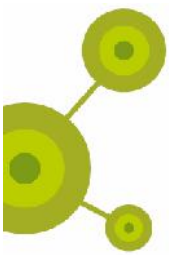
RESIDENTIAL LAND SUPPLY MONITORING PROJECT

G21 REGION (GEELONG)

June 2015

Final



Spatial Economics

Principal Author: Dale Stokes
Reviewed by: Peter Marshall (Director)
01/06/2015

Spatial Economics Pty Ltd
ABN: 56 134 066 783
www.spatialeconomics.com.au
info@spatialeconomics.com.au

LIST OF GRAPHS

LIST OF TABLES

LIST OF MAPS

EXECUTIVE SUMMARY

The following report (residential land component – Geelong) forms part of the G21 Regional Growth Plan (Growth Plan) Implementation Plan. The Growth Plan manages growth and land use pressures to 2050 for the G21 Region which includes the geographic areas of the City of Greater Geelong, Colac-Otway Shire, Surf Coast Shire, Borough of Queenscliffe and the southern section of Golden Plains Shire. The Growth Plan identified four key actions to be investigated as part of the Implementation Plan. This report forms part of one these four actions, namely the provision of:

> *"… a Residential and Industrial Land Supply Report and a Land Supply Monitoring and Reporting Tool that will enable more accurate reporting and monitoring of land supply across the region.*"

The following is an update of the residential land supply assessment undertaken in 2013 for the municipal area of Geelong.

Since the last residential land supply assessment was undertaken for the municipal area of Geelong in March 2013, there has been noteworthy changes in the stock/composition of undeveloped residential land parcels, projected dwelling demand, lot construction and subsequent adequacy or years of residential land supply.

At March 2013, it was reported across the municipal area of Geelong there was a broadhectare/major infill lot potential of 48,244, of which 28,024 lots were zoned to support residential lot/dwelling construction.

As at March 2015, the total broadhectare/major infill residential lot stock increased to 58,625. This increase in residential land supply is primarily due to the inclusion of approximately 1,100 hectares of land for residential development purposes in Lovely Banks.

The stock of zoned residential land stocks has increased from approximately 28,000 to 38,200 lots, this increase in zoned lot stock is primarily due to the completion of structure plans within the Armstrong Creek land release area.

Residential lot construction activity has illustrated increasing trends since the last assessment. In 2011/12 there was a total of 1,385 residential lots constructed, increasing to 1,600 in 2012/13, 2,581 in 2013/14 and to the March quarter 2015 nearly 1,800 lots have been constructed. In 2013/14, a record high of 86% of all lot construction was from broadhectare/major infill sites.

Projected dwelling requirements sourced from the State Governments' population projections have been revised since the previous (2013) residential land supply assessment. The revised projections illustrate a decrease in the projected dwelling requirement from 2011 to 2031. The previous projections (VIF 2012) illustrated an average annual dwelling requirement across the municipality of 2,333, the updated projections (VIF 2014) illustrate an average annual dwelling requirement of 2,059.

Based on the updated residential demand and supply information across the municipality at March 2015, the adequacy-years of residential broadhectare/major infill supply has increased. Previously it was reported that there was 18 years of zoned residential land stocks, this has now increased to 25 years of supply. In terms of unzoned stocks or land parcels requiring a precinct structure plan, the years of supply has remained relatively constant at 13 to 14 years of supply.

Recent Activity

From July 2006 to March 2015 there was an average annual residential lot construction of 1,564. Of this lot construction (65%) was broadhectare, followed by minor infill lot construction at 25%, 9% major infill and rural residential at 1%.

The majority (37%) of residential lot construction activity was located within Geelong, followed by Armstrong Creek (13%), Leopold (12%) and Ocean Grove (11%).

Of this total lot construction activity, 643 lots per annum were located within the Bellarine Peninsula Region and 920 lots per annum within the Geelong Urban Region.

From 2010/11 to 2012/13, broadhectare lot production averaged approximately 970 per annum, in 2013/14 broadhectare lot production peaked at 1,859 lots.

As measured to the March Quarter 2015 there has been 1,227 broadhectare lots constructed.

Significant levels of broadhectare lot construction within Armstrong Creek commenced in 2012/13 with 258 lots constructed, increasing to 819 in 2013/14 and 612 lots as measured from July 2014 to March 2015.

Projected Demand

Projected dwelling requirements sourced from VIF 2014 indicate that from 2015 to 2031 there will be a total dwelling requirement of 35,004 (2,059 average per annum).

The average annual projected demand by Region within the municipality of Geelong is:

- Geelong Urban: 1,377 dwellings per annum; and
- Bellarine Peninsula: 682 dwellings per annum.

It is estimated that within the Geelong Urban Region 73% of dwelling requirements were for broadhectare allotments compared to 75% for the Bellarine Peninsula Region. The proportion of broadhectare development as a proportion of all residential development is increasing across the municipality.

Residential Land Supply

As at March 2015. In total there is a residential lot supply of approximately 63,261. This is comprised of:

- 38,223 zoned broadhectare/major infill lots (60% of supply);
- 4,381 vacant urban residential lots (7% of supply);

- 20,410 designated future residential lots (32% of supply);
    - *7,560 Potential residential lots (unzoned) - (12% of supply);*
    - *12,850 UGZ (PSP Required) lots - (20% of supply);* and
- 247 vacant rural residential lots (0.4% of supply).

As at March 2015, there was a residential lot capacity within zoned broadhectare sites of approximately 36,561, of which 21% (7,615 lots) is located in the Bellarine Peninsula Region and the remaining 28,946 in the Geelong Urban Region.

The location of zoned broadhectare residential land stocks is primarily located within the following urban centres:

- Armstrong Creek – 20,075 lots;
- Lara/Avalon – 5,031 lots;
- Geelong – 3,811 lots;
- Ocean Grove – 3,213 lots; and
- Clifton Springs/Drysdale – 2,575 lots.

As at March 2015, there was 4,381 minor infill lots identified. Of these lots, 4,196 were sized less than 1,200sqm or 96% of the identified supply. Vacant lot stock was concentrated within the urban centres of: Geelong (1,289 lots), Ocean Grove (588 lots), Clifton Springs/Drysdale (562 lots) and Armstrong Creek (535 lots).

As at March 2015 across the City of Greater Geelong there was a total lot stock of rural residential allotments of 3,320. Of this stock, 247 lots were vacant, a lot vacancy rate of 9%. A total of 121 hectares of future rural residential land stocks have been identified, all of which is for the purpose of future LDRZ development. The location of the future rural residential land stocks is located in Lara/Avalon.

Adequacy of Land Stocks

Analysis has been undertaken to estimate the years of residential broadhectare land supply for the regions of Geelong Urban and Bellarine Peninsula. In estimating the years of residential land supply only zoned broadhectare/major infill and future residential land supply types are considered.

Dwelling projections sourced from the State Government (VIF2014) and I.d 2015 (commissioned by the City of Greater Geelong) form the basis of demand scenarios and are used to assess the years of residential land stocks, the outcomes are summarised below.

Years of Supply – VIF2014 Population Projection Demand Scenario

In terms of zoned broadhectare/major infill residential land stocks it is estimated based on the identified supply and projected demand, there are sufficient land stocks to satisfy **25 years** of future demand across the municipal area of Geelong, 14 years within the Bellarine Peninsula Region and 30 years across the Geelong Urban Region.

In terms of future residential (unzoned and PSP required land) land supply stocks, there is sufficient land to satisfy an additional **13 years** of projected

demand across the municipal area of Geelong, 10 years within the Bellarine Peninsula Region and 14 years across the Geelong Urban Region.

Years of Supply – I.d 2015 Population Projection Demand Scenario
In terms of zoned broadhectare/major infill residential land stocks it is estimated based on the identified supply and projected demand, there are sufficient land stocks to satisfy **24 years** of future demand across the municipal area of Geelong, 14 years within the Bellarine Peninsula Region and 29 years across the Geelong Urban Region.

In terms of future residential (unzoned and PSP required land) land supply stocks, there is sufficient land to satisfy an additional **13 years** of projected demand across the municipal area of Geelong, 10 years within the Bellarine Peninsula Region and 14 years across the Geelong Urban Region.

*It is considered that there is no need for additional **zoned broadhectare** residential land stocks across the municipal area of Geelong, from a land supply and demand basis. Based on dwelling projections contained within VIF 2014 (the State Governments' population projections) and I.d Consulting 2015 (projections undertaken for the City of Greater Geelong), there is **24 to 25 years** of zoned broadhectare land supply. It is considered that the historic broadhectare lot construction trend demand scenario considerably understates demand, due to historic broadhectare land supply constraints. This demand scenario equates to 33 years supply of zoned stocks.*

*In terms of the future broadhectare land supply stocks (PSP required and unzoned), based on the two dwelling projections contained in VIF 2014 and I.d Consulting 2015, there is an additional **13 years** of supply to cater for projected demand across the municipality.*

1.0 INTRODUCTION

1.1 Context

In 2013, Spatial Economics completed a set of reports on the status of land supply for the G21 region for both residential and industrial land. This report (residential land component) provides an update to the reports produced for G21. There are three separate land supply reports detailing the residential land demand and supply situation for the municipal areas of Greater Geelong, Surf Coast and the southern component of the Golden Plains Shire. The data has not been updated for the Colac-Otway Shire or for the Borough of Queenscliffe.

An online/web based *G21 Land Supply Monitor* has been updated (g21.spatialeconomics.com.au) which allows users to interrogate the land supply information at either a site level or generate custom statistical reports at any geographic level across the G21 Region. In addition, it allows the user to visually represent the land supply information on a site by site basis. The data for 2013 remains accessible and the updated data is shown for the municipalities of Geelong, Surf Coast and Golden Plains (southern component).

1.2 Purpose

The monitoring of land supply is a key tool to assist in the management and development of growth within the G21 Region. The primary purpose of this component of the Implementation Plan (land supply monitoring) is to improve the management of urban growth by ensuring that councils, public utilities, government and the development industry have access to up-to-date and accurate information on residential and industrial land availability, development trends, new growth fronts, and their implications for planning and infrastructure investment.

These Land Supply Reports provide accurate, consistent and updated intelligence on residential and industrial land supply, demand and consumption. This in turn assists decision-makers in:

- maintaining an adequate supply of residential and industrial land for future housing and employment 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.

1.3 G21 Land Supply Reports

The Land Supply Reports (Residential and Industrial) for the City of Greater Geelong, Surf Coast Shire, and the southern component of the Golden Plains Shire are available online at www.G21regionalgrowthplan.com.au

Interactive online land supply maps are also available. The *G21 Land Supply Monitor* enables users to search for specific projects, generate statistical reports and interrogate the land supply information on a parcel by parcel basis.

It includes other related spatial information layers including aerial imagery, zoning, planning scheme overlays and administrative boundaries. It allows users to search for specific land supply areas by region, municipality, street or address.

2.0 APPROACH AND METHODOLOGY

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

Future Dwelling Requirements

The Victorian State Government population and household projections - *Victoria in Future 2014* (VIF2014) provide a sound basis for comparison to other potential alternative dwelling projections as they are developed in the context of State population growth. For these reports we have also used the Id Consulting population and dwelling forecasts. For strategic planning purposes it is prudent to use a range of demand scenarios to test the requirements of land supply. In this report we have used three demand scenarios for residential dwellings:

- dwelling requirements contained in VIF 2014;
- dwelling requirements contained in Id Consulting 2015: and
- demand based on constant broadhectare/major infill lot construction - sourced as average construction since July 2006 to March 2015.

Supply Type Definitions

For this project, there are three major supply types considered for residential land: *broadhectare; established urban area*; and *rural residential.*

Broadhectare is defined as new development on greenfield sites (sites that have not been used for urban development previously or previously subdivided for normal density development), typically on the fringe of the established urban area.

Major Infill is defined as undeveloped land or sites identified for redevelopment within the existing urban area, zoned for residential development, and parent lot or existing lot greater than 5,000sqm and with an expected lot/dwelling yield greater than 10.

Minor Infill (Vacant Urban Lots) is defined as vacant land within the existing urban area or within broadhectare land release areas, zoned for residential development, and existing lot sized less than 5,000sqm.

Potential Residential is land identified by the relevant municipal authority for future residential development and current zoning not supportive of 'normal density' residential development.

UGZ (PSP Required) is land which has an 'Urban Growth Zone' applied, but a precinct structure plan has not yet been approved. It is expected that the majority of this land will be used for residential purposes.

Rural Residential is defined through the zoning, in particular Low Density Rural Residential (LDRZ) and Rural Living (RLZ) zones.

Future Rural Residential is land identified by the relevant municipal authority for future rural residential development and current zoning not

supportive such residential development. Future rural residential lands can be for the purpose of either Low Density Rural Residential (LDRZ) or Rural Living (RLZ) development.

In the residential land supply assessments for Surf Coast and the southern section of Golden Plains, both broadhectare and Major infill supply types have been merged and assessed as a combined supply source.

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.

Construction activity has been assessed on an annual basis as at July of each year from 2006 to 2014, additional analysis has been included to identify lot construction to March 2015.

Lot Yields

Lot yields have been established on a parcel by parcel basis for the following land supply types: major infill, broadhectare and potential residential (unzoned).

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, municipal strategic statements etc.

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 site of the land parcel i.e. a 1ha site will have less take-outs than say a 50ha site. Further intelligence and verification is sourced from local council planning officers.

A small number of supply sites have been allocated a zero lot yield due to a number of varying factors, these include but not limited to:

- unlikely to be developed over the next 15 years due to issues such as significant ownership fragmentation on relatively small parcels of land;
- subdivision restricted until sewerage is provided;
- the site is within an area of low demand and is unlikely to be developed with any certainty within the foreseeable future; and
- potential/likely lot density could be low.

Sites with a zero lot yield have been identified and are summarised by location and area.

Development Timing

Staging for lot construction or development timing has been established for four broad time periods, namely:

- 0 to 2 years (2015–2016);
- 3 to 5 years (2017–2019);
- 6 to 10 years (2020–2024);
- 11 years or more (2025 and beyond); and
- No timing.

Land identified for development over the next 2 years is available for residential purposes, and the required permits to subdivide the land generally exist and are being implemented.

Land parcels identified for development in 3 to 5 years are normally zoned, or may have rezonings finalised or approaching finalisation. They may also have permits to subdivide the land. Some degree of confidence can be applied to the timing and staging of these developments.

Confidence about lot yields and staging declines for developments proposed beyond 5 years as it is industry practice to regard developments beyond this period with less certainty in terms of exact staging, timing and yields.

A no timing category has been established for potential residential development sites that are within low demand areas (generally small outlying settlements). These sites typically in addition are allocated a zero potential lot yield. They are identified as potential and are measured by area.

Where land has been identified as 'Potential Residential' there are no associated timings, as timing cannot be confidently applied until such time the land is zoned to allow residential development to occur. Similarly, land which is within an Urban Growth Zone, where a precinct structure plan has not been approved, falls into a similar category. At such time a precinct structure plan has been prepared and approved, potential timings of residential development associated to these areas can be applied with a higher degree of confidence.

