MoiraShire

ENRICHING LIFE ON THE MURRAY

YARRAWONGA STRATEGY

Looking to the Future

Adopted December 2004

MOIRASHIRE
ON THE MURRAY

Revision No.	Date	Revision	Author
R1	9/5/05	Correct inconsistencies	D Becroft

TABLE OF CONTENTS

1 Introduction

This report gives an analysis of socio-economic and socio-demographic data for the town of Yarrawonga. Yarrawonga is one of the four primary towns in Moira Shire and has been experiencing unprecedented levels of growth and development. This significant growth has acted as a stimulus for Moira Shire Council to review existing conditions within the town as a forerunner to the development of strategies to guide future development.

Analysis of data from several sources is combined and interpreted in this report to provide a profile of Yarrawonga, a dialogue on the pressures facing the town and an outline of broad implications for the planning of the town during the next 15 to 20 years.

The strategy builds on work previously carried out by Sinclair Knight Metz *Cross Border Development Project November 2003*, Neil L. Noelker *Moira Shire Open For Business March 2001*, Collie Landscape and Design *Yarrawonga Urban Design Framework December 2000* and Essential Economics *Retail Advice Input To The Yarrawonga Urban Design Framework August 2000*.

The report is one of a suite of strategy documents currently in preparation. The other reports, which should be read in conjunction with this report, are:

- Moira Shire Heritage Study (phase 1 complete);
- Moira Shire Rural Living Study (phase 1 complete);
- Moira Shire Bicycle Strategy (underway); and
- Moira Shire Developer Contributions Study (underway).

Council's planning department has prepared the Yarrawonga Strategy Plan which has been publicly exhibited from 23 August 2004 to 17 September 2004.

It is important to note that the success or otherwise of Yarrawonga in the future depends to a large degree on the resident and business community itself. As such, individual retailers, business owner and organisations, tourism groups, service providers, property developers and the broader community will play vital roles in the implementation and success of the strategy. Council will lay the foundations, act as a facilitator and ensure that its regulatory functions actively promote the successful implementation of the strategy.

2 Aims and Objectives

The Yarrawonga Strategy Plan aims to ensure that future residential growth, retail activity, commercial activity and industrial development are conducted in a manner that meets the needs of the local community and visitors to the town. The general objectives of the strategy are:

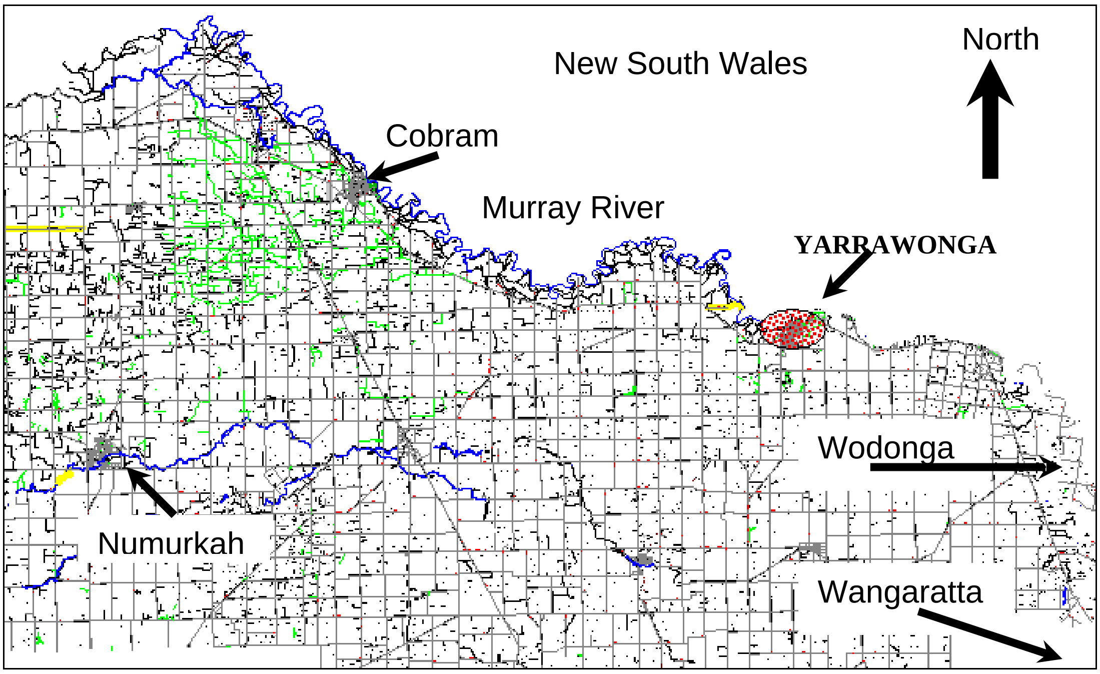
I. To provide a strategic framework for the development of residential land to ensure the provision of a reasonable supply of affordable serviced land;
II. To provide a strategic framework for the development of retail and commercial activities within Yarrawonga;
III. To encourage and reinforce the role of Belmore Street as a viable and dynamic retail centre;
IV. To provide for specialised bulky goods retailing facilities and other retail outlets requiring larger high visibility sites;
V. To provide a strategic framework for the development of serviced industrial land;
VI. To provide a framework to guide the provision of services and support infrastructure by both council and other providers; and
VII. To recognise the importance of Lake Mulwala and the Murray River to Yarrawonga and the region in general.

3 Yarrawonga Profile

Yarrawonga is a town of 4,500 plus people located on the southern foreshore of Lake Mulwala in north-east Victoria. It shares a common border with the township of Mulwala in New South Wales. The combined towns had a population of 6,534 at the 2001 census.

Yarrawonga is the second largest of the four major towns within Moira Shire accounting for 15.8 percent of the population in 2001.

The Murray Valley Highway transects the town from east to west with road access to Melbourne to the south, Cobram and Echuca to the west, Albury/Wodonga, Canberra and Sydney to the north and Wangaratta to the south-east.



The town was surveyed in 1868 but significant growth did not commence until the railway arrived in 1886. The line was subsequently extended to Oaklands in 1932.

The construction of the weir on the Murray River in 1939 began to see Yarrawonga develop its unique appeal.

The lake formed by the weir covers an area of 4,450 hectares and holds 118,000 megalitres of water. This water is distributed by two main channels to irrigate in excess of 128,000 hectares of land in Victoria and more than 700,000 hectares of land in south-west New South Wales.

In 2003, the estimated value of agricultural productivity in Moira Shire was $300 million. Much of this productivity is a direct result of the waters flowing from Lake Mulwala. The lake is much more though. Thanks to the foresight of a committed group of local residents, a large area was cleared of red gum trees prior to the initial filling of the lake to make a substantial area of open water. This water is used by residents and visitors year round for a number of water based activities. The lake is a valuable irrigation resource as well as being essential to the town for recreation and tourism purposes.

In addition to the lake, Yarrawonga is fortunate to have a climate conducive to relaxed outdoor living. The average year round temperature is 22 degrees Celsius with 59 or more days per year where the average temperature is in excess of 30 degrees Celsius. When this is combined with a minimum average daily temperature of 9.9 degrees Celsius and 114 or more clear days per year, the attractiveness of the town to residents and visitors is very apparent.

The population increased by 17 percent from the 1996 to 2001 census, to 4,012 people. The estimated population for 2003 has increases by another 14 percent to 4,588 people. This is an outstanding level of growth particularly when compared to the other three main towns in the municipality. For the same period, Cobram grew by only three percent, Numurkah by five percent and Nathalia by only two percent.

The surge in new dwelling construction in Yarrawonga reflects this rapid increase in population with 133 building permits being issued for new dwellings in 2003 up from just 58 permits in 2000. The rapid growth of Yarrawonga compared to the other three main towns is clearly evident from the building approvals for new dwellings. For the same period there were 42 permits issued in Numurkah, 29 in Cobram and only four in Nathalia.

In 2003, there were 2,243 private dwellings in Yarrawonga, up from 1,995 according to the 2001 census. This rapid growth has been at the expense of vacant residential land. Yarrawonga now finds itself with only a four to five year supply of land zoned residential, vacant and capable of being developed. This is well below the state government recommendation of a 10 year supply.

Subdivision of land is occurring at the rate of 100 new residential lots per year. Most, if not all, of the activity is occurring on the eastern fringe of the town.

Project Yarrawonga is expected to boost the supply of land with between 1000 and 1200 new residential lots in a golf course estate planned for development during the next 10 to 20 years. It is expected that these lots will be at the higher end of the market with the project targeting future long stay residents and absentee home owners (holiday homes) from Melbourne, Sydney and Canberra.

A further 400 plus lots are planned for land east of Woods Road and south of the Murray Valley Highway. Both of these developments require re-zonings from a rural zone to a residential zone which may take up to 12 months to achieve.

Affordability of new housing is becoming an issue in Yarrawonga. The 2001 census shows that 69 percent of residents are ranked in the first and second quartile for household income. This represents the lower to middle income brackets. When it is considered that the construction cost of a new dwelling has increased from $105,000 to $170,000 in 2003, the capacity of residents to afford a new dwelling becomes questionable.

In summary, the three main issues affecting residential development in Yarrawonga are the high level of demand, the lack of zoned land and the continual spiral in the cost of housing. Yet, the attractiveness of the town and its hinterland contributes to an expected continued population growth. Using a conservative seven percent growth rate per annum, the population in 2030 is estimated to be in the vicinity of 28,500 people.

This increase in population will place great pressures on existing services and facilities. Careful consideration must be given now to ensure that the requirements of the future population are catered for. In particular, more land needs to be zoned for residential purposes and, given the rapid increase in the cost of new dwellings, there is a need to ensure that affordable land is made available.

Rapid growth such as that occurring in Yarrawonga places added pressure on community facilities, the service infrastructure, transportation and commercial facilities.

Council has sourced a series of social and cultural service benchmarks from Capital-Hume Region Demographic, Social and Economic Analysis, SGS Economic and Planning, June 2003. These benchmarks are used as an indicative guide to the level of social and cultural services required to service the population.

Indicative benchmarks are provided for:

- Health services and facilities;
- Housing services and facilities;
- Family support services and facilities;
- Educational services and facilities;
- Cultural services and facilities; and
- Retail, police and emergency services and facilities.

The benchmarks indicate the number of services required at a given population level. The number in brackets is the number of existing services. The requirement is determined by calculating the change in population (2001 to 2010 and 2010 to 2030) and then applying the threshold figure. For example, if Yarrawonga's population in 2030 is 28,509 but only 7,367 in 2001, then the difference is 21,142. The threshold for a 100 bed hospital is 20,000. Therefore in this example, there would be a need for one additional hospital.

The 2010 and 2030 population of specific age groups has been calculated by applying the proportion of that population in the 2001 census against the estimated total population in 2010 and 2030. For example, in 2001 there were 1,393 people aged 70 plus, which is 35 percent of the population. The 35 percent figure is then applied against the estimated future population.

Health Services

Service	Threshold	2010	Requirement	2030	Requirement
Hospital (100 bed)	20,000	7,367	0 (1)	28,509	1
Community health	50,000	7,367	0 (0)	28,509	.4
General practitioners	2,000	7,367	2 (12)	28.509	10
Medical specialists	10,000	7,367	0 (0)	28,509	2
Community health centre – local	3,000	7,367	1 (0)	28,509	7
Community health centre - neighbourhood	10,000	7,367	0 (0)	28,509	2
Community health centre – district	30,000	7,367	0 (1)	28,509	.7
Neighbourhood house	6,000	7,367	.5 (1)	28,509	3
Dental service	2,500	7,367	1 (2)	28,509	8
Chemist	2,500	7,367	1 (2)	28,509	8

Based on these estimates, by 2010 there will be a need for two additional general practitioners, a local community health centre, one dentist and another chemist. By 2030, the demand will have increased significantly with requirements for a new hospital, 10 additional general practitioners, more dentists, more health centres and more chemists.

The existing community health centre is adjacent to the hospital in a transportable building. A new maternal health centre is planned for development in conjunction with the new kindergarten in Woods Road.

The neighbourhood house is in rented premises on the corner of Hargrave Court and McLeod Street. The building does not have sufficient size nor the capabilities to provide the full range of services provided by the neighbourhood house. A replacement needs to be found, perhaps by co-locating with other service providers such as Moira HealthCare Alliance, the food bank or the community health centre.

This analysis indicates that at the moment health services are reasonably well catered for, but there will be a need for additional services in the future. Planning for the hospital upgrade could not have foreseen the rapid growth and the unexpected new residential development proposals currently before council. These two developments alone will result in an additional 4000 plus residents during the next five to 20 years. The community must be mindful therefore, that in the not too distant future, the demand may exist for a further upgrade of the hospital to accommodate future demand.

Housing Services

Service	Threshold	2010	Requirement	2030	Requirement
Family	90,000	7,367	0 (0)	28,509	0
Hostels	5,000	7,367	0 (0)	28,509	4
Housing advice and referral	5,000	7,367	0 (1)	28,509	4
Home support and maintenance	5,000	7,367	0 (1)	28,509	4
Public rental housing	160	7,367	160 (121)	28,509	132
Youth housing (0 – 17)	7,100	1547	0 (0)	5987	.8
Aged care facilities (74^+)	433	2578	3 (2)	9,978	20

The benchmarks indicate that there will be a need for a greater number of public rental housing units as well as additional aged care housing facilities, services for housing advice and home support by 2030.

Council has recognised that facilities for the older age groups need to be provided and planning has commenced for a 60 bed aged person facility in Woods Road. Council has also commenced the planning for a new early childhood facility in the same location to cater for maternal health and pre-school requirements.

Services for youth, including recreation facilities, are not well catered for. There is a need to develop recreation facilities such as the planned skate park, an indoor swimming pool and an indoor gymnasium/sports hall.

Family Support Services

Service	Threshold	2010	Requirement	2030	Requirement
Respite service	8,000	7,367	.4 (0)	28,509	3
Child abuse and prevention	6,000	7,367	.5 (0)	28,509	3
Emergency relief outlets	10,000	7,367	.3 (1)	28,509	2
Youth services	1,420	7,367	2 (0)	28,509	15
Advocacy services	10,000	7,367	.3 (0)	28,509	2
Family	90,000	7,367	0 (0)	28,509	0
Family shelter	5,000	7,367	.7 (0)	28,509	4

With the exception of youth services, the threshold for the delivery of family support services will not be reached until post 2010. There is a need though, for youth services and while it may be that demand is adequately addressed at the moment, additional services may be instrumental in turning around outward youth migration.

Educational Services

Service	Threshold	2010	Requirement	2030	Requirement
TAFE/university 19 to 29 use 18 to 34	4,500	1252	0 (0)	4846	0.8
Secondary school 12 to 19	630	1400	1 (2)	5417	6
Primary school 5 to 12	126	1031	4 (2)	3991	23
Pre-school 2 to 4	167	147	.3 (2)	570	2
Child care 0 to 4	330	74	0 (1)	285	.6
Out of school hours care 5 to 12	525	1031	4 (0)	3991	6

The two primary schools in Yarrawonga have almost reached, if not exceeded, the capacity of the land to support the existing number of students. Additional primary school facilities will be required by 2010 and even more by 2030.

There are two secondary schools in Yarrawonga. Sacred Heart College is restricted for growth by limited land area and does not provide years 11 and 12. The demand will exist though for another secondary school or an expansion of the existing schools by 2010.

The provision of additional secondary school opportunities will assist in reducing the outward migration of youth from the town, as would a TAFE or university campus.

Cultural and Recreation Services

Service	Threshold	2010	Requirement	2030	Requirement
Places of worship	5,000	7,367	1 (5)	28,509	4
Library	35,000	7,367	0 (1)	28,509	.7
3ha open space/2 ha sporting ground	1000	7,367	3	28,509	28
Cultural/arts centre	75,000	7,367	0 (0)	28,509	0
Performing arts centre	150,000	7,367	0 (0)	28,509	0
Regional gallery	75,000	7,367	0 (0)	28,509	0
Community arts	75,000	7,367	0 (0)	28,509	0
Museum	75,000	7,367	0 (0)	28,509	0

Yarrawonga is well serviced with a library and many sporting facilities located in large open space areas, although there is no indoor sporting facility. A heritage museum serving both Yarrawonga and Mulwala exists in Mulwala.

Retail, Police And Emergency Services and Facilities

In addition to the thresholds extracted from Capital-Hume Region Demographic, Social and Economic Analysis report, additional retail floorspace requirements have been sourced from MacroPlan Australia. MacroPlan Australia are the planning consultants managing the golf course/residential development currently known as Project Yarrawonga.

Service	Threshold	2010	Requirement	2030	Requirement
Local shopping	2,500	7,367	1.3 (1)	28,509	8
District shopping	30,000	7,367	0 (0)	28,509	.9
Community legal service	25,000	7,367	0 (0)	28,509	1
Court houses	25,000	7,367	0 (0)	28,509	1
Police and emergency services	25,000	7,367	0 (0)	28,509	1

Belmore Street is the primary shopping district serving the needs of the town, Mulwala residents, visitors to the area and people living on farms and in the small towns outside of Yarrawonga. There are 141 businesses within the Belmore Street precinct employing 1,135 people. Of these, 71 businesses are shops occupying 25,134m^2 of floorspace.

There are no vacant shops in Belmore Street and limited opportunities for new shops to be developed. MacroPlan estimate that an additional 5,000m^2 to 10,000m^2 of additional retail floorspace will be required as a result of the 3,000 people expected to reside in the golf course estate. MacroPlan also suggest that an additional 5,000m^2 of bulky goods retail floorspace could be required.

The additional requirement of between 15,000m2 and 20,000m2 is a 60 to 80 percent increase over the existing amount of retail floorspace. This is a significant requirement that can only be achieved by developing a new retail precinct for the bulky white goods type trade, redeveloping large existing uses that no longer require a Belmore Street location, making greater use of the mixed use zone on land bounded by Witt, Hunt, Lynch and Hume Streets and perhaps, rezoning the southern end of Belmore Street to a business zone.

Water, sewerage, electricity, gas and telecommunication services to Yarrawonga are provided by North-East Water (water and sewerage), Powercor (electicity), Origin Energy (Gas) and Telstra (telecommunications).

While sufficient capacity exists across all services there are reservations.

North-East Water needs to provide an extra 10 megalitres supply of treated water at its plant in Witt Street to allow for unforeseen short term demand. Its sewerage farm is now inappropriately located and, realising the level of growth in Yarrawonga, the plan to relocate the sewerage farm is to be brought forward from 2008/2010.

The electricity supply can be improved on demand by running additional lines from the Cobram sub-station or by developing a zone sub-station on land Powercor owns in Old Wilby Road. Powercor's long term plan is for the construction of the zone sub-station in 2023. Anecdotal evidence suggests that the existing electricity supply is an impediment to new industries being established and adversely impacting on some. In one instance, a commercial enterprise installed a generator to provide power rather than rely on mains power.

Gas and telecommunication services are sufficient to meet current and future levels of demand.

Yarrawonga is not an industrial town, with only a small number of industries. Existing industries are mainly geared towards providing services to the surrounding farming community, the residential community and the property development industry. The largest employer in the district is the Australian Defence Industry (ADI) explosives and propellant plant in Mulwala.

This plant is relatively self-sufficient but does draw on Yarrawonga for its workforce as well as emergency services when required.

The ADI plan an extensive, multi-million dollar upgrade of the plant commencing in 2006 and this is seen as an opportunity for business investment.

Yarrawonga's uniqueness does not come from its industrial base but from its appeal as a place to live and visit. Lake Mulwala and the Murray River are pivotal to this appeal. Their importance to the town is clearly evident by immediate and large scale community response to what was seen as a move to limit public use of the lake by Goulburn Murray Water in a draft Lake Mulwala Land and On-Water Management Plan. The plan is yet to be finalised and is being reviewed in light of the community reaction.

The Yarrawonga Strategy Plan recognises Yarrawonga's appeal and sets out a range of initiatives to further strengthen and grow the town into the future. Subsequent sections of this report describe the town in detail and provide a plan to guide sustained growth and to protect the appeal and amenity of the Yarrawonga area.

4 Population and Housing

4.1 Population 1981 to 2031

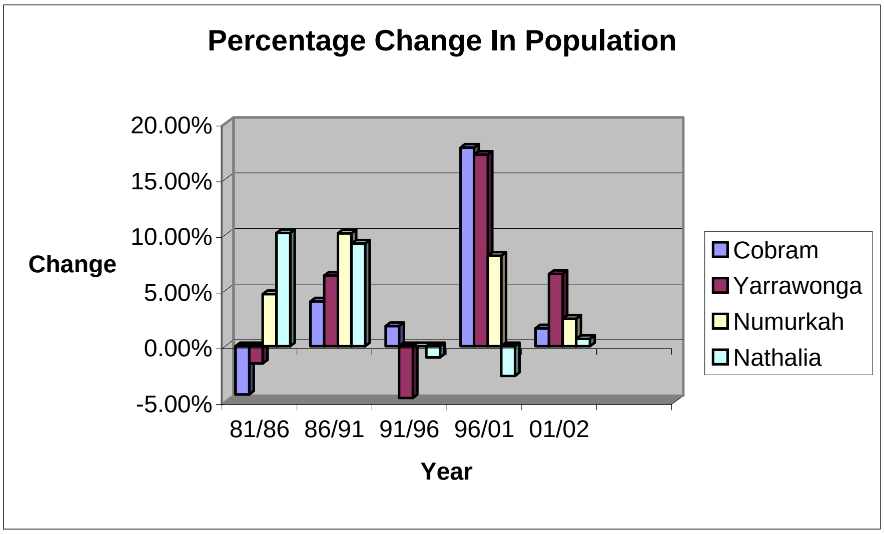
According to the latest census in 2001, Yarrawonga had a population of 4,012 people. This represents 15.8 percent of the Moira Shire's population. The population has increased since 1981 by 14.21 percent despite a population decline between 1981 and 1986 and between 1991 and 1996.

Total Population		Percentage Change	Percentage Shire	Percentage Change
1981	3442		15.7	
1986	3388	-1.59%	15.3	-2.61%
1991	3603	5.97%	14.8	-3.38%
1996	3435	-4.89%	13.9	-6.47%
2001	4012	14.38%	15.8	12.03%

Yarrawonga is also part of a cross border region and shares services and facilities with the Mulwala area. The table below shows that when Mulwala is added to the census figures, there is a 39 percent increase in the population count. Therefore, planning for the growth of Yarrawonga must take into account the population over the bridge.

	1991	1996	2001
Yarrawonga/Mulwala Combined Population	5304	5028	6634

Yarrawonga is currently the fastest growing town in the Shire as illustrated below.



Unfortunately the census information is now three years old. The following is an estimate of Yarrawonga's population for 2002 and 2003 derived from the

2001 census, estimated growth rates, household size and the number of new dwellings.

Town	1981	1986	1991	1996	2001	2002	2003
Cobram	3817	3651	3797	3865	4554	4627	4703
Yarrawonga	3442	3388	3603	3435	4012	4286	4588
Numurkah	2713	2840	3128	3128	3382	3465	3568
Nathalia	1222	1346	1470	1455	1416	1425	1435

The table above illustrates that the level of growth in Yarrawonga exceeds that of the other towns in the Shire.

With regard to population projections beyond 2003, both Noelker Consulting and the Department of Infrastructure have developed population estimates.

These estimates are shown below and have been used to develop an estimate of Yarrawonga's population up to the year 2031 by applying the average annual growth rate to Yarrawonga's 2002 population.

Estimated population of the Shire	2001	2006	2011	2021	2031
Noelker Estimate		27,038	27,659	28,928	
DOI Estimate	27,091	27,873	28,845	30,854	32,699
Average Population	27,094	27,455	28,252	29,891	32,699
Average Annual Growth Rate		0.32%	0.58%	0.58%	0.94%
Yarrawonga's Estimated Population	4012	4076	4196	4446	4882

When new dwelling statistics are added to these figures, there is a clear disparity in the population projections which can be explained by unanticipated growth in Yarrawonga in recent years.

Yarrawonga has seen a surge in new dwelling developments with 133 new dwellings approved for construction in 2003. This continues the significant growth being experienced since 2000. The table below illustrates the numbers of new dwellings applied for. It is very apparent that in terms of new dwelling development, more is happening in Yarrawonga than any of the other major towns in the Shire. It is also happening at a faster pace. The implications of this growth are significant in terms of:

- The sustainability of growth;
- The capacity of physical services to service the growth;
- The availability of community and other services; and
- The availability of land zoned residential.

Number of New Dwellings Applied For

	2000	2001	2002	2003
Yarrawonga	58	55	115	133
Numurkah	23	43	34	42
Cobram	29	24	28	29
Nathalia	8	4	4	4

Combining this information with average household sizes, the 2001 census and estimated growth rates, a raw projection of Yarrawonga's population up to 2031 is shown in the table below.

Percentage Increase

Year	1%	2%	3%	4%	5%	6%	7%
2003	4588	4588	4588	4588	4588	4588	4588
2004	4634	4680	4726	4772	4817	4863	4909
2005	4680	4773	4867	4962	5058	5155	5253
2006	4727	4869	5013	5161	5311	5464	5620
2007	4774	4966	5164	5367	5577	5792	6014
2008	4822	5066	5319	5582	5856	6140	6435
2009	4870	5167	5478	5805	6148	6508	6885
2010	4919	5270	5643	6037	6456	6899	7367
2011	4968	5376	5812	6279	6779	7313	7883
2012	5018	5483	5986	6530	7117	7751	8435
2013	5068	5593	6166	6791	7473	8216	9025
2014	5119	5705	6351	7063	7847	8709	9657
2015	5170	5819	6541	7346	8239	9232	10333
2016	5222	5935	6738	7639	8651	9786	11056
2017	5274	6054	6940	7945	9084	10373	11830
2018	5327	6175	7148	8263	9538	10995	12658
2019	5380	6298	7362	8593	10015	11655	13545
2020	5434	6424	7583	8937	10516	12354	14493
2021	5488	6553	7811	9294	11042	13096	15507
2022	5543	6684	8045	9666	11594	13881	16593
2023	5598	6818	8286	10053	12173	14714	17754
2024	5654	6954	8535	10455	12782	15597	18997
2025	5711	7093	8791	10873	13421	16533	20327
2026	5768	7235	9055	11308	14092	17525	21750
2027	5826	7380	9326	11760	14797	18577	23272
'2028	5884	7527	9606	12231	15537	19691	24901
2029	5943	7678	9894	12720	16313	20873	26644
2030	6002	7831	10191	13229	17129	22125	28509

4.2 Age Profile

The table below indicates the age profile of Yarrawonga's population since 1981. It also includes the age profile at the Shire level and regional Victoria level.

People in the 5 to 17 year age group are under-represented in Yarrawonga compared to the rest of the Shire and regional Victoria. People in the 60 year and over age group feature more prominently compared to the rest of the Shire and regional Victoria. These figures indicate that Yarrawonga has a generally older population and that there will be an increasing demand for services for the aged population.

	Yarrawonga					Shire	Regional Victoria
Age	**1981**	**1986**	**1991**	**1996**	**2001**	**2001**	**2001**
0-4	6.97	6.55	7.52	6.08	5.97	6.8	6.7
5-17	25.90	20.93	16.46	15.92	15.81	20.0	20.3
18-24	7.61	8.41	9.05	7.19	5.37	6.4	7.9
25-34	11.41	11.75	13.24	11.85	11.51	11.2	12.2
35-49	16.00	16.35	15.43	15.81	16.58	20.7	22.1
50-59	9.29	10.12	10.30	10.16	10.14	12.0	12.1
60+*	22.82	25.89	28.00	19.85	32.98	22.90	18.80

*Due to ABS changing groupings, it is not possible for further breakdown of the population aged 60 and over and at the same time allow comparisons to be made at the Shire and regional level.

The gradual reduction in the number of young people in Yarrawonga indicates that there is an outward migration of young people that could reflect a number of factors:

- Lack of higher education opportunities in the area;
- Lack of employment opportunities in the town and surrounding area; and
- The general drift of younger age groups to larger urban areas.

This continued decline is a concern because these age groups generally provide the catalyst for local economic development. Therefore, attention should be given to trying to retain the younger population through the Yarrawonga Strategy Plan.

Age Profile of Yarrawonga

	0-4	5-17	18-24	25-34	35-49	50-59	60-74	75+
2001	240	636	216	463	667	408	840	553
1996	209	547	247	407	543	349	682	451
1991	271	593	326	477	556	371	636	373
1986	222	709	285	398	554	343	557	320
1981	240	892	262	393	551	320	545	241

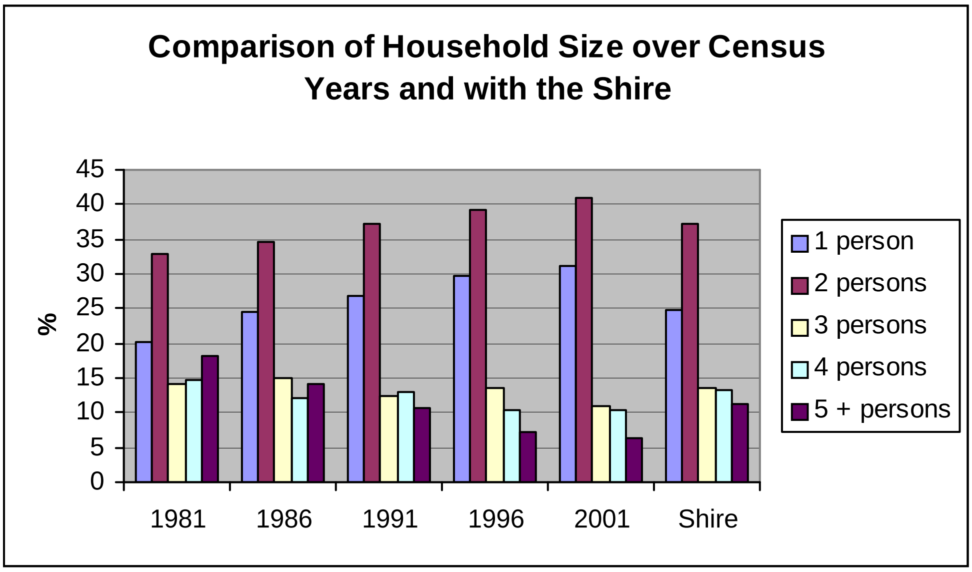
The chart above clearly illustrates the trends in the age composition of Yarrawonga's population with the following observable trends:

- A decline in the number of people aged five to 17 and 18 to 24.
- Increases in the number of people in the middle years from 25 to 59.
- A significant increase in the number of people 65 plus.

4.3 Household Size

The table and graph below illustrate the household size exhibited in Yarrawonga for the five preceding censuses plus a comparison with the overall shire figures for the 2001 census.

	1981	1986	1991	1996	2001	Shire
1 person	20.2	24.4	26.7	29.6	31.1	24.9
2 people	32.8	34.6	37.2	39.1	41	37.1
3 people	14.1	15	12.4	13.7	11	13.5
4 people	14.8	12	13.1	10.3	10.5	13.2
5 + people	18.1	14	10.6	7.3	6.4	11.3
Total	100	100	100	100	100	100



There does not appear to be any significant difference between census periods or between Yarrawonga and the shire in relation to household size.

4.4 Household Income

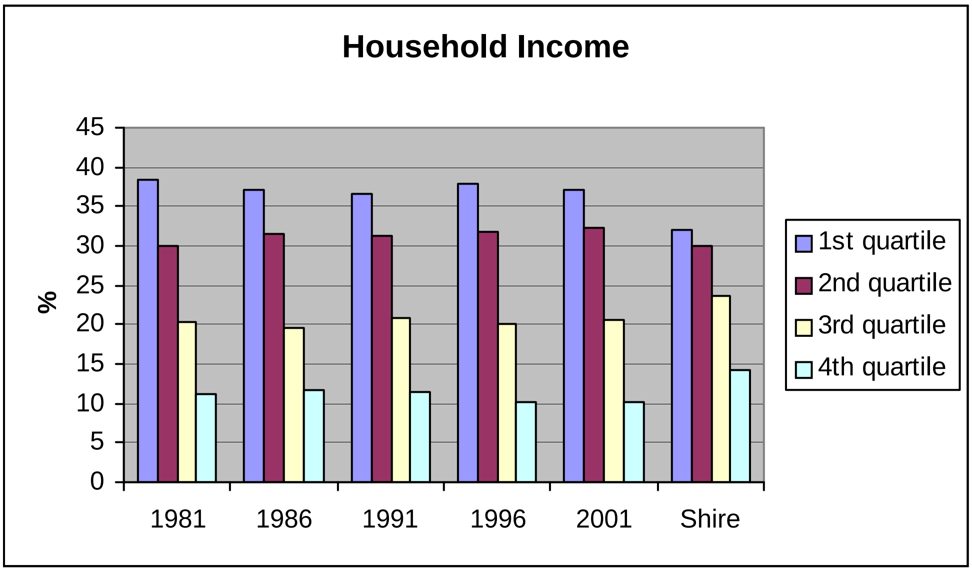
Household income is categorised into four quartiles with the first quartile being the lowest and the fourth being the highest.

	1981	1986	1991	1996	2001	Shire
1st quartile	38.4	37.2	36.5	37.8	37	32.1
2nd quartile	30	31.5	31.3	31.9	32.3	29.9
3rd quartile	20.3	19.6	20.8	20.2	20.6	23.7
4th quartile	11.3	11.6	11.4	10.1	10.1	14.3
Total	100	99.9	100	100	100	100

From 1981 to 2001 incomes in the second quartile (lower to middle incomes) increased, whilst those in the highest income bracket have declined marginally.

When compared to the whole Shire there are more families in the lower income bracket in Yarrawonga, with fewer households in the higher income bracket.

These statistics support the need for access to more aged care services in Yarrawonga as well as access to services to assist lower income earners.



The graph above illustrates that there are more households with lower incomes than higher.

4.5 Labour Force

Yarrawonga	1981	1986	1991	1996	2001	Shire 2001
Employed	1,151	1,182	1,404	1,178	1,522	10,747
Unemployed	81	99	162	129	99	665
Unemployment Rate	6.6%	7.7%	10.3%	9.8%	6.1%	6.2%
Participation Rate	49.3%	48.3%	54%	47%	49.8%	36.7%

The unemployment rate in Yarrawonga appears to be consistent with that across the shire, but it is in the participation rate where there is a significant difference.

Yarrawonga has a labour force participation rate of almost 50 percent which is much higher than the shire average.

Data from the 2001 Census indicates that 20 percent of employed Yarrawonga residents are engaged in manufacturing activities which could reflect the large number of employees engaged with ADI Mulwala.

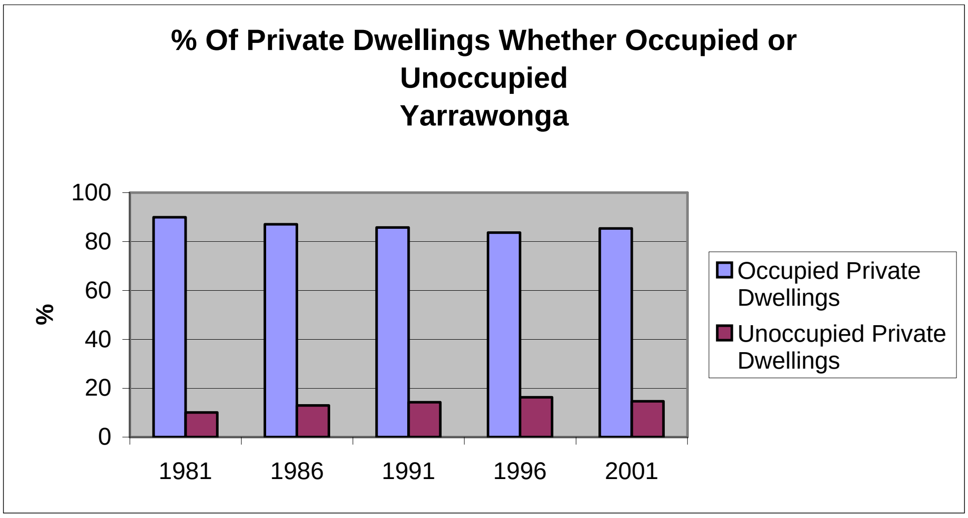
The next most significant sectors are retailing (17 percent) and health and community services (10.1 percent). A floorspace and employment survey recently carried out supports the census figures with 45 percent of employment in the Belmore Street commercial area relating to retailing and 25 percent to health and community services (primarily the hospital).

4.6 Dwellings

The following information relates to the number of private dwellings and whether or not they were occupied or unoccupied on the night of the 2001 Census.

Yarrawonga	1981	1986	1991	1996	2001
Occupied Private Dwellings	1,147	1,236	1,383	1,425	1,704
Unoccupied Private Dwellings	129	183	231	277	291
Total Private Dwellings	1,276	1,419	1,614	1,702	1,995
Vacancy Rate (%)	10.1	12.9	14.3	16.3	14.6

In 2001 there were 1,995 private dwellings in Yarrawonga, 14.6 percent which were vacant on the night of the census.

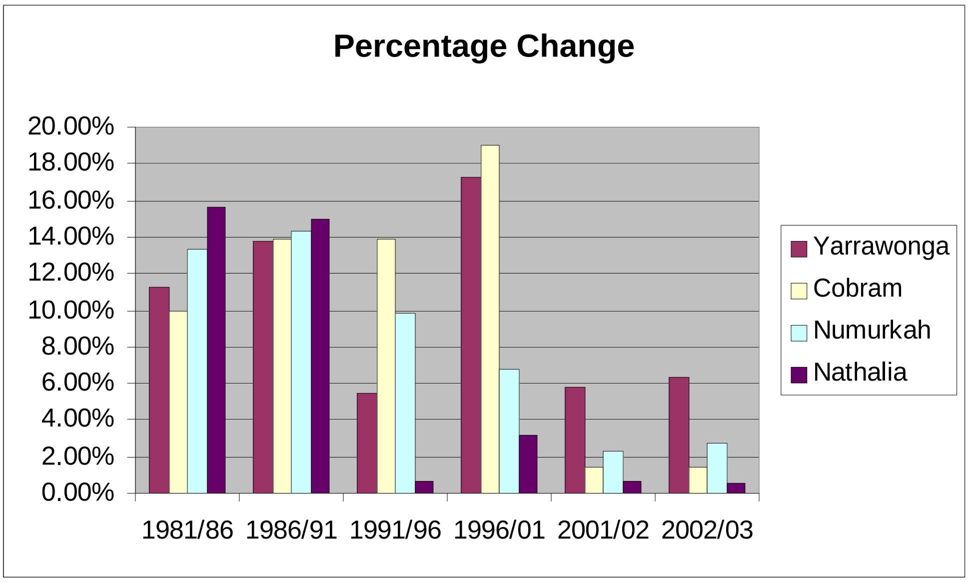


Number of Private Dwellings

Moira Shire	1981	1986	1991	1996	2001	2002	2003
Yarrawonga	1276	1419	1614	1702	1995	2110	2243
Cobram	1187	1305	1486	1693	2015	2043	2072
Numurkah	984	1115	1275	1400	1495	1529	1571
Nathalia	480	555	638	642	662	666	670

The census figures have been updated in the table above, by including new dwelling data sourced from building permits issued for dwellings by council.

These figures show that Yarrawonga is developing at a much faster pace than Cobram or Numurkah, although Cobram still leads Yarrawonga as far as population goes.



There was more new dwelling construction occurring in Cobram up until 2001 when new dwelling construction in Yarrawonga began to climb. The graph above shows the rate of new dwelling construction in Yarrawonga is climbing at a much faster rate than Cobram which is declining.

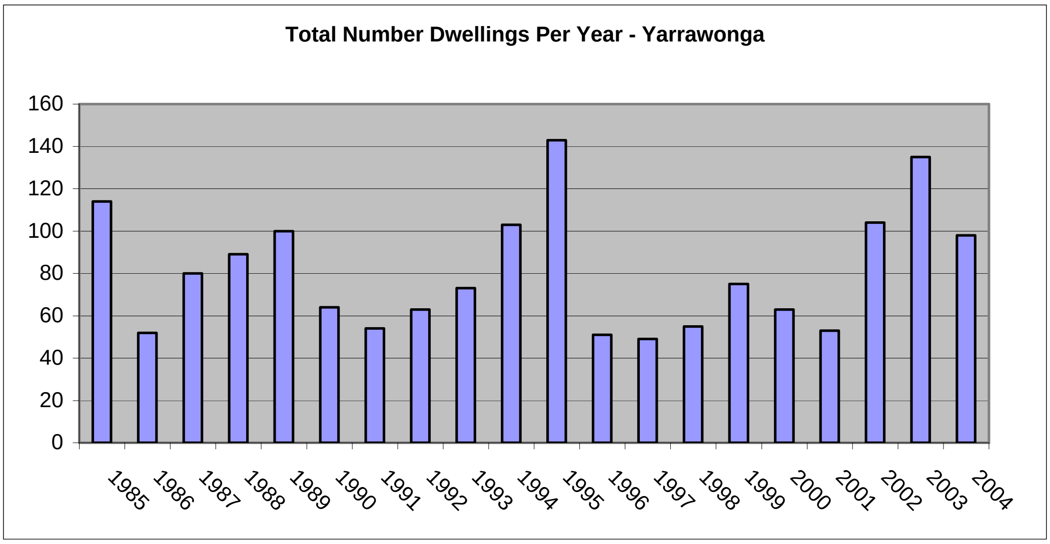
	1981	1986	1991	1996	2001	Shire
Fully Owned	43.5	44.0	47.9	46.7	46.4	47.7
Being Purchased	27.4	25.7	21.1	20.1	21.2	24.4
Rented - Govt	7.1	9.2	8.9	8.5	7.1	3.8
Rented - Private	17.3	16.4	18.8	20.5	19.7	15.8
Other	4.7	4.7	3.3	4.2	5.6	8.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

The table above illustrates the type of occupancy. Most dwellings are either owned or being purchased and there is little difference between Yarrawonga and the rest of the Shire. There is a difference in the type of rental accommodation between Yarrawonga and other parts of the shire. In Yarrawonga, 26.8 percent of dwellings are rented (7.1 percent from the Government and 19.7 percent privately). This compares to 19.6 percent of dwellings rented in the remainder of the shire (3.8 percent from the Government and 15.8 percent rented privately).

4.7 New Dwellings 1985 to June 2004

The building approval database was analysed to select all building permit applications in Yarrawonga for multiple dwellings and single dwellings from 1985 to June 2004. The data includes applications for construction and relocation but excludes alterations and additions.

