

Latrobe

Transit centred precincts

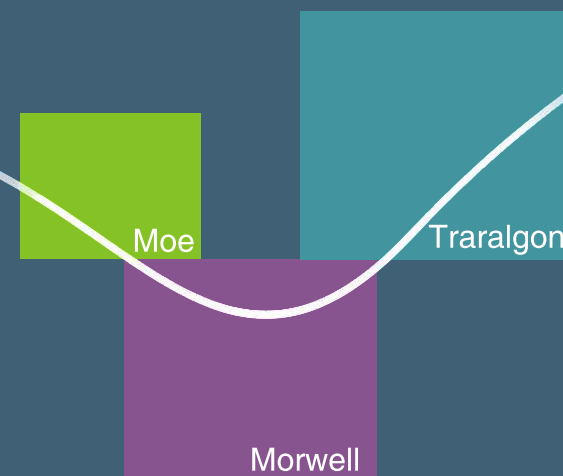
Background report
Revised Consultation Draft

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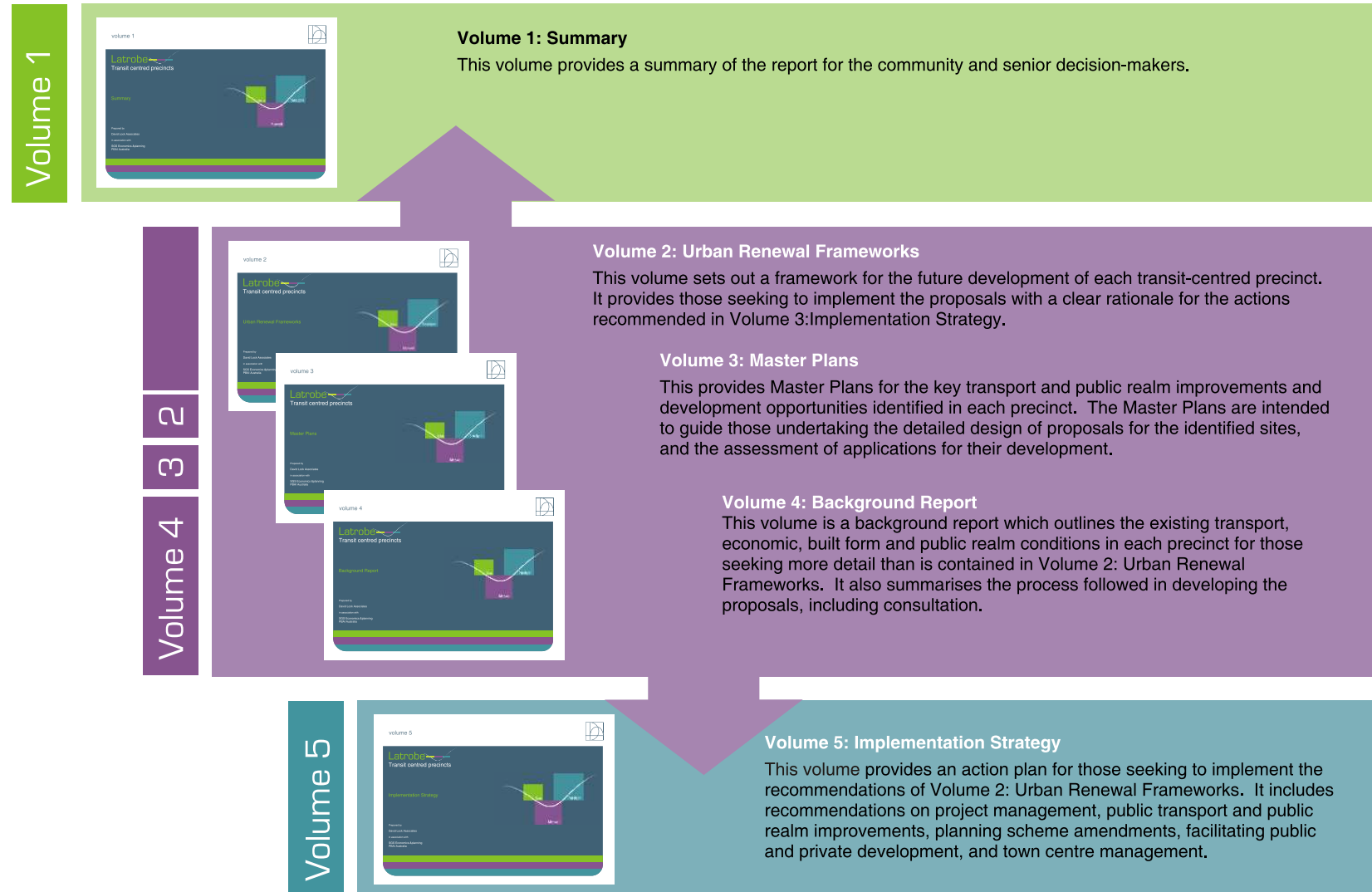
Preface

This is the consultation draft of the Latrobe Transit-centred Precincts Report, which provides a plan for the future development of the areas within a comfortable walking distance of the Moe, Morwell and Traralgon train stations.

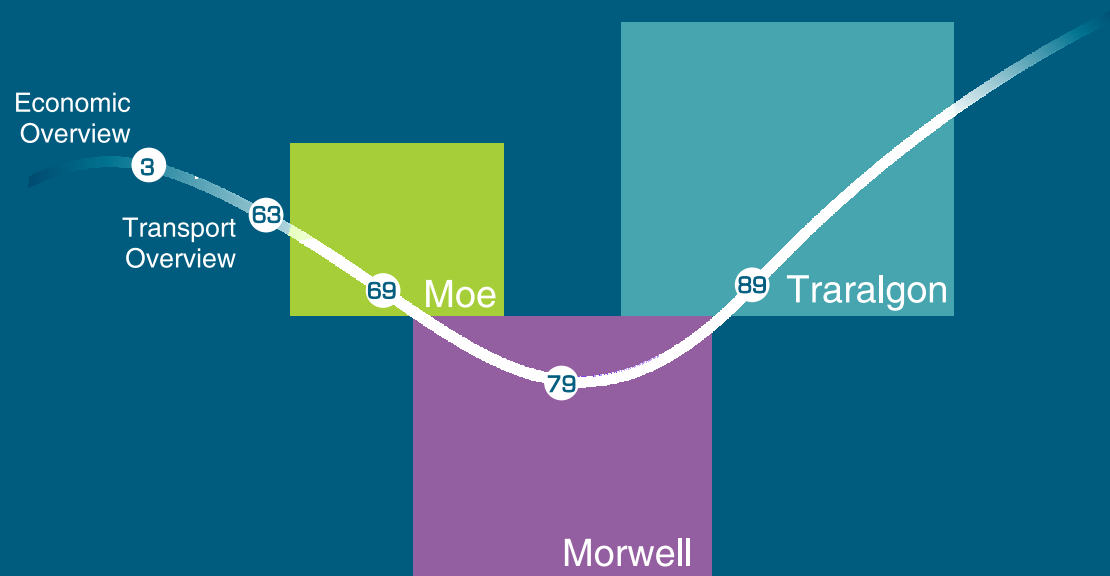
The development of the proposals has involved wide informal consultation with key stakeholders and the broad community. However, the proposals contained in this draft have not been formally considered by Council. The purpose of the draft is to seek comment on the proposals to inform their consideration by Council.

Once the report is adopted, it will be implemented through a partnership between state and local government and co-ordination of agencies and public authorities. Its implementation will be subject to budgetary processes.

The Latrobe Transit-centred Precincts report is presented in five volumes to meet the needs of its different readers:



Contents



This is Volume 4 of the Latrobe Transit-centred Precincts report, which outlines the existing transport, economic, built form and public realm conditions in each precinct for those seeking more detail than is contained in Volume 2: Urban Renewal Frameworks.

The contents of this volume are the results of an audit and analysis of the existing conditions and projected changes in the study area. This is based on site surveys and a review of material from previous and current studies, current planning controls, available data relating to demographics, land use, property ownership, property sales, retail trade, traffic volumes, car parking and services infrastructure.

CHAPTER 1 provides a contextual analysis of economic and social conditions in the region with a view to providing development forecasts for major town centre land uses.

CHAPTER 2 provides an overview of the existing transport context of the three precincts. More detail on the transport conditions in each precinct is provided in Chapters 3, 4 and 5.

CHAPTERS 3, 4 and 5 outline the existing land use, urban form and transport conditions in the Moe (Chapter 3), Morwell (Chapter 4) and Traralgon (Chapter 5) Transit Precincts.

4 Economic Overview

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1.1 Introduction

Background

The Latrobe Valley has undergone significant structural adjustment in recent decades. This has been mostly associated with restructuring of State utilities and coal mining but has also been associated with underlying productivity improvements in agriculture, forestry and production sectors resulting in job shedding. The upshot has been greater efficiency gains in processes but loss of labour intensive activities and jobs.

Major job shedding, high unemployment and related social impacts have had a significant flow on impact on the region's social and economic fabric during the 1990s. In this context the regional population declined.

However, this macro picture of structural economic and social shock sits alongside underlying renewal. The region continues to have exporter strengths in utilities, primary industries and production. Business services and various population driven activities like education have shown growth in the period of adjustment. Tourism (natural attractions, arts, culture, food) is emerging, as are other sectors.

In this context, the regional towns of Moe, Morwell and Traralgon are poised for renewal. The towns are linked to the State rail network and have been nominated by the State Government and Latrobe City for more intensive development as part of the Transit Cities Program. Fast rail access, broadband linkages and more cosmopolitan and vibrant developments are envisaged in the towns, to complement the emerging economic strengths of the region.

Purpose

This assignment calls for a strategy to position the Transit Centred Precincts of Moe, Morwell and Traralgon for long-term prosperity (with a 20-year outlook). This will include a focus on development that will deliver social and economic vibrancy, business innovation and economic development. A particular aim of the initiative is to make better use of public infrastructure investment in the town centres, especially the fast rail investment. The strategy is to be practical and have outcomes to 'kick start' the renewal process in the short term.

This report provides one element of the strategy: development economics. The report provides a contextual analysis of economic and social conditions in the region with a view to provide development forecasts for major town centre land uses. The forecasts focus on higher density residential opportunities, office / commercial development opportunities and retail development opportunities. Consideration is also given to 'other' land uses. This information is provided to inform design frameworks for the study area precincts.

Study Area

The study area for this assignment is the Transit Centred Precincts of Moe, Morwell and Traralgon. This defines the areas surrounding the rail station and commercial centres of three towns.

Structure

This report is structured as follows.

Development Economics Research – This section reviews recent trends and existing conditions in Latrobe to inform possible development directions for the region and the three towns. In particular, this section provides:

- Economic profile;
- Social profile;
- Indicators of recent activity; and
- Literature review and selected consultation.

Development Analysis and Forecasts – This section provides broad development forecasts for major land uses. In particular, this section provides information on:

- Residential development possibilities;
- Commercial development possibilities;
- Public sector facility planning;
- Retail development possibilities; and
- Other development possibilities.

Options Development Input – This section provides recommendations regarding land use development in the three precincts looking forward.

1.2 Development Economics Research

This section reviews recent trends and existing conditions in Latrobe to inform possible development directions for the region and the three towns. In particular, this section provides:

- Economic profile;
- Social profile;
- Indicators of recent activity; and
- Literature review and selected consultation.

Economic Profile

The following sections profile the economy of Latrobe. This includes snapshot and time series information on job stock, industry output and identification of export sectors. A parallel analysis of the 'Wider Region' (which comprises Latrobe, Baw Baw, South Gippsland and Wellington) and Regional Victoria is undertaken for benchmarking purposes where appropriate.

Job Stock and Industry Profile

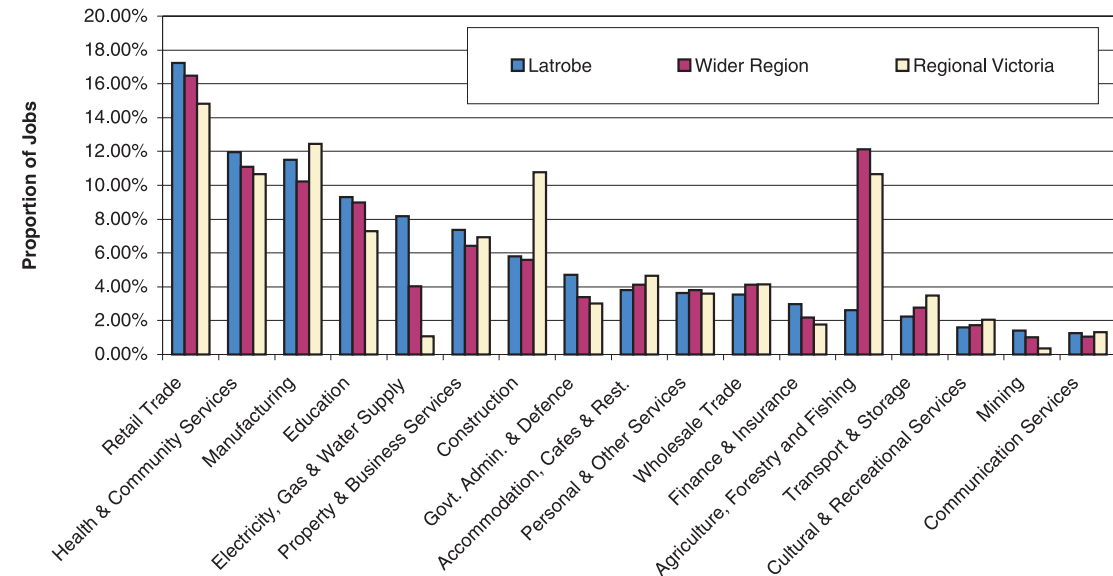
Latrobe is the major employment node in the Wider Region. It offers almost 44% of total job stock in the Wider Region, and almost 4.5% of jobs in a Regional Victoria context.

Job Stock, Selected Areas, 2001

	Employment	Share of Wider Region	Share of Regional Victoria
Latrobe - Moe	4,196	7.35%	0.75%
Latrobe - Morwell	10,448	18.31%	1.87%
Latrobe - Traralgon	10,103	17.71%	1.81%
Latrobe - Bal	252	0.44%	0.05%
Latrobe	24,999	43.81%	4.48%
Baw Baw	11,852	20.77%	2.12%
South Gippsland	9,291	16.28%	1.66%
Wellington	10,918	19.13%	1.95%
Wider Region	57,060	100.00%	10.22%
Regional Victoria	558,545		

Source: ABS Census 2001, Journey to Work

Industry Structure, Selected Areas, 2001



Source: ABS Census 2001, Journey to Work

The chart above shows the industry structure of jobs in Latrobe, the Wider Region and Regional Victoria. The biggest employment sectors are 'population driven' sectors (ie. the sectors that are determined by the size and composition of the population) such as Retail Trade, Health & Community Services, Education and Property & Business Services.

The strong Electricity, Gas & Water Supply profile of Latrobe is reflected in the data, as the municipality remains the power generation capital of Victoria.

Furthermore, another 'higher order' activity in Latrobe is manufacturing. This activity is likely to be a downstream spin-off from the power / utilities, agriculture and forestry sectors.