It should also be noted that timing of lot construction is cyclical, and highly dependent on underlying demand, economic cycles and industry capacity. This can mean that stated development intentions will vary from on-the-ground construction activity over time and by location. However, it is highly accurate in terms of the general direction and amount of growth.

Development timings have only been established for both major infill land supply stocks and broadhectare land.

Anticipated development timings are primarily sourced from existing planning permits, historic and current market activity, knowledge of industry capacity, projected demand and most importantly information and guidance from local council staff and the land development industry (UDIA Vic – Geelong Chapter).

Rural Residential
Rural Residential allotments have been established via the assessment of the cadastre and zoning information. All allotments zoned either Rural Living (RLZ) and Low Density Residential (LDRZ) is included. This information has primarily been assessed via aerial imagery interpretation and validation via the pertinent municipality's valuation database.

Land Supply Assessment Areas
For the purpose of this report land supply assessment areas have been based on broad geographic regions or specific townships (titled as *urban centres)*. The following regions and urban centres have specific land assessment areas (years of supply):

- City of Greater Geelong:
    - Geelong Urban Region (These sub-regions of Geelong remain geographically the same as in the 2013 report. This region encompassed the Statistical Local Areas (SLAs) of Corio – Inner, Geelong West, Newtown, Geelong, South Barwon and Greater Geelong Pt- C in the 2013 report. VIF and iD Consulting now report by SA2 and suburbs respectively. The current data has been assessed to reflect this previous division, hence the two reports are comparable); and
    - Bellarine Peninsula Region (comprised the SLAs of Greater Geelong– Pt B and Bellarine Inner in 2013 and again the current data has been assessed so that this region remains geographically the same as in 2013 and hence the 2013 and 2015 reports are comparable).
- Surf Coast Shire:
    - Torquay – Jan Juc;
    - Winchelsea;
- Golden Plains Shire:
    - Bannockburn.

The land supply assessment results in quantitative assessments of the supply, demand and adequacy (year's supply of land stocks).

Adequacy (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 urban centre or region and by supply type (i.e. zoned and unzoned). In the last decade the Victorian State Government has used a broad benchmark for land supply for residential land at a municipal level of at least 15 years.

In assessing the number of years of broadhectare/major infill and designated potential (unzoned) residential land supply, only a component of the total projected demand is apportioned to estimate future demand. The remainder is

apportioned for future demand for other forms of residential supply such as minor infill and rural residential.

Adequacy has been determined for the land supply assessment areas listed above as well as for the total municipal area of Geelong.

RESIDENTIAL LAND – GEELONG

This section of the report covers the trends and shifts in building activity across the municipal area of Geelong and provides an insight into proposed future residential development activity.

The information in this section has been compiled resulting from a number of comprehensive consultations with key representatives from the City of Greater Geelong, UDIA (Vic) – Geelong chapter members and representatives from Barwon Water. It is supported by datasets from the Australian Bureau of Statistics.

3.0 RECENT ACTIVITY

This section of the report details the recent activity of residential lot construction and dwelling approvals achieved across the Geelong municipal area. Residential lot construction activity is detailed from July 2006 to March 2015 and is presented at an urban centre level, region and municipal level. Residential lot construction is further analysed by supply type/location, namely:

- Minor Infill;
- Major Infill;
- Broadhectare; and
- Rural Residential.

3.1 Residential Building Approvals

As measured from July 2006 to July 2014 residential building approval activity within the Greater Geelong municipal area has averaged 1,865 per annum, the amount of building approval activity as measured on an annual basis has illustrated a degree of variability. In 2008/09 there was a low of 1,300 residential building approvals, increasing substantially the following year with 2,144 approvals. From the two financials from 2010 building approval activity were around 1,900 per annum respectively, increasing to 2,459 in 2013/14 – a peak in terms of activity as measured since 2001/02.

Graph 1 illustrates the amount of building approval activity by dwelling type on an annual basis for the municipal area of Geelong.

The vast majority of building approvals (87%) since July 2006 have been separate houses.

3.2 Residential Lot Construction

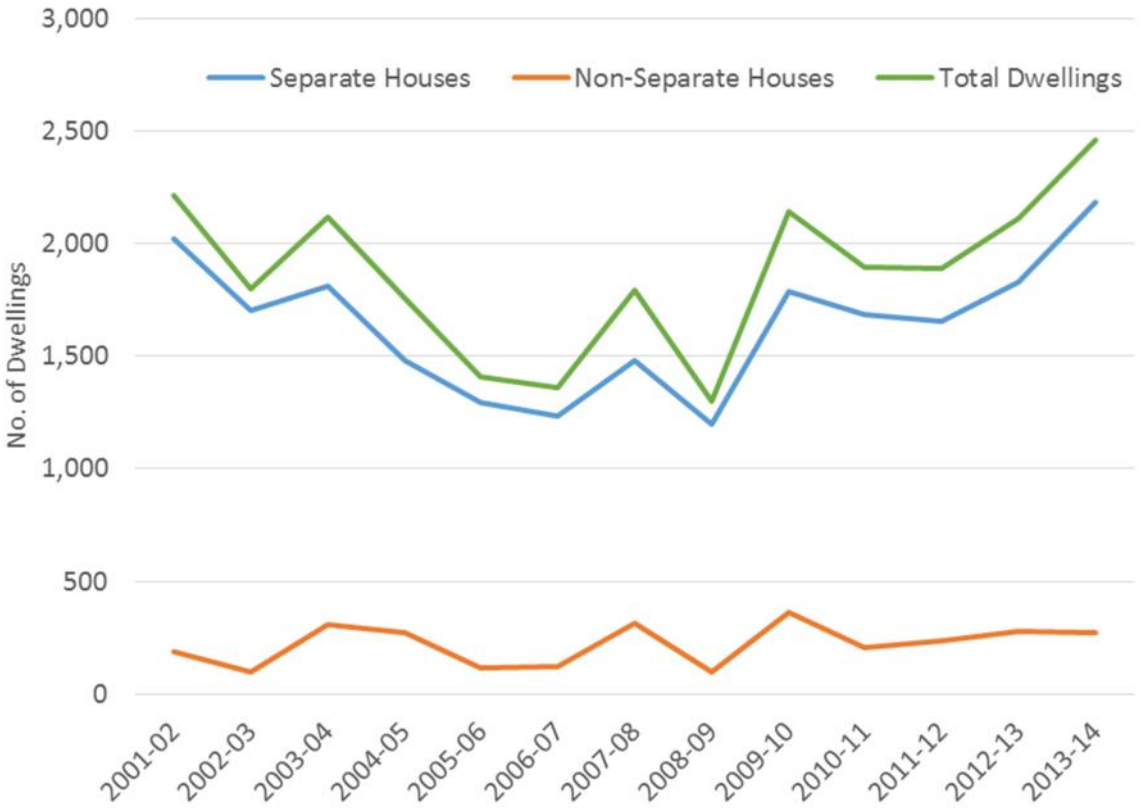
Analysis has been undertaken to determine on a lot by lot basis the location and amount of residential lot construction activity from July 2006 to March 2015. Lot construction activity has been classified into distinct supply types and or supply locations as defined above.

Graph 2 summarises the amount of residential lot construction by supply type for the municipal area of Geelong. From July 2006 to March 2015 there was an average annual residential lot construction of 1,564. Of this lot construction (65%) was broadhectare, followed by minor infill lot construction at 25%, 9% major infill and rural residential at 1%.

In comparison to the annual volume of residential building approvals, residential lot construction varies considerably. Residential lot construction was the lowest in 2006/07 at 601 lots and 'peaked' in 2013/14 at 2,581 lots. As measured to the March Quarter 2015 there have been 1,772 residential lots constructed.

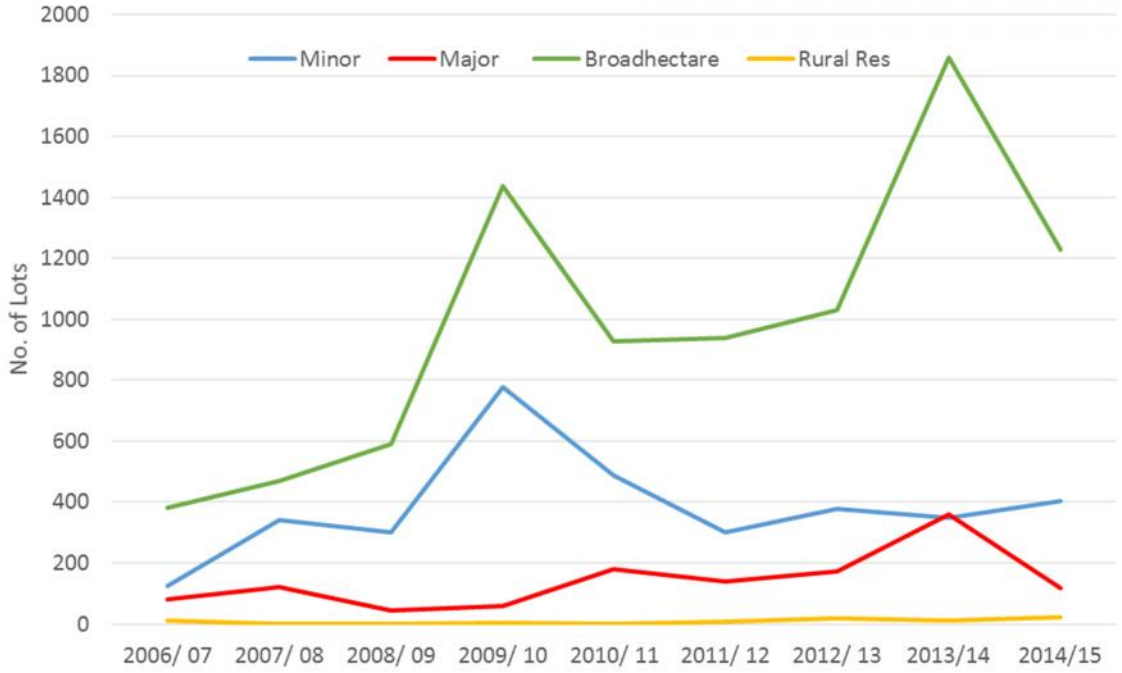
The lot construction variance over-time is a typical trend illustrated from the land development industry and indicates no significant supply or policy issues.

Graph 1: Number of Residential Building Approvals



Source: Australian Bureau of Statistics, Catalogue No.8731.0

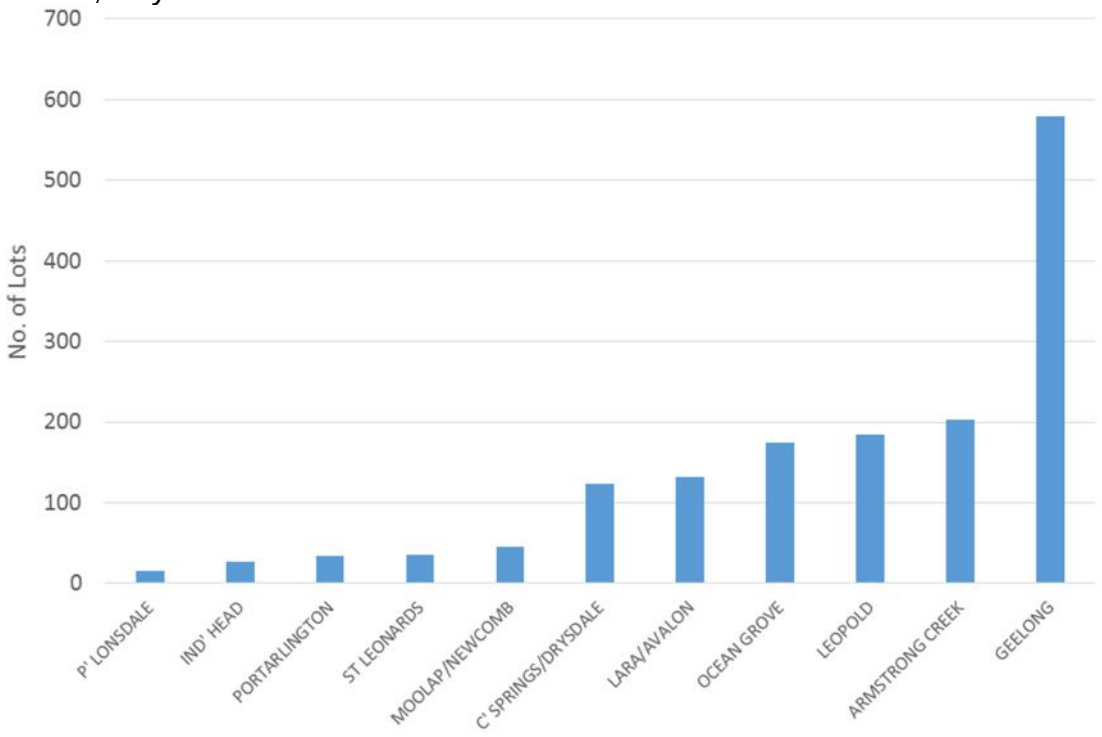
Graph 2: Number of Residential Lots Constructed by Supply Type, July 2006 to March 2015



Source: Spatial Economics Pty Ltd

Graph 3 illustrates the average annual volume of all residential lot production by urban centre. The majority (37%) of residential lot construction activity was located within Geelong, followed by Armstrong Creek (13%), Leopold (12%) and Ocean Grove (11%).

Graph 3: Average Annual Number of Residential Lots Constructed by Urban Centre, July 2006 to March 2015



Source: Spatial Economics Pty Ltd
Note: Includes – broadhectare, major infill, minor infill and rural residential lot construction.

3.2.1 Minor Infill Lot Construction

Minor infill lot construction activity as measured from July 2006 to March 2015 across the Geelong municipal area averaged 396 lots per annum. This represents 25% of all residential lot construction activity across the municipality.