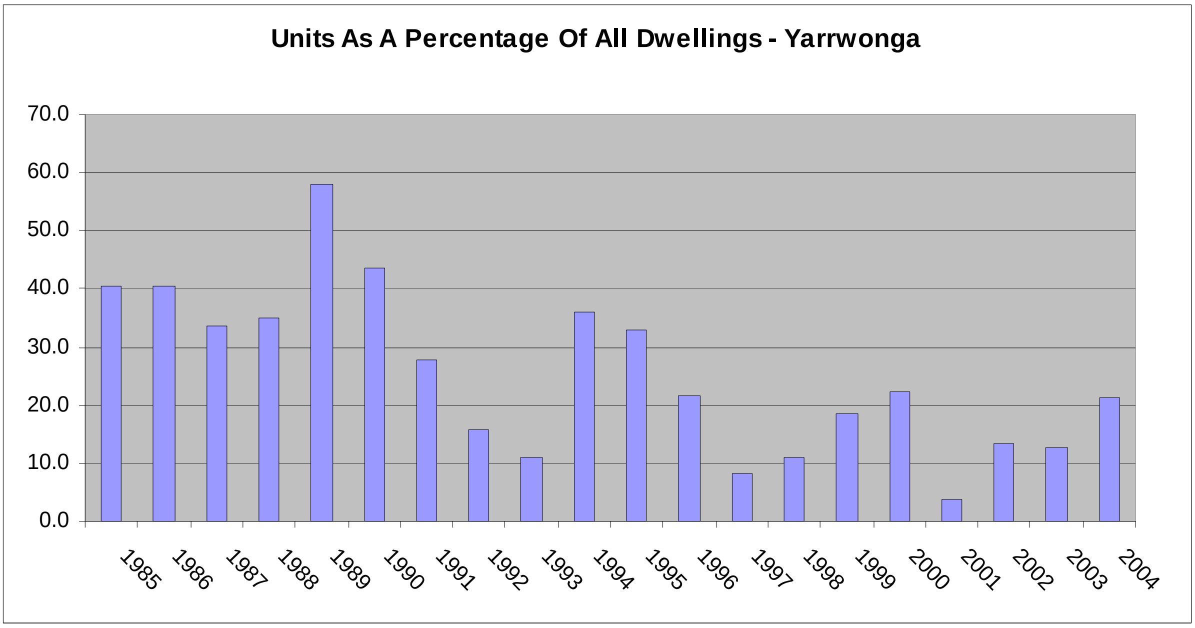
From 1985 to June 2004, there were 1,618 building permits issued for new dwellings, of these 21.4 percent multiple unit developments (431 units).

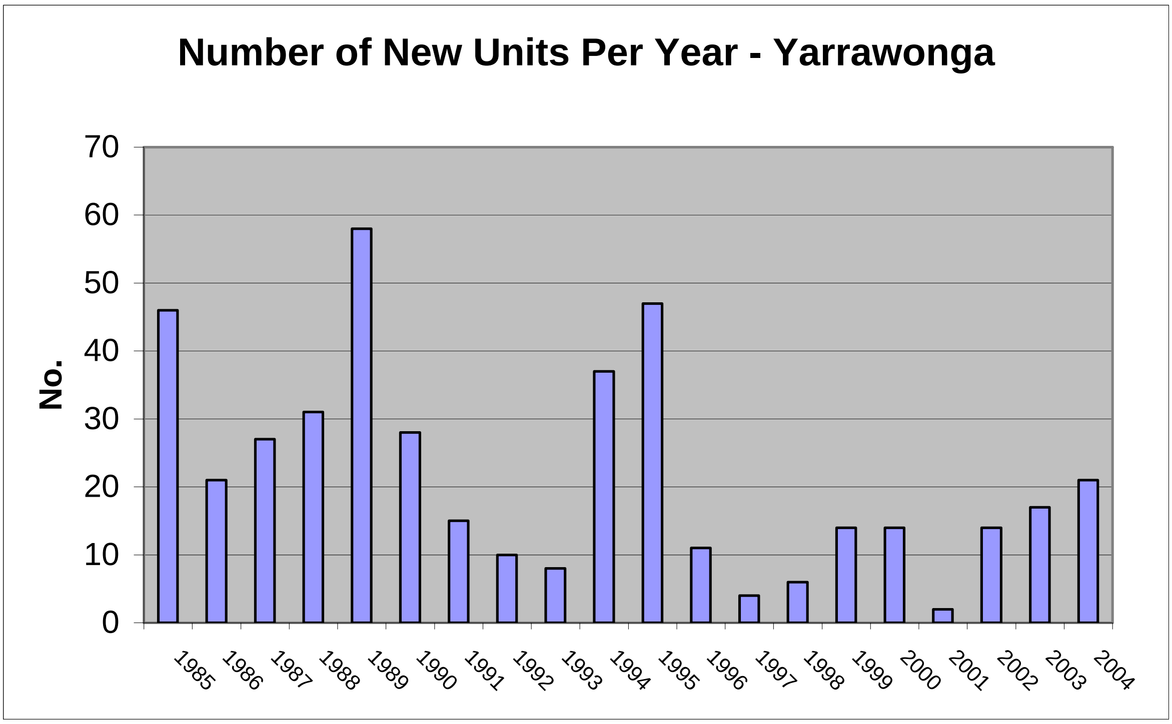


The graph above indicates that there have been three periods of intensive dwelling development: 1987 to 1989, 1993 to 1995 and 2002 to the present.

It is interesting to note that the number of multiple dwellings as a percentage of total dwellings appears to have declined since the mid 1980's. At that time 40 percent of all new dwellings were developed as part of a unit development.

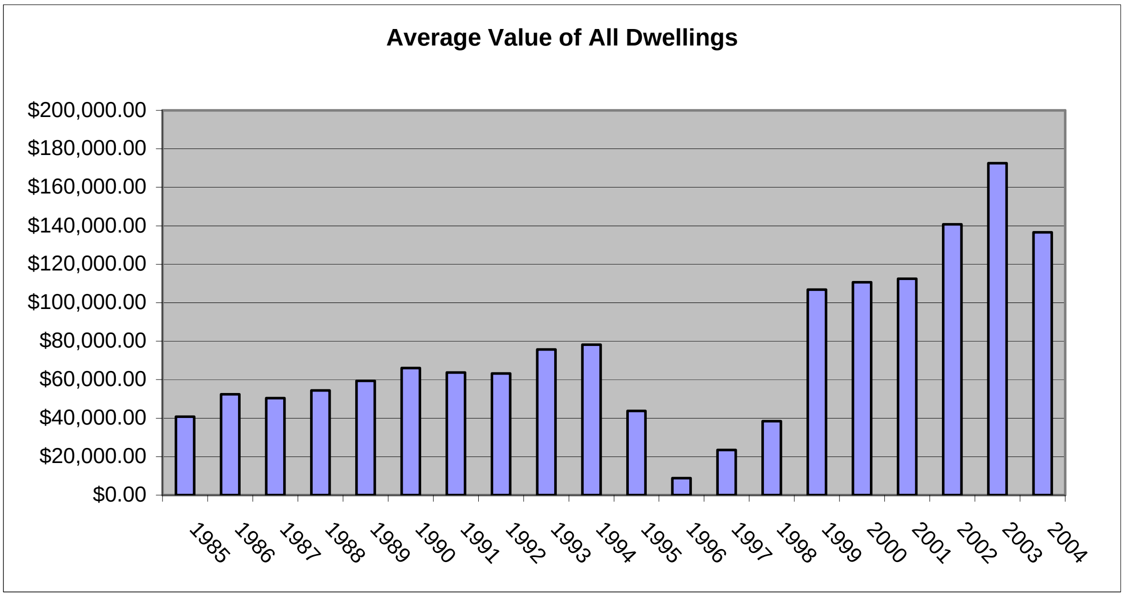
This trend peaked in 1989 when 58 percent of all new dwellings were part of a unit development. Since that time, there has been an overall decline in the proportion of unit developments although it appears that that trend may be reversing in 2004.





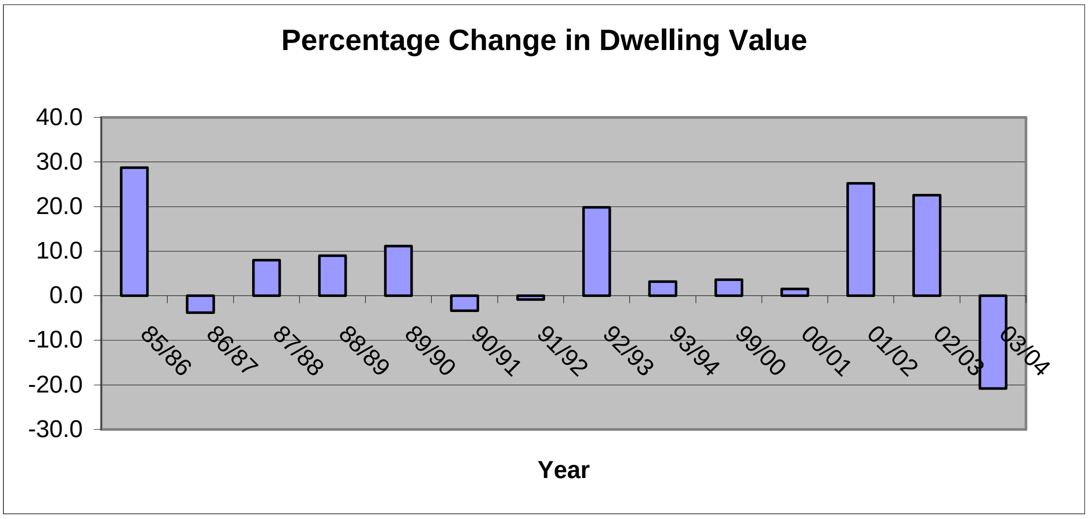
The value of new dwelling units discussed below is based on the cost of development as estimated by the applicant for a building permit and is not based on market value. It illustrates that the value of new dwellings continues to grow each year.

Growth in the value of properties was relatively consistent up until 2001. After that there was a dramatic increase in the average value that is continuing through the first half of 2004.



Note. From 1995 through to 1998, there was inconsistent data recorded in the building approvals data base which is why there is a drop between 1995 and 1998. Between 1995 and 1998 council's building service was outsourced and not all information was collected.

The graph below illustrates the percentage change per year over time. The data from 1995 to 1998 has been excluded as it is inconsistent. The decline between 2003 and 2004 is artificial as data is only available for the first half of 2004.

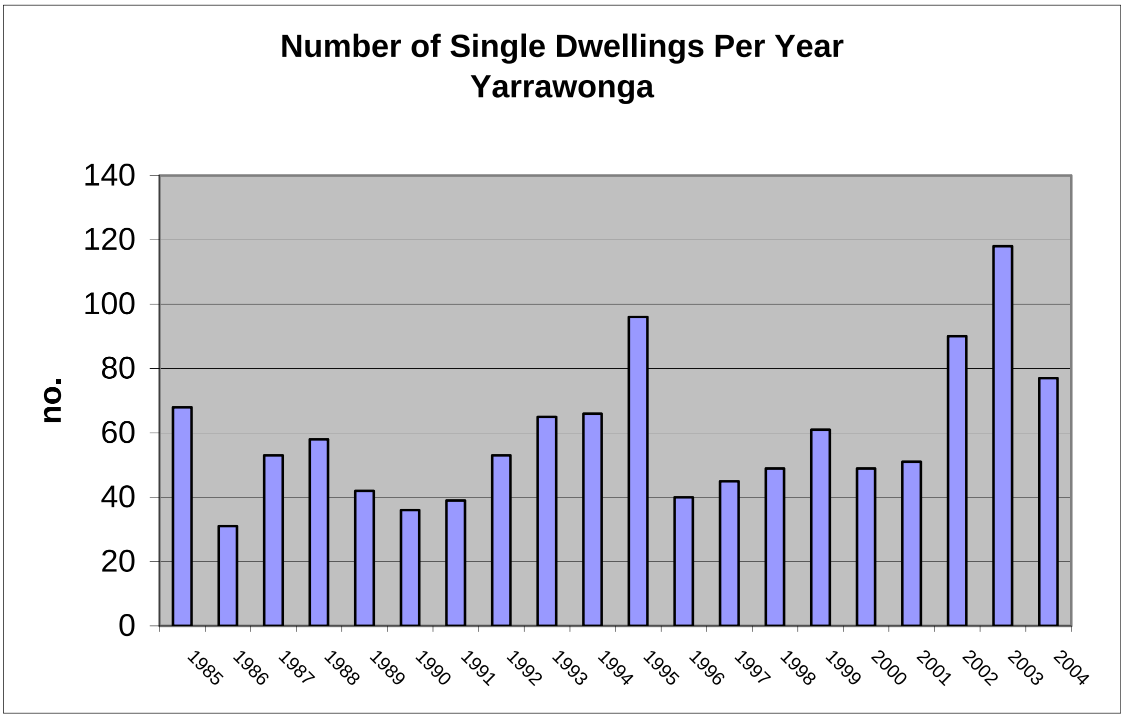


1999-2000	2.4
2000-2001	6
2001-2002	2.9
2002-2003	3.1

The table to the left is the change in the Consumer Price Index since 1999 as sourced from the Australian Bureau of Statistics.

During the last two years, and on several occasions in the past, the rate at which the cost of new dwellings is increasing is significantly higher than the annual CPI increase. This suggests that the new dwelling market is particularly buoyant at the moment. It also suggests that the cost of new housing may be outstripping income growth making housing less affordable.

There is also reasonably high demand for new single dwellings which are favoured over units.



The peaks are similar to what has previously been described with 2004 heading toward a record year for new dwelling construction.

Given the apparent increase in applications (building permits) in 2004 there does not appear to be any slackening of demand for new dwellings.

The increased demand, the increased cost of new dwellings and the decrease in the number of applications for multiple units does have implications with respect to choice and affordability of housing.

There is limited choice in the types of new dwellings available and there is limited supply of lower to medium cost dwellings. If this is considered in relation to household income, the housing market is not accommodating many of Yarrawonga's residents who are in the lower to middle income bracket.

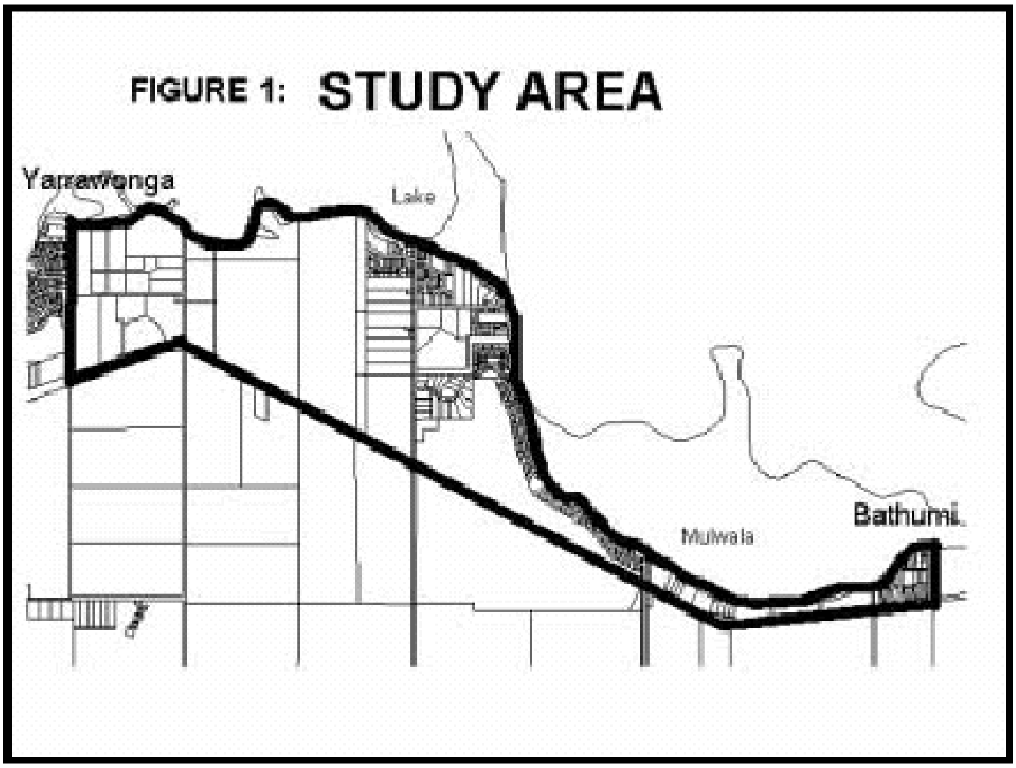
Therefore, consideration should be given, to measures aimed at providing greater choice and affordability in housing options. This is discussed in more detail in the next section.

4.8 Residential Land Supply

In 2002, Moira Shire Council commissioned a report for a future land use strategy from Yarrawonga to Bathumi.

The report was presented in June 2002 with the findings leading into the development and consideration of Amendment C13 to the Moira Planning Scheme.

The area of study for this report is illustrated on the plan below.



This study did not assess residential land to the south of the Murray Valley Highway (now known as Gorman's Land) nor did it consider vacant Residential 1 zoned land in Woods Road.

A theoretical supply of vacant residential allotments was developed with the conclusion that there was a total supply of 1,098 potential residential lots available within the study area.

The study concluded that Yarrawonga had a stable population with that trend to continue although it was noted *"…recent evidence suggest that some population growth would not be unexpected".* It was determined that the growth rate of 65 new dwellings per year would continue and that based on this, the current "actual supply" (ie land already subdivided for residential purposes) of residential land in Yarrawonga would be exhausted in less than three years.

Theoretical Supply of Vacant Residential Lots

Location	Actual Supply (1)	Potential Supply (2)	Total Supply
Between Woods Road and the western boundary of the Study Area*	83	120	203
Between western boundary of Study Area and Bott's Road (includes "superlots")	47(3)	550(4)	597
Between Bott's Road and Hogan's Road	6	145(5)	151
Between Hogan's Road and Buchanan's Road	12	130(6)	142
Between Buchanan's Road and eastern boundary of Study Area	5	Nil(7)	5
TOTAL NO. OF LOTS	**153**	**945**	**1,098**

* Not in Study Area but included for reference purposes.

(1) Land subdivided but not yet sold or developed.

(2) Land zoned but not subdivided to potential

(3) Represents the re-subdivision of the first and western most superlot.

(4) Represents the potential lot yield if all superlots are re-subdivided.

(5) This potential supply is contained within 8 large lots in the TZ west of Hogan Road.

(6) The majority of these lots are in the TZ north and south of Henderson Street.

(7) There is no subdivision potential under the RUZ.

Source: Shire of Moira maps and field surveys (January 2002).

It was then determined that if the actual and potential supply was included, (ie land zoned residential but not yet subdivided), then there would be a 17 year supply of residential land.

A land use strategy was developed based on this assessment and is illustrated on the plan below.

It identified four precincts for future residential development.

Precinct A: Already zoned residential with an estimated supply of at least 15 years.

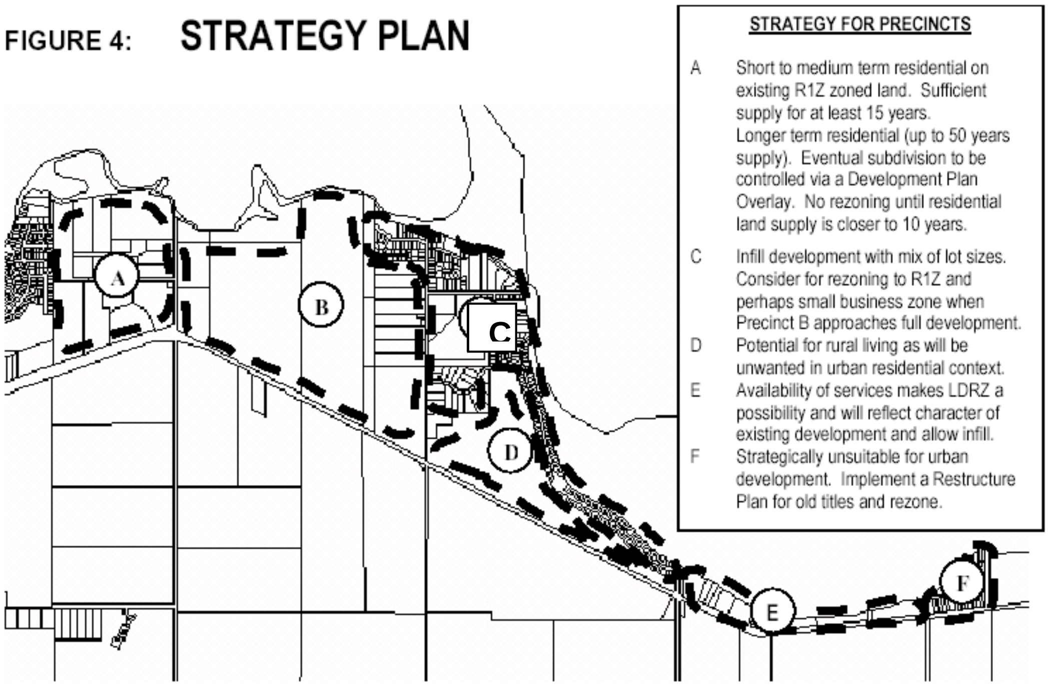
Precinct B: Botts land. Zoned rural with a potential supply of 50 years.

Precinct C: Infill development opportunities.

Precinct D: Potential for rural living as will be unwanted in an urban residential context.

This strategy is illustrated below.

FIGURE 4: **STRATEGY PLAN**



This analysis was used as an input to Amendment C13 which was a whole of planning scheme review adopted March 2004 and it was used by the government panel reviewing Amendment C13 to justify its determinations.

The Panel found as follows:

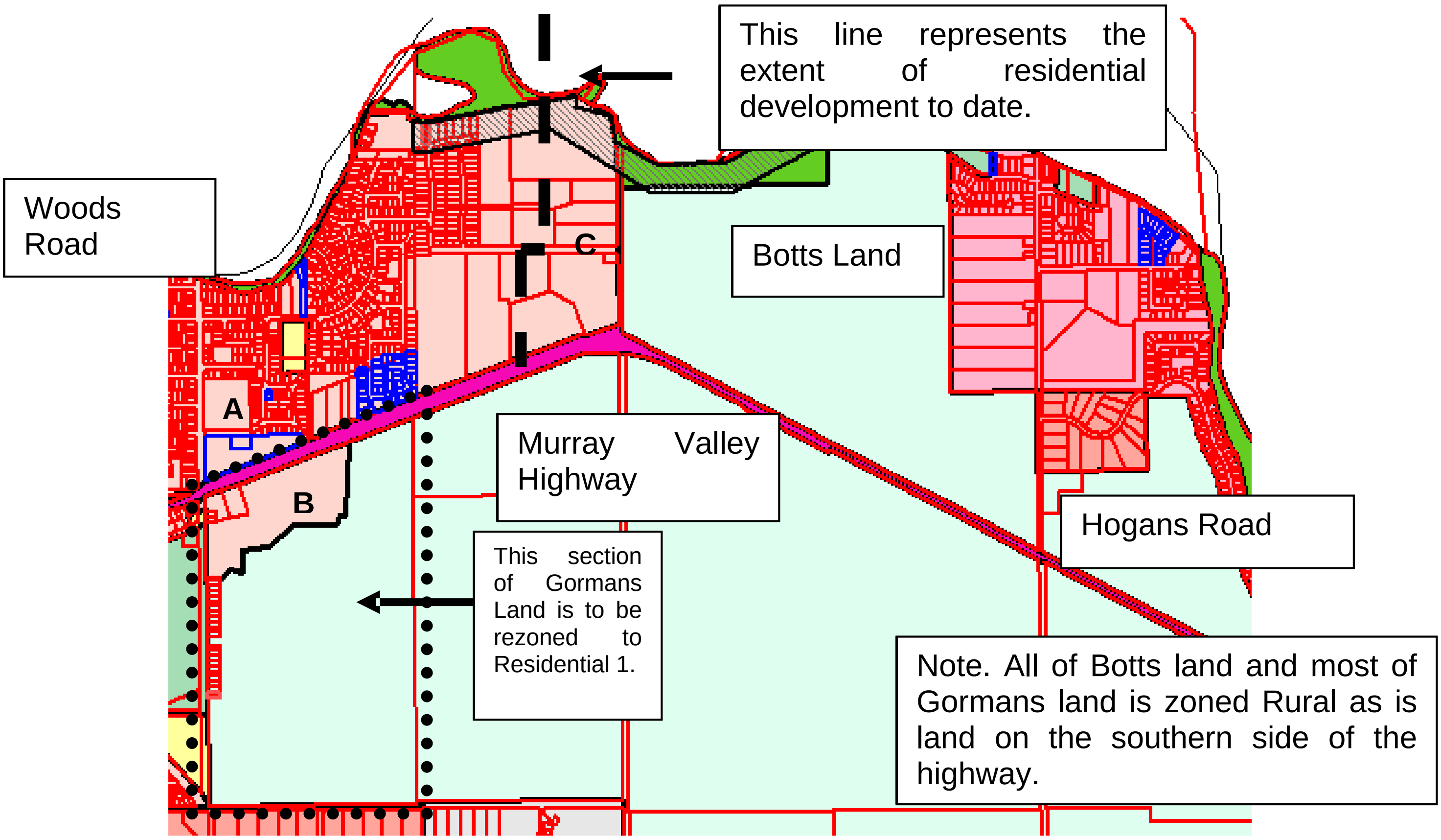
"The Panel accepts that the urban growth boundary identified in the structure plans for Yarrawonga and the Yarrawonga Bathumi Corridor provide a substantial potential supply of land to meet Yarrawonga's future needs for residential land. The framework proposed indicates that the direction and sequencing of growth, which, together with progressive rezoning and development planning, provides a level of assurance that the planning framework does not produce an excessive supply of land with inefficient supply of infrastructure to multiple development fronts".

It is now apparent that the estimates for new dwelling construction (or demand) were under-estimated and that the potential supply of residential allotments was over-estimated.

In the year 2000, there were 75.4 hectares of land zoned for residential purposes but not yet developed. Since then, there have been 342 new lots developed or approved consuming 38.5 hectares.

The new lots are being developed at nine lots per hectare and 98 lots per year over the last three years.

In 2004, there were 54.9 hectares of land zoned for residential purposes and at nine lots per hectare. This equates to a potential 486 lots. If consumption remains the same (at 100 new lots per year), there would be around five years supply of zoned residential land available.



The three areas of land zoned Residential C and used to estimated potential lot supply are:

- Area A in Orr Street;
- Area B on the Murray Valley Highway; and
- Area C to the west of Botts Road.

With regard to new dwelling construction, the 65 new dwellings per year as used in the Yarrawonga Bathumi study was a gross under-estimation as current trends see new housing being developed at almost twice that rate.

Year	Dwellings
1995	143
1996	51
1997	49
1998	55
1999	75
2000	63
2001	53
2002	104
2003	135
2004	98

The table above illustrates the number of building permits for new dwellings during the last 10 years. There has been a significant increase in the number of new dwellings for which a permit has been issued since 2001. The rate at which new dwellings are being constructed is consuming the new lots being created very quickly which means there is very little spare capacity.

4.9 Future Growth Areas

It is anticipated that the vacant residential land to the east of Botts Road will be consumed within the next three to four years. The only zoned residential land left is the land owned by the Roman Catholic Church in Woods Road and the land owned by Gormans which fronts the Murray Valley Highway.

The land in Woods Road, while being zoned residential may infact, be better suited to provide for new or expanded educational opportunities as discussed in subsequent sections.

There are no plans at present to develop the land in Woods Road (this land has a potential for 32 new lots), but the Gormans have submitted an Outline Development Plan (ODP) for consideration by the council. This ODP sees the land being developed into about 440 lots, the majority of which are to be developed at normal urban densities. This land would need to be rezoned to allow for development.

The next potential area for development is Botts land. A development proposal is being prepared for this land which would see it subdivided into between 1000 and 1200 allotments in a landscaped golf course setting. Should this development occur, the new lots and associated new dwellings will be at the higher end of the residential market and are expected to command significantly higher prices than other residential land.

Gormans land is also proposed to be developed as a landscaped residential precinct but it is considered that it will not command prices at the top end of the market.

With a potential 332 lots on the land east of Botts Road, 32 new lots on the Catholic Church land, 440 lots on Gormans land and 1100 lots on Botts land, the total estimated potential supply is in the order of 1904 new lots. At the development rate of 100 new lots per year, this would represent around 19 years supply. However, the proposed development for Botts land is a unique development which will appeal to a certain sector of the market. As new lots on this land will attract premium pricing and as average incomes in Yarrawonga are at the lower to middle end of the scale, much of this land will be unattainable by the existing community, so it should be excluded from the supply estimates.

Based on this assumption, there is an estimated total potential for 804 lots which represents a potential eight years supply.

This level of supply is too little to meet demand and as a consequence, additional land needs to be identified to provide for more affordable housing opportunities.

4.9.1 Potential Future Residential Areas

Clause 16 of the Moira Planning Scheme sets the scene for housing development with state-wide objectives for housing as represented in the State Planning Policy Framework which aims to encourage;

- Subdivisions in locations with access to physical and community infrastructure and providing for a range of lot sizes, a convenient and safe road network, appropriate pedestrian and cycle paths, sufficient useable open space and low vulnerability to fire;
- Residential development that is cost-effective in infrastructure provision and use, energy efficient, incorporates water-sensitive design principles and encourages public transport use; and
- Opportunities for increased residential densities to help consolidate urban areas.

These objectives begin to define the principles to determine and assess the suitability of areas for future residential development.

The areas should:

- be of a size that allows for variety in lot sizes;
- be of a size that allows for the establishment of open space areas;

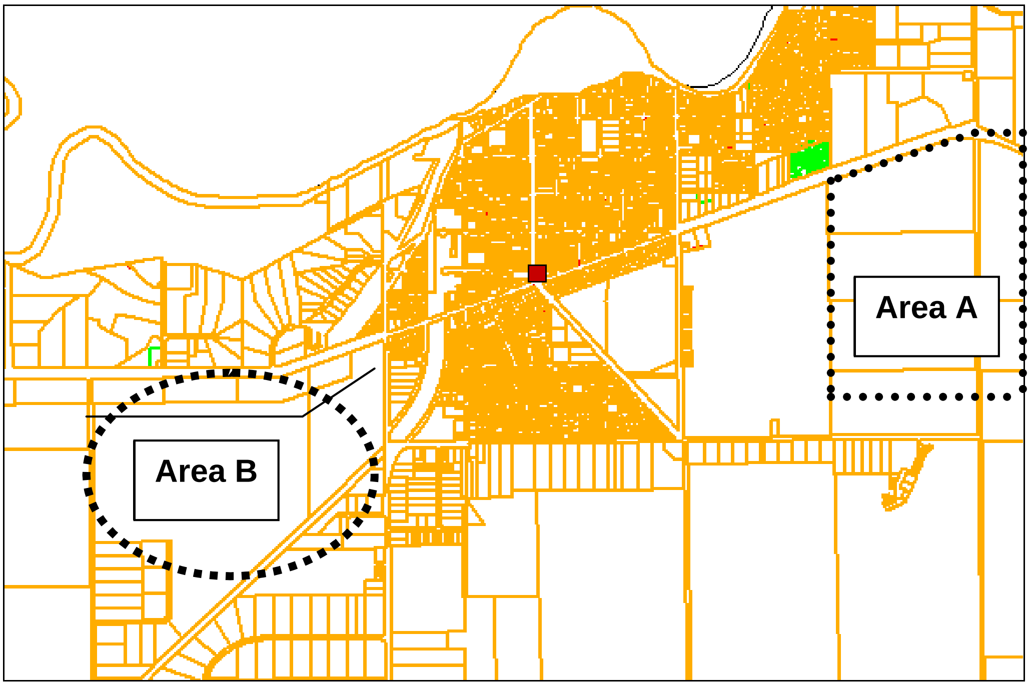
- have good external access and sufficient area to allow for a safe and convenient road network to be developed;
- be in close proximity to infrastructure services and not requiring major extensions;
- allow for the treatment of storm water on-site prior to release to the community drainage system;
- be close to existing commercial and social services and facilities; and
- be compact and able to be consolidated with existing urban areas.

In addition, recent amendments to the Moira Planning Scheme have introduced a number of landscape character objectives to be achieved around Lake Mulwala. These include:

- To recognise the special attributes to the local and regional community of the waters and shoreline environs of Lake Mulwala as an area of significant landscape, conservation and scientific interest;
- To preserve and enhance the sensitive inherent landscape qualities comprising the waters, shoreline environs and lands bordering upon the land;
- To protect the water quality of the lake;
- To ensure that existing water flow patterns and water quality are not adversely affected by development;
- To protect the landscape qualities and scenic vantage points of Lake Mulwala and its foreshore from visual intrusion resulting from inappropriate siting and design;
- To ensure the community has a suitable level of access to appropriate areas;
- To contain urban development to existing townships with definite visual boundaries; and
- To reduce ribbon development along Lake Mulwala.

Based on these principles and character objectives, further eastward extension of the urban area of Yarrawonga along the southern foreshore of Lake Mulwala is inappropriate and inconsistent with State Government Policy and the expressed intent of Moira Shire Council. Rather, the principles driving the identification of future residential areas should be consolidation of urban areas, sustainability and affordability.

There appears to be only one area that is in accordance with these principles and one other area which could potentially be considered on the basis of consolidation. These areas are identified on the plan below. A further area has been identified for future residential development on the basis that it is land no longer suited for agriculture and is already bounded on the north side by existing dwellings in the Rosemary Court and Stevenson Place.



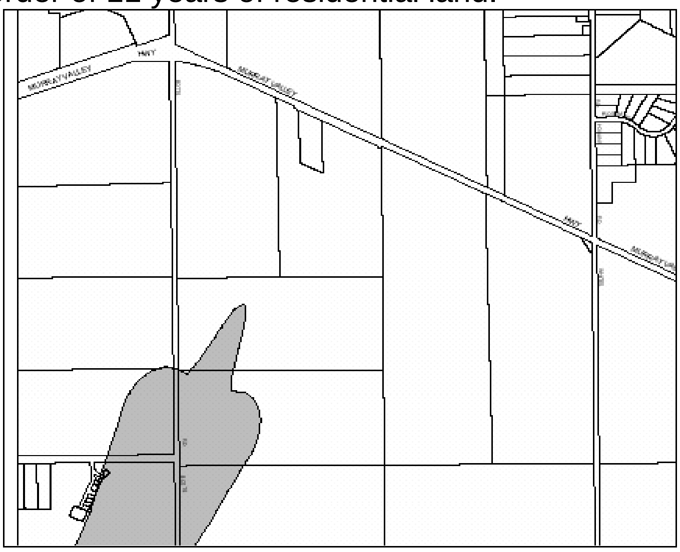
4.9.1.1 Area A

Area A is zoned rural, is held in one ownership (Gorman), has good access with frontages to the Murray Valley Highway and Botts Road to the east, is adjacent to an area already identified as being developable for residential purposes and is a logical area to be consolidated with the existing urban area.

It has an area of 129 ha with a potential yield of 1,160 residential allotments.

Constraints affecting the development of this land include an Airport Environs Overlay on part of land as illustrated below. Therefore, the development of dwellings in this area would be discouraged.

Should this land be identified as suitable for the medium to long term, it would provide in the order of 11 years of residential land.



4.9.1.2 Area B

Area B is located to the south-west of the town, is zoned rural, has reasonable access from Rileys Road and Burley Road and is held in two ownerships. It has an area of 141 hectares.

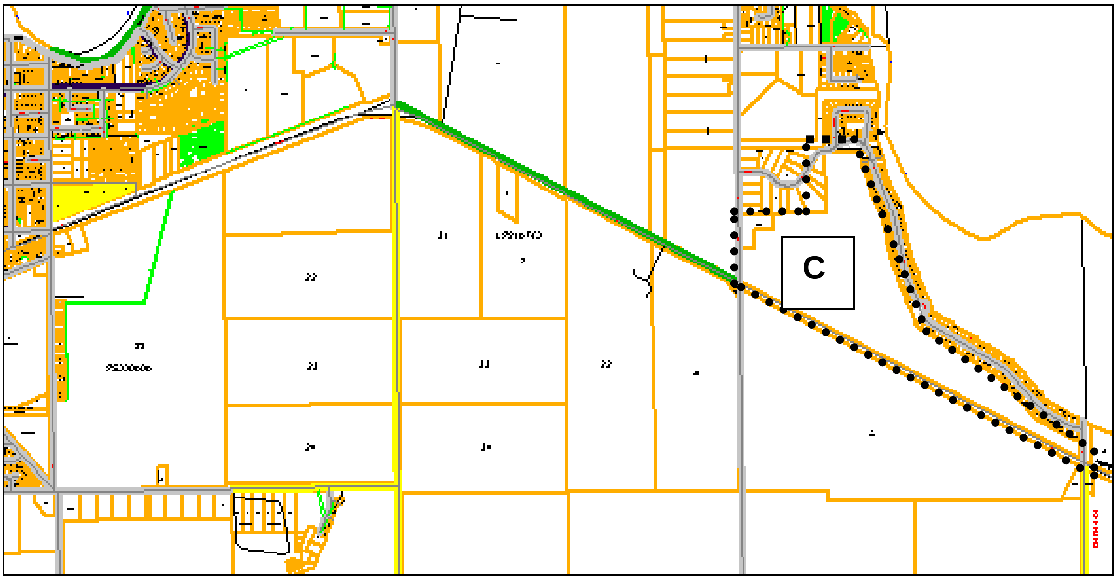
This land has been included as potential residential land because there are areas of low density residential developments to the north and south providing an opportunity for urban consolidation. In addition, land in this location would be more affordable and would provide a greater degree of choice than having all residential land on the eastern side of Yarrawonga.

The potential lot yield is 1,270 residential allotments which would represent 13 years supply of residential land.

The constraints with this land are that it may be considered more appropriate to develop for low-density residential development (larger than average lots) and the eastern part of the land is suitable for rezoning to a Business 3 Zone (the land along the Burley Road frontage).

4.9.1.3 Area C

Area C is the area bounded by the existing development in Rosemary Court to the north and the Murray Valley Highway to the south as illustrated below.



This land is zoned rural, is in one ownership, has good access and covers 55 hectares. It has been included because of the existing development that occurred several years ago in the Rosemary Court area.

While it does continue the ribbon development along the Murray Valley Highway, it is considered that it would be more appropriate to develop the land for residential purposes thereby complementing and completing the existing development to the north.

4.10 Residential Development Strategy

Clause 14.01-2 of the State Planning Policy Framework indicates that planning authorities should plan to accommodate projected population growth for at least a 10 year period.

Yarrawonga's population is growing rapidly with an estimated population in 2003 of 4,588 people. This estimate was based on the number of new dwellings for which building permits had been issued.

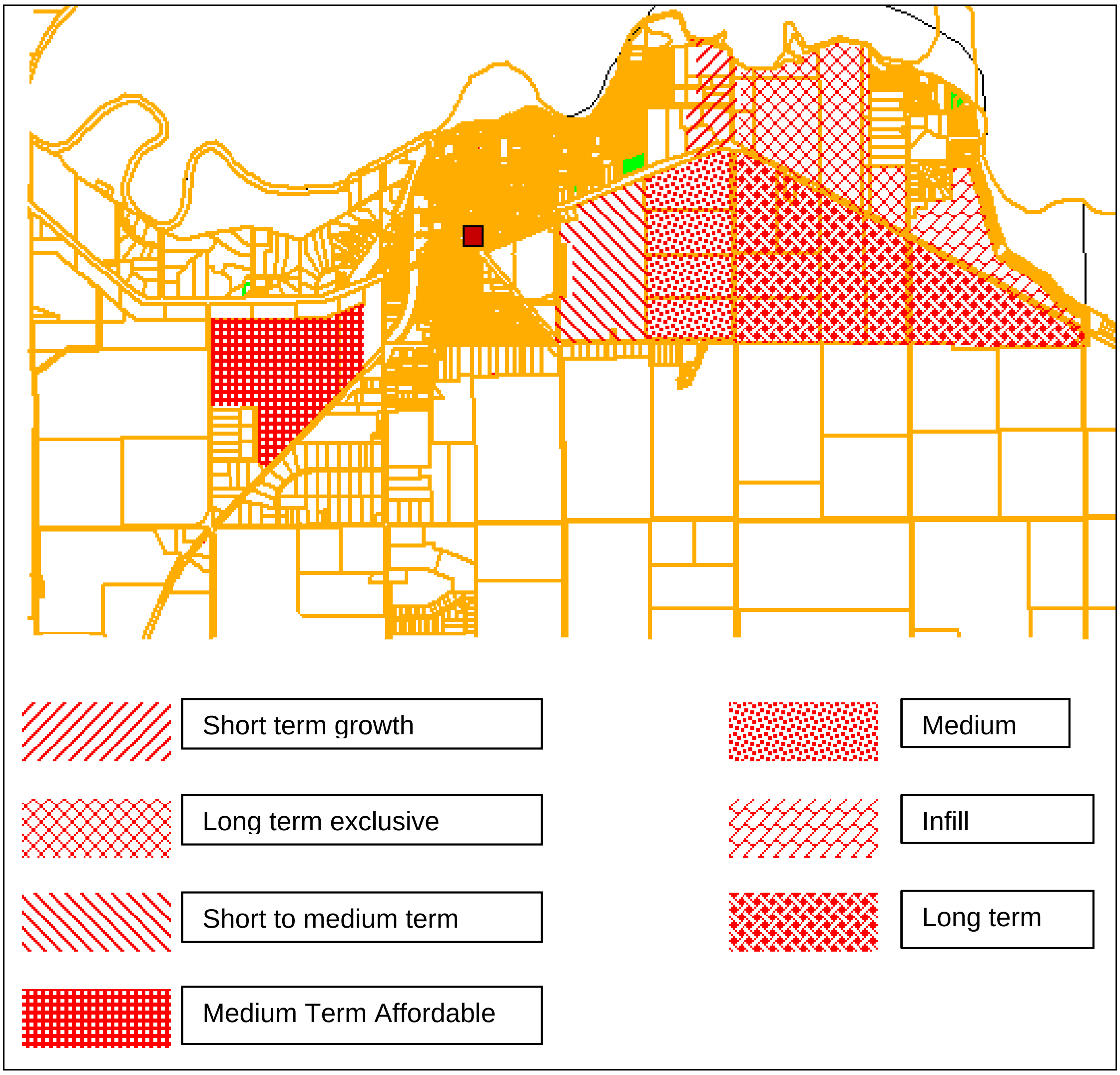
This rapid growth is further reinforced when considering the development of new residential allotments. If current trends continue it is estimated there is only four to five years supply of residential zoned land available in Yarrawonga.

Depending upon future population rate increases, Yarrawonga's population by the year 2030 could be between 6,002 people (1 percent increase per annum) and 28,509 (7 percent increase per annum).

The Yarrawonga study also looked at land already determined as suitable for future residential development. The largest component of land (Botts) should be discounted from future residential land potential because it is to be developed as an exclusive estate which will have its own demand and supply characteristics.

As previously discussed there is a potential eight years supply of residential land on Gormans land and the land owned by the Roman Catholic Church. However this level of supply is too little to meet future growth needs. This will push prices higher and place the affordability of residential allotments out of reach for many people. As a result, the need to identify more land for affordable development is an important part of the Yarrawonga Strategy.

The residential development strategy discussed below aims to identify and prioritise future residential areas. It is based upon the principles of consolidation, sustainability and affordability.



Short Term

Land is expected to be fully developed within the next four to five years. No action required.

Short to Medium Term

Expected to be developed over the next five to ten years.

Currently zoned rural and covered by a Development Plan Overlay.

Planning consent required as well as a rezoning to Residential 1.

Part of this land may be nominated for a commercial precinct fronting the Murray Valley Highway.

Medium Term Affordable

An alternative area for residential development aimed at providing affordable accommodation.

Potential for 1,270 lots which represents a 13 year supply.

Rezoning required to allow for development over next five to 15 years.

Medium

The logical next phase of residential development after the Gormans land has been developed.

Potential for 1,260 lots although this may be constrained by low lying areas and land within the Airport Environs Overlay.

Rezoning required to allow for development over next five to 15 years.

Infill Medium

Legacy areas left over as a result of development of Rosemary and Stevenson Courts.

Potential for 495 lots representing 5 year supply.

Rezoning required to allow development over the next 5 to 15 years.

Long Term

Area where long-term residential growth is expected to be accommodated.

