# Retail Advice – Lake Narracan Structure Plan

**Final Report**

Growth Areas Authority

July 2013

SGS Economics & Planning

Independent insight.

Independent insight.



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# 1 INTRODUCTION

## 1.1 Project Purpose

The Growth Areas Authority (GAA) and Latrobe City Council are currently undertaking the preparation of the Lake Narracan Retail Analysis. SGS Economics and Planning has been engaged to provide retail advice.

This report is a retail analysis which will ultimately provide inputs into the Lake Narracan Precinct Structure Plan. It explores the economic context for the wider region, local policy context and presents indicative frameworks for future retail and economic development in the area as it begins to accommodate increased residential development.

The GAA has long been committed to maintaining a local retail and employment focus in its Greenfield developments. This relates to ensuring that local residents have access to high quality employment and service opportunities and those growth areas can enjoy a vibrant retail economy.

This retail analysis has been informed by a review of the demand and supply contexts for retail floorspace development at the local and regional levels. In particular, analysis has also been undertaken for Moe and Newborough's existing retail areas.

A summary of timing considerations is also included, as well as indicative guidelines to inform the location and development of any future activity centre(s).

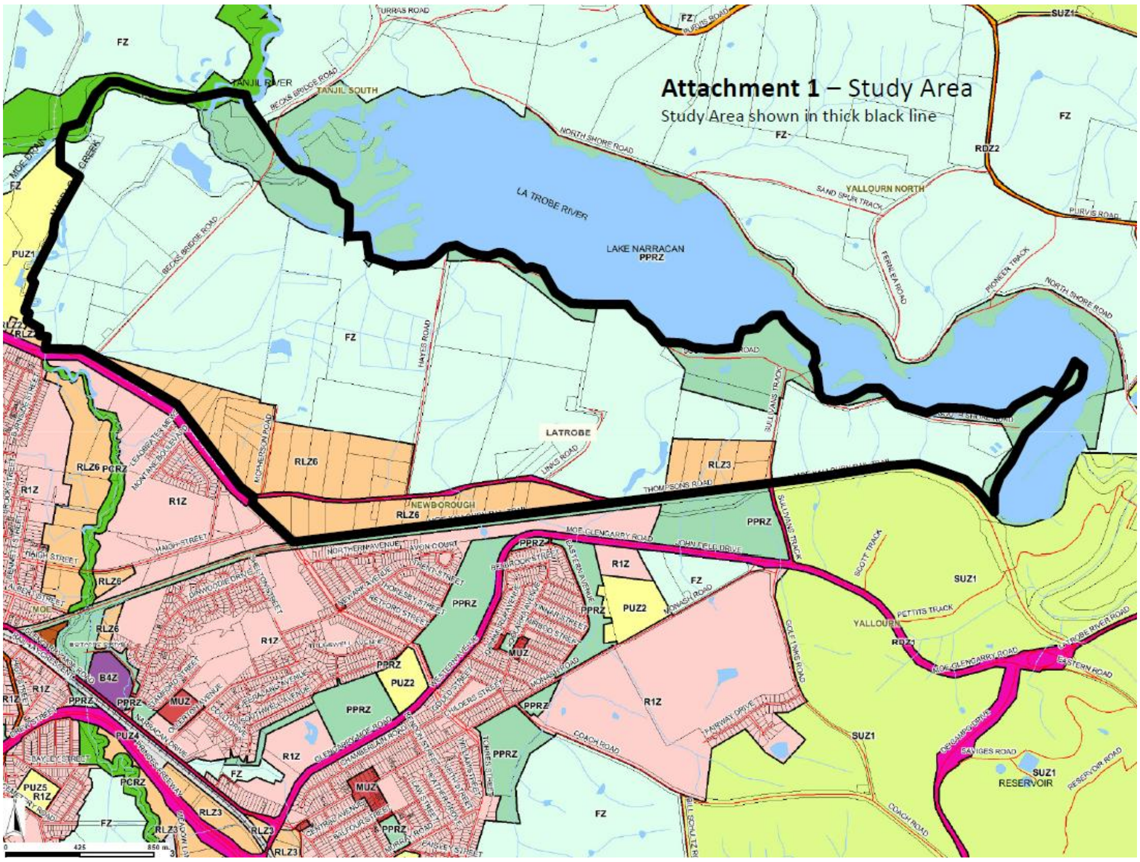
## 1.2 Study Area

The Study Area for the purposes of this report is an area of currently undeveloped land between Lake Narracan and the existing townships of Moe and Newborough. Moe and Newborough form a single joined urban locality, and are part of a networked 'tri-city' located within the Latrobe City Council. The other urban areas in this conglomeration are Morwell and Traralgon. The study area is located approximately 130 kilometres south east of Melbourne.

For the purposes of assessing retail issues, this report considers, where necessary, the broader Latrobe region and sub-areas of the region as required. The town centres of Moe and Newborough, are of particular relevance to this study.

Figure 1 demonstrates the current zoning of the study area and surrounds as defined in the project brief.

**FIGURE 1 LAKE NARRACAN AND SURROUNDS - CURRENT ZONING**



*Source: GAA 2012*

## 1.3 Disclaimer

This report has been compiled and interpreted only for the purposes of the project brief issued by the Growth Areas Authority to provide guidance on economic potential of the study area over a long time frame for broad structure planning purposes. The information must not be relied on for any other purpose or by any other party without prior verification. SGS Economics and Planning Pty Ltd offer no warranty or guarantee in relation to the interpretations of the information.

# 2 POLICY REVIEW

This section reviews relevant studies, strategies and policies at both the local and regional level. This review enables a sound understanding of the public policy context that governs retailing in the study area.

| Growth Areas Authority (2013) *Strategic Outlook for Moe-Newborough & Lake Narracan* | |
|---|---|
| **Purpose** | An overview report which provides some strategic context and justification prior to the preparation of a Precinct Structure Plan for the Lake Narracan area. |
| **Findings** | Key findings are:<br>• Some ageing of the population occurring.<br>• Despite housing being predominantly in the form of detached dwellings, there appears to be increasing market appetite for higher density living environments.<br>• Most potential sites for residential redevelopment are to the south of the existing township.<br>• Over 140 ha of developable land in the vicinity of the Moe-Newborough study area had expressed interest in developing. This could yield approximately 989 to 1,484 dwellings.<br>• A further 60 ha of land had not yet recorded an interest to develop, but there is potential for approximately 427 to 641 dwellings.<br>• If all of the abovementioned land is developed, then at projected growth rates, developable greenfield land will be exhausted sometime between 2031 and 2040 (assuming 10 to 15 dwellings per hectare). However if some land remains undeveloped, then greenfield land could be exhausted much earlier; 18 years is identified as a likely timeframe for exhaustion of developable land. |
| **Directions** | Development of Lake Narracan has been justified based on:<br>• Long term supply – residential land supply may fall below 15 years soon in the Moe-Newborough township.<br>• Healthy Housing Market – a preference for having multiple development fronts, and in high amenity locations.<br>• Reinvestment in the community – Development will help connect the existing township to the lake, with an increase in tourism and recreational opportunities. |

| David Lock Associates (2006) *Latrobe Transit Centred Precincts – Moe Town Centre Summary* | |
|---|---|
| **Purpose** | A report derived from the Latrobe Transit Centred Precincts. Principles to be used to guide planning and economic development for both the public and private sector. |
| **Findings** | Key findings are:<br>• Moe undergoing slow but assured economic growth.<br>• Perception of renewed demand for housing development.<br>• Potential for tourism and lifestyle advantages.<br>• Potential demand for 600 new apartments plus other medium density dwelling types over the next ten years (to 2016).<br>• Potential for up to 30,000 sqm of office development.<br>• Potential for up to 4,000 sqm of retail development.<br>• There is vacant underutilised land close to the station on all sides.<br>• Through traffic bypasses the town centre.<br>• Most housing in the activity centre is detached and low density. |

| | |
|---|---|
| **Directions** | Key directions are:<br>• Improve interface and pedestrian linkages around the train station.<br>• Promote higher density, mixed use development in and around the town centre.<br>• Enhance local character. |

| **Tract Consultants (2007) *Moe Activity Centre Plan – Urban Renewal Strategy and Implementation Report*** | |
|---|---|
| **Purpose** | Major purposes are:<br>• To assist Council in the prioritisation of across Council budget allocation relating to capital works.<br>• Provide a sound basis on which to apply for State and Federal Government funding opportunities.<br>• Review occupancy arrangements for all Victrack land, with a view to an optimum mix of transport support services, commercial development and community facilities, meeting the commercial expectations of the property owner, Victrack. |
| **Findings** | Key findings are:<br>• The need to open a north-south bicycle and pedestrian walkway across the railway track.<br>• Reconnect development west of Moore Street to the rest of the activity centre.<br>• There has been recent community and retail services which have located away from the main centre out to Moore Street.<br>• Extensive low density housing stock to the south of the centre. |
| **Directions** | Key directions are:<br>• Prioritise the creation of a green, open space corridor around the station.<br>• Integrating commercial activity around the station.<br>• A range of minor infrastructure projects proposed for implementation. |

| **Beca Consultants (2007) *Latrobe Structure Plans – Moe and Newborough*** | |
|---|---|
| **Purpose** | Major purposes are:<br>• Help plan and manage growth and change over a 30 year time horizon.<br>• Provide clear directions to all stakeholders regarding appropriate development. |
| **Findings** | Key findings are:<br>• Greenfields sites with the township's borders were identified.<br>• Only eight years of residential greenfield land was identified.<br>• Public transport identified as needing to be given priority, especially bus services and walkable streets in growth area centres.<br>• Amenity and visual appearance of key tourist routes need to be improved and well maintained. |
| **Directions** | Key directions are:<br>• Provide for high amenity housing growth.<br>• Protect areas for future urban growth.<br>• Improve transport access and mobility.<br>• Improve and protect visual amenity.<br>• Decrease residential and industrial interface conflicts – separate the two.<br>• Establish walkable neighbourhood centres in growth areas – neighbourhood centres to consist of basic goods and services, and not undermine the role of the Town Centre.<br>• Encourage development of new commercial, residential and mixed use developments in the Moe Town Centre.<br>• Restrict development of major retail and office uses outside the town centre. |

| **Macroplan (2007) *Latrobe City Council – Retail Strategy Review*** | |
|---|---|
| **Purpose** | Analysis of floorspace demand and supply in Latrobe City Council. The report incorporates information about the performance of retail provision in Latrobe. |
| **Findings** | Major findings are:<br>• Current retail demand could increase by 7% in the event of a resurgence in population.<br>• Traralgon residents have experienced significant increases in wealth, leading to greater levels of expenditure on clothing and restaurants.<br>• Marginal decline in household sizes has led to some increase in bulky goods retail expenditure.<br>• Current retail equation in Latrobe for demand and supply is in balance (equilibrium).<br>• There has been developer interest in some areas of the Municipality. |
| **Directions** | Key directions are:<br>• Existing town centres need to grow and innovate in order to remain competitive.<br>• Morwell is to provide the majority of growth for traditional retail floorspace in the municipality, with Traralgon to service the wealthier end of the retail market.<br>• For Moe, the directive is to protect existing businesses in the short term, whilst in long term, look for opportunities to facilitate increased private investment and improve current retail formats.<br>• There is a need for a bulky goods centre of the order of 15,000 to 20,000 sqm of floorspace in order to prevent escape expenditure from Latrobe. This may lead to some underperformance in the short term. |

