mooroopna -791 lots (108 hectares); and
- Merrigum -27 lots (5 hectares).

5.3 Rural Residential Land Stocks

The stock of both occupied and vacant rural residential allotments have been determined on a lot by lot basis at October 2021. Occupied is defined as having evidence of a 'habitable' dwelling, commercial use, or other significant capital-intensive land use. Vacant is defined as having no evidence of a significant capital-intensive use (as verified via the interpretation of aerial imagery).

Across the City of Greater Shepparton there was a total stock of 1,351 rural residential allotments. Of this stock, only 119 lots (9%) were vacant. Vacant rural residential lots as a supply type are comparatively low across the City of Greater Shepparton when compared to other regional municipalities in Victoria.

The majority (57%) of the rural residential lot stock is located outside of defined town boundaries. There is considerable stock located within Tatura (3121 lots (35 vacant)) and Shepparton/Mooroopna (225 lots (35 vacant)).

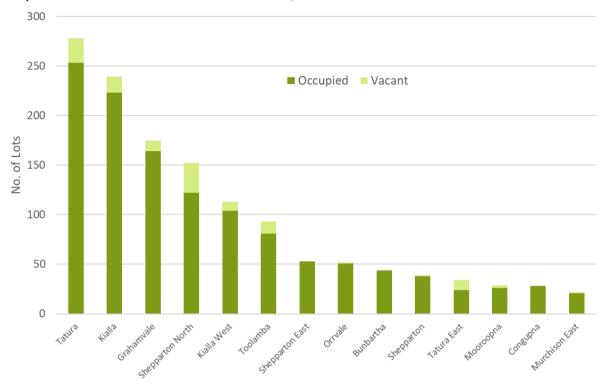
Graph 10 summarises the stock (lots) of both occupied and vacant rural residential allotments by suburb.

There is approximately 321 hectares of vacant rural residential land across the municipality. Of this vacant lot stock, 199 hectares is zoned Low Density Residential (LDRZ), the remaining 122 hectares is zoned Rural Living (RLZ). There has been a total of 71 hectares of rural residential lots converted from vacant to occupied since the last assessment undertaken (FROM December 2018 to October 2021).



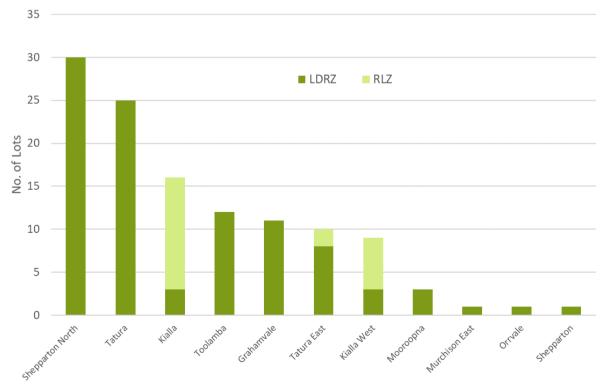
Graph 12 illustrates the size distribution of all existing rural residential allotments (occupied and vacant).

Graph 10: Stock of Rural Residential Allotments, 2021



Source: Spatial Economics Pty Ltd

Graph 11: Stock of Vacant Rural Residential Allotments, 2021



Source: Spatial Economics Pty Ltd

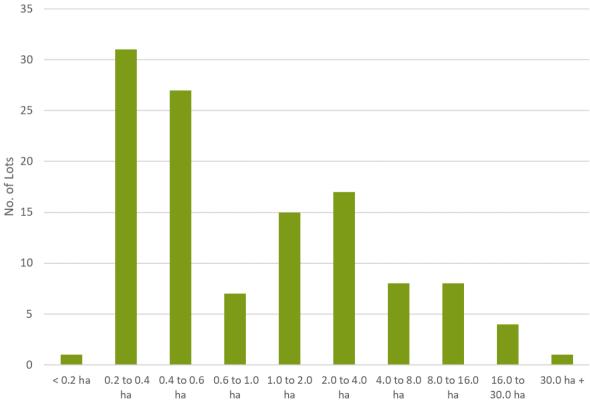


500 400 No. of Lots 300 200 100 0 < 0.2 ha 0.2 to 0.4 0.4 to 0.6 0.6 to 1.0 1.0 to 2.0 2.0 to 4.0 4.0 to 8.0 8.0 to 16.0 16.0 to 30.0 ha + ha ha ha ha ha 30.0 ha

Graph 12: Stock of Rural Residential' Allotments by Lot Size Cohort (occupied & vacant), 2021

Source: Spatial Economics Pty Ltd





Source: Spatial Economics Pty Ltd

Approximately 80% of the rural residential lot stock (both occupied and vacant) is less than one hectare in size. Only 4% of the rural residential lot stock (or 60 lots) is sized greater than four hectares.