Future development not expected for at least 15 to 20 years.

No action required at this moment.

No other urban density residential developments should be considered outside of these nominated areas.

Long Term Exclusive

Development proposal for exclusive residential estate expected to be received shortly. The development is aimed at the higher end of the Market and will have its own demand and supply characteristics and is not considered to be a part of the normal residential development market.

Considered a long-term proposition (10 years plus).

Planning consent required together with a rezoning to Comprehensive Mixed Use Zone.

In summary, the table below illustrates the potential number of residential allotments in each of the areas discussed above together with a calculation on the number of years supply each of these areas represents.

Area	**No. of Lots**	**Years Supply**
Short to medium term	440	4 years
Medium term affordable	1,270	12 years
Medium term	1,160	11 years
Medium term infill	495	5 years
Total	3,365	33 years
Long term exclusive	1,100	10 to 20 year development cycle

It is acknowledged, that this table indicates that should all of the areas be rezoned to allow for housing development, that there would be significantly greater supply than the 10 to 15 years recommended by the State Government. However, it should also be noted that these areas are held by only three land-owners. The implications from this are that the choice available to new home builders could be severely limited and, there is the possibility that one or more of the existing land-owners could decide to “sit” on their land and not make it available for development.

As a result, the recommendations of this Strategy are that three parcels of land be rezoned to residential to allow for choice as well as to encourage the land-owners to make their land available.

4.11 Residential Development Constraints

4.11.1 Capacity of Existing Services

Recent discussions with North-East Water (NEW), which is the water and sewerage supplier for Yarrawonga, indicates that the capacity to provide water and sewerage services is diminishing quickly.

Water supply is of particular concern as there is presently only a reserve capacity measured in hours rather than days.

North-East Water are aware of this problem and are in the process of developing additional water storage capabilities at the existing works in Witt Street. An extra 10 megalitres of water storage capacity is planned for.

The rapid growth of Yarrawonga has raised further concerns for North-East Water which will be addressed through the development of a Water Masterplan to begin in August of this year. This plan will result in the development of a strategy to ensure the long-term supply of water to the town (this analysis will feed into the development of the Water Plan).

In summary, works are planned for additional short-term storage capacity by 2005 with long-term supply to be determined on the basis of the Water Masterplan.

With regard to sewerage services, there is spare capacity at the existing sewerage treatment plant however, the rapid growth of Yarrawonga will see this quickly eroded.

North-East Water has developed a strategy for a new treatment plant in Reillys Road to increase capacity and provide the service in a more appropriate location. The construction of this plant was budgeted for 2008 to 2010. However now that North-East Water is aware of the growth rate being experienced, it may bring the construction of the new plant forward.

Powercor have advised that there is sufficient capacity in Yarrawonga to serve existing electricity needs. Powercor’s forward planning (50 years) schedules the development of a zone substation on land it owns at the intersection of South Road and Old Wilby Road in 2023. This facility will easily cope with a three percent annual population increase.

The power supply may need to be upgraded should a major industry establish in Yarrawonga. The upgrade would be facilitated by improving the feeder lines from the Cobram zone substation. Powercor do not plan for such upgrades but respond if and when required.

Therefore, there are no impediments to residential development from a power supply perspective.

4.11.2 Employment Opportunities

Yarrawonga does not have a strong industrial sector and its commercial and retailing sectors are geared to servicing the resident population including outlying areas and the tourist trade.

The major employers are the hospital and Australian Defence Industries in Mulwala. With the redevelopment of the ADI plant, employment opportunities there are expected to decline.

With a rapidly increasing population consideration needs to be given to providing employment opportunities for the existing population and for employment opportunities which can be used as to attract people to relocate to Yarrawonga.

The review of the industrial sector and the commercial sector has revealed that there is a need for action to stimulate more employment opportunities in the following areas:

- Service industries;
- Light industrial industries;
- Industries to service the redevelopment of the ADI munitions plant;
- Higher education;
- Expanded retailing opportunities in:
    - Hardware and homeware
    - Lighting shops
    - Garden and landscape supplies
    - Builders hardware
    - Plumbing supplies
    - Wood and timber supplies
    - Tile and tiling supplies
    - Window coverings
    - Nursery and nursery supplies; and
- Upmarket accommodation.

The major constraint to the development of these opportunities is the lack of available serviced land. Council is currently preparing industrial and commercial strategies to address this issue.

4.12 Summary Of Recommendations For Residential Development

That council amends the Moira Planning Scheme by:

- Rezoning the area identified as "Short to Medium" and "Medium" to Residential 1 with a Development Plan Overlay;
- Rezoning the area identified as "Medium Term Affordable" to Residential 1 with a Development Plan Overlay;
- Rezoning the area identified as "Infill" to Residential 1 with a Development Plan Overlay; and
- Placing a Development Plan Overlay over the area identified as "Long Term".

That Development Plan Overlays must:

- Require that a Development Plan must be prepared and approved by the Responsible Authority before a permit can be issued for subdivision of more than one dwelling on a lot.
- Describe:
    - The means of servicing to lots including the provision of reticulated water and sewerage to all residential allotments.
    - The layout of collector roads and the impact on the surrounding road system.
    - The design and makeup of residential lot density in a manner that reflects demand of the area.
    - The location of open space areas and the internal and external open space linkages including pedestrian and bicycle paths.
    - The location and connectivity of constructed footpaths along proposed streets.
    - The location of a site or sites for local convenience shopping.
    - The areas to be landscaped, including road reserves.
    - The proposed street tree and landscape planting regime with preference given to vegetation of local provenance.
    - The impact of the development on any sites of flora or fauna significance, archaeological significance or significant views that may affect the land.

- That council takes a lead role in the preparation of the Outline Development Plans in consultation with relevant land owners and service authorities.
- That council reviews the appropriateness of existing height control provisions of the Moira Planning Scheme and prepare a height control policy for subsequent inclusion as Schedules within the Residential 1 Zone, Low Density Residential Zone, Mixed Use Zone and Township Zone.

5 Commercial and Retail Development

5.1 Introduction

An employment and floorspace survey was conducted in the commercial district of Yarrawonga during the week of 9 February 2004.

Council visited every establishment in the commercial district of Yarrawonga was visited to establish:

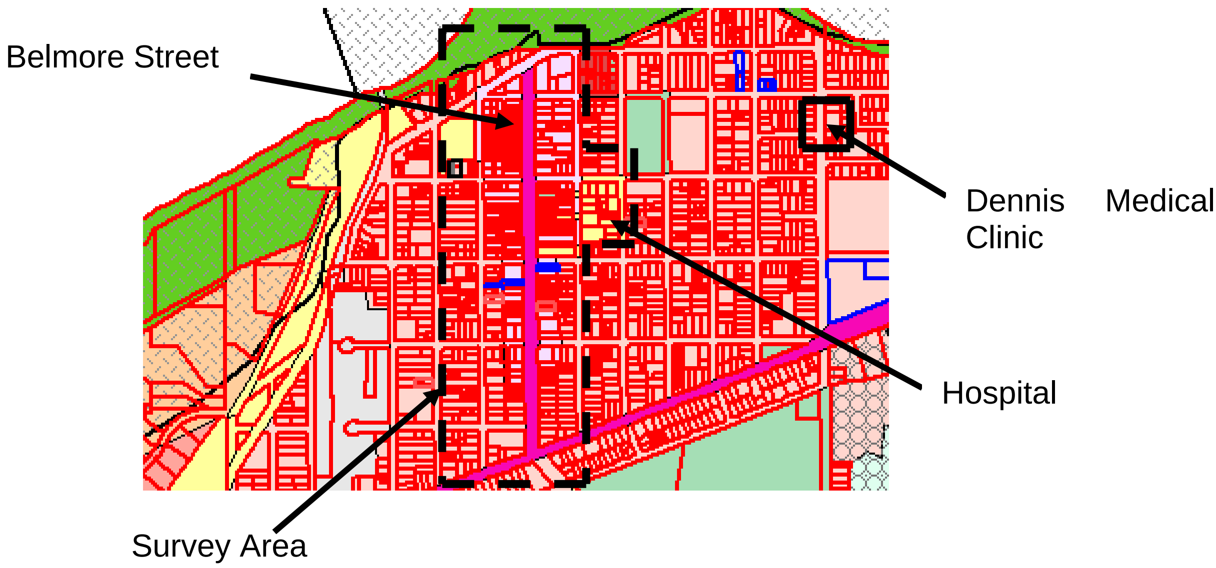
- The type of business carried out,
- The number of employees, and
- Employee status, being either full time or part time.

The land area of separate allotment was determined from map based data held electronically in council's MIDAS system.

Building area or floorspace was determined by measurement from aerial photographs also held in MIDAS.

The survey results were analysed using the Australian and New Zealand Standard Industrial Classification code which allows for the categorisation of the different establishments into various classes.

The results of this survey are presented in this report.



The main commercial area is zoned Business 1 with the southern end of Belmore Street being zoned Residential 1.

The hospital which was included in the survey is zoned for Public Use and the Dennis Medical Clinic is on land zoned Residential 1.

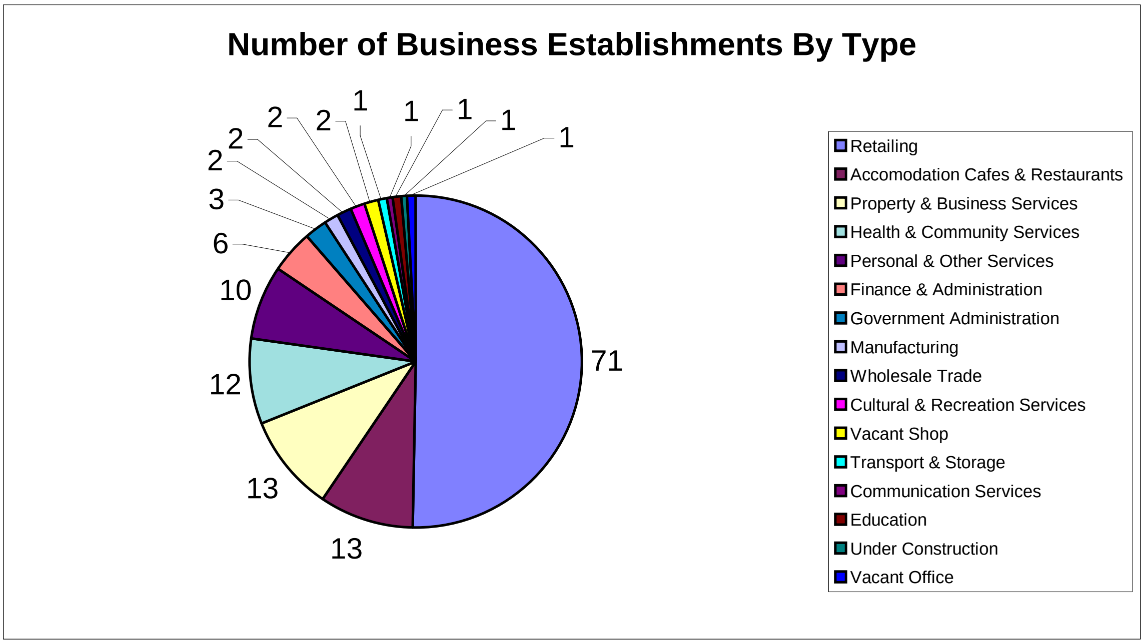
5.2 Summary of Findings

There are 141 separate business enterprises occupying 47,783m^2 of floorspace and employing 1,135 people (654 full time and 481 part time).

These premises occupy an estimated 81,069 m^2 of land.

At the time of the survey, there was one vacant office and two vacant shops indicating that the commercial economy of Yarrawonga is performing very well.

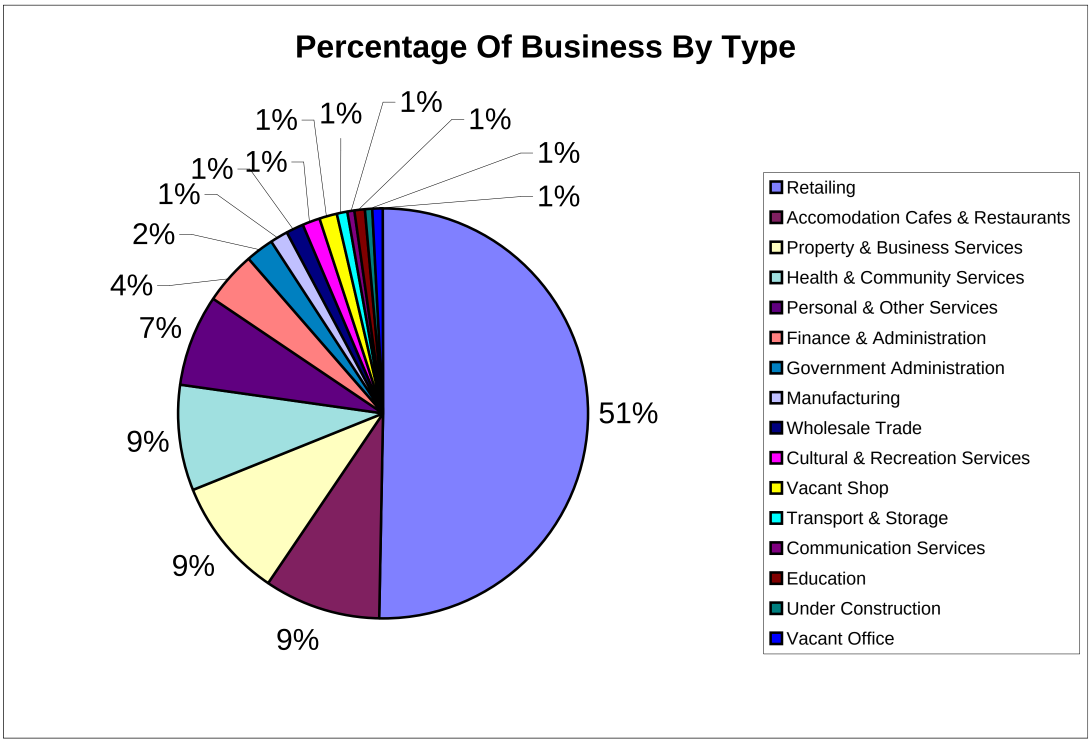
The graph below illustrates the number of businesses within the various classifications.



The graphs above and over page show that 51 percent of all businesses are involved in retailing. Accommodation, cafes and restaurants account for nine percent of total businesses as do property and business service type establishments and health and community service establishments. A detailed analysis of each classification is provided in subsequent sections.

The survey indicates that Yarrawonga is well serviced with smaller retailing outlets and has a reasonable level of other services.

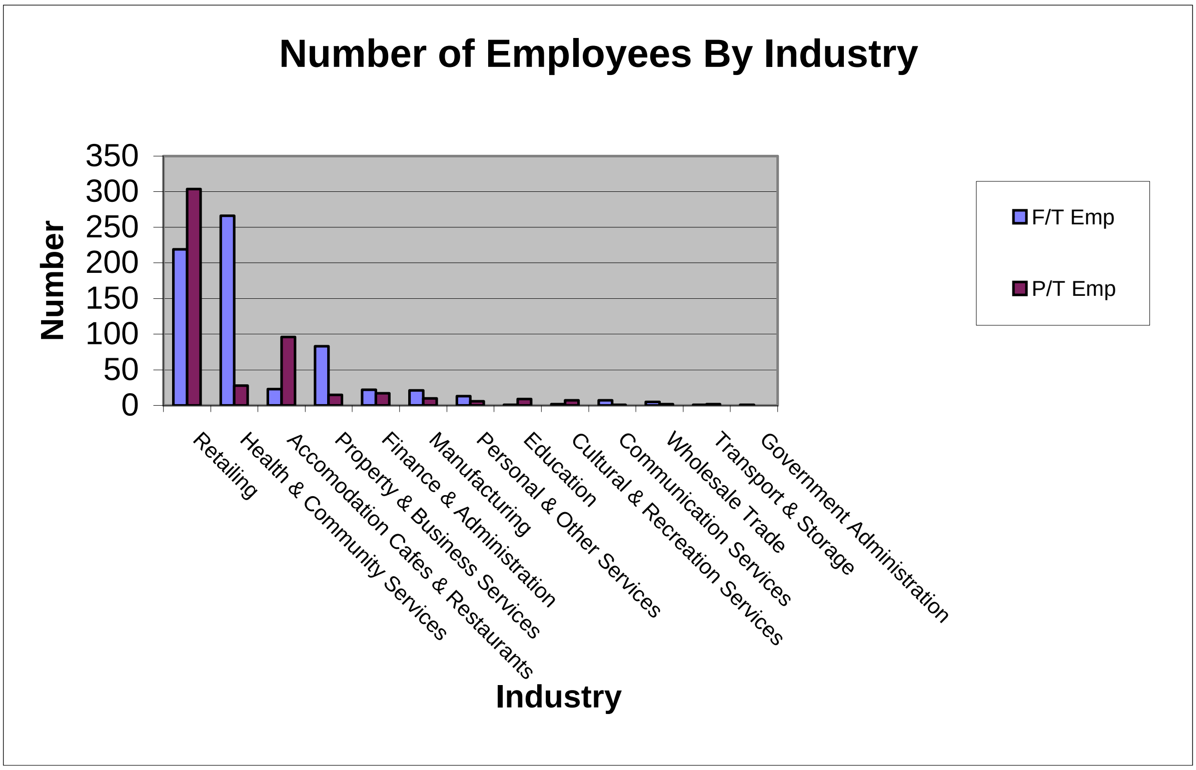
It is noted however, that there is not a great deal of consumer choice with only one or two establishments in several retail sectors.



The table below summarises the survey findings in terms of the number of businesses by type, full and part time employment, land area occupied and floorspace occupied (in square metres).

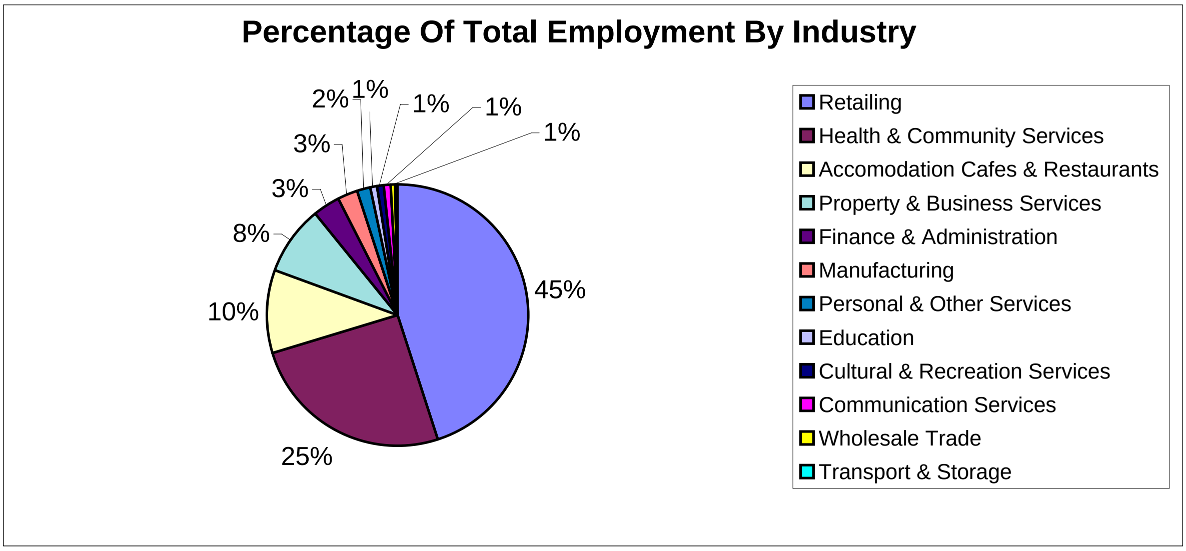
Description	No. of Businesses	Full Time Employees	Part Time Employees	Total Employees	Land Area	Floorspace
Retailing	71	219	304	523	43843	25134
Accommodation Cafes and Restaurants	13	23	96	119	11372	7417
Property and Business Services	13	83	15	98	4057	2491
Health and Community Services	12	266	28	294	9062	4411
Personal and Other Services	10	13	6	19	2624	1917
Finance and Administration	6	22	17	39	3162	1642
Government Administration	3	1	0	1	2080	1756
Manufacturing	2	21	10	31	662	460
Wholesale Trade	2	5	2	7	1252	431
Cultural and Recreation Services	2	2	7	9	737	604
Vacant Shop	2	0	0	0	1237	539
Transport and Storage	1	1	2	3	75	75
Communication Services	1	7	1	8	430	430
Education	1	1	9	10	287	287
Under Construction	1	0	0	0	131	131
Vacant Office	1	0	0	0	58	58
Total	141	664	497	1161	81069	47783

There are two primary sectors of employment: the retailing category (523 people) and in health and community services (294 people). The high number of people in health and community services results from the inclusion of the hospital and Moira Health Care Alliance in the survey. (Note: It was not possible to gain a breakdown of full and part time employment for the hospital).



This graph illustrates that the majority of employment is within the two sectors previously mentioned. It also indicates the high level of part time employment particularly in retailing and accommodation, cafes and restaurants. If the survey was undertaken outside of the holiday season it is likely there would be a decrease in the number of part time employees.

The graph over page illustrates the proportion of total employment within each of the different sectors.

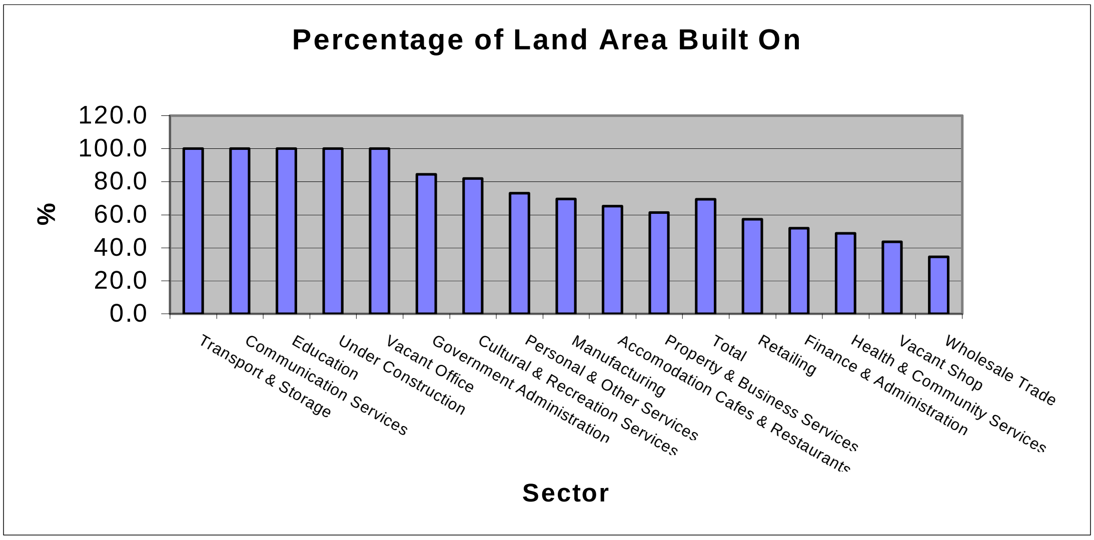


Four sectors account for 88 percent of total employment. This grouping suggests there is not a great degree of diversity of commercial establishments with Yarrawonga primarily providing for small scale retailing with no broad range of financial, personal or governmental services. The type of retailing provided is also limited in scope, which is further discussed in the retail analysis section below.

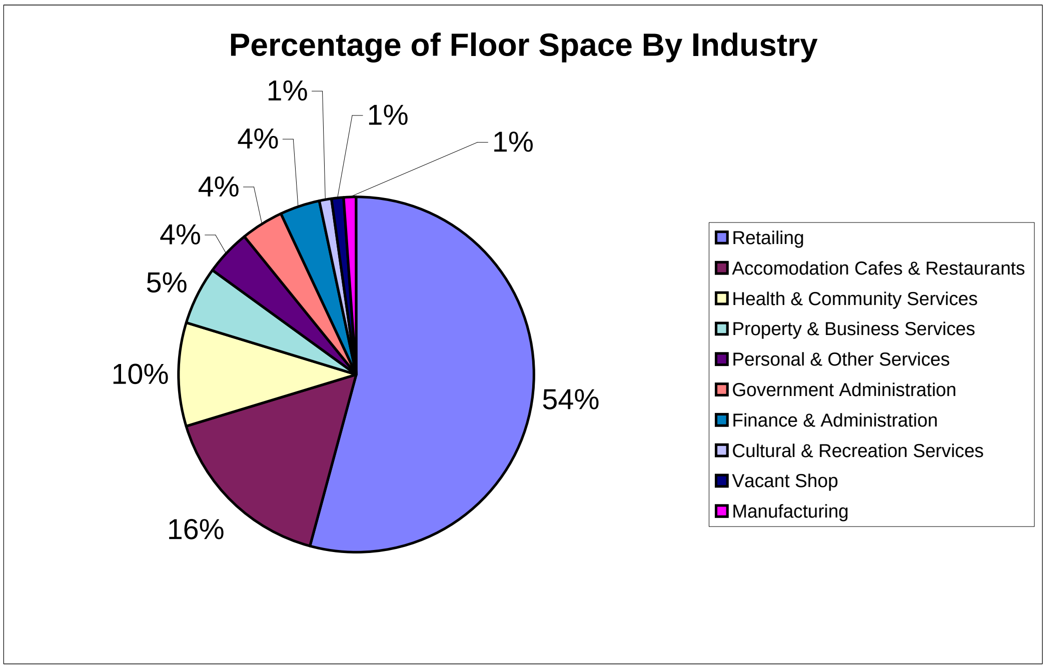
That retailing is the dominant activity is also apparent when land area and floorspace is considered.

54 percent of all land area and 53 percent of all floorspace is within the retail sector with the next most significant category being accommodation, cafes and restaurants.

What is particularly significant is the area built on in comparison to the available ground area.



In most instances, greater than 60 percent of the land area is built with, in several instances, 100 percent of the land area built on. The ramifications of this include the lack of space to provide an adequate level of car parking on-site and the lack of available vacant land area for new or extended developments.



The graph above highlights the importance of retailing to the commercial district. There are just two vacant shops in that district representing one percent of total floorspace. This represents, as noted above, two vacant shops.

The amount of floorspace within each category is shown in the following table. There is no vacant land available in the commercial district, only 539m^2 of vacant shop space and just 58m^2 of vacant office space.

Description	Land Area	Floorspace	% Land Area	% Floorspace
Retailing	43843	25134	54.1	52.6
Accommodation Cafes and Restaurants	11372	7417	14.0	15.5
Property and Business Services	4057	2491	5.0	5.2
Health and Community Services	9062	4411	11.2	9.2
Personal and Other Services	2624	1917	3.2	4.0
Finance and Administration	3162	1642	3.9	3.4
Government Administration	2080	1756	2.6	3.7
Manufacturing	662	460	0.8	1.0
Wholesale Trade	1252	431	1.5	0.9
Cultural and Recreation Services	737	604	0.9	1.3
Vacant Shop	1237	539	1.5	1.1
Transport and Storage	75	75	0.1	0.2
Communication Services	430	430	0.5	0.9
Education	287	287	0.4	0.6
Under Construction	131	131	0.2	0.3
Vacant Office	58	58	0.1	0.1
Total	81069	47783	100.0	100.0

Despite the lack of available land, there have been 32 applications for planning permits in Belmore Street during the past four years worth $3.1 million. Of these applications, only three have resulted in new office or shop floorspace with 11 of the applications for redevelopment or extensions to existing buildings. Other applications have been for signage, subdivision, liquor licenses, take away food premises and verandas.

No information is available on changes of use, as many of the activities carried out in the Business 1 Zone do not require a planning permit.

Despite a nine percent increase in population during a very short time span, there has not been an associated significant increase in retail/commercial facilities. It is likely that a lack of available land for development is a major contributing factor to this lack of growth.

5.3 New Retail Floorspace

Essential Economics concluded that additional retail space was required and that land to the east of the town centre would be preferable:

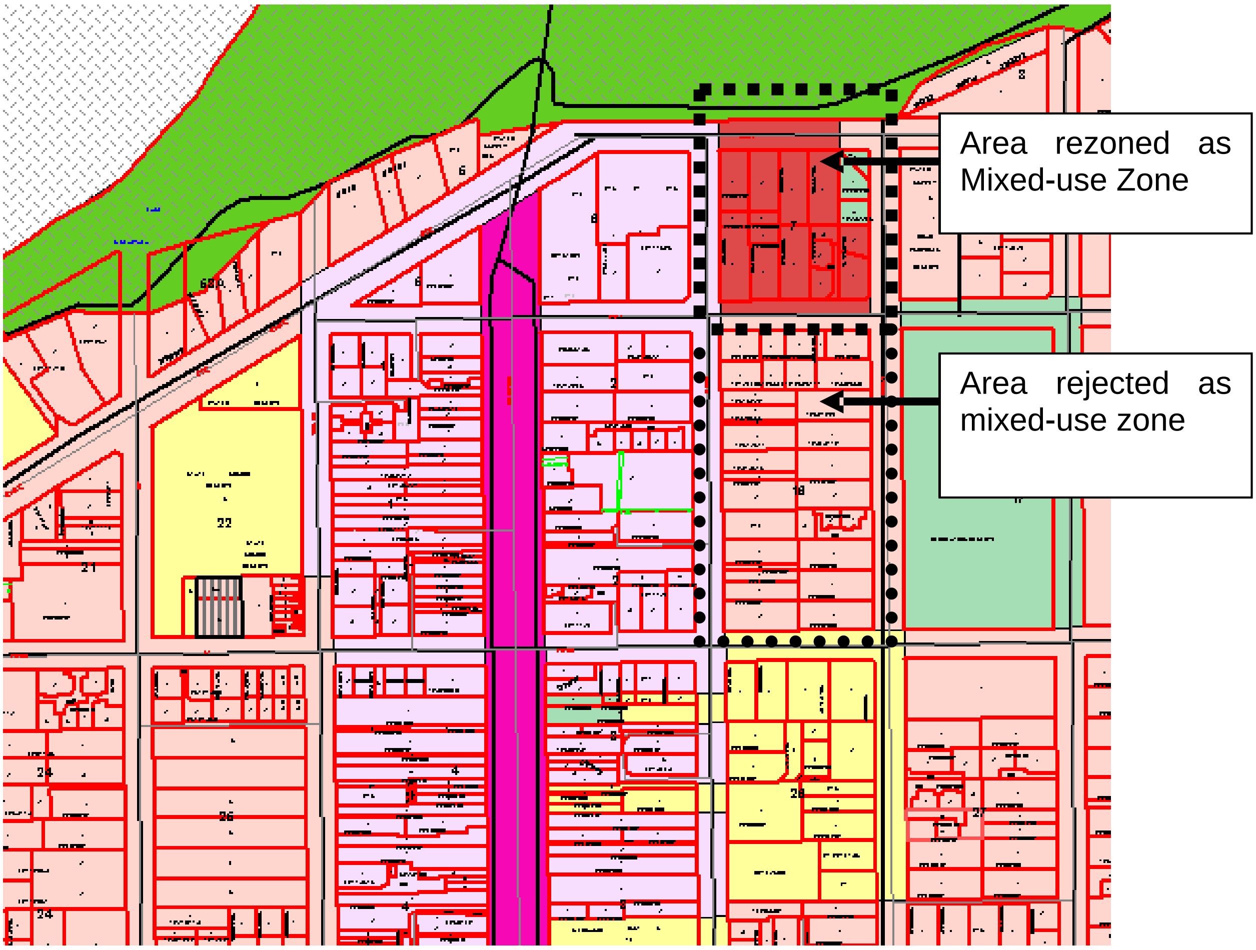
….our assessment suggests that there will need to be additional zoned land to accommodate the future needs of retailing in Yarrawonga.

….we are of the opinion that the best direction for new growth is to the east of the town centre:

- *Best to serve needs of population to the east;*
- *A location close to the lake will enable retail developments which are suited to meeting the needs of tourists….eg precincts for cafes and restaurants;*
- *This area presents an opportunity to build on the attraction of key retails outlets such as Target Country and the IGA; and*
- *There may be an opportunity for land reclamation, which would enable a better presentation of the town centre to the lake, including a relocated tourist information centre, public open space, and the potential for tourist-related commercial activity.*

Under the recently approved Amendment C13 to the Planning Scheme, an area of land to the east of the town centre was rezoned from Residential 1 to Mixed Use to facilitate new commercial opportunities. However, an extension to this area was excluded by the Panel considering Amendment C13 on the basis of the Essential Economics study:

"*The Panel agrees with submitters that the proposed Mixed Used Zone between Witt and Piper Streets has not been adequately justified and is at best premature. The area proposed for rezoning is well in excess of the medium term land area requirements suggested in the Urban Design Framework which poses a risk of an oversupply of land for commercial use and a more dispersed town centre".*



In addition, the proposal to rezone land at the southern end of Belmore Street was also excluded as:

"*The Panel recognises that there were no objections to the proposed Mixed Use Zone at the southern end of Belmore Street but comments that the Urban Design Framework recommendations did not provide clear justification for the rezoning. It is clear that the southern gateway to the town should be enhanced but the need for the extent of Mixed Use Zone proposed and the nature of 'complimentary' uses is less obvious. The proposed Mixed Use Zone presents a risk of extension of the business area to the south which would be contrary to one of the principles underlying the framework. There is also a risk that excessive rezoning would result in dispersed commercial development that could undermine objectives to enhance this town gateway".*

The Mixed Use Zone proclaimed in the Planning Scheme amendment is in an area heavily developed with dwellings, a caravan park and a cordial factory. Council has received an application for a multi storey apartment complex on the caravan park site.

The Mixed Use Zone is a residential zone which has the following purposes:

- *To provide for a range of residential, commercial, industrial and other uses which complement the mixed-use function of the locality; and*

- *To encourage residential development that respects the neighbourhood characters.*

This clearly indicates that the land is not suitable for pure retailing but is designed for residential development with some commercial elements. Typical examples of this type of development include multi-storey dwelling complexes with some shops, restaurants or cafes on the ground level.

Therefore despite the findings of the Amendment C13 Panel, there are limited opportunities for retail/commercial development in Yarrawonga with the possible exception of the following two sites:

- The premises occupied by Ross Lloyd Motors; and
- The premises occupied by Pigdons Motors.

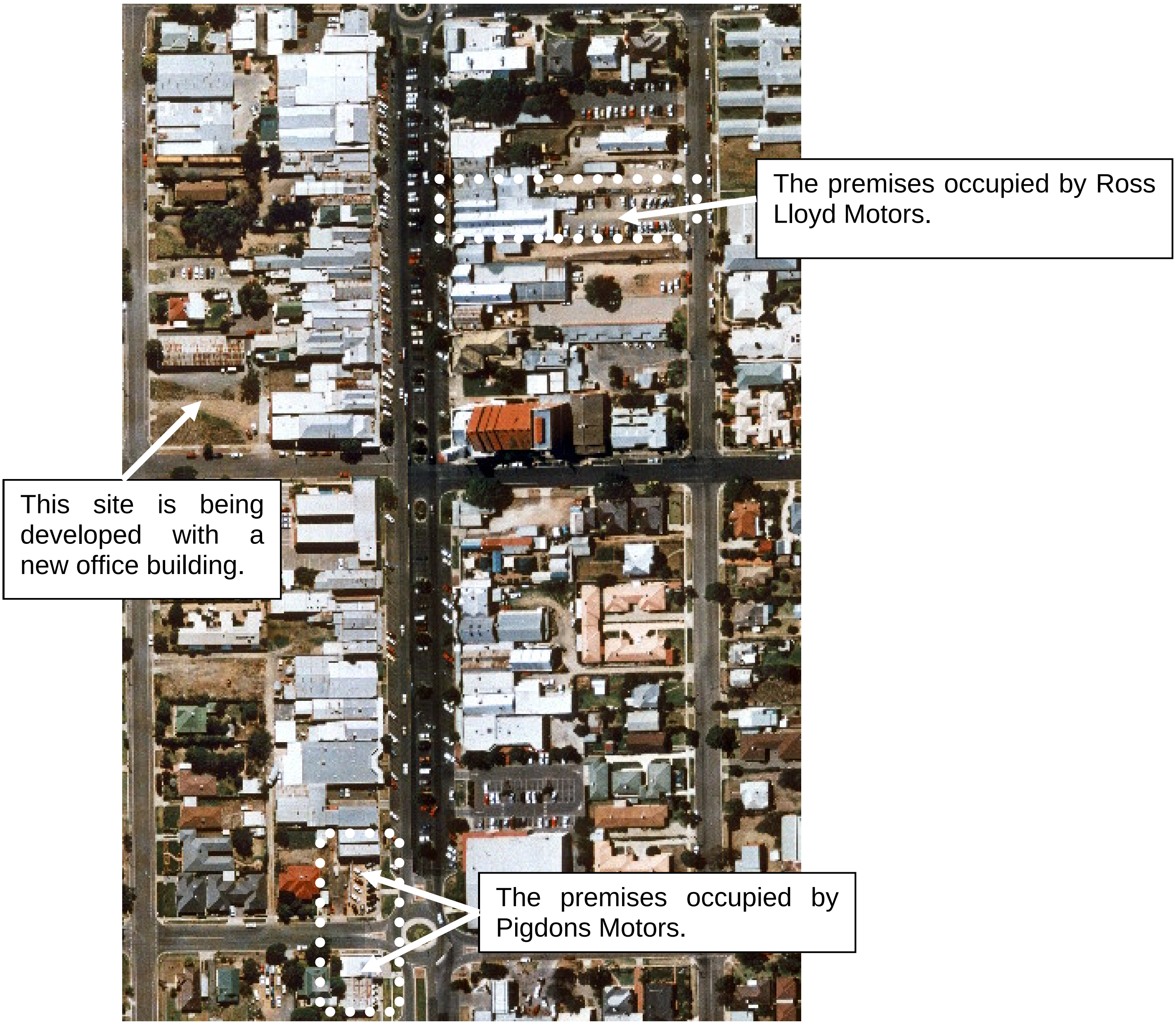
These two sites occupy prime retail land but they are used for lower order retail activity with opportunities to create a higher visual profile for these businesses in an alternative location. This would free up a substantial amount of retail/commercial floorspace in the main street.

The relocation of these businesses to a new “out-of-centre” precinct on the Murray Valley Highway would be more advantageous to the car dealerships as well as to the community.

These sites are therefore included in the recommendations of this report.

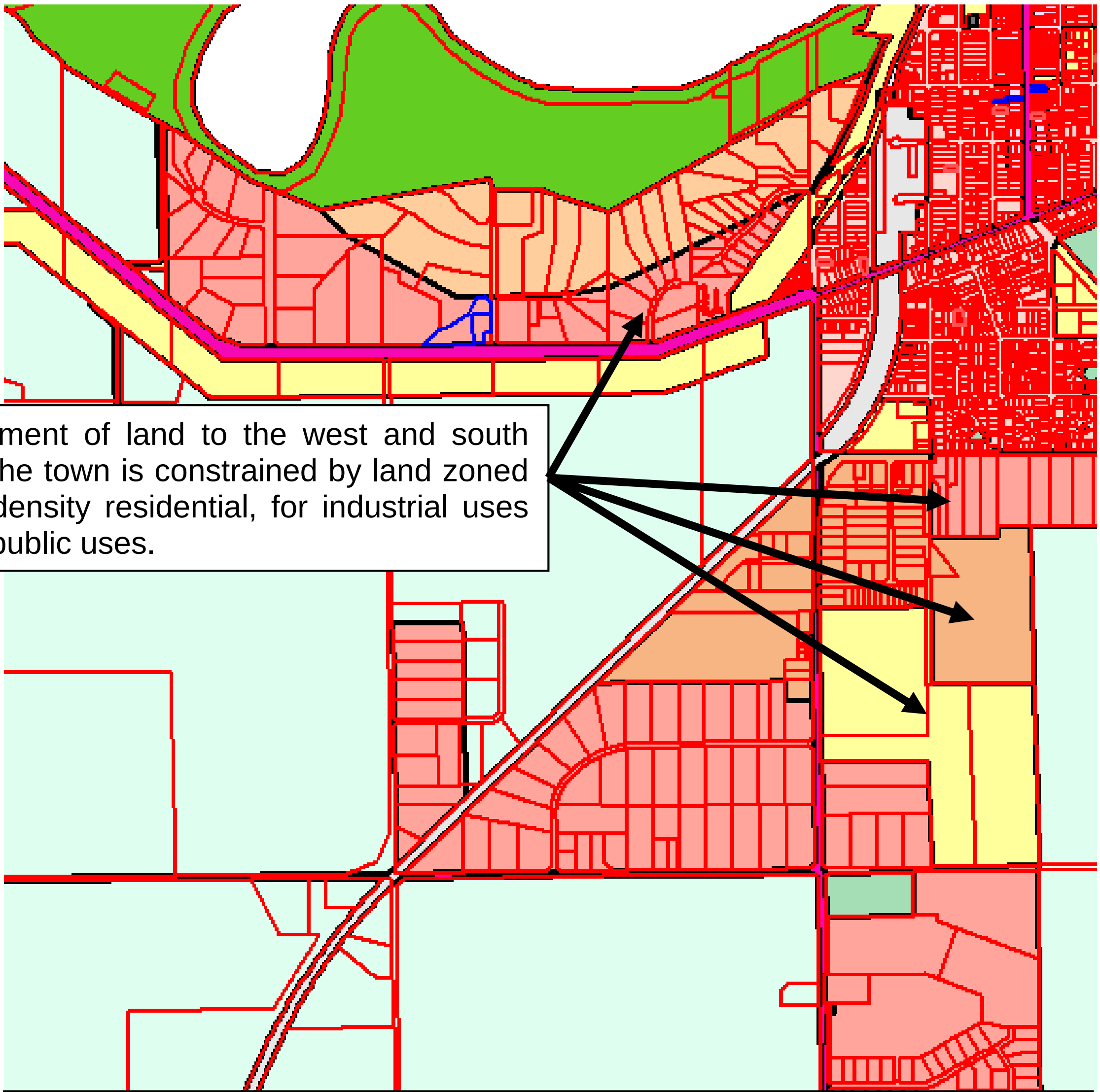
Should this opportunity be realised, the redevelopment of the two sites should be encouraged :

- The site occupied by Pigdons Motors lends itself to a commercial development of offices in a two storey complex.
- The Ross Lloyd Motors site lends itself to a retail complex with perhaps, an arcade leading to customer car parking at the rear.



Aside from these sites and with the knowledge that the mixed-use area is unlikely to be developed for retail purposes there are no real options but to look for new sites outside of the retail centre.

The following two diagrams are maps of zoned land around Yarrawonga.