| **Latrobe City Council (2010) *Municipal Strategic Statement – Main Towns*** | |
|---|---|
| **Purpose** | A council vision for its main towns. |
| **Findings** | N/A |
| **Directions** | Key directions are:<br>• Encourage higher density housing in and around the town centre of Moe.<br>• Only encourage basic goods, services, community services and facilities in neighbourhood clusters.<br>• Encourage new retail, commercial and mixed use development in the Moe centre, but restrict these uses outside the centre (with some exceptions). |

| **Macroplan (2009) *Latrobe City Council – Bulky Goods Retail Sustainability Assessment*** | |
|---|---|
| **Purpose** | An update of a 2007 analysis for bulky goods land, including identification of appropriate sites for bulky goods development. |
| **Findings** | Key findings are:<br>• At least two dedicated bulky goods precincts could be developed to increase the attractiveness of the bulky goods offer in the municipality.<br>• There is a market gap of 28,000sqm of bulky goods retail floorspace which should be provided in the municipality. Due to significant residential development in Greenfield areas, this gap is likely to rise to approximately 73,000sqm by 2023.<br>• Current bulky goods precincts are located in loosely defined precincts, causing leakage and loss of employment for the community in Latrobe.<br>• The protracted economic downturn has created a cyclical loss of demand for discretionary retailing – this has impacted the bulky goods sector. However latent demand is simply being delayed.<br>• Shop vacancies in Morwell and Moe are significant concern, especially for specialty retailers. Development of enclosed malls out of centre has been identified as the main contributor to this trend.<br>• Income and expenditure in Moe and Morwell are well below the Regional Victorian average, although Traralgon is much higher.<br>• Consultations confirmed that there is unlikely to be any significant demand from |

| | |
|---|---|
| | retailers for bulky goods floorspace to be developed in Moe. |
| **Directions** | Key directions include:<br>• Deliver two bulky goods clusters of approximately 15,000 to 20,000sqm each.<br>• Ideally, to locate a bulky goods cluster adjacent to existing town centres in order to create more anchors. However, may be challenging due to lack of suitable land parcels.<br>• Bulky goods clusters need to be located along main roads with good accessibility and critical mass.<br>• Preference is for bulky goods floorspace to be developed near Morwell and Traralgon. |

## 2.1 Policy Context Conclusions

The policy context suggests that:

- A future small scale supermarket of less than 1,500 sqm in Lake Narracan would be consistent with the intent of the GAA and local strategies to facilitate mixed use development, local shopping needs and walkability outcomes.

- Protecting the Moe Town Centre is a high priority and new retail centres should be regulated to avoid over-competition with such existing centres.

- It is important to connect existing and future settlements with the amenity and tourism features of Lake Narracan.

# 3 RETAIL AND ACTIVITY CENTRE CONTEXT

This section reviews retailing in the regional and local contexts. Observations from the site visit are used to help arrive at various conclusions for the existing framework of retailing in Moe, Newborough and Lake Narracan.

## 3.1 Regional Context

The existing retail hierarchy and floorspace supply around Lake Narracan is estimated based on available information, focusing on major centres that may potentially have an influence on retail demand in the study area.

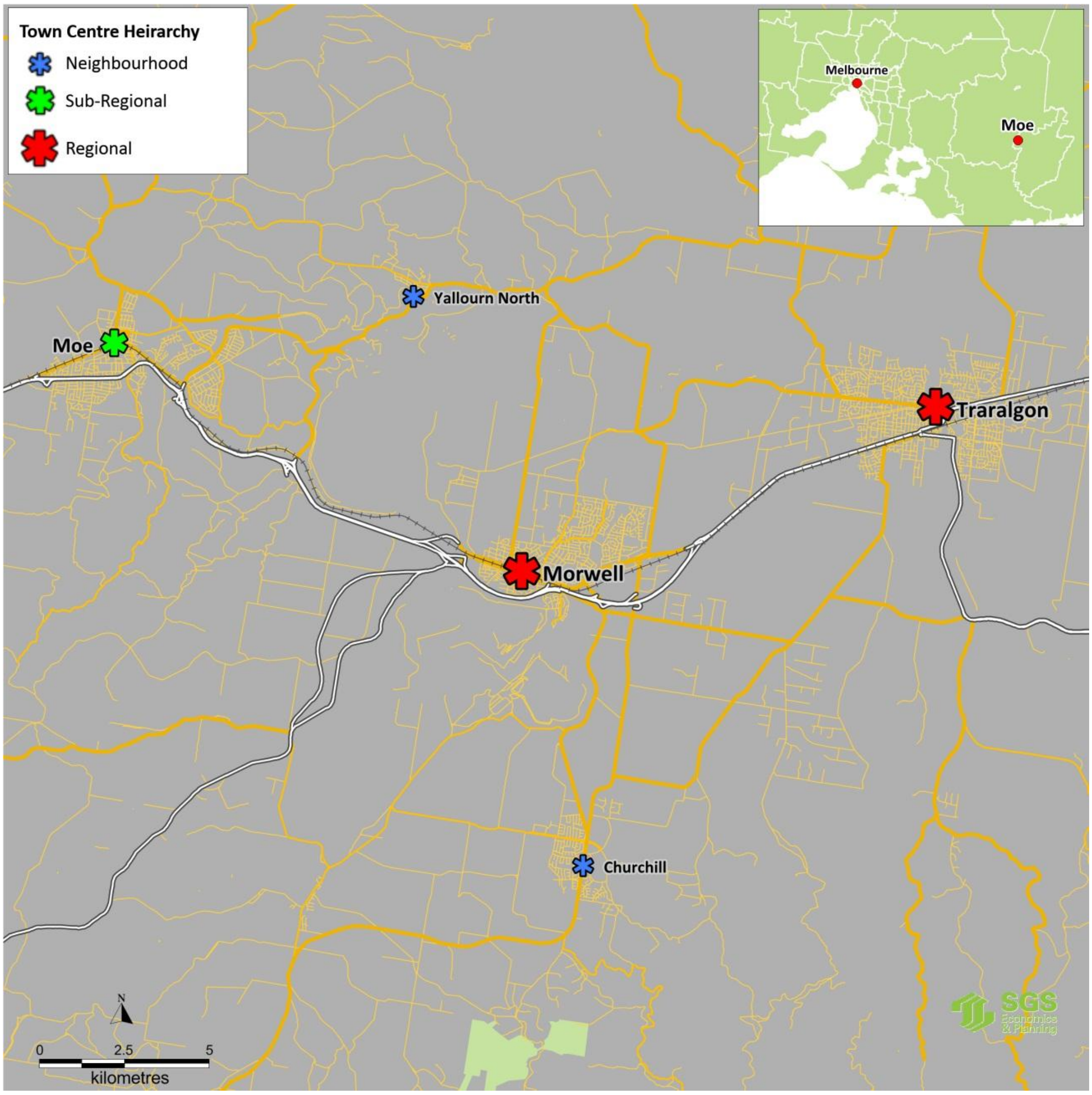
Figure 2 maps the activity centres in the region surrounding Lake Narracan. The major Regional centre in the area is Traralgon. Morwell may also be considered a Regional Centre. The town centre of Moe is best described as a Sub-Regional centre due to it possessing a Discount Department Store (DDS, K-Mart) and three supermarkets.

Due to its close proximity, Moe is the dominant centre for future Lake Narracan residents. The higher order retailing needs of Lake Narracan residents will be provided by Morwell and Traralgon. Warragul may also serve as a regional centre to Lake Narracan residents along with Morwell and Traralgon.

In this context, a centre in Lake Narracan is likely to perform a local neighbourhood function within this overall hierarchy.

See Table 1 for more detail.

## FIGURE 2 REGIONAL ACTIVITY CENTRE HIERARCHY




The commercial hierarchy observed above can be defined as follows:

- Regional centre – a major retail centre that serves a wide catchment and is anchored by a department store, discount department store, supermarket and specialty stores;
- Sub-regional centre - a major retail centre that serves a wide catchment (but smaller than a regional centre) and is anchored by a discount department store, supermarket and specialty stores;
- Neighbourhood centre - a retail centre that serves a neighbourhood catchment (smaller than a sub-regional centre) and is anchored by a supermarket and specialty stores; and
- Local shops – a collection of small shops that perform a convenience retail function.

## TABLE 1 REGIONAL ACTIVITY CENTRE LIST

| Town/Centre | Hierarchy | Enclosed Mall | Street Based Retail | Total Floorspace | Proposed Floorspace (Likely in next 15 years) | Major Anchors |
|---|---|---|---|---|---|---|
| Traralgon | Regional | 19,242 | 63,482 | 82,724 | 4,500 | K-Mart, Coles, Woolworths |
| Morwell | Regional | 45,369 | 60,386 | 105,755 | 1,500 | Target, Bunnings, Big W, Woolworths, Bi-Lo |
| Moe | Sub-Regional | - | 38,272 | 38,272 | 2,000 | K-Mart, Woolworths, Aldi, Coles, Harvey Norman |
| Newborough | Neighbourhood | - | 3,510 | 3,510 | - | Foodworks |
| Churchill | Small Neighbourhood | 1,453 | - | 1,453 | - | IGA |
| Yallourn North | Small Neighbourhood | - | 1,402 | 1,402 | - | |
| Yinnar | Local | - | 539 | 539 | - | |
| Glengarry | Local | - | 507 | 507 | - | |
| Boolara | Local | - | 456 | 456 | - | |

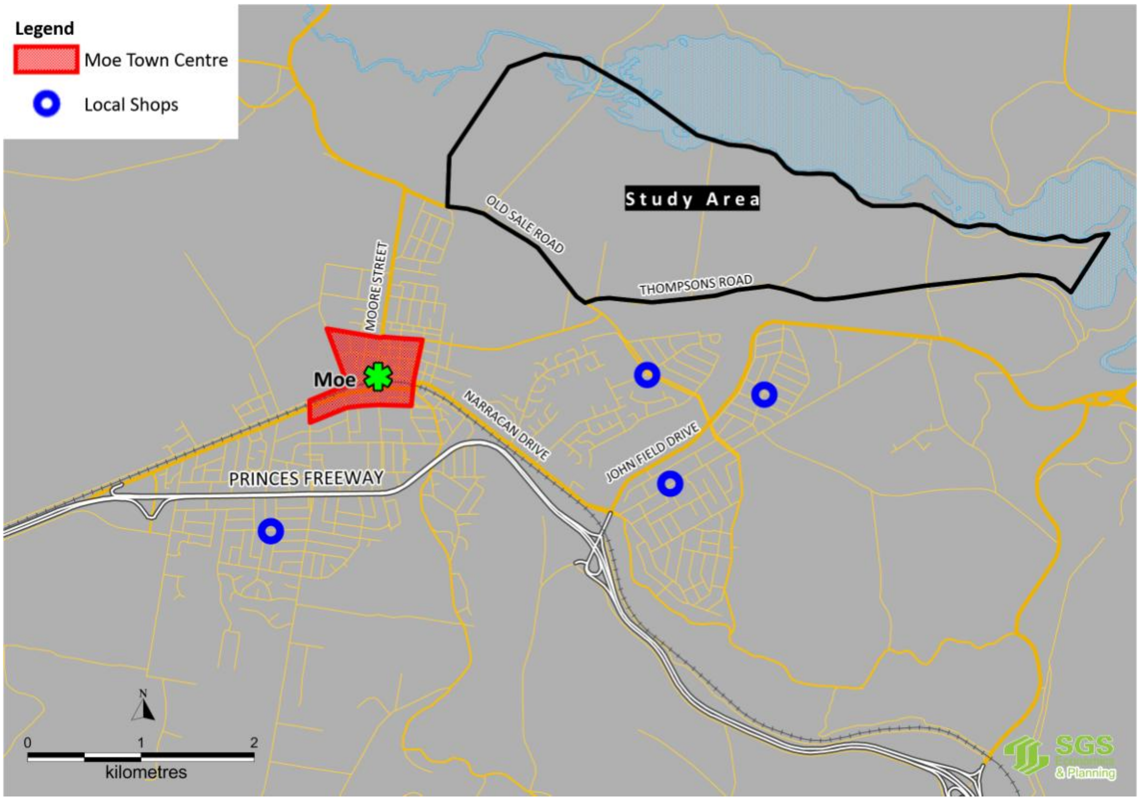
*Source: Property Council of Australia*

## 3.2 Local Context

A land use survey and site visit was conducted to develop a stocktake of existing retail floorspace in the townships of Moe and Newborough (the findings are presented below). The site visit explored Moe, Newborough and Lake Narracan. The visited areas are summarised in Figure 3. This site visit included visits to the Moe Town Centre (Red Shading) and four local shop nodes. The local shop nodes include