The proportion of jobs in Agriculture, Forestry & Fishing is low by regional standards. This is a reflection of vast tracts of land being used for coal mining and power generation in Latrobe.

The table opposite looks at the evolution of the employment opportunities in various sectors over the last five years. A key feature of this data is that the **Latrobe economy is growing**. Job stock increased from 22,794 in 1996 to 24,999 in 2001.

In terms of absolute change in jobs by industry sector, the major growth sectors are Manufacturing, Health & Community Services, Retail Trade and Government Administration & Defence.

All of these bar manufacturing can be classified as population driven sectors. Manufacturing is (or has the potential to be) an export sector, as sales from (some) firms in Manufacturing tend to have wider reach and generate inter-regional and international sales. This is a positive sign for the municipality.

Despite growth in Manufacturing and maintenance of Latrobe as the key power generation hub in the State, advanced business services have shown signs of decline in the five-years to 2001. Finance & Insurance and Property & Business Services have contracted. This may be a reflection of 'outdrift' forces of such activity to key business nodes in a regional and national context (eg. centralisation of the higher order services to central Melbourne and Sydney and some regional centres).

Industry Structure and Change, Selected Areas, 1996 - 2001

	Latrobe				Wider Region			
	1996	2001	Change	Av Ann Change	1996	2001	Change	Av Ann Change
&&& Not stated	5	76	71	72.33%	15	204	189	68.54%
B Mining	220	351	131	9.79%	617	583	-34	-1.13%
M Govt. Admin. & Defence	850	1,178	328	6.74%	1,715	1,933	218	2.42%
C Manufacturing	2,122	2,878	756	6.28%	4,724	5,826	1,102	4.28%
I Transport & Storage	423	561	138	5.81%	1,073	1,581	508	8.06%
O Health & Community Services	2,259	2,989	730	5.76%	4,655	6,326	1,671	6.33%
Q Personal & Other Services	789	908	119	2.85%	1,681	2,179	498	5.33%
H Accommodation, Cafes & Rest.	850	950	100	2.25%	1,907	2,359	452	4.35%
G Retail Trade	3,926	4,310	384	1.88%	7,911	9,399	1,488	3.51%
D Electricity, Gas & Water Supply	1,940	2,045	105	1.06%	2,083	2,296	213	1.97%
F Wholesale Trade	845	888	43	1.00%	2,316	2,357	41	0.35%
P Cultural & Recreational Services	385	401	16	0.82%	775	988	213	4.98%
N Education	2,295	2,323	28	0.24%	4,475	5,120	645	2.73%
E Construction	1,465	1,452	-13	-0.18%	2,898	3,194	296	1.96%
A Agriculture, Forestry and Fishing	676	654	-22	-0.66%	6,844	6,919	75	0.22%
L Property & Business Services	1,976	1,838	-138	-1.44%	3,232	3,663	431	2.54%
J Communication Services	404	312	-92	-5.04%	679	598	-81	-2.51%
990 Non-Classifiable Economic Units	205	140	-65	-7.34%	444	289	-155	-8.23%
K Finance & Insurance	1,159	745	-414	-8.46%	1,678	1,246	-432	-5.78%
Total	22,794	24,999	2,205	1.86%	49,722	57,060	7,338	2.79%

Source: ABS Census 2001, Journey to Work

Other important features reflected in the table are as follows.

Despite the deterioration in terms of trade and the continued decline in the world price of natural resources over the last decade, Mining sector experienced strong growth of 9.8% pa in Latrobe, while experiencing negative growth rate in the Wider Region. This suggests that the Mining sector is consolidating its activities in favour of Latrobe.

Government Administration & Defence experienced a significantly higher growth rate in Latrobe compared to the Wider Region signifying that Latrobe has been repositioning itself to undertake the lead role in this activity in Gippsland.

The strong growth experienced in Health & Community Services is a reflection of the rising demand for health services driven by an ageing population.

Other sectors that experienced high positive growth rates are Retail Trade and Accommodation, Cafes & Restaurants. The growth in these sectors can be accounted for by the rise of tourism industry in Latrobe in addition to the local population base. However, the Wider Region experienced higher growth rates compared to Latrobe, suggesting that the municipality faces stiff competition in attracting tourist dollars from areas with a more developed tourism 'offer'.

Overall, the total job opportunities offered by Latrobe grew at 1.9% pa, which is about one percentage point lower than the Wider Region.

Industry Output

Latrobe's total annual industry output equates to about \$2,147 million¹. This represents almost 50% of the total output of the Wider Region (\$4351 million) and 5.5% of the output of Regional Victoria (\$38,988 million). By way of comparison, Latrobe has about 44% and 41% of Wider Regional jobs and population respectively. This suggests that Latrobe's workers are more productive by virtue having high capital-intensive, high value-adding industry sectors as a base.

Industry Output, Selected Areas, 2001

Industry	Latrobe		Wider Region		Regional Victoria	
Elec., gas, & water supply	\$548.0m	25.5%	\$615.3m	14.1%	\$1,605.0m	4.1%
Manufacturing	\$220.5m	10.3%	\$446.4m	10.3%	\$5,339.1m	13.7%
Property & business services	\$180.4m	8.4%	\$359.5m	8.3%	\$3,804.1m	9.8%
Health & community services	\$162.5m	7.6%	\$343.9m	7.9%	\$3,238.5m	8.3%
Retail trade	\$142.7m	6.6%	\$311.1m	7.2%	\$2,742.4m	7.0%
Mining	\$137.8m	6.4%	\$228.8m	5.3%	\$768.2m	2.0%
Education	\$126.7m	5.9%	\$279.2m	6.4%	\$2,220.7m	5.7%
Construction	\$117.8m	5.5%	\$259.1m	6.0%	\$4,881.1m	12.5%
Finance & insurance	\$114.3m	5.3%	\$191.1m	4.4%	\$1,513.6m	3.9%
Govt admin. & defence	\$75.7m	3.5%	\$124.2m	2.9%	\$1,081.7m	2.8%
Wholesale trade	\$68.0m	3.2%	\$180.6m	4.2%	\$1,775.9m	4.6%
Personal & other services	\$49.9m	2.3%	\$119.6m	2.7%	\$1,102.5m	2.8%
Agric., forestry & fishing	\$48.7m	2.3%	\$515.2m	11.8%	\$4,442.9m	11.4%
Transport & storage	\$48.6m	2.3%	\$137.1m	3.2%	\$1,688.8m	4.3%
Accomm., cafes & restaurants	\$39.8m	1.9%	\$98.8m	2.3%	\$1,088.3m	2.8%
Communication services	\$39.4m	1.8%	\$75.6m	1.7%	\$934.1m	2.4%
Cultural & recreation services	\$26.5m	1.2%	\$65.3m	1.5%	\$761.3m	2.0%
Total	\$2,147.2m	100.0%	\$4,350.8m	100.0%	\$38,988.2m	100.0%

Source: Derived from ABS Census 2001 and ABS National Accounts Data 2001/02, Cat: 5220.0

The table highlights that in terms of value of output, Electricity, Gas & Water Supply, Manufacturing, Property & Business Services, Health & Community Services and Retail Trade are the strongest sectors in Latrobe. Together, these five sectors account for almost 60% of total annual industry output as compared to 48% for the Wider Region and 43% for Regional Victoria.

¹ This is based on 2001/02 labour factor incomes by industry for Australia, extrapolated to Latrobe, Wider Region and Regional Victoria's employment structure at that time.

Industry Concentration Index

The following analysis seeks to identify the main export sectors in Latrobe.

Exports

At a regional level, trade between regions plays a highly important role. Inter-regional trade, via exports, affects the regional economy's aggregate demand for goods and services and hence, the levels of total income, output and employment. Specifically, inter-regional exports acts as an additional source of demand that is over and above the demand from local consumers. Therefore, it is an injection into an economy's income stream.

The following table identifies the main export sectors of Latrobe and compares these to the Wider Region and Regional Victoria using location quotient (LQ) analysis². Using this method, it is estimated that over 5,200 jobs in Latrobe can be attributed to external demand (export sectors), which is equivalent to 21% of total jobs. This proportion is higher than that in the Wider Region (20%) as well as Regional Victoria (16%).

The analysis indicates that Latrobe's primary export sectors are Electricity & Gas Supply, Wood & Paper Product Manufacturing, Coal Mining, Forestry & Logging and Water Supply, Sewerage & Drainage Services.

A number of population driven sectors like Education, Government Administration, Health Services and Food Retailing generate jobs over and above the national average indicating that Latrobe plays a 'regional capital' role for many services by drawing in customers from outside the municipality.

Export and Local Sectors, Selected Areas, 2001

2 Digit ANZSIC Industries	Latrobe				LQ	
	Employment	Location Quotient	Local Jobs	Export Generated Jobs	Wider Region	LQ Regional Victoria
36 Electricity and Gas Supply	1882	15.46	122	1,760	7.36	1.21
23 Wood & Paper Prod Mfg	1174	6.14	191	983	3.33	1.38
11 Coal Mining	285	5.01	57	228	2.19	0.24
03 Forestry and Logging	152	4.60	33	119	4.36	2.00
37 Water Sply Swrge & Drnge Serv	163	2.71	60	103	1.82	1.99
87 Community Services	843	1.42	592	251	1.22	1.22
53 Mtr Vehicle Retailing & Serv	862	1.34	645	217	1.31	1.12
14 Other Mining	28	1.30	22	6	1.14	1.21
84 Education	2323	1.30	1,794	529	1.25	1.02
E00 Construction, n.d.	55	1.28	43	12	1.57	1.25
81 Government Administration	1170	1.26	925	245	0.90	0.67
86 Health Services	2023	1.18	1,718	305	1.14	1.06
51 Food Retailing	1545	1.16	1,337	208	1.18	1.07
52 Prsnl & Hhold Good Retailing	1787	1.15	1,560	227	1.02	0.93
96 Other Services	478	1.10	434	44	1.08	0.79
B00 Mining, undefined	13	1.08	12	1	0.47	0.29
G00 Retail Trade, undefined	116	1.08	107	9	1.03	0.98
O00 Health & Community Services, n.d.	123	1.05	118	5	0.83	1.04
65 Other Transport	3	1.04	3	0	1.36	0.99
45 Basic Material Wholesaling	280	1.03	271	9	1.39	1.12
990 Non-Classifiable Economic Units	140	0.97	140	0	0.88	0.81
41 General Construction	571	0.94	571	0	0.87	1.38
95 Personal Services	430	0.91	430	0	1.04	1.17
74 Insurance	204	0.88	204	0	0.54	0.39
A0 Agriculture n.d.	6	0.86	6	0	1.71	1.92
93 Sport and Recreation	258	0.84	258	0	0.86	0.95
27 Metal Product Manufacturing	334	0.84	334	0	0.66	0.86
42 Construction Trade Services	826	0.80	826	0	0.78	1.74
26 Non-Metalic Minl Prod Mfg	98	0.79	98	0	0.62	1.01
61 Road Transport	396	0.77	396	0	1.04	1.21
57 Accommodtn,Cafes & Restaurants	950	0.77	950	0	0.84	0.94
I00 Transport and Storage, n.d.	53	0.77	53	0	0.71	0.95
75 Services to Finance & Insurance	157	0.77	157	0	0.50	0.37

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Export and Local Sectors, Selected Areas, 2001 (continued)

73 Finance	381	0.76	381	0	0.63	0.55
C00 Manufacturing, n.d.	163	0.76	163	0	0.79	0.95
71 Communication Services	312	0.70	312	0	0.59	0.74
78 Business Services	1597	0.67	1,597	0	0.58	0.63
21 Food,Bevrge & Tobcco Mfg	316	0.67	316	0	1.01	1.91
46 Machinery & Mtr Vehicle Whlsling	280	0.66	280	0	0.76	0.65
91 Motion Picture,Radio,TV Serv	86	0.66	86	0	0.56	0.56
77 Property Services	238	0.64	238	0	0.57	0.57
K00 Finance and Insurance, n.d.	3	0.57	3	0	0.75	0.37
28 Machinery & Equipment Mfg	363	0.55	363	0	0.44	0.80
29 Other Manufacturing	110	0.54	110	0	0.61	0.66
01 Agriculture	468	0.54	468	0	3.18	2.83
47 Personal & Hhold Good Whlsling	302	0.54	302	0	0.55	0.75
L00 Property and Bus Services, n.d.	3	0.52	3	0	0.23	0.39
24 Prntg,Pubshg & Recorded Media	156	0.52	156	0	0.48	0.67
15 Services to Mining	14	0.46	14	0	0.89	0.33
25 Petrilm Coal Chmcl & Ass Prod Mfg	124	0.43	124	0	0.63	0.54
F00 Wholesale Trade, n.d.	26	0.43	26	0	0.40	0.57
62 Rail Transport	32	0.37	32	0	0.25	0.31
02 Serv to Agric Hunting & Trapping	20	0.37	20	0	1.68	1.95
92 Libraries,Museums and the Arts	54	0.33	54	0	0.57	0.88
P00 Cult & Rec Services, n.d	3	0.26	3	0	0.23	0.80
66 Services to Transport	46	0.24	46	0	0.31	0.41
04 Commercial Fishing	8	0.22	8	0	0.75	0.93
67 Storage	10	0.21	10	0	0.14	0.62
22 Txtl Clthg Ftwr & Lthr Mfg	40	0.21	40	0	0.96	1.33
12 Oil and Gas Extraction	3	0.20	3	0	4.39	0.95
63 Water Transport	6	0.19	6	0	0.18	0.62
&&& Not stated	76	0.17	76	0	0.21	0.29
64 Air and Space Transport	15	0.11	15	0	0.10	0.20
13 Metal Ore Mining	8	0.09	8	0	0.07	0.22
82 Defence	8	0.04	8	0	0.08	0.69
D00 Elec, Gas & Water Supply, n.d.	0	0.00	0	0	0.00	0.29
M00 Govt Admin & Defence, n.d.	0	0.00	0	0	0.00	0.36
97 Private Hholds Employing Staff	0	0.00	0	0	0.00	0.60
Q00 Personal and Other Services, n.d.	0	0.00	0	0	0.00	0.69
Total	24999		19,738	5,261		

This data also suggests that Latrobe is a net importer in a wide range of other activities. The sectors that score a low LQ are likely to be the importers.

Source: ABS Census 2001, Journey to Work

Industry Contribution from Exports

On the basis of factor productivity, it is estimated that more than \$770 million can be attributed to export activities in Latrobe, which is equivalent to 36% of total Latrobe output. The Wider Region's total output from export activities is estimated at \$1,199 million, or 28% of total output. For Regional Victoria, export output is estimated at \$6,886 million or 18% of total output. This again shows that Latrobe has a strong export economy, based on utilities and natural resource sectors and the down-stream processing of goods from those sectors.