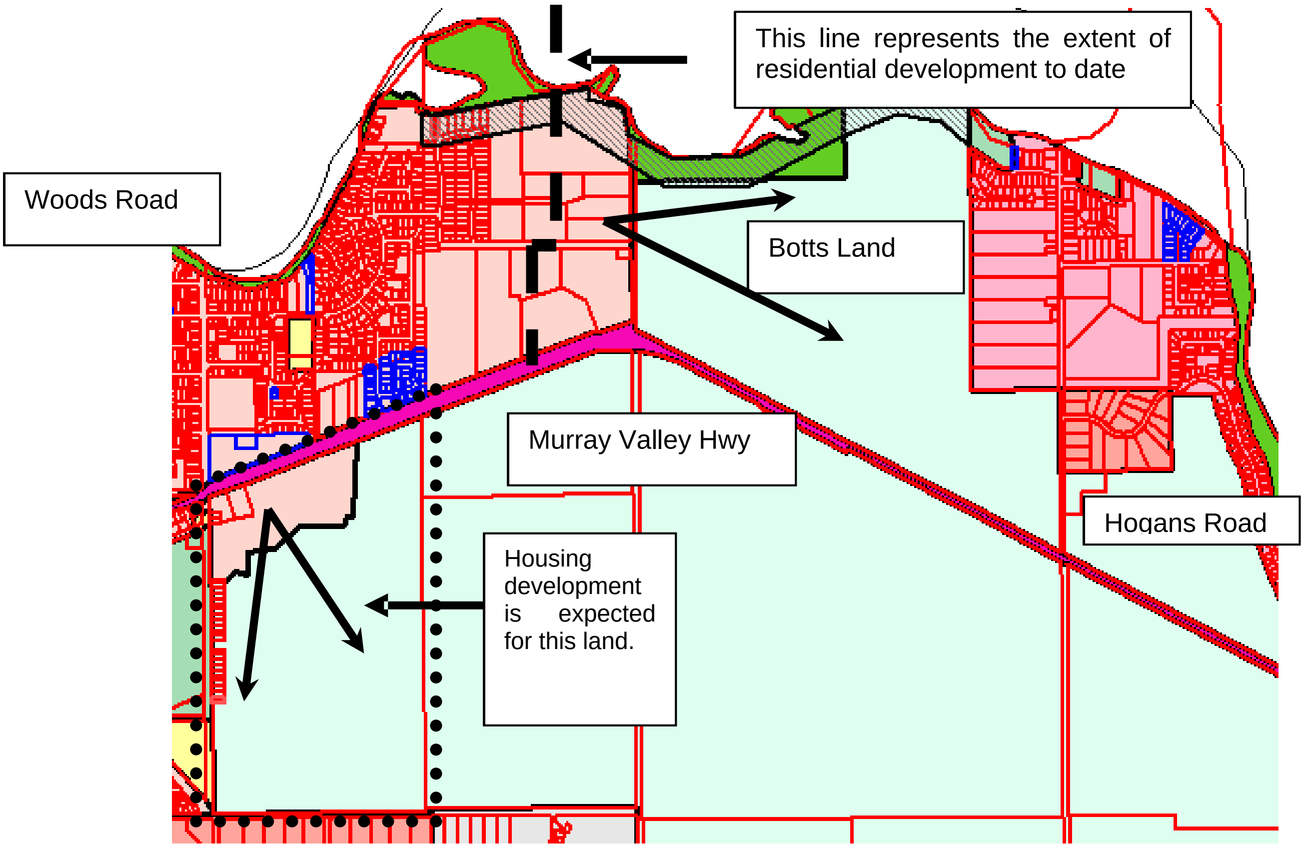


Development of land to the west and south east of the town is constrained by land zoned for low-density residential, for industrial uses and for public uses.

It is considered that expansion opportunities to the west and south east are limited.

There are few expansion options to the west and south east and major residential growth is occurring to the east of the town.

ANTICIPATED RESIDENTIAL GROWTH



Residential growth is expected to head in the direction of these arrows.

The geographic centre of Yarrawonga is rapidly moving eastwards as residential development activity takes place. Almost half of the land zoned for residential purposes has already been consumed. However, there is only one small general store in Hogans Road to service this growing community.

It is in this rapidly expanding area that the opportunity exists for the development of additional retail facilities.

Prior to identifying potential new areas for retail growth, it is important to state that the Belmore Street shopping and commercial strip should remain the prominent area because:

- it is the historic centre for retail and commercial activity in Yarrawonga;
- it provides for major retailing activities such as the supermarkets;
- it has other commercial elements such as solicitors, accountants, postal and other services;

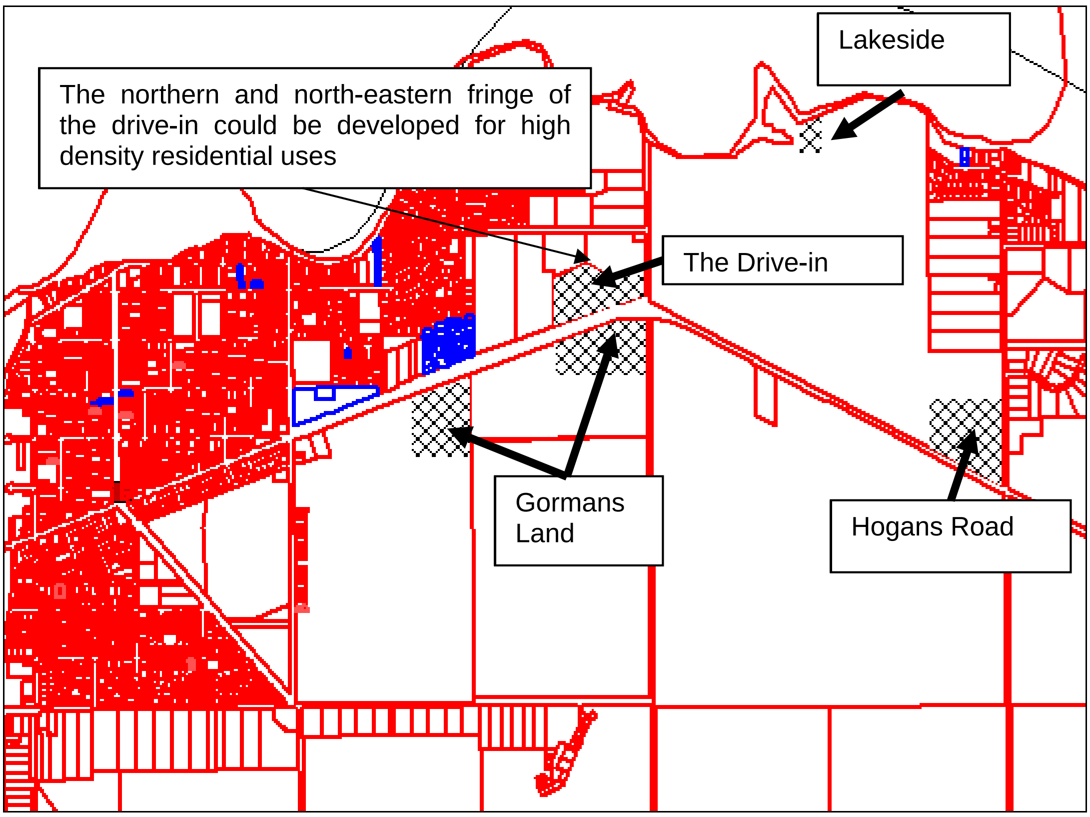
- it is close to the lake and the tourist areas so important to the town; and
- it services a catchment which extends into New South Wales and to the south and west of the town.

As a result, any future retail centres should be established with the following objectives:

- higher order retailing establishments requiring considerable land area are to be encouraged, eg home and hardware services;
- supermarket development should only occur where a demonstrated need exists;
- establishments servicing the daily requirements of residents in the local areas are encouraged;
- establishments requiring high visibility locations are encouraged;
- establishments serving the tourist industry are encouraged; and
- full provision of on-site car parking is required.

The plan below illustrates potential locations for retail/commercial facilities at:

- Gormans Land;
- The drive-in;
- Lakeside; and
- Hogans Road.



5.3.1 Gormans Land

There are two potential sites on the southern side of the Murray Valley Highway east of Woods Road. The land is zoned Rural and is farm land at present.

An Outline Development Plan for the residential development of Gormans Land has been submitted for approval. This Outline Development Plan foreshadows subdividing the land into 440 residential and low-density residential allotments with no areas set aside for retail or commercial purposes. Upwards of 1200 additional residents would be accommodated on this land.

The advantages of a retail and commercial centre on this land are:

- The land has a highway frontage;
- It is highly visible;
- It is within reasonable proximity to the town centre;
- It would provide for the day to day needs of the future population resident on Gormans land;
- All service and facilities are available;
- Sufficient land area exists to allow for the development of a retail centre complete with car parking and landscaping; and
- It could serve through traffic using the Murray Valley Highway.

There are no real disadvantages to this site save for the already prepared Outline Development Plan.

While there are two potential sites for a commercial/retail centre on Gormans Land and neither has priority over the other, the site opposite the drive-in may have some additional benefits if the commercial/retail centre spans both sides of the Murray Valley Highway.

A rezoning to a business zone would be required.

5.3.2 The Drive-in

The Drive-In site is located on the northern side of the Murray Valley Highway, 1.5 kilometres form Woods Road. It is zoned residential and is developed with an un-used drive-in theatre used on a regular basis for a Sunday market and the adjacent vineyard.

The advantages of this site are:

- It is already in a form of commercial use, although a rezoning would be required;
- Being on the north side of the highway, it could be expected to serve residents on both sides of the highway;

- It is highly visible;
- All services and facilities are available;
- It is better placed to serve the existing community in the Rosemary Court area;
- Sufficient land area exists to allow for the development of a retail centre complete with car parking and landscaping;
- It could serve through traffic using the Murray Valley Highway; and
- Access to and from the Highway could be facilitated by using the existing Botts Road/Highway intersection.

Again there are no real disadvantages of this site.

Surrounding land use is or will become residential in future years and that may be seen as an opportunity for the development of this land.

The Murray Valley Highway frontage could be developed for bulky goods retailing or motor vehicle retailing with the land to the immediate north developed for high density residential living (ie. multi-storey apartment buildings). Land to the south could be developed as a commercial/retail centre which would service the high density residential neighbourhood.

5.3.3 Lakeside

This site is located on Botts land on the southern shoreline of Lake Mulwala. It is about three kilometres from Woods Road is zoned rural and there is no road access as yet.

This site has been suggested because Botts land will be developed for residential purposes at some stage in the near future.

Residential development of Botts land will most likely focus on the lake foreshore and there will be a need to provide for the daily requirements of residents to the west and east with the potential to serve the tourist industry as well. As a result, retail activity on this land could include cafes restaurants and retail outlets serving the tourist trade. Short-term accommodation establishments could also be attracted to this area.

The advantages of this site are:

- It captures the benefits of a Lake Mulwala frontage;
- It would serve a different market sector;
- There would be a lessor impact on the main retail and commercial area;
- It would be easier to attract tourist focused establishments; and
- It could be developed along with a scenic drive and walking track along the southern shoreline of the Lake.

The disadvantages are:

- It is located over one kilometre from the Murray Valley Highway and more than three kilometres from Woods Road;
- There is no direct road access at this stage, although Linthorpe Drive could be extended; and
- Services and infrastructure would have to be extended to the site.

It is considered that a retail/commercial centre targeted towards the leisure, recreation and tourist market would be beneficial on this site.

5.3.4 Hogans Road

Located on the northern side of the Murray Valley Highway three kilometres form Woods Road. It is zoned rural and is used for farming purposes at present.

The advantages of this site are:

- It has a highway frontage;
- It is highly visible;
- All services and facilities are available;
- It is better placed to serve the existing community in the Rosemary Court area;
- Sufficient land area exists to allow for the development of a retail centre complete with car parking and landscaping;
- It could serve through traffic using the Murray Valley Highway; and
- Access to and from the Highway could be facilitated by using the existing Hogans Road/Highway intersection.

Again there are no real disadvantages of this site save for the distance from the town and the residential areas to the west.

5.3.5 Preferred Option

It is suggested that any new retail/commercial centre should have the following attributes:

- It should be within reasonable proximity of the town centre;
- It should be visible;
- It should have good access;
- Sufficient land should exist such that a centre in landscaped surroundings could be developed;
- All service should be available;
- There should be a residential population in the immediate vicinity; and
- It should not detract from the main retail and commercial centre.

It is considered that the Hogans Road option does not meet these attributes as it is some distance from the town with no residential development to the east or south.

The drive-in site has these characteristics but there is concern about whether or not sufficient land area exists if the vineyard is not included.

The development of a centre on Gormans Land meets all of the desired attributes for a new residential/commercial area.

A commercial/retail centre could be developed around the Botts Road/Murray Valley Highway intersection with bulky goods or motor vehicle retailing on one side of the highway and a shopping centre on the other. The development of a high density residential neighbourhood on the fringe of the drive-in site would add an extra dimension by providing a reasonably large immediate population in a compact neighbourhood.

With regard to Lakeside, a centre in this location may be best aimed at servicing the leisure/recreation and tourist sectors of the market particularly because of the attraction of its proximity to Lake Mulwala.

This area would best be developed with boutique type shops, cafes and restaurants and perhaps, high quality short-term accommodation.

The recommended strategy therefore, has two focuses:

- Development of a retail centre on land centred on the Botts Road/Murray Valley Highway intersection, and
- Development of a boutique centre on Botts land.

5.3.6 Types of Retail Establishments Required

The review of land in the industrial zone revealed there are few establishments supplying the needs of the residential construction industry and few providing for the needs of new homes buyers and or existing residents planning extensions or landscaping.

Establishments such as lighting shops, paint and plastering supplies, landscaping and outdoor recreation supplies all appear to be lacking. In addition, while the retail analysis revealed there are 12 shops in the domestic hardware and homeware retailing sector, in reality there is only one major hardware store which does not carry a large range of goods.

These types of establishments are required to service Yarrawonga.
It is recommended, that a marketing program be initiated with a view to attracting the following types of establishments to locate into Yarrawonga:

- Hardware and homeware;

- Lighting shops;
- Garden and landscape supplies;
- Builders hardware;
- Plumbing supplies;
- Wood and timber supplies;
- Tile and tiling supplies;
- Window coverings; and
- Nursery and nursery supplies.

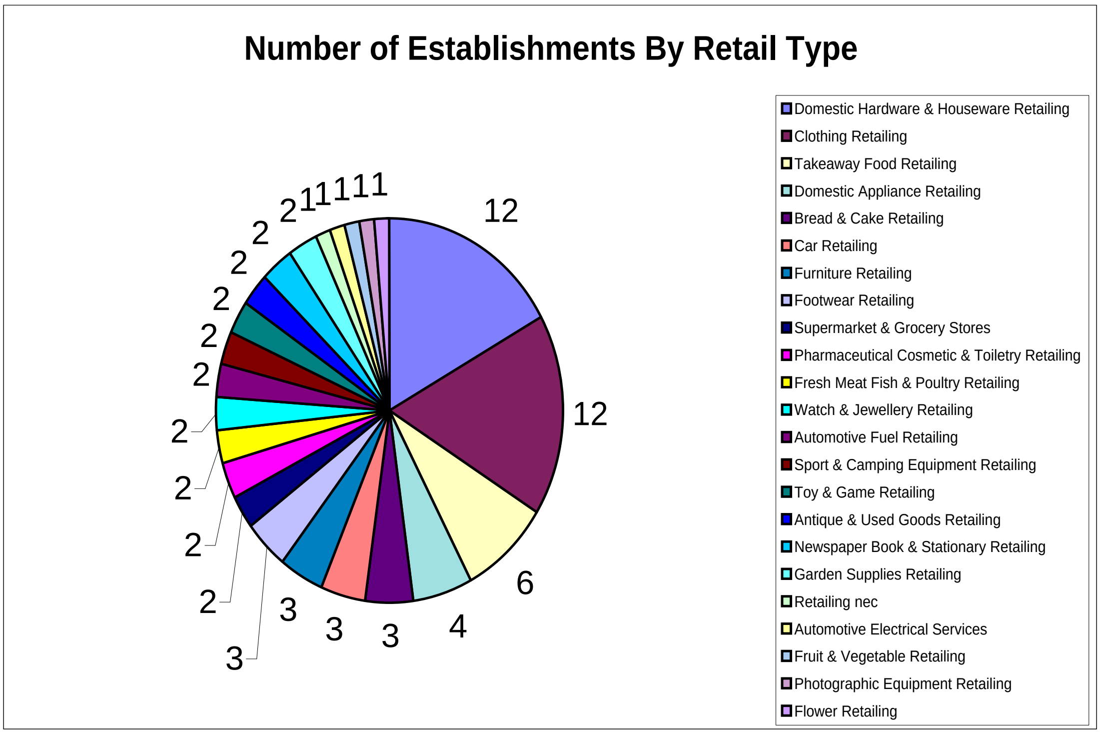
5.4 Analysis of Floorspace and Employment Survey

5.4.1 Retail Analysis

As noted previously, there are 71 establishments operating in the retail sector employ 503 people (213 full time and 290 part time) occupying 25,134m^2 of floorspace.

The average number of employees is seven with relatively small average floor area of 354m^2.

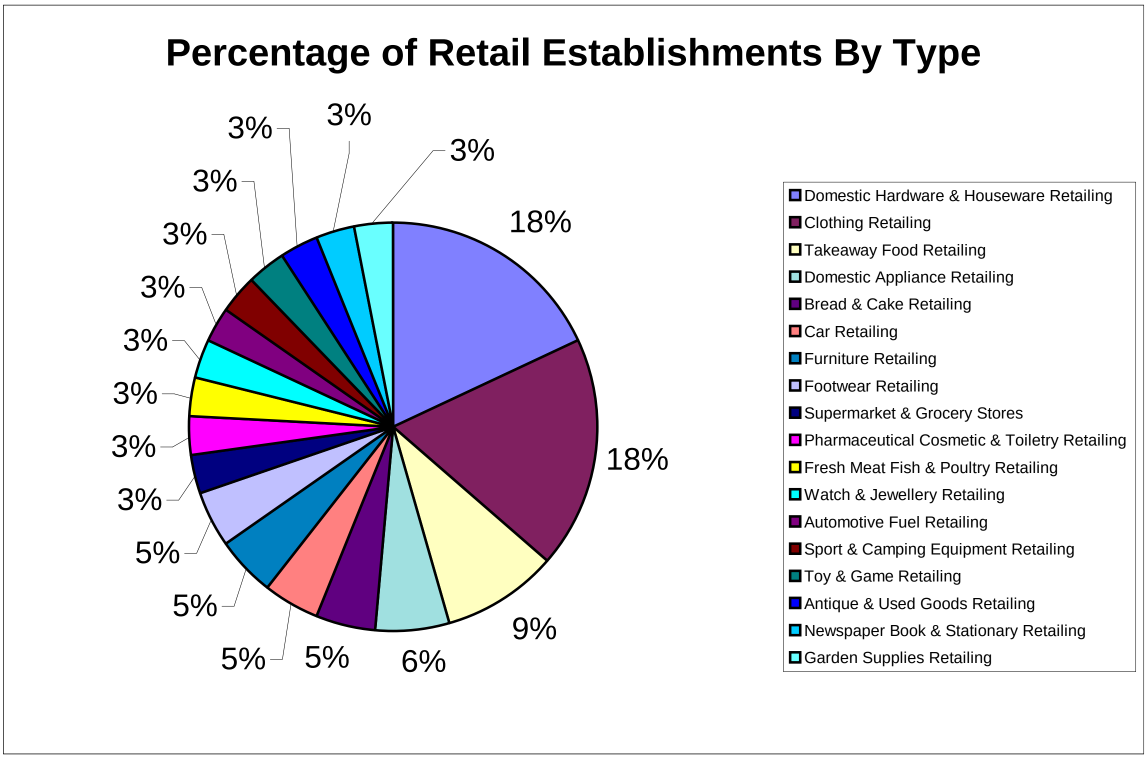
There are 23 different types of retail activity carried out as shown in the following graph.



The most common establishments are in the domestic hardware and houseware retailing category and clothing retailing. These establishments are primarily gift shops, hardware shops, discount stores and small clothing stores.

Together, they represent 33.8 percent of all retail establishments.

Take away food shops are the next most common form with 8.5 percent of total retail outlets (Note: Cafes and restaurants are included in the accommodation, Cafes and Restaurants category which is addressed separately).



The town is relatively well serviced with establishments in these three categories. There are only one or two establishments within each of the other retail types.

The type of employment in the retailing sector is skewed towards part time employment.

The supermarkets are the largest employers with 32 percent of total employment (56 percent part time).

In the clothing retail trade, 9.5 percent of employees are employed (66 percent part time).

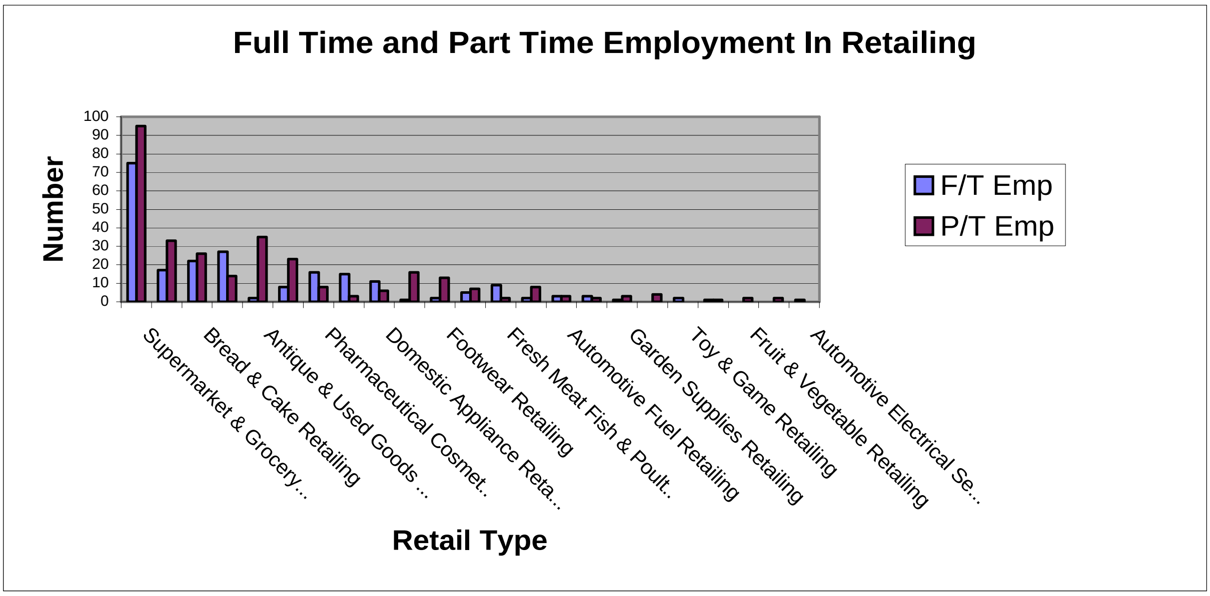
Similarly nine percent of employees are employed within bread and cake retailing (three shops) with 54 percent of these employees part time.

The next major categories of retailing in employment terms are domestic hardware and houseware retailing and antique and used goods retailing. With respect to antique and used goods retailing, there are 37 people categorised as employed however, it is noted that the majority of these people are volunteers who work in the opportunity shops.

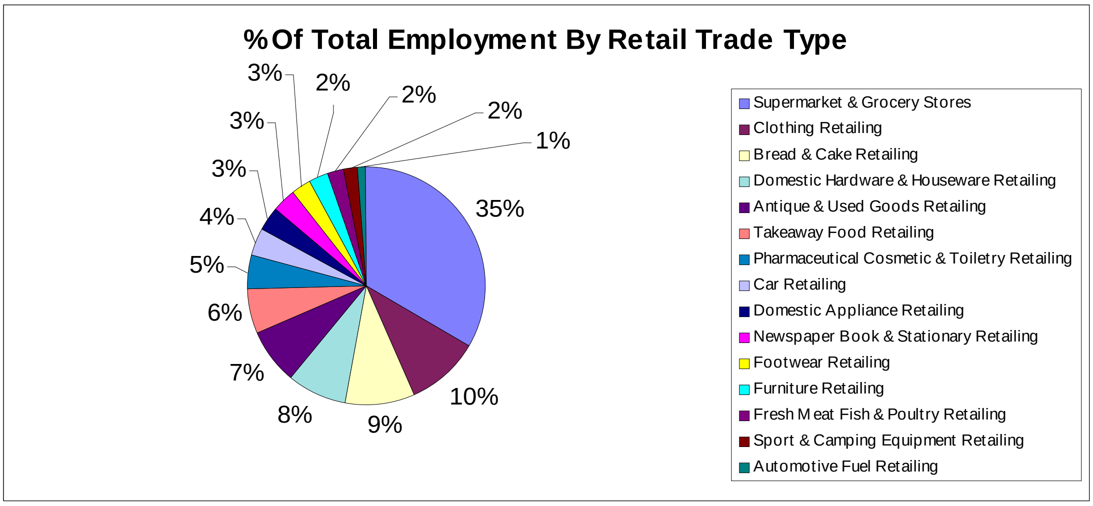
There are 5.9 percent of retail staff employed in take away food premises with 4.5 percent in pharmaceutical cosmetic and toiletry retailing.

Type	Full Time Employment	Part Time Employment	Total Employment	Percentage
Supermarket and Grocery Stores	75	95	170	32.1
Clothing Retailing	17	33	50	9.5
Bread and Cake Retailing	22	26	48	9.1
Domestic Hardware and Houseware Retailing	27	14	41	7.8
Antique and Used Goods Retailing	2	35	37	7.0
Takeaway Food Retailing	8	23	31	5.9
Pharmaceutical Cosmetic and Toiletry Retailing	16	8	24	4.5
Car Retailing	15	3	18	3.4
Domestic Appliance Retailing	11	6	17	3.2
Newspaper Book and Stationary Retailing	1	16	17	3.2
Footwear Retailing	2	13	15	2.8
Furniture Retailing	5	7	12	2.3
Fresh Meat Fish and Poultry Retailing	9	2	11	2.1
Sport and Camping Equipment Retailing	2	8	10	1.9
Automotive Fuel Retailing	3	3	6	1.1
Watch and Jewellery Retailing	3	2	5	0.9
Garden Supplies Retailing	1	3	4	0.8
Photographic Equipment Retailing	0	4	4	0.8
Toy and Game Retailing	2	0	2	0.4
Retailing nec	1	1	2	0.4
Fruit and Vegetable Retailing	0	2	2	0.4
Flower Retailing	0	2	2	0.4
Automotive Electrical Services	1	0	1	0.2
Total	223	306	529	100.0

It is interesting to note that 94 percent of people employed on a part time basis in the newspaper book and stationery retailing sector. This high number may suggest that proprietors of these establishments did not include themselves as employees when the survey was being undertaken.



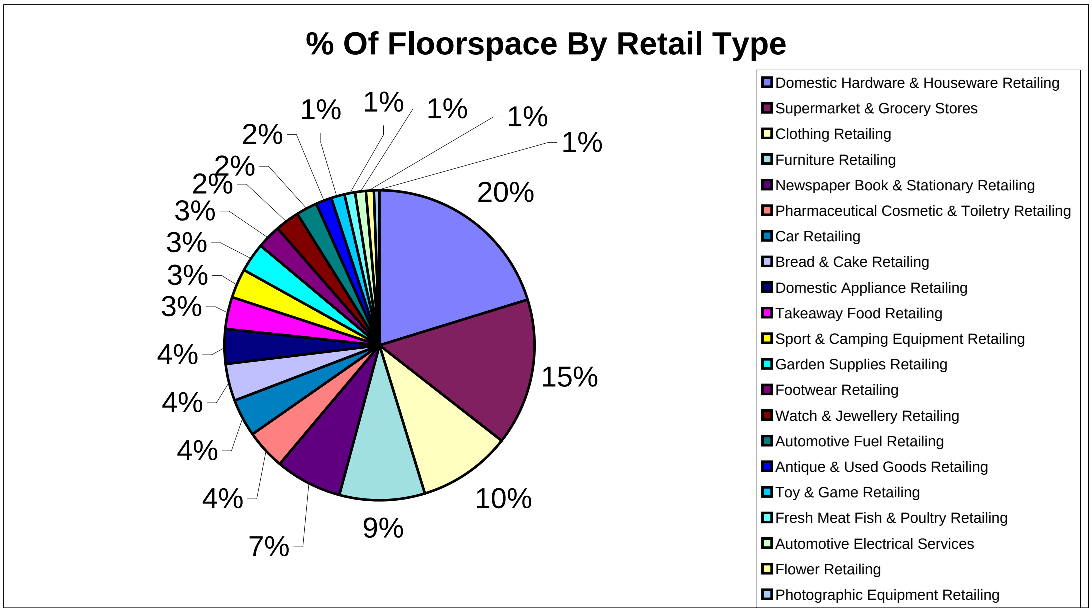
In summary, employment tends to be more in the food retailing, hardware and houseware and clothing retailing sectors and 58 percent of total retail employment is part time. Employment numbers fluctuate on a seasonal basis with more employment opportunities available in the tourist season than over the winter months.



Floorspace occupied for retail purposes equates to 25,134m^2 with 20 percent occupied by hardware and houseware retailing and 15 percent by the supermarkets. Both of these activities require large amounts of floorspace to display the goods on offer.

Clothing shops account for 10 percent of total retail floor area which is relatively significant, with nine percent occupied by furniture retailing.

The remaining 54 percent of retail floorspace is spread across several types of retailing with fruit and vegetable retailing occupying the least amount of floorspace.



Type	Floor Area	Percentage
Domestic Hardware and Houseware Retailing	5077	20.2
Supermarket and Grocery Stores	3776	15.0
Clothing Retailing	2470	9.8
Furniture Retailing	2190	8.7
Newspaper Book and Stationary Retailing	1732	6.9
Pharmaceutical Cosmetic and Toiletry Retailing	1049	4.2
Car Retailing	1001	4.0
Bread and Cake Retailing	928	3.7
Domestic Appliance Retailing	924	3.7
Takeaway Food Retailing	838	3.3
Sport and Camping Equipment Retailing	759	3.0
Garden Supplies Retailing	743	3.0
Footwear Retailing	661	2.6
Watch and Jewellery Retailing	586	2.3
Automotive Fuel Retailing	556	2.2
Antique and Used Goods Retailing	426	1.7
Toy and Game Retailing	340	1.4
Fresh Meat Fish and Poultry Retailing	331	1.3
Automotive Electrical Services	226	0.9
Flower Retailing	220	0.9
Photographic Equipment Retailing	156	0.6
Retailing nec	76	0.3

Fruit and Vegetable Retailing	69	0.3

In terms of floorspace requirements, Essential Economics report predicted that there was a potential for 2,040m^2 of additional floorspace to serve trade area residents and a further 170m^2 to serve tourist needs.

The additional floorspace would comprise 720m^2 for food floorspace, 1,180m^2 in non-food floorspace and 31m^2 in retail services.

The report notes, "*the additional 2,210m^2 of retail floorspace will require significant new land area when allowance is made for car parking, access, landscaping and floorspace not included as leasable floorspace*".

This additional area was estimated as follows:

	Food	**Non-food**	**services**	**Total**
Total retail potential	720m^2	1180m^2	310m^2	2210m^2
Car parking (@ 5 spaces.100m^2 x30m^2)	1080m^2	1770m^2	465m^2	3315m^2
Landscaping, access etc	180m^2	295m^2	78m^2	553m^2
Total land area required	1980m^2	3250m^2	850m^2	6080m^2

That is, 6,080m^2 of land would need to be made available to accommodate the predicted floorspace requirements.

Essential Economics also made the following conclusions which are valid for this study.

…on the basis of the existing supply of office space in Yarrawonga we estimate that the requirement for new office and other floorspace is unlikely to be substantial – and probably no more than an additional 500m^2.

….it is likely that the additional floorspace requirement will be accommodated in the form of small scale retail premises, rather than the introduction of single large premises.

….new shops and restaurants etc are likely to be in the order of 100-250m^2 each although there may be demand for larger non-food outlets.

…most of the new shops will want to locate in a central location…although there will be opportunities for shops with a tourist focus to locate close to tourist attractions.

…there is considerable underutilised land in the retail area…new floorspace may make better use of this

….Belmore street frontage is preferable to shops at the rear…

Since 2002, 2158m^2 of new retail floorspace has been approved for the retail centre of Yarrawonga. This amount is slightly less than the amount predicted to be required by Essential Economics by the year 2011 clearly illustrating that the demand exists but not the supply of land to cater for it.

The table below illustrates how the floorspace in the retail category is used with the great majority of the space being used for shop area. The table also illustrates, the land area upon which the retailing activity is carried out.

Space Type	Land Area	Floor Area	Percentage Occupied Land Area
Shop	32552	21015	64.6
Shop and service station	5058	556	11.0
Showroom	2120	1715	80.9
Café	1805	700	38.8
Showroom and workshop	809	417	51.5
Motor vehicle Display	768		
Outdoor Display Area	505	505	100.0
Workshop	226	226	100.0
Total	43843	25134	57.3

Significant areas of land are already developed for retail purposes. The estimates developed by Essential Economics of new retail floorspace and associated land area requirements indicate that 36 percent of the land area is required for retail floorspace with 64 percent required for car parking, landscaping and access etc. The figures above indicate that at present, 57 percent of the retail land area is not developed which is less than the 64 percent identified by Essential Economics as being required for landscaping, car parking and access.

This indicates there is no available land which could be developed for new retail floorspace unless car parking, access and landscaping were not required.

While Essential Economics indicate that there is *"considerable underutilized land in the retail area"* in reality, there is very little available land that can be developed.

5.4.2 Accommodation, Cafes and Restaurants

Accommodation, Cafes and Restaurants are the next most common type of establishment in the central area accounting for nine percent (13 establishments) of all establishments.

The average number of employees is nine with an average floorspace of 570m^2 per establishment.

The number of establishments in the accommodation category relate to four hotels and two motels in the commercial area.

The remaining establishments are either cafes or restaurants. Takeaway food premises are not included within this category as they are in the retail sector.

The accommodation, cafes and restaurants sector employs 10 percent of the total employment within commercial district and occupies 16 percent of all floorspace.

Employment in this sector is mainly part time with 83 percent of the total sector employment being part time.

Type	No. of Businesses	Space Type	Full Time Employment	Part Time Employment	Total Employment	Land Area	Floor Area
Accommodation	6	Motel Units	12	48	60	8399	5375
Cafes and Restaurants	7	Hotel	7	46	53	2973	2042

It would appear from the survey, that Yarrawonga is reasonably well serviced with establishments within this category.

5.4.2.1 Survey of Accommodation

At the same time as the floorspace and employment survey was being carried out, a telephone survey was conducted of all accommodation establishments in Yarrawonga and Mulwala.

Motels

Number	Rooms	Beds	Full Time Employment	Part Time Employment
15	364	1129	36	55

Caravan Parks

Number	Caravans	Camp Sites	Cabins	Beds	Full Time Employment	Part Time Employment
10	904	274	129	720	17	7

Holiday Units

Number	Rooms	Beds	Full Time Employment	Part Time Employment
7	47	218	6	5

There is a reasonable supply of visitor accommodation and the sector employs more than 125 people. There are no five star accommodation establishments within the area. While there is a reasonable supply of accommodation, there is limited supply of up-market establishments to service the higher end of the accommodation sector.

It is recommended that council initiate a program to attract one or more five star accommodation complexes to Yarrawonga. This program should draw on Yarrawonga's strengths as well as the new opportunities provided by the airport and the potential release of lakefront land to the east of Yarrawonga.

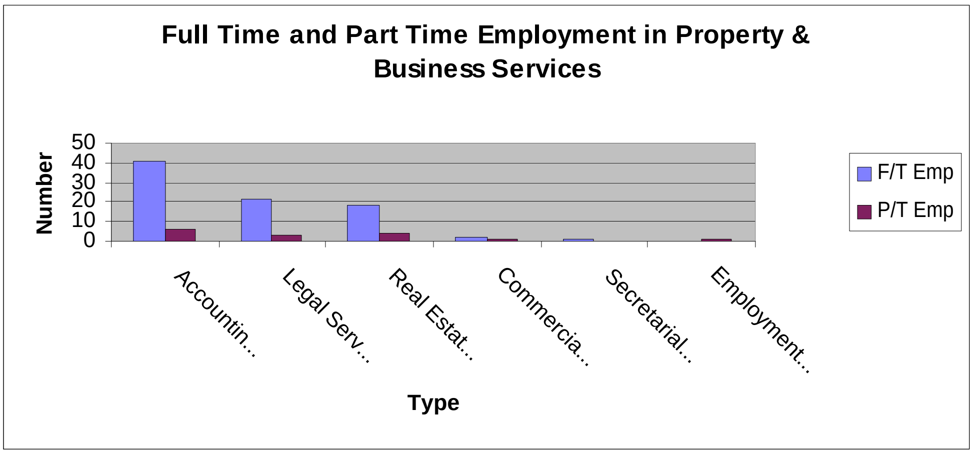
5.4.3 Property and Business Services

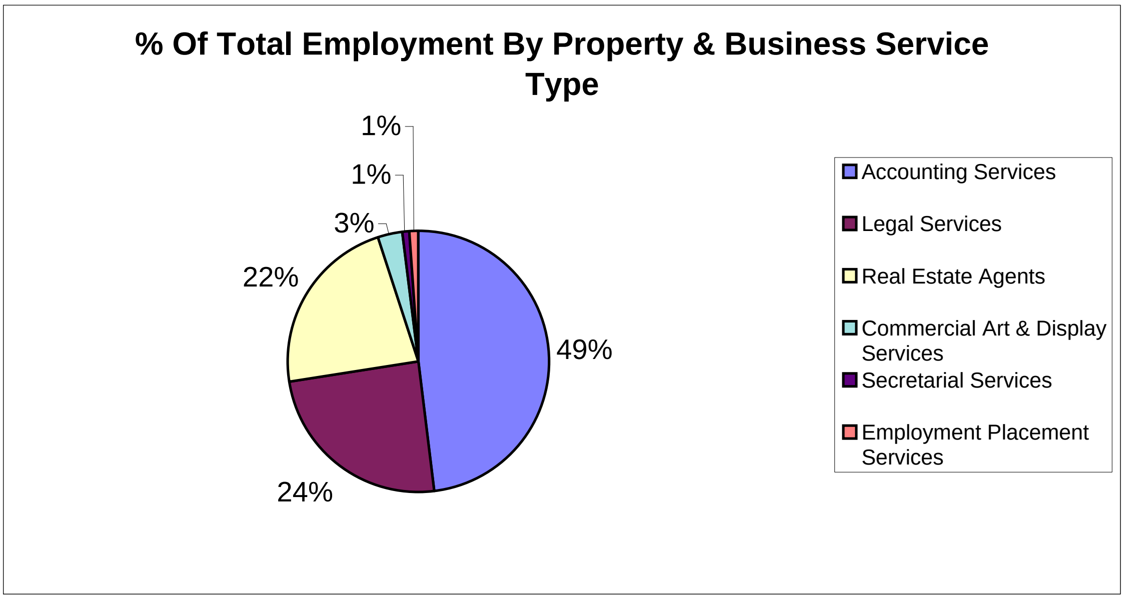
Property and business services establishments include solicitors, accountants, real estate agents and the like.

There were 13 establishments in this category which represents nine percent of all establishments in the commercial centre. They occupy 2491m^2 of floorspace and employ 98 people. The average floor area is 191m^2 with an average of seven people being employed per establishment.

Type	No. Of Businesses	Space Type	Full Time Employment	Part Time Employment	Land Area	Floor Area
Real Estate Agents	5	Office	18	4	657	533
Legal Services	2	Office	21	3	1316	560
Accounting Services	3	Office	41	6	976	595
Commercial Art and Display Services	1	Workshop	2	1	1008	640
Employment Placement Services	1	Office	0	1	91	154
Secretarial Services	1	Office	1	0	9	9
Total	**13**		**83**	**15**	**4057**	**2491**

The most common type of establishments are real estate offices. There are only two legal service establishments although they account for 24 percent of employment.





The following table and graph illustrate how much floorspace is occupied within each of the property and business service categories.

Type	Floor Area	Percentage
Commercial Art and Display Services	640	25.7
Accounting Services	595	23.9
Legal Services	560	22.5
Real Estate Agents	533	21.4
Employment Placement Services	154	6.2
Secretarial Services	9	0.4
Total	**2491**	**100**

With the exception of commercial art and display services (sign writer), floorspace occupied is relatively small.

The average real estate office occupies only 107m^2 of floorspace while the accountancy service occupies on average only 190m^2.

The smaller floor areas result from the space primarily being used as office space rather than display or sales areas.

All of the establishments are located on the ground floor in the retailing centre of Yarrawonga. Considering the lack of retail floorspace, it would be preferable for these types of establishments to be located at first floor level or in buildings which front surrounding streets rather than Belmore Street.

It is recommended that in future applications for development in and around Belmore Street, that offices be encouraged at first floor level and discouraged from establishing at ground floor level in Belmore Street.

5.4.4 Health and Community Services

This category covers medical and/or welfare services and veterinary care.

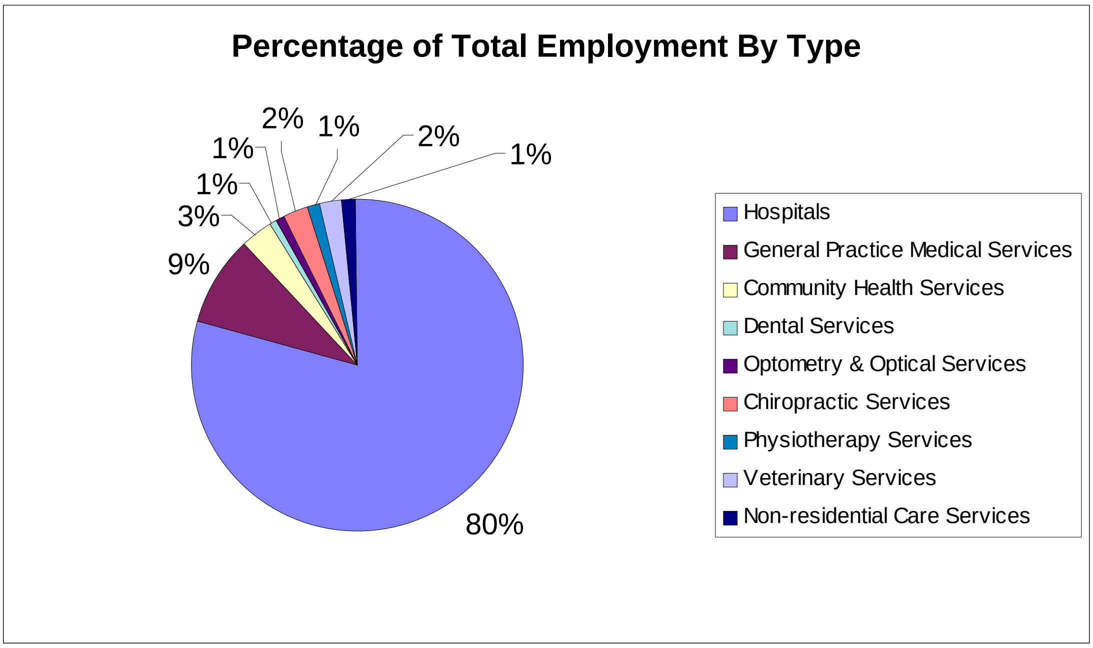
There are 12 establishments in this category which represent nine percent of all establishments.

They occupy 4,411m^2 of floorspace and employ 294 people. The average establishment occupies 367m^2.