- An IGA anchored strip at the corner of Elizabeth Street and Prince Street, Moe;
- A collection of shops and offices including a post office at the corner of Monash Road and Rutherglen Road, Newborough;
- A Foodworks anchored strip on Boolara Avenue, Newborough; and
- A small collection of shops including a milk bar at the corner of Old Sale Road and Newark Avenue, Newborough.

**FIGURE 3 EXISTING RETAIL IN MOE & NEWBOROUGH**




*Source: SGS Site Visit*

At present there is no retail floorspace located in the Lake Narracan precinct with the exception of a small café located adjacent to the Lake Narracan Caravan Park. If the Greenfield land in this precinct were to be developed for residential purposes, new residents would need to travel three kilometres to Newborough for basic shopping needs. This is a reasonable distance to travel for accessing local supermarket and related services. However it would also be beneficial for the local community if residents in Lake Narracan were able to walk to their nearest local convenience store or supermarket. Hence there is some need for the provision of retail floorspace in Lake Narracan. The remainder of Section 3 profiles the existing retail centres and their role. This is organised as:

- Moe Town Centre (north)
- Moe Town Centre (south)
- Local Centres – Moe

- Local Centres – Newborough

## Moe Town Centre (North)

The Moe Town Centre consists of a precinct of Business 1 Zoned land, positioned around the Moe Railway Station. The majority of visitation and expenditure appears to be drawn to the north of the railway station, featuring major anchors, a plaza, an arcade and a good selection of speciality stores.

**FIGURE 4 MOE TOWN CENTRE (NORTH)**


*Source: SGS Site Visit*
*Clockwise from topleft: Moe Plaza; Shops and active frontages on Albert Street; Moe library; Streetscaping in Moore Street*

Major anchors Woolworths, Coles, K-Mart and Aldi are located on the western and eastern boundaries of the centre, with speciality stores occupying the retail floorspace in between. The distance from the westernmost anchor (Aldi) to the easternmost anchor (Woolworths) is approximately 600 metres. This is distance is rather excessive for facilitating pedestrian traffic in the centre, as 400 metres is generally considered to be the maximum favourable walkable distance between anchors. As a result the Moe Town Centre is somewhat decentralised.

It is worth noting that Aldi appears to have set up in Moe fairly recently as a third supermarket in the centre.

**FIGURE 5 MOE TOWN CENTRE (MAJOR ANCHORS)**


*Source: SGS Site Visit*
*Clockwise from top-left: Aldi; Coles; K-mart; Woolworths*

The centre also appears to lack a strong focal point. Whilst Moore Street features quality streetscaping and aesthetics, it lacks a strong anchor to draw customers. Nonetheless the centre does possess bank branches, major fast food chains, and bulky goods retailers.

Vacancy rates are generally quite low in the northern parts of Moe, with more vacancies observed south of the railway line.

## Moe Town Centre (South)

The southern part of the Moe Town Centre was observed to attract significantly less foot traffic during the site visit. This appears to be caused by its relative isolation from the northern side of the centre, which contains all four major anchors in Moe. Hence the southern part of the Moe Town Centre essentially performs a role which would be analogous to that of a separate, small neighbourhood activity centre. This part of the centre contains some local specialty shops. Signs of under-investment include an abandoned former post office, a vacant (undeveloped) site and inactive/obsolete shop frontages.

**FIGURE 6 MOE TOWN CENTRE (SOUTH)**


*Source: SGS Site Visit*
*Clockwise from top-left: Shops along Moe-Glengarry Road; Moe Station Rail Crossing which connects the Southern and Northern parts of the town centre; Vacant Site on Moe-Glengarry Road; vacant former Post Office building.*

## Local Centres – Moe

There is a local supermarket (IGA) based centre situated at the corner of Elizabeth Street and Prince Street in Moe. It is located approximately 1.7km southwest of the Moe Town Centre. The supermarket in this centre is an IGA store of about 500sqm which serves the daily shopping needs of residents south of the Princess Freeway.

Other noteworthy business activities include:

- A vacant (former) milk bar which was found at the corner of High Street and Bayley Street, also near the southern outskirts of Moe.

- A used car sales cluster in the Industrial 3 Zone directly north of the Moe Town Centre.

**FIGURE 7 OTHER LOCAL CENTRES IN MOE**


*Source: SGS Site Visit*
*Clockwise from top-left: supermarket based local centre at the corner of Elizabeth Street and Prince Street; Indian restaurant on Elizabeth Street; Bulky Goods/Light Industry cluster at the corner of Moore Street and Della Torre Road; Vacant milk bar site on Bayley Street.*

## Local Centres - Newborough

Four local centres were identified within the township of Newborough. These are listed below in descending order:

- Corner Monash Road and Rutherglen Road. This local centre contains a post office, hotel and a carpark. Complimented by specialty food and clothing stores, with a few medical clinics.
- Boolara Avenue. This centre faces a well maintained local park and is anchored by a Foodworks store of approximately 300sqm. There are some food stores and a pharmacy.
- Corner Old Sale Road and Newark Avenue. Local shops including a milk bar, hair salon and vet clinic.
- Glengarry-Moe Road. A used car sales precinct on Business 4 Zoned land.

**FIGURE 8 LOCAL CENTRES IN NEWBOROUGH**


*Source: SGS Site Visit*
*Clockwise from top-left: Shops along Monash Road; Post Office on Rutherglen Road; Foodworks on Boolara Avenue; Milk bar and other shops at the Corner of Old Sale Road and Newark Avenue.*

## 3.3 Contextual Conclusions

The Moe Town Centre plays a Sub-Regional role within the broader retail economy. It is currently the dominant retail centre for all residents of Moe, Newborough and Lake Narracan.

The Town Centre is essentially divided into northern and a southern precincts by Moe Railway Station, and effectively operates as two separate retailing areas. The northern precinct benefits from having four major anchors (including three supermarkets). Whilst the decentralised nature of the centre deprives it of a strong focal point, this part of the Town Centre still appears to be trading reasonably well. On the other hand the southern precinct of the Moe Town Centre is under-invested and contains no anchor. Whilst this area has many specialty shops, they are also laid out in a decentralised formation.

It is assessed that whilst the Moe Town Centre is the dominant retail centre in local retail economy, it has been experiencing under investment and vacancies. The establishment of retail floorspace in Lake Narracan must therefore be carefully managed because the Moe Town Centre could be sensitive to competition.

Otherwise, there are four other centres spread across the Moe-Newborough Township. Whilst we found an IGA and a Foodworks, those stores were considered too small to be categorised as conventional supermarkets; they are better described as basic grocery stores.

There is little evidence to suggest that many local residents would rely on those centres for their weekly shopping needs – the range of products offered in these centres are very limited, and local residents can be expected to travel to the Moe Town Centre for all but their daily conveniences.

The four centres are therefore assessed to be local shop nodes that are not likely to be significantly affected by the establishment of supermarket based centre(s) in Lake Narracan.

# 4 DEMAND ESTIMATE

This section highlights the retailing conditions and drivers which will drive retailing in the study area. Utilising population projections and scenarios, it discusses likely catchments, expenditure, floorspace, need and impact for new retail floorspace in the Lake Narracan Growth Area. The issue of timing is also addressed.

## 4.1 Activity Centre Systems: Retail, Office and Services

### Framework

The basic 'building block' of an activity centre network and hierarchy is in most cases retail activity.

Centres that generate a 'large' number of retail visits from a 'large' catchment are well placed to accommodate other regional scale activities such as community services and other commercial activities. This is because retailing generates a large number of trips for a variety of purposes (for daily, weekly or less frequent purposes). This enables other land uses to co-locate with retailing and thus generate co-location benefits. This includes the ability to undertake multi-purpose trips (for example, shopping plus entertainment plus business in the one location) and share common infrastructure (for example, public transport, open space and parking).

In the general sense, a commercial hierarchy can be defined as follows:

- Regional centre – a major retail centre that serves a wide catchment and is anchored by a department store, discount department store, supermarket and specialty stores;
- Sub-regional centre - a major retail centre that serves a wide catchment (but smaller than a regional centre) and is anchored by a discount department store, supermarket and specialty stores;
- Neighbourhood centre - a retail centre that serves a neighbourhood catchment (smaller than a sub-regional centre) and is anchored by a supermarket and specialty stores; and
- Local shops – a collection of small shops that perform a convenience retail function.

Bulky goods retailing or large floor plate retailing (such as furniture, electrical goods and hardware supplies) can be located within large centres or as a standalone specialist precinct in some cases.

Population catchments determine the economic possibilities when establishing an activity centre network – that is, quantum of commercial floorspace and type of floorspace. Planning policy however determines how that floorspace is allocated – for example, dispersed retail network, strip based, centre based or mall based.

### Lake Narracan

Within the range of possibilities, retailing in Lake Narracan is likely to perform the role of a neighbourhood centre supported almost exclusively by the local population.

## 4.2 Population in Existing Areas

### Existing Population

The 2011 ABS Census (Table 2) shows that there are currently 16,675 people residing in the in the wider Moe/Newborough/Lake Narracan area (see Figure 9). Most of these residents are residing in dwellings that are located within the existing township. It is interesting to note that the heaviest concentrations of residents are either in Newborough or in areas south of the railway line in Moe[1]. There are also some residents living in the Rural Living Zone and the Farming Zone within the study area.