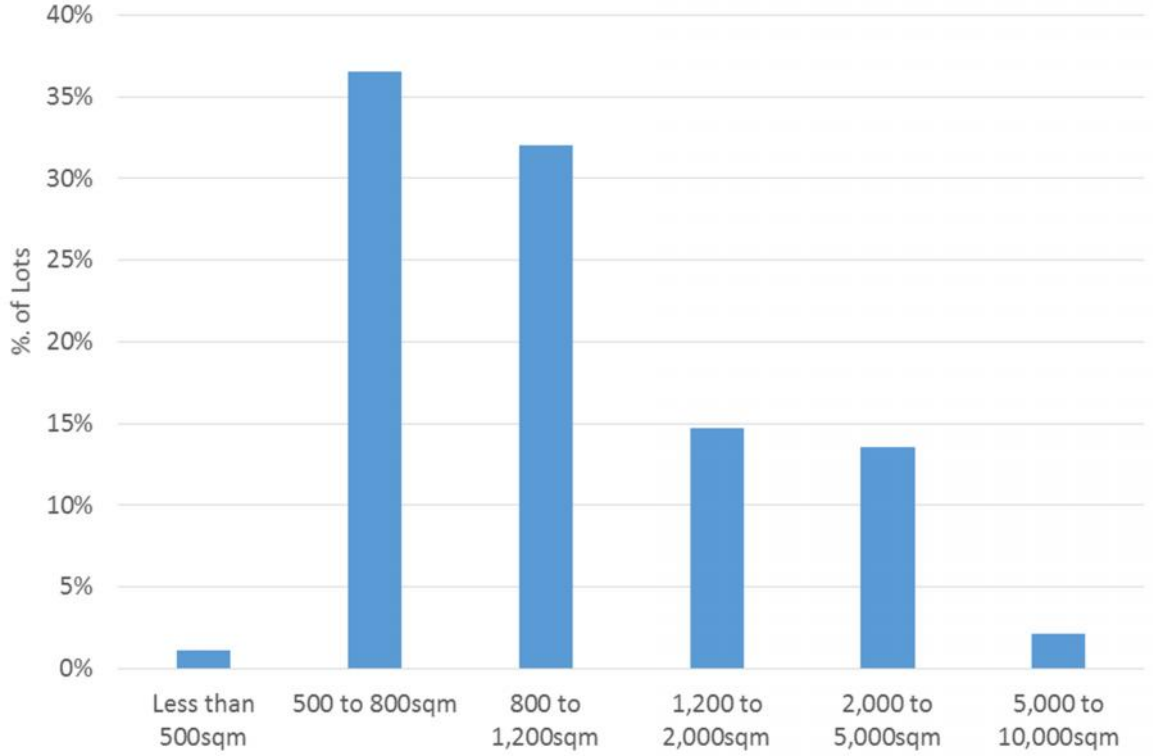
Minor infill lot construction activity was primarily located in the urban centre of Geelong (56% of activity or 222 lots per annum) and to a lesser degree in Ocean Grove (13% of activity or 53 lots per annum) and Moolap/Newcomb (27 lots per annum).

As measured annually from July 2006 to March 2015, the amount of minor infill lot construction activity has varied significantly. In 2006/07 there was approximately 125 minor infill lots constructed increasing to 340 lots constructed in the following year. In 2009/10, minor infill lot construction 'peaked' at 777 lots, steadily declining to 299 in 2011/12. Since then, the quantum of minor infill lot construction activity has increased to 379 the following year and 350 in 2013/14.

As measured to the March Quarter 2015 there were 404 minor infill lots constructed.

Of the 3,462 minor infill lots constructed since July 2006, 84% were constructed on 'parent' lots sized less than 2,000sqm, of these, 1,302 were constructed on parent lots sized less than 800sqm. There were 468 lots constructed (14%) on parent lots sized from 2,000 to 5,000sqm. Graph 4 summarises the volume of minor infill lot construction by 'parent' lot size cohorts.

Graph 4: Parent Lot Size of Minor Infill Lot Subdivision, July 2006 to March 2015



Source: Spatial Economics Pty Ltd
Note: Parent lot size refers to the size of the allotment prior to subdivision.

3.2.2 Major Infill Lot Construction

Major infill lot construction activity as measured from July 2006 to March 2015 across the City of Greater Geelong averaged 146 lots per annum. This represents 9% of all residential lot construction activity across the municipality.

Major infill lot construction activity was primarily located in the urban centre of Geelong, with 97 major infill lots constructed per annum. Followed by Leopold with 30 major infill lots constructed per annum and Moolap/Newcomb with 17.

As measured to the March Quarter 2015 there were 117 major infill lots constructed.

Since July 2006, the majority of major infill activity across the municipal area of Geelong has been on remnant broadhectare sites as opposed to redevelopment sites. It is considered based on identified future supply areas that this will change to a higher proportion of redevelopment site contribution to major infill activity.

3.2.3 Broadhectare Lot Construction

Broadhectare lot construction activity as measured from July 2006 to March 2015 across the municipality averaged 1,013 lots per annum. This represents 65% of all residential lot construction. Of this lot construction activity, 435 lots per annum were located within the Bellarine Peninsula Region and 577 lots per annum within the Geelong Urban Region.

Broadhectare lot construction activity was located primarily in the urban centres of:

- Geelong - 260 lots per annum;
- Armstrong Creek – 203 lots per annum;
- Leopold - 147 lots per annum;
- Ocean Grove - 122 lots per annum;
- Lara/Avalon - 114 lots per annum; and
- Clifton Springs/Drysdale - 98 lots per annum.

Significant levels of broadhectare lot construction within Armstrong Creek commenced in 2012/13 with 258 lots constructed, increasing to 819 in 2013/14 and 612 lots as measured from July 2014 to March 2015.

As measured annually from July 2006 to March 2015, the amount of broadhectare lot construction activity has varied significantly. In 2006/07 there was approximately 382 broadhectare lots constructed, increasing to 1,403 in 2009/10. From 2010/11 to 2012/13, broadhectare lot production averaged approximately 970 per annum, in 2013/14 broadhectare lot production peaked at 1,859 lots.

As measured to the March Quarter 2015 there has been 1,227 broadhectare lots constructed.

3.2.4 Rural Residential Lot Construction

Rural residential lot construction activity as measured from July 2006 to March 2015 across the City of Greater Geelong has averaged 9 lots per annum. This represents 0.6% of all residential lot construction activity across the municipality.

Of this lot construction activity – 34% was zoned Low Density Residential (LDRZ) and 66% Rural Living (RLZ).

From July 2006 to March 2015 there was an average annual residential lot construction of 1,564. Of this lot construction (65%) was broadhectare, followed by minor infill lot construction at 25%, 9% major infill and rural residential at 1%.

The majority (37%) of residential lot construction activity was located within Geelong, followed by Armstrong Creek (13%), Leopold (12%) and Ocean Grove (11%).

Of this total lot construction activity, 643 lots per annum were located within the Bellarine Peninsula Region and 920 lots per annum within the Geelong Urban Region.

Broadhectare lot construction activity was located primarily in the urban centres of:

- *Geelong - 260 lots per annum;*
- *Armstrong Creek – 203 lots per annum;*
- *Leopold - 147 lots per annum;*
- *Ocean Grove - 122 lots per annum;*

- *Lara/Avalon - 114 lots per annum; and*
- *Clifton Springs/Drysdale - 98 lots per annum.*

Significant levels of broadhectare lot construction within Armstrong Creek commenced in 2012/13 with 258 lots constructed, increasing to 819 in 2013/14 and 612 lots as measured from July 2014 to March 2015.

From 2010/11 to 2012/13, broadhectare lot production averaged approximately 970 per annum, in 2013/14 broadhectare lot production peaked at 1,859 lots.

As measured to the March Quarter 2015 there has been 1,227 broadhectare lots constructed.

4.0 RESIDENTIAL LAND SUPPLY

This section of the report details the stock (measured in lots) of residential land across the City of Greater Geelong as at March 2015. Residential lot stock/supply is presented at an urban centre, region and municipal level. Residential land supply is further analysed by supply type/location, namely:

- Minor Infill (vacant 'urban' lots);
- Broadhectare/Major Infill;
- Future Residential –
    - Potential residential (unzoned);
    - UGZ (PSP Required); and
- Rural Residential.

For both major infill and broadhectare land supply areas, anticipated lot construction timing is presented. This refers to the likely timing of lot construction, not dwelling construction. It is considered, that the level of actual lot construction activity will align closely to recent construction trends (particularly in the short to medium term). However, the location of the anticipated lot construction activity illustrated will generally commence development (e.g. 0-2 years), although complete 'build-out' will not be achieved within the stated time-frames.

Table 1 details the residential land supply, measured in lots, by supply type across the municipality as at March 2015. In total there is a residential lot supply of approximately 63,261. This is comprised of:

- 38,223 zoned broadhectare/major infill lots (60% of supply);
- 4,381 vacant urban residential lots (7% of supply);
- 20,410 designated future residential lots (32% of supply);
    - *7,560 Potential residential lots (unzoned) - (12% of supply);*
    - *12,850 UGZ (PSP Required) lots - (20% of supply);* and
- 247 vacant rural residential lots (0.4% of supply).

Each of the supply types are further detailed below, including maps of each of the supply type, including the location of recent residential lot construction activity.

Table 1: Residential Lot Potential by Supply Type, March 2015

Region/Urban Centre/LGA	Broadhectare /Major Infill	Vacant 'Urban' Lots	Potential Residential (unzoned)	UGZ (PSP Required)	Rural Residential	Total Lots
Bellarine Peninsula	***7706***	***2408***	***5645***		***113***	***15872***
BREAMLEA		4				**4**
CLIFTON SPRINGS/DRYSDALE	2575	562	2295		27	**5459**
CURLEWIS					1	**1**
INDENTED HEAD	198	204				**402**
LEOPOLD	217	288	1261		13	**1779**
MOOLAP/NEWCOMB	83	53			30	**166**
OCEAN GROVE	3221	588	436		10	**4255**
POINT LONSDALE	937	72				**1009**
PORTARLINGTON	335	301	250		12	**898**
ST LEONARDS	140	336	1403			**1879**
WALLINGTON					20	**20**
Geelong Township	***30517***	***1973***	***1915***	***12850***	***134***	***47389***
ANAKIE		8				**8**
ARMSTRONG CREEK	20075	535	600	850		**22060**
BATESFORD					1	**1**
CERES		5				**5**
GEELONG	5382	1289	420		21	**7112**
LARA/AVALON	5031	133	895		69	**6128**
LOVELY BANKS/BATESFORD	29	3		12000	43	**12075**
Geelong LGA	**38223**	**4381**	**7560**	**12850**	**247**	**63261**

Source: Spatial Economics Pty Ltd

4.1 Minor Infill Supply (Vacant Urban Lots)

A parcel by parcel assessment was undertaken to identify minor infill supply, specifically zoned vacant allotments sized less than 5,000sqm. All vacant allotments are zoned to support urban residential development (e.g. TZ, MUZ, GRZ, RGZ, and NRZ). The identification of vacant allotments sized less than 5,000sqm does not provide an estimated dwelling yield. Rather it simply identifies the vacant allotment by lot size, zoning and location.

Dwelling yields on such allotments can vary significantly, examples range from:

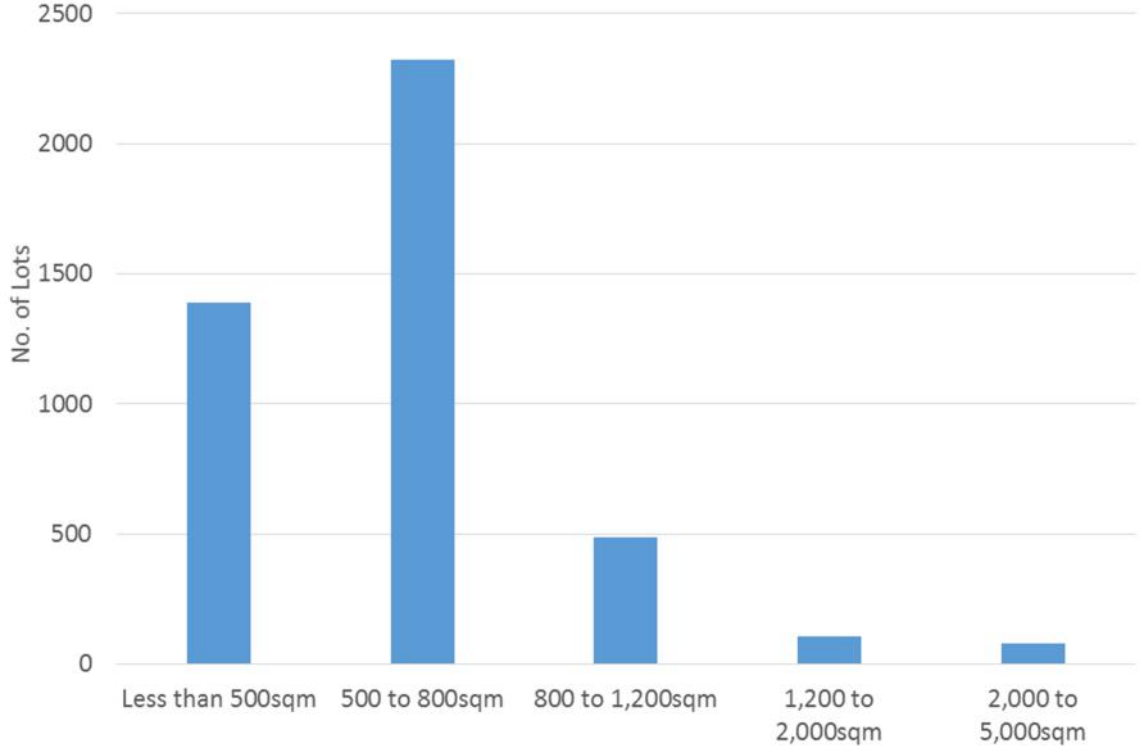
- 800sqm vacant allotment within a broadhectare estate typically would yield one dwelling;
- 800sqm vacant allotment within the urban centre, could typically range from one to four dwellings; and
- 5,000sqm allotment within a township zone (un-sewered) one dwelling versus anything from five plus dwellings within a larger urban settlement.

As at March 2015, there was 4,381 minor infill lots identified. Of these lots, 4,196 were sized less than 1,200sqm or 96% of the identified supply. In addition there were:

- 108 vacant lots sized between 1,200 to 2,000sqm; and
- 77 lots sized from 2,000sqm to 5,000sqm.

Graph 5 summarises the size distribution of identified minor infill supply. Of these vacant allotments, 55% were located within the Bellarine Peninsula Region and the remainder in the Geelong Urban Region. Vacant lot stock was concentrated within the urban centres of: Geelong (1,289 lots), Ocean Grove (588 lots), Clifton Springs/Drysdale (562 lots) and Armstrong Creek (535 lots).

Graph 5: Minor Infill Supply – Number of Vacant Zoned Residential Allotments, by Lot Size Cohort, 2015



Source: Spatial Economics Pty Ltd

4.2 Major Infill Supply

As at March 2015, there was a residential lot capacity within zoned major infill sites of approximately 1,694, of which the vast majority was located in the urban area of Geelong.

Based on existing planning permits, recent construction activity and Council feedback it is anticipated that over the next five years, on average 106 lots/dwellings per annum will be constructed within existing zoned major infill areas. Historically, major infill lot construction has averaged 146 per annum.

4.3 Broadhectare Supply

As at March 2015, there was a residential lot capacity within zoned broadhectare sites of approximately 36,561, of which 21% (7,615 lots) is located in the Bellarine Peninsula Region and the remaining 28,946 in the Geelong Urban Region.

The location of zoned broadhectare residential land stocks is primarily located within the following urban centres:

- Armstrong Creek – 20,075 lots;
- Lara/Avalon – 5,031 lots;
- Geelong – 3,811 lots;
- Ocean Grove – 3,213 lots; and
- Clifton Springs/Drysdale – 2,575 lots.

Table 2 identifies the lot yield and estimated development timing of zoned broadhectare lot stock.