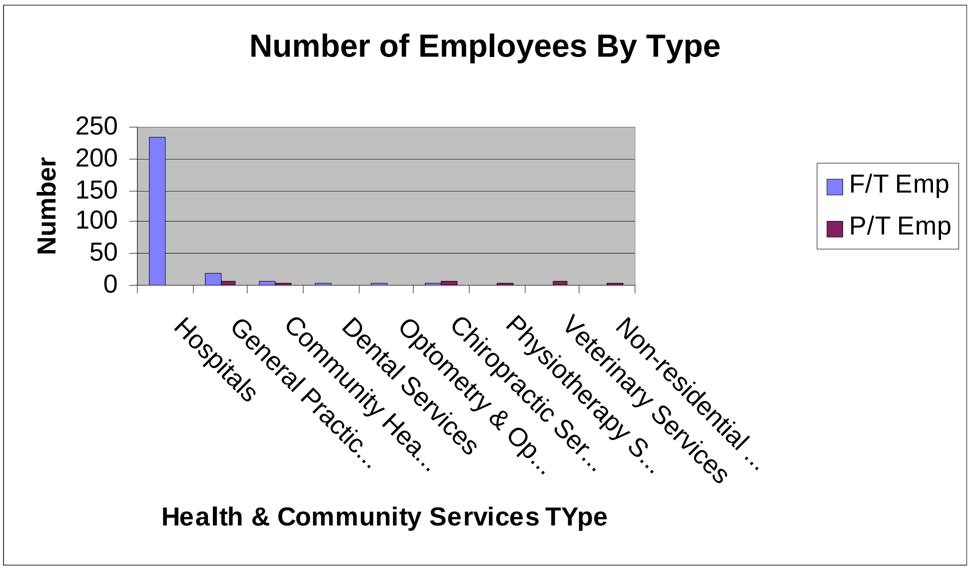
The most significant establishment is the hospital. While not in the retail centre, the hospital was included in the survey as it is a major employer and it occupies the largest amount of floorspace in this category. The medical clinic in Woods Road was included for the same reason.

Hospital management have indicated they plan to rebuild on the same site with fewer numbers of medical beds and a greater number of aged care beds. Employment in this sector is primarily full time.

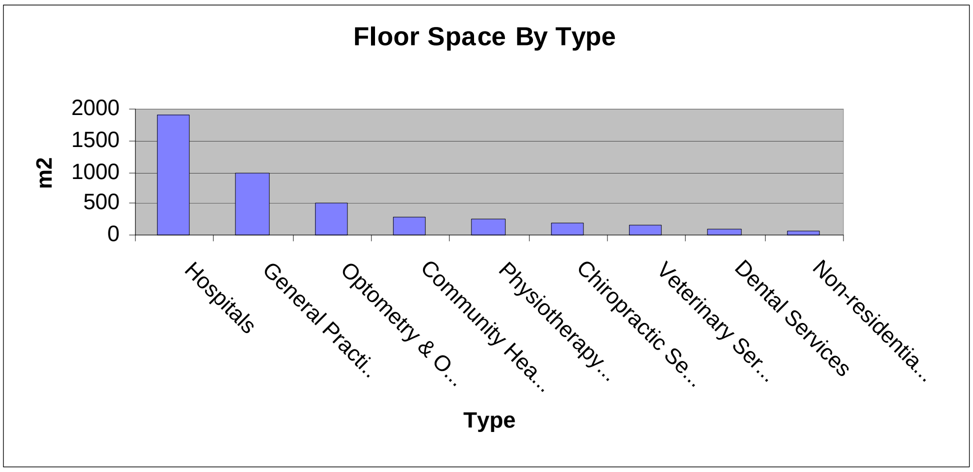
Type	No. of Businesses	Space Type	Full Time Employment	Part Time Employment	Land Area	Floorspace
Hospitals	1	Hospitals	233	0	4791	1900
General Practice Medical Services	2	Medical Rooms	19	7	2673	992
Dental Services	1	Dental Surgery	2	0	85	85
Optometry and Optical Services	1	Office	2	1	494	494
Community Health Services	1	Office	7	2	280	280
Physiotherapy Services	2	Consulting Rooms	1	2	333	254
Chiropractic Services	2	Office	2	5	175	175
Veterinary Services	1	Office	0	7	154	154
Non-residential Care Services	1	Office	0	4	77	77
Total	12		266	28	9062	4411

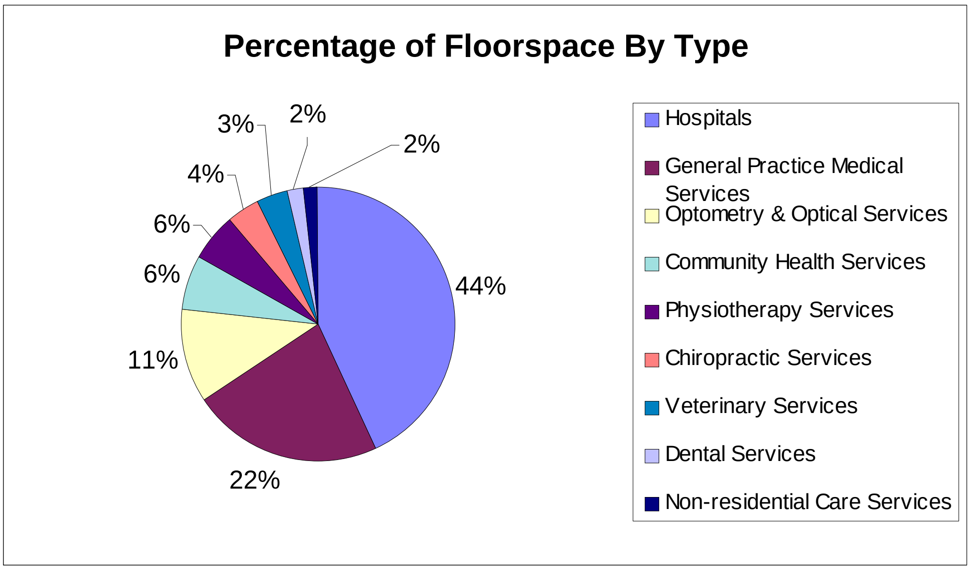


Type	Full Time Employment	Part Time Employment	Total Employment	Percentage
Hospitals	233	0	233	79.3
General Practice Medical Services	19	7	26	8.8
Community Health Services	7	2	9	3.1
Dental Services	2	0	2	0.7
Optometry and Optical Services	2	1	3	1.0
Chiropractic Services	2	5	7	2.4
Physiotherapy Services	1	2	3	1.0
Veterinary Services	0	7	7	2.4
Non-residential Care Services	0	4	4	1.4
Total	266	28	294	100



While the hospital has the greatest amount of floorspace, the medical clinics also occupy a reasonable amount (22 percent of sector floorspace).





The remaining establishments are generally smaller in size.

While the community appears reasonably well serviced with these types of establishments, anecdotal evidence indicates that there appears to be a shortage of general practitioners and there is a concern about the high turn-over of practitioners. It appears that junior doctors seek a 12 month placement in the country and then return to the metropolitan area.

With a high aged population, it is important there is a good supply of doctors. The perceived shortage of doctors and the inability to establish a relationship is a concern.

It is recommended that council write to the federal and state government expressing concern about the availability of general practitioners in rural towns and ask the governments to initiate programs to overcome this.

5.4.5 Personal and Other Services

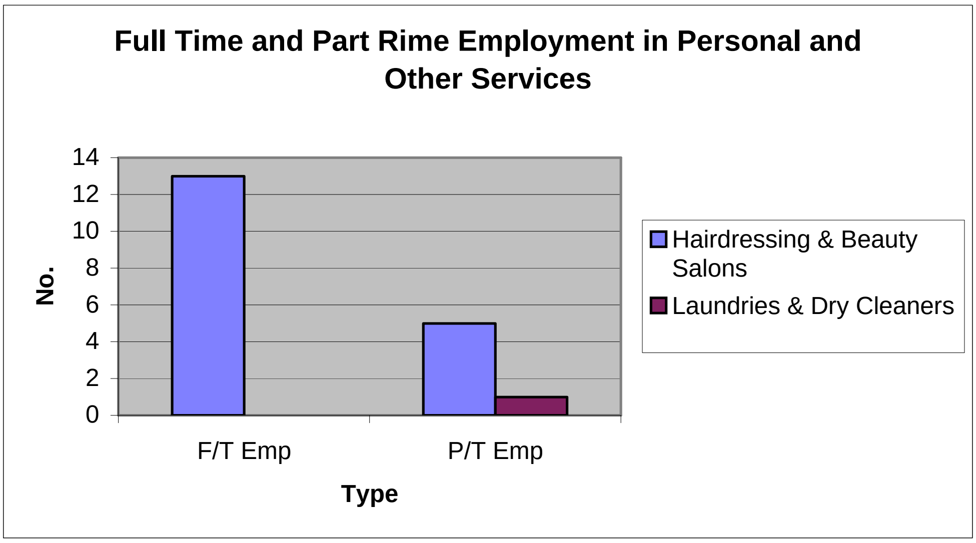
There are only two types of establishments within this category: a dry cleaning shop and 10 hairdressers.

This sector employs 18 people, occupies 1,917m^2 of floorspace and represents seven percent of total establishments in the retail centre.

The average employees per establishment is two people and the average floorspace per establishment is 172m^2.

Type	No. of Businesses	Space Type	Full Time Employment	Part Time Employment	Total Employment	Land Area	Floorspace
Hairdressing and Beauty Salons	10	Hair Dressing Salon	13	5	18	2369	1755
Laundries and Dry Cleaners	1	Shop	0	1	1	255	162
Total	11		13	6	19	2624	1917

Most employment in this category is full time which would reflect the high number of owners working in these establishments. Hairdressing establishments make up 91.5 percent of total floorspace in this category.



Type	Floorspace	Percentage
Hairdressing and Beauty Salons	1755	91.5
Laundries and Dry Cleaners	162	8.5
Total	1917	100.0

5.4.6 Finance and Insurance

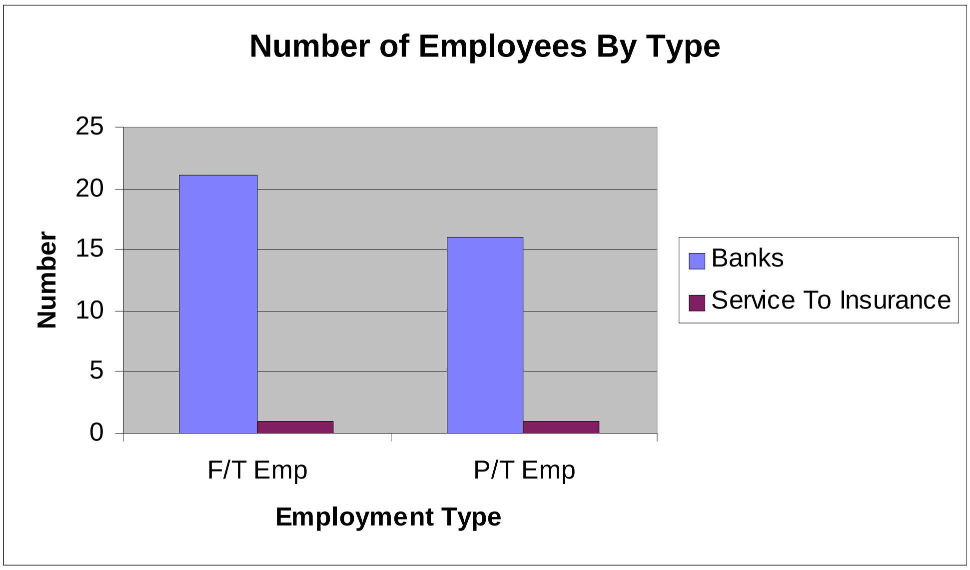
This sector represents the banks, financial institutions and insurance services.

There are six establishments in this sector which represents four percent of total establishments.

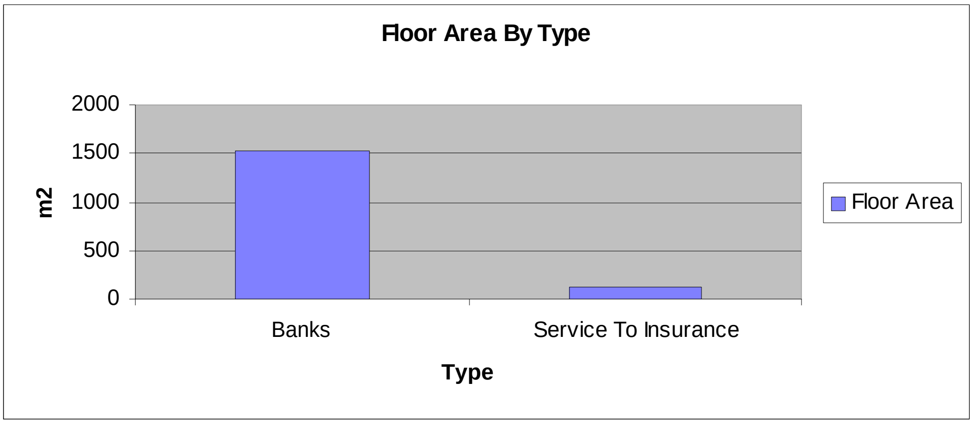
They occupy an area of 1,642m^2 and employ 39 people (56 percent full time and 44 percent part time).

The average establishment size is 274m^2 with six people employed.

Type	Number	Full Time Employment	Part Time Employment	Total Employment	Percentage of Employment	Land Area	Floor Area	Percentage of Floor Area
Banks	5	21	16	37	94.9	2911	1527	93.0
Service To Insurance	1	1	1	2	5.1	251	115	7.0
Total	6	22	17	39	100.0	3162	1642	100.0



There is only one to insurance business, with the majority of the floorspace occupied by the banks as offices.



5.4.7 Other Establishments

There are instances of other establishments in other sectors but the number of these is very low.

The other establishments include three in government administration (council premises), two manufacturing (cereal grain wholesaling and motor vehicle new part dealing), two in wholesale trade and two in cultural and recreation services.

There are also single establishments in transport and storage (tourist agent), communication services (post office) and education (kindergarten).

5.5 Car parking

The 1999 draft Yarrawonga Parking Study determined that there were 700 car spaces in the blocks zoned Business 1, with 334 spaces located in Belmore Street (half kerb-side and half centre road parking).

The study was conducted on 12 August 1999 (a Thursday during winter). The study determined there was a demand or maximum accumulation for 495 spaces. The authors of the study recognised that the survey was conducted outside of the tourist season, but no estimate was made of likely demand during the summer months or other high demand periods.

They determined there was 15,900m^2 of gross retail floor area which would equate to 9,540m^2 of leasable floor area. They further calculated that 87 percent of parking use was short-term.

The study then used the car space ratio of 4.5 spaces per 100m^2 of leasable floor area to determine a minimum car parking requirement of 429 spaces. The study was satisfied by the 700 car spaces already provided.

The estimate of retail floorspace as a result of the floorspace survey is a total area of 25,134$m^{2.}$ This would equate to 15,080m^2 of leasable floor area (determined as 60 percent of gross floor area).

By applying the ratio of 4.5 spaces per 100m^2 of leasable floorspace, then there would be a requirement for 678 spaces. Assuming that no on-street spaces have been removed since 1999, the 700 spaces originally recorded are all required to meet existing demand. Therefore, there is an under supply of car parking spaces in the commercial district particularly when it is considered that there are a number of other uses which attract parking demand (eg. council offices, the post office, library, etc).

The original parking study determined that the centre road parking in Belmore Street was no longer appropriate as it was dangerous for pedestrians and road users. However, if this area was converted to a landscaped median strip, there would be a loss of 169 spaces which today would significantly exasperate the parking supply shortage.

Whilst it is recognized that there are safety implications with the centre of road car parking, it is considered that it should be retained as:

- it is an iconic feature of Yarrawonga;
- the speed limit has been reduced to 50 kms per hour which assists in road safety;
- the volume of traffic using Belmore Street means that in reality, the speed limit is considerably less than 50 kms per hour further assisting road safety; and

- the removal of 169 spaces without provision elsewhere would have a considerable negative impact of the commercial viability of the centre.

There is a need to provide off-street car parking in close proximity to Belmore Street but the difficulty is in acquiring the land.

Of the four potential car park locations identified in the Parking Study, one is being developed now with an office building, one remains an unsealed car park, one is a sealed car park and the other is in private ownership.

There are few other potential sites for car parks. Which means land would need to be purchased on the private market at significant cost to the council.

In this respect, the current cash in lieu contribution is aimed at providing a sum of money to construct off-street car parks. However, it has been recently calculated that the cash in lieu rate is equivalent to one-third the cost of constructing a car space; it is far too low and should be raised.

It is recommended that the cash in lieu rate be raised to a more realistic amount of $7,000.

The practice of allowing a cash in lieu contribution or a discount on the parking provision as new development occurs should stop with the full requirement provided on-site.

This area could be developed as a small car park.

This area is already developed as a private car park used by Australia Post staff.

This site was identified under the parking study. It remains a potential site.

This site is being developed for offices.

Close examination of this aerial photograph clearly indicates that there are few sites suitable for off-street car parks.

With the exception of the site in Witt Street, none are owned by council and to purchase and develop would involve significant costs.

Due to the shortage of car spaces, it is imperative that action be initiated to locate land, acquire land and develop it for off-street car parking.

Partial funding may be obtained by using the reserves in the cash in lieu parking fund, by including the construction of the car parks in the Development Contributions Plan and from other council sources.

As at June 2003, there was $2000 in the cash in lieu reserve. However this is expected to swell to $76,000 once all outstanding amounts have been paid. However, some of these funds originated in Cobram and will be used there.

It is recommended that:

- A staged acquisition program be developed for the purchase of the three sites specified above;
- Negotiations should commenced with the owners of these sites to obtain an option to purchase the land;
- That the sites identified as being potential off-street car parks be rezoned to a Public Use Zone; and
- That the purchase and development of these car parks be included in the Developer Contributions Plan currently being developed.

5.6 Summary of Recommendations for Commercial and Retail Development

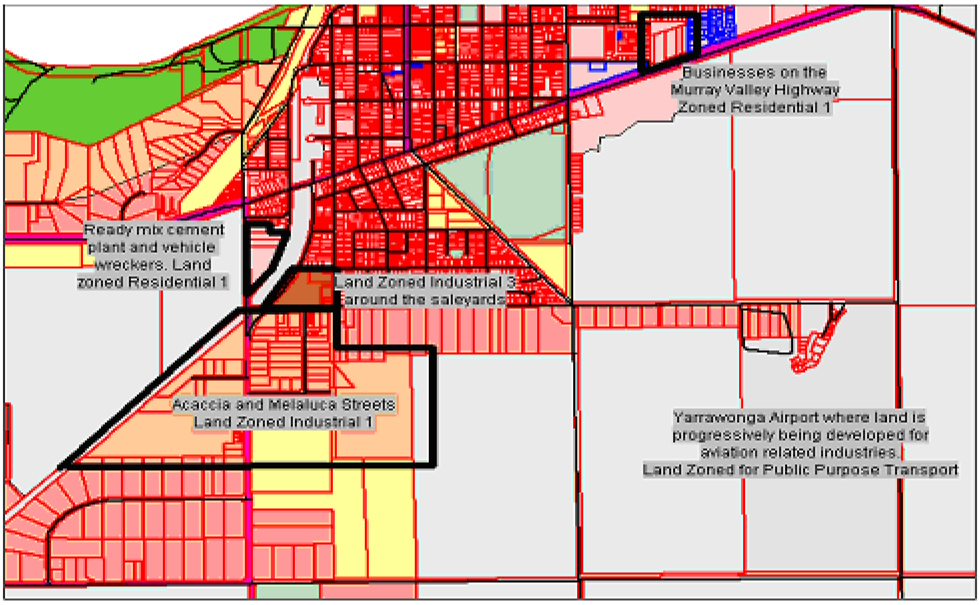
- Commence negotiations with the proprietors of the two car sale outlets in Belmore Street with a view to relocating to the potential Business 3 Zone in Burley Road or another suitable commercial centre;
- Through council's Business Development Officer, seek out potential tenants of an office complex on land currently occupied by Pigdons Motors;
- Modify the Outline Development Plan covering Gormans Land to include a commercial centre;
- Include a boutique retail centre in the vicinity of Linthorpe Drive for the future development of Botts Land;
- Identify land for the boutique retail centre be rezoned for that purpose;
- Initiate a marketing program to attract the following types of businesses in the new retail centres:
    - Hardware and homeware
    - Lighting shops
    - Garden and landscape supplies
    - Builders hardware
    - Plumbing supplies
    - Wood and timber supplies
    - Tile and tiling supplies
    - Window coverings
    - Nursery and nursery supplies;
- Develop a marketing program to attract one or more five star accommodation facilities to Yarrawonga;
- Favour future development applications in the central district of Yarrawonga that locate office space above ground floor or in the streets surrounding Belmore Street;
- Write to the Federal and State Ministers for Health expressing concern about the availability of general practitioners in country towns and request the governments to initiate programs to overcome this;
- Retain the centre road parking in Belmore Street;
- Lower the speed limit through Belmore Street to 40 kms per hour;
- Raise the cash in lieu rate for developers in relation to car parking to $7,000 per space;
- Favour full on-site parking provision rather than the cash in lieu car parking arrangement;
- Cease discounting the parking requirement for developments;
- Develop a staged acquisition program to purchase the three sites identified for off-street car parks;
- Commence negotiations with the owners of these potential car park sites to obtain an option to purchase the land;
- Rezone potential off-street car park land as a Public Use Zone; and
- Include these new car parks in the Developer Contributions Plan currently underway.

- Rezone land on the west side of Burley Road between the railway line and the Murray Valley Highway to Business 3 to allow for the development of peripheral sales outlets.

6 Industrial Land Use and Development In Yarrawonga

6.1 Industrial Activity in Yarrawonga

Yarrawonga has two areas of land zoned for industrial purposes that are centred around South Road, Acacia and Melaluca Streets, Benalla Road and O'Briens Road. There are other isolated patches of industrial activity at the airport, on the Murray Valley Highway and in the vicinity of the railway yards.



There are 79 business employing 248 people with the majority of the activity taking place in the Industrial 1 zone as would be expected.

A survey of these businesses has revealed that they are generally small employing on average less than 4 people with an average floor area of 833m^2.

The existing industries could best be described as service industries.

There is no one significant industry in Yarrawonga unlike Mulwala where the ADI munitions factory employs 390 people in the one complex.

There is 906,335m^2 of land developed with 59,183m^2 of industrial floorspace.

Industrial development occurs primarily in the Industrial 1 Zone although there are businesses at the airport, on the Murray Valley Highway, in Burley Road and in Hunt Street.

Despite the small number of industrial businesses and their limited scope, there is a shortage of land suitable for industrial purposes with only 13 vacant allotments of industrial land and eight vacant industrial type buildings.

The demand for industrial land and infrastructure is relatively low though with an average of four applications per year for planning permits for industrial purposes over the last four years. However, council's Business Development Officer reports that there are constant enquiries regarding available land which suggests there is an un-tapped demand.

The majority of the vacant land is held as one parcel at the eastern end of Melaluca Street. This parcel, with an area of 218,189m^{2,} represents a potential 41 additional parcels of land with a similar size to the existing lots in Acacia Street (on average these lots have an area of 5264m^2). If the observed take up rate of four developments per year is applied, there would be an estimated 10 year supply of industrial land in this one location.

The remaining areas of vacant industrial land have a combined area of 65,286m^2 and are held as 12 separate or part parcels. Assuming development in the order of four per year, this represents a three year supply of developable industrial land.

In addition to the vacant land, there are an estimated eight vacant or underutilised buildings in the industrial zone.

Therefore there is a sufficient supply of vacant land zoned for industrial purposes for the next 10 years. However, should the demand increase there are no other areas zoned for industrial activity. The identification of additional land for future consumptions is therefore seen as a priority outcome from this review.

The plan on the following page is a representation of the location of the various industrial activities in and around the Industrial 1 Zone.

There are limited vacant small lots available for development for industrial purposes but there is a large tract of as yet, undeveloped industrial land.

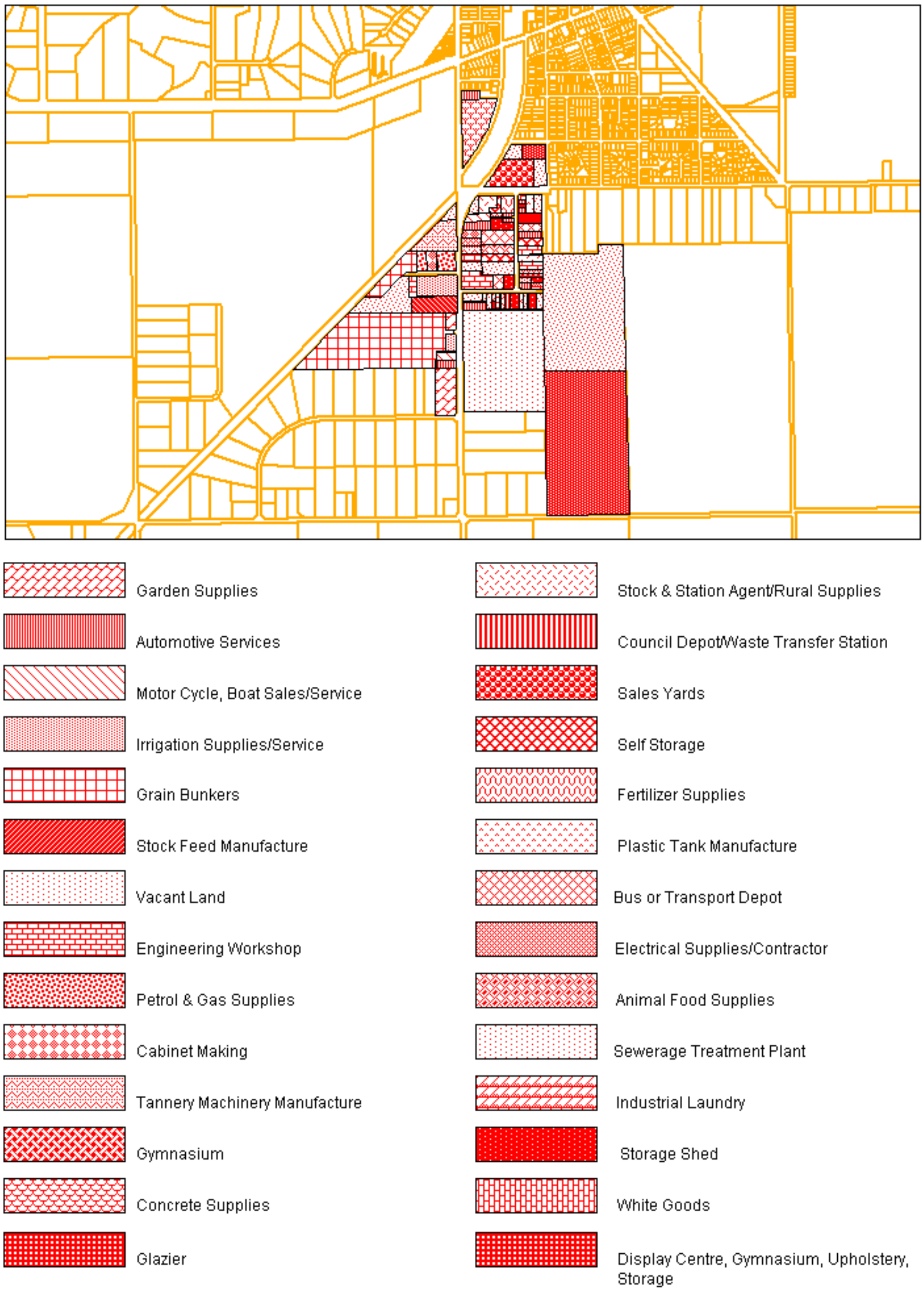
This illustration also depicts the location of the grain bunkers that are now considered inappropriately located. Should these be relocated, there will be a further substantial area of land zoned Industrial 1 available for development.

This illustration also highlights that there are no real buffers between the existing residential areas in Sharp Street and the Industrial 3 zoned land around the saleyards. Nor are there any real buffers between the Industrial 1 zoned land and the low density residential land to the north-east.

Should industrial development occur adjacent to these areas, care will need to be taken to minimise any adverse impacts on the residential areas.

Yarrawonga Strategy Plan

Location and Type of Industrial Activities



6.2 Identification and Assessment of Potential Industrial Areas

Before discussing the identification of potential new industrial areas, it is worthwhile considering what previous strategy documents have said about industrial development or activity in and around Yarrawonga.

The documents reviewed were:

Sinclair Knight Metz, Cross Border Development Project, 2003,
Neil L. Noelker, Moira Shire “Open for Business, 2001.

Sinclair Knight Metz

The Sinclair Knight Metz document considered cross border development and co-operation including a shared vision which included: The region acts as a single entity to pursue its competitive economic advantages, to improve social development and to sustain its shared natural environment.

The report identified that as a result of existing irrigation schemes and extensive transport network, there was potential to value add to the agricultural productivity of the region. It identified an opportunity to develop industries to further process local agricultural produce with particular recognition to building on the grain storage capacity of the region. The potential for flour milling and cereal food production was identified.

The report noted that there are disadvantages or problems to be overcome as follows:

- Lack of a unique regional identifier or brand;
- Lack of serviced industrial land;
- High transport costs;
- Small labour force;
- Poor co-ordination of investment attraction between states;
- Difficulty in attracting skilled workers; and
- Poor electricity supply.

This report does not discuss or recommend options to further develop the existing industrial base or attract new industries to the region. Instead, it discusses a range of measures that would boost the appeal of the region including implementing an advertising and publicity program to attract more people to the region. These suggestions are supported. However there is only a small labour force and that the industrial base of the region is small.

Neil L. Noelker

The Neil Noelker review involved an assessment of industrial development in the towns of Yarrawonga, Cobram, Nathalia and Numurkah.

The major points of the report were:

- Continued industrial growth is expected;
- The agricultural sector is the major driver of industries growth;
- Industrial land needs to increase with expanded infrastructure and facilities;
- Existing road networks need to be improved;
- Development of infrastructure over the next several years is imperative or the impact on industrial growth within the Shire will be a slow down in both new business development and expansion of existing businesses;
- To achieve continued growth, council must attract special funds from government to address economic industrial land development;
- Industry should be located where infrastructure is already available, or where best suited for development;
- The major concern for the Moira Shire with industrial development issues is the need to expend money on infrastructure for industry growth in locations that provide the best use of resources;
- Opportunities to value add continue to provide a prospective for future economic growth;
- Community consultation revealed that :
    - In Yarrawonga, there is a need to improve the appearance of the industrial estate, improve roadways and drainage in Acacia/Melaluca Streets area and the Benalla-Yarrawonga Road.
    - There is a need to consider the use of the railway land for industrial purposes in the longer term.
    - There is a need for small allotments of light industrial/commercial properties.
- In Yarrawonga the development of the grain handling facilities that service southern NSW and the ADI facility in Mulwala also contributes to local and regional growth. The road and rail bridges at Yarrawonga and Cobram provide transport links to bring agricultural produce from southern NSW into Victoria; and
- Yarrawonga will benefit to a lessor degree from agricultural growth.

The Sinclair Knight Metz report on prime development zones found:

- Moira Shire is a most ideal municipality for future growth opportunities associated with dairy, vegetables, fruit and a range of other agricultural products;

- In Yarrawonga, local interest from property developers in industrial land for development is not a priority;

- Economic indicators predict that the Moira Shire will continue to grow over the next 20 years. These indicators predict that Moira will grow faster than that of the regional Victorian average, which is reflected in the positive economic data currently available;

- Population of the Moira Shire will increase from 26,470 in 2001 to 29,000 in 2021. This is an increase of 10.1 percent, which exceeds the regional Victorian average of 9.2 percent;

- Part of this growth is driven by the economic factors within the Shire and also from the retirement growth in the Yarrawonga area;

- Education levels are slightly below that of the regional Victorian averages, with the exception of the higher qualifications where there is a lack of higher qualified skills within the Shire;

- There is a need for better access to education services, particularly in vocational areas that support manufacturing related industries;

- Moira Shire has a higher percentage of workers associated with manufacture than in comparison to regional Victoria;

- Agriculture makes up 28.5 percent of the workforce;

- A cost-benefit analysis of identified priorities was provided as follows:

    - Redevelopment of the industrial estate in Yarrawonga
        - Positive ratio of 3.6
        - Relatively low infrastructure cost - $900,000 compared to total benefits
        - High return for potential employment and increased local income with net benefits of $3.4 million.

    - Increased commercial and light industrial land in Yarrawonga
        - Positive ratio of 3.1
        - Provides for growth in an industrial related sector that provides services to the public generally with net benefits of $1.7 million.

        - Low cost of development to council of $150,000.

    - Light industry development of former depot site in Yarrawonga
        - Positive ration of 1.8
        - Low cost development price of $100,000.
        - Makes good use of unused land for small business growth in an ideal location with net benefits of $200,000.

    - Continue development at Yarrawonga airport
        - Positive ratio of 1.6
        - Low cost to council of investment of $250,000.
        - Provides a unique niche market opportunity and net benefits of $400,000.

- The following high priority initiatives were developed.

    - Seek funding from the Department of State and Regional Development to provide a promotional and marketing package for the promotion of industrial parks.

    - Initiate joint meetings (Corowa and Moira Shires) to discuss the future economic growth of the Yarrawonga/Mulwala area.

    - Initiate efforts to encourage Powercor to increase power availability to industrial estates in Yarrawonga.

    - Develop the former Shire depot and part of the saleyard fronting Sharp Street as a light industrial subdivision.

    - Develop commercial and industrial activities at the aerodrome.

    - Drainage and road improvements together with beautification to Benalla Yarrawonga Road area and Acacia/Melaluca streets.

    - Provide additional commercial/industrial land on the railway land and on land west of the railway both north and south of the Murray Valley Highway.

    - Initiate discussions with VicTrack regarding the future of the railway land.

    - Undertake an overall concept plan of commercial and light service industry associated with the need for highway frontage within Yarrawonga.

    - Support providing commercial light industry opportunities for growth on the Murray Valley Highway west of the railway line.

- That land north of the railway line be commercial or light industry with industrial development south of the railway line.
- Improve railway crossings, roads and drainage in the industrial/commercial areas.
- Develop incentive packages to encourage the relocation of the industries on the Murray Valley Highway east of Woods Road.
- Initiate discussions with major agricultural producers with the aim of assisting them to establish in Yarrawonga.
- Audit of business required to better predict requirements for business growth within the municipality.
- Need for small premises suitable for one to three person operations.
- Sale of industrial land developed by the council should include a sunset clause that the land be developed within a set timeframe.
- Develop a comprehensive promotional and marketing strategy that promotes the industrial estates.

• Selected comments from consultation

- Transportation within the Moira Shire is well served in terms of highway access with the Goulburn Valley and Murray Valley Highways traversing the municipality.
- Rail transport serves the grain industry well in Yarrawonga but not the general freight industry.
- In Yarrawonga, it is believed that there is sufficient (industrial) land, it is not selling, with one reason being the poor appearance of the industrial estate.
- Moira Shire is the main supplier of industrial zoned land.
- Most of the businesses within the Moira Shire generally relate to local business or local agricultural products.
- In Yarrawonga over recent years, there have been reasonable sales and consideration needs to be given to continuing to provide adequate land for future growth as Yarrawonga continues to expand. There does not appear to be any great necessity to expand the current industrial area, but rather provide more commercial industrial type development within the

township. Yarrawonga also has the unique development at the aerodrome and is currently providing industrial growth that may have an association with an airport.

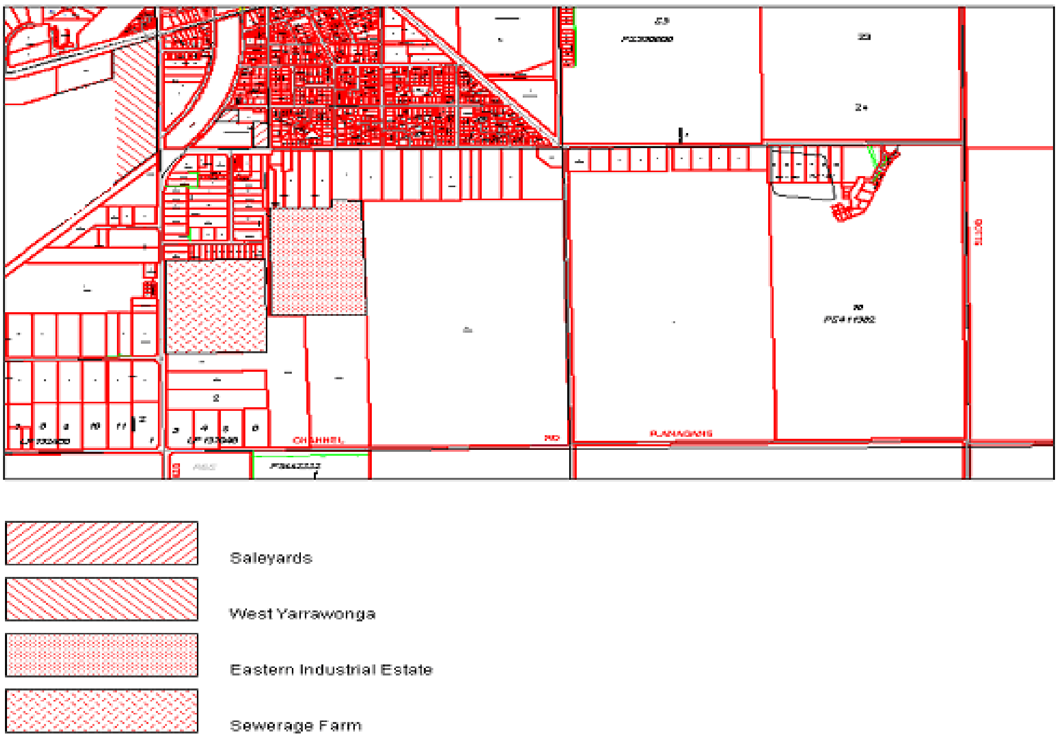
- Most development organisations believe it is better to have access to buildings ready for occupation. This could mean speculative development of industrial buildings.

6.3 Potential Industrial Areas

Both the Noelker report and the Sinclair Knight-Metz review conclude that while the demand for industrial land is relatively low, there is still a need to plan for future development needs.

The two maps below illustrate potential industrial areas for development over the next 20 years.

Each of these areas is discussed below.



6.3.1 Saleyards

This is an area of 12,484m^2 which is presently under-utilised.

The land was recently rezoned from Public Purposes to Industrial 3.

It is in two parts with 4,624m^2 fronting Benalla Road and McLeod Street and an area of 7,860m^2 fronting Sharp Street and South Road.

council owns the land.

The Industrial 3 Zone has the following objectives:

- To provide for industries and associated uses in specific areas where special consideration of the nature and impacts of industrial uses is required or to avoid inter-industry conflict.

- To provide a buffer between the Industrial 1 Zone or Industrial 2 Zone and local communities, which allows for industries and associated uses compatible with the nearby community.

Development to the east and north is residential with the railway line to the west and the industrial estate to the south.

Surrounding development and the zoning preclude the development of general industry yet there is an opportunity for the land to be developed to provide serviced allotments of a size that would suit small scale service type industries.

Using an average floor area of 409m^2 and adding 367m^2 for car parking, upwards of 16 allotments could be developed in this location.

The types of industries which could be encouraged to set up in this area would include:

- Plumbers, electricians and other trades;
- Upholstery services; and
- Small low impact workshops.

Uses which have the potential to cause adverse amenity impacts to the adjoining residents would be discouraged.

The major advantages of this location are that council owns the land and that it is suitable for small low impact industrial uses.

The disadvantage is the proximity to residential areas and there is the potential for an adverse community reaction should council develop this land.

It is suggested that this area could be developed by the council in the short term to create small serviced allotments.

With regard to the saleyard itself, this is a long established facility still used frequently. It would have been developed when this area was on the edge of the town with little surrounding development.

This facility is now inappropriately located due to encroaching development. Before deciding on the relocation or closure of this facility however, careful consideration must be given to the role the saleyard plays in todays rural/town economy.

Questions to be answered would include:

- Is a saleyard still required to service the farming sector?
- If so, is there a particular market sector toward which the saleyard focus eg specialising in sheep?
- Should a regional saleyard be considered?
- If a regional saleyard is considered would Yarrawonga or Cobram or somewhere in between be the optimum location?
- Could the saleyard be co-located with the abattoir in Hicks Road or perhaps, in one of the small towns?

Should relocation or closure be considered appropriate, it would release a further significant area of land zoned Industrial 3 and available for development. With an area of 32,890m^2, in the vicinity of 42 industrial allotments could potentially be developed.

6.3.2 West Yarrawonga

The land has excellent road frontages, especially to Burley Road, which is now the primary entrance to Yarrawonga for people visiting from the south.

The major advantage of this land is its good access and visibility. The major disadvantage for potential industrial activity is its visibility given that the eastern boundary is the main access to Yarrawonga from the south and its northern boundary is the Murray Valley Highway.

Access to Yarrawonga from the south is an important access point with an opportunity to improve visual appeal and aesthetics of this area. To create even more industrial land alongside of this key entrance could detract significantly from the potential to create a vision gateway entrance.

Nevertheless, should industrial land development be considered at this location, it should be on the basis of an industrial estate with only one or two access points from Burley Road and one access from the Murray Valley

Highway. Extensive landscaping and screening would need to be developed and maintained to provide a visual screen and an attractive entrance.

An alternative to a landscaped buffer would be the development more visually attractive than industrial uses and which require a high exposure site. Uses such as furniture warehouses, vehicle sales yards, large house and hardware stores could be promoted.

Therefore, development of this land for industrial purposes should be seen as longer term with the exception of the land fronting the Murray Valley Highway and Burley Road.

It is suggested that consideration be given to rezoning these road frontages for commercial, not industrial uses and that an urban design theme be developed highlighting the importance of these two areas as entrances to the town.

6.3.3 Eastern Industrial Estate

This is the land at the eastern end of Melaluca Street and zoned Industrial 1 that is within one ownership and not as yet developed.

This area of land is the logical extension of the existing industrial estate. It has an area of 218,189m^2 and, as noted previously, could provide for a further 41 industrial lots which represents approximately 10 years supply of industrial zoned land.

It is recommended that the owner of this land be encouraged to develop it in the short to medium term.

It is further recommended that council work closely with the owner/developer to ensure the land is developed as a first class industrial park with the following attributes:

- wide and well constructed roads;
- footpaths;
- landscaped road reserves;
- entry signage;
- efficient and effective drainage system;
- a variety of lot sizes;
- fully serviced with an attractive appearance that can be effectively marketed; and
- a 10 metre deep landscaped and treed buffer along the northern and eastern boundaries to provide a buffer between the residential and industrial areas. It is also recommended that the existing “stock route” easement running from the sewerage treatment plant to South Road be retained in council ownership and be developed as a landscaped and treed buffer.

Uses such as self-storage should be discouraged as should quasi retail businesses as are evident in the existing industrial estate. These types of businesses take up valuable industrial land and would be better located in the Industrial 3 Zone.

The development of this land in a controlled manner will see many of the problems evident in Acacia and Melaluca avoided.

6.3.4 Sewerage Farm

The land occupied by the North East Water sewerage farm is zoned for public purpose and has an area of 242,393m^2. It has been included in this analysis as it is considered that the location of the sewerage farm is now inappropriate.

Not only is the farm located on the major traffic entrance to the town, it is highly visible, becoming surrounded by other land uses and, from some accounts, has occasional odour problems.

Discussions with North-East Water indicate that the plant is scheduled for relocation to North-East Water land in Rileys Road. This relocation was scheduled for 2008 to 2010 but this may be brought forward as Yarrawonga's growth continues to escalate.