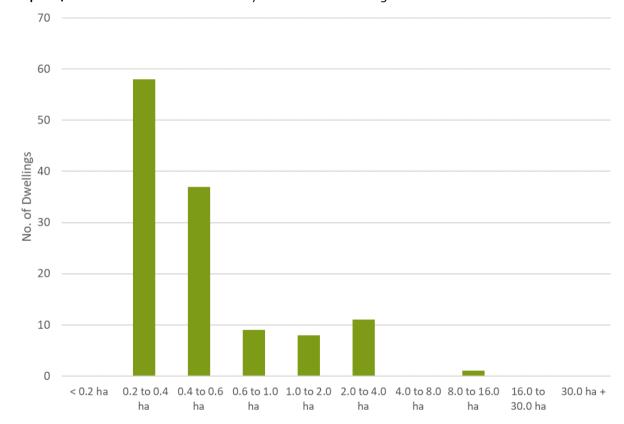
The high proportion of smaller rural residential allotments results in a significant limitation in terms of any future feasible re-subdivision.

Spatial Economics have observed that since the previous assessment undertaken in 2019 there has been a considerable increase in rural residential development activity. This assessment has previously documented the significant increase in rural residential subdivision activity over the last three years.

Similarly Spatial Economics have observed a significant increase in the construction of new dwellings on rural residential lands.

In total, there has been a total of 124 dwellings constructed on rural residential lands, which equates on an average annual basis to 44 dwellings, compared to 48 lots constructed per annum. The vast majority (77%) of dwelling construction was on lots sized from 2,000 to 6,000 sqm. A large proportion (70%) of this dwelling construction was in either Shepparton-Mooroopna and Tatura.

Graph 14 below illustrates the lot size distribution of recent dwelling construction on rural residential lands.



Graph 14: Lot size distribution of recently constructed dwellings on rural residential lands

Source: Spatial Economics Pty Ltd

5.3.1 Preliminary subdivision approvals - rural residential lands

It appears based on preliminary subdivision approval data the recent trend of a) increased subdivision activity for rural residential lands; and b) a consumer preference for smaller rural residential lots will continue.

Currently, there is a yield of 148 rural residential lots with current subdivision approval (97% are zoned LDRZ). Predominantly the anticipated lot size of the proposed subdivisions is from 2,000 to 4,000 sqm or 87% of the total.

The proposed construction activity is located in:

Tatura – 92 lots;



- Shepparton North (48 lots); and
- Kialla 8 lots.

The typical resultant density of the proposed rural residential subdivision is around 2,030 sqm.

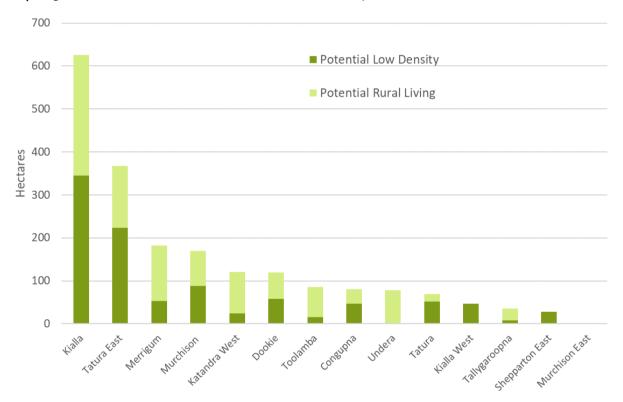
5.3.2 Future (Unzoned) Rural Residential Land Stocks

There are significant stocks of land identified for future rural residential use/zoning. Currently, this stock of future rural residential land is not zoned to support rural residential development and is typically zoned Farm (FZ). This identified land stock is widely distributed across the municipality and all smaller towns are well provided for in terms of future rural residential land stocks.

There is a total of 2,011 hectares of land identified for future rural residential zoning, of which, 989 hectares is identified for future Low Density Residential (LDRZ) and 1,022 hectares for future Rural Living (RLZ).

There are 86 hectares of land currently zoned Rural Living (RLZ) in Kialla/Kialla West identified for future rezoning to Low Density (LDRZ)