Industry Contribution from Exports, Selected Areas, 2001

	Latrobe		Wider Region		Regional Victoria	
	Factor income (\$m)	% Industry Contribution	Factor income (\$m)	% Industry Contribution	Factor income (\$m)	% Industry Contribution
Elec., gas, & water supply	\$495.0m	64.3%	\$499.6m	41.7%	\$507.7m	7.4%
Mining	\$91.7m	11.9%	\$108.7m	9.1%	\$39.1m	0.6%
Manufacturing	\$74.7m	9.7%	\$78.1m	6.5%	\$968.0m	14.1%
Health & community services	\$30.2m	3.9%	\$44.7m	3.7%	\$283.0m	4.1%
Education	\$28.6m	3.7%	\$55.5m	4.6%	\$32.9m	0.5%
Retail trade	\$21.7m	2.8%	\$35.1m	2.9%	\$122.2m	1.8%
Govt admin. & defence	\$15.6m	2.0%	\$0.0m	0.0%	\$0.0m	0.0%
Agric., forestry & fishing	\$8.8m	1.1%	\$344.3m	28.7%	\$2,760.3m	40.1%
Personal & other services	\$2.4m	0.3%	\$6.3m	0.5%	\$100.0m	1.5%
Construction	\$1.0m	0.1%	\$4.5m	0.4%	\$1,811.3m	26.3%
Wholesale trade	\$0.7m	0.1%	\$18.5m	1.5%	\$55.7m	0.8%
Transport & storage	\$0.0m	0.0%	\$4.0m	0.3%	\$206.0m	3.0%
Accomm., cafes & restaurants	\$0.0m	0.0%	\$0.0m	0.0%	\$0.0m	0.0%
Communication services	\$0.0m	0.0%	\$0.0m	0.0%	\$0.0m	0.0%
Finance & insurance	\$0.0m	0.0%	\$0.0m	0.0%	\$0.0m	0.0%
Property & business services	\$0.0m	0.0%	\$0.0m	0.0%	\$0.0m	0.0%
Cultural & recreation services	\$0.0m	0.0%	\$0.0m	0.0%	\$0.0m	0.0%
Total	\$770.2m	100.0%	\$1,199.3m	100.0%	\$6,886.3m	100.0%

Source: Derived from ABS Census 2001 & ABS National Accounts 2002, Cat: 5220.0

Export and Import Change Analysis

The table below analyses the annual changes in location quotients. As shown, various sectors can be grouped into four categories depending on whether an industry is an export or import industry, and whether its concentration (LQ) is increasing or declining. The first category, exporters with a rising LQ, is the most desirable situation; a self sufficient and prosperous region would have a significant proportion of sectors within this category. Local governments and planning agencies need to provide adequate support and maintain an environment that is conducive to these industries for continued growth and expansion.

Location Quotient Change Analysis, Latrobe, 1996 – 2001

	Location Quotient (LQ)		Annual Average Growth Rate
	1996	2001	(1996-2001)
Export Industries & Rising LQ			
Electricity, Gas & Water Supply	11.07	11.18	0.19%
Mining	0.85	1.55	12.66%
Health & Community Services	1.04	1.23	3.36%
Govt. Admin. & Defence	0.76	1.06	6.76%
Export Industries & Declining LQ			
Education	1.42	1.30	-1.87%
Retail Trade	1.27	1.18	-1.42%
Construction	1.01	0.86	-3.17%
Finance & Insurance	1.31	0.79	-9.57%
Import Industries & Rising LQ			
Personal & Other Services	0.95	1.00	1.06%
Manufacturing	0.74	0.95	5.12%
Wholesale Trade	0.63	0.67	1.23%
Transport & Storage	0.43	0.52	4.17%
Import Industries & Declining LQ			
Accommodation, Cafes & Rest.	0.80	0.77	-0.85%
Communication Services	0.90	0.70	-5.00%
Property & Business Services	0.88	0.66	-5.56%
Cultural & Recreational Services	0.72	0.66	-1.81%
Agriculture, Forestry and Fishing	0.70	0.66	-1.24%

Source: Derived from ABS Census 2001, Journey to Work and ABS Census 1996, Cat: 2020.0

Features highlighted by this analysis are:

- Latrobe has a strong and continuing reliance of utility and related sectors.
- Population driven activity – especially activities serving a growing and ageing population – are growing.
- Production and transport sectors are growing as a spin-off from utility and natural resource sectors.
- Tourism is growing but is coming off a low base in the municipality (as indicated by Accommodation, Cafes & Restaurants).
- Various service sectors continue to have a low profile in Latrobe.

Perhaps the most significant weakness or 'gap' in Latrobe's economic structure is the small and declining higher order business services group. Activities like Finance & Insurance and Property & Services have contracted.

Business trends of today are marked by a greater trend towards outsourcing of specialist business services. Firms engaged in production (eg. power generation, manufacturing, primary industries) outsource to a host of specialists in accountancy, law, marketing, business management and others in order to focus on core business activity and have the capacity to source the most advanced and competitive services. This is necessary for firms to be able to produce first class goods in a competitive global economic environment. The trend towards outsourcing of advanced business services is growing.

On this basis, growth in Latrobe's utility, primary and production sectors is very likely to be associated with growth in demand for advanced business services. The questions for the regional economy are: Where are these services sourced? Can Latrobe seek to provide these services within its boundaries? This would be ideal for the region in order to retain local wealth, generate a high number and wide range of service jobs and generate flow-on benefits to local retail and service sectors.

The available information suggests that Latrobe is losing its business services capabilities. Advanced business services are generally located where the skills are, and at this time Latrobe may lack a critical mass of high skilled workers to sustain this activity.

These forces have also contributed to the capture of economic activities like data processing and call centres in Latrobe where there is a stable and skilled labour pool. Fast rail links and broadband links will boost the capacity of Latrobe to capture a greater share of such activity.

In order to avoid leakages from inter-regional imports, Latrobe should concentrate on developing and fostering import replacement industries. This analysis implies that Latrobe should continue to boost its exporter sectors and develop strategies to develop its advanced business service capabilities.

Social Profile

This section reviews social indicators in relation to Latrobe, the Wider Region and Regional Victoria.

Population and Household Change

In 2001, Latrobe registered a population of 67,022 persons, down slightly on 1996 Census period. The Wider Region experienced growth in this period (albeit marginal) and Regional Victoria had relatively strong population growth during this time.

Households in Latrobe in 2001 totalled 25,399 and increased by 0.5% pa from 1996. Household size declined in Latrobe in the five years to 2001, reflecting a trend to smaller households across Australia generally.

Population and Household Trends, Selected Areas

	Latrobe				
	1996	2001	Change No.	% Ann.	Ave.
Pop'n	67,564	67,022	-542	-0.80%	-0.16%
H'hold	24,797	25,399	602	2.43%	0.49%
Ave HH Size	2.72	2.64	-0.90	-0.33	-0.33
	Wider Region				
	1996	2001	Change No.	% Ann.	Ave.
Pop'n	164,449	165,643	1,194	0.73%	0.15%
H'hold	59,794	60,788	994	1.66%	0.33%
Ave HH Size	2.75	2.72	1.20	0.44	0.44
	Regional Victoria				
	1996	2001	Change No.	% Ann.	Ave.
Pop'n	1,235,376	1,278,422	43,046	3.48%	0.70%
H'hold	490,138	471,544	-18,594	-3.79%	-0.76%
Ave HH Size	2.52	2.71	-2.32	-0.92	-0.92

Source: ABS Census 1996 and 2001

Population and household numbers in Latrobe are expected to increase gradually until 2011 and then relatively faster in the ten years to 2021. Similar growth is expected for Regional Victoria.

Forecast Population and Household Change, Selected Areas, 2001-2021

	2006			2011		
	Pop'n	H'hold	Ave HH Size	Pop'n	H'hold	Ave HH Size
Latrobe	70,579	28,662	2.46	70,848	29,931	2.37
Regional Victoria	1,342,051	534,969	2.51	1,367,656	565,330	2.42

	2016			2021		
	Pop'n	H'hold	Ave HH Size	Pop'n	H'hold	Ave HH Size
Latrobe	72,010	31,399	2.29	73,366	32,899	2.23
Regional Victoria	1,394,836	595,808	2.34	1,424,138	626,802	2.27

Source: Department of Infrastructure, Victoria in Future

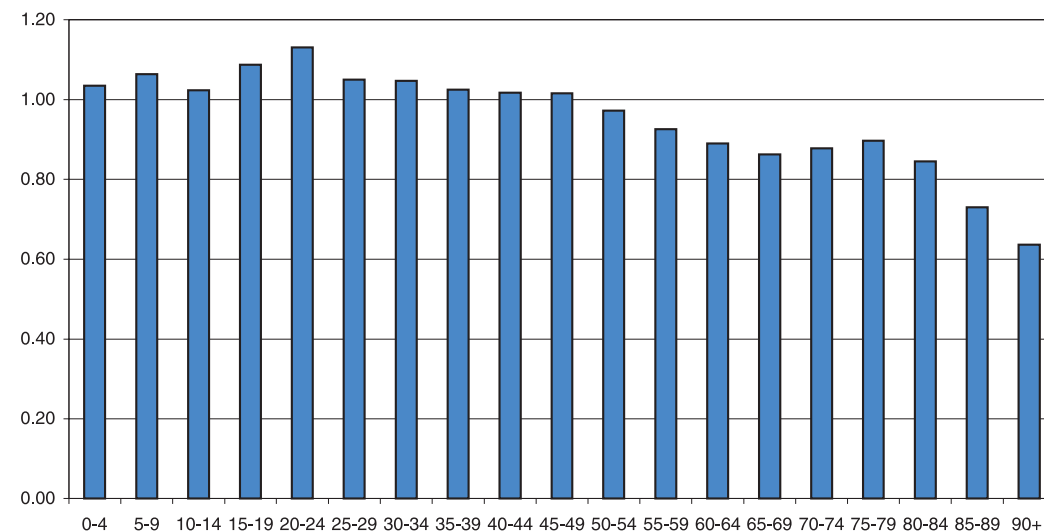
Age Structure

Latrobe's age profile, compared to Regional Victoria, is illustrated to the right. This shows that Latrobe has a relatively 'younger' age structure compared to non-metropolitan Victoria, with all age cohorts up to 49 being over-represented and all age cohorts over 50 being under-represented.

The lower graphic shows change in age structure in the five years to 2001. Despite Latrobe's 'younger' age profile in 2001 compared to Regional Victoria, the gap is closing. Latrobe is gaining older persons at a faster rate and is losing younger people at a faster rate. A significant trend has been the outdrift of the core working age cohorts of between 20 and 39 years.

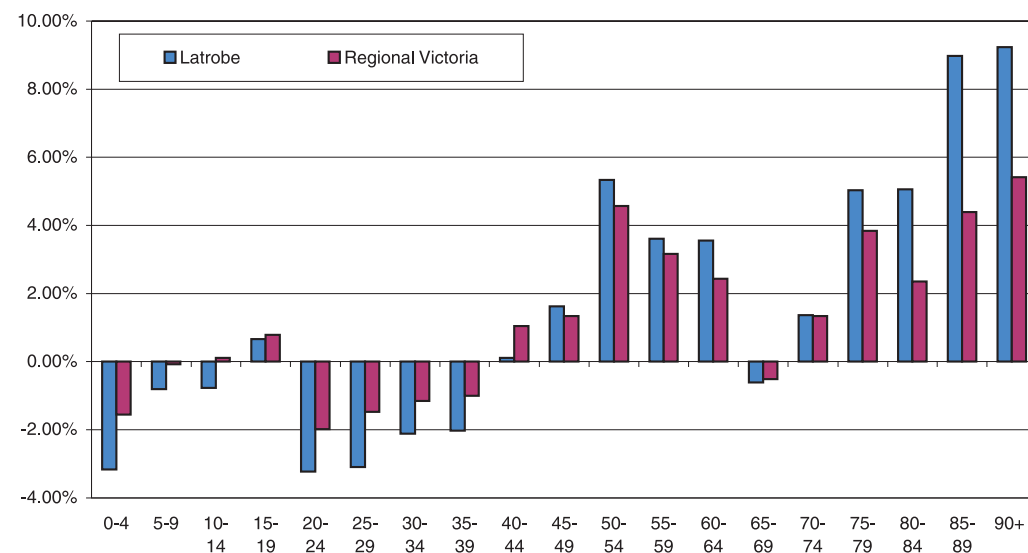
It appears that many rural areas and regional centres are not having a great deal of success in attracting young people back to their home regions at this point in time. However, growing job opportunities and higher education places will boost the capacity of the towns to retain and attract a younger and more skilled population. Furthermore, Latrobe's towns will have the capacity to attract inward migration from older demographic groups based on quality provision of health and other services.

Latrobe Compared to Regional Victoria, Population Cohorts, 2001



Source: ABS Census 1996 and 2001

Change in Age Profile, Selected Areas, 1996 - 2001



Source: ABS Census 1996 and 2001

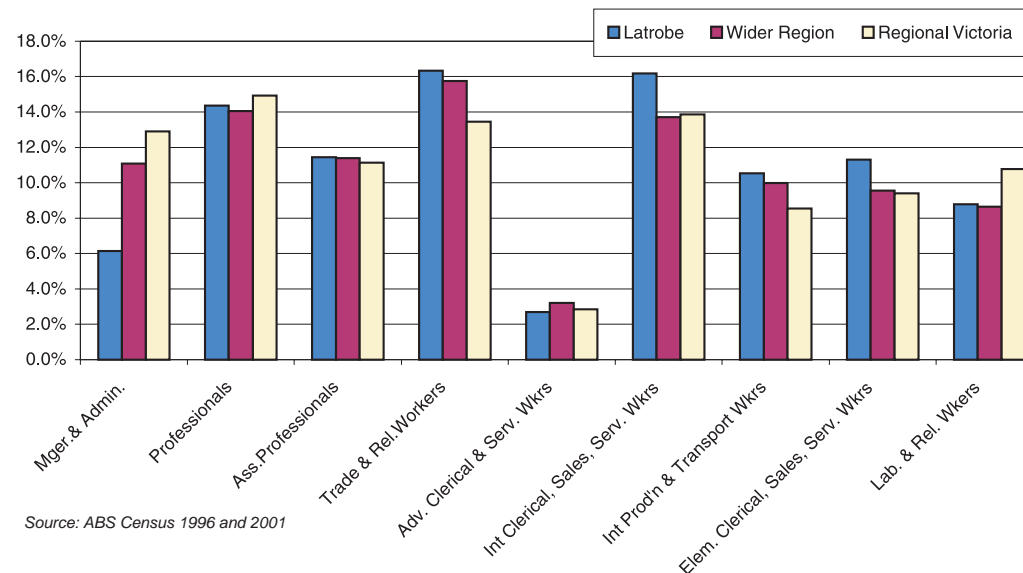
Skills Profile

Latrobe's occupational profile is similar to Regional Victoria, with two main points of difference:

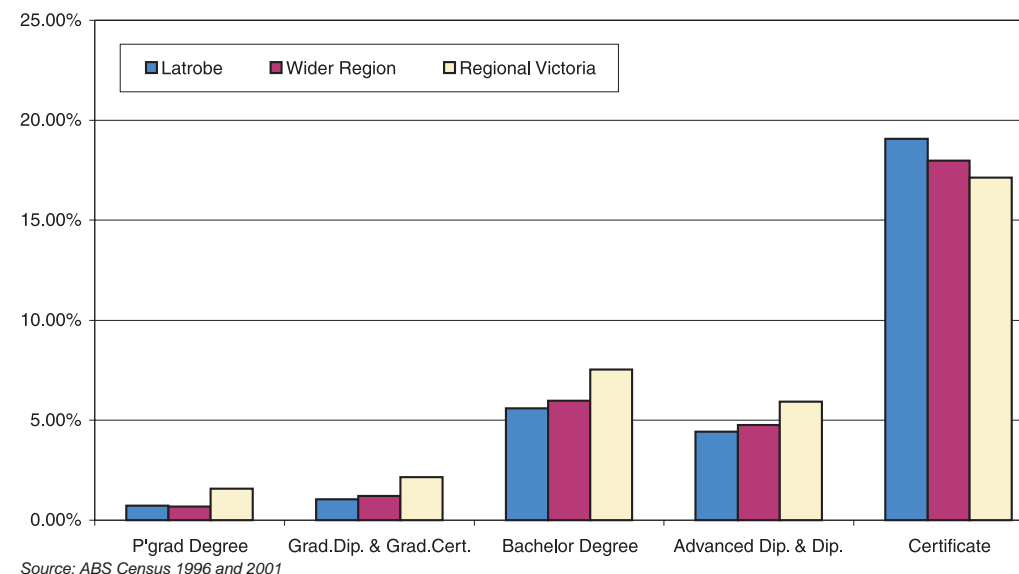
- The first is a low proportion of 'managers', which in regional settings comprises mainly farm managers. Hence Latrobe's low count in this employment category is a reflection of the relatively low number of farms in Latrobe compared to other regional areas.
- Secondly, Latrobe has a clear strength in trade, clerical and vocational fields, which is a reflection of the utility, government and population driven service employers in the municipality.