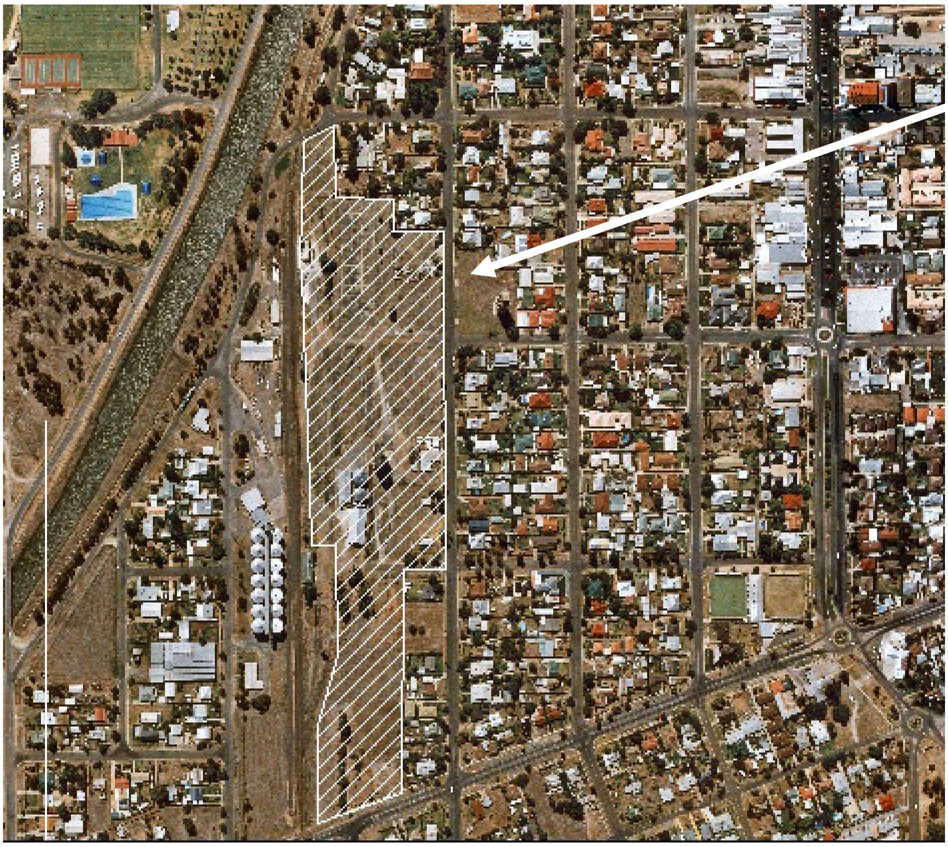
It is recommended that discussions be commenced with North-East Water with a view to agreeing the decommissioning of the plants and its relocation.

The land occupied by the farm could be seen as an area into which the industrial estate could develop in the long term (20 years), and to add weight to the move to relocate the sewerage farm, consideration could be given to rezoning the land to Industrial 1.

6.3.5 Railway Yards

The illustration on the following page depicts an area of under-utilised land in the urban area of Yarrawonga at the old railway yards. This area of land runs in a north south direction between the Murray Valley Highway and Orr Street with Sharp Street on the easterly boundary.

The land is zoned for Public Purposes (Transport) and has an area of approximately 76,768m^2.



Railway Land

This area of land lends itself to the development of small scale service industries.

Should the land be developed in this manner, and using the 776m^2 of area as discussed above, upwards of 100 lots could be developed for light industrial purposes (ie Industrial 3 Zone). This would provide a 25 year supply of land for light industrial purposes, which is considered to be more than sufficient to satisfy demand.

As with the development of the vacant land in the Industrial 1 Zone, this area, if it is to be developed, should be developed as an industrial park with the same attributes as mentioned previously and treated to ensure that nearby residential amenity is not unduly affected.

As the State Government owns the land, negotiations would need to be entered into with a view to transferring the land from the government to the council. Once this was achieved, council could progressively develop and sell the land.

6.3.6 Waste Transfer Station

No detailed analysis of the future of council's waste transfer station has been undertaken as a result of this review as there are sufficient areas of land available for industrial development. Nevertheless, this area of land is the next most appropriate location for the industrial estate to expand into. However there is no need to rezone or develop this land for industrial purposes at this stage, as there is sufficient land elsewhere.

6.4 Analysis of Floorspace and Employment Survey

An employment and floorspace survey was conducted in the industrial district of Yarrawonga during the week of 9 February 2004.

Every establishment in the industrial district of Yarrawonga was visited to establish:

- The type of business carried out;
- The number of employees; and
- Employee status, being either full time or part time.

The land area of separate allotment was determined from map based data held electronically in council's MIDAS system.

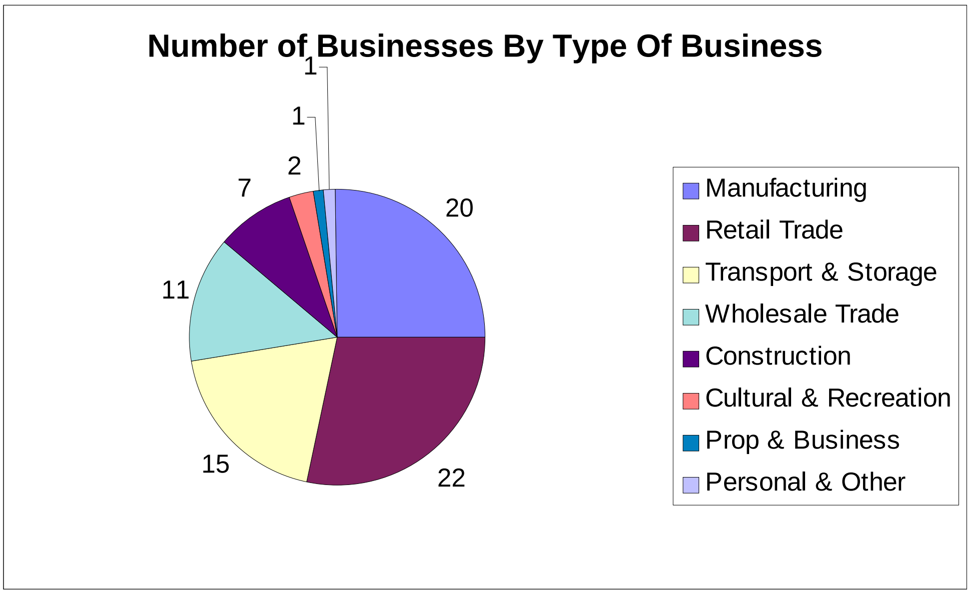
Building area or floorspace was determined by measurement from aerial photographs also held in MIDAS.

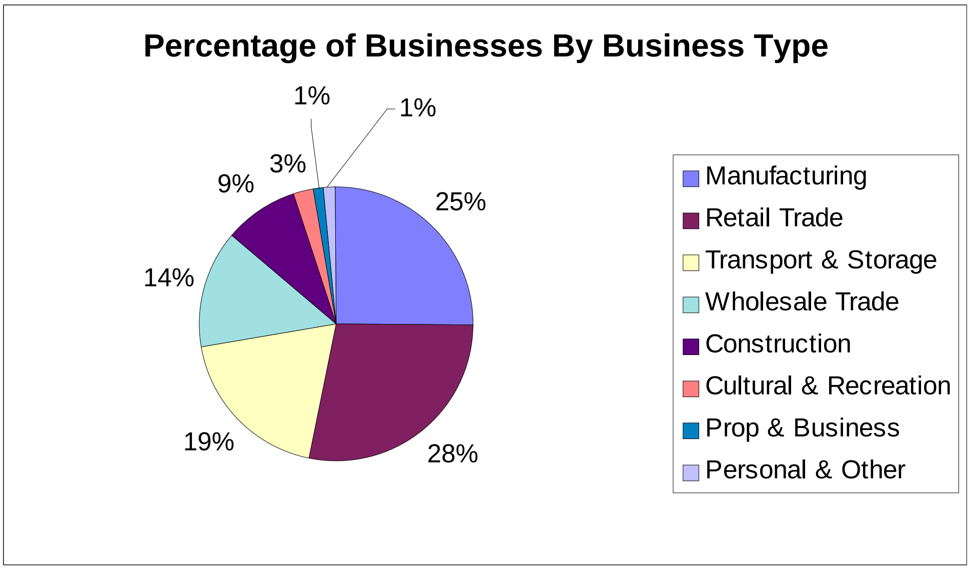
The survey results were analysed using the Australian and New Zealand Standard Industrial Classification code which allows for the categorisation of the different establishments into various classes.

The results of this survey are presented in this report.

6.4.1 Type Of Business

The following analysis assigns the various businesses into classification as defined within the Australian and New Zealand Standard Industrial Classification (ANZIC). Use of this classification allows for comparative analysis to be carried out as well as allowing for time series analysis as further surveys are done in the future.





53 percent of industrial businesses are classified as being either a manufacturing business or operating within the retail trade. A detailed analysis by classification type is provided on the following pages.

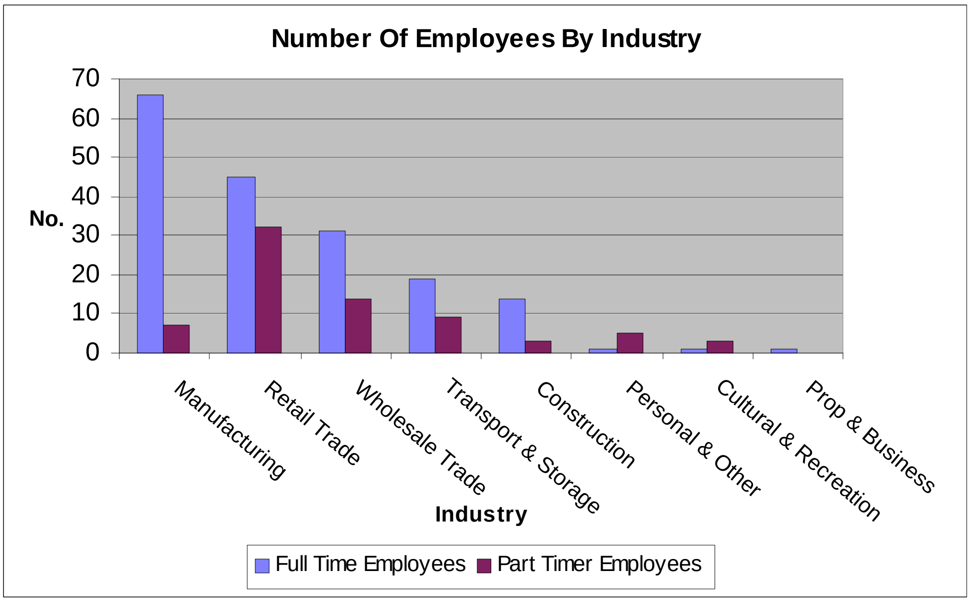
These are closely followed by businesses operating in transport and storage (19 percent of industrial businesses) and in wholesale trade (14 percent of businesses).

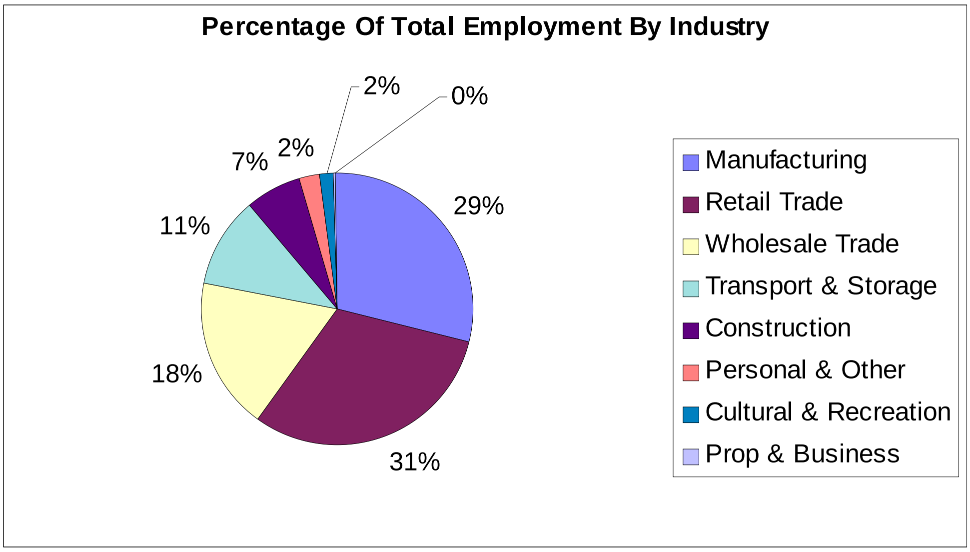
There are seven businesses in the construction industry (9 percent) consisting of plumbing services, electrical contracting services, glazing services and ready mixed concrete.

The remaining businesses are active in the real estate field, gymnasiums and an industrial laundry. These businesses are classified as being in the property and business services classification, cultural and recreation classification and personal and other services classification respectively.

6.4.2 Employees By Industry Type

There were a total of 248 employees consisting of 178 full time employees and 73 part time employees at the time of the survey. The major employers are in the manufacturing and retail sectors. The difference between these two industry sectors is in the composition of the workforce. In the manufacturing sector, 90 percent of employment is fulltime, whereas in the retail sector, there is only 58 percent.





The manufacturing and retail trade sectors both have between 29 and 30 percent of total employment with the next most significant groups being in the wholesale trade and transport and storage sectors.

Most of the employment is on land within the industrial estate centred around Acacia and Melaluca Streets on land zoned Industrial 1. The survey results indicate that most businesses are small with an average three people per business. There are no heavy manufacturing businesses and only two light manufacturing businesses and the majority could be considered as service industries.

Overall, 72 percent of total employment is full time and 28 percent being part time employment.

The table below illustrates the percentage of employees (full time, part time and combined) across the industry sectors. Most industry is within the manufacturing and retail sectors. Industries in the cultural and recreation sectors and property and business services is low with less than two percent of full time employees. The businesses within theses industries are gymnasiums and a cleaning service.

Industry Type	Full Time Employees	Part Time Employees	Total
Manufacturing	37.1	9.6	29.1
Retail Trade	25.3	43.8	30.7
Wholesale Trade	17.4	19.2	17.9
Transport and Storage	10.7	12.3	11.2
Construction	7.9	4.1	6.8
Personal and Other	0.6	6.8	2.4
Cultural and Recreation	0.6	4.1	1.6
Prop and Business	0.6	0.0	0.4
Totals	100.0	100.0	100.0

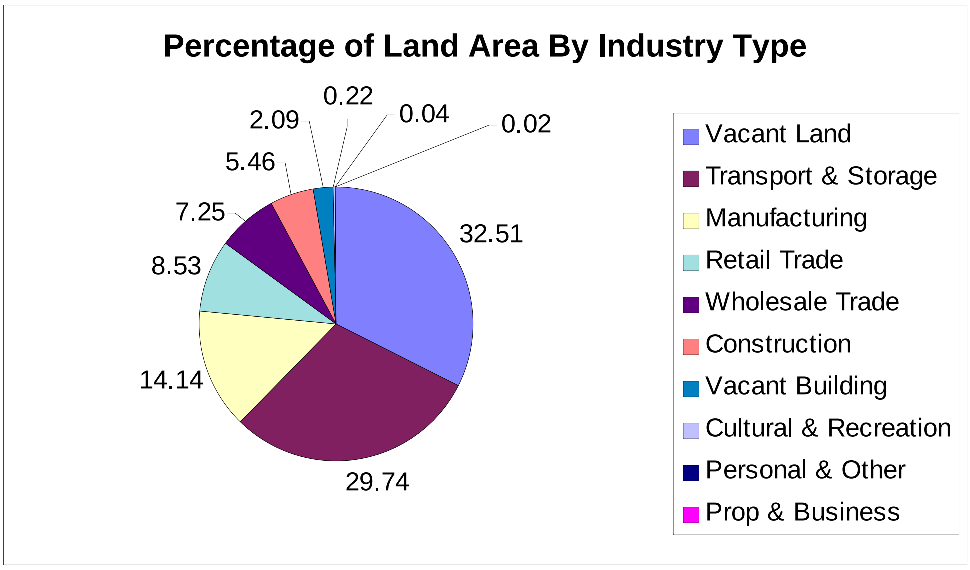
6.4.3 Floorspace By Industry Type

The table below illustrates the land area and the floorspace occupied by the various industry types.

Industry Type	Land Area	Building Floorspace	Percentage Built On
Vacant Land	294609	0	0.00
Transport and Storage	269584	6556	2.43
Manufacturing	128146	24275	18.94
Retail Trade	77325	8173	10.57
Wholesale Trade	65690	13699	20.85
Construction	49497	2580	5.21
Vacant Building	18962	2986	15.75
Cultural and Recreation	1990	382	19.20
Personal and Other	372	372	100.00
Prop and Business	160	160	100.00
Totals	906335	59183	6.53

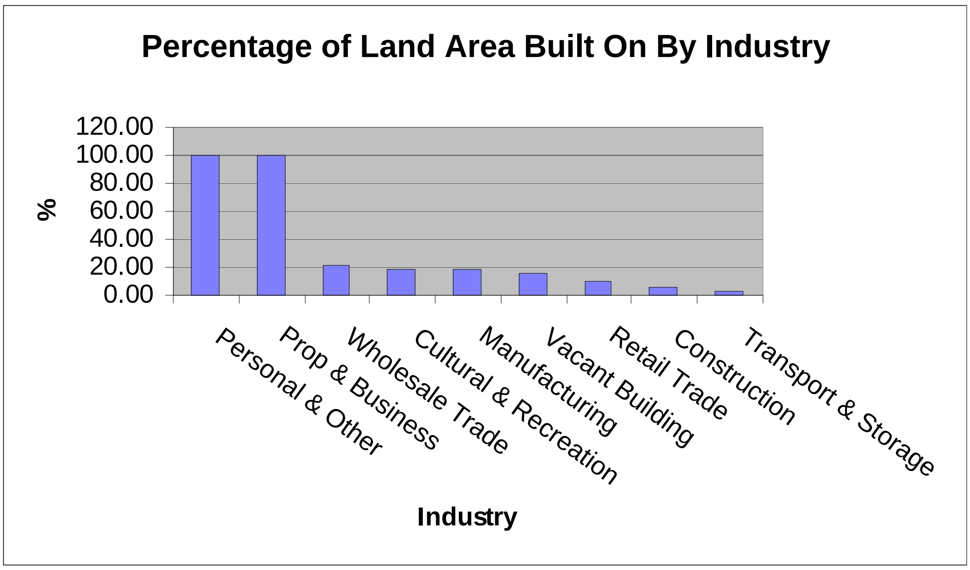
Vacant industrial land makes up 32.5 percent of industrial land. However, this is primarily land held in one ownership and not as yet developed. It is anticipated after discussions with the owner that this land will be developed over the next few years.

Manufacturing use makes up 29.7 percent of industrial land with 14 percent used by the wholesale trade sector. Overall, the amount of land occupied by the various industry sectors is quite large with the average lot size being 7,743m^2 (excluding vacant land).



The industry sectors of property and business services, cultural and recreation and personal and others services occupy very little of the total industrial land area.

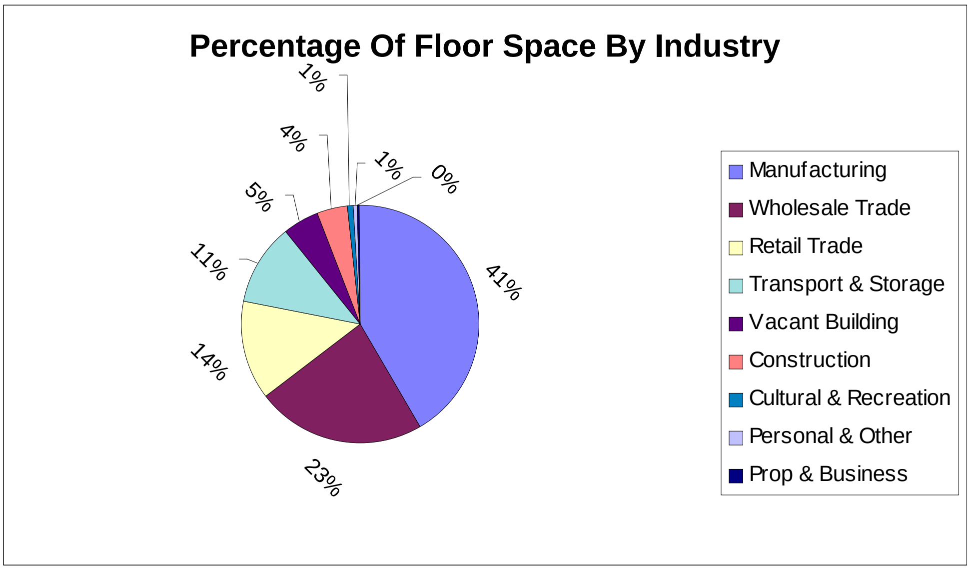
The table below illustrates how much of the land area is built on by industry type.



With the exception of personal and other services and property and business services, generally less than 20 percent of the land area is built on. This tends to indicate that the size of the industrial buildings is relatively small in comparison to the land area they occupy. It also indicates that there may be the potential to further subdivide some of the land parcels to provide new lots for other businesses to establish.

The significant difference in the built area to land area ratio indicates that careful consideration needs to be given to lot sizes in new industrial estates to ensure that they are not to big.

With regard to occupied floorspace, 41 percent is occupied by the manufacturing sector, 23 percent by the wholesale trade sector, 14 percent by the retail trade sector and 11 percent by the transport and storage sector.



The ratio of built area to land area is low, it must also be realised that for some industries, eg transport, there is a need for larger lots with smaller built areas.

6.4.4 Manufacturing

The 20 businesses in the manufacturing industry employ 29 percent of all people in the industrial sector and it occupies 24, 275m^2 of floorspace (41 percent of total industrial floorspace).

The average number of employees is four with an average floorspace of 1,214m^2 per business.

There are eight different types of manufacturing businesses as shown in the table on the following pages with 35 percent of business under the classification of industrial machinery and equipment manufacturing.

These industries are generally small scale engineering workshops servicing the agricultural, trucking and construction industries.

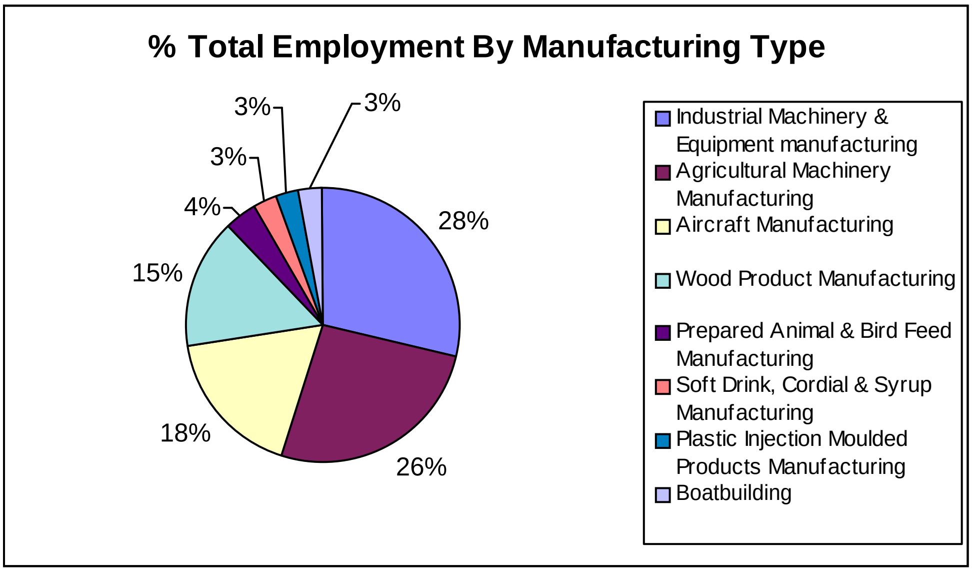
Aircraft manufacturing makes up 15 percent of manufacturing businesses. These businesses are primarily involved in the service and repair of aircraft and are located at the airport.

A further 20 percent of businesses are within the agricultural machinery manufacture industry; these are primarily in the manufacture and sales of irrigation equipment.

Description	No. Of Businesses	Full Time Employment	Part Time Employment	Total Employment	Floorspace	Percentage
Industrial Machinery and Equipment manufacturing	7	17	4	21	4622	28.8
Aircraft Manufacturing	3	12	1	13	3475	26.0
Agricultural Machinery Manufacturing	4	19	0	19	2836	17.8
Wood Product Manufacturing	2	9	2	11	1243	15.1
Prepared Animal and Bird Feed Manufacturing	1	3	0	3	8535	4.1
Soft Drink, Cordial and Syrup Manufacturing	1	2	0	2	2017	2.7
Plastic Injection Moulded Products Manufacturing	1	2	0	2	1092	2.7
Boatbuilding	1	2	0	2	455	2.7
Total	20	66	7	73	24275	100.0

There are two cabinet makers, one stock food manufacturer, a cordial manufacturer and a plastic tank manufacturer.

More than 50 percent off all employment is found within the industrial machinery and equipment manufacturing industry, aircraft servicing industry, agricultural machinery manufacturing and wood product manufacturing. Most employment in this sector is full time.

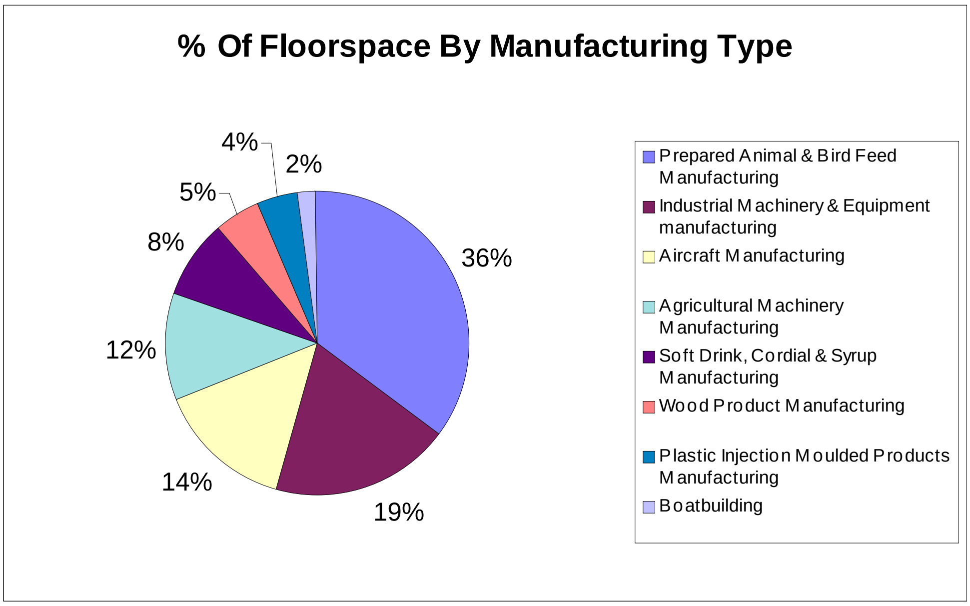


Generally speaking, the number of employees per business is low with four businesses having three or less employees. The graph above illustrates those manufacturing industry types which have low numbers of employees.

The largest premise in terms of floorspace is manufacturing stock feeds with 35.2 percent of total manufacturing floorspace. However, this is also one of the industries with a low number of employees (three).

Description	Floorspace	Percentage
Prepared Animal and Bird Feed Manufacturing	8535	35.2
Industrial Machinery and Equipment manufacturing	4622	19.0
Aircraft Manufacturing	3475	14.3
Agricultural Machinery Manufacturing	2836	11.7
Soft Drink, Cordial and Syrup Manufacturing	2017	8.3
Wood Product Manufacturing	1243	5.1
Plastic Injection Moulded Products Manufacturing	1092	4.5
Boatbuilding	455	1.9
Total	24275	100.0

Industrial machinery and equipment manufacturing is the next most significant category with 19.9 percent of total manufacturing floorspace followed by aircraft servicing with 14.3 percent. With the exception of the stock feed manufacturer, most establishments are relatively small with, on average, 828m^2 of floorspace per establishment.



The following table clearly illustrates that most activity takes place in small workshops with only 31 percent of total employment actually within a factory.

Space Type	Full Time Employment	Part Time Employment	Total Employment	Percentage	m^2
Workshop	30	3	33	40.7	8596
Factory	23	2	25	30.9	11349
Office	13	0	13	16.0	1902
Shop	8	0	8	9.9	562
Warehouse	2	0	2	2.5	372

There are also instances of offices, shops and warehouses. In other words, most floorspace is not manufacturing floorspace.

The small size of manufacturing businesses does have implications for the future green field development of industrial land and suggests that smaller lot sizes would be more appropriate, suitable for small workshops and service type industries.

That there is no large manufacturing enterprise is a matter of concern particularly with respect to future employment opportunities and the growth of Yarrawonga's economy. The Noelker report recognizes this failing and suggests targeting industries involved in the processing of grains. The report does not mention how to target this area.

The future direction in industrial development should focus on the provision of light and service industries to support the agricultural sector and the cross-border region rather than attempting to attract a major manufacturing industry.

One final finding is that there is a long established cordial making factory in Hunt Street directly opposite the foreshore. This business is in today's terms inappropriately located with the land better used for residential purposes. The future of this factory is not known.

6.4.5 Retail Trade

There are 22 businesses in the retail trade which represents 28 percent of all establishments, 31 percent of employment and 14 percent of floorspace found in the industrial areas.

The establishments are small in size with an average four employees and an average floorspace of 372m^2.

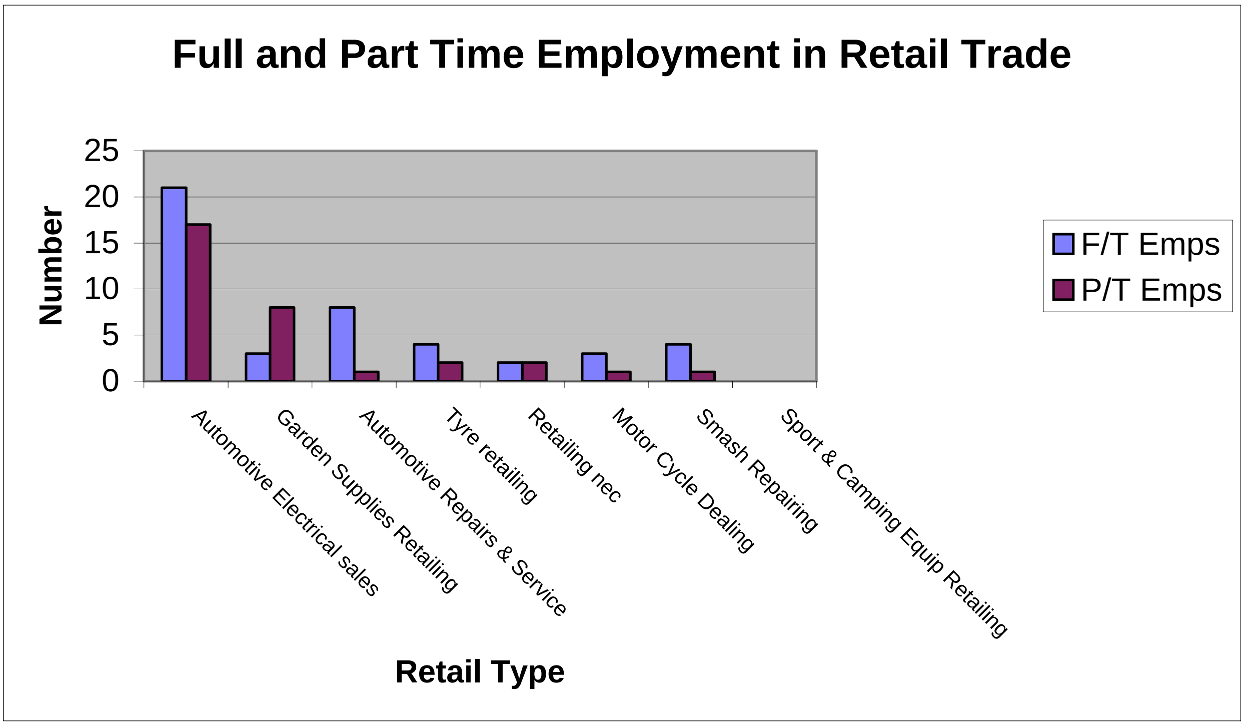
Six of these establishments are not located on land zoned for industrial purposes but are located on residentially zoned land on the Murray Valley Highway.

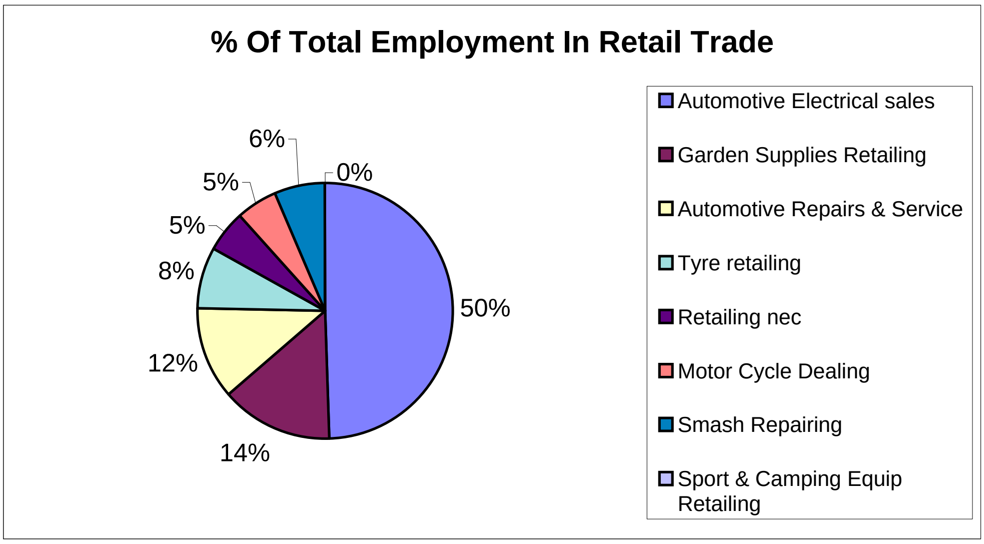
Description	No. Of Businesses	Full Time Employees	Part Time Employees	Total Employees	Floorspace
Automotive Repairs and Service	7	8	1	9	2163
Automotive Electrical sales	5	21	17	38	2057
Retailing nec	2	2	2	4	477
Smash Repairing	3	4	1	5	2254
Tyre retailing	2	4	2	6	592
Sport and Camping Equip Retailing	1	0	0	0	116
Garden Supplies Retailing	1	3	8	11	244
Motor Cycle Dealing	1	3	1	4	270
Total	22	45	32	77	8173

Automotive repairs, sales and automotive electrical sales make up 54 percent of those establishments. In addition, 23 percent of establishments are either smash repairs or tyre retailing. The remaining establishments are single businesses operating in the sport and camping equipment retailing area, garden supplies retailing and motor cycle retailing. It is noted, that some of these establishments have than one major interest. (for example, the motor cycle dealer also sells and repairs garden tools as well as boats).

Description	Full Time Employees	Part Time Employees	Total Employees	%
Automotive Electrical sales	21	17	38	49.4
Garden Supplies Retailing	3	8	11	14.3
Automotive Repairs and Service	8	1	9	11.7
Tyre retailing	4	2	6	7.8
Retailing nec	2	2	4	5.2
Motor Cycle Dealing	3	1	4	5.2
Smash Repairing	4	1	5	6.5
Sport and Camping Equip Retailing	0	0	0	0.0
Total	45	32	77	100.0

Automotive electrical sales accounts for 49.4 percent of the retail trade employment with the next most significant employer being garden supplies retailing. Most employees are full time employees although there is a significant number of part time employees.





The floor area occupied by the retail trades is only 14 percent of total floor area in the industrial areas although it must be pointed out that a number of these establishments have significant external storage and display areas.

Description	Floorspace	Percentage
Automotive Repairs and Service	2163	26.5
Smash Repairing	2254	27.6
Automotive Electrical sales	2057	25.2
Tyre retailing	592	7.2
Retailing (not elsewhere included)	477	5.8
Motor Cycle Dealing	270	3.3
Garden Supplies Retailing	244	3.0
Sport and Camping Equip Retailing	116	1.4
Total	8173	100.0

Motor vehicle repairs, smash repairs and automotive electrical sales between them account for 79 percent of all retail trade floorspace.

Establishments located on the northern side of the Murray Valley Highway to the east of the town are now probably inappropriately located given the extensive residential development that has occurred around them. Negotiations should be initiated with the proprietors of these businesses with a view to their relocation to the industrial estate.

6.4.6 Transport and Storage

There are 15 establishments involved in transport and storage, which represents 19 percent of all establishments, 28 percent of employment and 2.4 percent of floorspace found in the industrial areas.

The establishments are small with only two employees on average and 437m^2 of floorspace. These establishments do though, occupy the greatest land area with a combined area of 269,584m^2 that represents almost 30 percent of all industrial land.

This is to be expected as the establishments involve the transportation of goods, self-storage and storage sheds and bus depots, all of which require extensive areas of land, but relatively few employees.

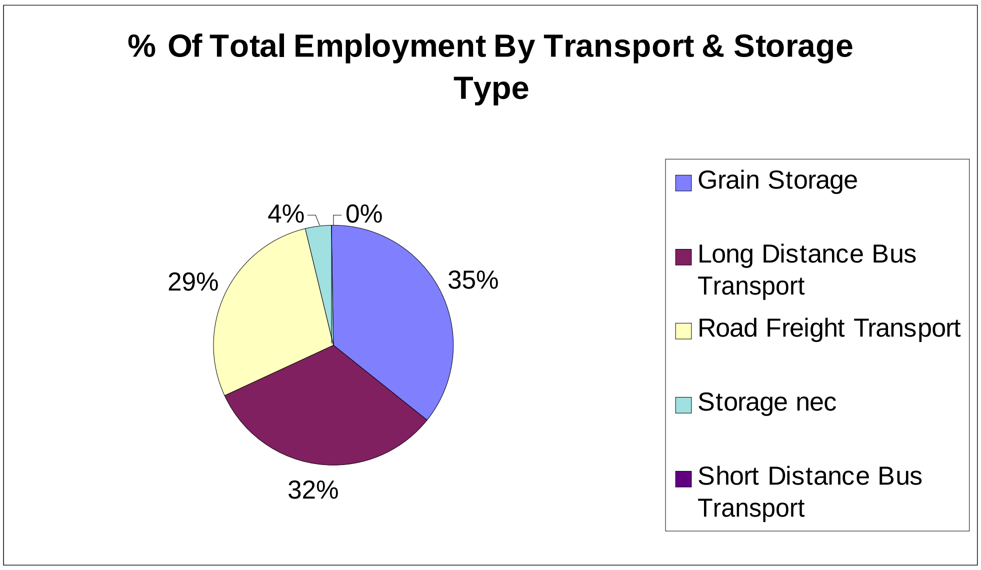
Description	No. Of Businesses	Full time Employees	Part Time Employees	Total Employees	Floorspace
Storage (not included elsewhere)	7	1	0	1	3744
Road Freight Transport	4	6	2	8	2150
Grain Storage	2	8	2	10	30
Long Distance Bus Transport	1	4	5	9	372
Short Distance Bus Transport	1	0	0	0	260
Total	**15**	**19**	**9**	**28**	**6556**

Storage not included elsewhere are those sheds used for general storage of which there are several in the industrial estate.

The grain storage bunkers to the west of Benalla-Yarrawonga Road employ the most in this category, but that is still only 10 people representing 35.7 percent of all employment in this category.

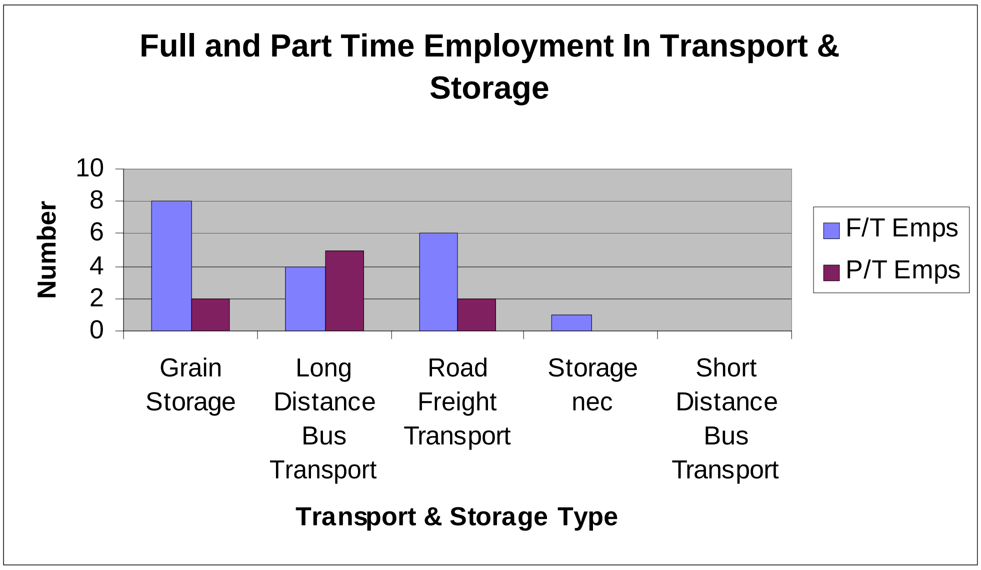
Description	Full time Employees	Part Time Employees	Total Employees	Percentage
Grain Storage	8	2	10	35.7
Long Distance Bus Transport	4	5	9	32.1
Road Freight Transport	6	2	8	28.6
Storage not elsewhere included	1	0	1	3.6
Short Distance Bus Transport	0	0	0	0.0
Total	19	9	28	100.0

The next most significant employer is long distance bus transport with 32.1 percent of employment and road freight transport with 28.6 percent of employment. There are no employees recorded for short distance bus transport as this establishment is used simply to store vehicles.



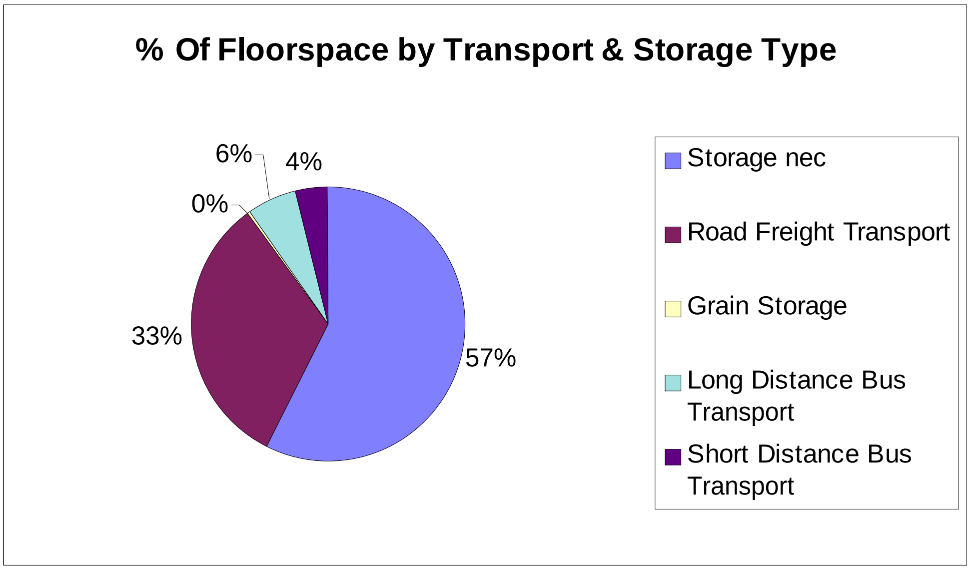
Most employees are full time employees although it is noted, that under long distance bus transport, 55 percent of employees are part time.

