

Warrnambool Land Use Strategy

24 September 2004

Warrnambool City Council



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Executive Summary

The aim of this project is to develop a land use strategy that will address Warrnambool's future land use and development needs over the forthcoming twenty year planning horizon. The Strategy identifies opportunities for more efficient and effective use of existing urban areas, identify future growth areas, assess infrastructure capabilities, environmental considerations and social indicators. A commitment to sustainability and best practice development techniques also underpins the Strategy.

Key land use and development issues were identified through a process of community and stakeholder consultation, desktop reviews and field inspections. This information was used to devise a set of future development options which were then assessed on the basis of environmental, economical and social considerations.

To satisfy residential land supply requirements, estimated to be 1950 lots over the forthcoming 15 years, the following areas were identified for immediate residential development:

- *The north east corridor east of Mortlake Road, incorporating a drainage management feature, recreational corridor and community nodes;*
- *The north Dennington area with linkages to the Merri River reserve;*
- *The coastal and Hopkins River environment both incorporating environmentally responsive siting, design and landscaping; and*
- *North of the Merri River with an emphasis on enhancing the Merri River corridor and providing substantial open space areas with pedestrian and bicycle linkages.*

In addition, the potential exists for further consolidation of established residential areas within the CAD and inner residential areas of west, east and south Warrnambool. This includes the redevelopment of brownfield sites such as the former Woollen Mills and Fletcher Jones sites.

Future demand for industry is to be met by:

- *Allocating new industrial land at Allansford to accommodate future industrial enterprises;*
- *Providing for new industrial developments in selected sites of west Warrnambool;*
- *Retention of the existing livestock saleyards operation and providing for additional industrial and commercial enterprises within an industrial buffer area west of the saleyards; and*
- *Providing for new industrial development in the vicinity of the Eastern Activity precinct.*

Land supply requirements for commercial activity will be met at the following locations:

- *Within the CAD and Eastern Activity precincts, particularly for retailing and offices;*
- *Supplementary retailing within smaller centres such as Dennington and Northpoint; and*
- *Community, commercial and retail services at proposed nodes within the north-east corridor.*

1. Introduction

The City of Warrnambool is located within the Local Government Area (LGA) of Warrnambool approximately 260 kilometres south - west of Melbourne on the Princes Highway, which provides a direct road link to Adelaide, Geelong and Melbourne. Warrnambool is the principal service centre for south-western Victoria and forms the western gateway to the Great Ocean Road Region. **Figure 1.1** shows the location of the Warrnambool LGA in the Western District and in relation to the rest of Victoria and Melbourne with its municipal boundary adjoining the Moyne Shire on all sides.

The City of Warrnambool is centred around the old City core south of the Princes Highway, which forms a grid pattern comprising significant heritage buildings and precincts with a strong landscape theme of Norfolk Island Pines.



The town has originated with a tendency to turn its back on the coast due to the severity of onshore winds, creating developed areas set back from the coastline. North of the highway, there is a range of subdivision styles responding to the terrain, watercourses and main roads. Drainage issues have also influenced the development of certain locations. The smaller satellite townships of Allansford and Dennington, have developed in a linear fashion and each has their own identity. Woodford and Bushfield are smaller settlements offering a relaxed rural lifestyle on the northern boundary of the municipality.

1.1 Purpose of the Land Use Strategy

As population growth and the intensity of land development within Warrnambool have increased beyond the expectations of Council's existing land use strategy, City Plan, there is a need to re-assess Warrnambool's land use requirements into the future.

The aim of this project is to develop a land use strategy that will address Warrnambool's future land use and development needs over the forthcoming twenty year planning horizon. The Strategy aims to identify opportunities for more efficient and effective use of existing urban areas, identify future growth areas, assess infrastructure capabilities, environmental considerations and social indicators. A commitment to sustainability and best practice development techniques also underpins the Strategy.



Figure 1.1
Location Map of
Warrnambool City Council

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1.2 Project Methodology

This report is the result of a consultation process with the community and stakeholders, including a public exhibition of the *Issues and Options Paper – Preliminary Land Supply Assessment*. A total of 36 submissions were received and taken into account in the preparation of the Strategy. The draft Strategy was then exhibited and a total of 28 submissions received. Relevant reports were also reviewed to extract issues and opportunities relating to future land development within Warrnambool.

The analysis of housing demand was undertaken within the regional context having particular regard to trend analysis based on most recent official forecasts and the local needs. This research was based on available data sources and together with existing assessments of commercial and industrial floor-space, will utilise previously completed audits and most recent information on development approvals. A summary of the relevant documents is contained within Section 8. This process was supported by field inspections of the City and surrounding settlements. Additional empirical studies are not within the scope of the brief.

Strategic development options have been considered for various areas within and around Warrnambool together with a number of Greenfield sites. The implications of the strategic options have been considered for the environment, for service provision, transport and community facilities. This assessment has been integrated with the overall future planning and development needs of the Warrnambool Urban Area. Based on the preferred development scenario, implementation plans were proposed which detail actions, timeframes and areas of responsibility. The timeframes include short term (until 2010), medium term (2010 to 2020) and long term (beyond 2020).

1.3 Scope of the Report

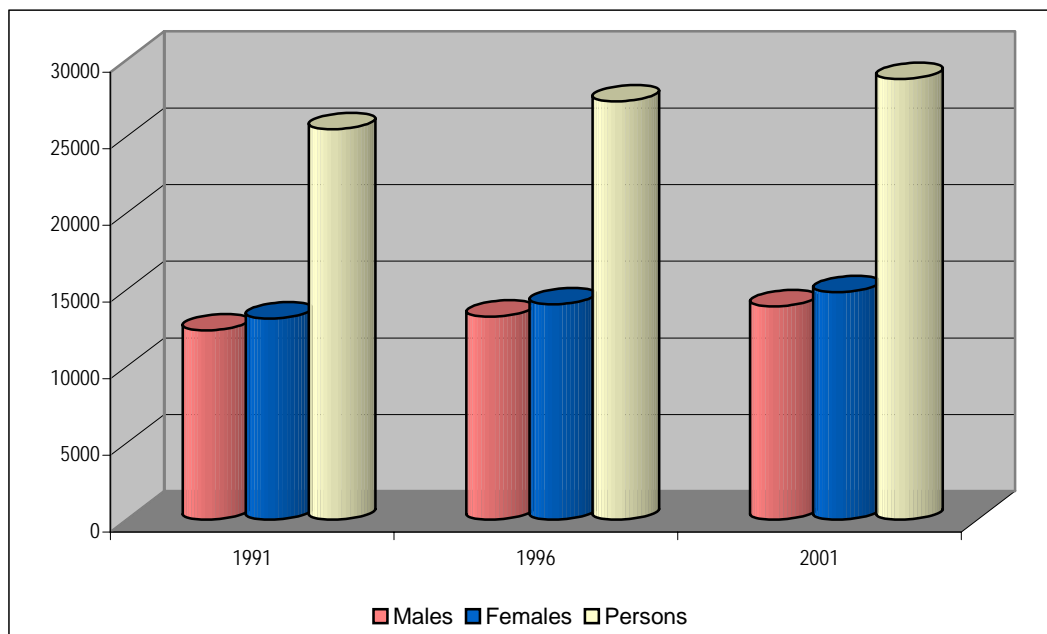
This document comprises the following sections:

- **Section 1:** An Introduction to the project and study area;
- **Section 2:** A demographic profile of the area;
- **Section 3:** A review of the major land use issues;
- **Section 4:** An assessment of available land supply;
- **Section 5:** Strategic land use and development options to identify suitable areas for future urban growth. Describes opportunities and constraints associated with these options;
- **Section 6:** Describes the preferred development scenario for urban growth;
- **Section 7:** Sets out the program for land release; and
- **Section 8:** Lists references used in undertaking the study.

2. Demographic Profile

2.1 Population and Age Structure

The Warrnambool urban area has a current population of 27,812 including Dennington and surrounding rural areas, (an additional 914 people reside within Allansford, Bushfield and Woodford) and has experienced strong population growth relative to the rest of Western Victoria with an average annual growth of 1.0% between 1991 and 2001, reference *Towns In Time, 2001 Census Update*. This has seen the overall population grow by 9.4% or 2,398 people in the decade between 1991 and 2001 (Refer **Figure 2.1**). The total population of the City of Warrnambool LGA based on current estimates by DSE for 2003 is suggested to be 30,359. DSE has most recently projected that the population will increase to 38,778. Within 15 years (between 2004 and 2019), it is estimated that the population will increase by 6,036. This equates to an average annual growth rate of 1.3% as compared to the previous growth rate of 1.0% (1981 – 2001). A slightly lower growth rate is shown in the DSE growth projections for regional Victoria with an average annual growth rate of 0.9% to 2019.



Source: Australian Bureau of Statistics

Figure 2.1: Population Growth

The total number of households is expected to grow by 4126 (to a total of 16,539) between 2004 and 2019 and to 17,868 by 2024, which represents an average annual growth rate of 2.2%. Accordingly, it is expected that the household growth rate will exceed the population growth rate over the next two decades (refer **Figure 2.2**). In addition, the projected household size is 2.2 persons per household.

The projections presented were released by DSE in September and based on the results of the 2001 census made public in July 2003. It should be noted that they are based on population totals and account for changes in regional migration trends.

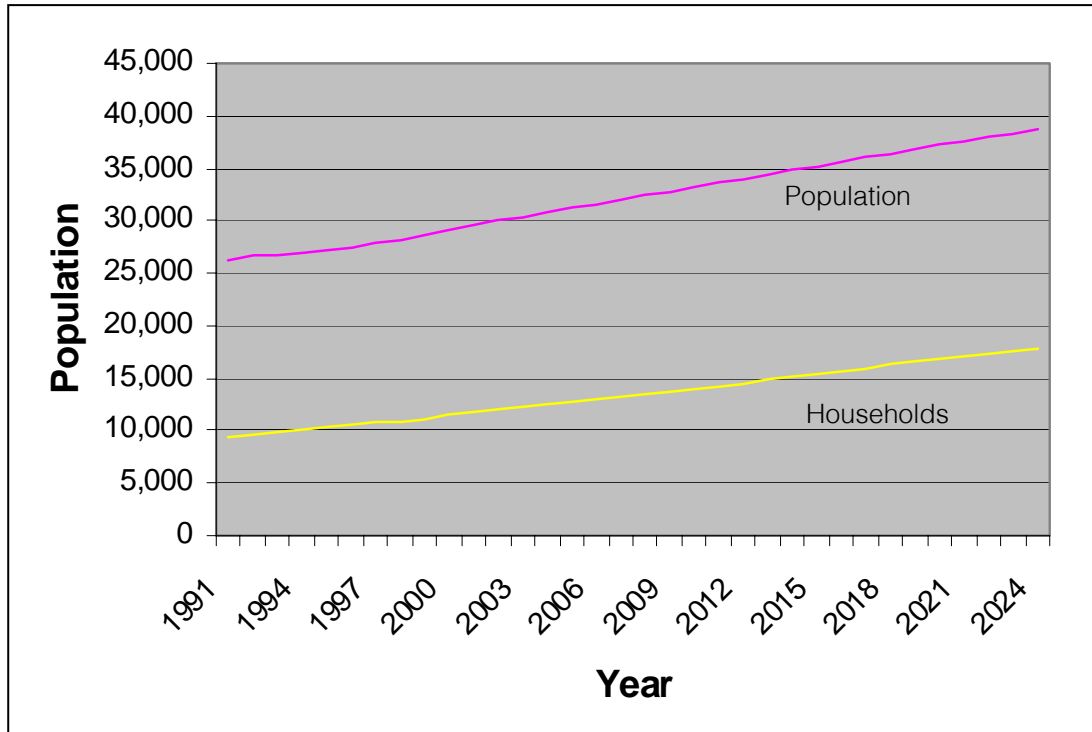


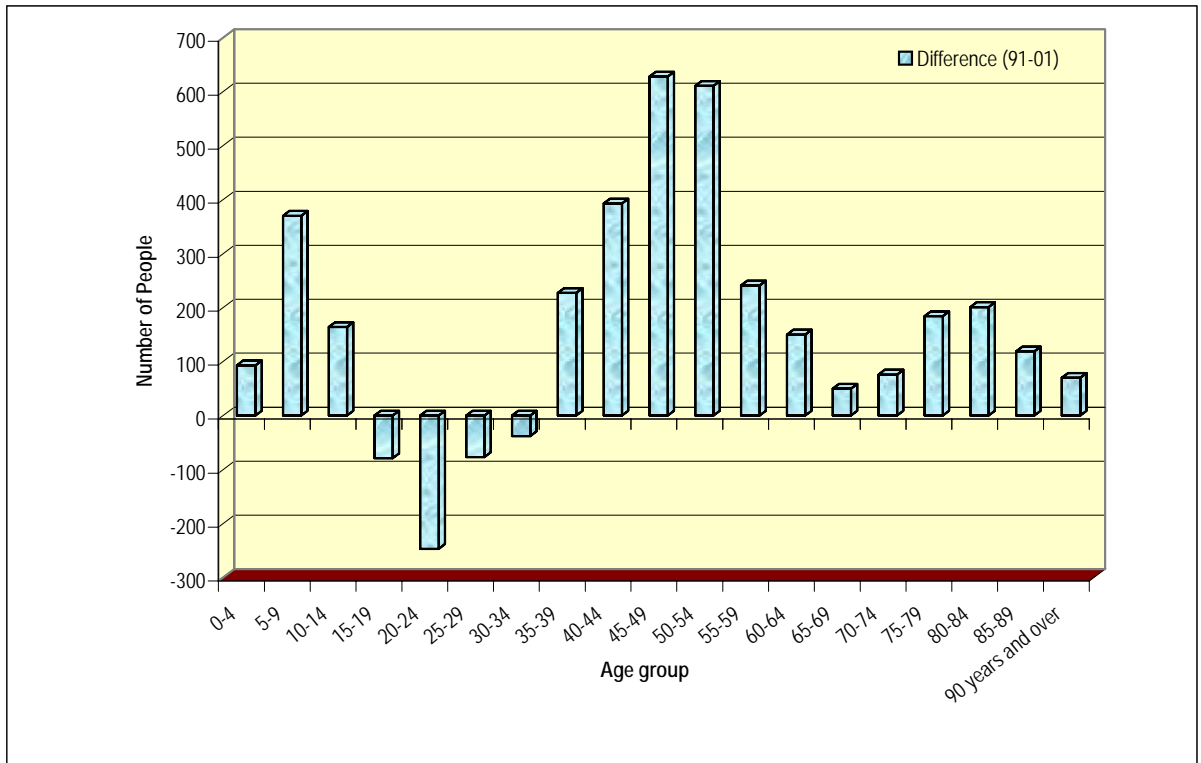
Figure 2.2: Population and Household Projections

Change is also expected in the age structure over the next two decades. The 35-49 age group is projected to have the greatest net growth, followed by the 15-24 age group.

Growth of coastal areas is based almost exclusively on the ageing of the population and the growth of people seeking lifestyle changes and moving to the coast. The two main reasons that coastal locations are sought are for retirement and by families seeking affordable housing in a coastal environment. This phenomenon occurs more in locations closer to Melbourne but has contributed to population growth in Warrnambool. Older people often move to a larger centre for easier access to health and community services.

Large regional centres such as Warrnambool have grown at the expense of small towns and rural hinterlands due to structural changes in primary industries brought about by declining terms of trade for mineral and agricultural commodities. Many jobs have disappeared from rural areas leading to the move to larger centres. As regional towns, such as Warrnambool grow, opportunities for local employment increase as more services emerge in the retailing and education and health areas.

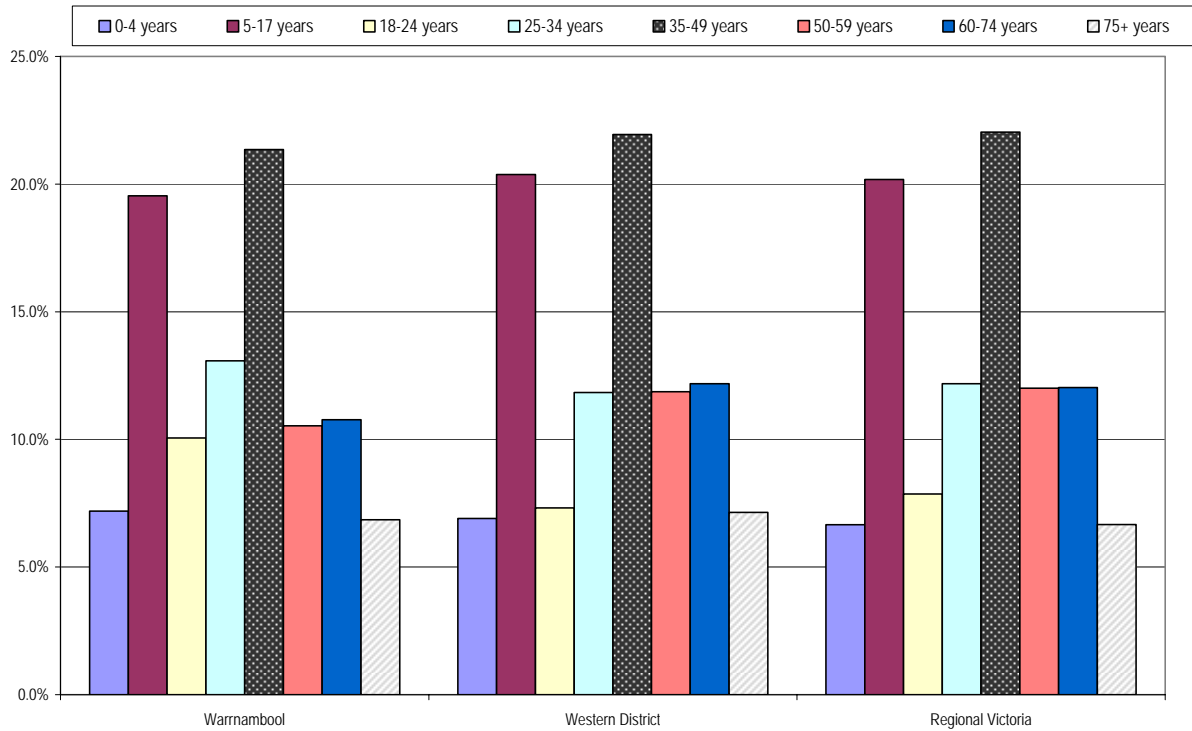
Most of the growth in the last decade has been in the family age groups (0-14 and 35-59 years) and in the 75+ age groups. (Refer **Figure 2.3**).



Source: Australian Bureau of Statistics

Figure 2.3: Change in Age Structure 1991 - 2001

Warrnambool has a higher representation of people in the age groups of 18-24 and 25-34 years relative to the rest of the Western District and Regional Victoria. This may possibly be due to the presence of a campus of Deakin University and a significant health-care sector providing work for people in these age groups. (Refer **Figure 2.4**).

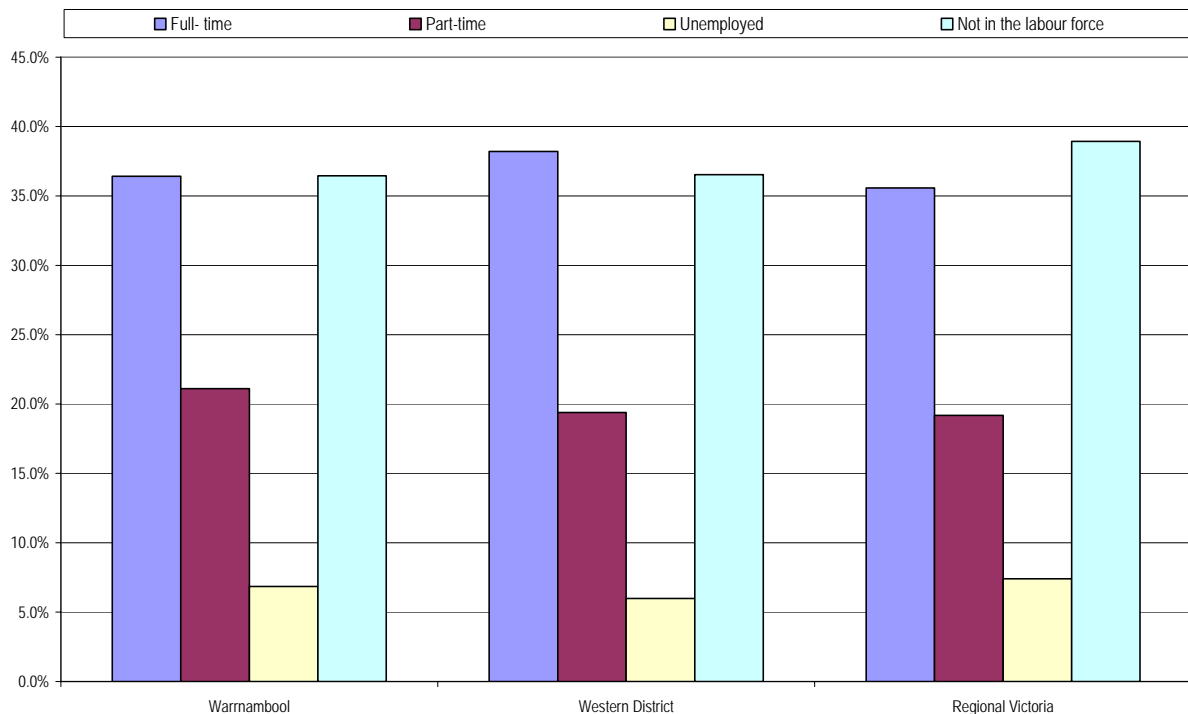


Source: Australian Bureau of Statistics

Figure 2.4: Age Profile

2.2 Employment

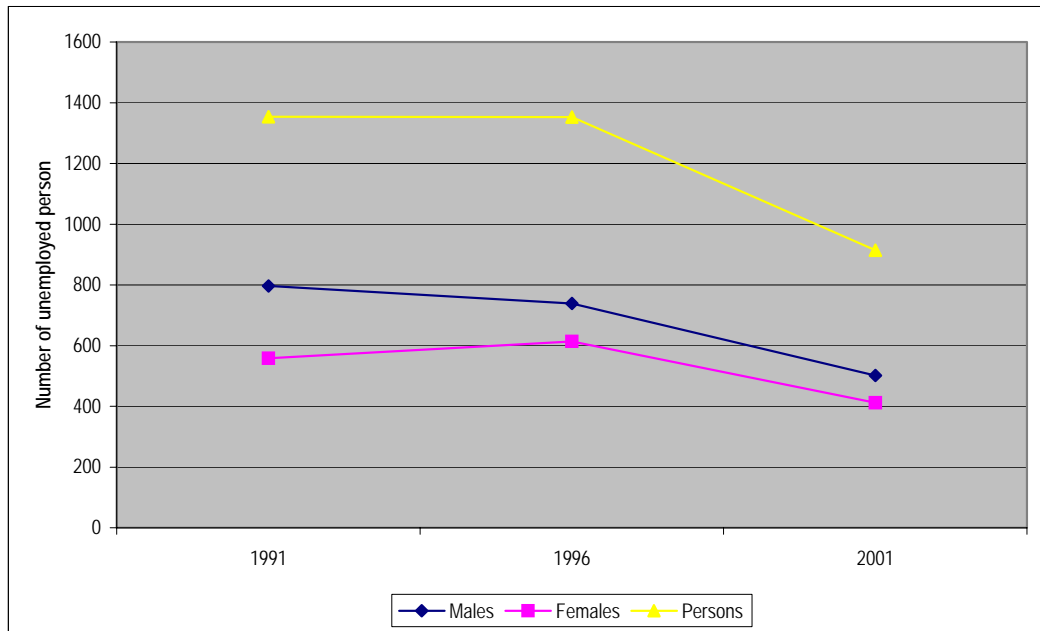
Labour force participation rates in Warrnambool are very similar to the rest of Regional Victoria and the Western District as shown in **Figure 2.5**. With strong concentrations of older people in coastal areas they often take on the characteristics of an older population: income levels tend to be concentrated in the lower income groups and in many areas, the labour force participation rates are quite low. Over one-third of Warrnambool's population is not in the labour force and 6.8% is unemployed. However, unemployment has been decreasing over the last five years. (Refer **Figures 2.2 & 2.3**). There are more part-time workers in Warrnambool than either the Western District or Regional Victoria, possibly due to the availability of work in the retail, health and community and service areas.