Graph 15: Stock of Future Rural Residential (unzoned) Land, 2021



Source: Spatial Economics Pty Ltd



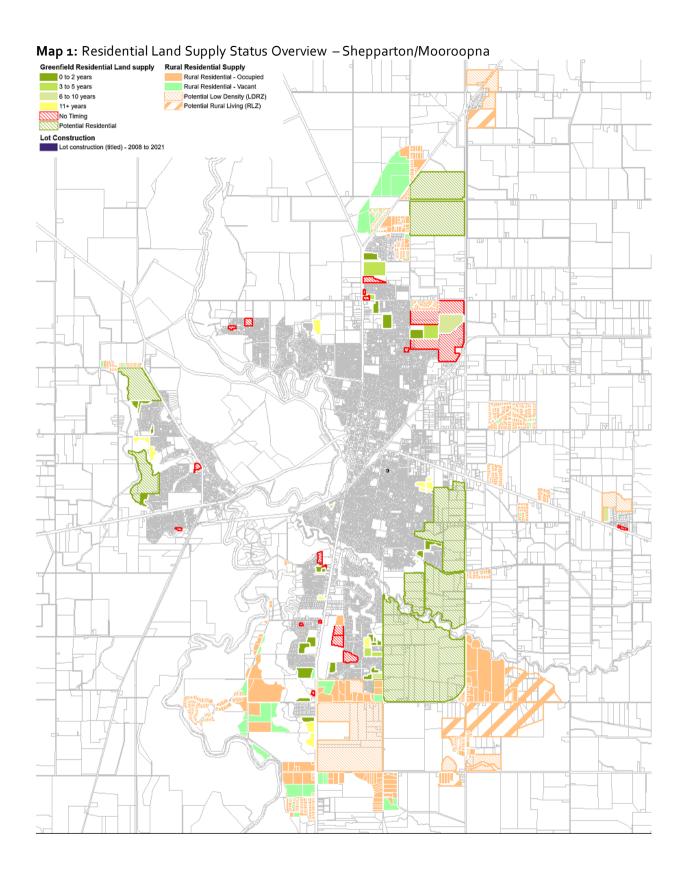
Key Issues

There are limited supplies of zoned broadhectare land stocks in both Shepparton-Mooroopna and Tatura. If zoned land stocks were excluded that were 1) pre-sold, 2) have preliminary subdivision approval/under construction; 3) parcels where no certainty can be provided in terms of development timing and 4) land parcels that are fragmented, have an existing use, have significant planning issues constraints – the likely zoned capacity is around 950 lots.

Spatial Economics consider that there is a shortage of suitable zoned broadhectare land stocks to meet demand in the medium term i.e. post three to five years.

The outlook for the demand for smaller rural residential allotments is likely to continue based on current and proposed development activity levels. There is currently a marginal stock of vacant rural residential lots and limited supply for larger/estate like subdivision projects. However, there is significant stock identified for future rural residential rezoning.



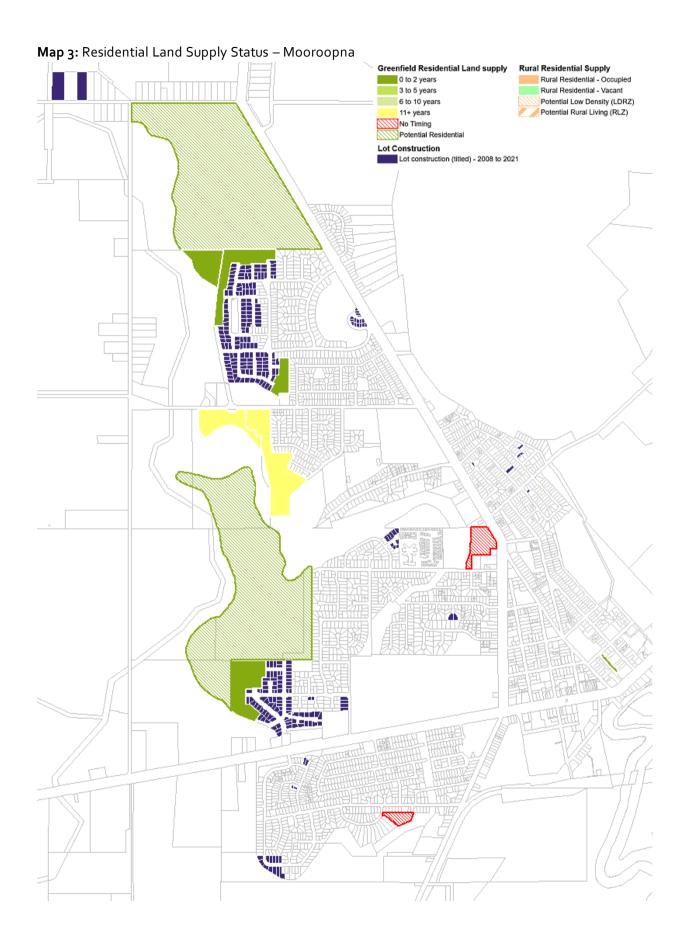




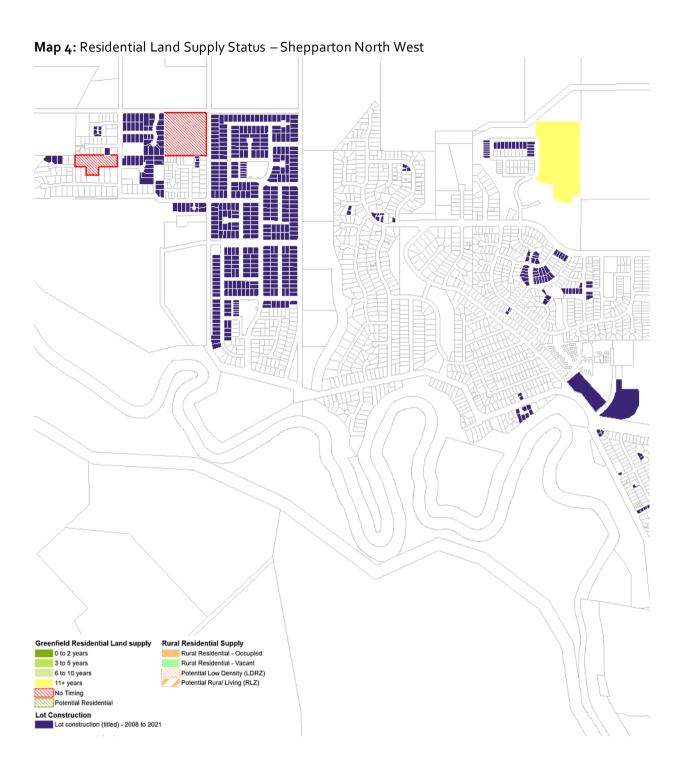
Rural Residential Supply Rural Residential - Occupied Rural Residential - Vacant Potential Low Density (LDRZ) Potential Rural Living (RLZ)