Road freight transport accounts for 28.6 percent of total employment in this category.



With regard to occupied floorspace, there is little in this category that reflects the types of activities undertaken. Storage not elsewhere included accounts for most of the floorspace. This reflects the fact that there are three parcels of land used for self-storage facilities.

Description	Floorspace	Percentage
Storage not elsewhere included	3744	57.1
Road Freight Transport	2150	32.8
Grain Storage	30	0.5
Long Distance Bus Transport	372	5.7
Short Distance Bus Transport	260	4.0
Total	6556	100.0



The survey shows there are several large parcels of land used for storage particularly the grain bunkers. Anecdotal evidence collected whilst the survey was underway suggests that there are environmental issues arising from the bunkers such as dust and noise nuisance. The question must be posed about the appropriateness of the bunkers so near to the town area.

It is suggested that consideration be given to the relocation of the bunkers to a less intrusive site. This would have the additional benefit of releasing more land for industrial use.

As a large area of land is required for grain bunkers, a site in the Rural Zone would be appropriate.

A further matter for consideration is the use of industrial land for self-storage facilities. Whilst these facilities are relatively new, the appropriateness of using land zoned Industrial 1 for such uses is questioned. Given that there is land now zoned Industrial 3, it is preferable for new self-storage facilities to be located on that land instead.

6.4.7 Wholesale Trade

The description wholesale trade refers to establishments such as wool brokers, grain brokers, electrical components and building supplies wholesaling.

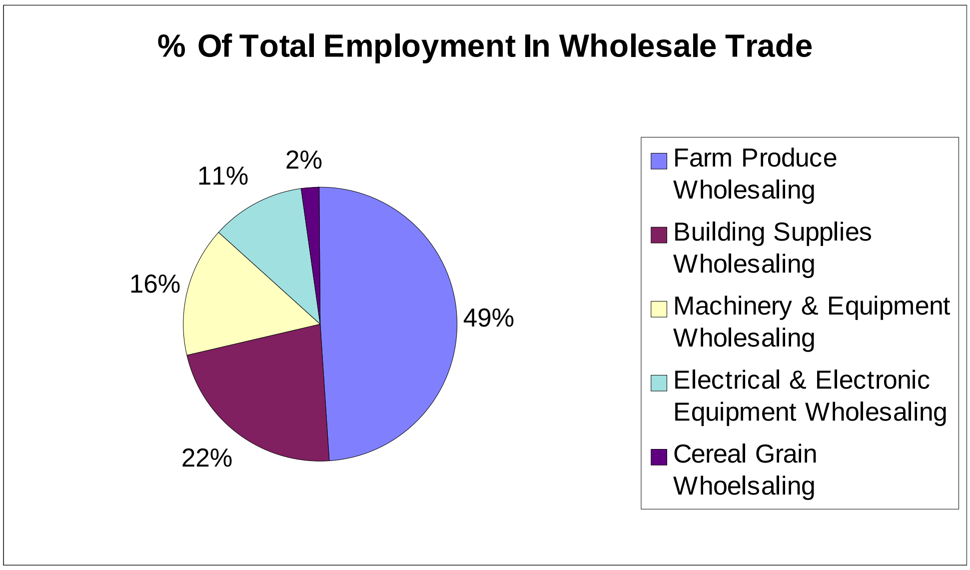
There are 12 establishments operating in this area that represents 14 percent of total industrial establishments, 18 percent of total employment and 23 percent of floorspace.

It is noted, that three of these establishments are outside of the industrial area, with one on the Murray Valley Highway (wool broking), and two in Pearce Street (wool broking and cereal grain broking).

Description	No. Of Businesses	Full time Employees	Part Time Employees	Total Employees	Floorspace
Farm Produce Wholesaling	7	14	8	22	6893
Cereal Grain Wholesaling	1	1	0	1	282
Building Supplies Wholesaling	2	6	4	10	1594
Electrical and Electronic Equipment Wholesaling	1	5	0	5	480
Machinery and Equipment Wholesaling	1	5	2	7	4450
Total	**12**	**31**	**14**	**45**	**13699**

As with other establishments, wholesale trade establishments are relatively small with an average 3.7 employees and 1142m^2 of floorspace.

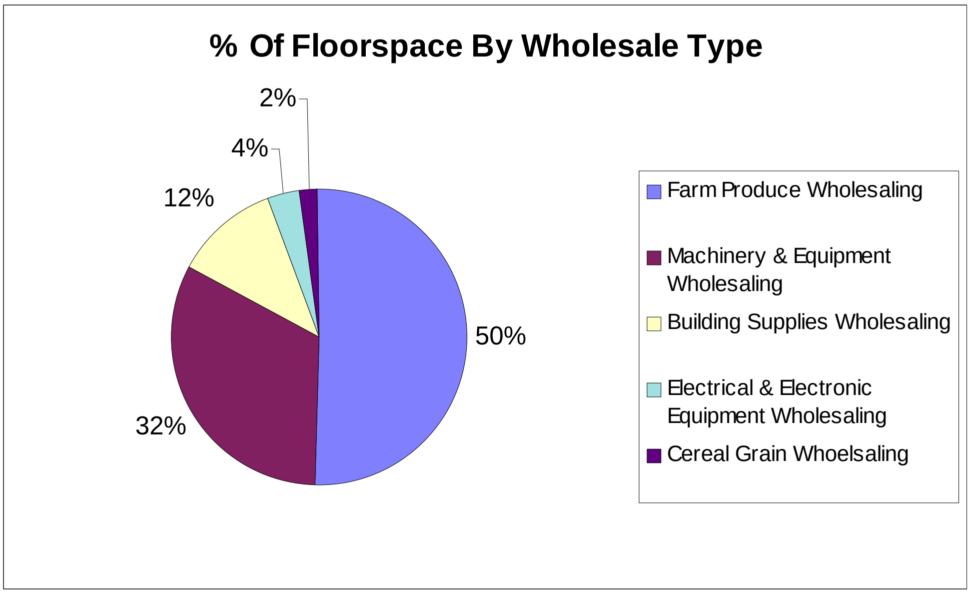
Forty nine percent of wholesale trade employment is found within farm produce wholesaling with the next major employment category being building supplies wholesaling with 22 percent. Machinery and equipment wholesaling accounts for 16 percent of employment with 11 percent to be found in electrical and electronic equipment wholesaling.



In the wholesale trade sector, 68 percent of employment is full time and 32 percent is part time with no particular outstanding patterns.

The building floorspace occupied by this activity is, 23 percent of all industrial floorspace. Despite the residential building boom in Yarrawonga over recent years, there are only two wholesale businesses existing to supply the necessary building materials.

Description	Floorspace	Percentage
Farm Produce Wholesaling	6893	50.3
Machinery and Equipment Wholesaling	4450	32.5
Building Supplies Wholesaling	1594	11.6
Electrical and Electronic Equipment Wholesaling	480	3.5
Cereal Grain Wholesaling	282	2.1
Total	**13699**	**100.0**



The table and graph above illustrate the amount of floorspace occupied by the various types of wholesale trade and the percentage of wholesale trade floorspace occupied by type. Farm produce wholesaling and machinery and equipment wholesaling dominate this category, with each requiring a reasonably large floorspace area.

6.4.8 Construction

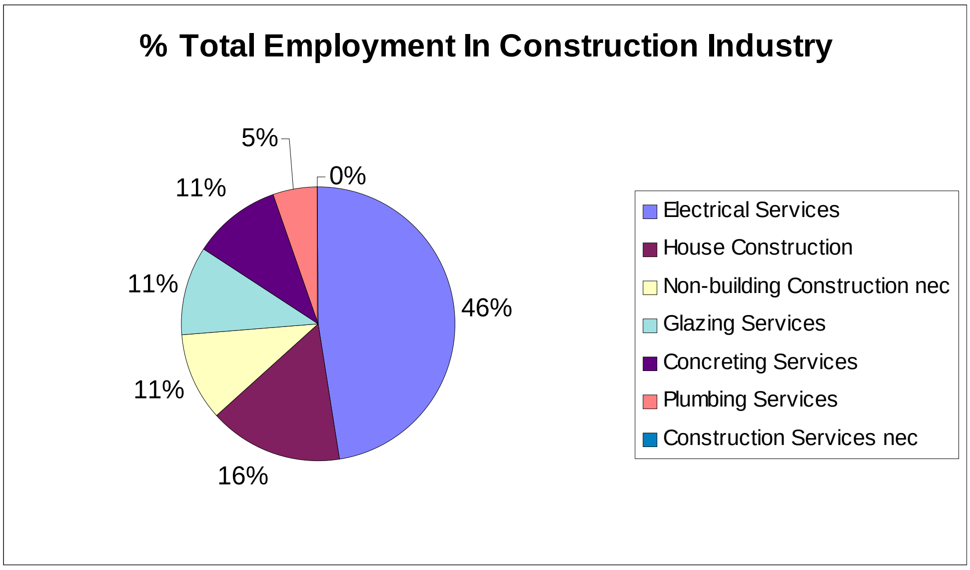
This category refers primarily to those establishments that are building trades with the floorspace they occupy mainly being used for small workshops.

There are seven establishments within this category that represent 8.9 percent of total industrial establishments, employing 5.6 percent of employment and occupying 5.2 percent of total industrial floorspace.

These establishments are quite small with, on average, three employees and an average floorspace of 369m^2.

Description	No. Of Businesses	Full time Employees	Part Time Employees	Total Employees	Floorspace
Electrical Services	1	9	0	9	600
House Construction	1	0	3	3	288
Non-building Construction nec	1	2	0	2	342
Glazing Services	1	2	0	2	756
Plumbing Services	1	1	0	1	160
Concreting Services	1	2	0	2	0
Construction Services nec	1	0	0	0	434
Total	7	16	3	19	2580

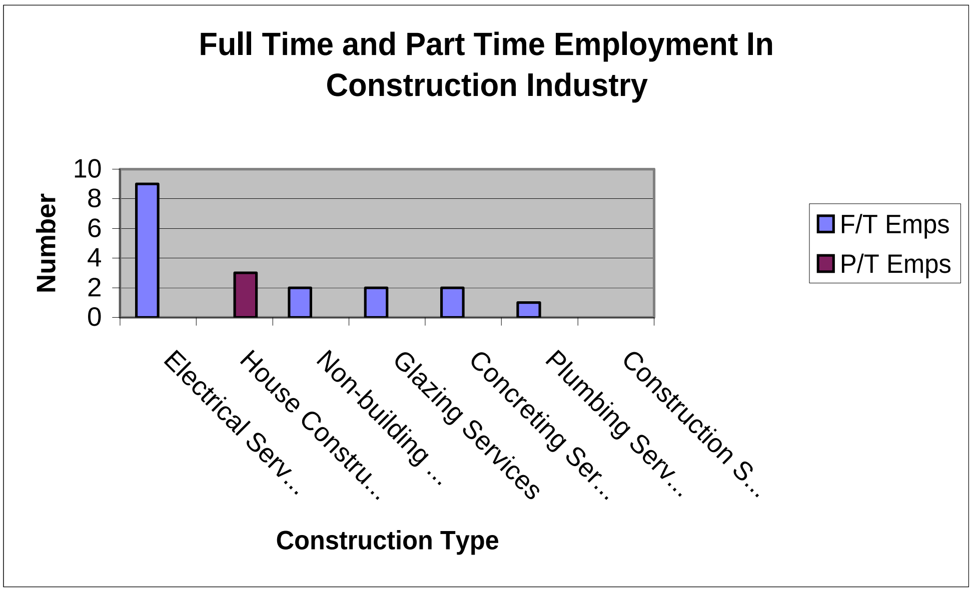
There are only single establishments within each of the various construction category types. It would appear from these results, that many of the businesses operating in the construction area operate out of residential properties elsewhere in the Shire or are from outside of the Shire.

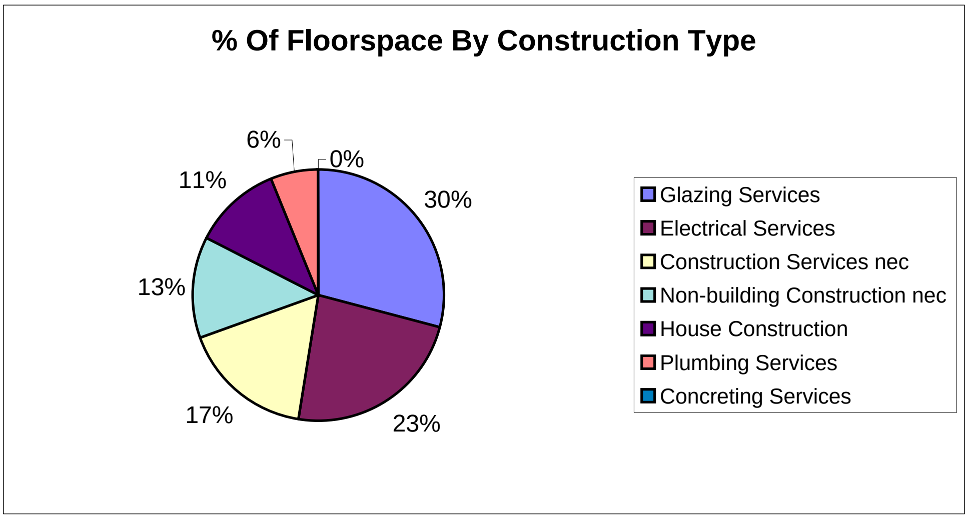


Electrical services are the single largest establishment in this category. The remaining establishments are one or two people operations and most employment is full time.

The amount of floorspace occupied by these establishments is generally small. The exception to this is glazing services that occupy 756m^2 of floorspace. This space is used as a workshop and a storage area as well.

There is no floorspace recorded against concrete services as this establishment is a ready mix concrete plant that has a land area of 35,294m^2.





The house construction establishment is both a display centre and a small office that is occupied on a part time basis only.

6.4.9 Property and Business Services, Cultural and Recreation and Personal Services

These establishments are a cleaning service, two small gymnasiums and an industrial laundry. They employ few people and occupy small areas of floorspace. The majority of employment in the gymnasiums and the laundries is part time.

The employment breakdown and floorspace occupied is illustrated in the following tables.

Property and Business Services

Description	Space Type	No. of Businesses	Full Time Employees	Part Time Employees	Total Employees	Floorspace
Cleansing Services	Storage	1	1	0	1	160
					0	
Total		2	1	0	1	160

Cultural and Recreation

Description	Space Type	Number of Businesses	Full Time Employees	Part Time Employees	Total Employees	Floorspace
Sports Ground and Facilities	Gymnasium	2	1	3	4	382
Total		2	1	3	4	382

Personal Services

Description	Space Type	Number of Businesses	Full Time Employees	Part Time Employees	Total Employees	Floorspace
Laundries and Dry Cleaners	Laundry	1	1	5	6	372
Total		1	1	5	6	372

6.5 ADI – Mulwala

ADI Mulwala is the largest employer and industry in the Yarrawonga/Mulwala area. It employs 390 people and has seen consistent growth over the last five years.

Year	People Employed
1999	326
2000	356
2001	368
2002	375
2003	379
2004	390

This growth is not expected to continue as the plant is about to enter a redevelopment phase. Once completed, employment numbers are expected to fall by around 60 people.

The value of the upgrade is estimated to be in the order of $220 million. It is anticipated that 200 additional workers will be required during the construction phase.

Commencement of the redevelopment is expected in 2006. Completion is expected in 2008 and the updated plant will have a design life of 30 years.

The importance of ADI to Yarrawonga cannot be under-estimated as it is a large direct employer and an indirect employer of people in various trades. It also relies on Yarrawonga for health services and fire fighting services to bolster its own.

Of the ADI workforce, 65 percent reside in Yarrawonga, 20 percent in Mulwala and 15 percent outside of the two towns.

ADI does not anticipate any requirement for additional land area, considering that there is sufficient land on-site.

In discussions with ADI, it became apparent that there is little scope for spin-off businesses or businesses which would directly support the plant. The exception to this is an ammonia plant. Ammonia is a critical raw material and there are only two suppliers: one on the east coast and one on the west coast.

However, there will be demand for trades and other services during the construction phase such as:

- building trades;
- metal and steel fabrication;
- electrical contractors;
- communications contractors; and
- other specialised industries.

ADI management raised a number of concerns they would like to see addressed.

Lake Crossing

On average there are 20 heavy vehicle movements to and from the plant each day with most vehicles using the weir crossing. Should this close, heavy vehicles would have to use the road bridge. If this was blocked for whatever reason it would impact directly on the operation of the plant.

In addition, the materials transported are explosive and potentially volatile. For safety reasons ADI would prefer that these materials not be transported through either the commercial district or residential districts. A second lake crossing is a vital requirement for the plant.

Standard Of Benalla-Yarrawonga Road

The surfacing of this road is a perceived problem particularly when volatile materials are being transported. Improvements to the surfacing of this road would improve the safety of the transport of the volatile materials.

Commuter Flights To Yarrawonga Airport

Senior executives and specialised people visit the plant on a regular basis from Sydney and Melbourne. Commuter flights from these destinations would be a considerable advantage.

Skilled Workforce

There is a perceived difficulty in attracting skilled people and the lack of higher education facilities is considered to be a barrier.

The age profile of employees is skewed toward younger and older employees.

ADI use an approach that focuses on the benefits of a Murray River lifestyle but still have difficulties attracting staff. An opportunity presents itself to work with ADI to attract a higher education facility as well as the development of a marketing program.

The redevelopment of the ADI plant is seen as an opportunity:

- There will be a demand for materials required for constructions purposes. The requirements should be identified now and a campaign initiated to attract the required industries and suppliers.
- With an additional workforce of 200, there will be a demand for accommodation. The private housing sector would be expected to provide the housing stock. However, an opportunity may exist to provide short to medium term accommodation in fully serviced transportable units at the Grove Caravan Park. The requirements should be identified now, and if appropriate a development plan should be prepared for the caravan park. An additional benefit would be that the accommodation would subsequently be available to service the tourist trade.
- The demand for skilled workers will potentially increase and there is the opportunity to capture some of the education market by attracting higher education facilities to Yarrawonga. Discussions should be initiated with the State Government and higher education institutions with a view to their locating a campus in Yarrawonga.
- A potential new industry could conceivably be developed in Yarrawonga providing the raw material for the propellant production. It is understood that the primary ingredients are a form of paper which is presently sourced from Canada together with ammonia which is

sourced from a plant on the eastern seaboard of Australia. It is suggested that an investigation could be undertaken to determine the feasibility of establishing a raw materials plant in the Yarrawonga area.
- The significant volumes of heavy traffic transporting volatile materials too and from the plant, the potential closure of the weir crossing and the hazards to the community potentially occurring by these heavy vehicles using the road bridge and streets through either the commercial or residential areas, lends weight to the need for a new lake crossing. It is suggested, that the campaign for a new lake crossing should have ADI as a major co-contributor.

6.6 Town Centre Bypass

There is a relatively high frequency of heavy transport traffic using Belmore Street Yarrawonga. This traffic also uses the existing road bridge which was not designed for the types of heavy vehicles now used.

Having heavy vehicles using the main commercial street is dangerous from a pedestrian and car traffic safety point of view and unsatisfactory from an amenity point of view and for the commercial health of the centre.

Some heavy vehicles transporting goods too and from ADI Mulwala use the weir crossing. That crossing is frequently closed forcing heavy vehicles to use the road crossing. This is potentially dangerous and if the bridge is ever closed, deliveries to the ADI plant are compromised which may have a negative effect on production.

The current situation is less than ideal. Goulburn-Murray Water is closing the weir crossing which means planning must commence for a new crossing. As an adjunct to a new crossing, a north-south bypass road is also required to remove heavy and passing traffic from Belmore Street.

It is suggested that there are three potential routes for a bypass road:

- Burley Road;
- Burley Road and Irvine Parade; and
- A new road through the railway yards.

The plan on the following page illustrates these potential bypass routes with each discussed separately.

It must be noted that irrespective of what option is viewed, all routes lead to Irvine Parade as it is the most convenient access to the road bridge.

This could see the need for alterations to the intersection of Irvine Parade and Belmore Street to change the priority of the roads so that Irvine Parade becomes the through road rather than Belmore Street. In addition, alterations to the existing parking arrangements in Irvine Parade near the school and measures taken to ensure the safety of students would be required.

Route A – Burley Road

This is the defacto bypass of the commercial centre of Yarrawonga as Burley Road leads from the Murray Valley Highway directly to the weir crossing.

Its continued use as a bypass is constrained by the narrow channel bridge at the Murray Valley Highway end. When the weir crossing is closed this is further constrained by the even narrower channel bridge in Piper Street.

Should this route be selected as a bypass, there will be a need to either construct two new bridges over the channel, or at the very least widen the existing bridges.

This route also involves a railway crossing which would require upgrading to cope with the increased volume of traffic.

For these reasons, it is suggested that this route is not the optimum.

Route B – Burley Road and Irvine Parade

This proposed route uses the southern end of Burley Road from the Murray Valley Highway down to the intersection with Irvine Parade on the southern side of the channel bridge.

The route then continues along Irvine Parade on the eastern side of the channel.

The advantages with this route are there are no bridges to be constructed no railway crossings involved and a wide road reservation. The disadvantage is that there are several dwellings fronting Irvine Parade between Orr Street and Piper Street.

Route C – New Bypass Road Through The Railway Yards

Central to this proposition is the concept that a light industrial estate would be developed on the old railway yards. A bypass route through the railway yards would provide an alternate and perhaps more direct means of access to an industrial estate.

The route could actually commence at the intersection of old Benalla Road and South Road and remove any necessity for railway crossings.

The disadvantage with this route is that an entirely new road would need to be constructed through the railway yards.

This is the optimum route. However, the cost factor may be prohibitive.

In all three options the northern end of Irvine Parade is used as the access to the existing road bridge, but there are other lake crossing options.

6.7 New Lake Crossing

There is no doubt that a new lake crossing is required as the weir crossing will close and does so on a regular basis. The existing road bridge was not designed for either the volume or type of traffic it is currently carrying.

It would appear from limited analysis that there are three potential locations:

1) construct a new bridge from Hovelll Street across the lake to the northern side of the existing bridge; or
2) use the existing infrastructure of the two railways bridges and the interconnecting embankment; or
3) construct two new bridges and an interconnecting road below the weir.

Option One: New Bridge from Tom Street

A direct lake crossing from Tom Street to Melbourne Road on the Mulwala side would require the construction of a bridge in the order of 600 metres long. It would potentially require the demolition of two houses on the Mulwala side, potentially one house on the Yarrawonga side and intersection treatment to facilitate safe passage of vehicles.

This would be an expensive option that, while providing a second crossing, does not readily assist in providing a more direct bypass for through traffic.

Option Two: Use existing railway bridges

Using the rail bridges and embankment is a novel approach that may have some merit as construction costs may be cheaper. This option uses an existing embankment which could be readily expanded, and the two rail bridges could be extended to provide a road surface as well as the rail track rather than the full construction of a new bridge.

The major disadvantage is dual use with the need to close when a train uses the bridge. This is not considered a major disadvantage given the limited frequency of rail traffic.

Further advantages of this option are that there is no need to provide road safety measures along side the school, there is the potential for Mulwala to be bypassed if desired, it is clearly a second crossing and a bypass and there would be no need to remove dwellings on the Mulwala side.

Option Three: Two new bridges below the weir

The third option is for the construction of two new bridges and an interconnecting road in the flood plain beneath or to the west of the weir wall.

The advantages of this option are that the construction difficulties of building over a lake are removed, there would be shorter spans of bridges required and that an interconnecting road could be constructed on land.

The disadvantages are that an area of parkland land on the Victorian side would have to be given up for the bridge approaches, there are two bridges to be constructed and, given that the area is a flood plain, the bridges would have to be constructed so that flood water was not impeded (ie. an embankment connecting the two bridges would be inappropriate as it would impede the flow of water). Alternatively, if the road was constructed at a low level, it is highly likely that it would be flooded and would need to be closed to traffic during these periods.

One final matter for consideration is the standard of the three bridges which cross the Yarrawonga Channel. These bridges would have been constructed when the channel was constructed and it would appear that they have not been altered since. The three bridges (one on the Murray Valley Highway, one on Burley Road and the other on Piper Street) are barely able to provide two lanes of traffic.

Should a new lake crossing be constructed in any one of the above locations, consideration will also need to be given to the extension of these bridges as well.

- If the crossing is below the weir, the Burley Road channel bridge would need to be extended;
- If the crossing uses the railway embankment or goes directly across the lake and Irvine Parade is not used as a bypass, both the Piper Street and Burley Road bridges would need to be extended; and
- If the crossing uses the railway embankment or goes directly across the lake and if either Irvine Parade or a new road through the rail yards was used as a bypass, then neither of the channel bridges would be used and their extension may not be required.

The favoured option is the use of the railway embankment for the crossing with Irvine Parade upgraded to provide a bypass route.

6.8 Summary Of Key Recommendations – Industrial Land

6.8.1 Short to medium term

- Develop a small lot industrial subdivision on the vacant land at the saleyards;

- Negotiate with the owner of the industrial land at the eastern end of Melaluca Street to develop an industrial park;

- Schedule drainage, road, streetscape and signage improvements to Acacia and Melaluca Streets;

- Negotiate with VicTrack and the State Government to secure the old railway yards for the development of a light industrial industry park including an amendment to the Planning Scheme to rezone the land to Industrial 3;

- Prepare a development strategy for a light industrial park on the old railway yards;

- Prepare and initiate a landscape plan for the disused stock route easement running between the sewerage farm and South Road;

- Prepare an amendment to the Planning Scheme to rezone land fronting the Murray Valley Highway and Burley Road from Rural to Business 3;

- Prepare a Design and Development Overlay for Burley Road to ensure that development occurs in the desired manner;

- Develop a strategy to secure a large hardware/homeware store to service the needs of the existing community and of the construction industry as part of the process to Amend the Planning Scheme to rezone land in Burley Road to Business 3 zone;

- Prepare an amendment to the Planning Scheme to rezone land occupied by the sewerage farm from Public Use to Industrial 1 Zone;

- Prepare an improvement program for the Benalla Road entrance to Yarrawonga including, but not limited to, drainage, landscaping and signage;

- Explore the potential for introducing commuter flights to and from Yarrawonga Airport as part of the airport masterplan;

- Negotiate with the proprietors of the cordial factory in Hunt Street Yarrawonga for its relocation to a new site in the industrial estate;

- Negotiate with the proprietors and land owners of the grain bunker site with the objective of removing the facility to a more appropriate location;

- Commence discussions with ADI Mulwala to determine the types of construction services and the types of building materials which will be required for the redevelopment and initiate a program to secure the required types of businesses to establish in the industrial estate;

- In conjunction with ADI Mulwala, determine the demand for short to medium term rental accommodation and if appropriate, prepare a development plan for The Grove Caravan Park and

- Initiate discussions with the State Government and selected tertiary institutions with the objective of securing a higher education campus on land near the existing secondary college. It is suggested that the focus should be on tourism and recreation and building and technology.

6.8.2 Medium to Long Term

- Review the use and appropriateness of the saleyard with a view to its relocation;

- Work with North-East water to facilitate the relocation of the sewerage treatment plant;

- Prepare an amendment to the Planning Scheme to rezone land behind the Murray Valley Highway and Burley Road from Rural to Industrial 1;

- Negotiate with the proprietors of the establishments on the Murray Valley Highway east of Woods Road for their eventual relocation to the industrial estate;

- In conjunction with ADI Mulwala, initiate a feasibility study into the potential to establish factories to manufacture the raw materials used in the production of the propellant;

- Determine the location of a north-south bypass of Yarrawonga, seek State Government funding and construct the bypass within seven years; and

- Negotiate with the Victorian and New South Wales State Governments for the construction of a new road bridge linking Yarrawonga and Mulwala to be constructed within the next 10 years.

7 Education

7.1 Snapshot of Schools

Early in 2004 a census was undertaken of school enrolments in Yarrawonga and discussions were held with key stakeholders to ascertain likely future requirements for each of the schools. With the exception of the pre-school, all schools have reported consistent growth in enrolments over recent years.

7.1.1 Kindergartens

There are two kindergartens in Yarrawonga: Yarrawonga Pre-school and Kaye's Place.

Yarrawonga Pre-school

- Is located in council owned premises in Orr Street.
- Current enrolment is 54 children.
- In recent years, enrolments have fluctuated from between 46 in 1998, to 61 in both 2001 and 2002 to 54 in 2003.
- The pre-school is to be moved to new purpose built premises to be constructed on land in Woods Road. Depending upon funding arrangements, the new pre-school is expected to become operational in either late 2005 or late 2006.
- There are no issues or matters of concern arising from the pre-school.

Kaye's Place

- Is a small (15 place) privately run kindergarten in McNally Street.
- It is understood, that all places in the kindergarten are fully occupied and that there are no plans at this stage to extend its operation.

7.1.2 Primary Schools

Yarrawonga Primary School

- Is located on a 15,324m^2 lot bounded by Tom, Piper and Hovelll Streets and Irvine Parade.
- In June 2004, there were 450 enrolments which is a 29 percent increase over the 1996 enrolments of 347 children.

Discussions with the primary school indicate that the existing site is undersized for the number of students enrolled and that future growth of the schools is impeded as a result. Using Education Department standard criteria, the available land area at the school is really only capable of supporting 220 students.

The actual number of students the school is projected to cater for is calculated by applying an Education Department yield rate of either 0.2 or 0.3 students per dwelling. With an estimated 2,243 dwellings in Yarrawonga in 2003, the estimated potential school population is between 448 and 672 students. Using either actual enrolments or projected enrolments, it is clear that the existing school is over-stretched on its current site.

In response to this, the Deputy Principal produced a discussion paper that identified three potential solutions to overcome the over-utilisation of the existing school site. This paper addressed the problem from a whole of education viewpoint (ie. from kindergarten through to secondary education).

The three potential solutions developed were as follows.

Solution One

The kindergarten could combine with the primary school's grades prep, one and two on the present school site. The other four grade levels could be provided for in a purpose built school.

Solution Two

The kindergarten and school, up to and including grade four could be provided for on the present site and a Middle Years School (5-8) could be provided for in a purpose built school.

Solution Three

Grades Years prep to four could be provided for on the primary school site. Grade five to Year nine on the secondary school site with years 10 to 12 provided for in a purpose built school.

The discussion paper concluded that solution two with 300 children in each of the three schools or campuses, would fit best with the available facilities and provide the most flexibility to handle enrolment fluctuations.

In addition to identifying potential solutions to the over-crowding problem at the primary school, the discussion paper also presented a number of initiatives to accompany a new middle school:

- A cyber library serving both the schools and the broader community was suggested as being more cost effective and efficient enabling longer opening hours;
- A science and technology centre would enable the school to provide a wider range of subject choices as well as the provision of night courses. This could also cater for some of the needs of local apprentices who currently have to travel out of town to have their education needs satisfied;
- Greater utilisation of community facilities including a heated swimming pool, sports facilities at the showground's (net ball courts, table tennis pavilion) and the town hall could conceivably be used for music, drama and as a performing arts centre; and
- Establishing greater links with major employers such as the sporting clubs and ADI for industry based and vocational training.

Sacred Heart Primary School

- Is located on an approximately 8,065m^2 site bounded by Murphy, Piper and Coghil Streets.

- There are 300 students in grades prep to six which represents a 36 percent increase in the number of students from the 220 enrolments in 1996;

- The school indicates that more land is required to allow it to provide for the needs of the students and future growth however, this is a matter that Catholic Education, the parish and the school community have yet to address;

- The school does use some community facilities but as many of these facilities are some distance from the school, their usage is not great; and

- Lack of bicycle paths and the standard of the existing bicycle paths is an issue of concern for this school with the safety of its students compromised by the lack of suitable paths.

7.1.3 Secondary Schools

Yarrawonga Secondary College

- Is located on a 49,418m^2 site bounded by Gilmore, McClean and Pinnegar Streets;

- There are 395 students enrolled which is a 23 percent increase over the 320 students enrolled in 2000;

- In addition to providing for VCE courses the college also offers courses leading to the Victorian Certificate of Applied Learning (VCAL). The VCAL is aimed at providing vocational training for those students not wishing to undertake higher education;

- The college is satisfied with its current site having recently invested in significant improvements and having sufficient land for existing and future needs. The college is aware though of the difficulties being experienced by the primary school and suggests that a multi-campus facility could be facilitated as follows.

  - Junior School — Prep to Grade four,
  - Middle School — Grade five to nine, and
  - Senior School — Years 10 to 12.

With regard to further education, the secondary college recognises there would be benefits from having an annex from a tertiary or higher education facility establishing in Yarrawonga, but suggests that there may be some difficulty in identifying the types of courses to be offered.

Sacred Heart College

- Is located on a 6,067m^2 site bounded by Witt, Murphy, Coghill and Murphy Streets.

- There are 184 students enrolled in years seven to 10 which represents a 4.5 percent increase compared to the 2000 enrolment of 176 students.

- Current discussions with the Catholic Education Office indicates there are no plans for relocation of the college. About $1.1 million of upgrades have been, or are about to be, undertaken.

- The college expects to continue to grow and is investigating forging greater links with other Catholic secondary colleges in Wangaratta to facilitate its students moving into year 11 and 12 (the VCE years). The college does provide some VCE units and expects the number to increase. However, there are no plans to provide years 11 and 12 on this site.

- The college acknowledges that its land area is limited. However, it does make extensive use of community facilities such as the swimming pool, tennis courts, table tennis pavilion and netball courts and as a result, does not need to provide these facilities on-site.

- With regard to the community facilities, the lack of a heated swimming pool is seen as a matter of concern and the college would be supportive of initiatives to develop such a pool.

7.2 School Age Population

Yarrawonga's population profile since 1981 indicates that people in the five to 17 year age group are under-represented when compared to the Shire and regional Victoria population statistics. People in the 60 years of age plus cohort are over-represented. These figures indicate that Yarrawonga has a generally older population compared to the Shire and regional Victoria averages and that there will be an increasing demand for services for the aged population.

The gradual reduction in people aged in the teen years and early twenties indicates that there is an outward migration of people in these age groups that could reflect a number of factors:

- Lack of higher education opportunities in the area;
- Lack of employment opportunities in the town and surrounding area; and
- The general drift of younger age groups to the larger urban areas.

This continued decline is a concern because these age groups provide the catalyst for local economic development. Therefore, attention should be given to trying to retain the younger population.

7.3 Identification of Issues

7.3.1 Insufficient Land Area

The Yarrawonga Primary School, Sacred Heart Primary School and Sacred Heart College all occupy sites which are insufficient in area to accommodate their existing and future school population.

Sacred Heart Primary and College

The two Catholic Education schools have no plans at this stage for expansion or relocation and believe this is an issue best addressed by higher authorities, the parish and the school community. Nevertheless, given the location of these facilities and surrounding land uses it would be difficult to accommodate any expansion on their current sites.

In addition, Sacred Heart College is endeavouring to establish closer ties with Catholic Secondary Colleges outside of the shire in order to provide for those students entering the later stages of their schooling. This approach is seen as a contributor to the reduction in the 15 to 18 year old population as many students leave the town to continue their education. This loss of students is identified as an issue which needs to be addressed, but to address it requires consultation with these institutions to achieve two primary objectives:

- Adding years 11 and 12 to the existing school; and
- Identifying a new site for the future development of a combined Catholic Education facility.

It is recommended that council instigates discussions with Sacred Heart Primary School and College and Catholic Education with a view to achieving these two objectives.

Yarrawonga Primary School

This school is under considerable pressure to provide sufficient land area for its existing and future school population. Its current site is too small for extensive redevelopment and accordingly, a new site must be identified. The issue then arises of what to do with the existing school site.

The discussion paper prepared by the Schools Deputy Principal and the comments from the Principal of Yarrawonga Secondary College suggest that a multi campus school comprising a junior, middle and senior school warrants further investigation. If this type of facility was developed, the existing primary school could be used to provide for one of the campuses.

It is apparent from comments from the schools and ADI that there is a lack of higher education opportunities within the town and that this is contributing to the drift of the late teen early 20s age group from the town.

A recommendation of the Industrial Land Review is that discussions be initiated with the State Government and selected tertiary institutions with the objective of securing a higher education campus on land near the secondary college.

While this recommendation is supported, the opportunity to use the primary school site as an alternative location for a higher education centre should not be over looked.

It is recommended that land adjacent to Yarrawonga Secondary College be rezoned to Public Purposes Education and that discussions be initiated with the State Government, the Education Department, Yarrawonga Primary School and the Yarrawonga Secondary College with the objective of planning a multi-campus education facility for development within the next five years.

7.4 Future Education Precinct

The plan below illustrates the suggested location for an Education Precinct adjacent to the secondary colleges and the extensive recreation facilities available in the showgrounds.

The land is zoned Public Park and Recreation Zone, has an area of approximately 46,000m^2 and is managed by the Yarrawonga Showgrounds Committee on behalf of council.

Detailed discussions are required with the State Government, Education Department, the secondary college and the primary school are required to formulate a plan for the development of this land as an education precinct.

7.5 Summary of Recommendations

- Instigate discussions with Sacred Heart Primary School and College and Catholic Education with a view to achieving the objectives of:

  - Adding years 11 and 12 to the existing school, and
  - Identifying a new site for the future development of a combined Catholic Education facility.

- Rezone land opposite Yarrawonga Secondary College on the showgrounds site to Public Purposes Education.

- Rezone land adjacent to Yarrawonga Secondary College to Public Purposes Education and initiated discussions with the State Government, the Education Department, Yarrawonga Primary School and the Secondary College with the objective of planning a multi-campus education facility for development within the next five years.

- Initiate discussions with the State Government and selected tertiary institutions with the objective of securing a higher education campus to serve the population of Yarrawonga and its hinterland.

8 Belmore To Bundalong

8.1 Introduction

Yarrawonga as a place of residence and as a visitor destinations has a number of attractions. The most prominent of these attractions is Lake Mulwala which is compromised by limited access.

In the town area, there are approximately 700 metres of foreshore park used for passive recreation, swimming and mooring boats. Beyond that, there are about two kilometres of pathway between the Woods Road and River Road intersection and the rowing sheds. Much of this pathway is in poor repair with little separation between vehicles and pedestrians. Beyond the rowing sheds to the east and extending as far as Bundalong, there is very little public access as a result of much of the land abutting the foreshore being in private ownership. Developments in Rosemary and Stephenson Courts would not be approved today as they act as a barrier to public access to the lake.

For boat users access is very limited with one major two-lane boat ramp which leads directly into deep water and one shallow boat ramp near the Yacht Club. These ramps were built many years ago and are not particularly well designed for boat ramp users nor for the safety of road users in the immediate vicinity of the ramps.

Outside of the town area, there is a public boat ramp and parkland at the end of Hogans Road, one at Majors Creek and two in Bundalong.

If the existing and growing population is to be catered for as well as providing well designed and located facilities for the many visitors to the town, then there is a need to enhance access to the lake for a wide variety of users.

8.2 Belmore To Bundalong Link

Traditionally the lake has been used for boating but the Lake is also an area of natural beauty recognised in the Planning Scheme by the Significant Landscape Overlay which covers much of the foreshore from the eastern fringes of Yarrawonga to Bundalong.

An area of natural beauty is meant to be seen. At present, outside of the town limits, there is little opportunity for the lake to be seen. The land abutting the lake for a varying distance inland is either owned or vested with Goulburn-Murray Water. This land is in a sense a linear reserve along the full length of the foreshore. While this is public land, the public are generally excluded from using it.

It is suggested that this linear reserve is an opportunity to develop a link between Belmore Street and Bundalong for use by a variety of users such as pedestrians, cyclists or in some areas motor vehicle users.

8.2.1 Belmore Street to River Road

In 2002, council over a short period of time created a new improved foreshore by reclaiming part of the lake and replacing outdated facilities.

This work has resulted in a visually attractive area and created useable and accessible parkland.

The remaining foreshore area to the east remains untouched with some of the facilities quite old and either in need of repair or replacement.

A landscape Masterplan should be developed to renew the area shown on the following plan and to continue the excellent progress already made.

The components of the Masterplan would include but not be limited to, the following landscape and streetscape elements:

- Continuing the design theme used over the reclaimed land;
- Replacing the existing concrete hard edge to continue the new hard edge provided where the land was reclaimed;
- Continuing the lighting theme already commenced;
- Continuing the vegetation treatment already commenced;
- Replacing of bitumen road paving with aesthetically more appealing surfacing material;

- Improving the pathways through the area; and
- Relocating the water slide to the Yarrawonga Pool in Burley Road.

- Restoring of the toddler's swimming pool;
- Installing new barbecue facilities and picnic shelters;
- Introducing new seating;
- Restoring the stone changing rooms and toilets;
- Restoring the stone kiosk;
- Restoring the stone fence;
- Stabilising the high banks area to prevent further erosion;
- Considering the future of the willow trees in the high bank area;
- Constructing a landscaped shared pedestrian/bicycle path to link up with the path in River Road. Vehicle/pedestrian separation is a priority;
- Improving access to and parking arrangements at the boat ramp; and
- Constructing jetties either side of the boat ramp to facilitate launching and retrieval of boats.

It is recommended that council seek funding for the preparation of a landscape Masterplan as well as funding to undertake the works involved.

8.2.2 River Road

River Road runs along the lake foreshore from Woods Road to the Yacht Club.

The road has served as the primary access to the new residential developments occurring in the Champagne Lakes area as well as serving River Road residents, the Yacht Club and people venturing to Chinamans Island.

River Road's function as a primary access road has changed since the Witt Street closure was removed and is further expected to change once Witt Street is connected to River Road in the vicinity of the Yacht Club. However, it will remain a popular scenic drive.

River Road is not within a designated road reserve but instead, has been constructed on land owned by Goulburn Murray Water. It has been Goulburn-Murray Water's intention to pass the land on to council, but this has not yet transpired.

The road and the pathway between the road and the lake are in poor condition particularly in the light of the number of and type of users of it. Visitors see a narrow road pavement with rough edges, poor or non-existent drainage, potholed and rough walking track with no separation between the track and motor vehicles and unkept vegetation.

An upgrade to River Road from Woods Road through to the Yacht Club is essential to provide for residents and continue to provide great scenic quality for visitors and residents.

It is recommended that council seeks the transfer of River Road from Goulburn-Murray Water within 12 months.

It is further recommended that a Landscape Masterplan be prepared for improvements to River Road to be undertaken jointly by council and Goulburn-Murray Water.

8.2.3 Yacht Club To The Rowing Sheds

This area extends from the Yacht Club at the northern end of River Road to the rowing sheds at the northern end of Botts Road.