### Future Population – VIF Projections

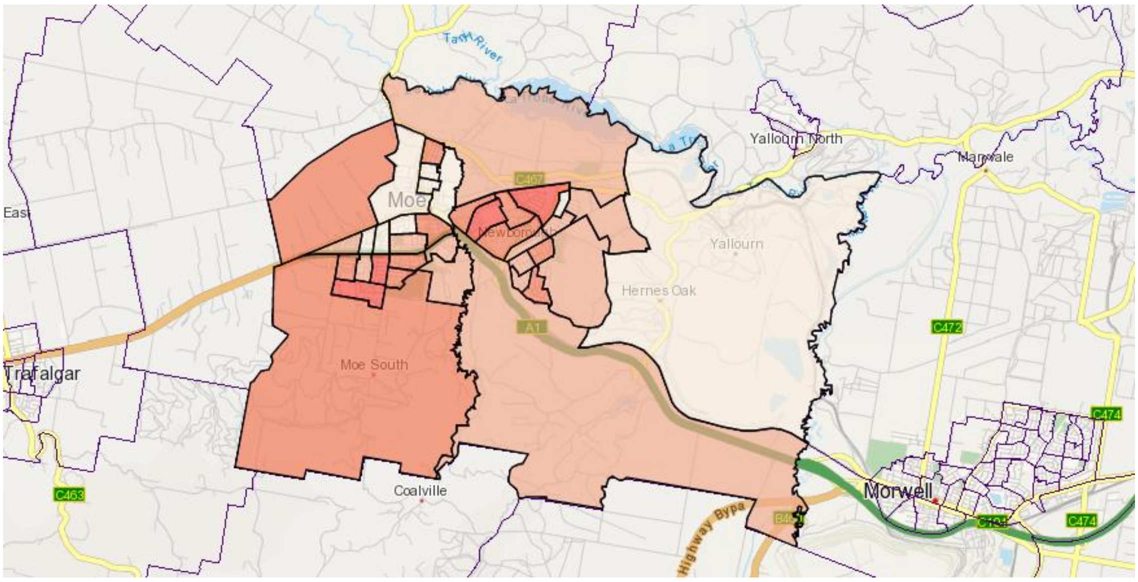
Table 2 also calculates the potential population growth in Moe and Newborough by applying Business-as-Usual growth rates from the 2012 Victoria in Future (VIF) population projections for the Latrobe – Moe Statistical Local Area (SLA). On that basis, Moe and Newborough is expected to eventually hold 16,943 residents by the year 2031 in a Business-as-Usual scenario.

**TABLE 2 POPULATION GROWTH – MOE AND NEWBOROUGH (2011 – 2031) VIF**

| | 2011 | 2016 | 2021 | 2026 | 2031 |
|---|---|---|---|---|---|
| Moe & Newborough Population | 16,675 | 16,737 | 16,807 | 16,876 | 16,943 |
| AAGR | | 0.37% | 0.42% | 0.41% | 0.40% |

*Source: SGS Economics and Planning, VIF, ABS Census*

**FIGURE 9 MOE & NEWBOROUGH STATISTICAL AREAS FOR VIF POPULATION PROJECTIONS (STATISTICAL AREA 1)**




*Source: ABS 2011 Census*

[1] A darker shade of red implies higher population

## Future Population – i.d Projections

Table 3 below calculates the potential population growth in Moe and Newborough as presented by i.d. consulting's projections for the Latrobe City Council. On this basis, Moe and Newborough are expected to contain 19,740 residents by the year 2031.

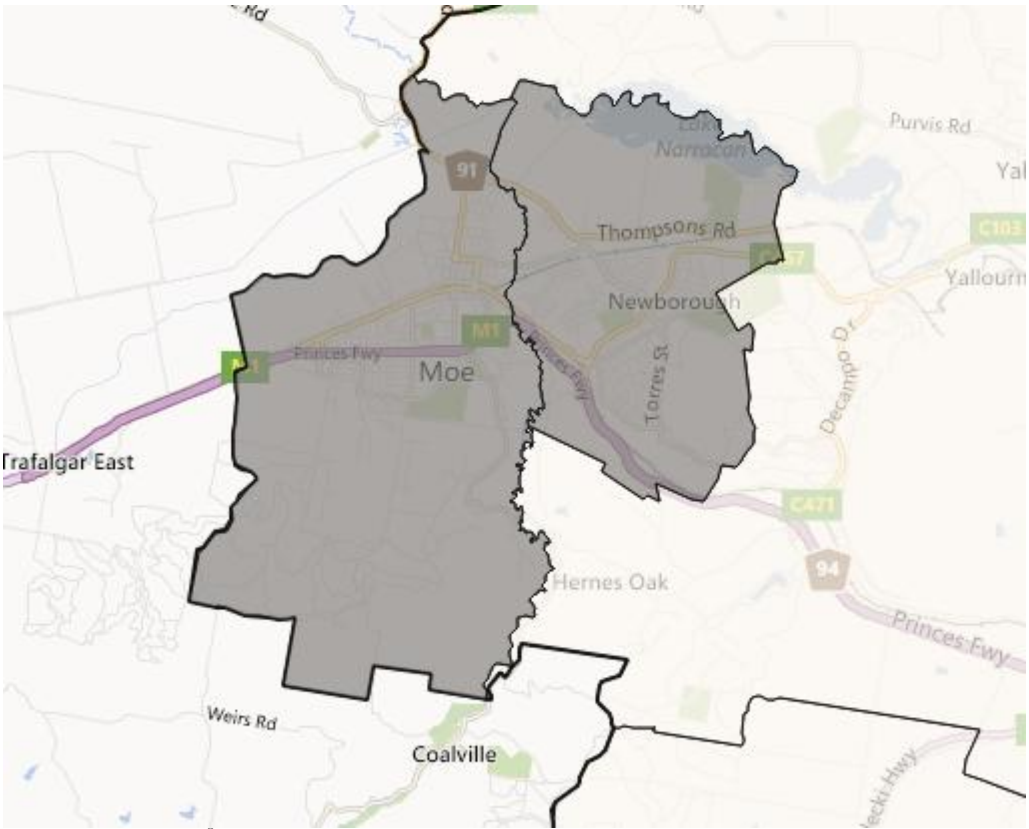
Figure 10 shows geographic areas covered by the i.d. population projections.

**TABLE 3 POPULATION GROWTH – MOE AND NEWBOROUGH (2011 – 2031) I.D.**

| | 2011 | 2016 | 2021 | 2026 | 2031 |
|---|---|---|---|---|---|
| Moe - Moe South | 9,448 | 9,903 | 10,419 | 10,958 | 11,550 |
| Newborough | 6,956 | 7,327 | 7,613 | 7,932 | 8,190 |
| Total | 16,404 | 17,230 | 18,032 | 18,890 | 19,740 |
| AAGR | | 0.99% | 0.91% | 0.93% | 0.88% |

*Source: i.d consulting*[2]

**FIGURE 10 MOE & NEWBOROUGH STATISTICAL AREAS FOR I.D. POPULATION PROJECTIONS**




*Source: i.d consulting*[3]

[2] http://forecast2.id.com.au/Default.aspx?id=294&pg=5310
[3] http://forecast2.id.com.au/Default.aspx?id=294&pg=5310

### Future Population – Concordance

The i.d. and VIF population projections are somewhat different. Note that neither set of projections impacted by future development in the Lake Narracan growth area.

As a result, this study will use population projections given the midpoint (or average) for the two sets of numbers. This is shown below in Table 4:

**TABLE 4 POPULATION GROWTH – MOE AND NEWBOROUGH (2011 – 2031) CONCORDANCE**

| Moe & Newborough Population | 2011 | 2016 | 2021 | 2026 | 2031 |
|---|---|---|---|---|---|
| VIF | 16,675 | 16,737 | 16,807 | 16,876 | 16,943 |
| i.d. | 16,404 | 17,230 | 18,032 | 18,890 | 19,740 |
| **Midpoint** | **16,540** | **16,984** | **17,420** | **17,883** | **18,342** |

This suggests that the population of Moe and Newborough can be expected to grow to 18,342 by 2031. Table 5 below extrapolates this midpoint figure out to 2046, with a resident population 19,685 to be expected in Moe and Newborough.

**TABLE 5 POPULATION GROWTH – MOE AND NEWBOROUGH (2011 – 2046)**

| Year | 2011 | 2016 | 2021 | 2026 | 2031 | 2036 | 2041 | 2046 |
|---|---|---|---|---|---|---|---|---|
| Midpoint | 16,540 | 16,984 | 17,420 | 17,883 | 18,342 | 18,785 | 19,235 | 19,685 |

## 4.3 Potential Population in Lake Narracan

It has been advised that the high level conservative development statistics for the Lake Narracan study area are as follows:

**TABLE 6 RESIDENTIAL DEVELOPMENT STATISTICS FOR THE LAKE NARRACAN STUDY AREA**

| | |
|---|---|
| Overall gross site area | 610ha |
| Estimated Net Developable Area | 380ha |
| Estimated Dwellings | 3,800 (10 dwellings/ha) |
| **Estimated Population** | **9,120 (2.4 persons/dwelling)** |

*Source: Growth Areas Authority*

The projections above are based on the assumption that of the net developable area in the Greenfield estate(s), some land will be used for open space, environmental purposes and local roads and other urban amenities. The calculation also includes the consideration of one or two retail/civic centres, as well as any new community facilities which might be accommodated in the study area.

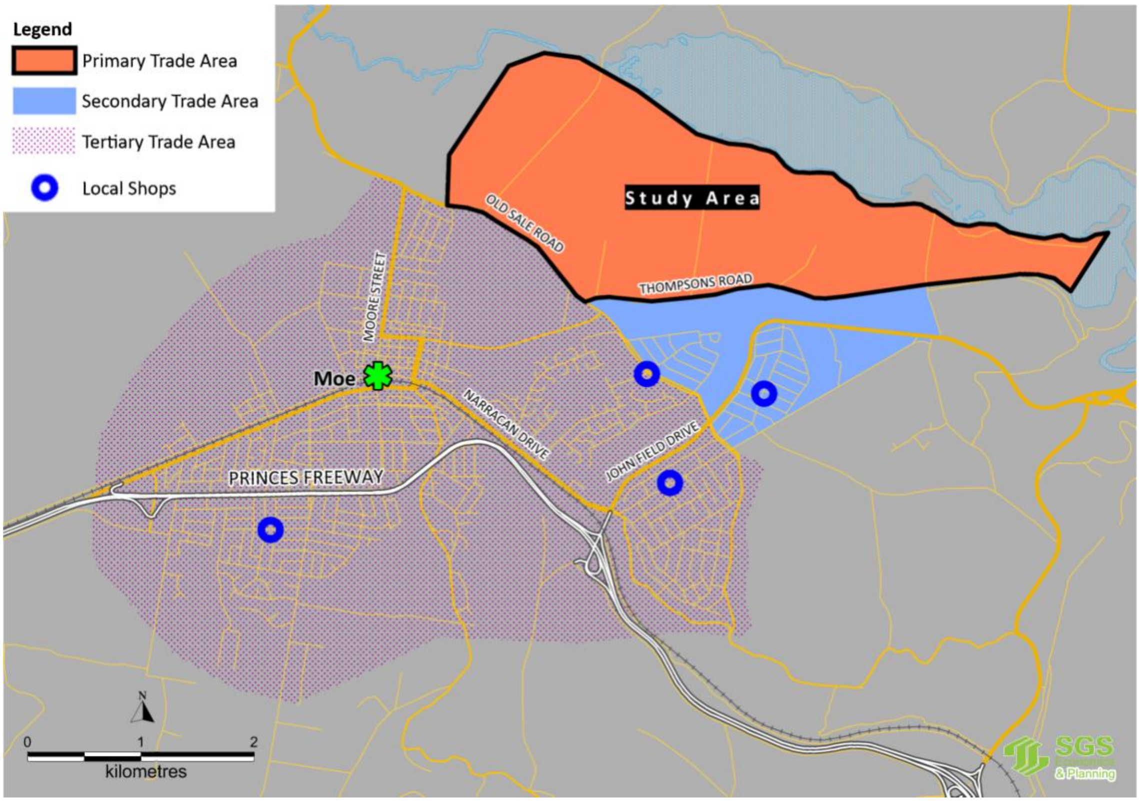
For the purposes of this study, it is assumed that there will be 9,120 residents in the Lake Narracan Growth Area Precinct by 2046.