Map 2: Rural Residential Land Supply Status Overview – Shepparton/Mooroopna











Greenfield Residential Land supply Rural Residential Supply 0 to 2 years Rural Residential - Occupied Rural Residential - Vacant 3 to 5 years 6 to 10 years Potential Low Density (LDRZ) Potential Rural Living (RLZ) 11+ years No Timing Potential Residential Lot Construction Lot construction (titled) - 2008 to 2021 11<u>11</u> 12 404

Map 5: Residential Land Supply Status – Shepparton North & North East

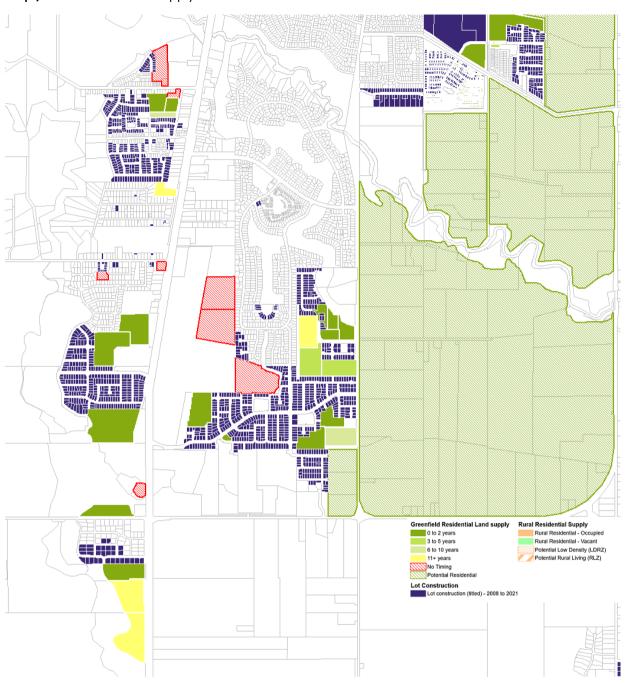


Map 6: Residential Land Supply Status – Shepparton East





Map 7: Residential Land Supply Status – Kialla



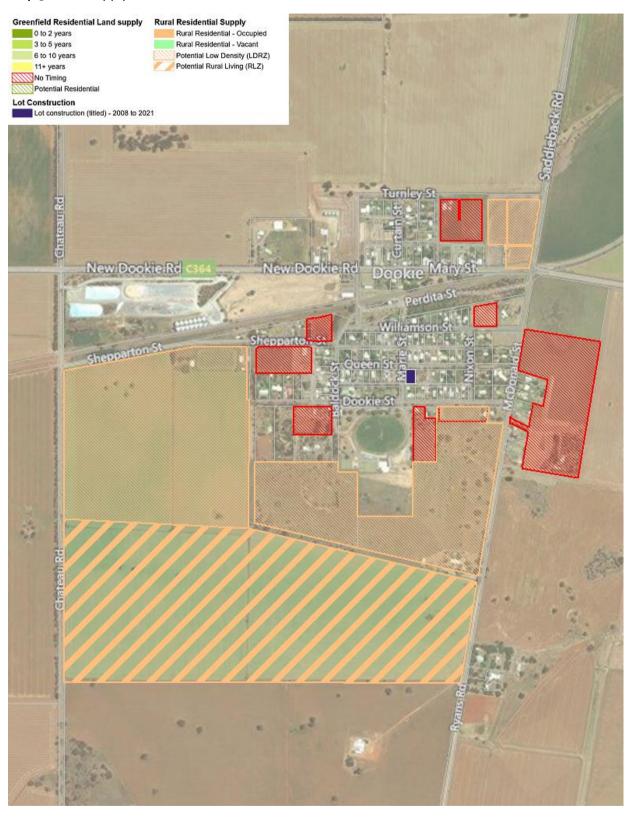


Map 8: Land Supply Profile – Congupna



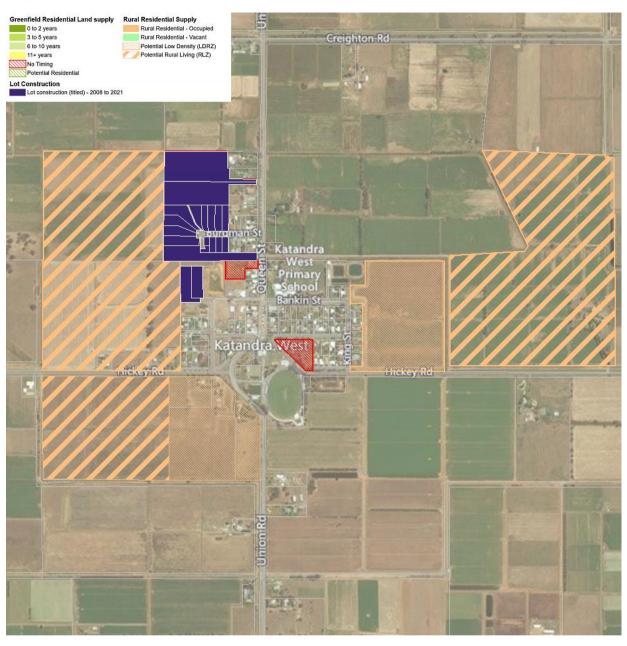


Map 9: Land Supply Profile – Dookie