Source: Australian Bureau of Statistics

Figure 2.5: Employment

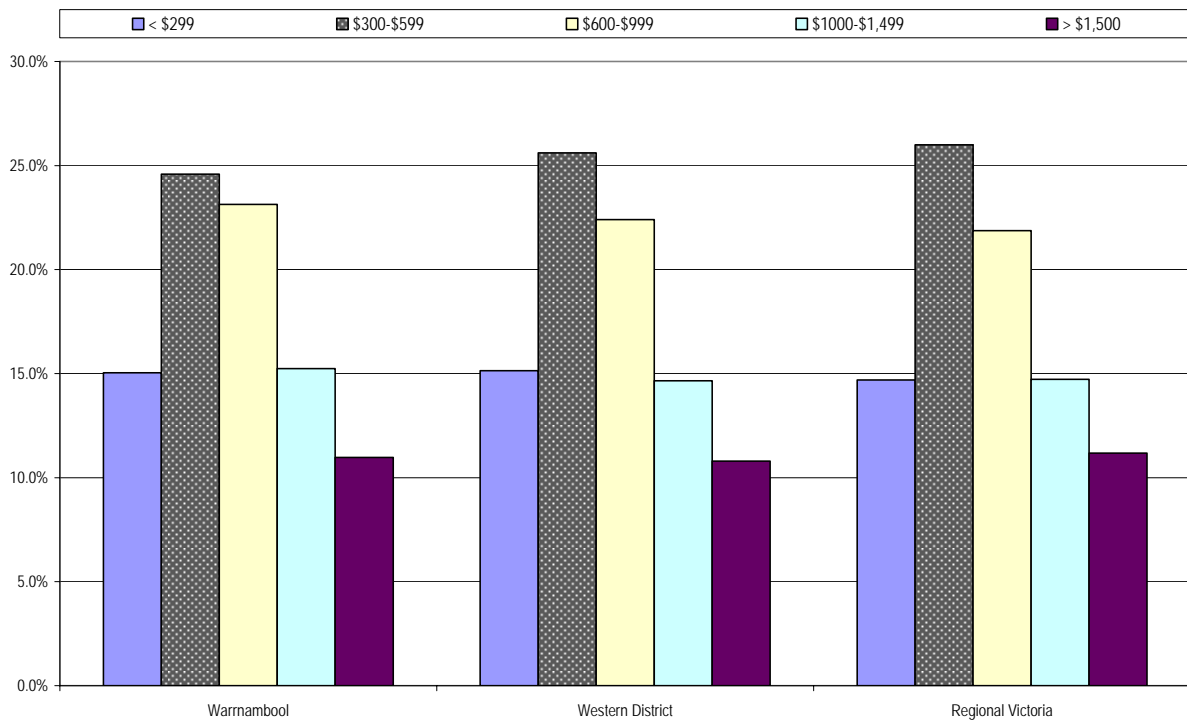
The numbers of unemployed persons within Warrnambool have considerably declined in recent years (**Figure 2.6**), reflecting a positive economic situation together with increasing urban development in the City.



Source: Australian Bureau of Statistics

Figure 2.6: Change in unemployment 1991 - 2001

Incomes in Warrnambool are very similar to Regional Victoria and the rest of the Western District (refer **Figure 2.7**) with the majority of households earning less than \$1,000 per week and approximately one-quarter earning in excess of that amount.

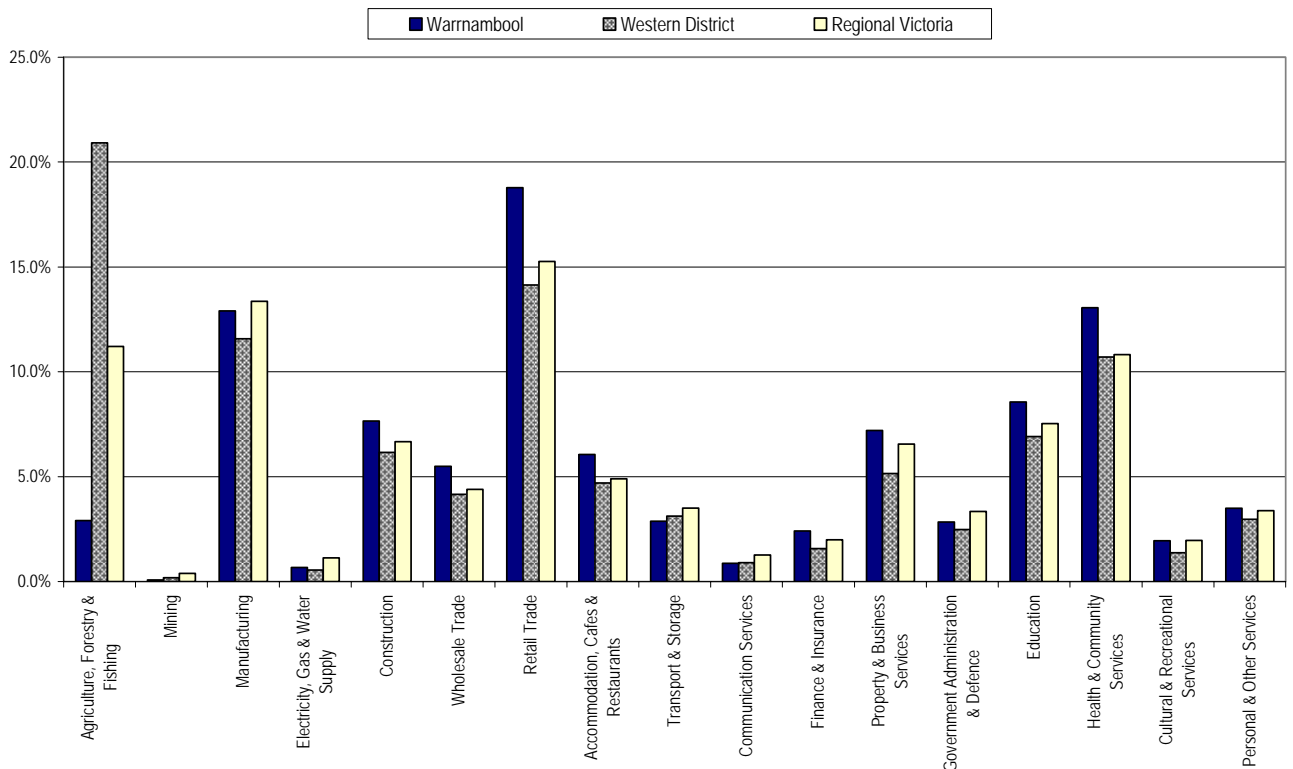


Source: Australian Bureau of Statistics

Figure 2.7: Weekly Household Incomes

2.3 Industry

The majority of the working population in Warrnambool is engaged in retail and wholesale trade, health and community services and manufacturing industries. Typically, between 40% and 65% of jobs in coastal towns are found in these three sectors. Employment in the recreational, personal and other services areas of the economy is also important to Warrnambool, particularly the tourist areas. Warrnambool also has strong employment in the educational sector (8.6%) due to the presence of tertiary institutions including Deakin University and South West College of TAFE. (Refer **Figure 2.8 & Table 2.1**).



Source: Australian Bureau of Statistics

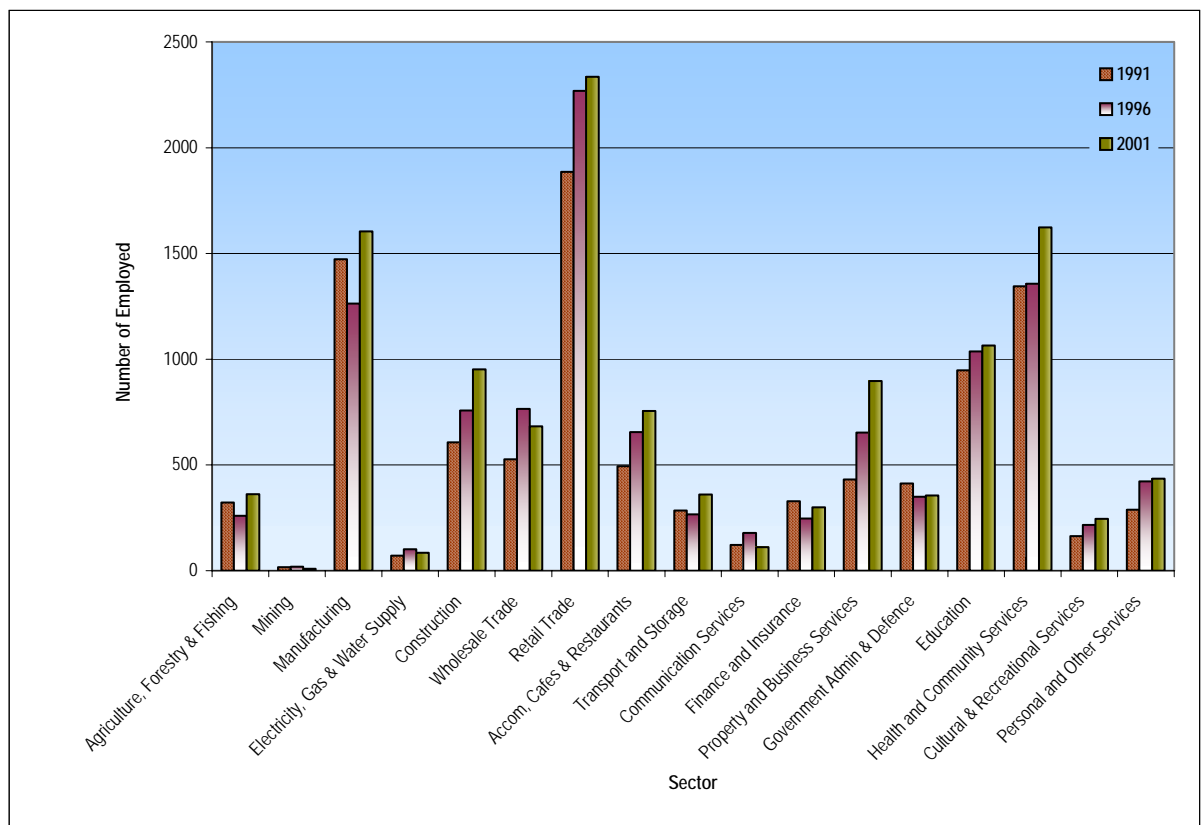
Figure 2.8: Industry Profile

Table 2.1: Employment by Industry

Industry Sector	Percent
Retail Trade	18.8%
Health & Community Services	13.1%
Manufacturing	12.9%
Education	8.6%
Construction	7.7%
Property & Business Services	7.2%
Accommodation, Cafes & Restaurants	6.1%
Wholesale Trade	5.5%
Agriculture, Forestry & Fishing	2.9%
Transport & Storage	2.9%
Government Administration & Defence	2.8%
Finance & Insurance	2.4%
Communication Services	0.9%
Electricity, Gas & Water Supply	0.7%
Mining	0.1%

Source: Australian Bureau of Statistics

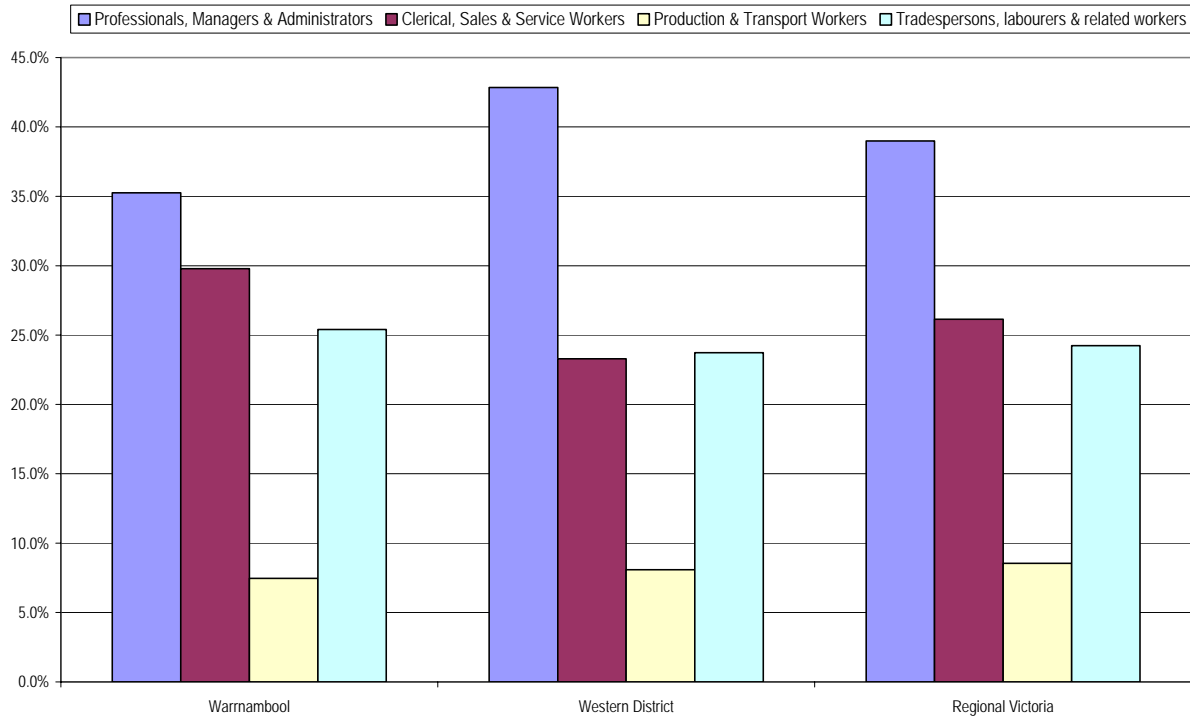
Industry sectors which have experienced growth in the last decade are property and business services, retail and wholesale, health and community services, personal and other services, education and manufacturing. (Refer **Figure 2.9**).



Source: Australian Bureau of Statistics

Figure 2.9: Changes in Employment by Industry Sector 1991 - 2001

In Warrnambool fewer people are employed as professionals, managers and administrators than in the Western District and Regional Victoria as shown in **Figure 2.10**, however more workers are engaged in clerical sales and service occupations, reflecting the strength of employment in the retail and service industries.



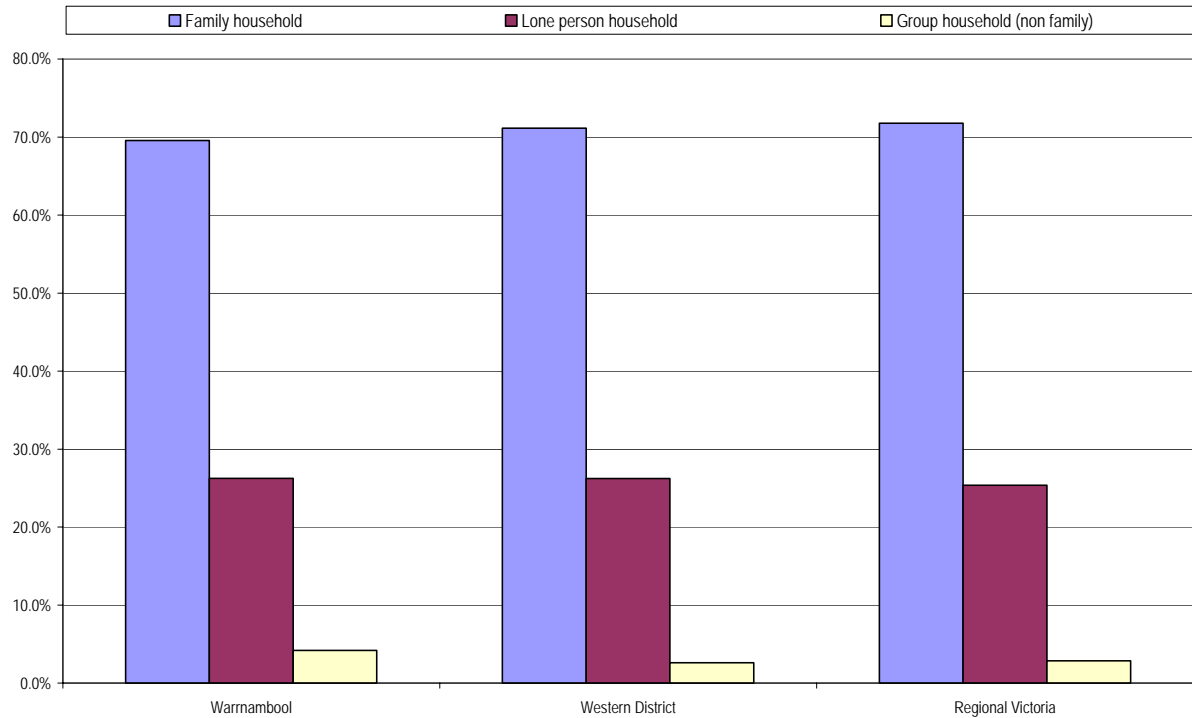
Source: Australian Bureau of Statistics

Figure 2.10: Occupation

2.4 Housing

There has been a decrease in household size in most of regional Victoria in the last two decades. This decline has been the result of fewer large households and far greater numbers of people in the one and two-person household category.

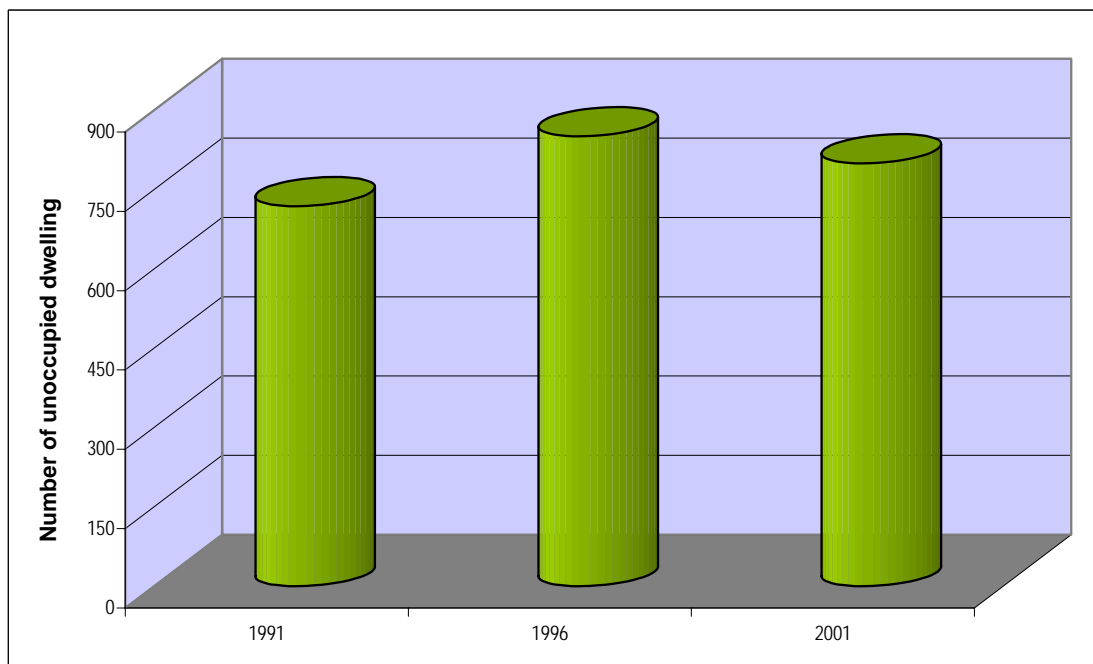
Family type in Warrnambool is typical of that elsewhere in Regional Victoria (**Figure 2.11**). However, group households are slightly more prevalent, possibly due to larger numbers of students and young adults sharing accommodation.