Note that GAA Guidelines state a requirement for 8,000-10,000 local residents to justify the establishment of a 3,500 sqm supermarket.

## 4.4 Catchments and Trade Area Population

The catchment for the retail centre in the Lake Narracan Greenfield precinct is shown in Figure 11 below.

**FIGURE 11 CATCHMENT AREAS FOR A FUTURE CENTRE IN LAKE NARRACAN**




This is assessed as a reasonable future catchment based on:

- The boundaries of the Greenfield precinct;
- The existing and potential future network of activity centres in the region;
- The existing and potential future road network in the region; and
- The propensity for households in Moe to shop in the larger centre as it contains three Supermarkets and a Discount Department Store.

It is anticipated that the Greenfield precinct can accommodate a total of 9,120 residents. This Greenfield precinct will also form the Primary Trade Area (PTA) for the retail floorspace which is proposed in the area.

A small Secondary Trade Area (STA) has also been defined to include the blue shaded region. From the ABS 2011 Census population statistics referenced in Table 2, the current population in this STA is 1,807 people. This population is expected to grow when the Monash Views development is completed. This development is expected to yield 219 to 329 dwellings. Based on the median yield scenario of 285 dwellings, it is reasonable to expect a population increase of 684 residents (2.4 persons per dwelling), which results in 2,491 residents at full development for this STA.

Note that collectively, the PTA and STA form the Main Trade Area (MTA).

A Tertiary Trade Area (TTA) has also been defined. It comprises the remainder of the Moe-Newborough Township (purple shaded region). As the total population of Moe and Newborough can be expected to accommodate 19,685 residents by 2046, and there are likely to be 2,491 residents in the STA

(Newborough), then the Tertiary Trade Area (TTA) (Moe and part of Newborough) can be expected to contain the remaining balance – 17,194 residents.

At full development, the Trade Area populations are estimated in Table 7.

**TABLE 7 TRADE AREA POPULATION PROJECTIONS AT FULL DEVELOPMENT (2046)**

| Trade Area | Population |
|---|---|
| Principal | 9,120 |
| Secondary | 2,491 |
| Tertiary | 17,194 |
| Total | 28,805 |

Source: SGS, ABS, GAA, VIF

For the purposes of this study, it is assumed that residential development of the study area will commence in 2016, with full development to be achieved by 2046. This is an assumption. In terms of the trajectory of development and population growth, it is assumed that growth will occur in a linear fashion between 2016 and 2046.

Whilst development may not follow this pattern in reality, for the purposes of this indicative assessment this assumption is used to provide a simple guide to the timing of demand.

Table 8 overleaf shows the annual expected population with these assumptions.

## TABLE 8 ASSUMED GROWTH PATTERN TO 2046

| Year | Primary Trade Area | Secondary Trade Area | Tertiary Trade Area | Total Trade Area |
|---|---|---|---|---|
| 2013 | 398 | 1,807 | 14,495 | 16,700 |
| 2014 | 398 | 1,828 | 14,577 | 16,802 |
| 2015 | 398 | 1,848 | 14,658 | 16,905 |
| 2016 | 679 | 1,869 | 14,740 | 17,289 |
| 2017 | 961 | 1,890 | 14,822 | 17,673 |
| 2018 | 1,242 | 1,911 | 14,904 | 18,056 |
| 2019 | 1,523 | 1,931 | 14,986 | 18,440 |
| 2020 | 1,805 | 1,952 | 15,067 | 18,824 |
| 2021 | 2,086 | 1,973 | 15,149 | 19,208 |
| 2022 | 2,367 | 1,994 | 15,231 | 19,592 |
| 2023 | 2,649 | 2,014 | 15,313 | 19,976 |
| 2024 | 2,930 | 2,035 | 15,394 | 20,360 |
| 2025 | 3,212 | 2,056 | 15,476 | 20,744 |
| 2026 | 3,493 | 2,076 | 15,558 | 21,127 |
| 2027 | 3,774 | 2,097 | 15,640 | 21,511 |
| 2028 | 4,056 | 2,118 | 15,722 | 21,895 |
| 2029 | 4,337 | 2,139 | 15,803 | 22,279 |
| 2030 | 4,618 | 2,159 | 15,885 | 22,663 |
| 2031 | 4,900 | 2,180 | 15,967 | 23,047 |
| 2032 | 5,181 | 2,201 | 16,049 | 23,431 |
| 2033 | 5,462 | 2,222 | 16,131 | 23,815 |
| 2034 | 5,744 | 2,242 | 16,212 | 24,198 |
| 2035 | 6,025 | 2,263 | 16,294 | 24,582 |
| 2036 | 6,306 | 2,284 | 16,376 | 24,966 |
| 2037 | 6,588 | 2,304 | 16,458 | 25,350 |
| 2038 | 6,869 | 2,325 | 16,540 | 25,734 |
| 2039 | 7,151 | 2,346 | 16,621 | 26,118 |
| 2040 | 7,432 | 2,367 | 16,703 | 26,502 |
| 2041 | 7,713 | 2,387 | 16,785 | 26,886 |
| 2042 | 7,995 | 2,408 | 16,867 | 27,269 |
| 2043 | 8,276 | 2,429 | 16,949 | 27,653 |
| 2044 | 8,557 | 2,450 | 17,030 | 28,037 |
| 2045 | 8,839 | 2,470 | 17,112 | 28,421 |
| 2046 | 9,120 | 2,491 | 17,194 | 28,805 |

## 4.5 Retail Spending Per Capita

An overview of the projected retail expenditure per capita is shown in Table 9 below. This estimate takes account of:

- Local spending patterns
- Local income levels
- State-wide retail trends

To estimate the changing patterns of retail spending, regression analysis was performed on retail turnover data from 1985 to 2011 as published in the ABS Retail Trade publication (8501.0). This enabled an estimate of how real growth in state expenditure per capita has changed over time and is likely to change in the future. Such growth levels have been estimated out to 2046 based on current estimates of per capita expenditure levels in the local area.

This state level expenditure data is then refined using an expenditure element of the SGS retail model. In addition to state-wide expenditure trajectories, the major input into this model is the local income profile of the Moe-Newborough area from the 2011 ABS Census. The analysis accounts for factors including per capita income, income quintiles and the relationship of these quintiles to data published in the ABS Household Expenditure Survey (2009/10).

These data sets are then factored into the calculation of estimated variations in the household spending patterns for the local area based on its income profile.

**TABLE 9 MOE/NEWBOROUGH/LAKE NARRACAN RETAIL SPENDING PER CAPITA (2013 $)**

| Per Capita Expenditure | 2013 | 2016 | 2021 | 2026 | 2031 | 2036 | 2041 | 2046 |
|---|---|---|---|---|---|---|---|---|
| Supermarkets | $3,132 | $3,285 | $3,559 | $3,716 | $3,880 | $4,037 | $4,200 | $4,358 |
| Department Stores | $521 | $526 | $534 | $562 | $591 | $618 | $648 | $675 |
| Other Food | $587 | $606 | $638 | $654 | $670 | $685 | $701 | $716 |
| Clothing and Soft Goods | $621 | $593 | $549 | $583 | $619 | $652 | $688 | $721 |
| Household Goods | $1,572 | $1,655 | $1,804 | $1,936 | $2,077 | $2,210 | $2,350 | $2,483 |
| Other Retail | $1,113 | $1,201 | $1,362 | $1,478 | $1,603 | $1,719 | $1,843 | $1,960 |
| Hospitality and Services | $794 | $817 | $858 | $907 | $959 | $1,008 | $1,060 | $1,110 |
| Total | $8,339 | $8,671 | $9,272 | $9,812 | $10,387 | $10,929 | $11,501 | $12,044 |

*Source: SGS Retail Model, ABS Retail Trade Publication, ABS Household Expenditure Survey 09/10, ABS Census 2011*

From the above list of commodity groups, 'Supermarkets', 'Other Food', 'Clothing and Soft goods', 'Other Retail' and 'Hospitality and Services' are all considered to be potentially relevant to retail traders in Lake Narracan.

Department Store spending would most likely be absorbed by higher order centres in the region (i.e. Traralgon or Morwell).

Expenditure on Household Goods will be directed to bulky goods or restricted retail clusters. There may be some scope to zone for a bulky goods cluster in the Moe-Newborough-Lake Narracan area, particularly as new households in the Growth Area are likely to spend heavily on Household Goods in the early years of settlement.

In this study, supermarkets will be the primary focus as they are likely to the key anchor(s) for any new retail node(s) in Lake Narracan.

## Supermarkets

The expenditure figures shown above from 2013 to 2046 are applied to the population estimates in Table 8 to estimate potential supermarket expenditure generation from the Trade Areas. The results are shown in Table 10 below.

Table 10 demonstrates how Total Trade Area supermarket spending is expected to increase from around $52.3m in 2013 to around $125.5m in 2046. This represents expenditure from the Trade Area residents and not necessarily capture by Trade Area businesses. The current level of expenditure is distributed across the three supermarkets (Aldi, Woolworths and Coles) in the Moe Town Centre.

Table 10 also shows the quantum of supermarket floorspace this level of expenditure will support over time, based on a supermarket retail turnover density (RTD) of $8,000 per square metre in 2013 and $11,354 by 2046.

Note that in 2013, the population in the Trade Area supports 6,537 sqm of retail floorspace space. Based on the estimates shown in this report, this figure is expected to increase to a total of about 11,056 sqm by 2046.