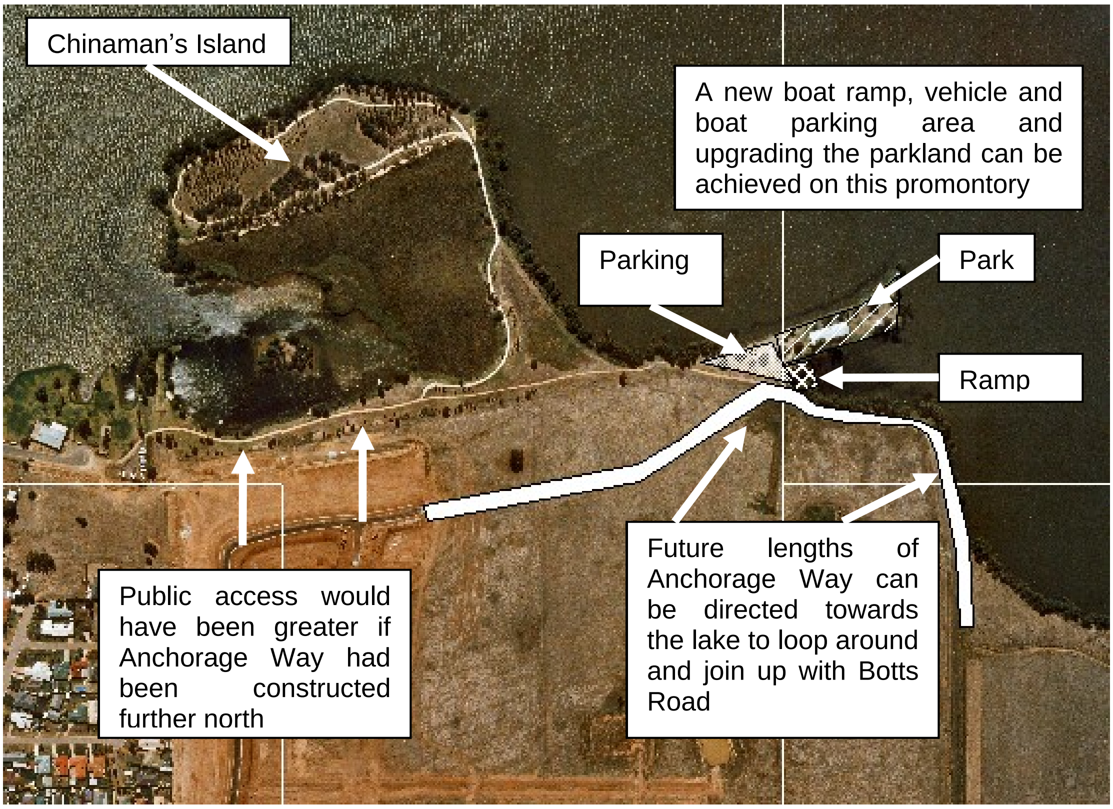
Much of the foreshore is developed with the Yacht Club, Chinamans Island and the walking track around Chinamans Island and to the rowing sheds.

These areas are an attractive part of the foreshore requiring little attention. The area around the rowing sheds is under-developed and under-utilised but it is ideally located to provide improved access.

This area has a hard concrete edge constructed many years ago, has little if any landscape treatment and is occupied by the old rowing sheds.

Informal car parking is provided on unformed gravel areas and there is no separation between pedestrians and vehicles.

In addition, the access road at the end of Botts Road is gravel, in generally poor condition and appears to have been constructed on private land.



Access to this site is potentially very good of the future extension of Anchorage Way is directed towards the foreshore on land that is not capable of development due to drainage and soakage easements. However, access from Hogans Road is poor and needs to be improved.

A new boat ramp to serve the needs of the growing population in the eastern areas of Yarrawonga together with visitors could be developed to overcome the shortage of available boat launching facilities in Yarrawonga.

Areas of car parking would provide for the users of this precinct as well as those venturing to Chinaman's Island.

It is recommended that an upgrade similar to what was done to the reclaimed land near the road bridge be undertaken jointly with Goulburn-Murray Water. The redevelopment would include the construction of new boat launching facilities, improved parking areas, landscape treatment, barbecue and picnic facilities and improvements to the walking track including physical separation from traffic and parking areas.

It is further recommended, that council in conjunction with Goulburn Murray Water negotiates with the land owner to the immediate south to obtain sufficient land to widen and improve access from Hogans Road.

It is understood that the Rowing Club is in recess with few active members. Consideration could be given in the planning for this area of providing improved facilities for the rowing club with the objective of re-invigorating it. As this will require the construction of new club at considerable cost, no action should be initiated until the feasibility of re-establishing the rowing club is determined.

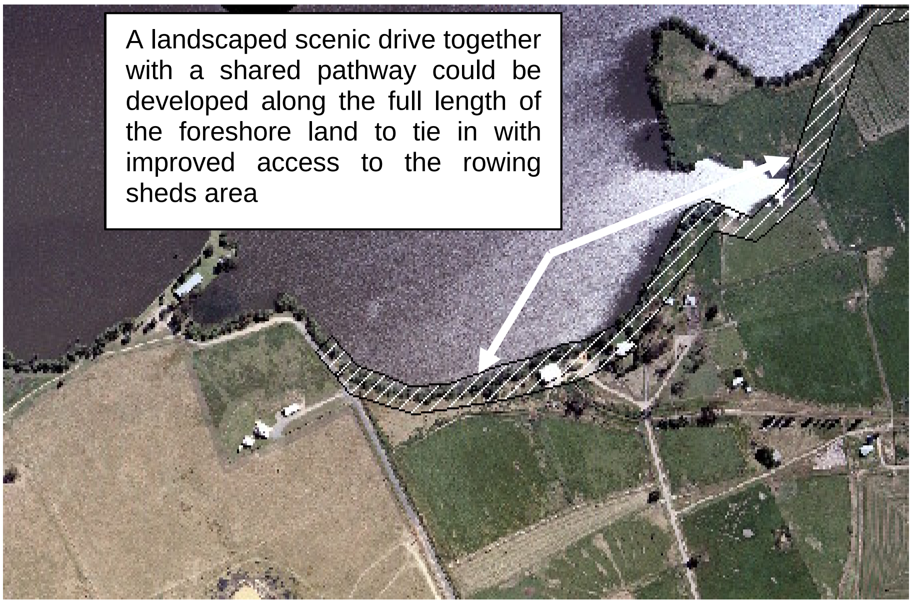
It is recommended that council initiate a survey of the community to ascertain the level of interest in re-establishing the rowing club.

If there is a high level of interest it is recommended that council seeks grants or alternative funding for the construction of new rowing club facilities.

8.2.4 Botts Land

Botts Land is held in private ownership and will, in all likelihood, be developed for residential purposes in a golf course setting.

The opportunity exists to provide excellent access to the lake by ensuring there is a landscaped scenic drive and/or landscaped pathway on the lakeside along the full length of the foreshore.



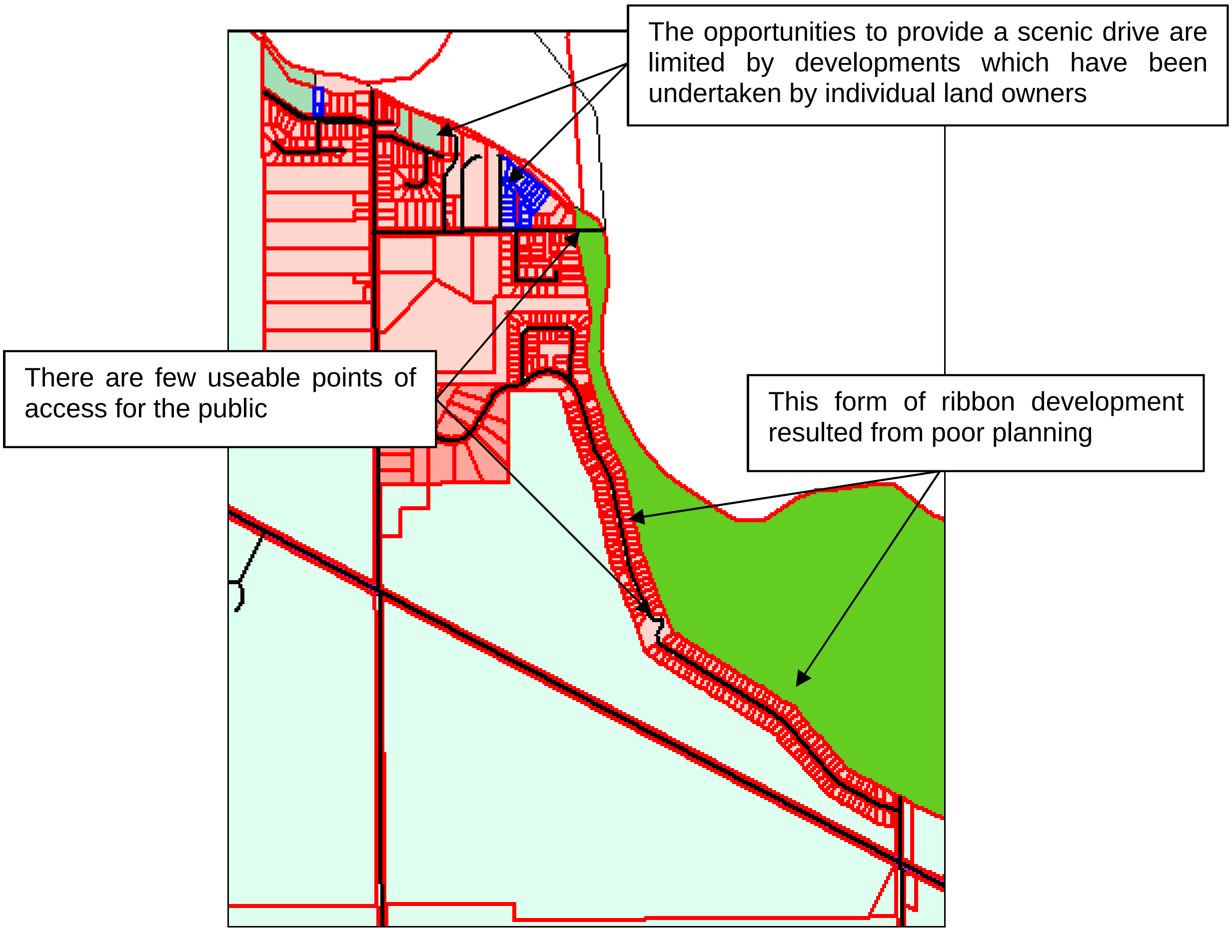
It is recommended, that council negotiate with the owners of Bott's land with the objective of ensuring that any design proposals for the development of this tract of land include an east-west link between Hogans Road and Linthorpe Drive.

8.2.5 Linthorpe Drive to Buchanan's Road

The area around Linthorpe Drive, Henderson Street, Rosemary Court and Stevensons Court has been developing over many years. The developments have occurred with the objective of capturing lake views for a small number of people with little emphasis given to providing public access to the lake.

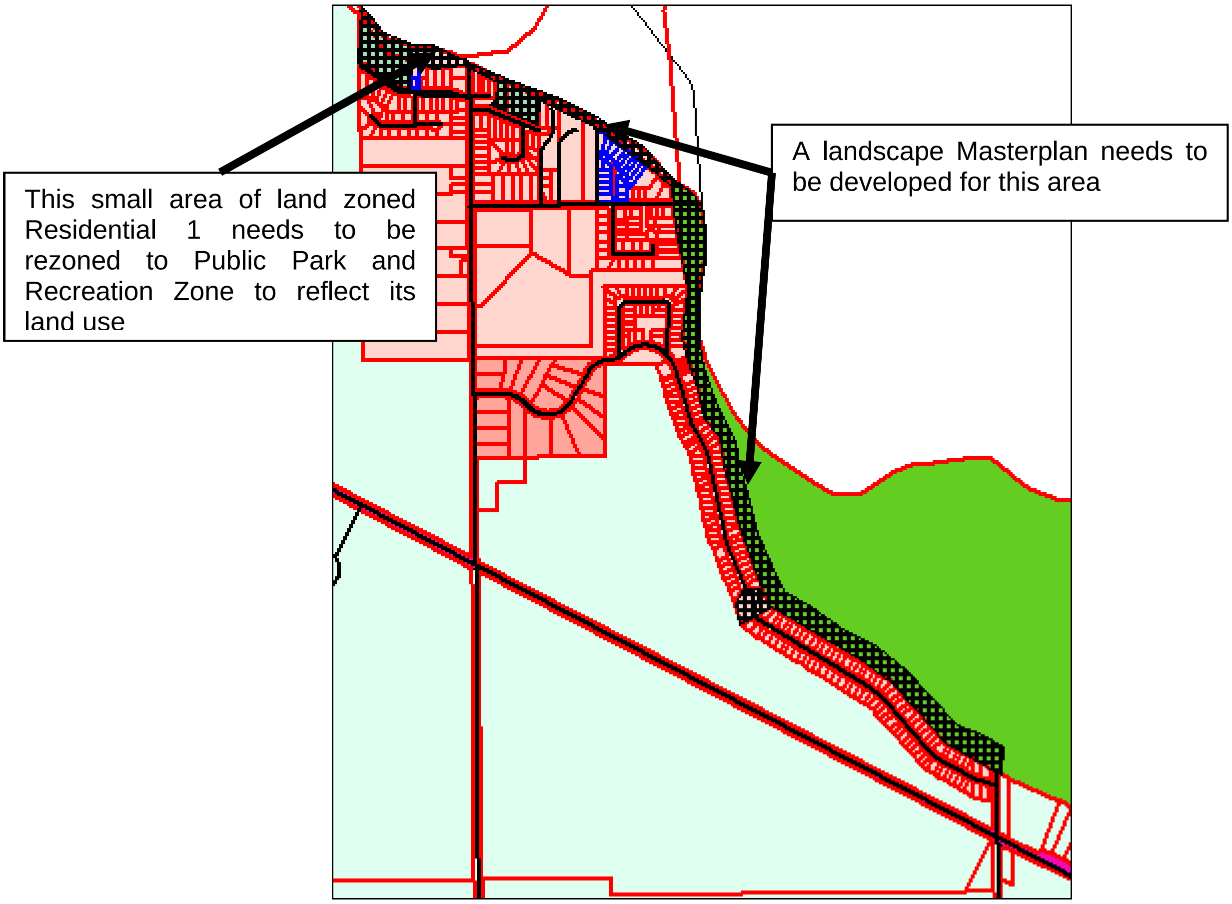
This approach has also resulted in legacy areas where the layout of new development is tied by the orientation of roads developed by individual land owners.

The plan below illustrates clearly the impact of un-planned developments in the past and it is quite apparent from this, that the opportunities to provide for improved access are reduced considerably.



Nevertheless, there is an opportunity to develop a linear park linking existing areas of public open space and continuing the pathway from Belmore Street to Bundalong.

The development of a linear park will be challenging, particularly in the Rosemary and Stevenson Court areas due to the narrowness of the Goulburn Murray Water reservation. Some property owners also perceive the reserve to be an extension of the garden area of the dwellings which front it.



It is recommended that a Landscape Masterplan be developed in conjunction with Goulburn Murray Water with the primary objective of continuing a linear park from Belmore Street to Bundalong.

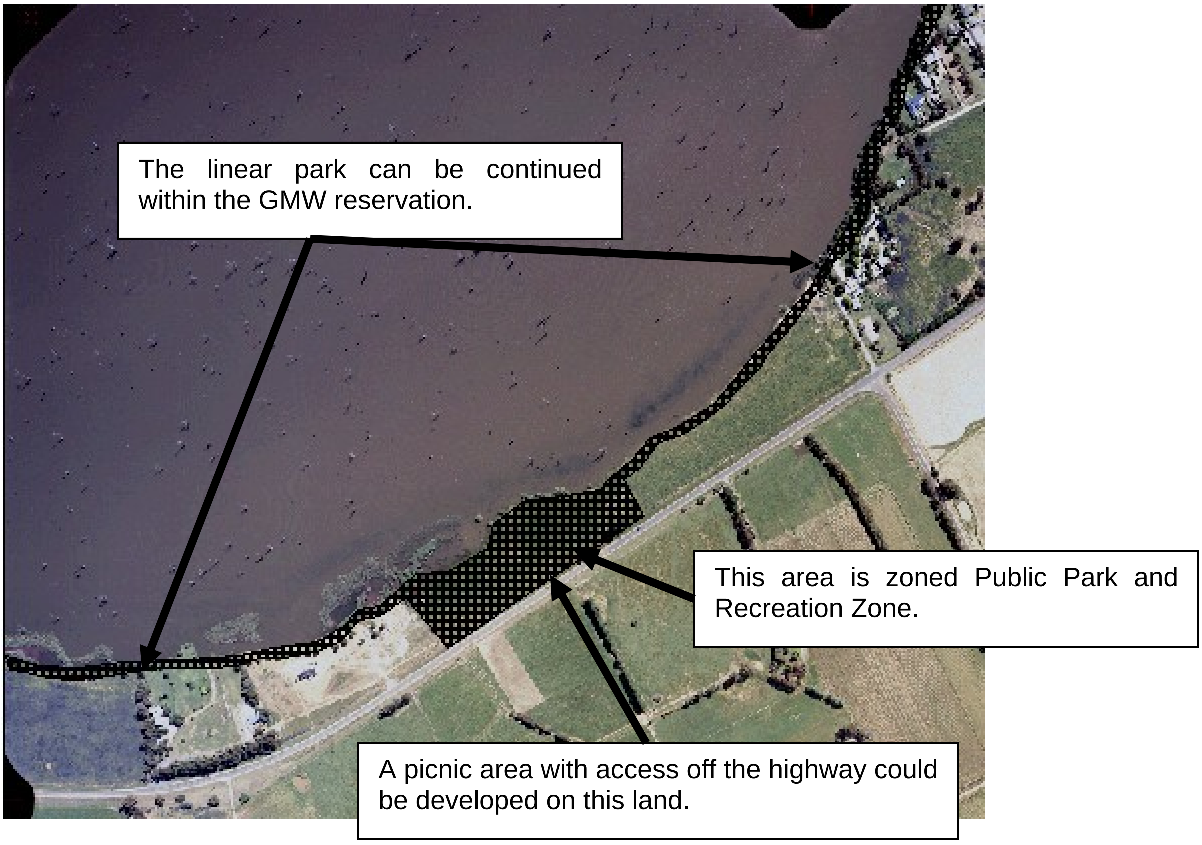
The Landscape Masterplan should include the following key elements:

- Fully formed shared pedestrian/bicycle pathway;
- Consistent landscape theme represented by selected planting and furniture;
- Barbecue and picnic facilities in appropriate locations;
- Improving car and boat parking areas;
- Upgrading of the small boat ramp between Rosemary and Stevenson Courts; and
- Enhancing visibility of the small existing pathways leading from Rosemary and Stevenson Courts to the Lake foreshore.

The area of land around the boat ramp at the end of Hogans Road should be rezoned from Residential 1 to Public Park and Recreation.

8.2.6 Buchanans Road to Bathumi

The land from Buchanans Road to Bathumi continues the Goulburn Murray Water reserve along the lake foreshore with privately owned properties to the south. There is a large area of land zoned Public Park and Recreation Zone and this is the only place where Lake Mulwala can be viewed directly from the Murray Valley Highway.



The linear park may be continued along the lake foreshore with a vantage point being developed on the area of land zoned Public Park and Recreation.

The vantage point would require the construction of an entrance from the Murray Valley Highway and a parking area. Ideally, picnic facilities in an informal setting would be developed to reflect the natural appearance of the foreshore environment.

Under Amendment C13 to the Planning Scheme, this area was to be retained in its present zoning until its suitability for low density residential living was determined as part of the Rural Living Strategy. It is suggested that the use of this land for low density residential is inappropriate as this is the only place along the entire length of Lake Mulwala where the lake and its signature treed environment can be viewed by the public. Its scenic value cannot be under-estimated and to lose it for the sake of three or four dwellings would be very unfortunate.

With regard to Bathumi itself, Amendment C13 introduced a Restructure Overlay on the basis that Bathumi is "strategically unsuitable for urban development" with the land consequently being rezoned to Rural.

This land is unsuitable for residential development and its agricultural potential is limited. A possible alternative land use is for something with a tourism orientation.

It is recommended, that the Landscape Masterplan is extended to cover the area from Buchanans Road up to and beyond Bathumi and that it has the following key components:

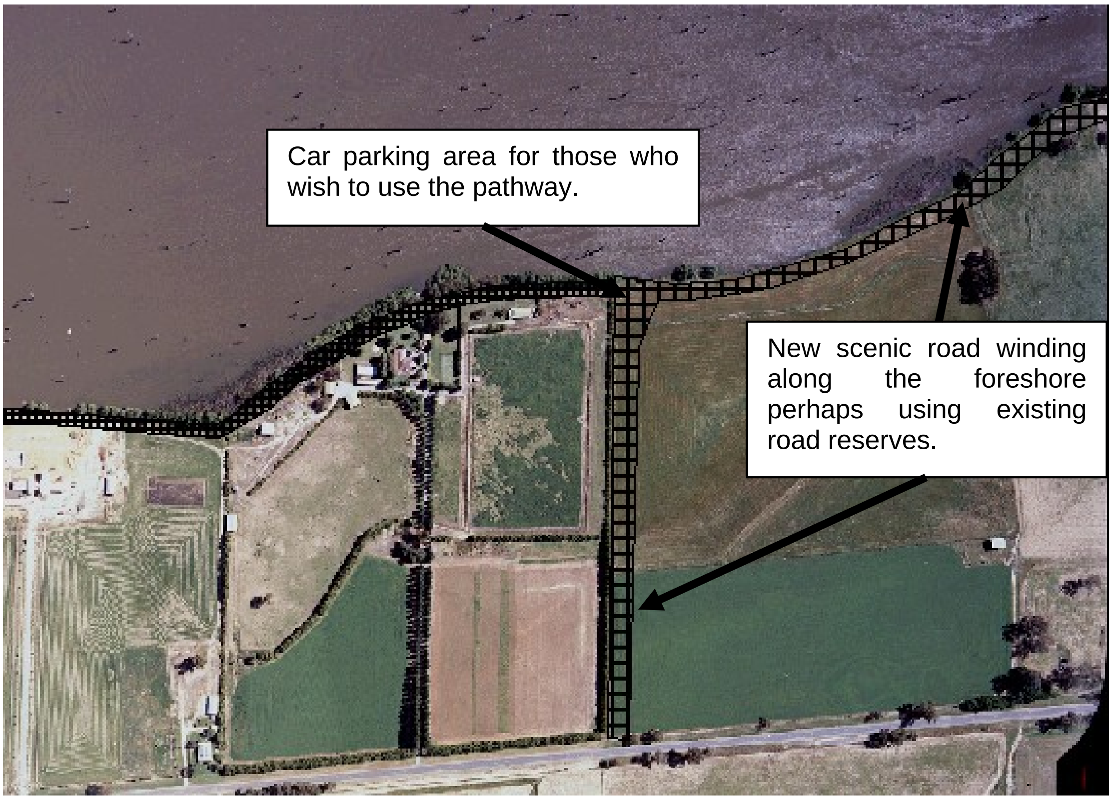
- A pedestrian/bicycle pathway in an informal setting reflecting the natural environment of the Lake and its foreshore;
- The development of an access off the highway and car park to provide for users of the vantage point; and
- An interpretive display describing the history of the lake and the background to the treed environment as well as information on the benefits to the natural environment arising from the treed environment.

8.2.7 Bathumi To Bundalong

To the east of Bathumi, the land along the foreshore becomes less heavily developed and there is a greater distance from the foreshore to the highway.

None of this land is accessible at the moment nor is it visible.

This is considered to be an opportunity to improve access and visitation of the lake by providing a scenic road winding in an informal manner and generally following the shoreline.



As well as a proposed scenic drive, the shared pathway would be continued to allow access for those who wish to walk, ride a bicycle or perhaps ride a horse.

The land between the proposed scenic drive and the highway is zoned Rural and is used for a number of agricultural pursuits. The usage of this land is limited though because it is between the lake and the highway.

This land would be suitable for a number of different activities including vineyards, intensive horticulture and in some locations, rural-residential style allotments on larger acreages. Alternatively, tourism ventures based around ecological themes and focused on the different environment of the lake's headwaters could be encouraged.

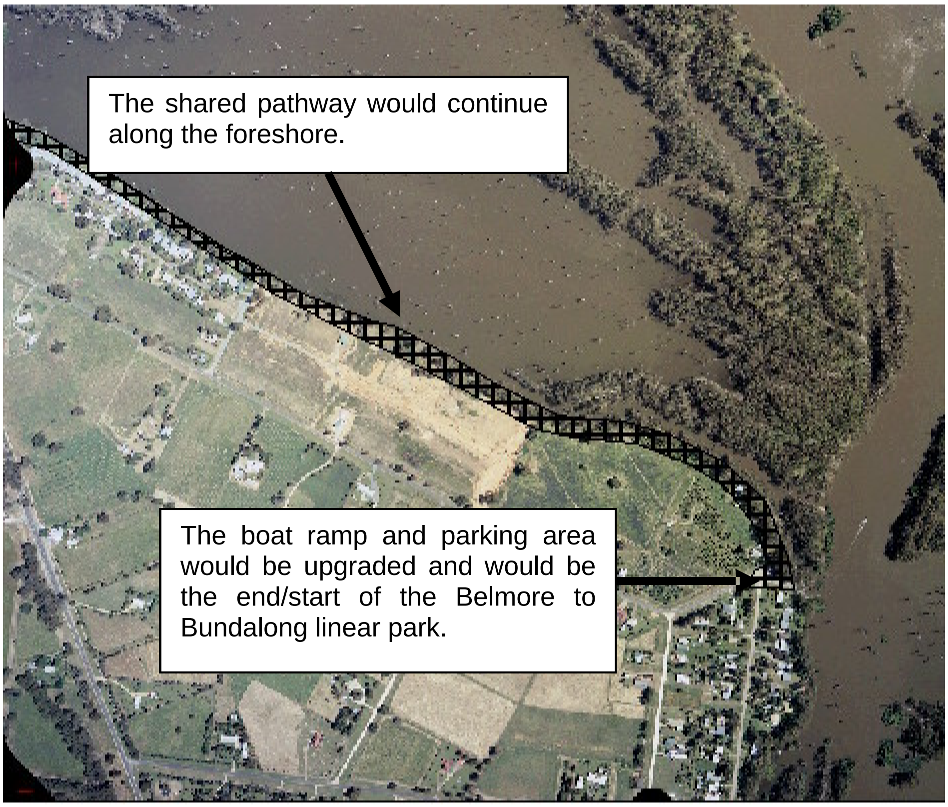
It is recommended that land along the southern foreshore of the Lake be rezoned to a Road Zone to allow for the construction of a scenic drive in the future.

It is further recommended that a boat ramp, car parking and toilet facilities be developed in the general vicinity of Majors Creek.

8.2.8 Bundalong

Much of the foreshore into and through Bundalong has been developed for residential purposes. The Goulburn-Murray Water reserve extends along the foreshore and this affords the opportunity to continue the shared pathway in a landscaped setting.

The pathway should continue to the existing boat ramp in Nicholson Street, Bundalong.



Access to Lake Mulwala from Bundalong into River Road is generally restricted to those whose land borders Goulburn Murray Water land.

This means that the scenic and landscape qualities of the Lake are enjoyed by relatively few people.

The lake is a major tourism drawcard, but underutilised in some areas. Visitor numbers swell to around 30,000 over the Christmas/New Year period.

The attractiveness of the lake is also a drawcard for residential development such as those estates occurring to the east of Yarrawonga.

In the past, development has occurred in piece-meal fashion resulting in what are, in today's terms, unsatisfactory ribbon developments. The opportunity now exists to recover from these planning decisions and with the goodwill of the public and the co-operation of Goulburn Murray Water, the southern foreshore of the lake can be revitalised to create exciting new possibilities.

8.3 Challenges

Revitalising the foreshore to create a scenic pathway and road is a significant challenge which can only be achieved over time.

It would need to be developed in stages.

Land developers would need to assist by creating the required infrastructure as they develop their land.

Council and Goulburn-Murray Water would need to construct other parts of the infrastructure as funds and resources allow.

The challenges to be faced are substantial, but the benefits to the community are even greater.

The challenges include:

- Changing people's perceptions of the foreshore;
- Achieving community acceptance;
- Achieving partnership with developers and land owners;
- Obtaining the land; and
- Land purchase and development costs.

The benefits include:

- Improving access and visibility of the lake;
- Better services and facilities in better locations;
- Improving water quality;
- Creating a safe and attractive path for pedestrians and cyclists;
- Better facilities for residents and visitors;
- Significant investment opportunities;
- Making Lake Mulwala, Yarrawonga and the region an even more attractive destination; and
- Completion of the excellent development already started on the foreshore.

It is considered that this a challenge that the community must adopt and call its own.

8.4 Summary of Recommendations – Belmore to Bundalong

- Develop a Landscape Masterplan for the eastern foreshore from Murphy Street to the Yacht Club with the following components:

  - Continuing the design theme used over the reclaimed land;
  - Replacing the existing concrete hard edge to continue the new hard edge provided where the land was reclaimed;
  - Continuing the lighting theme already commenced;
  - Continuing the vegetation treatment already commenced;
  - Replacing of bitumen road paving with aesthetically more appealing surfacing material;
  - Improving pathways through the area;
  - Relocating of the water slide to the Yarrawonga Pool in Burley Road;
  - Restoring of the toddler's swimming pool;
  - Installing new barbecue facilities and picnic shelters;
  - Installing new seating;
  - Restoring the stone changing rooms and toilets;
  - Restoring the stone kiosk;
  - Restoring the stone fence;
  - Stabilising the high banks area to prevent further erosion;
  - Consideration of the future of the willow trees in the high bank area;
  - Constructing a landscaped shared pedestrian/bicycle path to link up with the path in River Road. Vehicle/pedestrian separation is a priority;
  - Improving access to and parking arrangements at the boat ramp; and
  - Constructing jetties either side of the boat ramp to facilitate launching and retrieval of boats.

- Seek funding for the preparation of the Landscape Masterplan as well as for the works involved;

- Negotiate with Goulburn-Murray Water to secure the transfer of the River Road land to council;

- Develop and implement a Landscape Masterplan for the revitalisation of the area surrounding the rowing sheds including the following components:

  - New boat launching ramps;
  - Improved parking areas;
  - Landscape treatment;
  - Barbecue and picnic facilities; and
  - Physical separation of the walking track from traffic and parking areas.

- In conjunction with Goulburn-Murray Water negotiate with the land owner to obtain sufficient land to widen and improve the access to the rowing sheds area;

- Conduct a survey of the community to gauge the level of support for re-establishing the rowing club.

- If there is a high level of support for the re-establishment of the Rowing Club, seek funding for the construction of new rowing club facilities;

- Negotiate with the owners of Bott's Land seeking to ensure that as and when the land is developed, that an east-west link between Hogans Road and Linthorpe Drive is provided.

- In conjunction with Goulburn-Murray Water, prepare a Landscape Masterplan with the primary objective of creating a linear park on foreshore land from Hogans Road through to Bundalong with the Park to have the following key elements:

  - Fully formed shared pedestrian/bicycle pathway;
  - Consistent landscape theme represented by selected planting and furniture;
  - Barbecue and picnic facilities in appropriate locations;
  - Improvements and new car and boat parking areas;
  - Upgrading of the small boat ramp between Rosemary Court and Stevenson Court;
  - Enhanced visibility of the small existing pathways leading from Rosemary and Stevenson Courts to the Lake Foreshore;
  - The development of a vantage point, interpretive facility, car park and access from the Highway on the Public Park and Recreation zoned land near the Donkeys paddock; and
  - The construction of a boat ramp, car park and toilet facilities in the general vicinity of Majors Creek.

- Rezoning the small area of Residential 1 land adjoining the boat ramp at the end of Hogans Road to Public Park and Recreation Zone.

- Rezone the area of land along the southern foreshore of Lake Mulwala in the general vicinity of Bathumi to the west of Bundalong to Road Zone as a pre-curser to the development of a scenic drive.

- In conjunction with Goulburn-Murray Water, seek funding for the staged construction of the scenic drive.

9 Yarrawonga Urban Design Framework

Undertaken by Collie Landscape and Design Pty Ltd in December 2000, this framework presented a vision for Yarrawonga.

"Yarrawonga will be acknowledged as:

- *Having a unique identity derived from its location on Lake Mulwala, its growing, vigorous community and its continuing strengths as a commercial/retail centre;*
- *A tourist destination;*
- *An area of natural beauty;*
- *Providing a range of community infrastructure such as health and education; and*
- *Providing a variety of lifestyles particularly those that are recreation based.*

The distinguishing feature of Yarrawonga will continue to be Lake Mulwala, which will remain crucial to the provision of the 'recreation lifestyle' that will continue to attract residents and tourists.

The main strategy of the Framework will be to ensure better integration of Lake Mulwala with the town centre focussed on Belmore Street.

A model of the framework was developed with the following six key topics:

- Role and image of Yarrawonga;
- Lake Mulwala;
- Central activity area zoning and land use;
- Gateways and entries to Yarrawonga;
- Road and foot traffic; and
- Future form and appearance of Belmore Street.

Urban design framework strategies where developed for each of these key topics. The development of these strategies was guided by the following strategic urban design principles:

- Supporting Yarrawonga's role as an attractive place in which to live and as a provider of tourist facilities and retail opportunities;
- Ensuring an attractive visual environment by making the image of the town more distinctive and by creating entry or 'gateway' areas;
- Providing an attractive, accessible, safe and useable Lake foreshore and develop the area as a tourist activity node;
- Ensuring that Belmore Street remains the focus of retail/commercial activity in Yarrawonga and that:
    - The focus of retail/commercial activity is not shifted to another outer location.

  - The Belmore Street retail and commercial area is not extended unnecessarily further to the south; and
  - The form and location of additional developments assists with better integration with the Lake.

- Encouraging the consolidation of tourism related retailing and other activities at the northern end of Belmore Street in order to better integrate the town centre with the Lake;
- Maximising local community and visitor opportunities for positive cultural, recreational, environmental and educational experiences within the streets and public areas of Yarrawonga;
- Ensuring safe, convenient and appropriate public access to all areas of Yarrawonga including:
  - Provision of safe and efficient pedestrian circulation and access to facilities throughout the Belmore Street precinct;
  - Provision of better linkages between the Belmore Street precinct and the Lake Mulwala foreshore; and
  - Improved vehicular access, parking and safety throughout Yarrawonga.

9.1 Role and Image of Yarrawonga

Strategy	Status
Realise the full potential of Lake Mulwala and the foreshore area.	Ongoing
Facilitate retail activity and tourist facilities to service visitors to the area.	Ongoing
Maintain and improve sports and recreation facilities including a review of recent studies on the potential for an indoor recreation centre.	Further investigation required.
Explore, develop and publicise eco-tourism potential.	Strategy to be developed in conjunction with Moira Tourism Board. Year One 2004/05 Council Plan. (Item # 9.2.1)
Maintain and improve current health and education infrastructure.	Hospital being re-developed, aged care facility, kindergarten and day care centre planned, additional recommendations in Yarrawonga Strategy Plan.
Provide appropriate commercial activity, focussed on service industries, to maintain and increase employment.	Light industry park and land proposed in Strategy Plan.
Maintain and improve the potential for industrial and agricultural employment in the town.	See Strategy Plan recommendations.
Develop an image for Yarrawonga. • The lake and its uses. • The natural context of the town including the Murray River and river red gum forests. • The rural (agricultural) context of the town. • Recreation, particularly golf and water-based activities. • Service and commercial activity within the town. • The contemporary nature of the town.	Some design themes have been partially implemented eg some street bins, some pavement improvements. Themes need to be completed.
Brief relevant stakeholders on the framework.	Partial.
Maintain appropriate and regular communication with relevant stakeholders until Framework is implemented.	Partial.

9.2 Lake Mulwala

Improve directional signage to Lake Mulwala.	Partial.
Maintain the current open water views across Lake Mulwala.	On-going.
Re-establish the vista of Lake Mulwala from Belmore Street by relocating the Tourist Information Centre.	Not yet implemented.
Maintain vistas of the Lake from other north-south streets.	On-going.
Provide safe and convenient access between Belmore Street and the foreshore.	Not yet implemented.
Provide safe and convenient access between Kennedy Park and the foreshore.	Not yet implemented.
Remove chain mesh fence and replace with bollards.	Partial; eastern foreshore not addressed.
Extend the Lake foreshore.	Complete.
Create tourist focus along the Lake foreshore by developing passive and active recreation areas and facilities and by promoting tourist and related commercial activity adjacent to the foreshore.	Not yet implemented.
Design and install furniture including shade structures of a consistent design to those to be used along Belmore Street.	Not yet implemented.
Provide pedestrian-scale lighting that is consistent in design with other Belmore Street streetscape elements. Investigate the use of solar lights.	Partial; eastern foreshore not addressed.
Investigate redesign and relocation of tourist information centre: • It should be located away from the water's edge. • It should be contemporary in design. • It should include accessible public toilets. • It should not require the use of foreshore land for car parking. • It should be supported by signed tourist information booths at strategic locations.	Not yet implemented.
Hunt and Bank Street should be developed as esplanades: • A similar treatment as that provided in Belmore Street including paving, tree planting and street furniture, • Provision of drop-off zones. • Car parking along the south side of the streets. • Locate a bus stop close to public conveniences. • Designated bus parking for tourist related activities.	Not yet implemented.
Establish tree planting strategy for the foreshore including phased removal of willows.	Not yet implemented.
Remove the existing boat ramp.	Complete; but no replacement considered.
Commission interpretive signs about the history of the Lake as part of a trail throughout Yarrawonga and Mulwala.	Not yet implemented.

9.3 Town Centre Zoning and Land Use

Amend the MSS to include the Framework.	Not yet implemented.
Amend the Local Planning policies.	Complete.
Yarrawonga Development Options Plan should be amended to reflect the recommendations of the Framework.	Complete.
Rezone land bounded by Hunt, Lynch, Piper and Hume Streets to Mixed Use zone.	Complete.
Design and redevelop Kennedy Park: • Provide for continued use by schools. • Plant large tree species to provide shade to seating areas. • Provide barbecue, picnic and shaded areas. • Provide sustainable understorey planting. • Provide a major play focus such as an adventure playground. • Provide a safe and attractive link to the lake foreshore via the open area to the north of Kennedy Park.	Not yet implemented.

9.4 Gateways and Entries to Yarrawonga

Develop and construct gateways including signage, themed planting and other structures: • Along Burley Road south of Telford Street. • At the intersection of Burley Road and Benalla/South Roads. • At the intersection of Burley Road and Telford Street (proposed roundabout). • At the intersection of Belmore Street and Telford Streets. • At the intersection of Gilmore Street and Telford Streets. • At or near the intersection of the Murray Valley Highway and Woods Road. • At the intersection of Belmore and McNally Streets. • At the southern end or the road bridge.	Not yet implemented.
Formalise the nature strips along Telford Street by ensuring consistent and conspicuous kerb and channelling.	Partial completion.
Continue to plant avenues of feature trees along Telford Street.	Not yet implemented.
Commission a structure for the roundabout at Belmore and Telford Streets.	Not yet implemented.
Continue entrance theme along Belmore Street that will reinforce the sense of arrival.	Not yet implemented.
Design and construct entry signage that directs travellers to the town centre.	Not yet implemented.

9.5 Road and Foot Traffic and Transport

Develop Belmore Street bypass:
• Install roundabout at the intersection of Burley Road and Telford Street.
• Upgrade channel bridges.
• Upgrade the intersection of Piper Street and Irvine Parade.
• Upgrade Irvine Parade near the school to improve pedestrian and traffic safety.
• Upgrade/reconfigure the intersection of Irvine Parade and Belmore Street:
    o Assign priority to through traffic.
    o Ensure safe access to Hunt Street and the Lake foreshore.
    o Ensure safe pedestrian access across the intersection especially from the road bridge.
    o Ensure safe and convenient access for pedestrians between Belmore Street and the Lake foreshore.
	Not yet implemented.
	
	Traffic Management Strategy to be delivered March 2005. Council Plan Ref # 14.4.1.
	
	Primary School traffic management budgeted for 2004/05.

Modify Piper Street as the preferred east-west collector.	Not yet implemented. Has been replaced by Witt Street.
Modify other east-west streets to provide: • Appropriate pedestrian access across and along them. • To discourage traffic accessing Belmore Street from these streets to encourage off street parking in Hume and Hovelll Streets.	Partial.
Design and install centre of road pedestrian refuges in Piper Street, Witt Street. Orr Street and McNally Street.	Not yet implemented.
Promote the use of Hume and Hovelll Streets for car parking by providing additional and safe accesses to Belmore Street together with trailer and bus parking.	Not yet implemented. Parking strategy for Yarrawonga to be delivered by October 2004. Council Plan Ref # 14.3.1.
Develop Hunt Street and parts of Bank Street as an esplanade to provide a visual interface between the foreshore and the town.	Not yet implemented.
Provide a safe pedestrian environment in Belmore Street: • Install mid-block crossings. • Install crossings at intersections.	Not yet implemented. Pedestrian crossings

	Yarrawonga budgeted for 2005/06.
Provide bus parking on north side of Orr Street and: • Provide upgrade public toilets. • Investigate one-way traffic east along Orr Street.	Partial completion. Bus parking provided on south side, toilet block being constructed outside of Shire Hall and one-way traffic in a westerly direction.

9.6 Future Form and Appearance of Belmore Street

Locate off-street car parks at the rear of the shops prior to modifying current angle parking.	Not yet implemented.
Implement pedestrian crossing and vehicular circulation improvements at the intersections of Belmore Street, McNally, Orr, Piper and Witt Streets.	Partial. Belmore Street and Orr Street completed.
Construct mid-block pedestrian crossings.	Not yet implemented.
Install tree planting and landscaping in kerb area.	Not yet implemented.
Investigate maximum usage of angle parking by adjusting the angle of the parking.	Not yet implemented.
Ensure an appropriate number of disabled spaces and appropriate access to the footpath.	Not yet implemented.
Install directional signage to off-street car parks (at the rear of the shops).	Not yet implemented.
Promote pedestrian linkages to and from Belmore Street using paving, furniture and planting of a consistent design: • Ease of access to car parking at the rear of the Belmore Street shops. • Opportunities for further development at the rear of the shops. • Links to parkland, community facilities and the foreshore. • Safe access to public toilets.	Not yet implemented.
Ensure a safe and convenient pedestrian environment particularly for disabled people.	Not yet implemented.
Develop a consistent suite and style of streetscape elements including lighting, bins, bollards, seats, benches and paving.	Not yet implemented.
Implement street planting along Belmore Street: • Replace existing street trees in the centre of the road. • Plant grassed median strip with indigenous species.	Not yet implemented.

• Use exotic shade producing species along the footpaths. • Integrate native grasses, low-growing shrubs and groundcover planting with the central tree planting.	
Aerial bundle remaining powerlines and over-head services or underground.	Not yet implemented.
Promote the development of outdoor eating and develop policy for the placement and type of removable furniture.	Not yet implemented.
Implement an urban arts programme that is consistent with adopted streetscape images.	Not yet implemented.
Commission interpretive signs about the history of the Belmore Street and Yarrawonga as part of a trail throughout Yarrawonga and Mulwala.	Not yet implemented.
Remove centre of road parking once off-street car parks are established.	Not yet implemented.
Implement streetscape works and installation of street furniture to improve the footpaths of the street.	Partial.
Adopt a car park ratio of 5 spaces per 100m^2 of leasable floor area.	Partial.

9.7 Urban Design: Built Form

Ensure that buildings along Belmore Street include an awning/verandah of a height and extent similar to existing structures: • Ensure that verandahs respect street trees.	Partial.
Construct new buildings up to the building line.	Partial.
Architectural details and materials should avoid overt ‘heritage’ styling; contemporary design and finishes are encouraged.	Not practised.
Encourage public access ways or access through shops to rear car parks.	Not yet implemented.
Buildings should meet disability act requirements.	Ongoing.

Yarrawonga Streetscape	$200,000 budgeted for 2004/05.
Foreshore toilet upgrade	$70,000 budgeted for 2005/06.