Table 2: Anticipated Lot Construction Activity – Broadhectare, 2015

Region/Urban Centre/LGA	0-2 years	3-5 years	6-10 years	11+ years	No Timing	Total Zoned (lots)
Bellarine Peninsula	***2031***	***2101***	***1913***	***1570***		***7615***
CLIFTON SPRINGS/DRYSDALE	966	1163	255	191		**2575**
INDENTED HEAD	48	70	80			**198**
LEOPOLD	65	56	15	81		**217**
OCEAN GROVE	444	397	1074	1298		**3213**
POINT LONSDALE	189	259	489			**937**
PORTARLINGTON	239	96				**335**
ST LEONARDS	80	60				**140**
Geelong Township	***4698***	***6751***	***7164***	***10313***	***20***	***28946***
ARMSTRONG CREEK	2631	3538	4607	9299		**20075**
GEELONG	1238	1323	986	264		**3811**
LARA/AVALON	829	1890	1542	750	20	**5031**
LOVELY BANKS/BATESFORD			29			**29**
Geelong LGA	**6729**	**8852**	**9077**	**11883**	**20**	**36561**

Source: Spatial Economics Pty Ltd

Based on existing planning permits, recent construction activity and primarily Council and developer feedback it is anticipated that over the next five years, on average 3,116 lots/dwellings per annum will be constructed within existing zoned broadhectare areas. Historically, since 2006, broadhectare lot construction has averaged 1,013 per annum. However, in 2013/14 1,859 broadhectare lots were constructed, and 1,227 lots from July 2014 to March 2015.

It is considered that the quantum of anticipated broadhectare lot construction is highly improbable unless there is significant increase in overall demand and/or

significant shifts in the composition of demand (i.e. declining share of minor infill construction).

4.4 Future Residential Land Supply

Analysis has been undertaken in conjunction with municipal planning officers to identify the location and associated lot yield of future residential land stocks. Future residential land stocks are identified by the City of Greater Geelong Council, and contained within various municipal planning policy and strategy planning documents.

Future residential land stocks are not zoned to support immediate 'normal' residential development, and rezoning and structure planning processes are required before normal residential development proceeds.

Within the municipal area of Geelong, there is an estimated lot potential within Future Residential areas of approximately 20,410, of this potential supply 12,850 lots is zoned Urban Growth and requires a Precinct Structure Plan prior to develop to proceed and 7,520 lots is unzoned for residential development purposes. Of this future residential broadhectare land stocks is primarily located within the urban centres of:

- Lara/Avalon – 12,895 lots;
- Clifton Springs/Drysdale – 2,295 lots;
- Armstrong Creek – 1,450 lots;
- St Leonards – 1,403 lots; and
- Leopold – 1,261 lots.

4.5 Rural Residential Supply

The stock of both occupied and vacant rural residential allotments have been determined on a lot by lot basis as at March 2015. A Rural Residential allotment is defined as all allotments that are zoned Low Density Residential (LDRZ) and Rural Living (RLZ). Occupied is defined as evidence of a 'habitable' dwelling and vacant is defined as no evidence of a habitable dwelling via the interpretation of aerial imagery.

As at March 2015 across the City of Greater Geelong there was a total lot stock of rural residential allotments of 3,320. Of this stock, 247 lots were vacant, a lot vacancy rate of 9%. Graph 8 summarises the stock (lots) of both occupied and vacant rural residential allotments by urban centre.

By zone type, as at December 2012 there were 1,020 Low Density Residential (LDRZ) allotments, of which 47 were vacant across the municipality, a lot vacancy of 5%. In comparison, there were a total of 2,200 Rural Living (RLZ) zoned allotments, of which 200 were vacant – a lot vacancy rate of 9%.

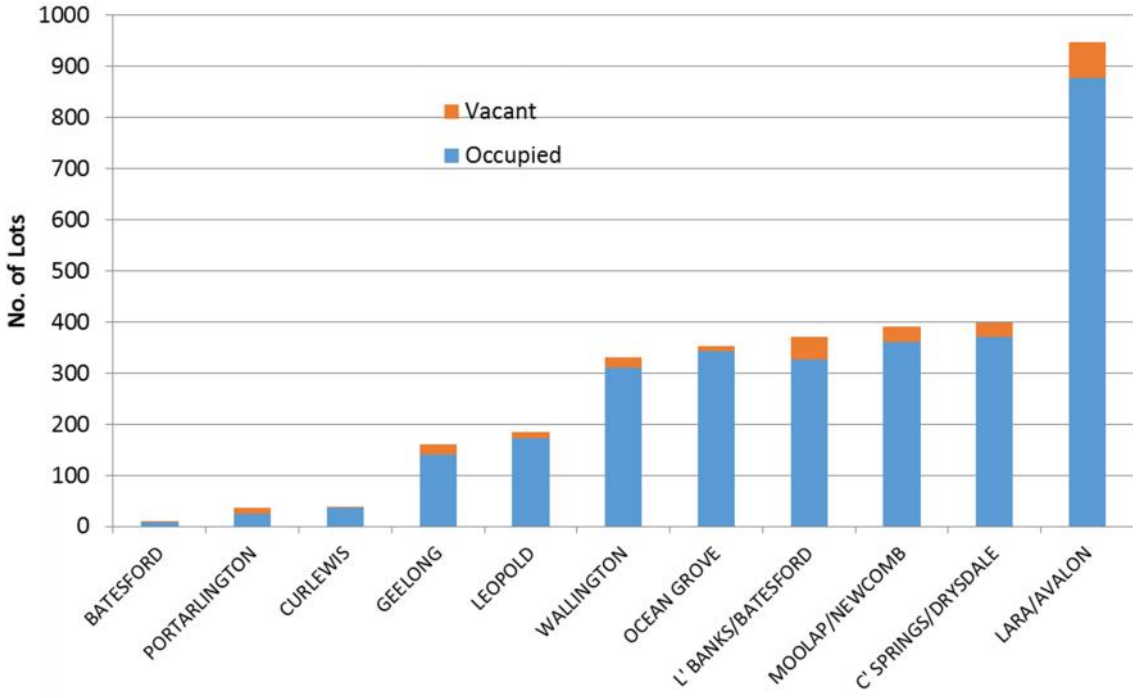
The location of the majority of rural residential lots across the municipality includes:

- Lara/Avalon - total 947 lots (lot vacancy of 7%);
- Clifton Springs/Drysdale - total 398 lots (lot vacancy of 7%);

- Moolap/Newcomb/St. Albans Park - total 391 lots (lot vacancy of 8%);
- Lovely Banks/Batesford - total 370 lots (lot vacancy of 12%);
- Ocean Grove - total 353 lots (lot vacancy of 3%); and
- Wallington - total 331 lots (lot vacancy of 6%).

Of the vacant rural residential lot stock the total area is approximately 455 hectares, of which 435 hectares is zoned RLZ.

Graph 6: Stock of Vacant 'rural residential' Allotments, 2015



Source: Spatial Economics Pty Ltd

Future rural residential (LDRZ and or RLZ) areas have been identified through Council consultation and are geographically identified in the accompanying maps. In summary a total of 121 hectares of future rural residential land stocks have been identified, all of which is for the purpose of future LDRZ development. The location of the future rural residential land stocks is located in Lara/Avalon.

In total there is a residential lot supply of approximately 63,261. This is comprised of:

- 38,223 zoned broadhectare/major infill lots (60% of supply);
- 4,381 vacant urban residential lots (7% of supply);
- 20,410 designated future residential lots (32% of supply);and
- 247 vacant rural residential lots (0.4% of supply).

As at March 2015, there was 4,381 minor infill lots identified. Of these lots, 4,196 were sized less than 1,200sqm or 96% of the identified supply.

As at March 2015, there was a residential lot capacity within zoned major infill sites of approximately 1,694, of which the vast majority was located in the urban area of Geelong. Historically, major infill lot construction has averaged 146 per annum.

As at March 2015, there was a residential lot capacity within zoned broadhectare sites of approximately 36,561, of which 21% (7,615 lots) is located in the Bellarine Peninsula Region and the remaining 28,946 in the Geelong Urban Region.

The location of zoned broadhectare residential land stocks is primarily located within the following urban centres:

- Armstrong Creek – 20,075 lots;
- Lara/Avalon – 5,031 lots;
- Geelong – 3,811 lots;
- Ocean Grove – 3,213 lots; and
- Clifton Springs/Drysdale – 2,575 lots.

There is an estimated lot potential within Future Residential areas of approximately 20,410, of this potential supply 12,850 lots is zoned Urban Growth and requires a Precinct Structure Plan prior to develop to proceed and 7,560 lots is unzoned for residential development purposes. Of this future residential broadhectare land stocks is primarily located within the urban centres of:

- Lara/Avalon – 12,895 lots;
- Clifton Springs/Drysdale – 2,295 lots;
- Armstrong Creek – 1,450 lots;
- St Leonards – 1,403 lots; and
- Leopold – 1,261 lots.

Since the previous residential land supply assessment was undertaken in 2013, the overall quantum of broadhectare lot stock has increased by 10,573. This has been primarily driven by the inclusion of residential land in Lovely Banks. This residential land supply inclusion is currently zoned Urban Growth Zone (PSP required) and has an estimated lot potential of 12,000.

In addition, since the last assessment, the stock of zoned broadhectare land in 2013 has increased from 26,138 lots to 36,561 lots.

5.0 PROJECTED DEMAND

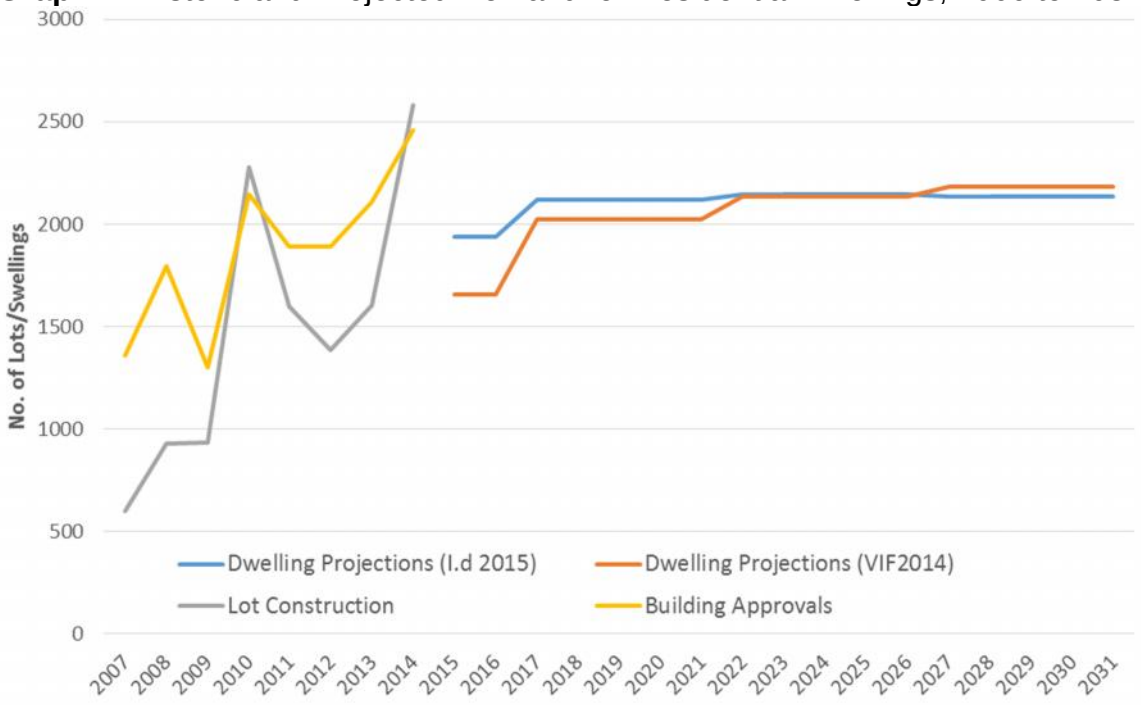
This report incorporates the most recently available demand figures to project dwelling requirements and future adequacy of residential land. These figures currently use published population and household projections contained in Victoria in Future 2014 (VIF 2014) undertaken by the Department of Environment, Land, Water & Planning as the basis for projected dwelling requirements

The projections detail state-wide, regional and metropolitan areas as well as local government areas population, household and dwelling projections that encompass the latest available trends such as changes to levels of immigration or economic conditions, or changes to policy affecting population growth locations and levels, and subsequent demand for housing.

In addition, population and dwelling projections undertaken by I.d Consulting (I.d 2015) for the City of Greater Geelong has been included as an additional demand projection/scenario.

Graph 7 summarises the projected population based demand scenarios for residential dwellings across the municipal area of Geelong. In addition, it highlights historic actual lot construction and residential building approvals – both measure of historic expressed demand for dwellings.

Graph 7: Historic and Projected Demand for Residential Dwellings, 2006 to 2031



Source: DELW&P Victoria in Future 2014: Population and Household Projections.
Australian Bureau of Statistics, Catalogue No.8731.0. I.d Consulting Population & Dwelling Projections – City of Greater Geelong
Spatial Economics Pty Ltd

5.1 VIF2014 Demand Projections

Projected dwelling requirements sourced from VIF 2014 indicate that from 2015 to 2031 there will be a total dwelling requirement of 35,004 (2,059 average per annum). For specific time cohorts average annual dwelling requirements include:

- 2016 to 2021 – 2,024;
- 2021 to 2026 – 2,133; and
- 2026 to 2031 – 2,181.

As measured from 2015 to 2031, the average annual projected demand by Region within the municipality of Geelong is:

- Geelong Urban: 1,377 dwellings per annum; and
- Bellarine Peninsula: 682 dwellings per annum.

The above dwelling requirements equate to an average annual 1.5% population growth rate and a 1.8% dwelling growth requirement (measured from 2016 to 2031).

5.2 I.d2015 Demand Projections

Projected dwelling requirements sourced from I.d Consulting 2015, undertaken for the City of Greater Geelong indicate that from 2015 to 2031 there will be a total dwelling requirement of 35,890 (2,111 average per annum). For specific time cohorts average annual dwelling requirements include:

- 2016 to 2021 – 2,122;
- 2021 to 2026 – 2,146; and
- 2026 to 2031 – 2,134.

As measured from 2015 to 2031, the average annual projected demand by Region within the municipality of Geelong is:

- Geelong Urban: 1,412 dwellings per annum; and
- Bellarine Peninsula: 699 dwellings per annum.

The above dwelling requirements equate to an average annual 1.6% population growth rate and a 1.8% dwelling growth requirement (measured from 2016 to 2031).

Projected dwelling requirements sourced from VIF 2014 indicate that from 2015 to 2031 there will be a total dwelling requirement of 35,004 (2,059 average per annum).

The average annual projected demand by Region within the municipality of Geelong is:

- *Geelong Urban: 1,377 dwellings per annum; and*
- *Bellarine Peninsula: 682 dwellings per annum.*

Projected dwelling requirements sourced from I.d Consulting 2015, undertaken for the City of Greater Geelong indicate that from 2015 to 2031 there will be a total dwelling requirement of 35,890 (2,111 average per annum).

The average annual projected demand by Region within the municipality of Geelong is:

- *Geelong Urban: 1,412 dwellings per annum; and*
- *Bellarine Peninsula: 699 dwellings per annum.*

There is minimal differences in the projected quantum of dwellings projected between the two differing sources.