Qualifications data also shows that Latrobe is more vocationally oriented as opposed to business services oriented at the current time. This pattern is linked to other trends evident in the region, namely: the lack of advanced business service job opportunities leading to the outdrift of a corresponding workforce to other areas.

Employment by Occupation, Selected Areas, 2001



Highest Qualification Obtained, Selected Areas, 2001



Labour Force and Unemployment Trends

Over the five years to 2002, Latrobe's labour market conditions have improved significantly, with unemployment numbers down and employed numbers up.

A key feature of the data in the table below is the relative prosperity of Traralgon compared to Morwell and Moe. The latter two locations have significant unemployment numbers and rates in 2002. Traralgon achieves a very good labour market result on a regional basis.

Labour Force Characteristics, Selected Areas, June 1998-2002

Latrobe

	1998	1999	2000	2001	2002
Persons Unemployed	4,271	3,865	3,922	3,428	2,842
Persons Employed	22,621	23,541	18,125	26,765	25,086
Labour Force	26,892	27,406	22,047	30,193	27,928
Unemployment Rate	15.9%	14.1%	17.8%	11.4%	10.2%

Moe

	1998	1999	2000	2001	2002
Persons Unemployed	1,269	1,133	1,152	988	803
Persons Employed	5,168	5,427	5,786	6,239	5,882
Labour Force	6,437	6,560	6,938	7,227	6,685
Unemployment Rate	19.7%	17.3%	16.6%	13.7%	12.0%

Morwell

	1998	1999	2000	2001	2002
Persons Unemployed	1,734	1,578	1,584	1,423	1,171
Persons Employed	7,147	7,473	7,988	8,548	8,052
Labour Force	8,881	9,051	9,572	9,971	9,223
Unemployment Rate	19.5%	17.4%	16.5%	14.3%	12.7%

Traralgon

	1998	1999	2000	2001	2002
Persons Unemployed	1,146	1,044	1,077	924	790
Persons Employed	9,269	9,570	10,149	10,770	10,027
Labour Force	10,415	10,614	11,226	11,694	10,817
Unemployment Rate	11.0%	9.8%	9.6%	7.9%	7.3%

Wider Region

	1,998	1,999	2,000	2,001	2,002
Persons Unemployed	44,657	47,671	41,459	34,153	41,210
Persons Employed	383,966	391,289	393,820	384,494	411,807
Labour Force	428,623	438,960	435,279	418,647	453,017
Unemployment Rate	10.4%	10.9%	9.5%	8.2%	9.1%

Source: DEWRSB Small Area Labour Markets

Dwelling Structure

Detached houses are the most common housing form in Latrobe, the Wider Region and Regional Victoria, at around 88%. Apartments (1 to 2 storeys) are the second most common form of housing followed by semi detached housing options. The proportions between housing forms have remained largely unchanged over the five years to 2001.

This historic pattern of dwelling structure is expected to change with the introduction of new and smaller housing types integrated with services in Transit Centred Precincts. The underlying demand drivers are in place for this to occur, that is, smaller households and a more diverse population.

Dwelling Structure, Selected Areas, 1996 and 2001

1996	Latrobe		Wider Region		Regional Victoria	
	1996	% Share	1996	% Share	1996	% Share
Separate house	21,856	87.19%	54,037	89.49%	399,215	87.87%
Semi-detached, row or terrace house, t/house, etc	822	3.28%	1,651	2.73%	12,553	2.76%
Flat, unit or apartment: In 1 or 2 storey block	1,768	7.05%	3,015	4.99%	26,114	5.75%
Flat, unit or apartment: In 3 or more storey block	18	0.07%	38	0.06%	490	0.11%
Flat, unit or apartment: Attached to a house	35	0.14%	75	0.12%	936	0.21%
Flat, unit or apartment: Total	1,821	7.26%	3,128	5.18%	27,540	6.06%
Other dwelling: Caravan, cabin houseboat	201	0.80%	600	0.99%	5,900	1.30%
Other dwelling: Improvised home, tent, sleeper out	18	0.07%	55	0.09%	476	0.10%
Other dwelling: Home or flat attach to shop/office	41	0.16%	229	0.38%	2,754	0.61%
Other dwelling: Total	260	1.04%	884	1.46%	9,130	2.01%
Not stated	307	1.22%	685	1.13%	5,883	1.29%
Total	25,066	100.00%	60,385	100.00%	454,321	100.00%

2001	Latrobe		Wider Region		Regional Victoria	
	2001	% Share	2001	% Share	2001	% Share
Separate house	22,886	87.95%	57,154	89.49%	430,699	87.87%
Semi-detached, row or terrace house, t/house, etc	1,066	4.10%	1,986	2.73%	16,153	2.76%
Flat, unit or apartment: In 1 or 2 storey block	1,600	6.15%	2,959	4.99%	27,256	5.75%
Flat, unit or apartment: In 3 or more storey block	19	0.07%	65	0.06%	727	0.11%
Flat, unit or apartment: Attached to a house	24	0.09%	62	0.12%	694	0.21%
Flat, unit or apartment: Total	1,643	6.31%	3,086	5.18%	28,677	6.06%
Other dwelling: Caravan, cabin houseboat	213	0.82%	570	0.99%	6,119	1.30%
Other dwelling: Improvised home, tent, sleeper out	11	0.04%	80	0.09%	656	0.10%
Other dwelling: Home or flat attach to shop/office	44	0.17%	211	0.38%	2,374	0.61%
Other dwelling: Total	268	1.03%	861	1.46%	9,149	2.01%
Not stated	158	0.61%	377	1.13%	3,288	1.29%
Total	26,021	100.00%	63,464	100.00%	487,966	100.00%

Source: ABS Census 2001

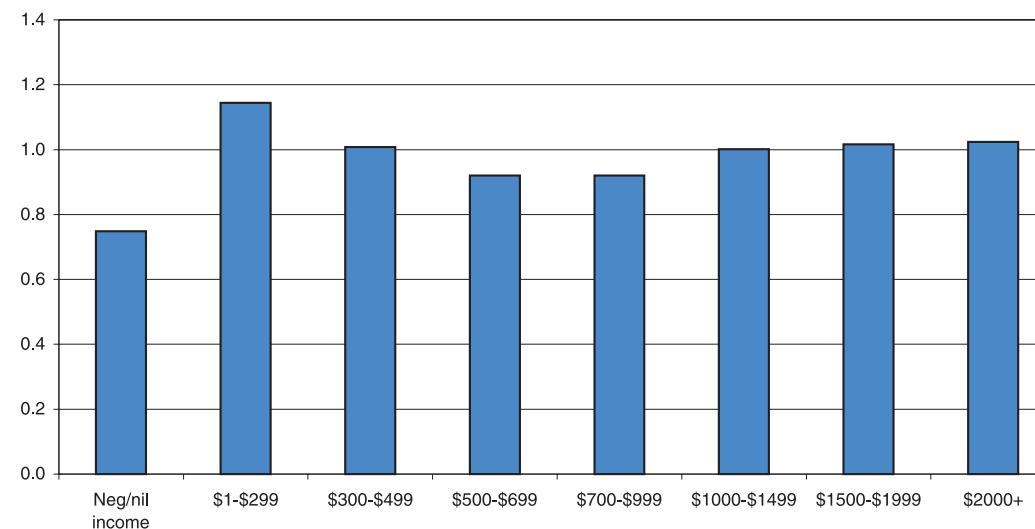
Household Income

Weekly household income in Latrobe compared to Regional Victoria is shown opposite. Latrobe has a slight over-representation of 'low' and 'high' income households, and a lower representation of 'middle' income households. This is a reflection of a high unemployment rate at one end of the scale and a significant cluster of higher order jobs in export sectors and government administration at the other end of the scale.

In terms of change in household income in the five years to 2001, both Latrobe and Regional Victoria have shed low income households and gained higher income households. This pattern is consistent with wider trends indicating improvement in the regional economy, in terms of economic expansion, employment growth and falling unemployment.

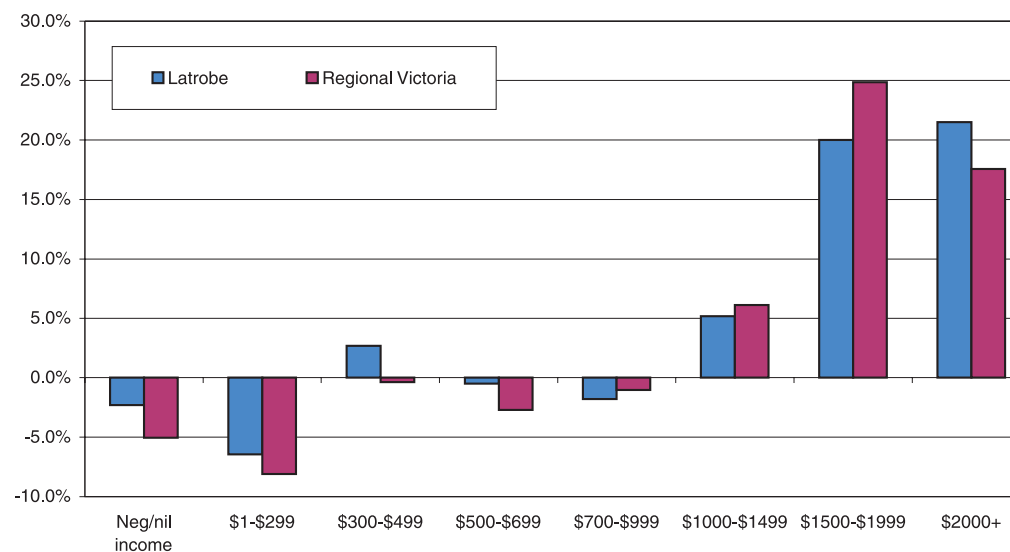
The stand out feature of this data is the rapid growth of high income households in both Latrobe and Regional Victoria.

Latrobe Compared to Regional Victoria, Household Income, 2001



Source: ABS Census 2001

Change in Household Income Profile, 1996 - 2001



Source: ABS Census 1996 and 2001

Indicators of Recent Activity

This section reviews investment trends and recent property sales.

Investment Trends

Broad Investment Trends

The table opposite provides building approvals data for Latrobe and Regional Victoria. This shows that the value of building approvals for all land uses in Latrobe has fluctuated widely over a five year period to 2002 falling from \$109 million in 1998 to a minimum of \$52 million in 2000 before picking up again in 2001 and 2002. By 2002, the total value of all building approvals had recovered to \$107 million.

Over the five-year period, residential approvals accounted for the bulk of approvals, followed by 'other' land uses. Commercial, retail, industrial and other works are generally at a lower level but have spikes associated with major works on an irregular basis.

The average value of residential approvals in Latrobe has gone up from \$39,257 in 1998 to \$56,892 in 2002. Average approval values for all sectors combined have marginally risen mainly related to residential with other sectors being more sporadic on a year-by-year basis.

Latrobe Building Approvals (\$'000, Constant 2001-02 Prices)

Year	Housing	Comm.	Retail	Industrial	Other	Total
1998	42,869	9,098	6,701	13,658	36,977	109,303
1999	51,103	4,012	3,273	2,895	9,813	71,097
2000	36,569	4,300	2,381	1,403	7,036	51,690
2001	37,509	5,320	6,529	2,835	8,925	61,117
2002	56,266	8,277	17,142	1,089	24,125	106,899
Total	224,316	31,007	36,026	21,880	86,876	400,106

Latrobe No. of Building Approvals

Year	Housing	Comm.	Retail	Industrial	Other	Total
1998	1,092	49	51	44	74	1,310
1999	1,058	45	36	25	55	1,219
2000	847	52	27	25	65	1,016
2001	815	52	32	19	56	974
2002	989	47	59	14	62	1,171
Total	4,801	245	205	127	312	5,690

Latrobe Average Value (\$'000, Constant 2001-02 Prices)

Year	Housing	Comm.	Retail	Industrial	Other	Total
1998	39,257	185,673	131,392	310,409	499,689	83,437
1999	48,302	89,156	90,917	115,800	178,418	58,324
2000	43,175	82,692	88,185	56,120	108,246	50,876
2001	46,023	102,308	204,031	149,211	159,375	62,748
2002	56,892	176,106	290,542	77,786	389,113	91,289
Total	46,723	126,559	175,737	172,283	278,449	70,317

continued overleaf

Source: Derived from Building Commission Victoria (Various Years), "Building Victoria"

continued from previous page

Regional Victoria Building Approvals (\$'000, Constant 2001-02 Prices)

Year	Housing	Comm.	Retail	Industrial	Other	Total
1998	1,231,990	133,851	108,155	90,831	305,714	1,835,518
1999	1,614,521	102,153	86,008	98,678	381,218	2,242,005
2000	1,442,789	134,145	91,272	93,574	357,378	2,089,575
2001	1,724,833	126,322	98,173	56,268	387,563	2,382,561
2002	2,066,276	220,553	112,971	85,072	408,950	2,893,822
Total	8,080,409	717,024	496,579	424,423	1,840,823	11,443,481

Regional Victoria No. of Building Approvals

Year	Housing	Comm.	Retail	Industrial	Other	Total
1998	22,126	879	834	941	1,069	25,849
1999	25,775	820	826	601	1,188	29,210
2000	24,198	971	783	616	1,283	27,851
2001	25,825	1,105	658	510	1,185	29,283
2002	28,458	1,235	776	573	1,273	32,315
Total	126,382	5,010	3,877	3,241	5,998	144,508

Regional Victoria Average Value(\$'000, Constant 2001-02 Prices)

Year	Housing	Comm.	Retail	Industrial	Other	Total
1998	55.6806472	152.276451	129.682254	96.5260361	285.981291	71.009246
1999	62.6390301	124.576829	104.125908	164.189684	320.890572	76.7547073
2000	59.6243078	138.15139	116.56705	151.905844	278.548714	75.026929
2001	66.789274	114.318552	149.199088	110.329412	327.057384	81.3632825
2002	72.6079134	178.585425	145.581186	148.467714	321.249018	89.5504255
Total	63.9363913	143.118563	128.083312	130.954335	306.906135	79.189256

Source: Derived from Building Commission Victoria (Various Years), "Building Victoria"

In terms of relative importance of the development types, Latrobe has a more even mix across the sectors compared to Regional Victoria as a whole, which is more reliant on residential works – see table below.