**TABLE 10 SUPERMARKET EXPENDITURE & FLOORSPACE (2013 $)**

| Year | RTD ($/sqm) | Primary Trade Area | | Secondary Trade Area | | Tertiary Trade Area | | Total Trade Area | |
|---|---|---|---|---|---|---|---|---|---|
| | | Expenditure | F'space | Expenditure | F'space | Expenditure | F'space | Expenditure | F'space |
| 2013 | $8,000 | $1,246,359 | 156 | $5,658,721 | 707 | $45,391,040 | 5,674 | $52,296,119 | 6,537 |
| 2014 | $8,107 | $1,266,449 | 156 | $5,815,886 | 717 | $46,382,959 | 5,721 | $53,465,294 | 6,595 |
| 2015 | $8,216 | $1,286,862 | 157 | $5,976,648 | 727 | $47,395,061 | 5,769 | $54,658,572 | 6,653 |
| 2016 | $8,328 | $2,231,979 | 268 | $6,141,082 | 737 | $48,427,741 | 5,815 | $56,800,801 | 6,821 |
| 2017 | $8,442 | $3,207,229 | 380 | $6,309,263 | 747 | $49,481,397 | 5,862 | $58,997,889 | 6,989 |
| 2018 | $8,558 | $4,213,338 | 492 | $6,481,271 | 757 | $50,556,439 | 5,907 | $61,251,048 | 7,157 |
| 2019 | $8,677 | $5,251,049 | 605 | $6,657,185 | 767 | $51,653,281 | 5,953 | $63,561,514 | 7,325 |
| 2020 | $8,799 | $6,321,117 | 718 | $6,837,086 | 777 | $52,772,347 | 5,998 | $65,930,550 | 7,493 |
| 2021 | $8,923 | $7,424,318 | 832 | $7,021,056 | 787 | $53,914,069 | 6,042 | $68,359,443 | 7,661 |
| 2022 | $9,016 | $8,498,663 | 943 | $7,156,320 | 794 | $54,675,017 | 6,064 | $70,330,000 | 7,801 |
| 2023 | $9,109 | $9,591,075 | 1,053 | $7,293,400 | 801 | $55,445,106 | 6,087 | $72,329,582 | 7,940 |
| 2024 | $9,204 | $10,701,786 | 1,163 | $7,432,320 | 807 | $56,224,437 | 6,108 | $74,358,544 | 8,079 |
| 2025 | $9,300 | $11,831,032 | 1,272 | $7,573,100 | 814 | $57,013,113 | 6,130 | $76,417,245 | 8,217 |
| 2026 | $9,397 | $12,979,050 | 1,381 | $7,715,761 | 821 | $57,811,238 | 6,152 | $78,506,049 | 8,354 |
| 2027 | $9,496 | $14,146,081 | 1,490 | $7,860,327 | 828 | $58,618,914 | 6,173 | $80,625,323 | 8,491 |
| 2028 | $9,595 | $15,332,368 | 1,598 | $8,006,820 | 834 | $59,436,249 | 6,195 | $82,775,437 | 8,627 |
| 2029 | $9,695 | $16,538,158 | 1,706 | $8,155,261 | 841 | $60,263,349 | 6,216 | $84,956,768 | 8,763 |
| 2030 | $9,797 | $17,763,699 | 1,813 | $8,305,675 | 848 | $61,100,321 | 6,237 | $87,169,695 | 8,897 |
| 2031 | $9,900 | $19,009,243 | 1,920 | $8,458,083 | 854 | $61,947,276 | 6,257 | $89,414,601 | 9,032 |
| 2032 | $9,993 | $20,261,140 | 2,027 | $8,606,602 | 861 | $62,761,251 | 6,280 | $91,628,993 | 9,169 |
| 2033 | $10,088 | $21,531,798 | 2,134 | $8,756,953 | 868 | $63,584,269 | 6,303 | $93,873,020 | 9,306 |
| 2034 | $10,183 | $22,821,437 | 2,241 | $8,909,155 | 875 | $64,416,424 | 6,326 | $96,147,016 | 9,442 |
| 2035 | $10,279 | $24,130,279 | 2,348 | $9,063,227 | 882 | $65,257,808 | 6,349 | $98,451,315 | 9,578 |
| 2036 | $10,376 | $25,458,548 | 2,454 | $9,219,191 | 889 | $66,108,516 | 6,371 | $100,786,255 | 9,713 |
| 2037 | $10,474 | $26,806,471 | 2,559 | $9,377,066 | 895 | $66,968,644 | 6,394 | $103,152,181 | 9,848 |
| 2038 | $10,573 | $28,174,277 | 2,665 | $9,536,873 | 902 | $67,838,286 | 6,416 | $105,549,436 | 9,983 |
| 2039 | $10,674 | $29,562,197 | 2,770 | $9,698,632 | 909 | $68,717,541 | 6,438 | $107,978,370 | 10,116 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2040 | $10,775 | $30,970,464 | 2,874 | $9,862,365 | 915 | $69,606,506 | 6,460 | $110,439,336 | 10,250 |
| 2041 | $10,877 | $32,399,317 | 2,979 | $10,028,094 | 922 | $70,505,281 | 6,482 | $112,932,691 | 10,383 |
| 2042 | $10,971 | $33,829,198 | 3,084 | $10,189,876 | 929 | $71,372,202 | 6,506 | $115,391,276 | 10,518 |
| 2043 | $11,065 | $35,278,435 | 3,188 | $10,353,501 | 936 | $72,248,084 | 6,529 | $117,880,020 | 10,653 |
| 2044 | $11,161 | $36,747,236 | 3,293 | $10,518,987 | 942 | $73,133,011 | 6,553 | $120,399,234 | 10,788 |
| 2045 | $11,257 | $38,235,812 | 3,397 | $10,686,353 | 949 | $74,027,070 | 6,576 | $122,949,235 | 10,922 |
| 2046 | $11,354 | $39,744,374 | 3,500 | $10,855,618 | 956 | $74,930,346 | 6,599 | $125,530,338 | 11,056 |

## 4.6 Expenditure Capture for New Supermarkets

The next issue is the proportion of expenditure and space which can reasonably be captured by a new centre in the Lake Narracan Growth Area based on the competitive context. The scenarios discussed in the remainder of this sub-section are for the **end scenario of full development**, which is assumed to be 2046.

### Primary Trade Area (PTA) Capture

There is no precise way of estimating what share will be captured in the study area because it can vary depending on the relative attractiveness of the supermarket(s) in comparison to the other three supermarkets in Moe.

It is the view here that a reasonable estimate of market share for the new supermarket(s) will be:

- A one-fifth (20%) share if a small line supermarket is established in the study area.
- A two-fifth (40%) share if a full line supermarket is established in the study area.
- A half (50%) share if two supermarkets are established in the study area.

These are assumptions. The one-fifth share is based on the fact that a hypothetical small supermarket in Lake Narracan would be perceived to be far less attractive than the three full line supermarkets in Moe. One full line supermarket on the other hand, has the potential to be far more competitive as it is essentially one of four equivalent supermarkets in the region. It would then gain a competitive advantage by being the local supermarket – although this is somewhat offset by the greater level of attractiveness in Moe Town Centre overall.

If two supermarkets were to be constructed in the Lake Narracan Growth Area, there would be a strong case for locating these supermarkets in separate nodes in order to facilitate better walkability outcomes for the future community in Lake Narracan. As a result, the total walkable catchment of supermarkets in Lake Narracan could effectively be almost doubled[4].

### Secondary Trade Area (STA) Capture

For the Secondary Trade Area, a lower capture by the Study Area is assumed. The range is assumed to be between

- A one-tenth (10%) share if a small line supermarket is established in the study area.
- A one-fifth (20%) share if a full line supermarket is established in the study area.
- A three-tenth (30%) share if two supermarkets are established in the study area.

[4] Note that if a walkable catchment is considered to be within an 800 metre radius of a centre, the catchment area is approximately 200 hectares. Two nodes would cover 400 hectares worth of walkable catchments. In this case, 400 hectares would cover the majority of the 610 hectare study area (and PTA) in Lake Narracan.

These are assumptions. The one-tenth share is based on the fact that a small line supermarket is unlikely to be significantly more attractive to residents of the STA than the local shops (which includes a small Foodworks on Boolara Avenue) within the STA itself. A full line supermarket can attract twice as much share, but distance is likely to be a mitigating factor when compared to market shares gained in the PTA.

If two full line supermarkets are established, there is a good chance that a second supermarket could be located in the eastern parts of the study area. A supermarket in such a location could be very accessible for residents in the STA, and hence a 30% market share is possible overall.

## Tertiary Trade Area (TTA) Capture

Supermarket floorspace in the Lake Narracan Growth Area is also likely to attract some level of expenditure from the remainder of the Moe-Newborough township, albeit at a very low level. These are assumed to be:

- A 5% share if a small line supermarket is established in the study area.
- A 10% share if a full line supermarket is established in the study area.
- A 15% share if two supermarkets are established in the study area.

## Expenditure and Floorspace Results

The expenditure and floorspace result of each scenario is shown in Tables 11 and 12. These tables demonstrate that all three supermarket scenarios are likely to be viable.

For example, Table 11 shows that a small supermarket[5] is likely to generate an annual expenditure of $12,780,954 when Lake Narracan becomes fully developed. This is based on the trade area captures discussed above. At an end scenario RTD of $11,354 per square metre, this would translate to a floorspace of 1,126sqm. This is effectively 75% of the standard 1,500sqm model for a small supermarket. Other scenarios are highlighted in Table 14.

Such a supermarket is likely to be viable for several reasons:

- The RTD of $11,354 per sqm is ambitious and significantly higher than the current conventional RTD of $8,000 per sqm. At the present RTD of $8,000 per sqm, the supermarket's expenditure capture would be able to support 1,598sqm of supermarket floorspace.
- In regional areas, the potential for extra competition is usually lower than in metropolitan areas. Hence a supermarket trader is often more willing to accept a lower level of trade due to less risk of increased competition.
- A marginal error of +/- 10% is usually taken into account for RTD and floorspace estimates.
- There are many supermarkets across both metropolitan and regional Victoria which have been assessed to operate at approximately 75% of its 'standard' RTD.

[5] Standard supermarket sizes: small – 1,500sqm; medium – 2,700sqm; large – 3,500sqm.

### TABLE 11 SUPERMARKET EXPENDITURE ESTIMATES FOR POTENTIAL LAKE NARRACAN SUPERMARKET(S) – FULL DEVELOPMENT (2013 $)

| | Scenario | Expenditure |
|---|---|---|
| Primary Trade Area | Total Demand | $ 39,744,374 |
| | Small Supermarket (20%) | $ 7,948,875 |
| | Full Line Supermarket (40%) | $ 15,897,749 |
| | Two Supermarkets (50%) | $ 19,872,187 |
| Secondary Trade Area | Total Demand | $ 10,855,618 |
| | Small Supermarket (10%) | $ 1,085,562 |
| | Full Line Supermarket (20%) | $ 2,171,124 |
| | Two Supermarkets (30%) | $ 3,256,685 |
| Tertiary Trade Area | Total Demand | $ 74,930,346 |
| | Small Supermarket (5%) | $ 3,746,517 |
| | Full Line Supermarket (10%) | $ 7,493,035 |
| | Two Supermarkets (15%) | $ 11,239,552 |
| **Overall Capture** | **Small Supermarket** | **$ 12,780,954** |
| | **Full line Supermarket** | **$ 25,561,908** |
| | **Two Supermarkets** | **$ 34,368,424** |

### TABLE 12 SUPERMARKET FLOORSPACE ESTIMATES FOR POTENTIAL LAKE NARRACAN SUPERMARKET(S) – FULL DEVELOPMENT

| | Scenario | Floorspace |
|---|---|---|
| Primary Trade Area | Total Demand | 3,500 |
| | Small Supermarket (20%) | 700 |
| | Full Line Supermarket (40%) | 1,400 |
| | Two Supermarkets (50%) | 1,750 |
| Secondary Trade Area | Total Demand | 956 |
| | Small Supermarket (10%) | 96 |
| | Full Line Supermarket (20%) | 191 |
| | Two Supermarkets (30%) | 287 |
| Tertiary Trade Area | Total Demand | 6,599 |
| | Small Supermarket (5%) | 330 |
| | Full Line Supermarket (10%) | 660 |
| | Two Supermarkets (15%) | 990 |
| **Overall Capture** | **Small Supermarket** | **1,126** |
| | **Full line Supermarket** | **2,251** |
| | **Two Supermarkets** | **3,027** |

## 4.7 Indicative Need

In assessing the likely need for supermarket floorspace to serve a greenfield/regional community, a consideration of floorspace to population ratio is required. The general standard which SGS applies across Victoria is 300 sqm of supermarket floorspace per 1,000 people in the Main Trade Area[6] (MTA), or 0.30 sqm per person.