6.0 ADEQUACY OF LAND STOCKS

Analysis has been undertaken to estimate the years of residential broadhectare/major infill land supply for the two composite Regions within the City of Greater Geelong being: Geelong Urban and Bellarine Peninsula. In estimating the years of residential land supply only zoned broadhectare/major infill and future residential land supply types are considered. In the assessment of adequacy or establishing the estimated years of supply, the demand component for the above supply types are estimated via the assessment of historic construction.

The Department of Environment, Land, Water & Planning (DELW&P) Population and Household Projections – VIF 2014 are used as the basis for determining projected demand. Additional demand scenarios are presented, including dwelling projections sourced from I.d Consulting undertaken for the City of Greater Geelong and constant actual historic broadhectare/major infill lot construction activity.

Based on historic (July 2006 to March 2015) lot construction activity, it is estimated that within the Geelong Urban Region 73% of dwelling requirements were for broadhectare allotments compared to 75% for the Bellarine Peninsula Region.

Tables 3(a), 3(b), 3(c), Graphs 8, 9 and 10 summarise the estimated years of supply by demand scenario for broadhectare stocks in the Geelong Urban and Bellarine Peninsula Regions by demand scenario and for the total municipal area of Geelong.

6.1 Years of Supply – VIF2014 Population Projection Demand Scenario

In terms of zoned broadhectare/major infill residential land stocks it is estimated based on the identified supply and projected demand, there are sufficient land stocks to satisfy **25 years** of future demand across the municipal area of Geelong, 14 years within the Bellarine Peninsula Region and 30 years across the Geelong Urban Region.

In terms of future residential (unzoned and PSP required land) land supply stocks, there is sufficient land to satisfy an additional **13 years** of projected demand across the municipal area of Geelong, 10 years within the Bellarine Peninsula Region and 14 years across the Geelong Urban Region.

Table 3(a): Estimated Years of Residential Broadhectare/Major Infill Land Supply, 2015 – VIF2014 Demand Scenario

Region/LGA	Total Zoned (lots)	Potential Residential (unzoned)	Total (lots)
BELLARINE PENINSULA	14	10	24
GEELONG URBAN	30	14	25+
GEELONG LGA	**25**	**13**	**25+**

Source: Spatial Economics Pty Ltd

6.2 Years of Supply – Historic Trend Based Demand Scenario

In terms of zoned broadhectare/major infill residential land stocks it is estimated based on the identified supply and projected demand, there are sufficient land stocks to satisfy in excess of **25 years** of future demand across the municipal area of Geelong, 15 years within the Bellarine Peninsula Region and well in excess of 25+ years across the Geelong Urban Region.

In terms of future residential (unzoned and PSP required land) land supply stocks, there is sufficient land to satisfy an additional **17 years** of projected demand across the municipal area of Geelong, 10 years within the Bellarine Peninsula Region and 22 years across the Geelong Urban Region.

Table 3(b): Estimated Years of Residential Broadhectare/Major Infill Land Supply, 2015 – Lot Construction Trend Demand Scenario

Region/LGA	Total Zoned (lots)	Potential Residential (unzoned)	Total (lots)
BELLARINE PENINSULA	15	10	25
GEELONG URBAN	25+	22	25+
GEELONG LGA	**33**	**17**	**25+**

Source: Spatial Economics Pty Ltd

6.3 Years of Supply – I.d 2015 Population Projection Demand Scenario

In terms of zoned broadhectare/major infill residential land stocks it is estimated based on the identified supply and projected demand, there are sufficient land stocks to satisfy **24 years** of future demand across the municipal area of Geelong, 14 years within the Bellarine Peninsula Region and 29 years across the Geelong Urban Region.

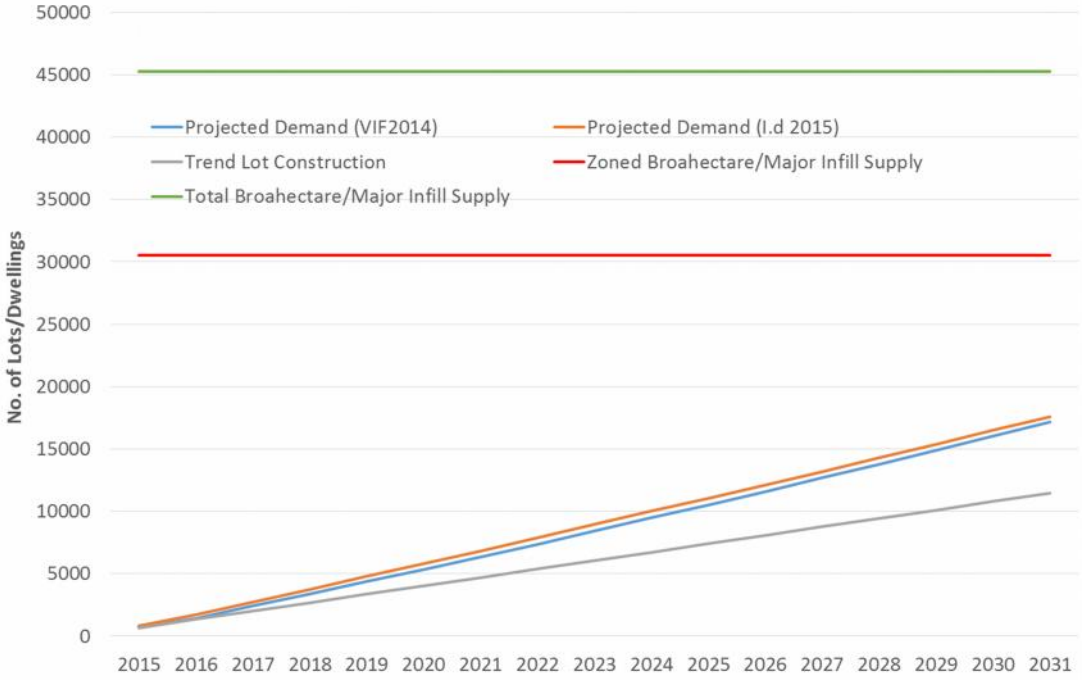
In terms of future residential (unzoned and PSP required land) land supply stocks, there is sufficient land to satisfy an additional **13 years** of projected demand across the municipal area of Geelong, 10 years within the Bellarine Peninsula Region and 14 years across the Geelong Urban Region.

Table 3(c): Estimated Years of Residential Broadhectare/Major Infill Land Supply, 2015 – I.d 2015 Demand Scenario

Region/LGA	Total Zoned (lots)	Potential Residential (unzoned)	Total (lots)
BELLARINE PENINSULA	14	10	24
GEELONG URBAN	29	14	25+
GEELONG LGA	**24**	**13**	**25+**

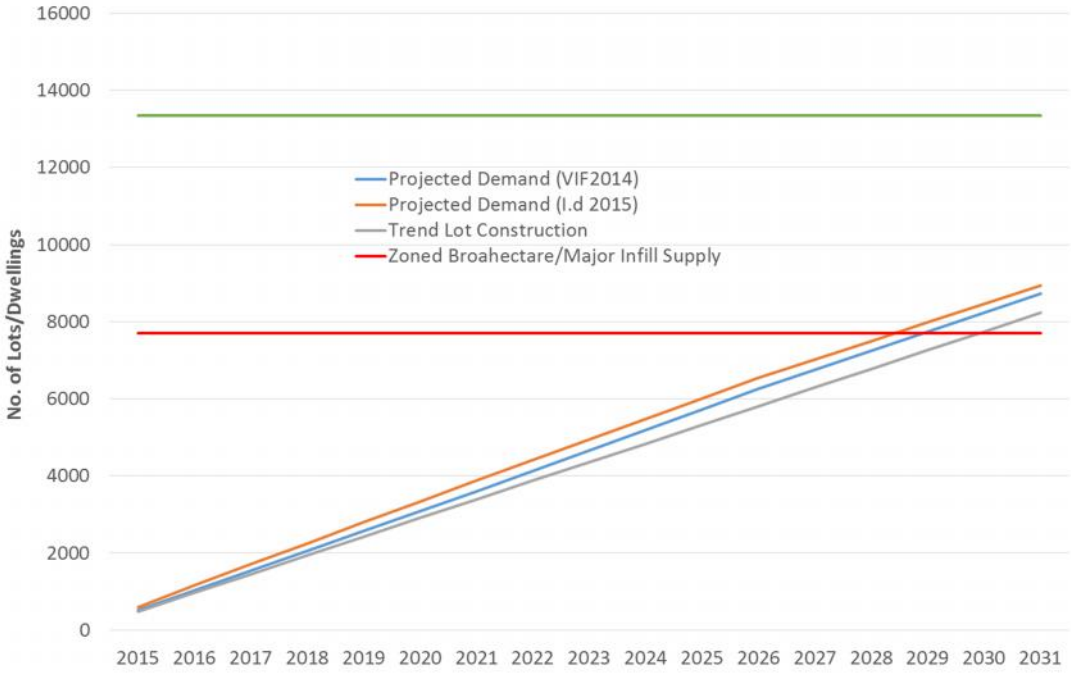
Source: Spatial Economics Pty Ltd

Graph 8: Adequacy of Broadhectare/Major Infill Land Stocks – Geelong Urban Region, 2015



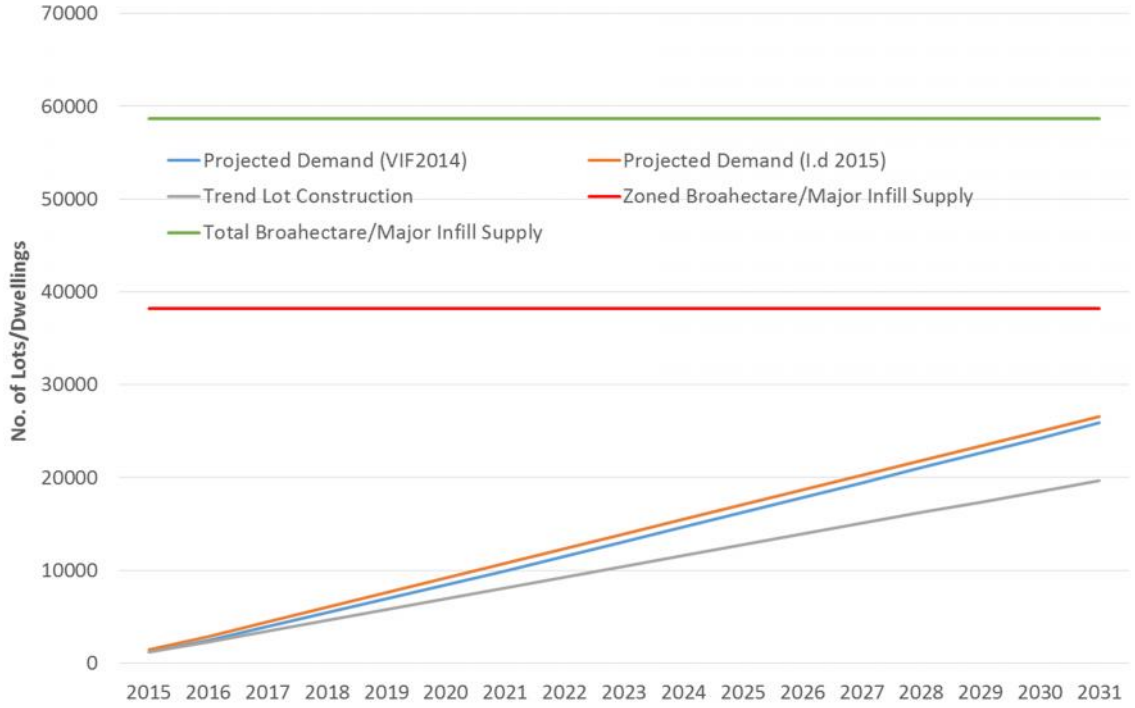
Source: Spatial Economics Pty Ltd

Graph 9: Adequacy of Broadhectare/Major Infill Land Stocks – Bellarine Peninsula Region, 2015



Source: Spatial Economics Pty Ltd

Graph 10: Adequacy of Broadhectare/Major Infill Land Stocks – Geelong LGA, 2015



Source: Spatial Economics Pty Ltd

City of Greater Geelong

*It is considered that there is no need for additional **zoned broadhectare** residential land stocks across the municipal area of Geelong, from a land supply and demand basis. Based on dwelling projections contained within VIF 2014 (the State Governments' population projections) and I.d Consulting 2015 (projections undertaken for the City of Greater Geelong), there is **24 to 25 years** of zoned broadhectare land supply. It is considered that the historic broadhectare lot construction trend demand scenario considerably understates demand, due to historic broadhectare land supply constraints. This demand scenario equates to 33 years supply of zoned stocks.*

*In terms of the future broadhectare land supply stocks (PSP required and unzoned), based on the two dwelling projections contained in VIF 2014 and I.d Consulting 2015, there is an additional **13 years** of supply to cater for projected demand across the municipality.*

Bellarine Peninsula Region

*It is considered that there is no need for additional **zoned broadhectare** residential land stocks across the Bellarine Peninsula Region of Geelong. Based on dwelling projections contained within VIF 2014 and I.d Consulting 2015, there is **14 years** of zoned broadhectare land supply.*

In terms of the future broadhectare land supply stocks (PSP required and unzoned), based on the two dwelling projections contained in VIF 2014 and I.d

*Consulting 2015, there is an additional **10 years** of supply to cater for projected demand across the municipality.*

Geelong Urban Region
*It is considered that there is no need for additional **zoned broadhectare** residential land stocks across the Geelong Urban Region of Geelong. Based on dwelling projections contained within VIF 2014 and I.d Consulting 2015, there is **29 to 30 years** of zoned broadhectare land supply.*

*In terms of the future broadhectare land supply stocks (PSP required and unzoned), based on the two dwelling projections contained in VIF 2014 and I.d Consulting 2015, there is an additional **14 years** of supply to cater for projected demand across the municipality.*

7.0 RESIDENTIAL TABLES

Table 4: Minor Infill Lot Construction Activity, July 2006 to March 2015

Region/Urban Centre/LGA	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15[1]
Bellarine Peninsula	***58***	***144***	***96***	***294***	***222***	***99***	***156***	***143***	***128***
CLIFTON SPRINGS/DRYSDALE	5	24	11	43	26	11	38	30	15
INDENTED HEAD	3	2	3	4	5	1	13	8	2
LEOPOLD		11	3	18	19	6	5	12	1
MOOLAP/NEWCOMB	7	18	24	46	41	20	30	19	34
OCEAN GROVE	28	66	37	81	90	25	37	53	45
POINT LONSDALE	4	7	1	15	1	5		2	
PORTARLINGTON	5	6	6	45	27	21	25	9	11
ST LEONARDS	6	10	11	42	13	10	8	10	20
Geelong Township	***67***	***196***	***203***	***483***	***267***	***200***	***223***	***207***	***276***
ANAKIE		1			6		1		
ARMSTRONG CREEK		1							
CERES				8					
GEELONG	63	183	189	431	234	187	202	191	264
LARA/AVALON	3	11	14	39	27	13	20	16	12
LOVELY BANKS/BATESFORD	1			5					
Geelong LGA	**125**	**340**	**299**	**777**	**489**	**299**	**379**	**350**	**404**