Source: Australian Bureau of Statistics

Figure 2.11: Family Type

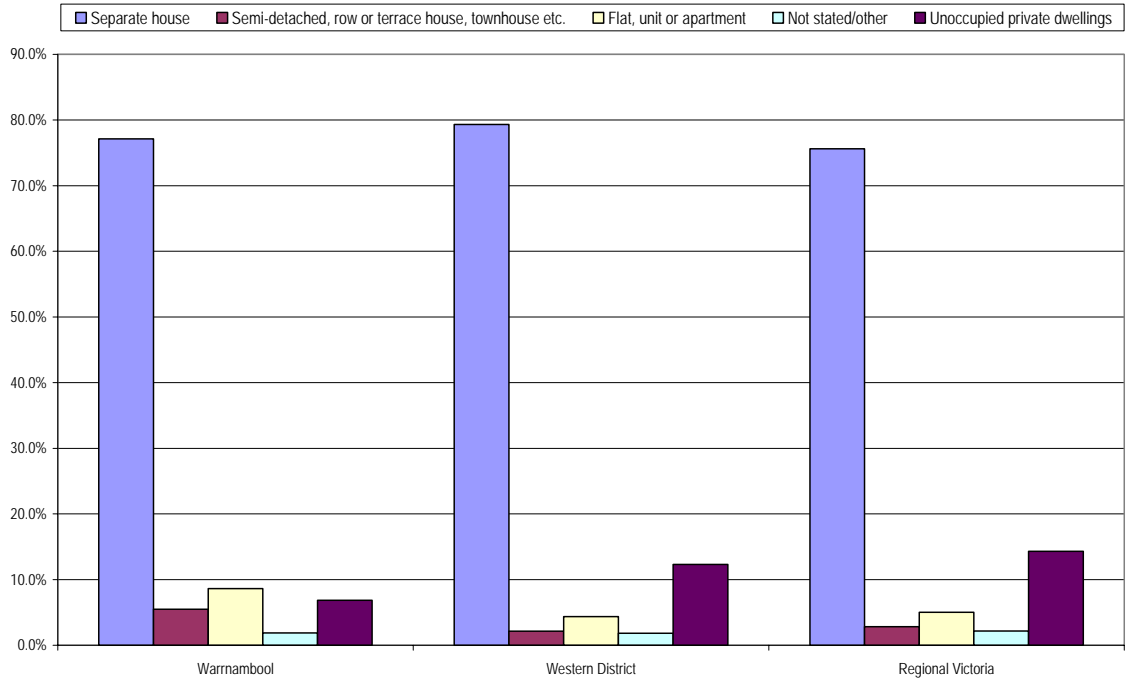
Coastal areas usually contain large numbers of unoccupied dwellings for most of the year. These dwellings are typically occupied by holiday makers over the summer. The number of unoccupied dwellings in Warrnambool (**Figure 2.12**), although increasing in the 5 years to 1996, decreased over the 5 years to 2001 indicating an increase in permanently occupied dwellings.



Source: Australian Bureau of Statistics

Figure 2.12: Changes in Unoccupied Dwellings 1991 - 2001

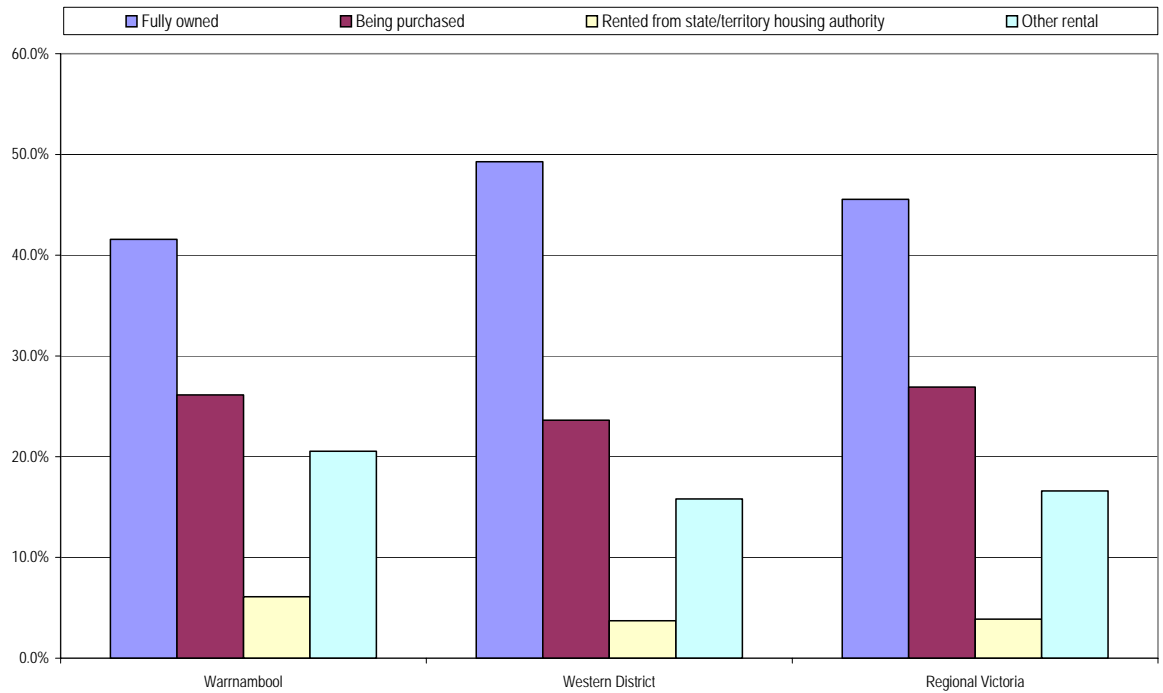
Warrnambool's housing profile (**Figure 2.13**) shows slightly more semi-detached (5%) and unit style housing (8%) than the rest of the Western District and Regional Victoria, fewer outright property owners and less unoccupied dwellings.



Source: Australian Bureau of Statistics

Figure 2.13: Housing Profile

Figure 2.14 shows a higher rate of rental properties (21%) than in western and regional Victoria could be attributed to the presence of the University and TAFE. Warrnambool is also experiencing a slightly lower rate of home ownership (42%) than the rest of Regional Victoria (45%). This is likely to be an indication of increased investment in housing from outside of Warrnambool, partly due to the attractive lifestyle opportunities of a coastal City centre.



Source: Australian Bureau of Statistics

Figure 2.14: Housing Tenure

3. Issues Review

Urban growth within Warrnambool is primarily focussed in and around the Warrnambool urban area but new residential growth is also occurring in a number of townships and communities within commuting distance of Warrnambool. In addition to the townships of Allansford, Bushfield and Woodford, (within the Warrnambool LGA), development is also occurring in places such as Port Fairy and Koroit, which is directly related to Warrnambool's continuing growth.

The future direction and form of urban development will be shaped by a range of issues over the next 20 years. The key issues that have a bearing on future development of the township and outlying areas are discussed below. They relate to matters of environmental management, landscape protection, urban character, infrastructure provision and economic growth. Key principles of sustainability which underpin this Strategy are discussed below.

To support the analysis, a map showing existing services, road connections, educational, health and recreational facilities within the City is provided in Figure 3.1. Physical characteristics of Warrnambool including topography are shown in Figure 3.2.

3.1 Sustainability

3.1.1 Sustainable Urban Form

Based on Brundtland's 1987 definition of sustainability, sustainable urban form can be defined as urban form that provides for the needs of the current generation without compromising the needs of future generations. Like most cities, Warrnambool must juggle the pressing needs of the current generation, needs that are often demanded in a loud and persistent voice, with the needs of future generations.

The Melbourne Metropolitan Strategy (Melbourne 2030: Planning for Sustainable Growth) identifies 9 key directions that contribute to a sustainable City. Direction 1 "A more compact city" and Direction 2 "Better management of metropolitan growth", specifically refer to sustainable urban form, essentially describing sustainable urban form as compact and centred around existing services and infrastructure.

The Department of Sustainability and Environment's discussion paper for "Sustainability in the Built Environment" recognises the Melbourne 2030 Strategy as significant as it defines how "sustainability manifests in a metropolitan spatial context". The principles of sustainable urban form that have been applied to Directions 1 and 2 in the Melbourne 2030 Strategy are fundamental and can be applied to towns and cities, including Warrnambool.

3.1.2 Consequences of Sustainable Urban Form

Social - Sustainable urban form is compact and has consolidated facilities and services within a defined central urban area, providing residents with easier access to a range of services and facilities. By ensuring accessibility to these facilities, such as health services or retail precincts, the city improves its social equity and social sustainability. Sustainable urban form encourages cycling and walking and, by providing better opportunities for regular exercise, it promotes healthier lifestyles and daily social interaction.

Conventional low density housing, particularly in fringe areas, can lead to residents becoming isolated from their community. Distances between community centres, friends or family is generally much greater than medium density housing in central urban areas. Social isolation is particularly evident in peripheral low density areas with minimal public transport provision. Social isolation has important links to mental and physical health. Essentially, social isolation is linked to lower levels of mental and physical health, while social inclusion and the opportunity to interact, is linked to improved mental and physical health.

Sustainable urban form focuses activity and development on the heart of the city, creating a space that is vibrant and lively, that is used by the public and that feels safe. Sustainable urban form also provides for a range of affordable and appropriate housing choices that meet the needs of a changing population, characterised by a climbing population with steadily shrinking household sizes.

Economical – Sustainable urban form takes full advantage of existing infrastructure and facilities including public transport, community centres, education centres, retail and commercial centres etc by focusing intensified residential development in locations that are already provided with these facilities. It also promotes the wise investment of new infrastructure that demonstrates best practice performance and where possible, links to existing facilities. By restricting low density urban growth, sustainable urban form reduces economic pressures based on providing new infrastructure to supply these fringe areas, such as sewerage, road construction and maintenance and extending council services such as meals on wheels or garbage collection.

Sustainable urban form promotes protection of high quality agricultural land. For many regional cities, including Warrnambool, the surrounding agricultural land provides substantial employment opportunities as well as playing a key role in the health of the local economy.

Environmental – By limiting residential growth to existing urban areas, sustainable urban form protects the natural environment and the biodiversity of the area by reducing development pressures on non urban areas. Environmental sustainability is particularly relevant to the Warrnambool region, as the water quality of the region’s rivers and streams have been measured amongst the lowest in the state. It is critical that these waterways are protected from further degradation.

Sustainable urban form also incorporates water conservation and water re-use, as well as WSUD. With household water demands increasing and current water use levels identified as unsustainable, the Department of Sustainability and Environment’s Green

Paper for Discussion on “Securing our Water Future” has indicated water consumption targets will be set for regional centres across Victoria.

Sustainable urban form, by creating a compact urban environment that encourages increased public transport patronage as well as walking and cycling, has substantial benefits in reducing reliance on motor vehicles and consequently reducing greenhouse gas emissions.

3.1.3 Sustainable Urban Form and Warrnambool

Warrnambool is a City surrounded by highly productive agricultural land. Local and regional agricultural industries, particularly the dairy industry and related food manufacturing industries, play a vital role in the region’s economy. It is critical that this agricultural land is not severely compromised by further low density urban growth. While Warrnambool is a relatively compact City, in order to ensure the ongoing economic sustainability of the City, future urban growth needs to be limited to the existing urban area as much as possible. Consolidation can be achieved by utilising existing undeveloped residential sites, redeveloping or regenerating appropriate existing urban areas and considering options such as shop-top housing.

The natural environment surrounding Warrnambool and within the City itself is severely degraded. Almost all of the native vegetation of the region has been cleared for grazing. The Hopkins and Merri Rivers, including their network of streams and waterways, have very low water quality and extensively degraded riparian habitat. Low Density Residential and Rural Living subdivisions of Bushfield, Woodford and Allansford have followed the path of the river, adding further stress to this sensitive environment. Erosion, mass movements, land slips and salinity are some of the problems resulting from the continued environmental degradation of the district. Further urban development, concentrated along rivers, coastlines and areas of remaining native vegetation, is not environmentally sustainable. As with protecting agricultural land, future urban growth needs to be restricted to existing urban areas that do not further jeopardise environmental values. It is recognised however, that there are limitations to locating all urban growth within the existing urban fabric and that a degree of outward expansion will need to be accommodated.

Sustainable urban growth for Warrnambool entails consolidation of the existing urban area. Alternative options also include directing limited growth to the townships of Bushfield, Woodford or Allansford. If these options were considered, access to infrastructure, particularly public transport and sewerage, as well as any further detrimental effects on the environment, particularly river health, need to be addressed. Additional options include taking a more regional perspective to urban growth and directing some growth to Port Fairy or Koroit. Each of these townships has a unique identity and has varying levels of services and facilities already in place that has potential to service an increase in population.

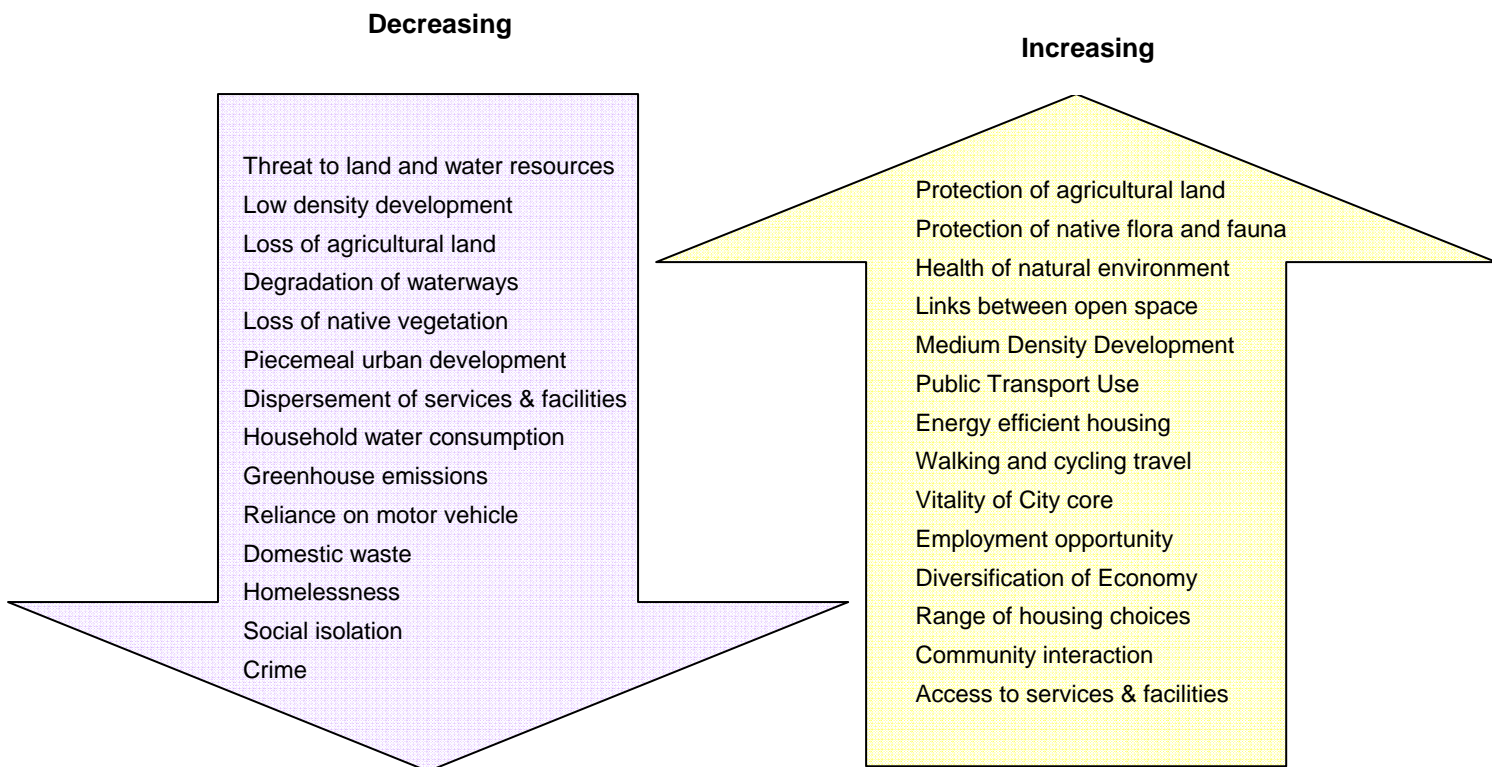
As with the sustainable urban growth principles for Warrnambool, further low density residential development of these townships should be avoided where possible, so that the surrounding agricultural land and the natural environment are not compromised.

Warrnambool is a popular tourist destination, particularly for eco-tourists who enjoy the City’s rural environs and the wild coastline that links the City to the Great Ocean Road. Whale watching at Logan’s Beach is a particularly popular tourist attraction. These natural features, particularly coastal and river areas, need to be protected from urban development, in order to ensure their ongoing appeal to tourists and eco-tourists.

Overall, by adopting sustainable urban form and consolidating urban growth to existing central and serviced urban areas, Warrnambool will be able to ensure its survival as a vibrant and liveable City that is attractive to residents as well as tourists. It will be protecting its valuable agricultural land and will halt further degradation of its fragile natural environment, particularly it’s rivers, coastline and indigenous flora and fauna. Further, it will become a fairer and greener City to live in, with increased access to a wide range of centrally located facilities and services and reduced car reliance as opportunities are improved for cycling, walking and using public transport.

3.1.4 Urban Form Sustainability Indicators for Warrnambool

The core principles that determine whether Warrnambool is becoming a more sustainable City include:



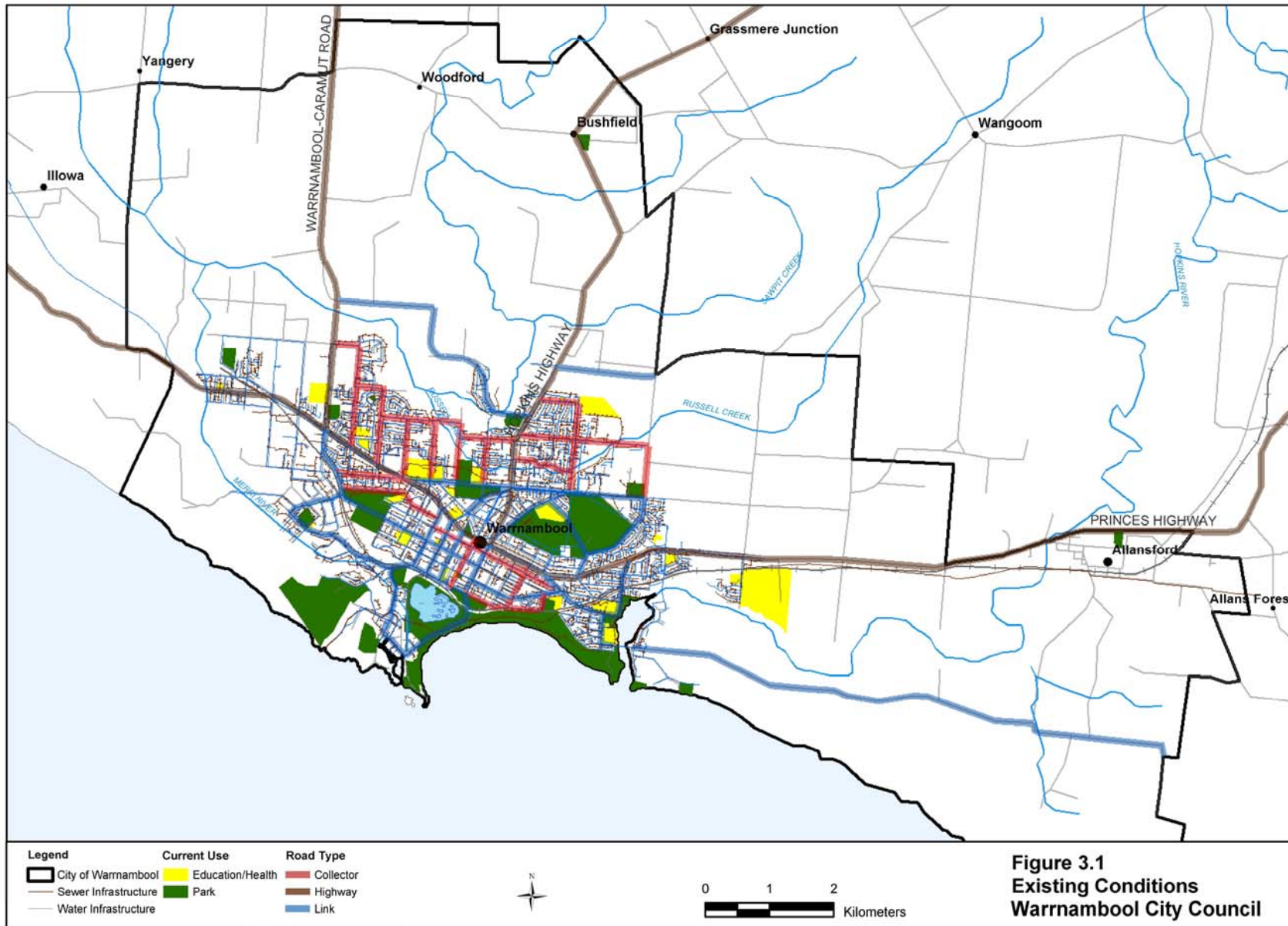
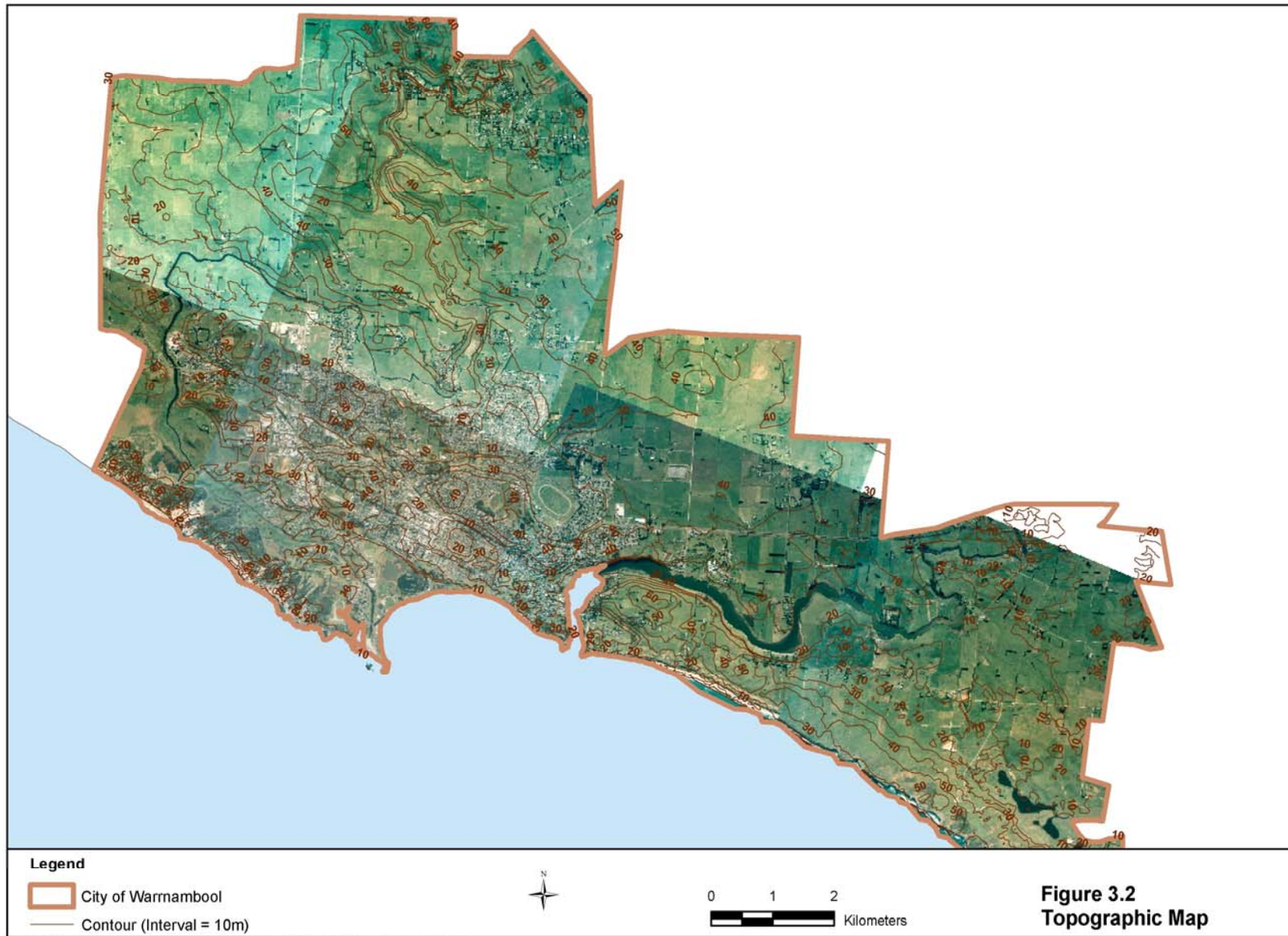