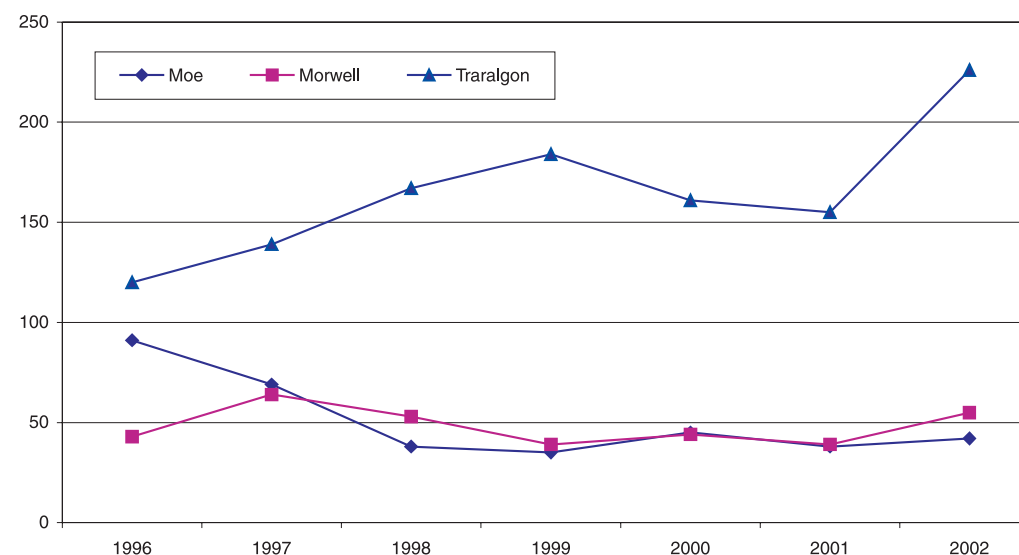
Total Value of Building Approvals 1998-2002 (\$'000, Constant 2001-02 Prices)

	Housing	Comm.	Retail	Industrial	Other	Total
Latrobe						
	224,316	31,007	36,026	21,880	86,876	400,106
	56.1%	7.7%	9.0%	5.5%	21.7%	100.0%
Regional Victoria						
	8,080,409	717,024	496,579	424,423	1,840,823	11,443,481
	70.6%	6.3%	4.3%	3.7%	16.1%	100.0%

Source: Derived from Building Commission Victoria (Various Years), "Building Victoria"

A Focus on Residential Approvals Activity by Area

The graph shows that within Latrobe, Traralgon is surging ahead of Morwell and Moe in terms of dwelling activity. This is consistent with other information that suggests that Traralgon is increasingly playing a regional 'flagship' role within Gippsland.



Number of Dwelling Approvals, Quarterly and Yearly Totals

	Moe					Morwell					Traralgon				
	Mar	Jun	Sep	Dec	Total	Mar	Jun	Sep	Dec	Total	Mar	Jun	Sep	Dec	Total
1996	15	31	16	29	91	10	12	12	9	43	32	39	26	23	120
1997	8	11	24	26	69	6	19	13	26	64	29	36	38	36	139
1998	6	18	9	5	38	9	20	13	11	53	45	57	41	24	167
1999	5	13	8	9	35	13	9	10	7	39	44	47	53	40	184
2000	5	19	7	14	45	8	20	6	10	44	50	60	25	26	161
2001	13	6	11	8	38	9	7	10	13	39	27	44	43	41	155
2002	8	12	12	10	42	15	16	11	13	55	64	61	51	50	226
Total	60	110	87	101	358	70	103	75	89	337	291	344	277	240	1,152

Property Sales Review

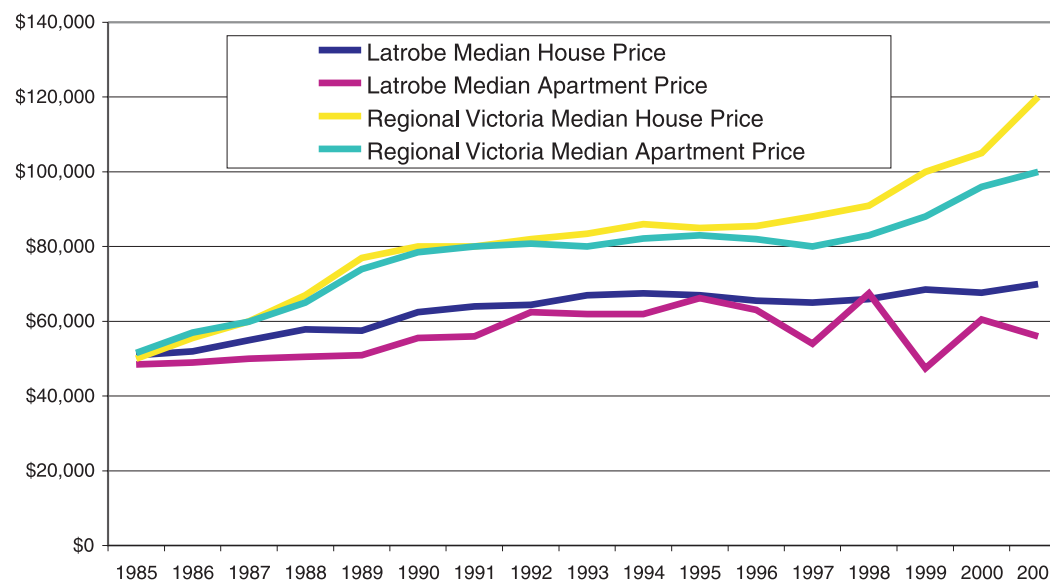
A review of property sales provides information on market depth in a property category (eg. housing, retail, office), given by number of sales over time, and provides information on prices and trends in prices achieved to understand relative supply and demand conditions within market areas.

The figure opposite shows house and apartment price trends in Latrobe from 1985 to 2001 (historic data) compared to Regional Victoria. This shows that in the mid 1980s, there was only marginal difference in prices between Latrobe and Regional Victoria, and between houses and apartments. From the late 1980s and early 1990s however, a significant gap in prices had emerged with Latrobe falling behind Regional Victoria. This is an outcome of the economic shocks from the restructuring and downsizing of utility and related sectors in Latrobe during this period.

From the late 1990s the gap between Regional Victoria and Latrobe grew larger, with prices in country Victoria surging upward, reflecting a wider economic and property market boom in Victoria during this time. This boom included significant property price increases in tourist towns and 'lifestyle' locations, particularly along the coast and within two hours drive from Melbourne.

Note that the above data provides information up to 2001 only. In more recent times Latrobe's property market has started to 'pick up' with prices in a number of sectors increasing, as shown in the following charts.

Median House and Apartment Prices, Selected Areas, 1985 - 2001



Source: Landata, 2001

The following charts provide property sales and price per square metre achieved over time in Moe, Morwell and Traralgon for houses, apartments and commercial and retail properties. (Commercial data is not included for Moe due to a low number of sales).

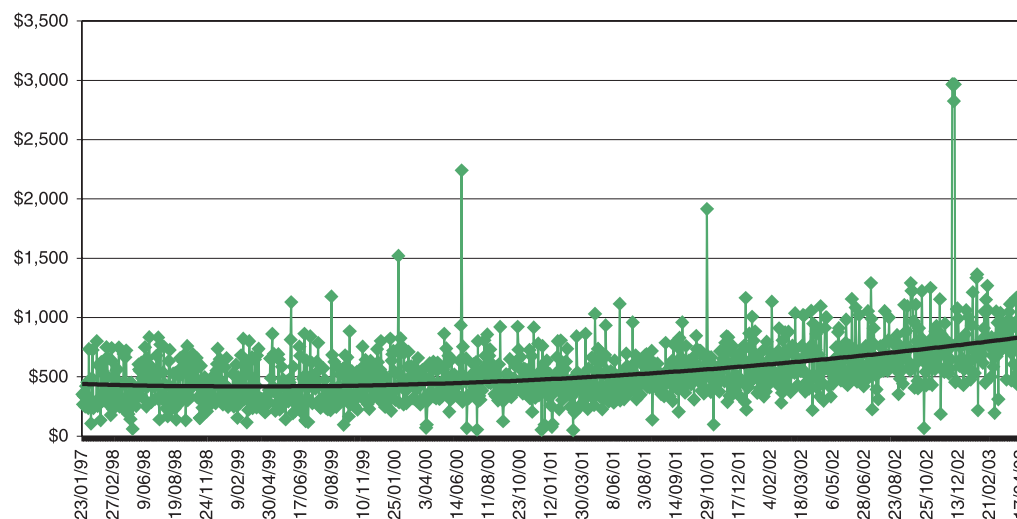
The detailed sales information is derived from unpublished data provided by Latrobe City. Note that this data is indicative only and is provided to obtain insights into general market depth and price trends in the three towns. This data is likely to contain anomalies despite efforts to remove such entries. Also, caution should be taken when interpreting trends where there are a low number of sales per year.

In all three towns, the data generally shows the following.

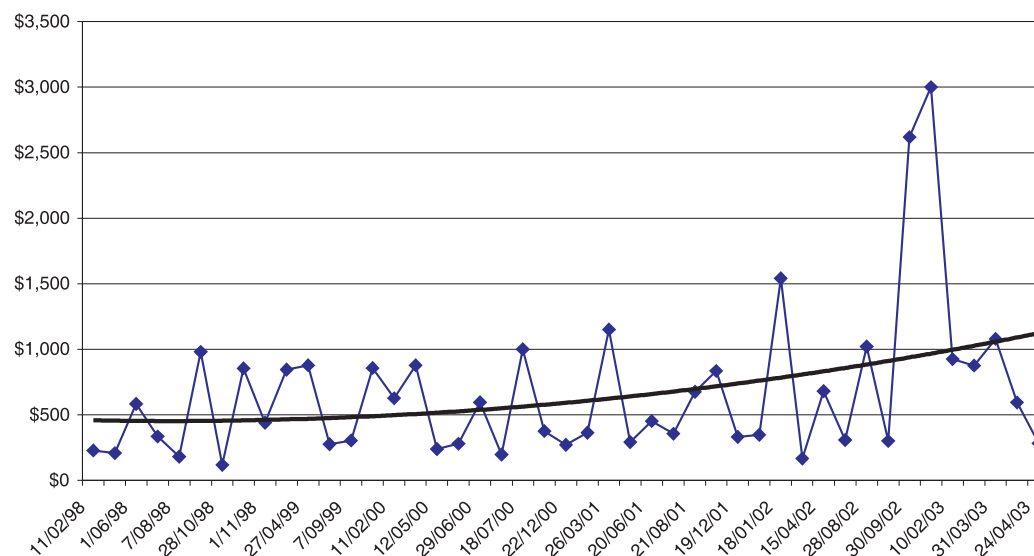
- There have been a significant number of **house** sales and an upward trend in prices, especially from 2001. In Moe and Morwell prices have increased from about \$500 / sqm in 2000/01 to about \$800 / sqm in early 2003. In Traralgon prices have increased to about \$1,000 / sqm on average.
- There have been a relatively low number of **apartment** sales with high variability in prices achieved, but a general upward movement can be seen from 2001 in all towns. Prices in the order of \$1,000 to \$2,000 / sqm may be achievable at the current time, with higher prices likely to be available in Traralgon.
- There has been a small number of **retail and commercial** sales over time (which is unlikely to provide reliable trend information). Nevertheless, on the available information, it may be suggested that prices are holding ground or heading up in the three towns.

To summarise, this information suggests that residential activity provides the greatest market depth and shows sign of price growth, which will encourage development activity. Retail and commercial uses have lower market depth and thus development is likely to be more restrained and based on pre-commitments with a less risk taking focus.

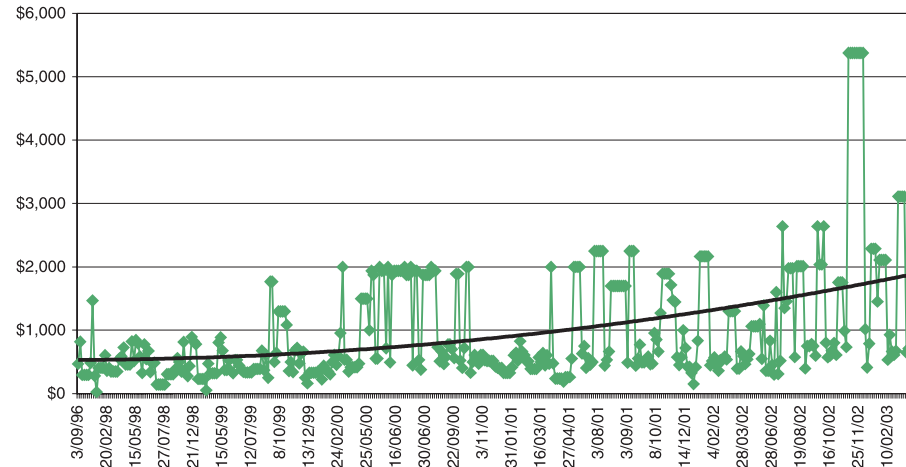
Moe Residential House, Price / SQM



Source: Derived from Latrobe City Unpublished Data

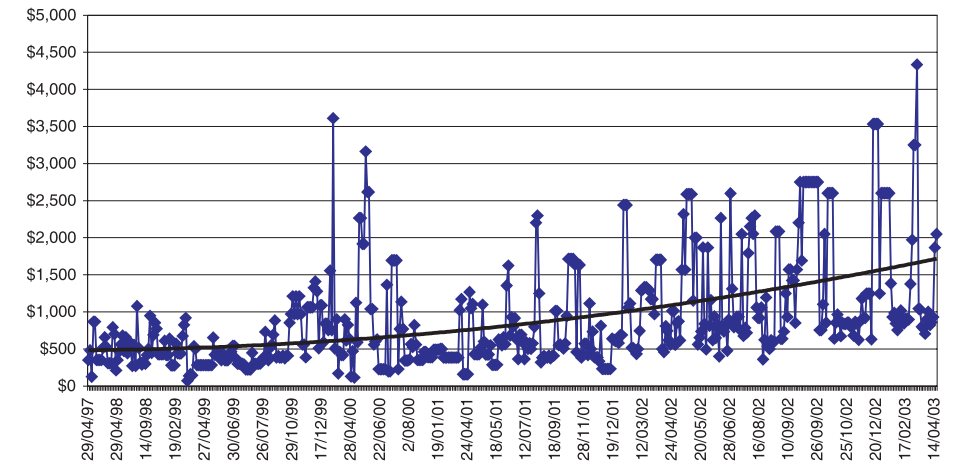


Moe General Retailing, Price / SQM



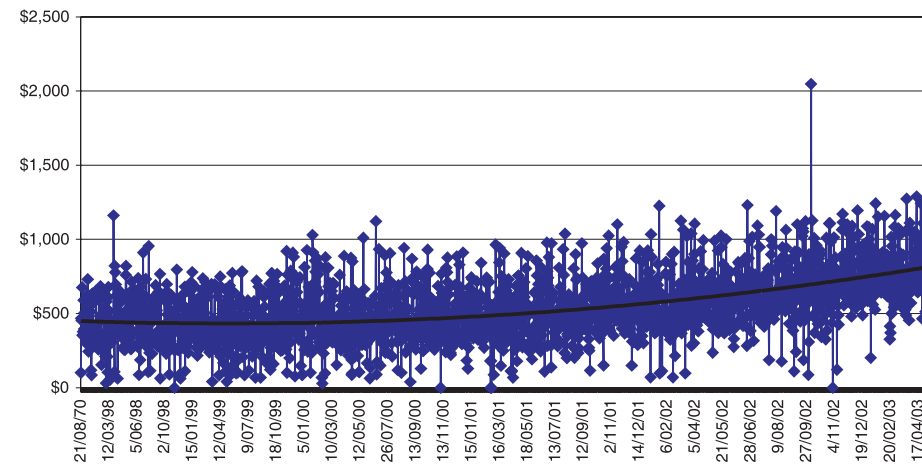
Source: Derived from Latrobe City Unpublished Data