1: From July 20114 to March 2015
Source: Spatial Economics Pty Ltd

Table 5: Major Infill Lot Construction Activity, July 2006 to March 2015

Region/Urban Centre/LGA	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15[1]
Bellarine Peninsula	***38***	***61***	***12***		***140***	***48***	***62***	***50***	***14***
CLIFTON SPRINGS/DRYSDALE		12							
LEOPOLD		6	12		110	48	47	38	
MOOLAP/NEWCOMB	38	43			30		15	12	14
Geelong Township	***44***	***59***	***34***	***58***	***40***	***91***	***112***	***311***	***103***
GEELONG	44	59	34	58	40	91	112	311	103
Geelong LGA	**82**	**120**	**46**	**58**	**180**	**139**	**174**	**361**	**117**

1: From July 20114 to March 2015
Source: Spatial Economics Pty Ltd

Table 6: Broadhectare Lot Construction Activity, July 2006 to March 2015

Region/Urban Centre/LGA	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15[1]
Bellarine Peninsula	***223***	***154***	***275***	***531***	***441***	***631***	***517***	***522***	***516***
CLIFTON SPRINGS/DRYSDALE	60	20	51	18		337	146	107	121
INDENTED HEAD		29	31	52		20	39	24	
LEOPOLD	21	48	82	188	300	242	136	104	161
OCEAN GROVE	111	57	111	165	141		149	154	177
POINT LONSDALE				11			37	30	17
PORTARLINGTON				39		32		67	
ST LEONARDS	31			58			10	36	40
Geelong Township	***159***	***314***	***316***	***906***	***487***	***307***	***515***	***1337***	***711***
ARMSTRONG CREEK			38			52	258	819	612
GEELONG	159	287	278	474	256	255	191	303	70
LARA/AVALON		27		432	231		66	215	29
Geelong LGA	**382**	**468**	**591**	**1437**	**928**	**938**	**1032**	**1859**	**1227**

1: From July 20114 to March 2015
Source: Spatial Economics Pty Ltd

Table 7: Low Density Residential Lot Construction Activity, July 2006 to March 2015

Region/Urban Centre/LGA	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15[1]
Bellarine Peninsula					***2***	***9***	***3***	***6***	***5***
CLIFTON SPRINGS/DRYSDALE						9	1	3	
MOOLAP/NEWCOMB							1	3	5
OCEAN GROVE					2		1		
Geelong Township	***3***								
LARA/AVALON	3								
Geelong LGA	**3**				**2**	**9**	**3**	**6**	**5**

1: From July 20114 to March 2015
Source: Spatial Economics Pty Ltd

Table 8: Rural Living Lot Construction Activity, July 2006 to March 2015

Region/Urban Centre/LGA	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15[1]
Bellarine Peninsula	***4***						***6***	***4***	***13***
CLIFTON SPRINGS/DRYSDALE									2
LEOPOLD							3	1	
MOOLAP/NEWCOMB							1	3	11
WALLINGTON	4						2		
Geelong Township	***5***			***4***			***11***	***1***	***6***
GEELONG							7	1	1
LARA/AVALON	5						4		5
LOVELY BANKS/BATESFORD				4					
Geelong LGA	**9**			**4**			**17**	**5**	**19**

1: From July 20114 to March 2015
Source: Spatial Economics Pty Ltd

Table 9: Minor Infill (vacant lots) Supply by Lot Size Cohort, March 2015

Region/Urban Centre/LGA	Less than 500sqm	500 to 800sqm	800 to 1,200sqm	1,200 to 2,000sqm	2,000 to 5,000sqm	Total Lots
Bellarine Peninsula	***601***	***1471***	***258***	***41***	***37***	***2408***
BREAMLEA		4				**4**
CLIFTON SPRINGS/DRYSDALE	92	417	44	5	4	**562**
INDENTED HEAD	72	111	12	2	7	**204**
LEOPOLD	132	133	18	3	2	**288**
MOOLAP/NEWCOMB/ST.ALBANS PARK	24	19	3	3	4	**53**
OCEAN GROVE	117	357	95	11	8	**588**
POINT LONSDALE	26	38	6	2		**72**
PORTARLINGTON	39	192	53	7	10	**301**
ST LEONARDS	99	200	27	8	2	**336**
Geelong Township	***787***	***851***	***228***	***67***	***40***	***1973***
ANAKIE				3	5	**8**
ARMSTRONG CREEK	348	184	2	1		**535**
CERES				3	2	**5**
GEELONG	419	575	212	54	29	**1289**
LARA/AVALON	20	92	13	5	3	**133**
LOVELY BANKS/BATESFORD			1	1	1	**3**
Geelong LGA	**1388**	**2322**	**486**	**108**	**77**	**4381**

Source: Spatial Economics Pty Ltd

Table 10: Major Infill Lot Potential and Anticipated Development Timing (lots), 2015

Region/Urban Centre/LGA	0-2 years	3-5 years	6-10 years	11+ years	Total Zoned (lots)	Potential Residential (unzoned)	Total Lots
Bellarine Peninsula	***63***			***20***	***83***		***83***
MOOLAP/NEWCOMB	63			20	**83**		**83**
Geelong Township	***810***	***189***	***548***	***24***	***1571***	***40***	***1611***
GEELONG	810	189	548	24	**1571**	40	**1611**
LOVELY BANKS/BATESFORD					**0**		**0**
Geelong LGA	**873**	**189**	**548**	**44**	**1654**	**40**	**1694**

Source: Spatial Economics Pty Ltd

Table 11: Broadhectare Lot Potential and Anticipated Development Timing (lots), 2015

Region/Urban Centre/LGA	0-2 years	3-5 years	6-10 years	11+ years	No Timing	Total Zoned (lots)	Potential Residential (unzoned)	UGZ (PSP Required)	Total Lots
Bellarine Peninsula	***2031***	***2101***	***1913***	***1570***		***7615***	***5645***		***13260***
CLIFTON SPRINGS/DRYSDALE	966	1163	255	191		**2575**	2295		**4870**
INDENTED HEAD	48	70	80			**198**			**198**
LEOPOLD	65	56	15	81		**217**	1261		**1478**
OCEAN GROVE	444	397	1074	1298		**3213**	436		**3649**
POINT LONSDALE	189	259	489			**937**			**937**
PORTARLINGTON	239	96				**335**	250		**585**
ST LEONARDS	80	60				**140**	1403		**1543**
Geelong Township	***4698***	***6751***	***7164***	***10313***	***20***	***28946***	***1875***	***12850***	***43671***
ARMSTRONG CREEK	2631	3538	4607	9299		**20075**	600	850	**21525**
GEELONG	1238	1323	986	264		**3811**	380		**4191**
LARA/AVALON	829	1890	1542	750	20	**5031**	895		**5926**
LOVELY BANKS/BATESFORD			29			**29**		12000	**12029**
Geelong LGA	**6729**	**8852**	**9077**	**11883**	**20**	**36561**	**7520**	**12850**	**56931**

Source: Spatial Economics Pty Ltd

Table 12: Future Rural Residential Stock (Hectares), 2015

Region/Urban Centre/LGA	Zone Type	
	LDRZ	RLZ
Geelong Township	**121**	
LARA/AVALON	121	
Geelong LGA	**121**	

Source: Spatial Economics Pty Ltd

Table 13(a): Occupied and Vacant Rural Residential Lot Stock by Zone Type (hectares), 2015

	LDRZ			RLZ		
Region/Urban Centre/LGA	Occupied	Vacant	Land Area Vacancy Rate %	Occupied	Vacant	Land Area Vacancy Rate %
Bellarine Peninsula	***346***	***16***	***4%***	***1415***	***152***	***10%***
CLIFTON SPRINGS/DRYSDALE	75	5	6%	312	34	10%
CURLEWIS				81	2	2%
LEOPOLD	40	2	4%	167	17	9%
MOOLAP/NEWCOMB/ST.ALBANS PARK	103	5	4%	222	42	16%
OCEAN GROVE	120	3	2%	70	4	6%
PORTARLINGTON	8	1	14%	47	6	12%
WALLINGTON				517	48	8%
Geelong Township	***79***	***4***	***5%***	***2210***	***283***	***11%***
BATESFORD				26	1	5%
GEELONG	12	1	10%	178	35	16%
LARA/AVALON	67	3	4%	1458	146	9%
LOVELY BANKS/BATESFORD				549	101	16%
Geelong LGA	**425**	**20**	**4%**	**3625**	**435**	**11%**

Source: Spatial Economics Pty Ltd

Table 13(b): Occupied and Vacant Rural Residential Lot Stock by Zone Type (lots), 2015

	LDRZ			RLZ		
Region/Urban Centre/LGA	Occupied	Vacant	**Lot Vacancy Rate %**	Occupied	Vacant	**Lot Vacancy Rate %**
Bellarine Peninsula	***813***	***41***	***5%***	***806***	***72***	***8%***
CLIFTON SPRINGS/DRYSDALE	177	12	**6%**	194	15	**7%**
CURLEWIS				37	1	**3%**
LEOPOLD	85	4	**4%**	87	9	**9%**
MOOLAP/NEWCOMB/ST.ALBANS PARK	240	9	**4%**	121	21	**15%**
OCEAN GROVE	307	7	**2%**	36	3	**8%**
PORTARLINGTON	4	9	**69%**	20	3	**13%**
WALLINGTON				311	20	**6%**
Geelong Township	***160***	***6***	***4%***	***1194***	***128***	***10%***
BATESFORD				9	1	**10%**
GEELONG	26	4	**13%**	114	17	**13%**
LARA/AVALON	134	2	**1%**	744	67	**8%**
LOVELY BANKS/BATESFORD				327	43	**12%**
Geelong LGA	**973**	**47**	**5%**	**2000**	**200**	**9%**

Source: Spatial Economics Pty Ltd

Table 14(a): Estimated and Projected Population, 2011 to 2031 (VIF2014 & I.d 2015)

	VIF2014				
Region/LGA	**2011**	**2016**	**2021**	**2026**	**2031**
Bellarine Peninsula	63337	69053	74528	80094	85197
Geelong Urban	152495	161687	174814	188748	203609
Greater Geelong LGA	**215,833**	**230,740**	**249,342**	**268,842**	**288,806**
	I.D Consulting 2015				
Region/LGA	**2011**	**2016**	**2021**	**2026**	**2031**
Bellarine Peninsula	63338	70328	76678	82799	88285
Geelong Urban	152497	164673	179857	195122	210989
Greater Geelong LGA	**215835**	**235001**	**256535**	**277921**	**299274**

Source: DELW&P Victoria in Future 2014: Population and Household Projections. I.d Consulting 2015 City of Greater Geelong Population and Household Projections.

Table 14(b): Estimated and Projected Number of Dwellings, 2011 to 2031

	VIF2014				
Region/LGA	**2011**	**2016**	**2021**	**2026**	**2031**
Bellarine Peninsula	31791	35195	38622	42137	45422
Geelong Urban	64470	69344	76039	83188	90811
Greater Geelong LGA	**96,261**	**104,540**	**114,662**	**125,325**	**136,232**
	I.D Consulting 2015				
Region/LGA	**2011**	**2016**	**2021**	**2026**	**2031**
Bellarine Peninsula	31835	35719	39310	42846	46046
Geelong Urban	64560	70376	77393	84587	92059
Greater Geelong LGA	**96395**	**106095**	**116703**	**127433**	**138105**

Source: DELW&P Victoria in Future 2014: Population and Household Projections. I.d Consulting 2015 City of Greater Geelong Population and Household Projections.

Table 14(c): Projected Average Annual Change in the Number of Persons and Dwellings, 2011 to 2031

VIF2014

SLA/Region/LGA	Estimated Resident Population				Structural Private Dwellings			
	2011 to 2016	2016 to 2021	2021 to 2026	2026 to 2031	2011 to 2016	2016 to 2021	2021 to 2026	2026 to 2031
Bellarine Peninsula	1143	1095	1113	1021	681	685	703	657
Geelong Urban	1838	2625	2787	2972	975	1339	1430	1525
Greater Geelong LGA	**2981**	**3721**	**3900**	**3993**	**1656**	**2024**	**2133**	**2181**

Source: DELW&P Victoria in Future 2014: Population and Household Projections.

I.D Consulting 2015

SLA/Region/LGA	Estimated Resident Population				Structural Private Dwellings			
	2011 to 2016	2016 to 2021	2021 to 2026	2026 to 2031	2011 to 2016	2016 to 2021	2021 to 2026	2026 to 2031
Bellarine Peninsula	1398	1270	1224	1097	777	718	707	640
Geelong Urban	2435	3037	3053	3173	1163	1403	1439	1494
Greater Geelong LGA	**3833**	**4307**	**4277**	**4271**	**1940**	**2122**	**2146**	**2134**

Source. I.d Consulting 2015 City of Greater Geelong Population and Household Projections.

Table 14(d): Projected Average Annual Percentage Change in the Number of Persons and Dwellings, 2011 to 2031

VIF2014

SLA/Region/LGA	Estimated Resident Population				Structural Private Dwellings			
	2011 to 2016	2016 to 2021	2021 to 2026	2026 to 2031	2011 to 2016	2016 to 2021	2021 to 2026	2026 to 2031
Bellarine Peninsula	1.7%	1.5%	1.5%	1.2%	2.1%	1.9%	1.8%	1.5%
Geelong Urban	1.2%	1.6%	1.5%	1.5%	1.5%	1.9%	1.8%	1.8%
Greater Geelong LGA	**1.3%**	**1.6%**	**1.5%**	**1.4%**	**1.7%**	**1.9%**	**1.8%**	**1.7%**

Source: DELW&P Victoria in Future 2014: Population and Household Projections.