Figure 3.1
Existing Conditions
Warrnambool City Council

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3.2 New Residential Areas

Warrnambool has experienced a population growth of 1450 people (5.3%) between the 1996 census and 2001 census. With an annual growth rate of 1.6%, the population is increasing at a higher rate than the State average. This cannot be sustained by the current land supply which is projected to last only 3-4 years, approximately (Section 6 refers).

The pressure for new residential development areas has resulted in urban encroachment of the rural areas beyond the Merri River and east beyond the Hopkins River. Such development not only threatens the environmental values of these areas, but has resulted in the lack of a clear boundary to the City.

Based on current rates of construction of different forms of housing, evidence of demand for townhouse and unit developments, suggests that consolidation of existing residential land is a viable option. Provision needs to be made for this demand through a variety of development densities in selected locations whilst ensuring that smaller sites are not over-developed.

There are limitations on the development of particular parcels of land due to drainage and flood mitigation issues. The Russell Creek Catchment in particular, would require the most drainage works. This includes the Mortlake Road Sub-Catchment, with the second highest total upgrade costs (Warrnambool Drainage Study, 2003).

Although the rate of development has been significant, which may explain why some streetscapes are not fully complete, it is evident that the overall quality of design and treatment of these areas is variable. Subdivisions are occurring in an ad hoc manner and are not of sufficient scale to permit a high degree of coordination in the treatment of streetscapes and features such as gateways, open space links, and community facilities. Further, there is a general preference for such developments to occur in undulating areas such as the Hopkins River area with attractive landscape views, leaving flat areas of residential zoned land undeveloped such as the outlying areas north east of Warrnambool.

These areas require identifiable foci to be incorporated at the subdivision stage that would create a sense of community. Opportunities for community building and interaction are becoming more valuable with an ageing population and smaller household sizes. A further consideration is the need to provide for people who are frail, have a physical disability or have young children by ensuring that they have appropriate access to services, as highlighted in the Healthy Communities Project Report 2002.

The foci should form part of a distinctive theme that creates a specific environmental character within each residential area and throughout each subdivision. The future of the former Brierly Psychiatric Hospital site is also expected to have implications for the form of urban development that occurs, given its potential to become a community focal point.

There is also a notable absence of community focal points in the form of well-positioned parkland. The allocation of public open space has not been uniform and needs to be rationalised according to proximity to housing or the need to protect natural features.

Existing local parks are often excessive in size and underutilised (Public Open Space Municipal Review and Strategy, 2000). These matters should be addressed as part of Council's capital works program together with a review of Council's Public Open Space Strategy.

Because the scope of development has been limited to incremental expansion of discrete residential subdivisions, the capability of these areas to contribute to the overall structure of the residential community is sometimes constrained. For example, there is a need for comprehensive subdivisions that contribute to the recreational and open space system of the township. Generally however, the establishment of each area has occurred independently with notable deficiencies in their degree of structural integration. This has not caused major problems to date, but with future increased population of the City, works will be required to address transportation, social, environmental and urban design deficiencies. It is important that this approach to residential development is accepted and understood by the wider development community.

3.3 Neighbourhood Character

An increase in the number of one and two person households (and an ageing population) has resulted in significant demand for unit development and medium density housing lots (WCC building statistics). Central Warrnambool has increasingly become the focus for such development as urban consolidation is becoming recognised as delivering important environmental, social and economic benefits.

Within these inner residential areas, there are buildings and streets of historic value, and areas which comprise a mix of housing, including housing which makes a substantial contribution to the overall quality and character of the area. Existing Heritage Overlays and the Heritage Precincts Local Policy aim to preserve heritage values of the locality, while the Design and Development Overlay (Schedule 4) aims to ensure that new dwellings and extensions to dwellings above 7 metres are compatible with the surrounding neighbourhood character and scale. Additionally, Development Plan Overlays apply to the South Warrnambool and Logans Beach area to protect environmental and landscape characteristics.

Given the suitability of these locations for the intensification of development, due to their proximity to the City core, commercial facilities, and the coastal views and recreation, it is desirable for selected sites to be redeveloped for unit and apartment style accommodation. Maintaining the overall character requires that new development respond to the context of the sites and be effectively integrated with the existing architectural, historic and landscape character of Warrnambool. Building heights for example, should continue to maintain viewlines to the coast and respect the scale and character of existing buildings. Development that contributes to an active street frontage (eg. front porches, low front fences and shop fronts), will further enhance neighbourhood character and encourage a sense of community.

Issues of residential amenity would need to be addressed through appropriate siting and design of new developments to protect residents from issues such as privacy and noise exposure in accordance with the provisions of Rescode. The higher lot densities

provide an opportunity for increased surveillance of areas which are often the subject of security and safety concerns such as carparks and open space areas. The additional housing will also need to be balanced with adequate provision of parkland within the central area, which is identified in the Open Space Strategy as being deficient.

Bushfield and Woodford are outlying settlements offering a more peaceful rural lifestyle setting. These areas are considered unique and should be preserved so that any intensification of residential land uses is sympathetic to the retreat-like setting. Further, these areas do not have sufficient infrastructure (i.e. no water or sewage) to support a substantial increase in urban development.

Land surrounding Dennington and contained by the Merri River has some potential for future urban development, however it is important that Dennington maintains its identity as a separate township. It is strongly associated with the Nestlé milk manufacturing operation and the area has been carefully planned to minimise off-site impacts of the factory. There is potential to promote an individual township character through employing appropriate landscaping treatments along streetscapes.

Allansford is a relatively small linear township which is becoming more popular, with the Hopkins River as a key feature. While the possibility of expanding the residential area is constrained by drainage issues, it is also important to reinforce a sense of visual containment to the township. Hence, the *Allansford Urban Design Framework* prepared in 2003 seeks to encourage the location of new residential development radiating outwards from the eastern and western nodes of the town. It includes other recommendations for landscape treatments and avenue planting to convey a consistent sense of identity.

3.4 Housing Affordability

Residential property prices within Warrnambool have risen dramatically over the last two years. Between 1998 and 2002, the median price of a vacant housing block in Warrnambool has increased by 63% from \$30 000 to \$48 900 and similar price increases are recorded for developed properties (Know Your Area, DSE).

Research has shown that housing affordability is deteriorating for many working Australians and is now of concern on a National level (National Research Consortium, 2001). With approximately 40% of Warrnambool households earning less than \$599 per week, which is not sufficient to permit the repayment of a loan on an average 3-bedroom house, home ownership is now beyond the reach of many households, particularly the younger generation.

Approaches to addressing the issue have in the past centred around the supply of land, facilitation of development approvals, reduction in infrastructure costs and reduction in lot sizes. Whilst the potential supply of lots has increased through the re-subdivision of lots created during the development of new estates, this has done little to reduce their cost. It must be recognised that housing as a form of investment and superannuation are also key factors driving the market. It will therefore be important for this Strategy to efficiently utilise existing infrastructure services which will result in cost savings that can be passed on to the consumer.

3.5 Agricultural Interface

Expected growth in the food products industry means that the agricultural value of the land surrounding the urban area will become increasingly important. In terms of land use, there has been a considerable focus on cropping, dairying and timber production in recent times (Glenelg Hopkins Regional Catchment Strategy, 2003), with the majority of the population within the Western District engaged in such agricultural industries (refer **Figure 2.7**). This trend is likely to continue with the growing export potential of Warrnambool's major industries, such as Nestlé and Midfield Meats, being reliant on productive farming in the region surrounding Warrnambool.

It is noted that environmental protection of the rural zones is provided mainly through Environmental Significance and Significant Landscape Overlays along the coastline and surrounding water bodies, where environmental values are highest. This leaves rural land along the boundaries of residential estates, where environmental overlays may not exist, exposed to adverse effects of urbanisation such as pest plants and animals or storm-water pollution. If not designed appropriately, residential development is likely to prejudice the effective use of this land for agricultural purposes. It is therefore important to provide a long term sustainable land use arrangement at the boundary of the City in addition to the selection of an appropriate location for this boundary. Although the waterways and the coast provide substantial edges to the City the remaining north eastern boundary requires appropriate definition to completely contain the urban areas and maintain a surrounding greenbelt.

3.6 Protection of the Coastline

Warrnambool is the largest Victorian regional centre situated on a largely pristine high quality coastline. Proximity to the coast is therefore a distinguishing feature of Warrnambool's residential areas, including existing and potential recreational reserves. As the population of the City matures, this feature will continue to be a major attraction for the over 50 year age group.

The strong demand for coastal properties is driven by both the local and metropolitan markets. This is reflected in development in the southern and western parts of the Logan's Beach area which have been fragmented by incremental residential development and subdivision. Increasing pressure to expand further east-ward along the coastline is a major consideration for Council as it threatens to compromise the viability of rural land and the scenic qualities of the coastline. Certain limitations to residential development need to be maintained if the existing landscape character of the coast is to be maintained, and viewlines along Hopkins Point Road preserved. If the provision of further land for residential development is to proceed, it is also important that the access for visitor traffic to the whale viewing area is appropriately managed to minimise the impact residential development may have on this regional attraction. Similarly, this must ensure traffic is managed to minimise impacts on residential amenity.

The desirability of the coast of Lady Bay and Logan's Beach for residential development is such that building impact is increasingly significant despite the application of siting controls (such as the Hilltop and Ridgeline Protection Policy at Clause 22.02-7) and urban design frameworks. The scale of dwellings is increasing without complimentary attention to landscape treatment. As a result, the impact of housing areas is collectively significant on what is an extremely attractive landscape with high levels of sensitivity to any built modifications. The siting of buildings on ridgelines and in prominent locations is seen as intrusive and obstructs highly important views from the coastal roads, and from the bay. This is also due to the importance of the whale watching platform as a major destination point for visitors. The Logan's Beach policy (Clause 22.01-9) of the Warrnambool Planning Scheme aims to address this issue through requiring consideration of Hopkins Point Road as a major tourist gateway, limiting further subdivision east of the whale viewing platform and protecting the landscape from inappropriate development.

Development potential of the Logan's Beach area must also take into account capacity of the water supply and sewer system and impacts of development on groundwater and other natural resources. Whilst water could easily service lower level areas either side of Hopkins Road, higher level areas including land to the north of the ridge would require a new pump station and elevated tower. Similarly, a new sewage pumpstation or upgrade would be required in this area. It is also noted that the Hopkins River Catchment has relatively high drainage upgrade costs in comparison to other Warrnambool Catchments (Warrnambool Drainage Strategy, 2003).

The coast and beaches are highly valuable natural assets that promote Warrnambool as a tourist destination. The MSS recognises Lady Bay as a major foreshore precinct with the opportunity for redevelopment of private land and Logan's beach as an area of high environmental and landscape amenity. It is important that such nature based attractions are maintained and alternatives promoted (for example through wetland restoration) to ease the impact of visitor numbers. New tourist oriented developments should avoid fragmentation of the coastal environment and consider the impact of any acid sulphate soils in the area.

Whilst Council and the community are keen to maintain access to the beaches, this opportunity is restricted by portions of land in private ownership where public access cannot be provided. In areas where public access is possible, the fragile primary dune along the foreshore must be protected. Access requirements to the whale viewing area are likely to grow in the future as visitor numbers to Warrnambool increase with the realisation of tourism infrastructure redevelopment opportunities such as the redevelopment of Flagstaff Hill Maritime Museum.

The Warrnambool South foreshore area is experiencing considerable development pressure, corresponding to the strong demand for family holiday accommodation. Although these developments contribute to the vitality of Warrnambool, it is important to moderate their intensity to preserve the 'seaside village' character of the locality.

3.7 Protection of Waterways

Land surrounding the Merri and Hopkins River and Russells Creek corridors is rapidly becoming urbanised as developers consume what is perceived as prime real estate for its attractive landscape qualities. Residential areas appear devoid of substantial landscaping which would visually soften the effect of the development and reduce its impact on the landscape character. Similar to development along the coastline, there is a need to protect vantage points and viewlines from inappropriate development.

Although the rivers and drainage lines are key features of the residential area, they are not treated as important elements in the design of subdivision areas. These areas should be conserved as wildlife corridors to recognise their inherent natural values. There is a need for consistent set back of developments and allocation of natural reserves. This is reflected in Clause 21.09 of the MSS, which includes strategies to create open space and/or habitat corridors along river frontages. Additionally, the Hopkins River Open Space Policy (at Clause 21.02-11) aims to develop a public open space network along the Hopkins River generally between Proudfoot's Boathouse and Deakin University.

Whilst stormwater quality has generally improved in recent times, urban development has also impacted on river health through the introduction of exotic plant species, urban runoff, use of septic tank systems and industrial waste (Warrnambool Stormwater Management Plan, 2001). There is a need to look at suitable alternatives to traditional infrastructure servicing such as stormwater harvesting. This would reduce the impact of urban runoff into the water catchments. Promotion of Water Sensitive Urban Design (WSUD) techniques and utilising open spaces to act as floodways are also strategies that can minimise pollution of stormwater runoff into the water catchments.

Reserves along creeks act as important buffers to environmental sensitivities such as Aboriginal archaeological values which can be impacted by ground disturbance. It is noted that a Memorandum of Understanding is currently being prepared between the Council and the Warrnambool Aboriginal community with regard to matters such as identification of sites of aboriginal cultural heritage.

Buffer zones and reserves need to be more consistently incorporated into new developments to enhance and preserve natural and heritage assets. Housing along Russell Creek is one example of development within the floodplain that does not include a substantial reserve. The MSS identifies a need to improve public access to rivers to promote the riparian areas as a recreational as well as environmental asset. Although some riverside reserves exist, there is a need to consistently provide public land frontages. This has been highlighted in the Hopkins River Open Space Policy (Clause 22.02-11) which aims to enhance the Hopkins River as an important environmental and recreational feature. The River provides an important linkage between the City Centre and Deakin University but requires improvement. Similarly, the Merri River has been adversely impacted by urban activity and requires suitable enhancement and restoration for it to become a more valuable component of the surrounding urban areas. In particular, activities within the saleyards site generate significant volumes of effluent which require appropriate treatment to avoid adverse impacts on the Merri River.

3.8 Access and Mobility

Improved public transport linkages, integrated with land use are fundamental in achieving a reduction in energy consumption, pollution levels and traffic congestion, thereby promoting a more attractive, liveable environment. It is noted however, that the design of new residential areas has not been closely aligned to the provision of public transport throughout the urban areas of Warrnambool. Transit Southwest operates seven bus routes throughout Warrnambool and these run on an hourly basis. Anecdotal evidence suggests that patronage rates are relatively low and this can be attributed to the infrequency of bus services routes throughout Warrnambool which do not meet the potential demand of growing residential areas. The availability of bus services will become increasingly important as the age profile of the City matures. It will also become the responsibility of the development industry to contribute to the operation of this service.

Lot design which maximises permeability for pedestrians and cyclists will also reduce reliance on motor vehicles. Access and mobility needs for frail or physically disabled people also require consideration particularly in view of the ageing population. Opportunities exist to improve housing and carpark design, as well as increase community transport options that will improve safety and reduce social isolation. Within the central City area improvement in pedestrian opportunities is required particularly to reduce car dependence and resolve car parking issues. This will also have the effect of improving community health and alleviating safety concerns.

3.9 Retail/Commercial Development

3.9.1 Central Activities District

The Warrnambool Central Activities District (CAD) functions as the principle retail and commercial centre for the south-west region of Victoria. The municipality comprises other retail components including the Gateway Plaza, (east of the CAD) which acts as a secondary retail centre and a network of smaller centres ranging from small shopping centres to approximately 20 general and convenience stores.

Currently, the Warrnambool CAD is experiencing a very low vacancy rate of 1.4%, which indicates a lack of development opportunities within the CAD (Warrnambool Retail Strategy Update 2002).

To maintain Warrnambool as the primary retail centre of south-west Victoria, the provision of additional retail opportunities within the CAD is particularly important. Given that the area is already built up, there is limited capacity for further retail development unless comprehensive renewal is carried out. Potential carpark redevelopment to incorporate new retail outlets will need to be of an acceptable scale to manage off-site impacts and preserve the urban character. The lack of suitably located carparking is also a growing issue which could be addressed in part through improved management and encouraging alternative modes of transport. To improve visual appeal of the CAD, provide better pedestrian oriented linkages and rationalise commercial space, it will be important to implement the Warrnambool City Centre Urban Design Framework, 2001.

Growing demand for commercial space over the last two years is reflected by a significant 34% increase in commercial land prices (WCC, Economic Development). Additionally a number of commercial sectors have experienced growth in recent years including property, business, health and community services (Figure 2.9 refers). It is important that growth in these sectors continues and that future demand for office and other commercial developments is addressed through identification of further commercial development locations. It is noted that a significant commercial sector is required within Warrnambool to support existing industrial operations and this is evident in the range of professional services located throughout Warrnambool such as the precinct within the CAD on Kepler Street between Koroit and Lava Street and the mix of uses located within East Warrnambool.

3.9.2 Eastern Activity Precinct

The demand for bulky goods retailing is growing and has concentrated along the Princes Highway which offers large, level sites with a high degree of exposure. In addition, the Gateway Plaza (located on the highway) requires further expansion opportunities to incorporate retail activity. It is important, however that such activity does not detract from the services provided within the CAD. Road safety is another important consideration given that a significant proportion of crashes occur on primary arterial roads.

The development of these sites is also having a major impact on the overall quality of the approach route into Warrnambool as some existing free standing commercial warehouse buildings with expansive areas of parking make a poor contribution to the highway character. There is a need for appropriate articulation of this gateway to the City to make a statement about the economic vitality of the City and surrounding environs. It should no longer be the responsibility of Council and Vic-Roads to implement improvement schemes along the road corridor to ameliorate the effect of overscaled buildings which make a limited contribution to the quality and character of the township. Appropriate definition of the City boundary should also assist in creating an effective gateway to Warrnambool. In this regard, the *Warrnambool Eastern Activity Precinct Structure Plan (2004)* has been prepared to address such urban design matters and development is encouraged to follow its recommendations.

3.10 Tourism

Redevelopment of Warrnambool's major tourism assets such as the Flagstaff Hill Maritime Museum (completed 2002) is expected to generate an increase in visitor numbers by 70%. There will be a need for tourist oriented retail land uses to support the increase in visitor spending.

The main tourism market within Warrnambool comprises the family beach holiday segment. The Warrnambool South foreshore area is the main holiday accommodation precinct for these visitors and has progressively developed to capture this market. Whilst development is occurring to meet the apparent strong demand for holiday accommodation, there is a lack of alternative forms of accommodation directed at other market segments such as a backpacker resort and 4 or 5 star accommodation.