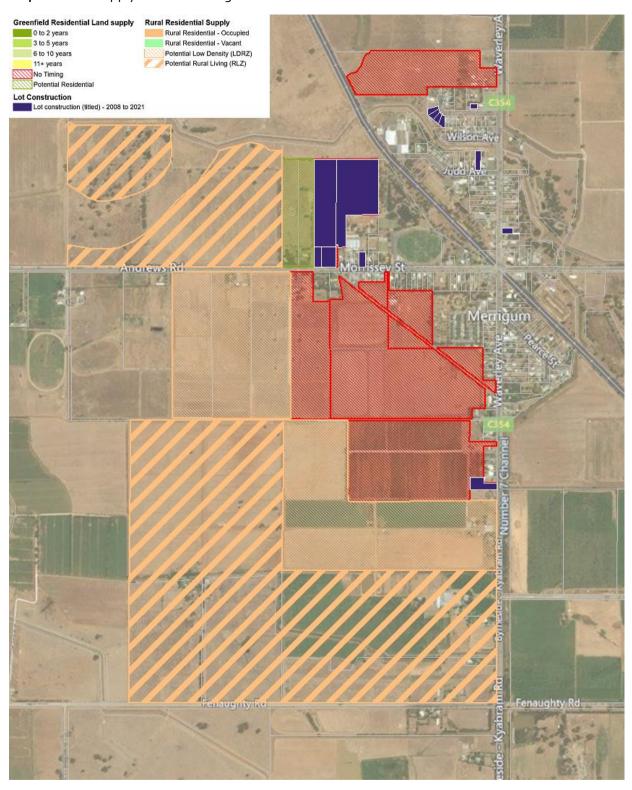


Map 10: Land Supply Profile – Katandra West



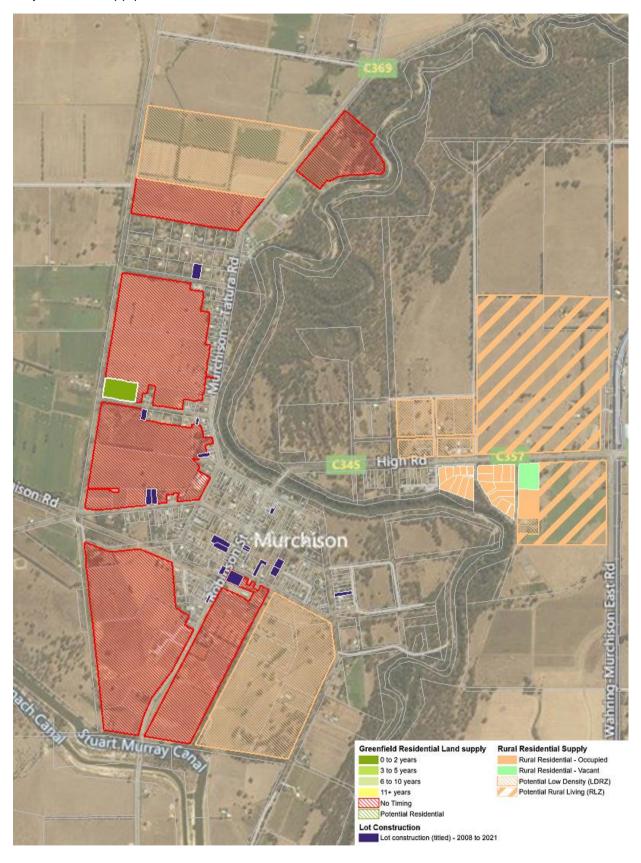


Map 11: Land Supply Profile – Merrigum





Map 12: Land Supply Profile – Murchison/Murchison East



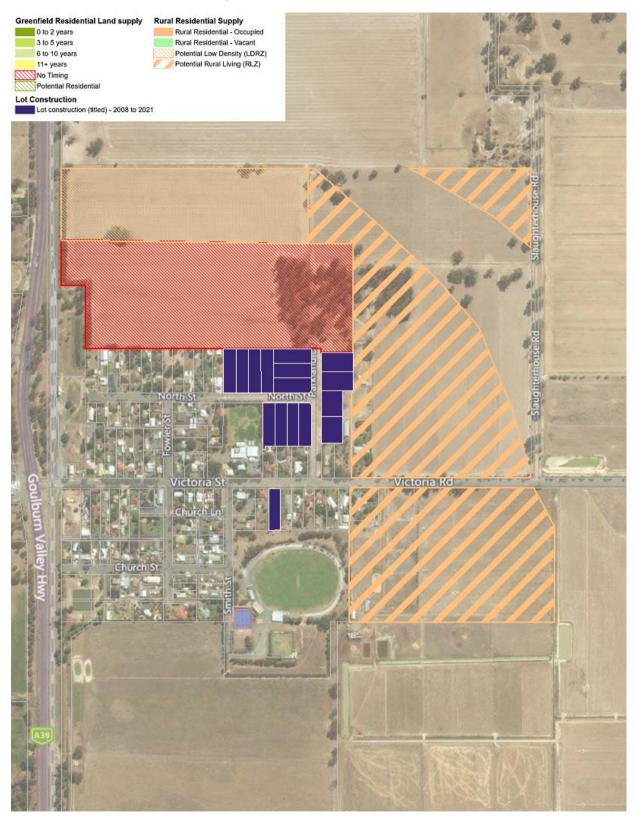


Map 13: Land Supply Profile – Shepparton East



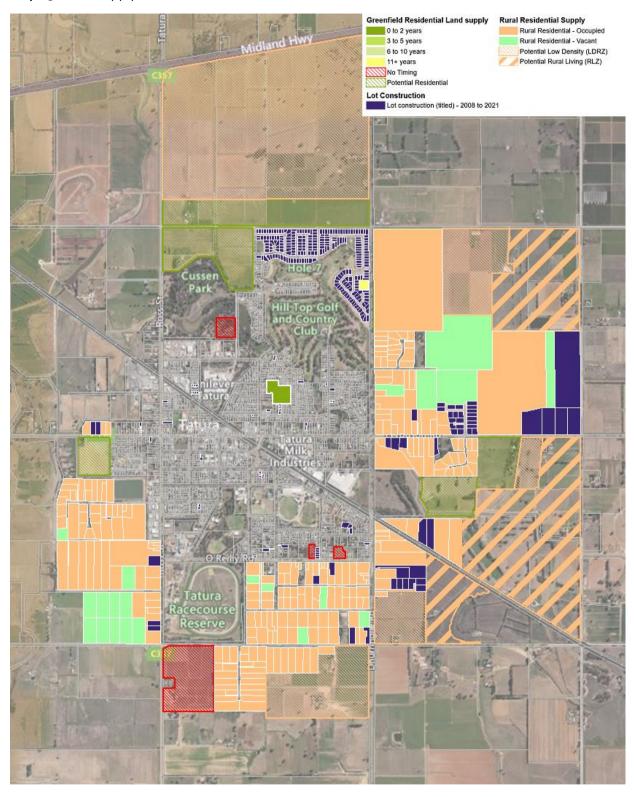


Map 14: Land Supply Profile – Tallygaroopna



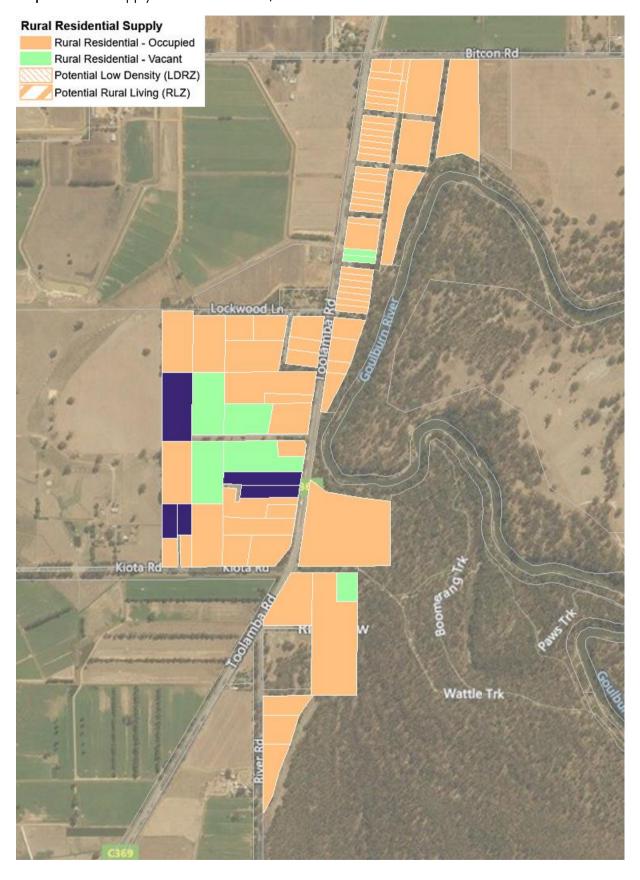


Map 15: Land Supply Profile – Tatura



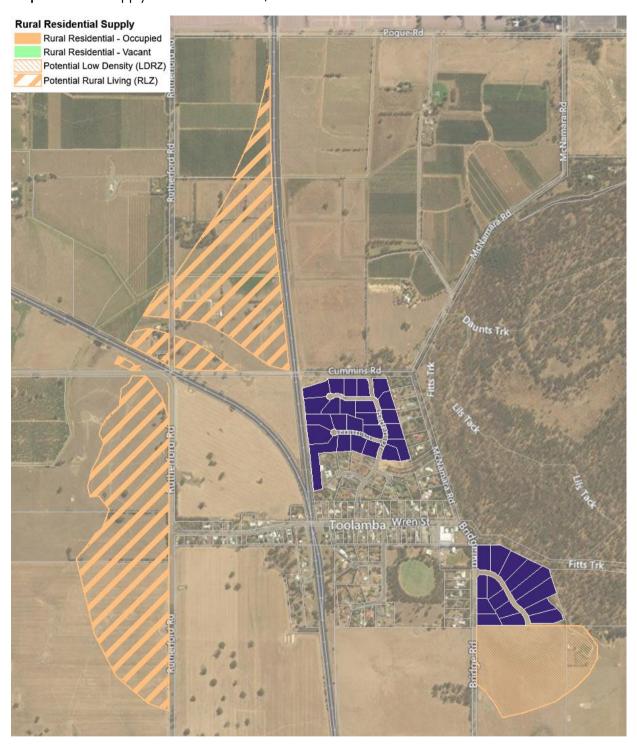


Map 16a: Land Supply Profile – Toolamba/Old Toolamba



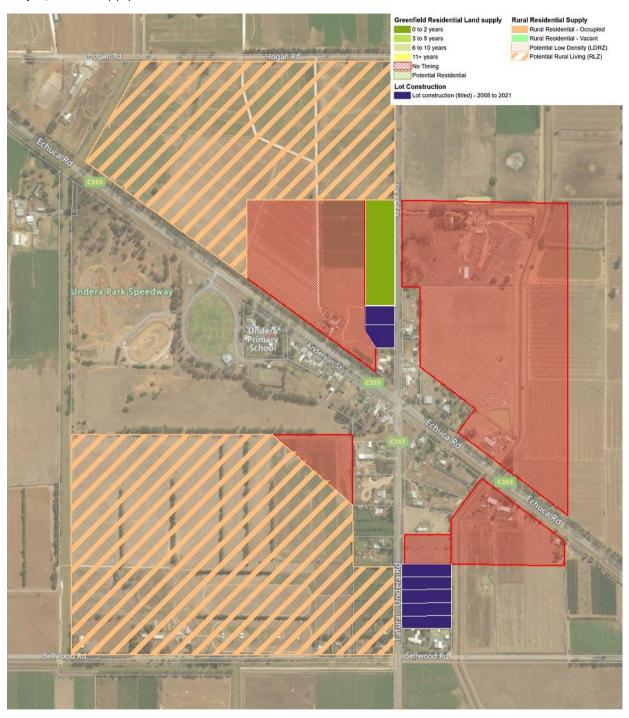


Map 16b: Land Supply Profile – Toolamba/Old Toolamba





Map 17: Land Supply Profile – Undera





6.0 Adequacy of Land Stocks

Key Findings

In terms of zoned broadhectare residential land stocks it is estimated based on the identified supply and projected demand scenarios, there are sufficient land stocks to satisfy between **8 to 14 years** of demand across the Greater Shepparton municipality.

In addition, there are sufficient unzoned broadhectare residential land stocks to satisfy over 25 of demand.

Spatial Economics consider the above measure over-states the years of undeveloped greenfield supply. If it is assumed that the majority of land stocks identified to be developed over the next two years is achieved, the lot potential identified in the 11+ years and the No-Timing¹ category is excluded (as these land parcels have significant land development constraints, fragmentation, planning issues, existing uses etc) - the adequacy of undeveloped land stocks significantly declines. This would result in a remaining adequacy of around **five years zoned supply**.

With the amount of supply and demand estimated, it is possible to describe the results in years of supply (a simple and understandable measure). For example, it can be stated that there are X years of supply based on projected demand within a given housing market and by supply type.

This succinct way of describing adequacy is standard across most State Governments in Australia and incorporates a wealth of information into a single figure. A series of adequacy numbers can be provided to reflect differing demand scenarios.

It is also possible to describe adequacy in a qualitative sense but with both the private and public sector familiar to this methodology, it seems appropriate to adopt the above approach.