I.D Consulting 2015

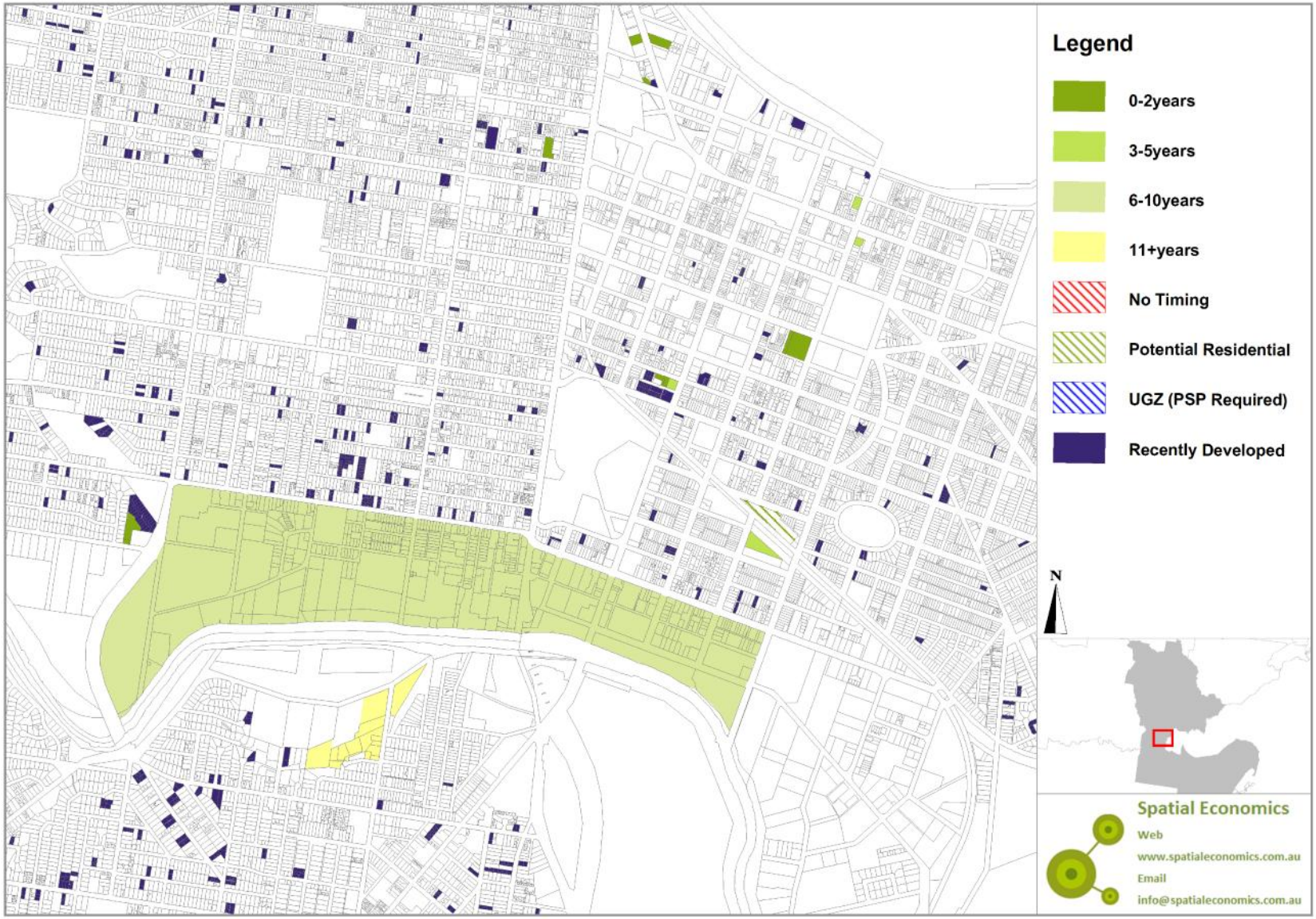
SLA/Region/LGA	Estimated Resident Population				Structural Private Dwellings			
	2011 to 2016	2016 to 2021	2021 to 2026	2026 to 2031	2011 to 2016	2016 to 2021	2021 to 2026	2026 to 2031
Bellarine Peninsula	2.1%	1.7%	1.5%	1.3%	2.3%	1.9%	1.7%	1.5%
Geelong Urban	1.5%	1.8%	1.6%	1.6%	1.7%	1.9%	1.8%	1.7%
Greater Geelong LGA	**1.7%**	**1.8%**	**1.6%**	**1.5%**	**1.9%**	**1.9%**	**1.8%**	**1.6%**

Source. I.d Consulting 2015 City of Greater Geelong Population and Household Projections.

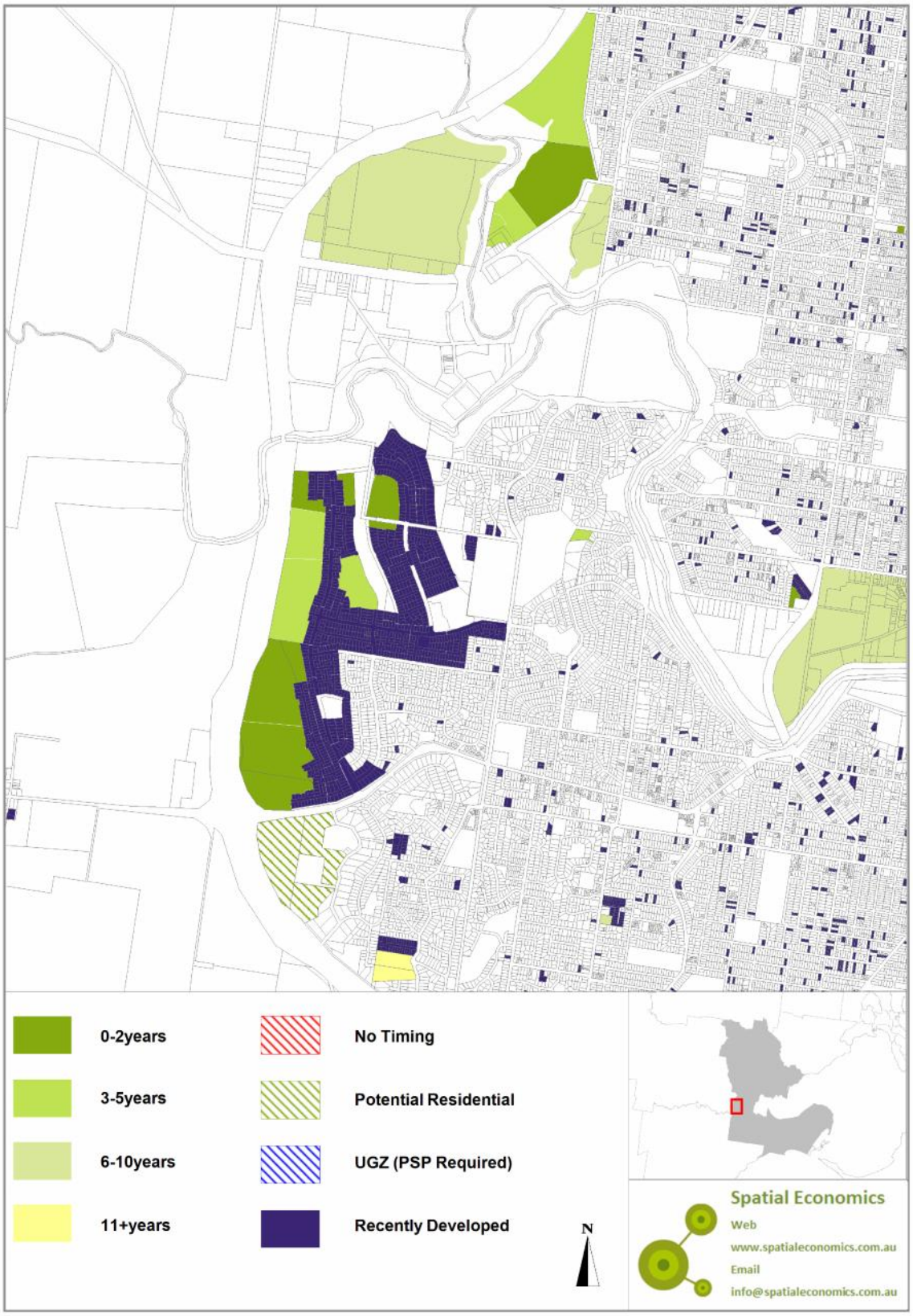
Map 1: Residential Land Supply Areas - Lara

Map 2a: Residential Land Supply Areas - Geelong

Map 2b: Residential Land Supply Areas - Geelong

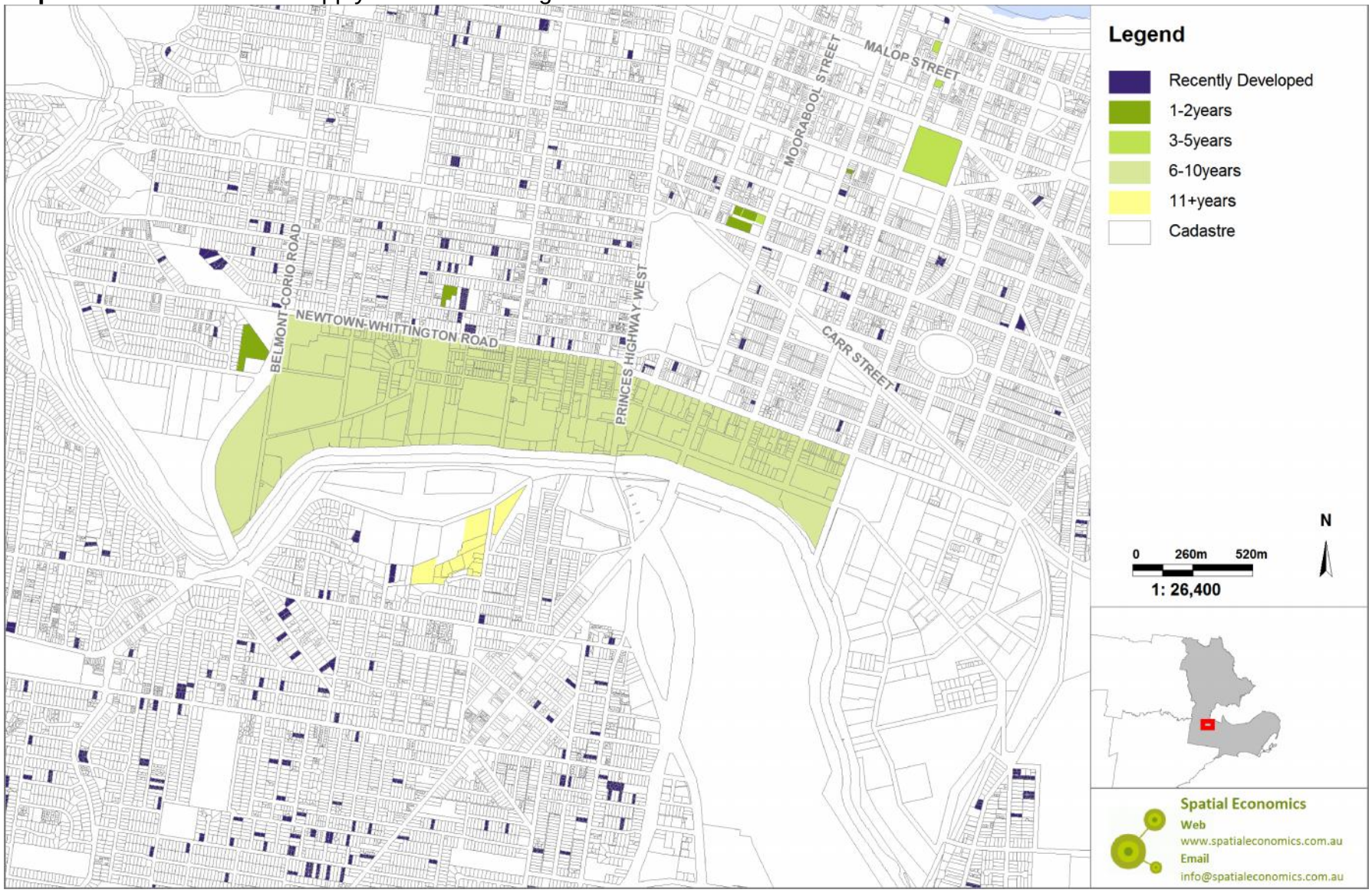


Map 2c: Residential Land Supply Areas - Geelong



Map 2d: Residential Land Supply Areas - Geelong

Map 2e: Residential Land Supply Areas - Geelong



Map 3: Residential Land Supply Areas – Armstrong Creek

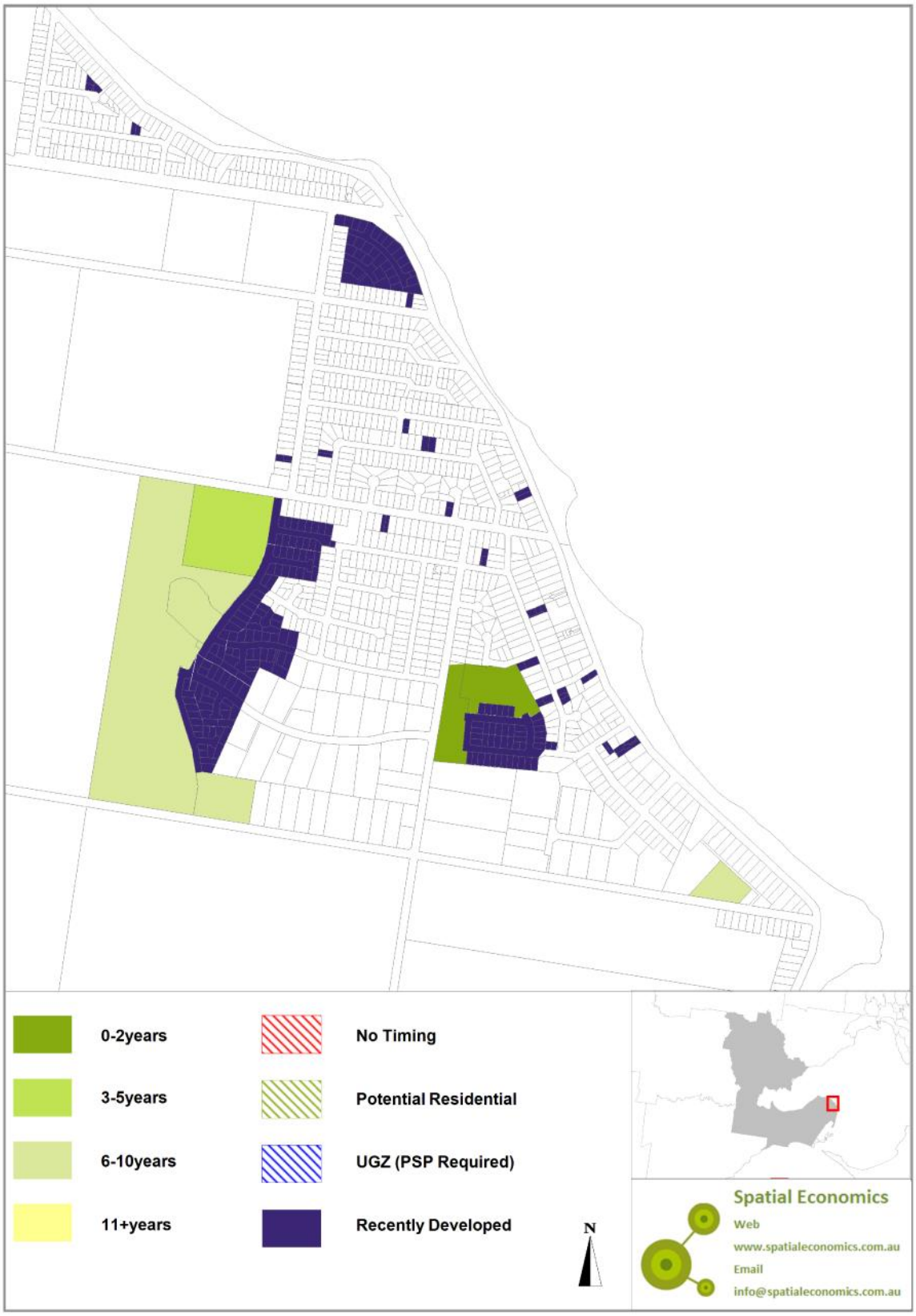
Map 4: Residential Land Supply Areas – Leopold