Morwell Apartment, Flat & Units, Price/ SQM



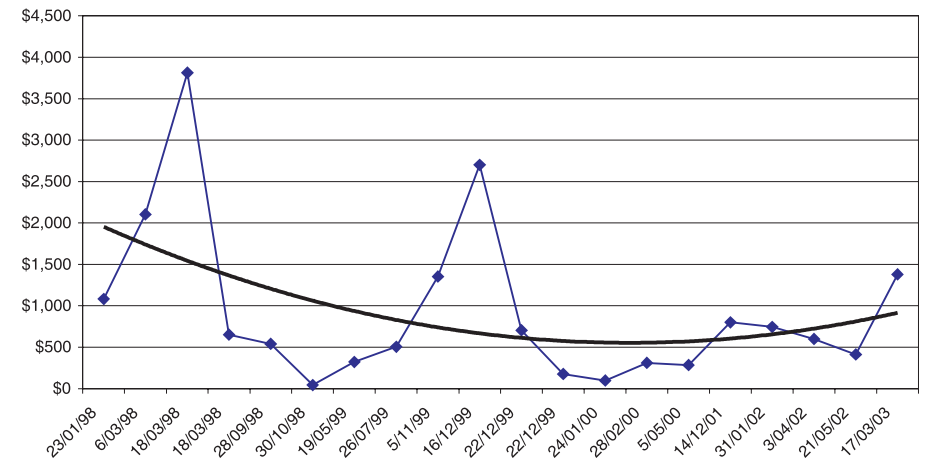
Source: Derived from Latrobe City Unpublished Data

Morwell Residential House, Price / SQM



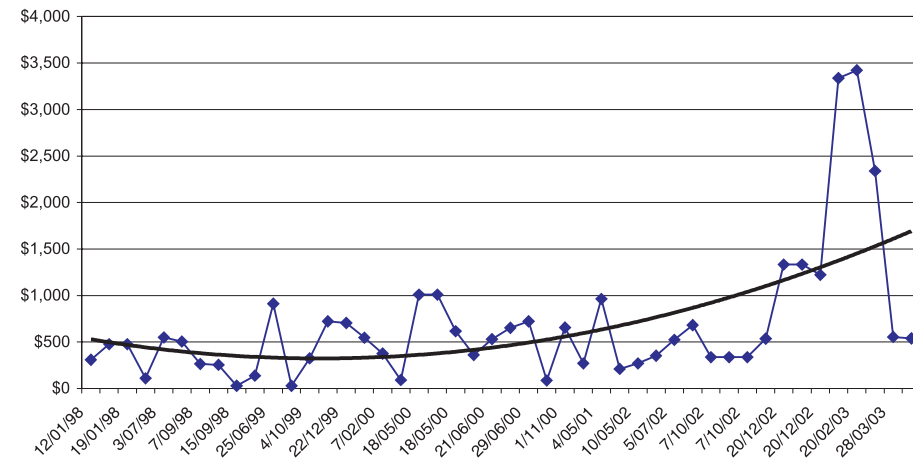
Source: Derived from Latrobe City Unpublished Data

Morwell Commercial Office, Price / SQM



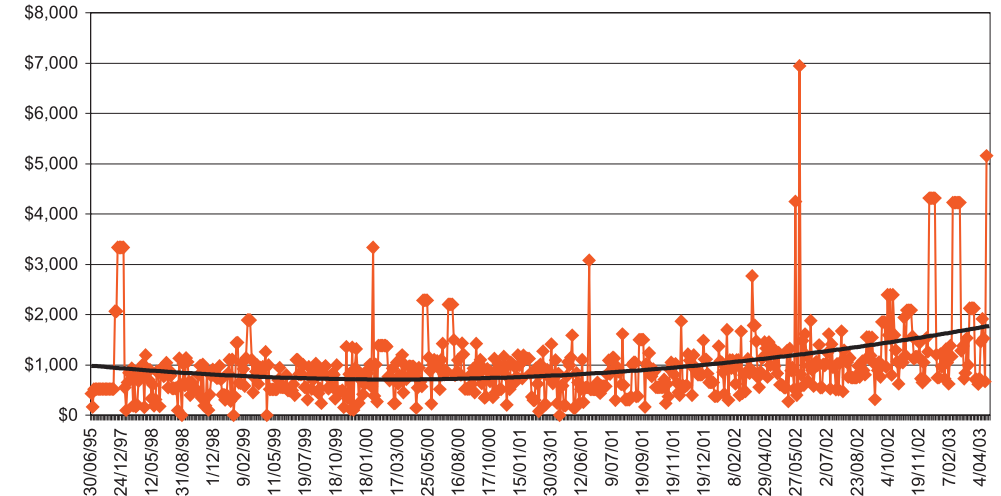
Source: Derived from Latrobe City Unpublished Data

Morwell General Retail, Price / SQM



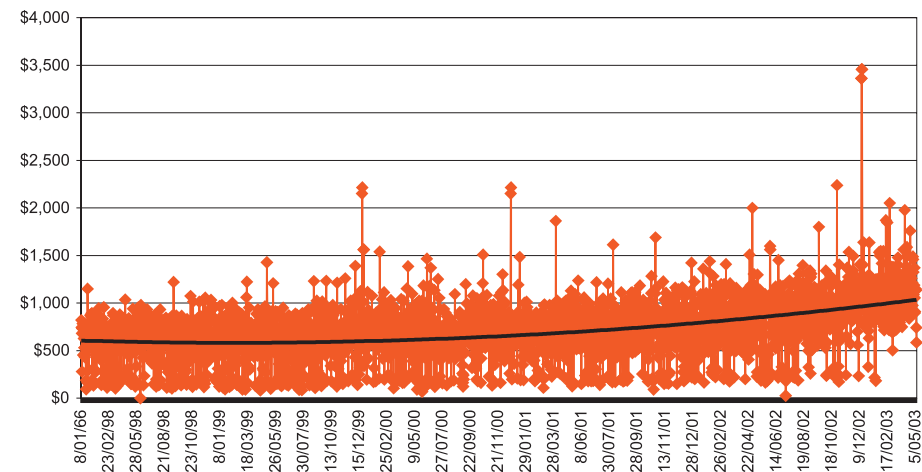
Source: Derived from Latrobe City Unpublished Data

Tararagon Apartment, Flat & Unit, Price / SQM



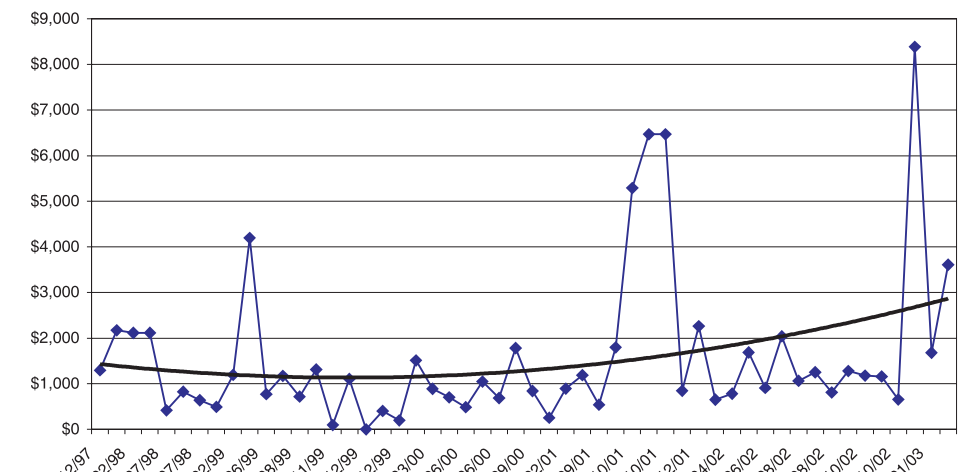
Source: Derived from Latrobe City Unpublished Data

Tararagon Residential House, Price / SQM



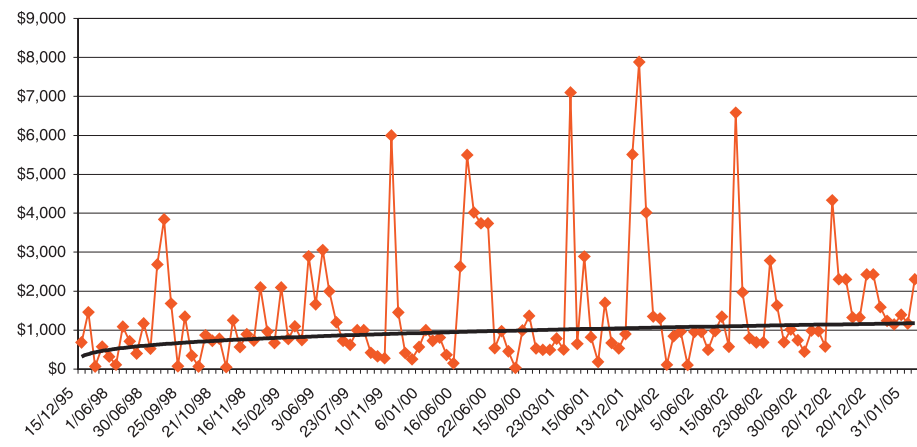
Source: Derived from Latrobe City Unpublished Data

Tararagon Commercial Office, Price / SQM



Source: Derived from Latrobe City Unpublished Data

Traralgon General Retailing (price per sqm)



Source: Derived from Latrobe City Unpublished Data

Literature Review and Selected Consultation

Other contextual information is provided in this section of the report. This comprises literature review summaries and a synthesis of consultation undertaken for this assignment (including information from site inspections).

Master Plans & Urban Renewal Frameworks for Transit Centred Precincts in Moe, Morwell and Traralgon (Study Brief, Latrobe City 2002)

Latrobe is described as being 150 kilometers outside the metropolitan area and being the main regional centre in Gippsland (having the third largest population in regional Victoria not including Geelong). Latrobe has three major centres on a linear corridor (rail and freeway / highway), which operates as a 'networked city' system. This is distinct from most regional municipalities, which typically have one large centre.

Moe is described as the gateway to Latrobe from Melbourne and tourism gateway (to Mountain Rivers district, Thompson Valley, Mount St Gwinear snow fields, Baw Baw Alpine National Park and gold mining town of Walhalla). The town is considered to have residential development potential with significant views to the Baw Baw Ranges. Sites considered to offer development potential include VicTrack Land adjacent to the station, police station building in Fowler Street, and various other sites in the CBD.

Morwell is the central town in the City. It accommodates transport serves (experiencing significant rail patronage in a regional context), government services, manufacturing, power and other industrial activities. Morwell has two retail centres, the traditional town centre (CBD style) and Mid Valley shopping centre on its south-eastern fringe. A feature of Morwell is its strong links to the university town of Churchill (Monash University Campus).

Recent strategies to revitalise Morwell include: plans for construction of new Council headquarters; station car parking development; refurbishment of the regional art gallery; construction of a new justice precinct; pedestrian network upgrades; intermodal transport interchange development; removal of freight rail infrastructure from the city centre; and various traffic works.

Tasks planned but not yet undertaken in Morwell include: development of mixed use areas; introduction of housing into the centre; open space and rose garden development; and expansion of the medical and health precincts.

Traralgon is the largest town in Gippsland. It developed traditionally as an agricultural service centre and more recently has developed an engineering profile (associated with power industry works) and has a large retail, business and government services role, which serves a wide regional catchment. Traralgon also has tourism and hospitality strengths and has experienced strong residential development in recent years.

Sites that have potential for higher density housing include land along the north side of Queen Street held by VicTrack, and adjacent properties.

Morwell CBD Revitalisation Action Plan, Discussion Paper (La Trobe Shire Council, Morwell CBD Revitalisation Taskforce, 1999)

This report was prepared to provide a framework for the revitalisation of Morwell, generate additional interest in the Morwell Central Business District, and to facilitate public comment regarding the revitalisation process.

The key outcomes and project tasks are listed as: consolidate the retail core; develop a medium density residential strategy; develop older persons housing; improve parking systems; improve pedestrian networks; facilitate public sector agency investment in the town, including the Council offices and Department of Justice; make improvements to the arts centre; enhance the medical and health precinct; encourage rail station redevelopment; integrate the rose garden with the CBD; utilise the ex 'freightgate' site to create a 'visual gateway'; maximise opportunities presented by centrally located open space; and restore heritage built features.

Morwell Town Centre, Medium Density Residential Strategy (RPD Group, Morgan & McKenna Architects, 1999)

This report was prepared to direct and contribute to the rejuvenation of the northern precinct of the Morwell Town Centre, primarily through the provision of medium density housing integrated with selected mixed use development. The strategy seeks to foster renewed community and investor confidence and provide diversity in housing opportunities adjacent to a key retail centre, while also protecting the viability of existing commercial land uses.

The report identifies an appropriate site for the development of medium density housing that meets the expectations and demands, and complies with the restrictions of the project. It identifies building techniques (single storey, setback from boundaries, low site coverage, reduced building mass, large landscaping areas) that ensure the amenity and privacy of adjacent properties will not be adversely affected.

Latrobe Valley Housing Renewal Strategy (SGS Economics and Planning, 2002)

This document provides a strategy for public housing estate renewal in four towns in the Latrobe Valley: Moe, Morwell, Churchill and Traralgon. The report focuses on neighbourhood renewal projects in specific areas within these towns (Moe Heights, Morwell East, Glendonald Estate and Traralgon East) and provides guidance on the number and standard of housing to be provided (including the location and mix of housing). The report provides strategic directions for the application of funds to maximise the Latrobe Ministerial Task Force's effectiveness in delivering social housing outcomes.