3.11 Industrial Area Impact

Recent decline in the textiles and clothing industry has made way for food production and regional service industries as significant employers within Warrnambool. As a regional City, Warrnambool provides industrial land for the entire sub-region. It is recognised that there is currently a shortage of industrial zoned land (*Industrial Land Strategy 2001*), with approximately 8 hectares of zoned industrial land identified as being 'vacant' and some potential for additional land to accommodate small and medium scale industrial activity, subject to appropriate servicing and subdivision. There is however, no industrial zoned land of sufficient size to accommodate a large industrial operation seeking to locate in Warrnambool. Allansford has been identified as a suitable location to support a major industrial enterprise and already contains an industrial estate and several longstanding businesses. Investigations already undertaken by Council reveal a positive scenario for locating an intermodal freight hub adjacent to the industrial estate in Allansford. Whilst some of this land is located within the Moyne Shire municipal boundary, the Moyne Shire Council has also expressed interest in a freight hub at this location.

Export growth in key processed foods such as meat and dairy foods presents opportunities for future expansion of these industries in the future (*Economic Development Strategy, 2001*). Midfield Meats is currently experiencing pressure to expand which needs to be appropriately accommodated and the livestock saleyards are the centre of a growing agricultural precinct, requiring protection.

It is also important to ensure that sufficient land continues to remain available to accommodate the ongoing need for smaller service industries such as plumbers and other trades. In addition, there is an increased demand for new warehousing and larger sites with truck access (*Industrial Land Strategy 2001*) which is likely to grow given the rise in internet shopping and associated distribution activities. It appears that the availability of sites suited to warehousing or larger enterprises is decreasing.

3.12 Consultation Outcomes

A series of stakeholder interviews were conducted to identify the issues experienced by the local community. These were incorporated into this document in response to matters that were raised.

In addition, a community workshop was conducted on Wednesday 19 November, 2003 to present the issues that were identified as part of the desktop review and consultations. The preliminary land supply assessment was also presented. The workshop was attended by a wide cross section of people numbering approximately 30. In order to gauge the most important characteristics of new development areas, as viewed by the community, workshop groups were asked what they saw as the most appropriate selection criteria for new land development options. The outcome is summarised below:

- Provision of infrastructure services;
- Appropriate drainage and stormwater management;

- Appropriate road capacity and access routes;
- Utilisation of public transport;
- Preservation of existing landscape qualities;
- Connectivity along waterways, the coastline and railway;
- Large open space areas and recreation facilities;
- Access to community facilities;
- Mixture of development types and densities; and
- Maintaining viability of rural land.

Public exhibition of the *Warrnambool Land Use Strategy Issues and Options Paper* occurred during January 2004 and a total of 36 submissions were received. These are summarised in a supplementary document entitled *Submissions to the Preliminary Issues and Options Paper January 2004* and categorised according to particular development areas and issues enabling comments to be collectively addressed in the Strategy.

The draft Strategy was placed on public exhibition in June 2004, seeking comment and a total of 28 submissions were received. These have been incorporated into the Strategy where appropriate and are compiled together with a response in the *Submissions to the Draft Warrnambool Land Use Strategy, June 2004* document.

4. Land Supply Assessment

4.1 Introduction and Process

A requirement of the project study brief is to provide the Warrnambool City Council with a preliminary appraisal of the land supply requirements for the township for the forecast planning period. This is to achieve the following objectives:

- Identify immediately key land supply issues that will need to be addressed;
- Focus on areas for potential development requiring greater attention ;
- Produce a framework which will allow for the consideration of current and future development applications and proposed rezonings; and
- Achieve an overall agreed set of principles that will provide direction to the Strategy.

The process which has been adopted in the completion of this land supply audit may be summarised as follows:

1. Identification of current supply of residential, commercial and industrial zoned land.
2. Review of rate of development having regard to previous building construction rates, the composition of dwelling types and observed trends in demand.
3. Assessment of likely impediments to future development and factors which may continue to support levels of demand.
4. Preliminary assessment of land capability and suitability, having regard to previous planning policy directions, environmental features and values, strategic servicing requirements and the need for increased sustainability of development.
5. Assessment of overall capacity of existing and previously nominated future areas for residential, industrial or commercial development.

Following the formulation of the anticipated quantity of this future development requirement, it is then appropriate to identify options for the distribution of this growth. These options will need to achieve the overall objectives of increasing township sustainability, maximising social capital, promoting economic development and achieving effective integration with the existing urban frame. They will also need to account for a future stimulus to growth, as a result of current State Government Policies which seek to promote increased settlement within rural regional Victoria.

4.2 Forecast Land Supply Requirements

4.2.1 Residential Land Supply

The dwelling commencement rate since 1996, indicates that an average 220 dwellings have been constructed within the City of Warrnambool each year. Most recently this rate has increased to:

- 284 dwellings constructed in 2001/2002; and
- 257 dwellings constructed in 2002/2003.

As it is difficult to predict future residential land requirements with certainty, it is prudent to allow for a higher growth scenario to allow for identification of sufficient land for development. By adopting a higher average dwelling commencement rate of 250 dwellings per year, apportioning 27% of these commencements as units/townhouses (67.5 units), and 50% of these units as redevelopment within the existing residential area, a total of 192.5 new lots are required each year (an average of 3 units for each standard allotment). Note that this data is based on previous dwelling construction rates. The current supply is estimated to be between 600 (Urbanomics, March 2003) and 884 (Warrnambool City Council Assessment, August 2003), this represents approximately 3-4 years supply of residential land.

Assuming a continuation of the current accelerated development practice, a continued decrease in household numbers (Section 2.1 refers) and the now elapsed six months since the initial land supply estimate was made, the assessment of available land supply is expected to yield approximately 3-4 years supply of residential land.

Consistent with Melbourne 2030 recommendations, land should be available to satisfy demand for the next 15 years. To provide for a forecast 15 year period, an additional 1950 lots are required (taking into account existing supply). Additional focus on strategies such as the Warrnambool City Centre Urban Design Framework, promotion of units and townhouses in established areas, or transit orientated development outlined in this document can assist in reducing this allotment requirement. For the purpose of this Strategy the requirement for an additional 1950 lots has been adopted which would have the potential to accommodate approximately 4500 people.

4.2.2 Industrial Land Supply

The Industrial Strategy, 2001 has adopted a demand scenario for a ten year period to 2010 of:

- 1.9 hectares per year for smaller allotments of less than 1 hectare requiring a total of 19 hectares over 10 year the period; and
- An allowance of 20 hectares for major enterprises.

A recent Council assessment of demand for industrial land has revealed that industrial land prices have risen by 68% from 2002 to 2004.

4.2.3 Commercial Land Supply

With the spending by residents and visitors expected to increase into the future, there is significant growth potential for Warrnambool retailers. This would translate into approximately 23 000 sq m of potential for new retail floorspace within Warrnambool by 2011. Some of this demand will be satisfied by an additional 10,200 sqm of retail floorspace proposed to the east and west of the existing gateway precinct. However, currently the Warrnambool CAD is experiencing a very low vacancy rate of 1.4%, which indicates a lack of development opportunities within the CAD (Warrnambool Retail Strategy Update 2002).

It is likely that demand for commercial floorspace will continue to be generated by small enterprises that require a high level of interaction with their client base and suppliers, such as architects, accountants and health professionals. Hence these types of businesses will be best accommodated within or close to the CAD, where they can cluster together and benefit from proximity to other services, facilities and potential clients. Anecdotal evidence suggests that the supply of office space is limited within the CAD, reinforced by the 34% increase in commercial land prices within the last two years (WCC, Economic Development).

4.3 Key Strategic Directions

In evaluating the demand for future residential land within the City of Warrnambool the following key directions or trends, formulated from a review of previous studies and reports and based on discussions with the project Reference Group, are considered to be relevant:

Residential Development

- The rate of demand for accommodation is forecast to continue at the current increased level.
- There will continue to be an increase in household formation particularly due to a requirement for dwellings for single persons and couples without children. Lone person households and non-family households comprise approximately 30% of all Warrnambool households.
- Re-development of properties within the inner established residential area for unit accommodation will continue. This is due to the composition of the housing stock and the raw land value.
- Demand for properties with proximity and/or views to the coast or rivers will continue to be strong.
- Selection of an appropriate use for the Brierly site will become a catalyst for residential development in the surrounding area.
- The projected demographic composition of the community will see an increased representation in the older age groups. Currently the majority of the population (22%) falls within the 35-49 year age group. This will continue to favour the supply of smaller allotment size, but without a corresponding reduction in dwelling size.

- A requirement for accommodation for expanding families is still anticipated in the most affordable development location.
- Bushfield and Woodford will continue to attract new residents seeking a retreat-like, small community lifestyle. The settlement does not have the infrastructure to support a more intensive residential community. It will also provide tourist accommodation opportunities.
- While it may benefit from supplementary population, Dennington will continue to be strongly associated with the operational requirements of Nestlé.
- Allansford, as a potential focus for new industrial activity will provide for modest township development opportunities. Lower property prices and available infrastructure services will facilitate this development. The absence of a complete range of community and commercial facilities will however continue to constrain its rate of residential development.
- It is anticipated that the type of accommodation provided to the market within Warrnambool will continue to be consistent with current estate development models. However residential projects that offer an environmental rural lifestyle, with features such as golf courses or collective agricultural enterprises, may also be proposed.

Employment

- While employment within the township within the retail service sector is relatively high (18%), establishment of multi-national retail businesses will attract other commercial groups to the City. Although manufacturing industry has declined, a number of large enterprises are planned for Warrnambool which will provide a boost to local employment.

Commercial Development

- Increased commercial development within the Gateway Plaza site and within the Eastern Activity Precinct will increase the attraction of this locality for residential development.
- The provision of additional retail opportunities within the CAD and neighbourhood centres will promote demand for higher density development close to these centres.
- Meeting the needs of the business services sector is recognised as important for the future prosperity of Warrnambool with a number of commercial sectors experiencing growth in recent years.

Industry

- There is a lack of sufficient zoned land to accommodate any future large industrial operation.
- There will continue to be an ongoing need for smaller service industries.
- Allansford provides opportunities to accommodate a large industrial enterprise.

Environment

- Any development near waterways will require more open space and environmental treatments.
- Increased requirement for more effective on-site drainage management will require increased open space provision.
- Appropriate management of the urban-agricultural interface will be required to protect farming operations and maintain a greenbelt around the City.

5. Strategic Land Use and Development Options

A range of development options have been prepared to identify alternatives for the form and location of future development. It is possible for more than one of these options to be embraced in order to arrive at the most appropriate development solution for Warrnambool. They represent a longer term vision and aim to promote and encourage discussion so that the issues can be addressed. Setting a future urban form is a critical part of the Strategy because it will assist in shaping key land uses, transport services, environmental elements and community centres. It is important to recognise that different options have certain implications for the form of residential and commercial development, environmental outcomes and urban character. Accordingly, each option has been assessed against social, economic and environmental factors (Table 5.1 refers) to determine the most appropriate location for immediate and future development, taking into account existing infrastructure, land use and physical land characteristics (Figure 3.1 and 3.2 refer). To promote choice in the market place and effective utilisation of sites, development staging is also nominated.

5.1 North of the Merri River

Parcels of rural land north of the Merri River have in the past been precluded from development due to their environmental context. The proximity of such sites to the centre of Warrnambool does however warrant their review for a more environmentally responsive form of land use and development. The composition of proposed land use and development should demonstrate a net environmental benefit to the City.

The area north of Merri River and south of Woollaston Road which forms a backdrop to central Warrnambool and has high environmental and landscape values that are to be protected. In addition, new development would require the construction of a new sewerage pump station, with the higher level land requiring a new water tower and pump station. This area of land has the capacity to satisfy a large number of allotments, however only a small proportion would be required to satisfy the 15 year land supply requirement. When the other designated growth areas have been utilised, this site could then be considered and envisaged to include substantial open space and environmental resource areas and landscaping prior to development. Preference would be for forms of development which feature clusters of housing in precincts, within a substantial parkland habitat context. Natural environmental constraints must also be taken into account including the ridgeline, areas of land subject to flooding and protection of rural land to the north.

5.2 Mortlake Road

Along the main arterial routes within Warrnambool, such as the Princes Highway, Mortlake Road and Caramut Road there is a range of development and land use which can form the basis of more intensive forms of residential development.

Future redevelopment along Mortlake Road around the developing commercial centre known as Northpoint would be well positioned to take advantage of this main access route off the Princes Highway and other major infrastructure. However some infrastructure will require upgrading in order to accommodate additional growth, such as sewerage and water supply services.

Increasing the density of development along this route and within 500 metres walking distance along each side of the road corridor would offer considerable capacity to provide for residential accommodation within the short to medium term (up to 2020). This option would benefit from the proposed north south arterial route near the Gateway Plaza which would divert traffic from Mortlake Road and ease congestion. It would also support further development of the nearby Russells Creek recreational corridor.

Given the level of exposure of this site to the main road, it will be important to ensure a high standard of building design. As the area has some drainage issues, consideration will also need to be given to incorporating the principles of WSUD in new developments.

5.3 North East Corridor

In the same way that the central core area of Warrnambool is the focus for the surrounding residential area, there is a need to create identifiable foci for residential communities that are now located at a less convenient walking distance from the centre.

The former Brierly Psychiatric Hospital site has the potential to become a community focal point, supported by residential development in the surrounding area. The design of these residential areas needs to promote pedestrian access, and provide additional land for future community facilities.

It will be important to set a strategic direction for the area through an outline development plan to establish the composition and framework for future residential use and provide direction for establishing local community services such as child care, shops and small service businesses. This plan will be important, even if the implementation of development does not proceed immediately. A requirement for such a plan will need to be specified in the Warrnambool Planning Scheme as a pre-requisite for rezoning to allow residential use and development.

5.4 Eastern Activity Precinct

It is envisaged that concentration of residential development surrounding the Eastern Activity Precinct will utilise the recently proposed north-south arterial route and through creative and innovative design, provide high quality residential living environments. The site also presents an opportunity to provide more affordable accommodation as well as a range of higher density housing such as townhouses, aged persons accommodation and commercial accommodation.

Consideration should also be given to the presentation of new developments along the highway frontages, and introduction of a defined 'gateway' to demarcate an entrance point and make a statement about the significance of the City. Additionally there are drainage and infrastructure issues associated with further development in this area,

particularly beyond the ridgeline. Future development will therefore need to take into account the recommendations of the approved *Warrnambool Eastern Activity Precinct Structure Plan* (2004).

5.5 Coastal Tourism Opportunities

Opportunities exist for some coastal tourism development to the east of the City which would take advantage of the major scenic coastal opportunities while remaining sensitive to environmental and landscape values of the coast. Relevant policies such as the Victorian Coastal Strategy and Great Ocean Road Region Strategy would also need to be considered. The Lady Bay foreshore area and Lake Pertobe also provide significant opportunities for tourist oriented developments.

5.6 Allansford

A direction for future development and land use within Allansford has been set by the *Allansford Urban Design Framework, 2003*, addressing matters including town boundaries, town entry, traffic and transport, pathway systems, the recreational reserve and residential development. Higher density residential development is to be encouraged around the east and west nodes of the town, with progressive expansion into the Low Density Residential Zones. In addition, the industrial area located in East Allansford will be expanded to accommodate demand for industrial land and major industrial enterprises.

5.7 Coastal/Hopkins River Environment

Consistent with the current MSS and prescribed Urban Growth Boundary, land to the north and south of Hopkins River is to be considered for future residential use. The visual and landscape significance of this location is recognised in the Planning Scheme overlays which apply to all future development. It is important that these environmental values and landscape qualities continue to be preserved for the benefit of the wider community and ecological biodiversity.

Accordingly, consideration of any form of residential land use would be subject to the preparation of detailed siting and design schemes that demonstrate net environmental benefits as a result of development. The protection of the ridge line, coastal and river systems are paramount in the consideration of any form of development on this site. Development densities will not be uniform, but will respond to a visual and environmental assessment of potential development impacts. Subdivision of this area should have allotment sizes with buffer zones that afford effective protection of the environmental values of the coast and river environments from impacts such as stormwater, septic discharge and domestic animals. It should also be noted that this area may contain acid sulphate soils which will impact on the feasibility and location of proposed developments and infrastructure. Additionally, significant water infrastructure will also be required to service the higher elevation land and a new sewerage pump

station is required to service the land to the north of the ridge line down to the Hopkins River.

Building and site design will demonstrate how a high degree of visual absorption is to be achieved. Subject to infrastructure servicing requirements, the potential exists for development south of Hopkins Point Road to extend further east along the coastline, with the ridgeline forming a boundary to the urban edge. North of Hopkins Point Road, development could occur as far east as Deakin University which, as a significant activity node would form an appropriate boundary to the urban edge. The landscape treatment of the edge of the site should provide a suitable transition to Deakin University, the Hopkins River and Hopkins Point Road.

5.8 East Warrnambool

Within the inner residential areas of Warrnambool, there is considerable scope for the continued construction of units and townhouses in selected locations such as near the Fletcher Jones site. Housing stock comprises well established high value, recently constructed housing (with limited redevelopment potential), as well as significant quantities of older housing without major character features, and limited site investment. Throughout the inner areas there is housing of heritage value that contributes to the overall streetscape quality and character that is protected by the Planning Scheme. The density of this heritage housing does not however preclude the selective redevelopment of sites for units and townhouses that complement this heritage reference with appropriate design standards. It is important that the continued promotion of this form of accommodation which accounts for up to 27% of the total dwellings constructed in the township is accompanied by investment in improved streetscapes.

5.9 Warrnambool Central Activities District

The re-development of the commercial core of Warrnambool for higher density housing will, in the short term (up to 2010), provide a limited supply of residential accommodation. This will often be favoured for short term and holiday accommodation. In the medium term, demand for this form of accommodation is anticipated to increase (up to 2020) and in the long term extend into the nearby inner residential areas. This is the most desirable option to achieve maximum pedestrian amenity to town centre functions and the foreshore.

It is recognised, however that there are infrastructure costs associated with an increased density. Whilst these can be alleviated through promotion of water conservation and WSUD, there has been no investigation into the extent of redevelopment within the CAD that can be supported by existing infrastructure. There will be a point at which existing concrete sewage pipes will need replacing. Until such a study has been completed, infill development should be moderated in the short term and suitable service provision alternatives promoted.

5.10 West Warrnambool

Similar to East Warrnambool, this area is characterised by numerous areas of older housing stock with redevelopment potential, in addition to a number of heritage places protected by the Planning Scheme. Strategies for residential development in this location should therefore be consistent with those set for East Warrnambool.

5.11 South Warrnambool and Merrivale

This area is characterised by a unique mix of recreational and residential land uses. In addition to the areas of established housing, holiday accommodation and some pockets of rural land, it includes Lake Pertobe, the south Warrnambool wetlands, the Merri River, the Lady Bay foreshore and Warrnambool Golf Club. To recognise and protect the natural features of this area, several Design and Development Overlays are in place, and while infill and redevelopment is desirable here, it must be complementary to the inherent values of this sensitive landscape area. Opportunities exist for contemporary residential development within selected locations in south Warrnambool including the Woollen Mill site, south of the railway line and an area of rural land on Younger Street. In addition, the harbour area has potential to provide improved visitor services and port facilities.

5.12 Transit Orientated Settlement

Along the main arterial routes within Warrnambool, such as the Princes Highway, Mortlake Road and Caramut Road there is a range of development and land use which can form the basis of more intensive forms of residential development. This will however require consideration to be given to neighbouring industrial or commercial uses to minimise amenity issues.

Future redevelopment should be focussed along this route and within 500 metres walking distance along each side of the road corridor. Given the exposure of these sites to main roads, it will be important to ensure a high standard of building design. The capacity of such sites to provide for residential accommodation within the short to medium term (up to 2020) is considerable.

5.13 Dennington

The existing urban area of Dennington is centred around the Nestlé manufacturing site and is located directly off the Princes Highway. The community enjoys a co-operative relationship with the operation of Nestlé, direct access to the Warrnambool CAD, proximity to schools and recreational opportunities. Expansion of the Dennington township provides an opportunity to support these existing facilities including major water and sewage infrastructure. Future development will however, require attention to drainage issues and the importance of maintaining the existing sense of community

within Dennington. This could include appropriate landscape treatments along streetscapes.

5.14 North Dennington

The scenic rural area in the north – west corridor (north of Dennington) has potential for future residential development that could enhance the surrounding river environs. This is envisaged to include substantial open space and environmental resource areas and landscaping prior to development.

The location of the Merri River would act as a natural boundary to prevent over-expansion of the residential area. Future development of this area would however need to give consideration to appropriate access arrangements and installation of a new pump station to provide sewage services.

5.15 Saleyards

Nomination of future activity areas could include the livestock saleyards precinct which is the centre of a growing agricultural services area. It is acknowledged that the use of this facility is anticipated to continue during the forecast planning period but may need further consideration in the longer term, beyond the 20 year planning horizon. Industrial uses within this agricultural-related precinct should however be carefully managed, to provide scope for selective redevelopment in the future for a broader mix of uses.

5.16 Bushfield and Woodford

The outlying settlements of Bushfield and Woodford to the north of the Warrnambool City centre have experienced considerable residential development in recent years. Although the low density rural character should be maintained, appropriate provision of supporting infrastructure relative to the extent of urban development, including retailing and public transport would facilitate the development of a more sustainable community. Urban expansion should be limited to within the Rural Living Zone, however opportunities for higher density township type developments should be considered together with a review of the extent of the Rural Living Zone.