0-2years
3-5years
6-10years
11+years
No Timing
Potential Residential
UGZ (PSP Required)
Recently Developed
N
Spatial Economics
Web
www.spatialeconomics.com.au
Email
info@spatialeconomics.com.au

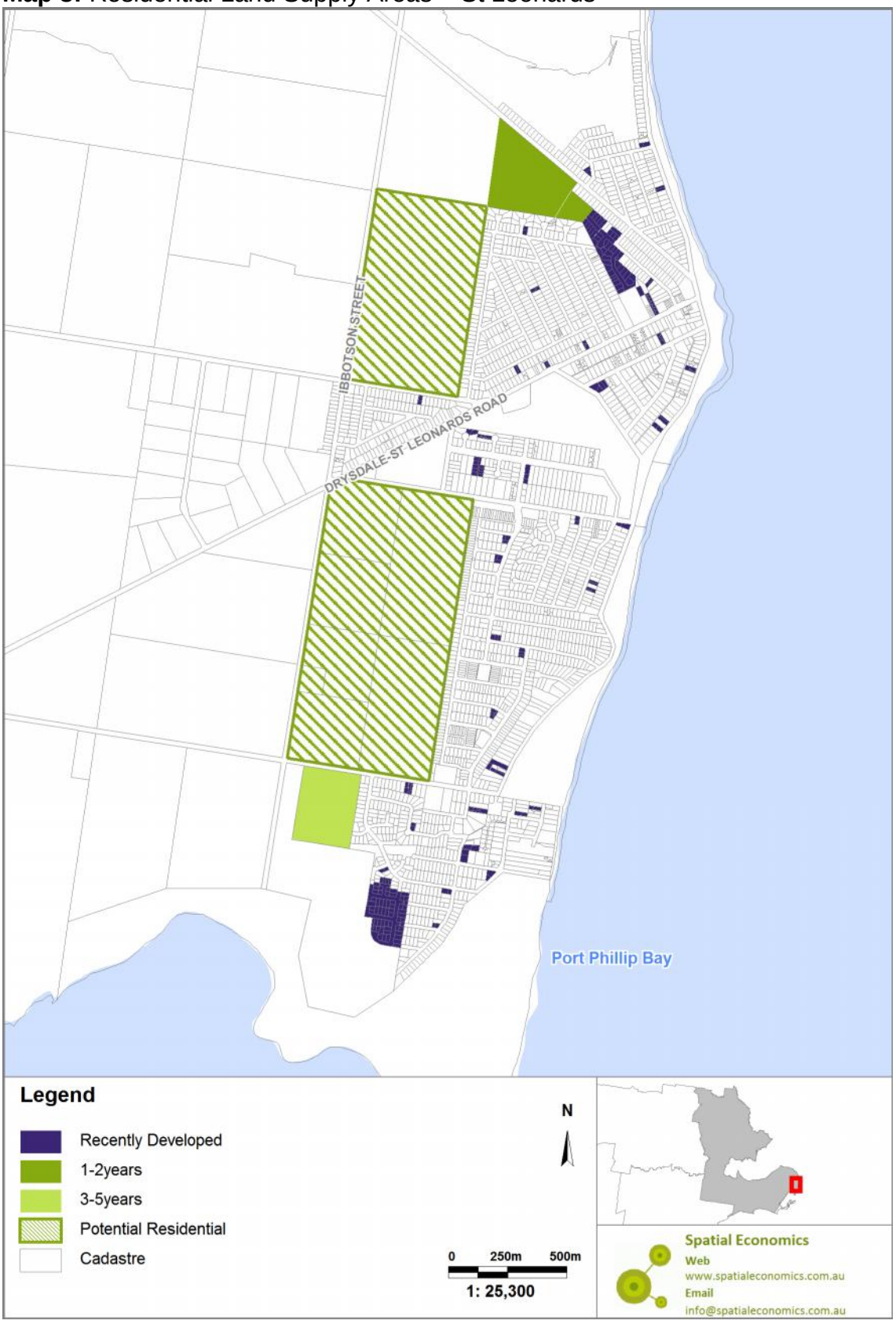
Map 5: Residential Land Supply Areas – Clifton Springs/Drysdale

Map 6: Residential Land Supply Areas – Portarlington

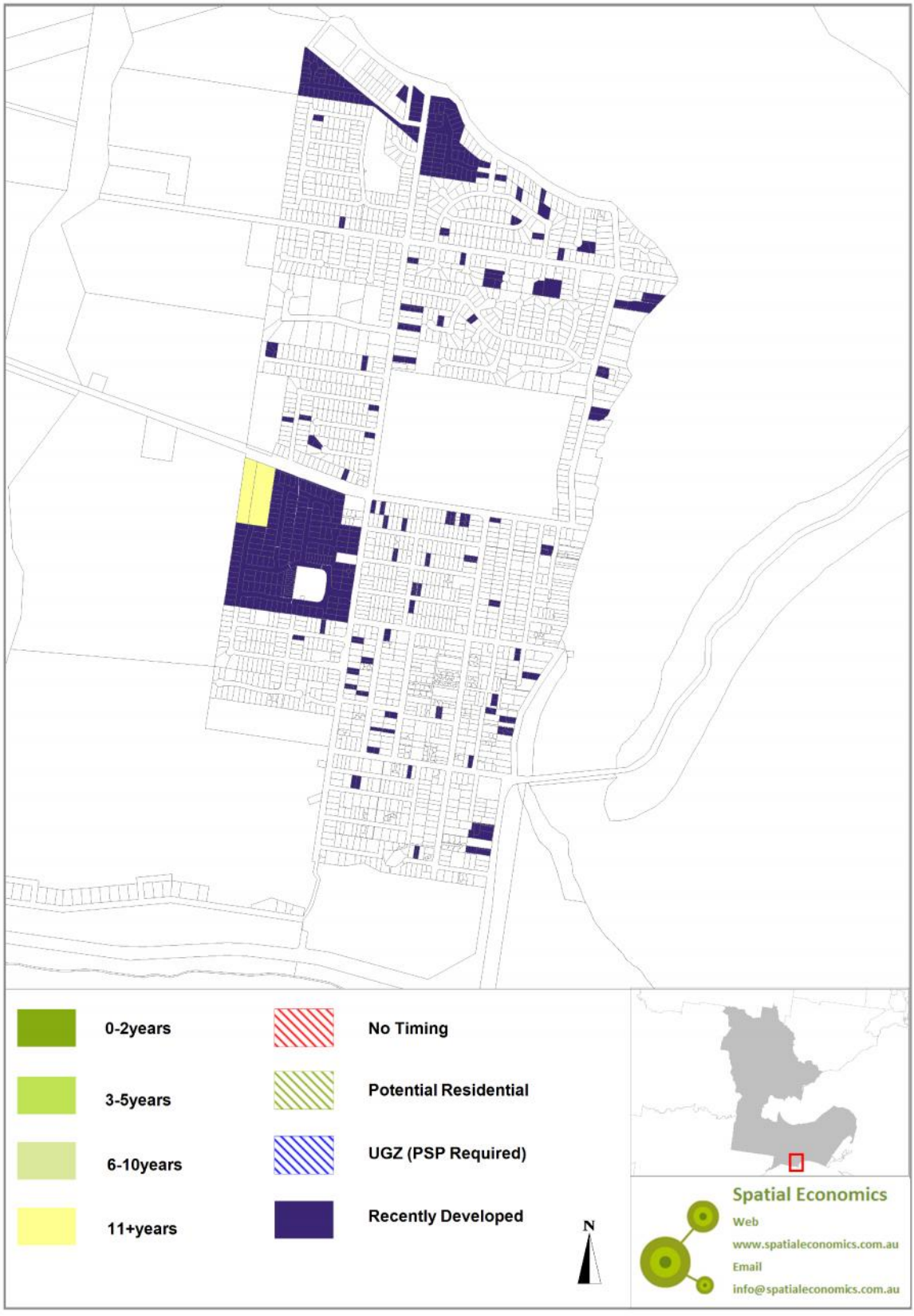
Map 7: Residential Land Supply Areas – Indented Head



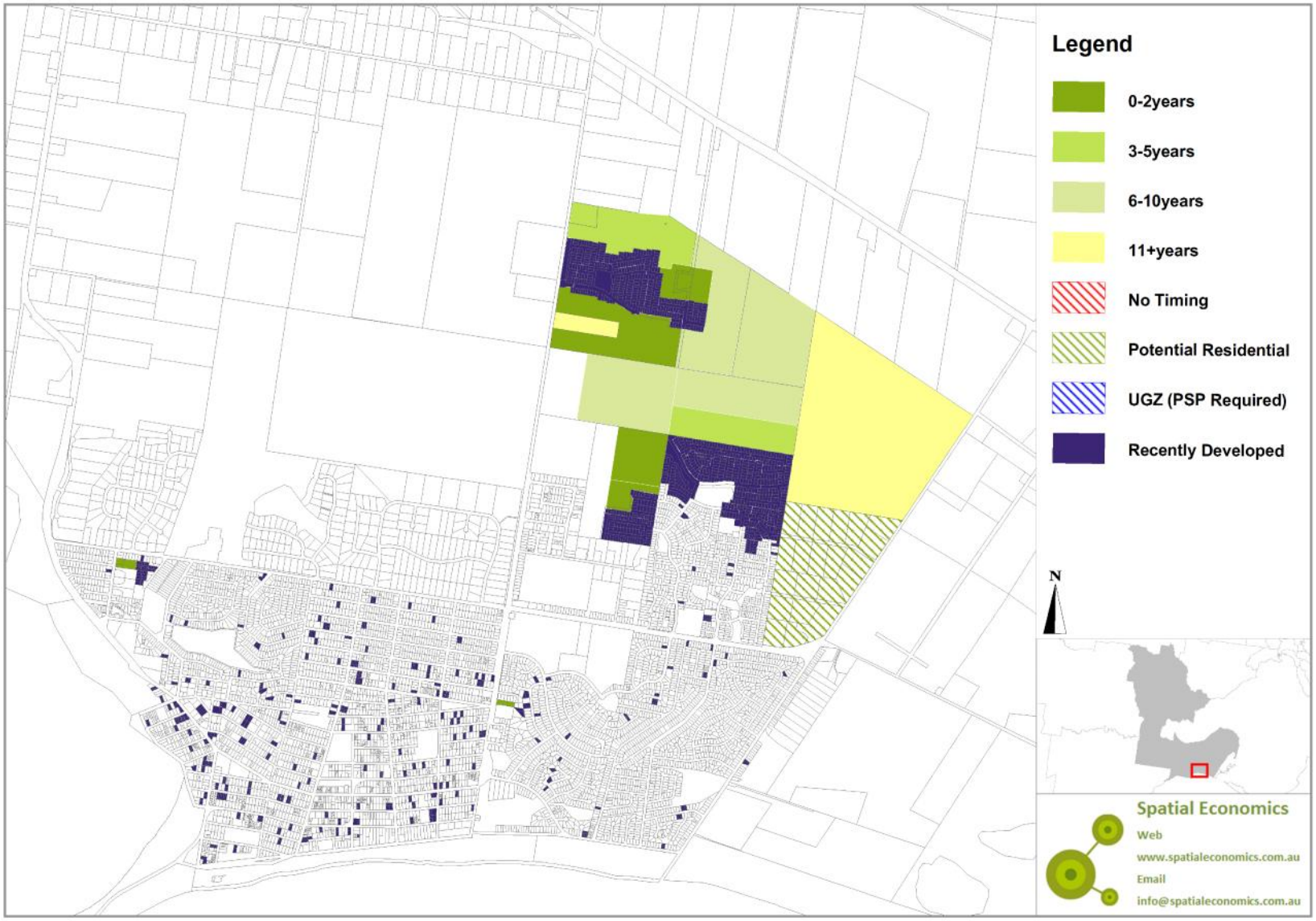
Map 8: Residential Land Supply Areas – St Leonards



Map 9: Residential Land Supply Areas – Barwon Heads



Map 10: Residential Land Supply Areas – Ocean Grove



Map 11: Residential Land Supply Areas – Point Lonsdale

Map 12: Residential Land Supply Areas – Lovely Banks

GLOSSARY OF TERMS

Broadhectare land

Undeveloped land generally located on the urban fringe, zoned for residential development (no previous urban development activity), and the parent lot greater than 5,000sqm.

Constructed lot

For the purposes of this assessment, a lot is created when land has been subdivided ('constructed') whether or not a separate title has been issued.

Dwelling

A building used as a self-contained residence, may include house, apartment, student accommodation, retirement or aged care facilities or a mobile dwelling such as a caravan.

Future rural residential land

Land identified by the relevant municipal authority for future rural residential development and current zoning not supportive of such residential development. This includes both future zone types of Low Density Residential (LDRZ) and Rural Living (RLZ).

Local Government Area (LGA)

A geographical area that is administered by a local council.

Lot

For the purposes of the UDP, a lot is created when land has been subdivided ('constructed') whether or not a separate title has been issued.

Major infill

Undeveloped land within the existing urban area, zoned for residential development, and parent lot or existing lot greater than 5,000sqm and/or has the likely potential to yield 10 or more dwellings. This definition also includes major redevelopment sites, these are sites predominantly in existing urban areas that are proposed to be converted or redeveloped for residential purposes and that will yield 10 or more dwellings.

Minor infill or Vacant Urban Lots

Undeveloped land within the existing urban area, zoned for residential development, and parent lot or existing lot less 5,000sqm.

Rural Residential Land

Land zoned Low Density Residential (LDRZ) or Rural Living (RLZ).

Potential Residential Land

Land identified by the relevant municipal authority for future residential development and current zoning not supportive of 'normal' residential development. Land which is has an 'Urban Growth Zone' applied, and a precinct structure plan has not yet been approved, falls into this category.

Precinct Structure Plans

In the Urban Growth Zone (UGZ), the precinct structure plan (PSP) is the key document that triggers the conversion of non-urban land into urban land. A

precinct structure plan is a long-term strategic plan that describes how a precinct or a series of sites will be developed.

Statistical Local Area (SLA)
A geographical area created by the Australian Bureau of Statistics for statistical purposes. Victoria is divided into 200 SLAs. SLAs may be the same as an LGA or in most cases several SLAs aggregate to form LGAs. Superseded by Statistical Area geographies.

Statistical Area 2(SA2)
A geographical area created by the Australian Bureau of Statistics for statistical purposes.

Recent Lot Construction
Refers to residential lot construction activity measured on an annual basis as at July of each year from 2006 to 2014, additional analysis has been included to identify lot construction to March 2015.

Urban Centres
Custom boundaries for defined geographic areas developed by Spatial Economics in consultation with the pertinent municipal authority that aims to reflect small area urban centres, where typically an urban centre may have multiple suburbs or transcend municipal boundaries. The boundaries aim to capture all forms of existing and future residential land supply and development, including rural residential land stocks. Map 13 below illustrate the Urban Centre boundaries within the municipal area of Geelong.

Map 13: Urban Centre Boundaries – Geelong