The report presents recommendations for the four towns separately and the broader Latrobe Valley region. The recommendations address: improving the mix of public housing stock to better match needs; providing tenants with a better standard of housing and neighbourhood amenity; increasing apprenticeship, training and employment options; and improve the social outcomes for the citizens in Latrobe City. More general directions address the need for safer streets and parks, public telephones, management and enhancement of properties, maintenance of private property, amenity and facilities in public parks, housing diversity and choice, and streetscape amenity.

Latrobe Region Shopping Centres: a Study of CBD Retailing Dispositions in Moe, Morwell and Traralgon (Reimers, V. and Pullin, L. - Monash University)

This research paper explores retailing in the CBDs of Moe, Morwell and Traralgon in a regional context. The purpose of the paper is to understand the current position of the centres and provide recommendation regarding future strategic directions.

A key finding is that there is significant vacancy across the three centres, but especially Morwell, which reflects an over-supply of retail space (Morwell 18% vacancy, Moe 13% and Traralgon 12%).

Traralgon is considered to have a positive future outlook, based on its diverse offer and wide regional catchment. It has emerged as the dominant centre in the region.

Moe's retail and service offer does not offer distinct advantages over the other centres but its location at the edge of the municipality provides a relative stable catchment and positive outlook.

Morwell is considered to be the worst performing centre, because of its poorer mix of establishments compared to Moe and Traralgon. Moe and Traralgon have advantages in terms of serving rural hinterlands and small towns at the periphery of and outside Latrobe, whereas Morwell suffers from competition from these centres, constraining its market reach. Furthermore, Mid Valley Shopping centre acts to disperse the retail offer of Morwell, and competes with the town centre in terms of providing discount department store, cinemas, major hardware, electrical goods, bookstores and health services.

Morwell needs to build a wider range and critical mass of services, especially personal services and business services, to complement its retail offer.

[Consultation](#) (Based on Meetings with Representatives from Latrobe City, Sample of Property Owners and Real Estate Agents)

Following is a synthesis of views expressed by a number of individuals. Only main themes are presented.

Housing - Housing development has been strong in recent years and this is considered to be the main opportunity for the town centres looking forward. Some consider medium and high density housing a real development opportunity looking forward, more so than retail and commercial development opportunities. This in part relates to a growing and ageing population but also to a perception (by some) of lack of supply of residential development land in the region and a desirability to live close to services. Mixed use development is a possibility, such as retail ground floor in part mixed with residential and perhaps small offices.

Retail – Most new retail investment has been in highway retail premises in Traralgon and retail development in Mid Valley. Apart from that most investment has been of a low scale. Major new opportunities are not expected although there may be more discount retail premises investment in the region. Many retail premises are obsolete and not suited to the need of modern retailers and service providers. This is driving new retail development such as bulky goods and generally larger premises.

Commercial – The main commercial development opportunities are considered to be government offices and call centre type establishments. The market for office investment is patchy.

Health Services – Latrobe Hospital is poorly located from a population perspective, being between Traralgon and Morwell, but despite this health services in the municipality are of a high standard and will act to retain and attract older population groups in years to come.

Education Services – The municipality has a good supply and mix of education services from University to TAFE and other providers. The only issue of concern is location, with services dispersed across the City. A possibility is development of student housing in Morwell, as this is the best connected major centre to the Churchill campus of Monash University.

Town Centre Needs – General infrastructure and amenity improvements are desired, and better utilisation of sites would be a positive, to boost the 'look' and image of the towns.

Public Transport – This is a key issue in the City, as services are dispersed across and between centres. The infrastructure (bus and train) is considered to be in place but services in terms of direction and frequency is considered poor. This marginalises groups that do not have access to car transport, such as young people.

Public Investments - Latrobe is expected to benefit from planned development of the fast rail system, fibre optic / broadband rollout, freeway improvements and ongoing improvements to higher education and health services. New government facilities (local government, justice precinct and others) are being developed.

Private Investments - The outlook for Latrobe is positive. The municipality has planned investments in mining, manufacturing, power generation, transport & logistics and other activities.

Risk - The main risks for the municipality are closure of major operations such as power generation or major manufacturers.

1.3 Development Analysis and Forecast

This section provides broad development forecasts for major land uses. In particular, this section provides information on:

- Residential development possibilities;
- Commercial development possibilities;
- Public sector facility planning;
- Retail development possibilities; and
- Other development possibilities.

Disclaimer - Note that the following forecasts are indicative and provide a general guide to development opportunities. The information has been compiled and interpreted only for the purposes of informing development and urban design principles in the context of this brief. The information must not be relied on for any other purpose or by any other third party without prior verification. SGS Economics and Planning Pty Ltd offers no warranty or guarantee in relation to the interpretations of the information.

Residential Development Possibilities

Introduction to Housing Opportunities

It was noted earlier that Latrobe's population is expected to increase over time, and household numbers are expected to increase at a faster rate (a function of falling household size in the context of a maturing and diversifying population). For example, the Department of Infrastructure estimates that there could be about 5,400 more households in Latrobe in 2021 (off a 2001 base). This would translate into opportunities for development of (primarily) separate houses and townhouses. If current rates of dwelling types are used, this might mean:

- About 4,800 new separate houses;
- About 500 new townhouses; and
- A small number of apartments.

However, this (past) trend information does not take into account the potential to establish a new and more vigorous 'higher density' housing market in Latrobe. Such a market can have many benefits in terms of:

- Better utilising valuable but scarce land close to services and rail stations to maximum potential;
- Building a 'café culture' and extending hours of activity;
- Increasing informal surveillance, and making a place look and be safer;
- Encouraging a more pedestrian and public transport oriented lifestyle; and
- Generally adding to a sense of vibrancy.

It is the view here that a latent market for higher density Transit City living *is likely to be present to some extent*. The key markets for higher density living in the Transit Centres are likely to be:

- Older persons such as retirees and 'empty nesters' (the latter may be in the workforce but have no dependants living with them).
- Students that live in single or group households (especially Monash University students and TaFE students).
- Executive labour / professionals (permanent residents and temporary residents).
- Other smaller household types, such as single women and lone parent families.

The task is to understand the market and how this can be drawn out (which will require analysis and planning that is not simply based on past trends). Successful implementation of a high density housing program would mean that the some housing that would otherwise be accommodated on town fringes would be redirected into the Transit Centres.

For the purposes of this assignment it is felt that 'lower rise' apartment complexes (generally one, two or three storeys) are the only form of 'high density' housing available to Latrobe. 'High rise' complexes often found in major metropolitan centres are discounted as an opportunity in Latrobe, due to market need, acceptance, cost and price factors not being suited in Latrobe.

On this basis, housing development possibilities in Latrobe are summarised as follows:

- Separate houses will continue to comprise the bulk of the market. The 'free market' is likely to meet this need, and this is generally likely to occur on town fringes and within major infill sites across the towns.
- Townhouses will continue to comprise a significant portion of the market, and will possibly increase market share over time. Again, it is felt that the 'free market' is likely to meet this need, and this is generally likely to occur on town fringes and within major infill sites across the towns. Transit Centre sites may be suitable for this form of development.
- A number of apartments are a possibility for the Transit Centres. This form of housing would be suited to a Transit Centre location given that it would make best use of scarce land resources in the precincts.

Given this context, the remainder of this section of the report examines the potential for 'higher density' housing development in the Transit Centres in more detail.

Higher Density Demand By Price

This Transit Centred Precinct project is based on 'opening up' new markets including new residential development possibilities. The potential for higher density living in a Transit Centred Precinct is difficult to assess using past trends because this form of housing represents a 'new' product in the Latrobe marketplace. Hence this analysis requires a set of assumptions on level of interest in this form of living by price.

SGS Economics & Planning has developed a set of ratios that apply to this topic in Transit City environments. The ratios assume that a proportion of owner-occupier, renters and investors are interested in higher density living / investing in a market area. The ratios are based on surveys undertaken in outer metropolitan Melbourne, and relate to interest in apartments in three storey or higher complexes. It is not possible to replicate the survey based ratios within the scope of this assignment and hence for the purpose of this analysis, it is assumed that the same ratios hold in Latrobe, except that the interest applies to all forms of apartments including one and two storeys. In effect this means that the ratios apply to lower density forms of housing than what might be available in metropolitan Melbourne, which is reflective of reality. In other words, the analysis for Latrobe is 'factored down' to take into account Latrobe's lower tolerance of different development forms.

Other calibrations are made in the analysis. This includes calibrations based on Latrobe's household by type profile, and income profile.

Such assumptions are deemed reasonable because modelling must estimate possible future conditions, for which past trends provide little information, where the product in question is 'new' to a market area.

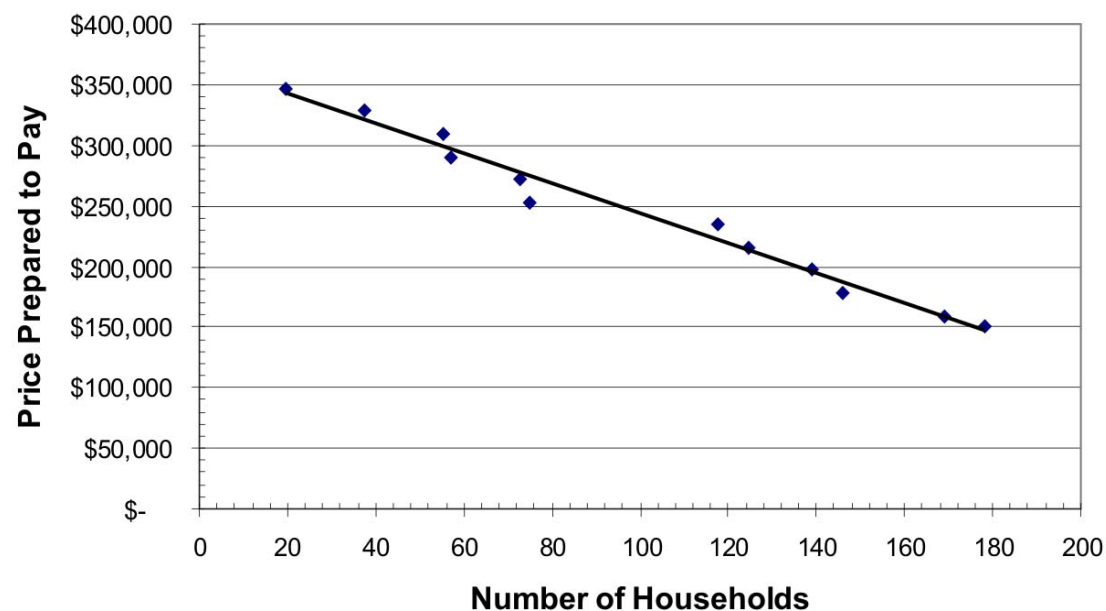
On this basis, the following analysis provides a guide to future interest in higher density living by price in a Transit Centred Precinct environment by assessing:

- Apartment living interest by price from owner-occupiers;
- Apartment investment interest by price (from investors); and
- Apartment living interest by price from private housing renters.

This analysis is merged to provide a total demand table for Transit Centred Precinct living, as a base case, and then this case is 'factored up' to account for possible growth in this form of housing over time.

Owner Occupiers - Owner occupying household's number 18,728¹ in Latrobe. Based on SGS Economics & Planning research it is assumed that 28% of households intend to move in the next ten years. It is therefore estimated that 5,244 households will move within this time frame. It is also estimated that 3.4% have an interest in apartments (SGS Economics & Planning research). This translates to a figure of 178 apartments over 10 years. The figure below is a demand curve for the owner-occupier market using these assumptions. It utilises information on the price owner-occupiers expect to pay for their next dwelling applied to a Latrobe context².

Owner Occupier Market by Price (10 Year Period)

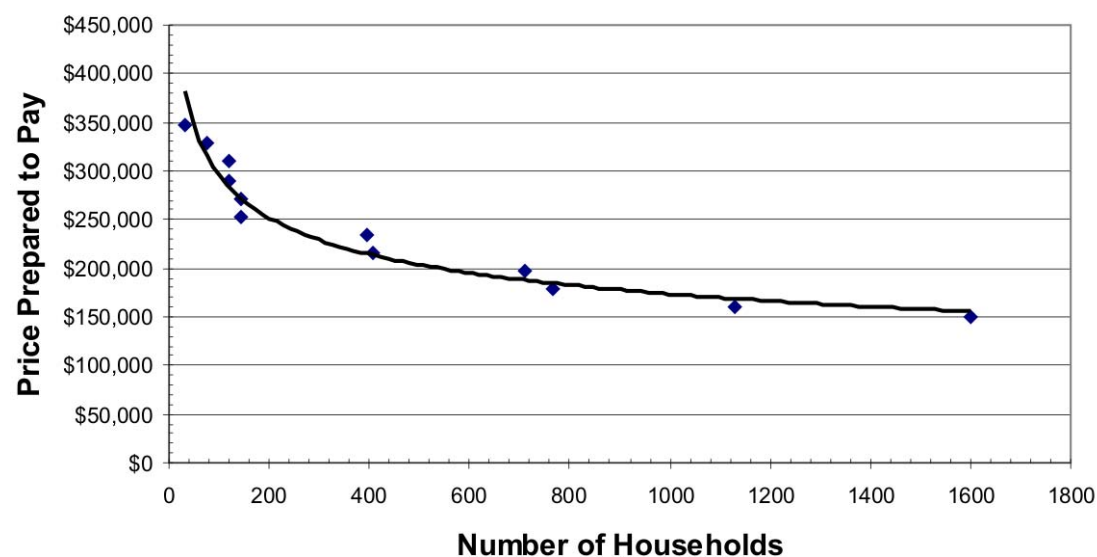


¹ ABS Census, 2001

² Prices have been scaled according to the income profile of Latrobe.

Investors - SGS Economics & Planning research results suggest that in urban settings about 35% of households are likely to purchase an investment dwelling within the next ten years. In Latrobe, where there are 25,399³ households (2001), this translates to a figure of 8,890 possible investors. Assuming, 18% of these potential investors purchase an apartment in Latrobe (based on SGS Economics & Planning research), the subsequent figure is a potential for 1,600 apartment investments in Latrobe over 10 years, or 160 per annum. The demand curve below has been constructed based on the price at which potential investors may consider purchasing a residential investment property, scaled to the Latrobe context.