When this ratio of 0.30 is applied for the full development (2046) MTA population of 11,611 in Lake Narracan and parts of Newborough, supportable supermarket floorspace of approximately 3,483 sqm is deemed reasonable (see Table 13).

This would suggest that when this Greenfield precinct is fully developed there will be a *need* for either

- A full line supermarket of 3,000 to 3,500 sqm of floorspace; or
- Two supermarkets totalling no more than 3,500 sqm of floorspace.

Note however that this assumes that there is no other supermarket within a reasonable distance of this area – which is not the case for Lake Narracan.

**TABLE 13 ASSESSMENT OF POPULATION AND FLOORSPACE IN THE MAIN TRADE AREA (MTA)**

| MTA Population (2013) | Floorspace to Population Ratio | Supportable Floorspace (2013) |
|---|---|---|
| 2,205 | 0.3 | 662 |
| **MTA Population (2046)** | **Floorspace to Population Ratio** | **Supportable Floorspace (2046)** |
| 11,611 | 0.3 | 3,483 |

[6] The Main Trade Area here is defined as the combined demand for the Primary and Secondary Trade Areas

## 4.8 Viability

Most small supermarkets (three to six checkouts) range from 500 sqm to 2,000 sqm. Typically, 1,500 sqm is the standard size of a small supermarket for an IGA or Aldi. A full line supermarket (12 to 16 checkouts) may range from anywhere between 2,000 to 4,000sqm. A 'standard' full line supermarket for Woolworths or Coles will generally contain 3,200 sqm of floorspace. Based on an RTD of $11,354 (in 2046) per square metre, the levels of expenditure required to support such supermarkets are shown below in Table 14.

**TABLE 14 FLOORSPACE AND EXPENDITURE (2013 $)**

| Floorspace | Required Expenditure |
|---|---|
| 1200 | $ 13,624,800 |
| 1500 | $ 17,031,000 |
| 2000 | $ 22,708,000 |
| 2400 | $ 27,249,600 |
| 2700 | $ 30,655,800 |
| 3000 | $ 34,062,000 |
| 3300 | $ 37,468,200 |
| 3500 | $ 39,739,000 |
| 3800 | $ 43,145,200 |

With these standard supermarket sizes, we can obtain thresholds for when supermarkets in the study area could be viable.

## 4.9 Turnover, Need and Impact

The primary objective should be to ensure that the role of the Moe Town Centre as the sub-regional centre servicing Moe, Newborough and (in future) Lake Narracan is maintained. Indeed, the proposed Greenfield development in Lake Narracan should be seen as an opportunity to reinforce the primacy of the Moe Town Centre by effectively increasing the population with Moe Town Centre' broader catchment.

Our site visit found there to be three standard supermarkets anchoring Moe (Woolworths, Coles and Aldi). As assessed earlier (Table 10), in 2013 the population in Moe, Newborough and Lake Narracan supports 6,537 sqm of supermarket floorspace space. At present then, the local catchment would only support 2,179 sqm of supermarket floorspace in each store – a significant level of underperformance.

Tables 15 and 16 demonstrate that standard supermarkets in Victoria invariably average just over 2,700 sqm of floorspace. If this rule is applied to the Moe Town Centre (assuming there remains three supermarkets), it would be optimal for the local catchment to support 8,100 sqm of supermarket floorspace in total (to be distributed among the three anchors in Moe). According to Table 10, this is likely to be achievable by 2025, which is when the Moe, Newborough and Lake Narracan possess a combined population of 20,744.

It is hence advised that the City of Latrobe avoid allowing any supermarket floorspace to be established in Lake Narracan until the population of the three areas combined reaches at least 20,000.

### TABLE 15 SUPERMARKET SIZES IN REGIONAL VICTORIA

| Centre Name | Centre type | Suburb | Region | Supermarket Size |
|---|---|---|---|---|
| Pakington Strand | Strip Mall | Geelong West | Barwon | 3,950 |
| Bellarine Village | Enclosed Mall | Newcomb | Barwon | 3,877 |
| Village Epsom - Bendigo | Enclosed Mall | Bendigo | Loddon | 3,348 |
| Centro Birallee | Enclosed | Wodonga | Ovens-Murray | 3,196 |
| Fountain Plaza (VIC) | Enclosed Mall | Echuca | Goulburn | 2,862 |
| Drysdale Village | Enclosed Mall | Drysdale | Barwon | 2,757 |
| Bayside City Plaza | Street Based | Warrnambool | Western District | 2,684 |
| Centro Warrnambool | Enclosed Mall | Warrnambool | Western District | 2,627 |
| Yarra Junction Village | Enclosed Mall | Yarra Junction | Gippsland | 2,270 |
| Midvale | Partially Enclosed Mall | Mount Clear, Ballarat | Central Highlands | 1,855 |
| Darley Plaza | Open Mall | Bacchus Marsh | Central Highlands | 1,400 |
| Lara Shopping Centre | Strip Mall | Lara | Barwon | 1,204 |

*Source: PCA*

### TABLE 16 STANDARD SIZE OF SUPERMARKETS IN REGIONAL VICTORIA (FROM DATA IN TABLE 15)

| Percentile | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
|---|---|---|---|---|---|---|---|---|---|---|
| Floorspace | 1,445.50 | 1,938.00 | 2,377.10 | 2,649.80 | 2,720.50 | 2,820.00 | 3,095.80 | 3,317.60 | 3,824.10 | 3950.00 |

Tables 11 and 12 in Section 4.6 analysed in detail, the likely impact of new supermarkets given various scenarios. The impacts are summarised below in Table 17.

### TABLE 17 SUMMARY OF IMPACTS ON MOE TOWN CENTRE BY NEW SUPERMARKET FLOORSPACE IN LAKE NARRACAN

| Scenario | 1500sqm (small supermarket) | 2700sqm (Full line supermarket) | 3500sqm (Two supermarkets) |
|---|---|---|---|
| Loss of Expenditure (Moe Town Centre) | $12,780,954 | $25,561,908 | $34,368,424 |
| Loss of Floorspace Demand (Moe Town Centre) | 1,126 | 2,251 | 3,027 |

If every dollar of expenditure and square metre of floorspace attracted by a supermarket(s) in Lake Narracan will reduce floorspace and expenditure by an equivalent amount, this also needs to be factored into the timing of a new supermarket in Lake Narracan.

Assuming that 8,100 sqm of supermarket demand should be maintained in the Moe Town Centre and new supermarket floorspace is likely to absorb 1,126 to 3,027 sqm of floorspace demand, the entire Moe, Newborough and Lake Narracan area needs to support between 9,226 sqm to 11,127 sqm of floorspace demand before any new supermarket is constructed in Lake Narracan. This timing equation is calculated in Table 18 below.

It shows that if supermarket floorspace demand in the Moe Town Centre is to be kept above 8,100 sqm, in Lake Narracan:

- A 1,500 sqm supermarket can be constructed by 2033 when the population of the whole Moe, Newborough and Lake Narracan area reaches a population of 23,815.
- A 2,700 sqm supermarket can be constructed by 2041 when the population of the whole Moe, Newborough and Lake Narracan area reaches a population of 26,886.
- Two supermarkets totally 3,500 sqm of floorspace should not be considered until after 2046 when the total population of Moe, Newborough and Lake Narracan exceeds 29,000.

## TABLE 18 IMPACTS ON MOE TOWN CENTRE FROM A NEW SUPERMARKET IN LAKE NARRACAN

| Year | Total Trade Area Population | Total Trade Area Demand | | 1500 sqm Supermarket | | 2700 sqm Supermarket | | Two Supermarkets (3500 sqm) | |
|---|---|---|---|---|---|---|---|---|---|
| | | Expenditure | Floorspace | Impact on Moe Town Centre | Remaining Trade | Impact on Moe Town Centre | Remaining Trade | Impact on Moe Town Centre | Remaining Trade |
| 2013 | 16,700 | $52,296,119 | 6,537 | -1,126 | 5,411 | -2,251 | 4,286 | -3,027 | 3,510 |
| 2014 | 16,802 | $53,465,294 | 6,595 | -1,126 | 5,469 | -2,251 | 4,344 | -3,027 | 3,568 |
| 2015 | 16,905 | $54,658,572 | 6,653 | -1,126 | 5,527 | -2,251 | 4,402 | -3,027 | 3,626 |
| 2016 | 17,289 | $56,800,801 | 6,821 | -1,126 | 5,695 | -2,251 | 4,570 | -3,027 | 3,794 |
| 2017 | 17,673 | $58,997,889 | 6,989 | -1,126 | 5,863 | -2,251 | 4,738 | -3,027 | 3,962 |
| 2018 | 18,056 | $61,251,048 | 7,157 | -1,126 | 6,031 | -2,251 | 4,906 | -3,027 | 4,130 |
| 2019 | 18,440 | $63,561,514 | 7,325 | -1,126 | 6,199 | -2,251 | 5,074 | -3,027 | 4,298 |
| 2020 | 18,824 | $65,930,550 | 7,493 | -1,126 | 6,367 | -2,251 | 5,242 | -3,027 | 4,466 |
| 2021 | 19,208 | $68,359,443 | 7,661 | -1,126 | 6,535 | -2,251 | 5,410 | -3,027 | 4,634 |
| 2022 | 19,592 | $70,330,000 | 7,801 | -1,126 | 6,675 | -2,251 | 5,550 | -3,027 | 4,774 |
| 2023 | 19,976 | $72,329,582 | 7,940 | -1,126 | 6,814 | -2,251 | 5,689 | -3,027 | 4,913 |
| 2024 | 20,360 | $74,358,544 | 8,079 | -1,126 | 6,953 | -2,251 | 5,828 | -3,027 | 5,052 |
| 2025 | 20,744 | $76,417,245 | 8,217 | -1,126 | 7,091 | -2,251 | 5,966 | -3,027 | 5,190 |
| 2026 | 21,127 | $78,506,049 | 8,354 | -1,126 | 7,228 | -2,251 | 6,103 | -3,027 | 5,327 |
| 2027 | 21,511 | $80,625,323 | 8,491 | -1,126 | 7,365 | -2,251 | 6,240 | -3,027 | 5,464 |
| 2028 | 21,895 | $82,775,437 | 8,627 | -1,126 | 7,501 | -2,251 | 6,376 | -3,027 | 5,600 |
| 2029 | 22,279 | $84,956,768 | 8,763 | -1,126 | 7,637 | -2,251 | 6,512 | -3,027 | 5,736 |
| 2030 | 22,663 | $87,169,695 | 8,897 | -1,126 | 7,771 | -2,251 | 6,646 | -3,027 | 5,870 |
| 2031 | 23,047 | $89,414,601 | 9,032 | -1,126 | 7,906 | -2,251 | 6,781 | -3,027 | 6,005 |
| 2032 | 23,431 | $91,628,993 | 9,169 | -1,126 | 8,043 | -2,251 | 6,918 | -3,027 | 6,142 |
| 2033 | 23,815 | $93,873,020 | 9,306 | -1,126 | 8,180 | -2,251 | 7,055 | -3,027 | 6,279 |
| 2034 | 24,198 | $96,147,016 | 9,442 | -1,126 | 8,316 | -2,251 | 7,191 | -3,027 | 6,415 |
| 2035 | 24,582 | $98,451,315 | 9,578 | -1,126 | 8,452 | -2,251 | 7,327 | -3,027 | 6,551 |
| 2036 | 24,966 | $100,786,255 | 9,713 | -1,126 | 8,587 | -2,251 | 7,462 | -3,027 | 6,686 |
| 2037 | 25,350 | $103,152,181 | 9,848 | -1,126 | 8,722 | -2,251 | 7,597 | -3,027 | 6,821 |
| 2038 | 25,734 | $105,549,436 | 9,983 | -1,126 | 8,857 | -2,251 | 7,732 | -3,027 | 6,956 |
| 2039 | 26,118 | $107,978,370 | 10,116 | -1,126 | 8,990 | -2,251 | 7,865 | -3,027 | 7,089 |
| 2040 | 26,502 | $110,439,336 | 10,250 | -1,126 | 9,124 | -2,251 | 7,999 | -3,027 | 7,223 |
| 2041 | 26,886 | $112,932,691 | 10,383 | -1,126 | 9,257 | -2,251 | 8,132 | -3,027 | 7,356 |
| 2042 | 27,269 | $115,391,276 | 10,518 | -1,126 | 9,392 | -2,251 | 8,267 | -3,027 | 7,491 |
| 2043 | 27,653 | $117,880,020 | 10,653 | -1,126 | 9,527 | -2,251 | 8,402 | -3,027 | 7,626 |
| 2044 | 28,037 | $120,399,234 | 10,788 | -1,126 | 9,662 | -2,251 | 8,537 | -3,027 | 7,761 |
| 2045 | 28,421 | $122,949,235 | 10,922 | -1,126 | 9,796 | -2,251 | 8,671 | -3,027 | 7,895 |
| 2046 | 28,805 | $125,530,338 | 11,056 | -1,126 | 9,930 | -2,251 | 8,805 | -3,027 | 8,029 |