Table 5.1: Options Analysis Against Sustainability Indicators

Options	Social	Economical	Environmental	Recommendation
<p>Future Environmental Corridor (North Merri River)</p> <p>Promote future use for residential land use and development with net environmental benefit</p>	<ul style="list-style-type: none"> ✓ Attractive landscape setting for residential purposes. ✓ Relative proximity to schools, shops, services. 	<ul style="list-style-type: none"> ✗ Extension beyond natural boundaries could promote urban sprawl with an undefined City edge ✗ Access constraints across the river. ✗ Pressure for infrastructure provision across the river. A new sewerage pump station is required with a new water tower and pump station required to service higher level land. ✓ Significant developer interest. 	<ul style="list-style-type: none"> ✓ Potential to enhance environmental corridor. ✗ Land subject to flooding. ✗ Urban – agriculture interface issue. 	<p>Land supply resource to be carefully staged for the immediate and longer term.</p> <p>Initial 400 lots to be activated as part of the 15 year land supply requirement with the remainder to be activated when 80% developed.</p>
<p>Mortlake Road</p> <p>Focus for existing residential area surrounding the Northpoint retail area.</p>	<ul style="list-style-type: none"> ✓ Residential development will have good access to commercial, educational and recreational needs. ✗ Residential amenity will require protection. 	<ul style="list-style-type: none"> ✗ Some infrastructure upgrade costs. ✓ Planned north south arterial route near Eastern Activity Precinct will improve access along Mortlake Road. ✗ Flooding issues. 	<ul style="list-style-type: none"> ✓ Consolidation of existing development will reduce car dependency, urban sprawl and pressure on rural land. 	<p>Develop a community node at available church owned site at Wangoom Road and in the Brierly precinct.</p> <p>To form part of 15 year land supply requirement.</p>
<p>North East Corridor</p> <p>Focus for new residential area to north and north-east.</p>	<ul style="list-style-type: none"> ✓ Potential to utilise catholic church school site and Brierly site as a community nodes. ✓ Potential to incorporate provision for alternative transport modes within new subdivisions. ✗ Lack of a Primary School. 	<ul style="list-style-type: none"> ✗ Large no. of different land owners. ✗ Traffic and safety issues along Aberline Road. ✓ Readily serviceable – water and sewage. ✓ Planned north south arterial route near Eastern Activity Precinct will improve access 	<ul style="list-style-type: none"> ✗ Agricultural interface issues. ✗ Drainage issues Russells Creek. ✓ Russells Creek Flood Study (Nov. 2003) has been prepared. ✓ Solar efficient and permeable subdivision layouts. ✓ Structure planning to include environmental corridors, cycling and pedestrian paths. 	<p>Selected areas to develop in the short term.</p> <p>To form part of 15 year land supply requirement.</p> <p>Development Plan Overlay/Structure Plan</p>
<p>Eastern Activity Precinct</p> <p>Focus for new residential precinct to north.</p>	<ul style="list-style-type: none"> ✓ Potential to enhance the public realm , include community facilities and employment opportunities. 	<ul style="list-style-type: none"> ✓ Readily serviceable – water and sewage. ✗ Need for infrastructure investment 	<ul style="list-style-type: none"> ✓ No significant environmental constraints. ✓ Potential to improve the 	<p>Structure Plan required.</p> <p>Light industry north Eastern Activity Precinct.</p> <p>Extend bulky goods. Retailing</p>

Options	Social	Economical	Environmental	Recommendation
		north of the ridgeline (water, sewer and drainage). ✓ Retail expansion and economic development opportunities.	Warrnambool Gateway. ✓ Benefits from planned north-south road linking Dales Road and Raglan Parade.	along Princess Highway to Horne Road. Residential development south of Dales Road.
Allansford Residential area to be promoted in accordance with UDF Promote industrial enterprises within Allansford.	✓ Potential to reinforce the established community.	✓ Opportunity to attract large scale business to Warrnambool	✓ Good road and rail access for freight transport. ✗ Environmental and amenity interface issues to be managed	Support gradual expansion of residential centred around existing nodes. Expand existing industrial area for large scale industry
Coast / Hopkins River Area. Coastal Environmental. Promote land use and development which results in net environmental benefit to coast, south east of Hopkins Point Road. Environmental housing with substantial river edge reserve, north of Hopkins Point Road.	✓ Desirable development opportunity in proximity to the coastline, river and CAD. ✓ Potential to satisfy high end of the residential market.	✗ Need for new sewerage and water supply infrastructure. ✗ Traffic pressure Flaxman Street. ✓ Opportunity to capitalise on coastal views and setting. ✓ Significant developer interest.	✗ Environmental sensitivities including the dune area and Hopkins River landscape. ✗ Sloping land a development constraint . ✓ Opportunity to create a foreshore reserve. ✓ Proximity to CAD and opportunities for bicycle and pedestrian paths.	Include in immediate land – supply requirement north of Hopkins Point Road. Retain low density residential area with environmental and landscape objectives south of Hopkins Point Road. Establish a clear eastern boundary at the ridgeline on the south side of Hopkins Point Road.
Established East Warrnambool Redevelopment Promote quality redevelopment of units and townhouses.	✓ Development opportunity at Fletcher Jones site to create a mixed use development. ✗ Management of amenity issues associated with higher residential densities.	✗ Unknown infrastructure limitations. ✓ Opportunity to provide for compatible commercial developments. ✓ Utilisation of existing land and infrastructure capabilities.	✓ Enhancement of existing urban character. ✓ Consolidation of existing development will reduce car dependency, urban sprawl and pressure on rural land.	Allow for the continued construction of units and townhouses, while protecting neighbourhood character. Promoted some mixed use opportunities Conduct neighbourhood character assessments
Warrnambool CAD. Promote higher density residential use in association with commercial use.	✓ Increase activity in the public realm – community building opportunities. ✗ Limited provision of public open space.	✗ Unknown infrastructure limitations. ✓ Reinforcement of commercial capacity in the city core.	✓ Consolidation of existing development will reduce car dependency, urban sprawl and pressure on rural land.	Include in immediate land – supply requirement. Conduct neighbourhood character assessments

Options	Social	Economical	Environmental	Recommendation
	<ul style="list-style-type: none"> ✗ Management of amenity issues related to higher residential densities. 	<ul style="list-style-type: none"> ✓ Utilisation of existing land and infrastructure capabilities 	<ul style="list-style-type: none"> ✓ Enhancement of existing urban character. 	
Established West Warrnambool Redevelopment. Promote quality redevelopment of units and town houses.	<ul style="list-style-type: none"> ✓ Encourages alternative modes of transport – reduces car dependence. ✗ Management of amenity issues associated with higher residential densities. ✓ Utilisation of existing land and infrastructure capabilities. 	<ul style="list-style-type: none"> ✗ Unknown infrastructure limitations. ✓ Opportunity to provide for compatible commercial developments. ✓ Reinforcement of commercial capacity in the core. 	<ul style="list-style-type: none"> ✓ Enhancement of existing urban character. ✓ Consolidation of existing development will reduce car dependency, urban sprawl and pressure on rural land. 	<ul style="list-style-type: none"> Allow for the continued construction of units and townhouses, while protecting neighbourhood character. Conduct neighbourhood character assessments
South Warrnambool and Merrivale Infill and redevelopment to include residential and mixed use.	<ul style="list-style-type: none"> ✓ Access to a wide range of environmental and recreational experiences. 	<ul style="list-style-type: none"> ✓ Opportunities to further capture the tourism market through development that enhances the bay and lake areas. ✓ Access to existing infrastructure services 	<ul style="list-style-type: none"> ✗ Environmentally sensitive areas including foreshore, Merri River and wetlands. 	<ul style="list-style-type: none"> Site responsive Infill and redevelopment to include residential and mixed use. Subject to investigation of brownfield sites and rural land pockets.
Transit Oriented Development. Promote unit and townhouse development along major arterial routes.	<ul style="list-style-type: none"> ✓ Reduction of car dependence and traffic congestion. ✓ Reduced risk of road accidents ✓ Promotion of a more physically active lifestyle 	<ul style="list-style-type: none"> ✗ Maintaining a good standard of residential design with a high level of exposure to main roads. ✓ Utilisation of existing land and infrastructure capabilities 	<ul style="list-style-type: none"> ✓ Reduction in greenhouse gas emissions and pollution. ✓ Consolidation of existing development will reduce car dependency, urban sprawl and pressure on rural land. 	<ul style="list-style-type: none"> Include in 'immediate' land – supply requirement.
Dennington. Maintain./reinforce existing community structure.	<ul style="list-style-type: none"> ✗ Removed from community services and facilities of central Warrnambool. 	<ul style="list-style-type: none"> ✓ Utilisation of available infrastructure capacity. 	<ul style="list-style-type: none"> ✓ Enhancement of existing urban character. 	<ul style="list-style-type: none"> Limited residential development to be directed to Dennington.
North – Dennington Land Use and Development to enhance the river environment.	<ul style="list-style-type: none"> ✓ Urban expansion could support new retail and community services within Dennington. ✓ Access to Dennington oval and train station. 	<ul style="list-style-type: none"> ✗ Distance from Warrnambool CAD. ✗ New pump station required for sewage services north of Coghlan's Road. ✓ Land can be readily serviced (water & sewer). 	<ul style="list-style-type: none"> ✗ Potential land subject to flooding. ✓ Scenic landscape environment. ✓ Improved river access. ✓ Future development contained by river edge. ✗ Need to manage interface issues 	<ul style="list-style-type: none"> Include in 'immediate' land supply requirement. Establish river reserve. Establish 500 metre buffer zone between saleyards and residential land.

Options	Social	Economical	Environmental	Recommendation
<p>Saleyards Protect current enterprises. Provide appropriate edge treatment to allow for residential infill.</p>	<p>✓ Protection of current enterprises from encroachment.</p>	<p>✗ Interface issues with amenity of existing and proposed residential</p> <p>✓ Ensures the provision of additional serviced industrial land.</p>	<p>with industrial area to the east.</p> <p>✓ Opportunity to address waste water issues.</p>	<p>Include buffer area of 500 metres west of the saleyards.</p>
<p>Bushfield and Woodford Maintain rural lifestyle setting.</p>	<p>✓ Urban growth could facilitate introduction of new facilities eg. public transport and shops.</p>	<p>✓ Contributes to housing and lifestyle choice in the market place</p> <p>✗ There are no water or sewerage services to support urban development.</p>	<p>✗ Need to manage rural interface issues and protect the green belt.</p>	<p>Prepare urban design framework to set a framework for future development of the area and review the extent of the Rural Living Zone.</p>

6. Preferred Development Scenario

The scope for new residential, industrial and commercial areas is indicated in the diagram **Figure 6.1**. This shows the sites that are recommended for residential development to the west, south and particularly north-east of Warrnambool. It also designates community/commercial centres and industrial development areas.

6.1 Development Objectives

As continued urban growth can be expected to result in fewer residents having ready access or views of the coast or rural setting, it will be important that future residential development seeks to maintain and enhance these important assets, with a level of accessibility to all. To achieve an improved outcome in the delivery and operation of new residential communities within Warrnambool over the next 20 year planning horizon (to 2024), it is proposed that the following key objectives be adopted:

Residential Development

1. Within the inner core area of Warrnambool opportunities for higher density accommodation are to be realised, and attention given to the promotion of this concept by model schemes, project facilitation and education on design best practice.
2. In the inner residential areas redevelopment of detached dwellings for residential units is to be encouraged, with increased promotion and support for the achievement of design excellence that respects existing neighbourhood character and heritage assets.
3. To create safe, attractive living environments for a diverse social and demographic mix.

Accessibility

4. The provision of improved efficiency and accessibility of public transport is to become a priority, supported by the layout and design of new residential areas.
5. A comprehensive integrated pedestrian and bicycle system is to be the foundation for future subdivision design.
6. To achieve equal standards of access to employment, housing, education, health and commercial opportunities for all sectors of the community.

Urban Design

7. On going emphasis on development which reinforces streetscape quality and the public realm.

Environment

8. Environmental resources within and surrounding Warrnambool are to be protected and enhanced.
9. New subdivision is to be capable of achieving high standards of water conservation and drainage management.
10. Maintain a greenbelt surrounding the Warrnambool urban area for long term management of the boundary to maximise the potential use of the adjacent agricultural land and to reinforce the image of Warrnambool as a regional City in an attractive rural environment.

Social Wellbeing

11. Consideration is to be given to an identifiable focus for community activity within each residential precinct. This is to be supported by higher density accommodation and increased facilities.
12. Scale of the residential area is to be sufficient to incorporate a comprehensive integrated recreation and open space system.
13. Facilitate opportunities to provide more affordable housing through a mix of housing types and densities in different locations to cater for a diversity of housing needs.

Economic Development

14. To increase the supply of accessible land for industrial and commercial purposes, protected from encroachment by residential growth areas.
15. To enhance Warrnambool's tourism assets and associated businesses.

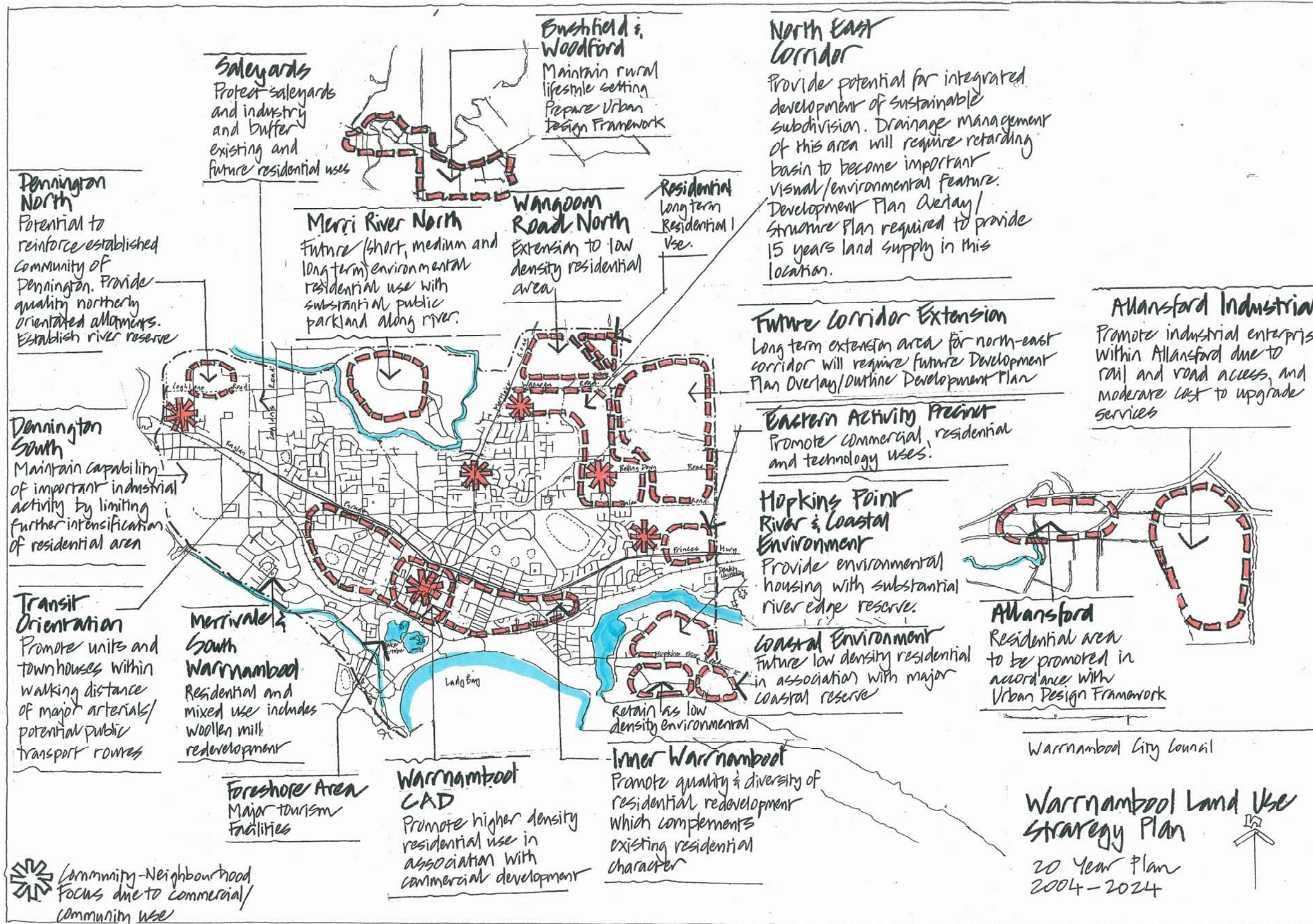


Figure 6.1: Land Use Strategy Plan

6.2 Greenfield Sites

The development of the nominated Greenfield sites within Warrnambool provides an opportunity to develop a variety of dwelling types with varying development densities. Greenfield sites allow for a range of housing types to be developed to cater for the needs of all market segments. The use of smaller lot sizes and housing close to community services will be particularly appropriate for the ageing and student population. Structure planning of these areas and/or application of appropriate development controls such as a Development Plan Overlay will ensure that these areas are developed in a sustainable manner and make a positive contribution to Warrnambool as a whole. Developer contributions plans will also facilitate appropriate infrastructure provision in terms of roads, drainage, utilities and community infrastructure, to support the principles of this Strategy.

The following key strategies should be addressed in the design of new residential neighbourhoods:

- Encourage a range of uses to locate around community nodes to cater for relevant sectors of the community, including the use of combined facilities for education and other purposes;
- Urban design that promotes activity in the public realm eg. Seating or BBQ areas and enhances the streetscape;
- An open space network that links areas of environmental significance and connects local destinations through revision and implementation of Council's Open Space Strategy ;
- Residential subdivisions to incorporate a road hierarchy that includes capability for public transport and effective access to nearby commercial centres; and
- Incorporate solar oriented allotments and other sustainable design features.
- Landscaping schemes within new developments to incorporate indigenous plant species and WSUD techniques.

To ensure that these objectives are adopted, it is proposed that new development controls apply to these locations as shown in table 6.1.

Table 6.1: Indicative Zonings for Selected Urban Growth

Area	Existing Zone	Existing Overlay	Proposed Zone	Proposed Overlay
North East Corridor	RUZ	DDO4 DPO 1-4	R1Z	DPO Based on a Local Structure Plan DDO4 DCPO
North Dennington	RUZ	DDO4 DPO1 -4	R1Z	DPO Based on a Local Structure Plan DDO4 DCPO
Hopkins River Coastal Env't: North Hopkins Pt Rd	RLZ/RUZ	DDO2 ESO2	LDRZ	DPO Based on Local Structure Plan DCPO (retain ESO) DDO4
Hopkins River Coastal Env't: South Hopkins Pt Rd	RLZ/RUZ	DDO2 SLO1 ESO1	LDRZ and CDZ to replace RLZ	DPO Based on Local Structure Plan DDO4 DCPO (retain SLO and ESO)
North Merri River	RUZ	ESO2 (along the River)	R1Z	DPO Based on Local Structure Plan DCPO (Retain ESO) DDO4

6.2.1 North East Corridor

Residential growth within the north east of Warrnambool will primarily take the form of detached and semi-detached dwellings on a variety of allotment sizes with a potential yield of 700 lots to meet demand within the immediate 15 years. The former Brierly Psychiatric hospital located on Aberline Road and the St Josephs owned land on the corner of Wangoom and Mortlake Road represent valuable opportunities to create community focal points offering retail, recreational or community services. Such developments will enable walking and cycling to be promoted as alternative modes of transport, incorporating a high standard of pedestrian amenity and safety. Convenient access to the retail precinct at Gateway Plaza would also be available, particularly with the introduction of the north south road linking Raglan Parade and Dales Road. The site also presents an opportunity to provide more affordable accommodation opportunities through designation of a range of housing styles as well as a range of higher density housing such as townhouses, aged persons accommodation and commercial accommodation.

The intent of residential development within this area is to utilise the available water supply and sewage capability, thereby reducing development costs. South West Water is planning to install a new 300ML water storage facility to the west of the existing storage to cater for growth in demand for water resources which would provide for additional demand in the north-east area. Drainage issues can also be addressed by incorporating drainage management requirements as a landscape feature near Russells Creek as part of approval of subdivision.

The area north of Wangoom Road is also identified for further residential development, initially retaining the existing Rural Living Zone for residential purposes, followed by an extension of the residential area (when 80% of the land south of Wangoom Road is developed), given that the land is already fragmented and has low agricultural value. This land would adjoin a vegetated buffer between the developing residential areas and high quality agricultural land to the north. It is important that this agricultural land is protected from encroachment.

A lot yield of approximately 215 lots is proposed to be provided north of Dales Road as part of the 15 year land supply. This area is in close proximity to the Gateway Plaza area, recreation reserve on Aberline Road and would support the development of a community focus at the Brierly site. The land is able to be readily serviced with water and sewage. Dwelling density in this area has potential to form a higher density than other outlying areas, while allowing for WSUD urban design treatments within streetscapes.

A clear boundary to the City would be created through a planned Link Road that would provide an alternative access route around the City, and divert traffic pressure from Mortlake Road and Raglan Parade. A potential Link Road location along Horne Road and Wangoom Road is seen to be consistent with the future residential land supply requirements of Warrnambool. A vegetated buffer along the outer edge of the Link Road incorporating a bicycle and pedestrian path that would provide clear separation between the urban and rural areas while fostering a sense of appreciation for the rural surroundings.