Years of supply can also be linked to trigger points relating to the need for additional land and more importantly triggering specific strategic land use planning responses. The adequacy of broadhectare/major infill residential land supply sources is calculated as a residual taking into account the state of the other supply types.

Analysis has been undertaken to estimate the years of broadhectare residential land stocks for the municipal area of Greater Shepparton – this is outlined below.

6.1 Years of Supply - Greater Shepparton

Three future demand scenarios are used and assessed against the identified stock of undeveloped residential broadhectare land. The demand scenarios are detailed previously in this report. In summary these include:

VIF2019, modified and extended – dwelling forecasts undertaken by the State Government. Dwelling requirements from 2021 to 2036 at 372 per annum or a 1.2% per annum growth rate (note this is comparable to the dwelling growth as measured by the ABS Census from 2011 to 2016).

Higher Growth:— assumes that Greater Shepparton-'s population growth rate rises in 2021 to 1.3% per year — the rate of growth that Albury-Wodonga has experience over the last ten years — and remains at that rate until 2051. Dwelling requirements from 2021 to 2036 at 505 per annum or a 1.6% per annum growth rate.

Lower Growth:— assumes that Shepparton-Mooroopna's population growth drops to 0.7% per year in 2021 and remains at that rate until 2051. This is the rate of growth that Greater Shepparton experienced mid last decade. Dwelling requirements from 2021 to 2036 at 301 per annum or a 1.0% per annum growth rate.

¹ The land identified in the North East PSP area with a No Timing category is included as available supply



The share of broadhectare lot construction activity is assumed at 80% across the City of Greater Shepparton. This benchmarks above are assumed constant over-time and is seen as a conservative assumption.

Table 14 summarise the estimated years of broadhectare residential supply by demand scenario as at September 2021.

In terms of **zoned** broadhectare residential land stocks, it is estimated based on the identified supply and projected demand scenarios, there are sufficient land stocks to satisfy between **8 to 14 years** of demand across Greater Shepparton municipality. In addition, there are sufficient **unzoned** broadhectare residential land stocks to satisfy over 25 years of demand.

Table 14: Estimated Years of Broadhectare Residential Land Supply, 2021

	Zoned	Unzoned	Total
VIF2019 (extended)	11	25+	25+
High Growth	8	18	25+
Low Growth	14	25+	25+

Source: Spatial Economics Pty Ltd

However, Spatial Economics consider the above measure over-states the years of undeveloped greenfield supply. If it is assumed that the majority of land stocks identified to be developed over the next two years is achieved, the lot potential identified in the 11+ years and the No-Timing¹ category is excluded (as these land parcels have significant land development constraints, fragmentation, planning issues, existing uses etc) - the adequacy of undeveloped land stocks significantly declines. This would result in a remaining adequacy of around **five years zoned supply**.

Spatial Economics consider that the total stock of zoned broadhectare residential land is sufficient to meet short-term requirements. However, Spatial Economics recommend that the stock of zoned residential broadhectare land is increased in the short-term to maintain both a) a competitive land supply market; and b) meeting underlying dwelling requirements for the medium and longer term.

Spatial Economics recommend:

- 1. Increasing the stock of zoned broadhectare land for the urban centre of Shepparton-Mooroopna in the short term.
- 2. Increasing the stock of zoned broadhectare land for the township of Tatura in the short-term.

The years of supply is not only dependent on the projected number of dwellings in total, the share of total dwellings within broadhectare supply areas but also the timely realisation of the identified supply opportunities. Therefore, caution is highlighted in the interpretation of the years of broadhectare land supply, as a major assumption is that the identified supply is realised in a development timing setting.

Key Issues

Spatial Economics consider that the total stock of zoned broadhectare residential land is sufficient to meet short-term requirements. However, Spatial Economics recommend that the stock of zoned residential broadhectare land is increased in the short-term to maintain both a) a competitive land supply market; and b) meeting underlying dwelling requirements.

For both the urban centres of Shepparton/Mooroopna and Tatura, there is a need in the short-term to increase the stock of zoned broadhectare residential land to ensure ample zoned stocks are available to ensure a competitive land supply industry. This is particularly urgent for Tatura, as currently, undeveloped broadhectare land stocks are effectively depleted.

¹ The land identified in the North East PSP area with a No Timing category is included as available supply



There are ample identified unzoned stocks in both urban centres to meet this need.

From a land supply and demand perspective Spatial Economics consider that to effectively maintain a competitive residential land supply market across distinct urban centres (i.e. Shepparton/Mooroopna and Tatura) there is need to maintain 10 to 15 years supply of zoned residential broadhectare land supply.

It is imperative that ample zoned residential supply opportunities are provided within each major identified housing market within Shepparton/Mooroopna to allow both a competitive land supply market and locational choice to meet consumer preference—in the context of established strategic land use planning objectives and land use capability.

It is recommended that any major rezoning of broadhectare land is prioritised based on localised/housing market needs in the context of existing zoned residential broadhectare stocks.