Whilst Table 13 appears to argue the case for a full line supermarket in Lake Narracan at a much earlier date based on need, this is somewhat unnecessary given the precinct's proximity to three major supermarkets in the Moe Town Centre.

## 4.10 Ancillary Retail and Benchmarks

Table 13 compares relevant supermarket anchored neighbourhood centres across Regional Victoria. It shows that they are mostly anchored by one supermarket, but with a wide range of sizes - from 1,200 sqm to 3,900 sqm in floorspace. The average size of a single supermarket based centre is about 2,700 sqm.

On average, these single supermarket based centres are accompanied by about 11 specialty stores which comprise approximately 1,400 sqm of floorspace. The average single supermarket centre is just over 4,000 sqm in size, occupying approximately 1.3 hectares of site area.

The centres which are anchored by two supermarkets have been observed to possess only 63.8% more supermarket floorspace than the single supermarket centres. However those centres contain more than twice the amount of specialty retail floorspace, with almost triple the number of specialty shops.

This suggests that in regional areas, a centre anchored by two supermarkets possesses the ability to attract a greater than usual share (per supermarket) of ancillary retail than a centre with only one supermarket. This is evidence that the two supermarket centre is of a higher level of attractiveness in the retail economy, and therefore its net impact potentially greater on other centres in the retail economy.

As a guide the following levels of ancillary retail is recommended:

- A small supermarket may be accompanied by five specialty stores totalling 500 sqm
- A full line supermarket may be accompanied by 10 to 15 specialty stores totalling approximately 1,500 sqm
- Two supermarkets are likely to attract 20 to 30 specialty stores totalling around 2,500 sqm to 3,000 sqm of specialty retail floorspace. *If the two supermarket scenario is pursued, the Latrobe City Council should consider limiting the number of specialty stores to under 20 in order to prevent greater impacts on the Moe Town Centre*.

**TABLE 19 SUPERMARKET ANCHORED NEIGHBOURHOOD CENTRES IN REGIONAL VICTORIA**

| Centre Name | Centre type | Suburb | Region | No. Major Tenants (supermarkets) | Major Tenants GLAR | No. Specialty Stores | Specialty GLAR | Total Centre GLAR | Office GLA | No. Open Car Bays | Site Area (ha) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pakington Strand | Strip Mall | Geelong West | Barwon | 1 | 3,950 | 17 | 1,416 | 5,366 | - | 200 | 2.8 |
| Bellarine Village | Enclosed Mall | Newcomb | Barwon | 1 | 3,877 | 17 | 2,293 | 6,170 | - | 309 | 1.8 |
| Village Epsom - Bendigo | Enclosed Mall | Bendigo | Loddon | 1 | 3,348 | 4 | 748 | 4,096 | - | 350 | - |
| Centro Birallee | Enclosed | Wodonga | Ovens-Murray | 1 | 3,196 | 16 | 2,473 | 5,669 | - | 307 | - |
| Fountain Plaza (VIC) | Enclosed Mall | Echuca | Goulburn | 1 | 2,862 | 10 | 1,000 | 3,862 | - | 170 | - |
| Drysdale Village | Enclosed Mall | Drysdale | Barwon | 1 | 2,757 | 7 | 427 | 3,184 | - | 150 | - |
| Bayside City Plaza | Street Based | Warrnambool | Western District | 1 | 2,684 | 17 | 3,606 | 6,290 | 1,000 | - | - |
| Centro Warrnambool | Enclosed Mall | Warrnambool | Western District | 1 | 2,627 | 11 | 1,704 | 4,331 | - | 214 | - |
| Yarra Junction Village | Enclosed Mall | Yarra Junction | Gippsland | 1 | 2,270 | 9 | 902 | 3,172 | - | 99 | 0.3 |
| Midvale | Partially Enclosed Mall | Mount Clear, Ballarat | Central Highlands | 1 | 1,855 | 10 | 900 | 2,755 | 412 | 220 | 1.0 |
| Darley Plaza | Open Mall | Bacchus Marsh | Central Highlands | 1 | 1,400 | 4 | 400 | 1,800 | - | 80 | 0.8 |
| Lara Shopping Centre | Strip Mall | Lara | Barwon | 1 | 1,204 | 5 | 617 | 1,821 | - | 50 | - |

*Source: Property Council of Australia, Google Earth*

## 4.11 Implications

The Lake Narracan Greenfield Area is expected to accommodate over 9,000 residents at full development. This is likely to form the Primary Trade Area (PTA) of any new retail centres for Lake Narracan.

Due to proximity to Lake Narracan and distance to Moe, the northern part of Newborough is considered to be a likely Secondary Trade Area. The remainder of the Moe-Newobourgh Township forms a Tertiary Trade Area where some minor expenditure is likely to be drawn towards future traders in Lake Narracan.

Presently, the total annual supermarket expenditure for the three trade areas is estimated at $52.3m. This is expected to rise to $125.5m by 2046 assuming that Lake Narracan reaches full development at that stage. Based on a supermarket retail turnover density (RTD) of $8,000 per square metre in 2013, this local economy presently supports 6,537 sqm of supermarket floorspace. By 2046, this figure is estimated to rise to 11,056 sqm.

The City of Latrobe should be aiming to maintain and reinforce the primacy of the Moe Town Centre as the sub-regional shopping destination of this region. While there are many different methods to achieve this, the primary economy goal should be to ensure that its supermarket anchors are trading at optimal levels. The level of supermarket floorspace demand required to achieve this is assessed to be a total of 8,100 sqm.

If this is to be reached and then maintained, from an impact perspective a small supermarket could be trading in Lake Narracan by 2033, with considerations for an expansion by 2041 or a second supermarket to be delayed until after 2046. If trading occurs earlier than these timeframes, then there there will be a disruption to the plan to strengthen the supermarket anchors in the Moe Town Centre.

A benchmarked guide for ancillary retailing in Lake Narracan has been developed from comparisons with other supermarket based neighbourhood centres across Regional Victoria. Recommended shop numbers and floorspace quantities vary depending on the supermarket scenario selected.

## 4.12 Tourism

Lake Narracan is increasingly well noted for its recreational features, and these are likely to become an attractor for new local residents as well as the wider region. As such, there will need to be sufficient retailing to support this population growth.

Lake Narracan's ability to generate local water-based tourism in the future will also have some impact for retail and activity centre planning – particularly in terms of location. This does not just include retail floorspace. An appropriate allowance for the long term provision of ancillary entertainment, commercial and institutional floorspace in the activity centre may also be beneficial for the area's economic growth prospects.

It may therefore be a good idea to locate one of the retail nodes near the lake's caravan park, as this is already a well established facility. If there is sufficient interest from businesses and land owners to establish extra ancillary retailing, council should consider accommodating those uses. However Supermarket (anchor) floorspace should still be limited within the recommended guideline – this would help to limit the impact of this centre on the major anchors in the Moe Town Centre.

# 5 CONCLUSIONS AND RECOMMENDATIONS

The Study Area is well positioned to accommodate one or two retail nodes for the future community in Lake Narracan.

Any new supermarket in Lake Narracan would essentially be trading as one of four (or five if there are two) supermarkets in the region, which includes three existing supermarkets in the Moe Town Centre. The extent to which a new supermarket can capture floorspace and expenditure will depend on its offer and positioning in relation to this competitive context.

In order to reinforce the primacy of the Moe Town Centre by protecting trading impacts to its supermarket anchors whilst also adequately serving the local community, it is estimated that the Study Area should initially accommodate a **small supermarket of 1,500 sqm of floorspace once the population of Moe, Newborough and Lake Narracan exceeds 23,800**. The modelling in this report estimates that this is likely to occur around 2033.

Given the dimensions of the Lake Narracan study area, the two retail nodes are ultimately considered the favourable solution because that will help maximise the walking catchments of activity centres in Lake Narracan. However a second supermarket should not be considered until after 2046 when the population is likely to exceed 29,000.

It is recommended that the first supermarket based node should be established in the eastern part of the study area as this will allow it to be integrated with the caravan park and recreational facilities fronting the Lake. Extra ancillary retail floorspace may be considered by council if it helps facilitate the development of Lake Narracan as a tourism attractor.

The other retail node – presumably near the western end of the Lake Narracan study area – will trade without a supermarket anchor until the population of Moe, Newborough and Lake Narracan exceeds 29,000. This should be a reasonable outcome for the shopping needs of local residents because the western end of Lake Narracan is located closer to the Moe Town Centre than the eastern end.

The local road network should also be configured to facilitate the best possible accessibility outcomes for the community.

An alternative approach in planning for future supermarkets across the Moe, Newborough and Lake Narracan area could be to prioritise the consolidation and expansion of existing supermarkets in the Moe Town Centre. Also, in terms of the development of new supermarkets outside of the Moe Town Centre, Newborough may be considered by Latrobe City Council as a higher priority location than the Lake Narracan area.

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