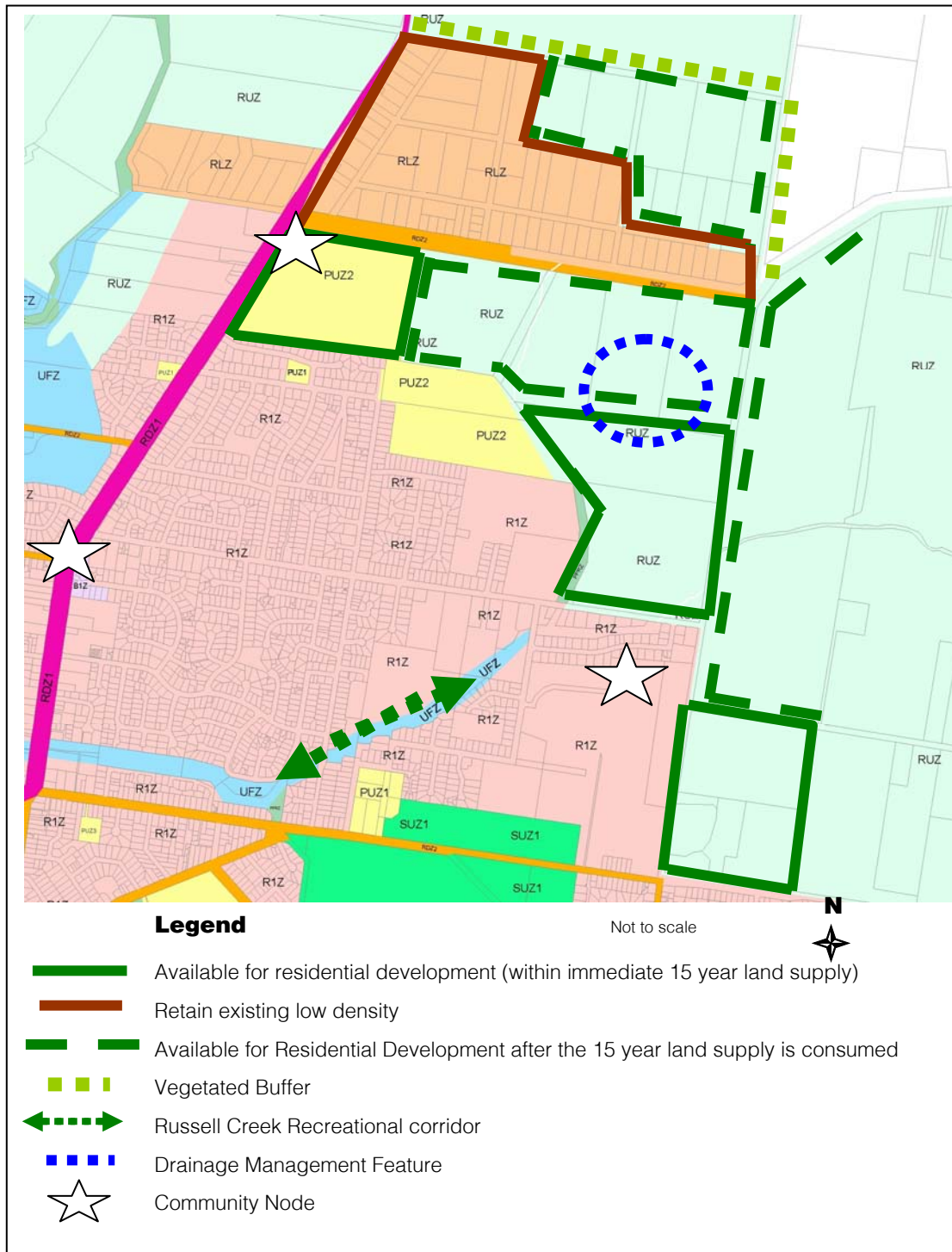


Figure 6.2: North East Corridor

To facilitate development within the north east area, the following items listed in Table 6.2 will need to be actioned.

Table 6.2: North-East Corridor Implementation Plan

Action	Timeframe	Area of Responsibility
Liaise with the Moyne Shire Council regarding future development of the north east area and the potential impacts this may have on surrounding land within the Moyne Shire.	Immediate	Town Planning
<p>Prepare a Structure Plan to co-ordinate services and provision of lots within the north-east area in co-ordination with the Shire of Moyne. The Plan should achieve the following:</p> <ul style="list-style-type: none"> ▪ Encourage a range of housing types to be developed to cater for the needs of all market segments. The use of smaller lot sizes and higher density housing close to community services will be particularly appropriate for the ageing and student population; ▪ Urban design of residential precincts should emphasise the importance of community activity within the public realm. This includes landscaping and fencing treatments of housing frontages in addition to seating areas within open space and community nodes; ▪ Facilitate early provision of community and commercial facilities in co-operation with key infrastructure providers; ▪ Incorporate suitably located bus shelters along new collector roads that are well designed and signposted; and ▪ Assess capacity and upgrade requirements for Aberline Road to address safety and traffic management issues. The design and overall road hierarchy within this area should achieve optimal performance based on efficient residential subdivision design. Capacity for alternative transport modes should be integrated with the new areas and provide for access to designated community/commercial nodes. ▪ Staging of development should provide for the most effective roll-out of infrastructure, while providing for the sustainable treatment of open space and environmental enhancement prior to development. 	2004-2005	<p>Town Planning</p> <p>Residential Services</p> <p>Engineering</p> <p>Engineering</p>
Apply a Development Plan Overlay to ensure that new subdivisions address drainage, WSUD, road capacity and public safety requirements. Drainage issues need to be comprehensively addressed on a large scale basis as part of this plan. Performance targets are to be specified with regard to on-site drainage detention as part of subdivision designs, installation of rainwater tanks to reduce stormwater runoff volumes and WSUD techniques.	2005 – to follow structure planning	Town Planning Engineering
Promote opportunities to incorporate more sustainable housing design that improves energy efficiency and reduces water consumption. This could include distributing information on solar oriented design	Ongoing	Building and Planning Residential

Action	Timeframe	Area of Responsibility
techniques or managing cost rebates for solar hot water systems.		Services
Promote opportunities to provide for access to buildings/houses and mobility for the frail and physically disabled or people with young children. Increase awareness of adaptable housing standards through training and education programs for targeted stakeholders.	Ongoing	Building Community Planning
Amend the WCC <i>Design Guidelines for Subdivisional Developments, Urban/Rural Road and Drainage Construction Projects, and Traffic Management</i> (2003) to include guidance on sustainability, WSUD and landscaping.	2004 - 05	Engineering
Source sufficient funding from developers through a Development Contributions Plan for maintenance of the river corridor, development of open space and integration of WSUD features.	2005	Engineering
Undertake Link Road feasibility study to determine appropriate route location, having regard to the future land use directions.	Immediate	Engineering VicRoads
Incorporate appropriate edge treatment of low density residential area north of Wangoom Road, including native planting that allows viewlines between the urban and rural areas.	2005	Open Space
Support opportunities for the provision of education and community facilities, rationalisation of existing facilities or the utilisation of combined facilities.	Ongoing	Residential Services Department of Education

6.2.2 Coastal/Hopkins River Environment

Urban expansion east of the Hopkins River will involve utilisation of Greenfield sites including approximately 450 lots based on a density of 4 or 5 dwellings/hectare, while retaining existing low density allotments located in the Rural Living Zone. This particular location is a unique residential area within Warrnambool, with coastal and river views and would be suited to a more selective residential market segment. Preservation of landscape qualities and managing environmental sensitivities, particularly the dune area and ridgeline will be of primary importance. Further investigation is required to determine the extent of development together with comprehensive design and siting required prior to approval.

To ensure that the coastal environment south of Hopkins Point Road and east of Logans Beach is protected, no further development should extend east beyond the ridgeline or Deakin University. Development at a range of densities is to occur to the north of Hopkins Point Road with high quality design features encouraged, including the preservation of views from the river to land and a substantial river edge reserve.

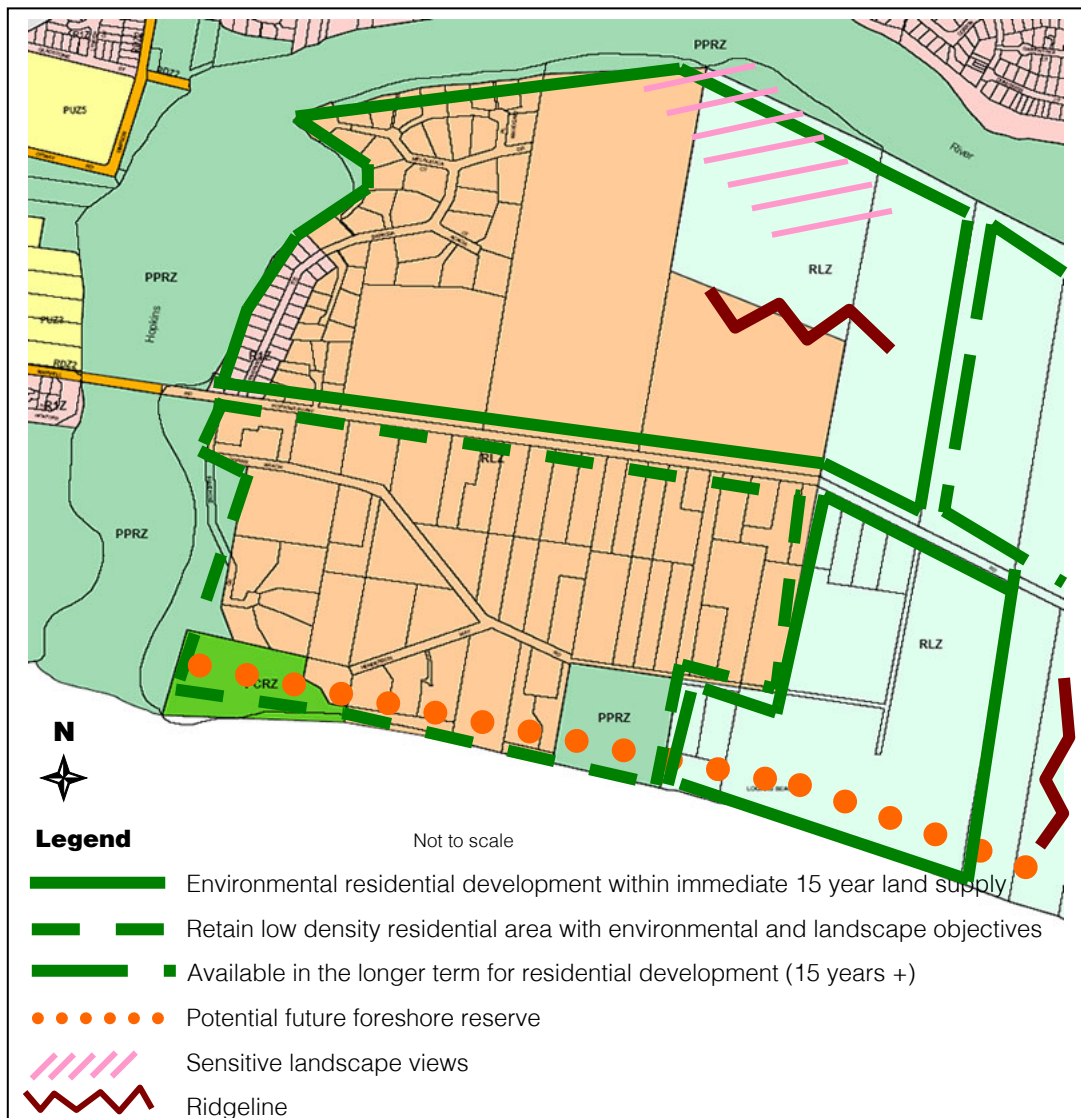


Figure 6.3: Coastal/Hopkins River Environment

The actions identified in Table 6.3 will assist in achieving the desired future development form in this area.

Table 6.3: Coastal/Hopkins River Environment Implementation Plan

Action	Timeframe	Area of Responsibility
The evaluation of sites within this area is required to more accurately identify existing environmental features including flora, fauna and cultural heritage. This should ensure that future development does not encroach upon these heritage assets.	2004 - 05	Environment
Implement a monitoring system to ensure that development does not impact on the beneficial uses of the existing groundwater resource.	2006	Environment
Examination of Hopkins Point Road Bridge capacity and other infrastructure requirements such as roads (ie. Flaxman Street) to determine appropriate residential capacity within the Hopkins River/Coastal area. Significant water infrastructure will also be required to service the higher elevation land and a new sewerage pump station is required to service the land to the north of the ridge line down to the Hopkins River.	2004 - 05	Infrastructure
Retention of the valuable dune area through the negotiating the transfer of development rights and designation as a public reserve in association with proposed rezoning.	2004 - 05	Environment Town Planning
Undertake structure planning for the area. Urban design guidelines specific to this Hopkins River/Coastal area would assist in improving design standards. Future development should reinforce the role and importance of limiting development to within the urban frame. It should also take into account the location of identified ridgelines and viewsheds. Introduce development controls to ensure the following:	2005 - 06	Town Planning
<ul style="list-style-type: none"> ▪ A sense of place is to be established through urban design that emphasises the integration of housing and landscaping, while preserving viewsheds; ▪ High quality housing design is to be encouraged that is visually absorbed by the surrounding landscape; ▪ Consideration to be given to utilising the top of the ridgeline, south of the Hopkins River for public purposes as a vantage point for visitors with incorporation of a water tower required for servicing; and ▪ Promote opportunities to provide for access to buildings/houses and mobility for the frail and physically disabled or people with young children. ▪ Staging of development should provide for the most effective roll-out of infrastructure, while providing for the sustainable treatment of open space and environmental enhancement prior to development. 		
Increase awareness of adaptable housing standards through training and education programs of stakeholders.	Ongoing	Building, Community Planning

Action	Timeframe	Area of Responsibility
Amend the WCC <i>Design Guidelines for Subdivisional Developments, Urban/Rural Road and Drainage Construction Projects, and Traffic Management</i> (2003) to include guidance on sustainability, WSUD and landscaping.	2004 - 05	Engineering
Staging of development should provide for the most effective roll-out of infrastructure, while providing for the more effective treatment of open space and environmental enhancement prior to development.	2005 - 06	Subdivisions Town Planning
Process a Planning Scheme amendment to appropriately rezone land.	2007	Town Planning
Source sufficient funding from developers through a Development Contributions Plan for maintenance of the river corridor and development of open space and integration of WSUD features. Other infrastructure requirements are an extension to the existing water supply system and installation of a new sewer pump station and tower.	2006	Engineering

6.2.3 Dennington and North Dennington

Urban expansion within the existing rural area north of Dennington and delineated by the Merri River provides the opportunity for highly sustainable and liveable urban design outcomes in the development area shown in Figure 6.3. Detached housing will be the dominant housing stock, however at higher densities than current residential development estimated to yield approximately 400 lots. These areas will be enhanced by a rehabilitated Merri River corridor with open space areas for passive recreation, riparian habitat preservation and management of stormwater runoff.

This expansion area will be supported by the existing Dennington community which may justify the introduction of additional commercial and community services. The main collector roads would be Russell Street and Station Street, providing a connection to Raglan Parade. Consideration will also need to be given to extending the existing north east bus service to circulate through this new development area. In terms of infrastructure, the area can be readily serviced through extensions to existing water and sewage systems. However the lower level land would require the installation of a new sewerage pump station.

To achieve successful development of the North Dennington area the items listed below in Table 6.4 are relevant.

Table 6.4: North Dennington Implementation Plan

Action	Timeframe	Area of Responsibility
<p>Assist in preserving Dennington’s sense of community, consideration should be given to undertaking an urban design framework for the township and landscaping treatments along Raglan Parade. This should incorporate the following requirements:</p> <ul style="list-style-type: none"> ▪ Landscaping of open spaces and streetscapes to occur well in advance of development incorporating WSUD techniques; and <p>Upgrade of existing transit facilities and inclusion of a sheltered bus stop along the collector roads.</p>	2004 - 2006	Town Planning
<p>Undertake structure planning for north of Dennington. Introduce development controls to ensure the following:</p> <ul style="list-style-type: none"> ▪ A sense of place is to be established through urban design that emphasises the integration of housing and landscaping, while preserving viewsheds; ▪ The use of smaller lot sizes and higher density housing close to community services will be particularly appropriate for the ageing and student population; ▪ High quality housing design is to be encouraged that is visually absorbed by the surrounding landscape; ▪ Promote opportunities to provide for access to buildings/houses and mobility for the frail and physically disabled or people with young children; and ▪ Staging of development should provide for the most effective roll-out of infrastructure, while providing for the sustainable treatment of open space and environmental enhancement prior to development. 	2004 - 2005	
<p>Process Planning Scheme amendment to appropriately rezone land.</p>	Mid 2005	
<p>Promote opportunities to incorporate more sustainable housing design that improves energy efficiency and reduces water consumption. This may be achieved for example by distributing information on solar oriented design techniques or managing cost rebates for solar hot water systems.</p>	Ongoing	Building/Town Planning
<p>To provide sufficient separation distance between the saleyards and industrial areas, a buffer area is to be located adjacent to the nominated residential areas of north Dennington. This area may incorporate a pedestrian/bicycle link and low impact light industrial uses.</p>	2004 - 05	Town Planning
<p>Promote opportunities to provide for access to buildings/houses and mobility for the frail and physically disabled or people with young children. Increase awareness of adaptable housing standards through training and education programs for targeted stakeholders.</p>	Ongoing	Building Residential Services
<p>Undertake a flood study to determine the extent of land subject to flooding surrounding the Merri River. Identify land subject to flooding in the Planning Scheme maps.</p>	2004	Engineering CMA

Action	Timeframe	Area of Responsibility
<p>Source sufficient funding from developers through a Development Contributions Plan for:</p> <ul style="list-style-type: none"> ▪ Maintenance of the river corridor and development of open space and integration of water sensitive urban design (WSUD) features; ▪ Extension to the existing water supply system and installation of a new sewer pump station; and ▪ Extension to the existing bus service (North-West and Dennington) through Russell Street and Station Street collector roads to connect with the City. 	2005	Infrastructure
<p>Amend the WCC <i>Design Guidelines for Subdivisional Developments, Urban/Rural Road and Drainage Construction Projects, and Traffic Management</i> (2003) to include guidance on sustainability, WSUD and landscaping.</p>	2004 - 05	Engineering

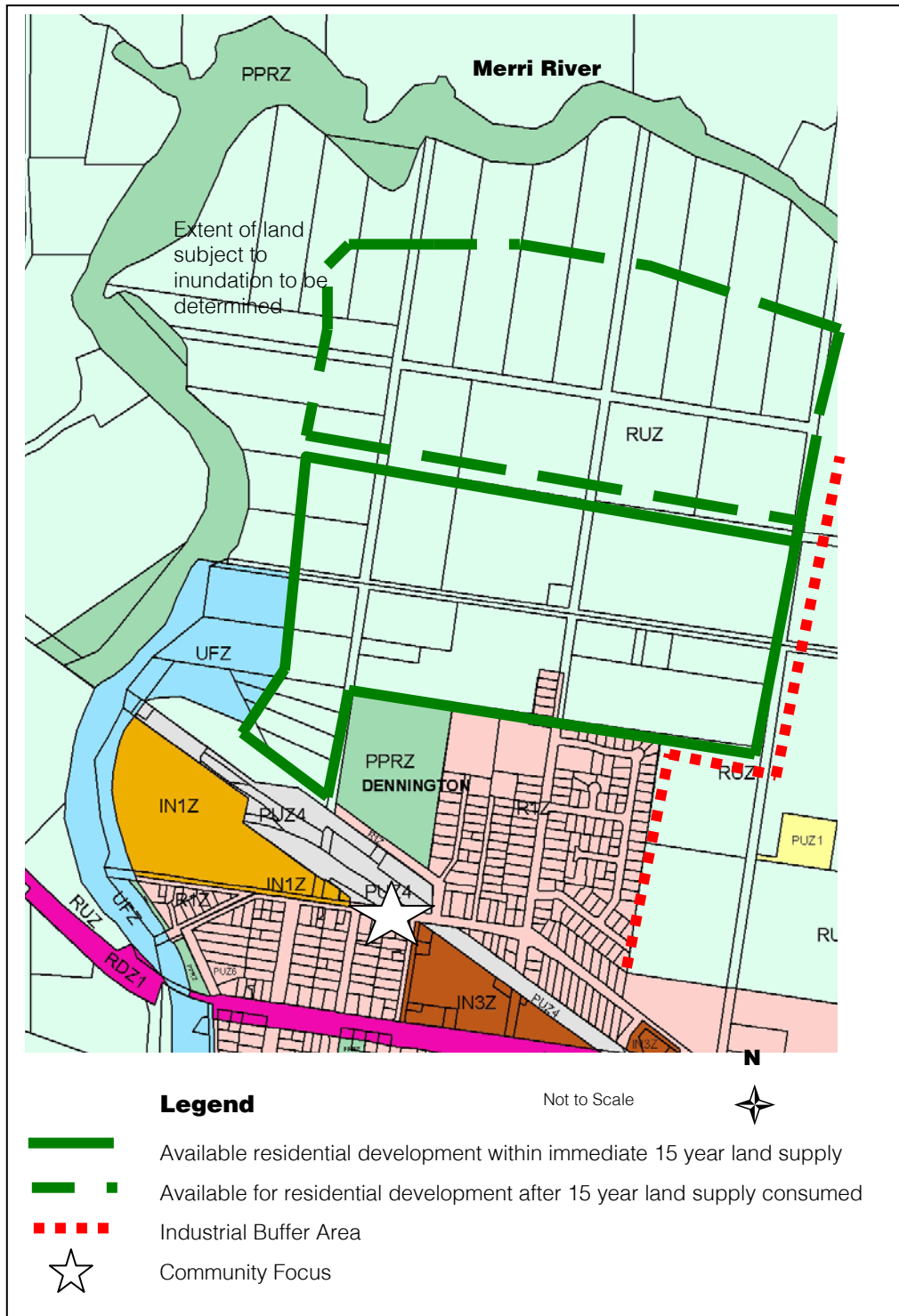


Figure 6.4: North Dennington

6.2.4 North of the Merri River

The area north of the Merri River in the vicinity of Wollaston Road is a large area of land, with the potential to meet residential demand beyond the immediate 15 year land supply. In the long term, the site could potentially accommodate approximately 750 lots, subject to further detailed structure planning.

Within the immediate 15 year timeframe, residential development of 400 lots to the north of the Merri River will provide housing opportunities for a variety of market segments, from high quality fully detached dwellings to smaller townhouse developments. Development will be clustered together to provide land for large areas of public open space (utilizing the floodplain), environmental linkages and the protection of ridgelines. As this area is currently rural land and in the past has been excluded from the urban frame of Warrnambool, it will be important to establish a clear boundary to further urban expansion that protects the viability of nearby agricultural land.

An emphasis will be placed on encouraging public access along the river frontage, and providing walkways and bicycle paths throughout the precinct. Given the size of the area, multiple land ownerships, environmental and landscape issues, there is a need for comprehensive structure planning and effective staging. Detailed siting and design plans will be required prior to approval, taking into account the landscape and environmental qualities of the locality.

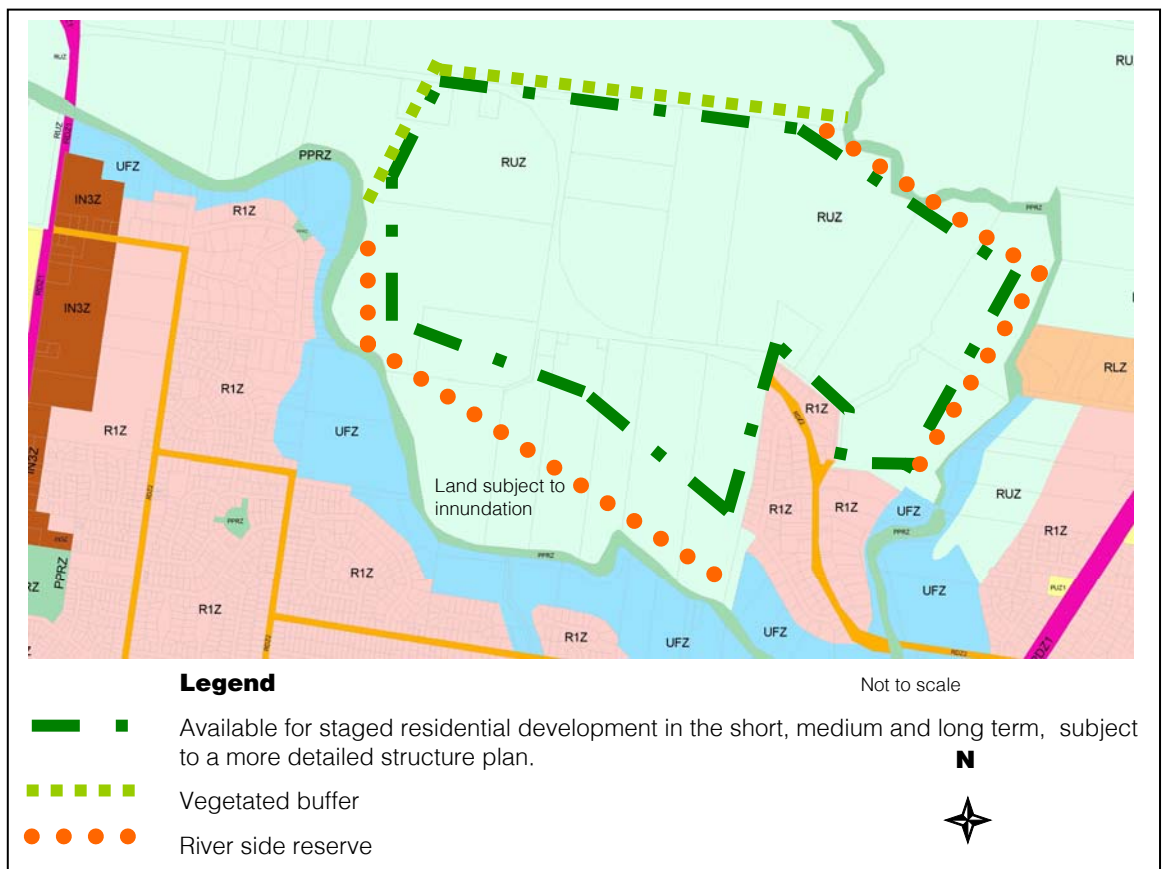


Figure 6.5: North of the Merri River

Table 6.5: North of the Merri River Implementation Plan

Action	Timeframe	Area of Responsibility
Process a Planning Scheme amendment to amend the MSS, identifying the area for future development in	2004-05	Town Planning
The evaluation of sites within this area is required to more accurately identify existing environmental features including flora, fauna and cultural heritage. This should ensure that future development does not encroach upon these assets.	2004 - 05	Environment
Retention of a portion of the Merri River frontage through the negotiating the transfer of development rights and designation as a public reserve in association with proposed rezoning.	2004 - 05	Environment Town Planning
Undertake structure planning to identify the location of community and access infrastructure requirements, together with appropriate treatment of the riparian zone. Introduce development controls to ensure the following: <ul style="list-style-type: none"> ▪ A sense of place is to be established through urban design that emphasises the integration of housing and landscaping, while preserving viewsheds; ▪ The use of smaller lot sizes and higher density housing close to community services will be particularly appropriate for the ageing and student population; ▪ High quality housing design is to be encouraged that is visually absorbed by the surrounding landscape. Development should take into account the location of ridgelines and viewsheds; and ▪ Promote opportunities to provide for access to buildings/houses and mobility for the frail and physically disabled or people with young children. ▪ Staging of development should provide for the most effective roll-out of infrastructure, while providing for the sustainable treatment of open space and environmental enhancement prior to development. Staging of the development should also take into account the need for a new sewerage pump station and water tower and pump station on the higher level land. 	2006 - 07	Town Planning
Increase awareness of adaptable housing standards through training and education programs of stakeholders.	Ongoing	Building, Community Planning
Amend the WCC <i>Design Guidelines for Subdivisional Developments, Urban/Rural Road and Drainage Construction Projects, and Traffic Management</i> (2003) to include guidance on sustainability, WSUD and landscaping.	2004 - 05	Engineering
Source sufficient funding from developers through a Development Contributions Plan for maintenance of the river corridor and development of open space and integration of WSUD features. Other infrastructure requirements are an extension to the existing water supply system and installation of a new sewer pump station and tower.	2006	Engineering

6.3 Redevelopment Areas

The inner residential areas of Warrnambool offer additional potential for the continued construction of units and townhouses. This is expected to provide a limited but necessary supply of residential accommodation and add to housing diversity and choice (which may accommodate around 1000 to 1500 people). These established areas feature a number of planning protocols such as heritage and building heights that must be considered during the redevelopment process. It is particularly important to recognise the unique character of the existing residential precincts and encourage not only the preservation of existing historic buildings but high quality site responsive design.

The potential for the redevelopment of brownfield sites, such as the Fletcher Jones and Woollen Mill site, should also be considered as an opportunity to consolidate residential and commercial land use within central Warrnambool. The potential for infill housing and re-development of existing buildings within the core and inner areas can commence immediately, with consideration given to improving pedestrian amenity, increasing lifestyle choice and enhancing urban identity. Other areas with redevelopment and infill potential are located in South Warrnambool and Merrivale, along main arterial routes and within Allansford and Dennington.

In order to successfully incorporate urban renewal within the urban frame, the following matters will need to be taken into account:

Table 6.5: Redevelopment Areas Implementation Plan

Action	Timeframe	Area of Responsibility
Conduct neighbourhood character assessments and prepare neighbourhood character statements for precincts with high priority for the retention of built form, landscape character and viewlines of significance. Where appropriate, apply relevant VPP overlays such as neighbourhood character overlays and review MSS policy to reflect changes.	2005 - 06	Town Planning
Prepare urban design guidelines for the established residential precincts to promote high quality design responses that recognise the significance of heritage places and buildings.	2005	Town Planning
Conduct workshops with members of the development industry and Council staff to provide guidance in appropriate urban design initiatives;	Ongoing	Town Planning
Implement the <i>Warrnambool City Centre Urban Design Framework</i> (2001) including recommendations to: <ul style="list-style-type: none"> ▪ Promote tourist and student accommodation in the vicinity of the City core and foreshore reserve; ▪ Promote development of 'shop top' housing. This may involve providing dispensations to standard planning regulations (such as car parking requirements), introduction of a local policy, conducting a study of existing shop top housing stock and providing public information on the costs and benefits of this type of 	Ongoing	Town Planning

Action	Timeframe	Area of Responsibility
<p>development;</p> <ul style="list-style-type: none"> ▪ Enhance/protect existing urban features including the Norfolk Island Pine Avenues, spires and surrounding landscape views; and ▪ Introduce new trees, co-ordinated street furniture and public art in appropriate locations. 		Parks
<p>Upgrade the Warrnambool railway station public transport interchange.</p>	2005+	Town Planning
<p>Identify candidate sites for medium density housing redevelopment within the urban area which may become available in the future. These should be assessed individually on their merits. Existing rural land should be re-zoned to allow for appropriate urban activities and consideration should be given to the protection of nearby industrial enterprises.</p> <p>Investigate use of rural land within the City area. An area of south Warrnambool along Younger Street is currently zoned for rural use and may be suitable for a future residential use. Other areas are specified in the <i>Warrnambool City Centre Urban Design Framework</i> (2001)</p> <p>Identify existing brownfield sites with redevelopment potential and assess their potential for future re-use such as low cost housing or commercial floorspace.</p>	2004 - 2005	Town Planning Economic Development
<p>Assess water and sewer infrastructure capability associated with future intensification of urban activity.</p>	2004	Engineering South West Water

6.4 Outlying Settlements

Limited growth is to be directed to the rural townships of Allansford, Bushfield and Woodford, whilst ensuring that a greenbelt is maintained between these settlements and Warrnambool City and having regard to preservation of the Merri River environs of high environmental value.

It is recognised that these areas provide alternative housing styles on larger allotments and opportunities not provided within the Warrnambool urban area. Consideration should be given to facilitating the provision of supporting infrastructure such as bicycle/pedestrian paths and local retailing. In order to provide specific guidance to the future development of Bushfield and Woodford, the preparation of a Structure Plan or Urban Design Framework for these areas would be worthwhile. Implementation of the Allansford Urban Design Framework (2003) will assist to appropriately accommodate residential growth centred around the town nodes of Allansford.

6.5 Industrial Land

To ensure that the City's economic growth is not impeded by future land supply constraints, continuing industrial development within Warrnambool needs to be accommodated. Of particular importance is the interface between industrial and residential activities with regard to heavy vehicle traffic, industrial emissions, noise and visual setting. Council's *Industrial Land Strategy* (2001) identifies a number of areas as potential sites for industrial development. Of these, Allansford was nominated as the most appropriate site for new industrial land to accommodate a major industrial enterprise. This finding is reinforced in the Feasibility Study for a *Dairy Industry Business Park* (2001) which identifies Allansford as having potential for a rail freight hub and is preferable given its location with regard to transport infrastructure and access to a labour force. An industrial business park is envisaged in this area, oriented to the dairy industry and its service providers. This location would also provide sufficient separation distance from the residential areas of Allansford, with the railway line as a buffer area.

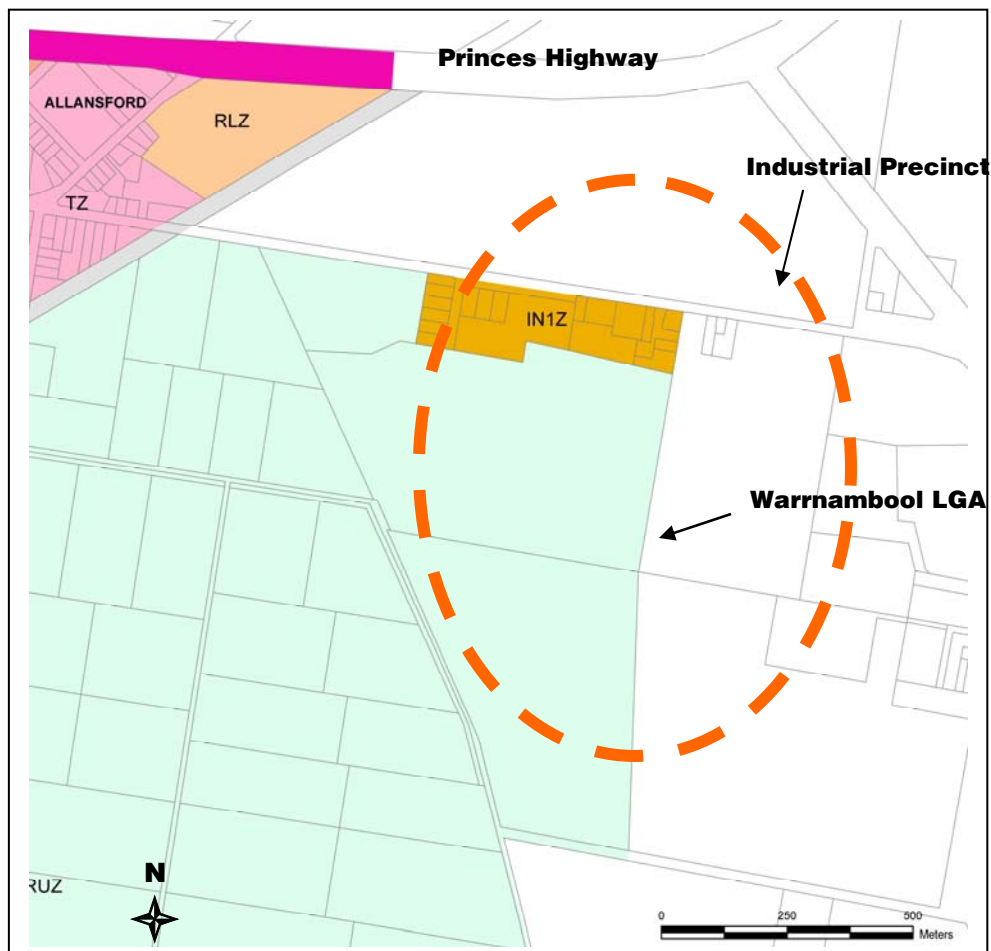


Figure 6.5: Industrial Location at Allansford

The existing industrial area (zoned Industrial 1) located in West Warrnambool south of the railway line should continue to provide for manufacturing industry, the storage and distribution of goods and associated uses. A key site identified in the *Industrial Land Strategy* (2001) as having potential for industrial development in the short term is the corner of Watson Street and Braithwaite Street, West Warrnambool (1 hectare).

An additional site with potential is located in West Warrnambool, between Harrington Road and the railway line. This may also be appropriate for industrial use provided drainage issues are addressed.

To the west of the saleyards, an industrial buffer area of 500 metres is required to manage the amenity impacts of existing industrial enterprises and allow for future growth to the north of Dennington. This should be located between Rooney's Road and Harrington Road, incorporating substantial open space areas and sensitively designed light industrial developments. The industrial activities in west Warrnambool should be maintained by discouraging further residential development in the area to maintain appropriate buffer distances.

In addition, there is potential along the Princes Highway within the vicinity of the Eastern Activity Precinct to satisfy additional demand for industrial activity such as warehousing and smaller service industries.

Table 6.6: Industrial Areas Implementation Plan

Action	Timeframe	Area of Responsibility
Prepare industrial building siting and design guidelines to encourage improved attractiveness of industrial sites and landscaping. Require new industrial development to provide appropriate landscaped setbacks of buildings or works.	2005	Town Planning
Liaise with Midfield Meats to encourage preparation of a Master Plan to include rationalisation of operational land requirements for accommodating stock.	2005	Health and Environment
Prepare a Structure Plan of the Allansford Industrial area in conjunction with the Shire of Moyne to effectively plan for its future development.	2005 - 06	Town Planning
Apply and promote environmental guidelines that aim to minimise environmental impacts of industrial activities.	Ongoing	Health and Environment

6.6 Commercial Land

Retailing and commercial developments are proposed to be centred primarily around the City core and Gateway Plaza area. To support the proposed urban expansion area of the north-east corridor, specific community/commercial nodes have been nominated as shown in Figure 6.1. As identified in the *Warrnambool Retail Strategy (2001)*, it is envisaged that retailing will serve the needs of residents and visitors to the City; create local employment opportunities and complement other businesses in the region; and contribute to the positive image of Warrnambool as the principal service centre to the south west region.

Land supply requirements for commercial activity will be met at the following locations:

- Within the CAD and Gateway precincts, particularly for retailing and offices;
- Supplementary retailing within smaller centres such as Dennington and Northpoint; and
- Community, commercial and retail services at proposed nodes within the north-east corridor.

The trend toward small scale office uses for professional services should continue to be supported in locations that allow for easy access to a customer base and supporting services. Subject to further investigation, this would be appropriate in selected locations of East Warrnambool. Another opportunity for a commercial/residential mixed use development is located in an existing rural zone adjacent to Deakin University. Bounded by the railway line to the south and a business zone to the west, this site could attract residents looking for low maintenance apartments and local retailing that could service the nearby residential area. However the development would need to overcome sewerage servicing constraints on the site.

Regarding tourism, opportunities for coastal tourism development which is environmentally responsive and easily accessible from Warrnambool should be supported. It is recommended that to further advance Warrnambool's retailing and commercial activities, the following actions be undertaken:

Table 6.7: Commercial Areas Implementation Plan

Action	Timeframe	Areas of Responsibility
Further expand the existing neighbourhood centre (Northpoint) on Mortlake Road, near Whites Road to service residential growth in this area with appropriate convenience retailing and services.	2004 – 05	Town Planning Business Development
Facilitate the provision of a local shopping centre in the North East Corridor near Wangoom and Mortlake Road.	2008	Town Planning Business Development
Facilitate the development of a commercial activity centre at or in the vicinity of the Brierly site. A mix of land uses may be incorporated included community uses, a housing demonstration site or recreational facilities.	2004 - 2005	Town Planning Business Development
Support the potential for retail/mixed use development at	2004	Town Planning

Action	Timeframe	Areas of Responsibility
<p>the Fletcher Jones site, located on the corner of Raglan Parade and Flaxman Street. Recommendations have been made to Council that the site be utilised for purposes including commercial/business services, tourist accommodation and function centre, boutique retail development, townhouse/unit development with easy access or community uses.</p>		<p>Economic Development</p>
<p>Additional retail development opportunities to be accommodated at the Eastern Activity Precinct for bulky goods retailing and light industry to the north which is to be addressed by a structure plan for the area. Neighbourhood shopping opportunities are also to be provided to develop the Eastern Activity Precinct and immediate surrounds as a community centre.</p>	<p>2004</p>	<p>Town Planning Economic Development</p>
<p>Within Dennington, there is potential for the development of local retailing (possibly a supermarket) to support residential growth in the area and reinforce its status as a self contained township. This should be recognised in an urban design framework for Dennington.</p>	<p>2005 - 06</p>	<p>Town Planning Economic Development</p>
<p>Mixed use opportunities should be provided in the future, in the rural zone between Deakin University and the railway line and in Banyan Street, East Warrnambool.</p>		<p>Town Planning</p>
<p>Implement the <i>Warrnambool City Centre Urban Design Framework</i> (2001) including recommendations to:</p> <ul style="list-style-type: none"> ▪ Promote the development of new retail attractions; ▪ Facilitate town centre management, marketing and operation of business activities; ▪ Increase car parking efficiency; and ▪ Increase visitor spending which may be captured by city centre businesses. 	<p>Ongoing</p>	<p>Town Planning Economic Development Local Laws</p>
<p>Apply the recommendations of the Retail Strategy Update, 2002.</p>	<p>Ongoing</p>	<p>Town Planning Economic Development</p>
<p>Identify and facilitate the development of appropriate sites for retail use such as cinemas, supermarkets or discount department stores throughout Warrnambool.</p> <p>Support proposals that would achieve further consolidation of retailing within the City core including upgrading the existing Coles site and redevelopment of the Target carpark.</p>	<p>Ongoing</p>	<p>Town Planning Economic Development</p>
<p>Retail developments along the highway require landscaping, setbacks and appropriate design standards to create visually appealing highway frontages. These standards should form part of a Structure Plan prepared for the Eastern Activity precinct.</p>	<p>2004 - 05</p>	<p>Town Planning</p>

7. Timeframes for Land Release

Staging and timing strategies must ensure that the extent of re-zonings are moderated to provide for competition and choice in the market place. Opportunities for public involvement will occur during the preparation of Strategic Plans for each growth area and the introduction of new development controls.

An immediate land supply for the forecast 15 year period has been nominated within the specified growth areas of the North-East, Dennington, the Coastal/Hopkins River area and part of the North Merri River area. Development of the inner areas are also included as part of the 15 year land supply. As shown in Figures 6.2 to 6.5, land has been nominated for short to medium term residential development to satisfy the 15 year land supply requirement based on a land take up rate of 192.5 lots per year. The availability of this land for development will however, depend on the completion of considerable strategic work and statutory processes prior to release of land onto the market. This includes the preparation of structure plans, developer contributions plans and infrastructure plans, in addition to the amendment process, subdivision certification and planning permit process. Table 7.1 shows a 5 year planning program to be enacted prior to the release of land for development, taking into account these preliminary planning processes. The timeframes are indicative based on the current land take up rates. A more rapid take up rate would result in the shortening of the timeframe. Conversely should the current take up rate ease the timeframe for the program would be extended.

Staging of subdivisions within the growth areas should allow for the orderly extension of services, giving priority to areas that can utilise existing infrastructure and require lower levels of investment in new infrastructure.

Once the designated growth areas have reached approximately 40% to 60% capacity, alternative areas nominated on the Strategy Plan should be considered for development. These lots should become available for development when other areas reach 80% capacity. It is recommended that an annual audit of land development rates be undertaken to monitor the rate of land take up and hence the need for additional land to be made available.

Table 7.1: Immediate 5 Year Planning Program

Indicative Timeframe	2004	2005	2006	2007	2008	2009
Strategic Framework	Re-Write MSS Oct 04 – March 05	MSS Amendment ▪ Exhibition & Panel April 05 – Dec 05	New strategic framework in place	New strategic framework in place		Plan for new devt areas when designated growth areas reach 40-60% capacity
Dennington (400 lots)	Structure Plan/Devt Contributions Plan/Infrastructure Plan Preparation Oct 04- Jun 05	Rezoning amendment to provide 8 years land supply. July 05 - Dec 05 Implement capital works program	First titles issued	1 st Stage developed		
North-East Corridor (700 lots)	Structure Plan/Devt Contributions Plan/Infrastructure Plan Preparation Oct 04- Jun 05	Rezoning amendment July 05 - Dec 05 Implement capital works program	First titles issued	1 st Stage developed		
Coastal/Hopkins River Environment (450 lots)	No justification exists in Planning Scheme to rezone land to residential		Structure Plan/Devt Contributions Plan/Infrastructure Plan Preparation Jan 06 - Dec 06 Implement capital works program	Rezoning amendment Jan 07 – Dec 07	First titles issued	1 st Stage developed
North of Merri River (400 lots)	No justification exists in Planning Scheme to rezone land to residential		Structure Plan/Devt Contributions Plan/Infrastructure Plan Preparation (multiple land owners) Jan 06 – Jun 07 Implement capital works program	Rezoning amendment Jan 08 – Dec 08	First titles issued for the first stage.	1 st Stage developed

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