Investor Market by Price (10 Year Period)

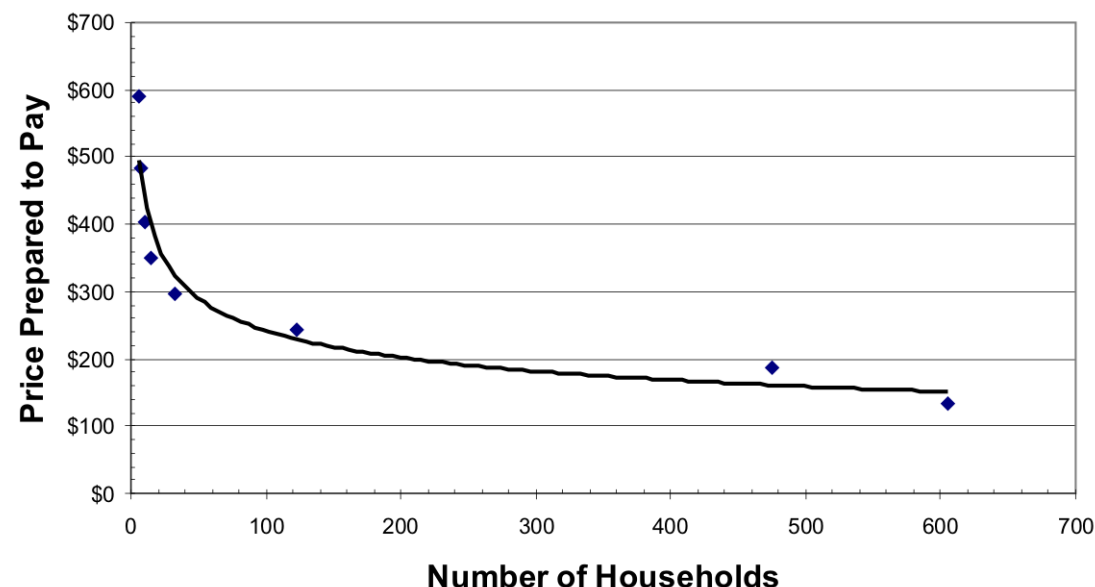


Renters - There are 3,836⁴ households that rent in Latrobe. Research has indicated that about 16% of renters would be interested in apartment style living over the coming 10 years, if such accommodation were made available (SGS Economics & Planning research). This translates to a figure of 606 renter households. The upper figure opposite shows the demand curve for 'interested' renters. It disaggregates the 606 interested renter households by the price they are willing to pay (based on ABS Census 2001 data).

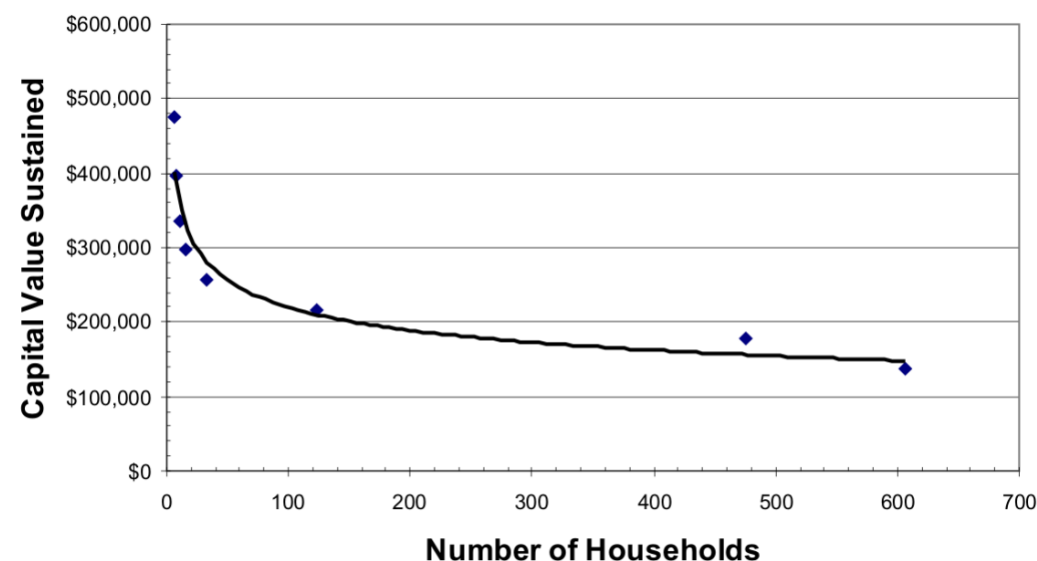
An estimate of the 'capital value' that is sustained by rents paid is shown opposite below. Assumptions in the analysis are renters will pay a premium of \$50 per week for a new apartment in a Transit Centre environment (this is a reflection of the benefits attributable to this residential location) and gross rents need to be 7% of purchase price to attract investors. On this basis, the figure below shows the relationships between the rental market and the sustainable capital value.

The large number of investors as opposed to renters, at each price level, indicates that there are an insufficient number of renters to support all of the potential investors. Hence the renter figures provide the demand case for renters and investors.

Renter Market by Price (10 Year Period)



Renter Market by Capital Value Sustained (10 Year Period)



Base Estimate Demand for Apartments

Assuming a quality product was diffused into Transit Centred Precincts, the following base case demand for apartment can be estimated at price levels. It is assumed that the sustainable number of apartments is the addition of the owner-occupier and renter market demand curves. Note that these figures do not take into account market growth factors, which are addressed in the following pages.

Base Estimate for Apartments

Price	Apartments Over 10 Years	Per Year Over 10 Years
Initial Interest	784	78
\$150,000	725	73
\$200,000	285	29
\$250,000	145	15
\$300,000	75	8
\$350,000	25	3
\$400,000	5	1

Growing the Market

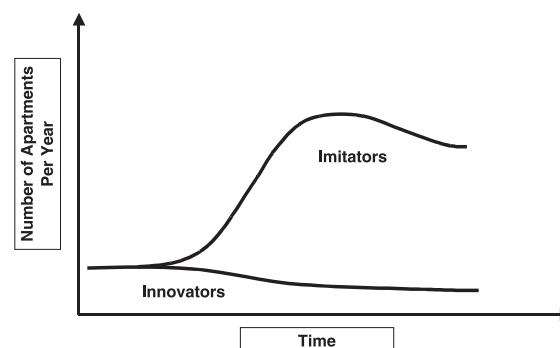
The picture outlined above is a 'static analysis' in that it reflects what the market is likely to do with a current level of knowledge. Experience has shown that when a new product is brought to the market and if it is well received, the market subsequently grows. There are three methods by which to factor these figures to account for a growing market:

1. Current renters moving from the rental to the owner-occupier market;
2. Marketing dynamics whereby initial interest is multiplied by a factor of 3.5 based on innovator / imitator dynamics; and
3. From household growth in Latrobe generally.

1. Research shows that 6% of renters intend to purchase an apartment dwelling (SGS Economics & Planning). This figure is used to factor up the initial interest of owner-occupiers in the model described above.

2. A 'Bass model' provides a means of analysing the dynamics of a population taking up a new product. There are four key elements to the diffusion process: the innovation, channels of communication, time and social system⁷. In the context of the Transit Centres apartment scenario: the innovation is apartment living; the channel of communication is observation / site inspection, word of mouth, television, radio, internet or other related mediums; time pertains to the rate at which apartments are adopted by the population; and the Latrobe community is the social system.

The uptake of a new product has been widely documented in a variety of research. It is initially expected that only a few households take up a new product (ie. the numbers presented in the Base Estimate above). These individuals are called innovators. In subsequent periods, diffusion of the product throughout society increases due to communication, and this results in an increasing rate of adoption, by imitators. That is, product take-up displays a skewed (to the right) 's-shape', as shown below. The growth rate ultimately slows down and levels off. When the level of adoption reaches its maximum, the market subsequently declines and the number of adoptions drop to a sustainable rate. Such a pattern has been evident in growth of inner Melbourne apartments.



Based on research the following generalisations can be applied to this study (which are used for calculation purposes below):

- There is approximately a 10 year gap between when innovators initially take to the market and when it reaches its peak; and
- The ratio of innovators to imitators is approximately 1:3.5.

3. This analysis has so far not considered changes to the number of households in Latrobe. Households are forecasted by Department of Infrastructure (Victoria in Future, 2000) to grow by approximately 9% in the ten years to 2011. This growth provides an increase in the number of owner-occupiers, investors and renters for apartments.

Calculations for Market Growth

Initial Absorption

	Apartment Price						
	Initial Interest	\$150,000	\$200,000	\$250,000	\$300,000	\$350,000	\$400,000
Owner Occupiers	178	175	135	95	55	15	0
Investors	1,600	1,600	550	200	100	50	10
Renters	606	550	150	50	20	10	5

Add 6% to Owner Occupiers for Renters Intending to Purchase

	Apartment Price						
	Initial Interest	\$150,000	\$200,000	\$250,000	\$300,000	\$350,000	\$400,000
Owner Occupiers	189	186	143	101	58	16	0
Investors	1,600	1,600	550	200	100	50	10
Renters	606	550	150	50	20	10	5

Imitator/Innovator Ratio X3.5

	Apartment Price						
	Initial Interest	\$150,000	\$200,000	\$250,000	\$300,000	\$350,000	\$400,000
Owner Occupiers	660	649	501	352	204	56	0
Investors	5,600	5,600	1,925	700	350	175	35
Renters	2,121	1,925	525	175	70	35	18

Add Household Growth at 9%

	Apartment Price						
	Initial Interest	\$150,000	\$200,000	\$250,000	\$300,000	\$350,000	\$400,000
Owner Occupiers	720	708	546	384	222	61	0
Investors	6,104	6,104	2,098	763	382	191	38
Renters	2,312	2,098	572	191	76	38	19

Sustainable Absorption - Owner Occupiers + Renters

	Apartment Price						
	Initial Interest	\$150,000	\$200,000	\$250,000	\$300,000	\$350,000	\$400,000
Number of Apartments (10 years)	3,032	2,806	1,118	575	299	99	19
Number of Apartments (per year)	303	281	112	57	30	10	2

Sustainable Absorption

The sustainable absorption of apartments is factored up as is shown in the table above, and summarised below. Note that the results are price specific, and will be contingent on a number of preconditions including diffusion of a quality product in the initial stages to ensure the new housing offer has a chance of take-up as shown by the table.

This table estimates sustainable absorption of apartments in the Latrobe market over a ten-year period at a given price. As shown, the lower the price the more apartment product is estimated to be demanded, and visa versa.

Sustainable Number of Apartments (Market Growth)

Price	Apartments Over	Per Year Over 10
	10 Years	Years
Initial Interest	3,032	303
\$150,000	2,806	281
\$200,000	1,118	112
\$250,000	575	57
\$300,000	299	30
\$350,000	99	10
\$400,000	19	2

Note that this provides a broad guide only. This information was developed only for the purpose of informing design options for the Transit Centred Precincts.

Development Issues and Directions

The above analysis provides an indicative aggregate figure of apartment demand at a given price in Latrobe.

Note that is it important that apartments are diffused carefully into the market to avoid over-supply at any given time and to ensure roll-out of a quality product and lifestyle offer. The concept requires that a quality apartment product and a quality urban setting is provided to ensure the benefits of the Transit Centred Precinct are a part of the package. It is important that the first projects are quality **demonstration** projects, having the capacity to change market perceptions of and preferences towards apartments, and demonstrate profitability and low risk to developers / investors.

On this basis it is likely that take up of apartments in initial years will be slow, with factoring up conditions taking hold in the latter phases of the development cycle. For example, the analysis above suggests that if apartments were offered for sale at a price of \$250,000, there may be 15 takers in year one, or 145 takers over ten years. If this product is delivered and diffused slowly to avoid over-supply and ensure quality, then factoring up may result in about 57 apartments being demanded in any one year, or 575 over 10 years. The ‘sustainable absorption’ projections provided above are more likely to play out in the latter part of the decade.

It terms of type of development, the price information provided above suggests that low risk projects are provided in initial years, with the possibility for more adventurous (ie. high rise) projects in subsequent development phases. Similar analysis in other Transit City environments suggests that initial apartment projects in new market settings should involve ‘low’ cost but ‘high’ quality structures in an attractive public domain setting, such as a maximum three storey walk up complex with high quality materials and finishes. The street level environment will need to be high quality and provide excellent connections to shops, open space, services and public transport. The total development package of the apartment unit plus street level amenity and access to services will need to be superior to the ‘offer’ of the detached house and yard in a typical residential environment.

Commercial Development Possibilities

Overview of Office Markets

The markets for office space can be classified as follows.

- Government Services – This includes offices and agencies of local, state and Commonwealth government. This is a significant sector in Latrobe given its regional headquarters role in a Gippsland context.
- Local Business Services – This includes businesses that derive most of their work from the local population base, such as accountants, solicitors, doctors, real estate agents and the like. This sector is determined by the size and composition of the population base, and business base.
- Back Offices of Large Firms – This describes data processing centres and call centres of large organisations. This is a significant sector in Latrobe. The locational requirements of such operations are access to a relatively skilled and stable workforce in a low cost setting (ie. labour and property costs) that provides good ICT infrastructure.
- Advanced Business Services – This describes ‘higher order’ business services that offer highly specialised professional services to a range of clients including international and national public and private organisations. This includes firms in business management, financial services, legal services, research & development, marketing and various other consultancy services.

Commercial Development Forecasts

This section will seek to provide an indication of possible future office development demand in Latrobe. This is a difficult task given that office demand is related to government department policy (for government services), sporadic investments (from back office developments), broader economic trends and growth (for advanced business services), and population size and composition (for local business services). In addition to the demand conditions, supply side considerations are also key determinants of regional office development. The region may be generating demand for office space but the extent to which any region captures this potential depends on the local offer, in terms of labour force skills, property conditions (infrastructure, services, image, cost) and other factors. The upshot is that office demand is difficult to precisely forecast.

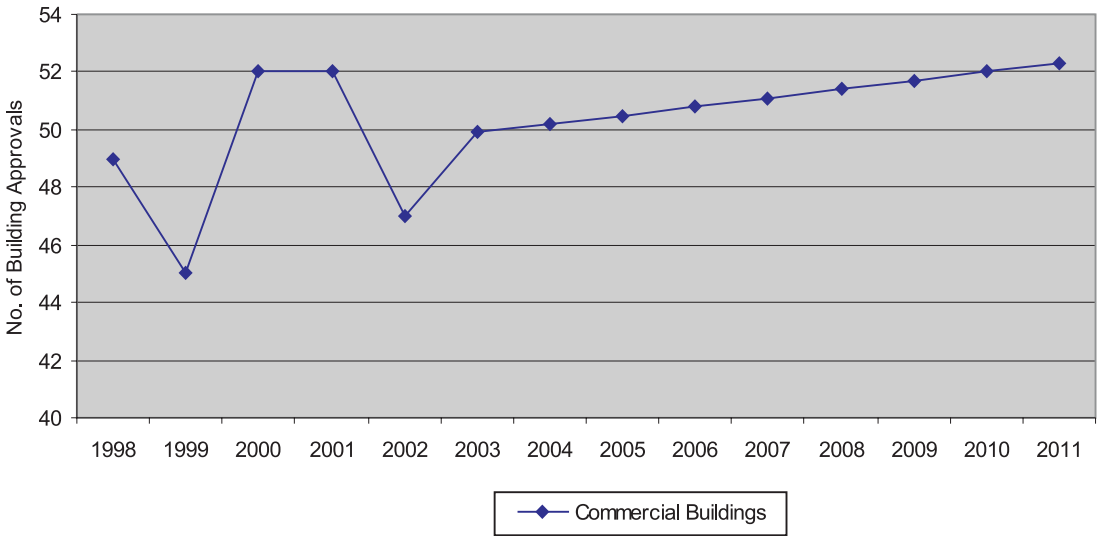
Despite this, SGS Economics & Planning has developed a number of modelling methods to undertake forecasting at a broad level. The methods are based on trend projections and regional modelling methods. They are: Building Approval Trend Projections; Employment Trend Projections; GSP Production Based Trends; and Input Output Modelling. These methodologies forecast the aggregate demand for office development in Latrobe over a ten-year period.

Trend Projections Using Building Approvals Data

This sub-section forecasts the value of building approvals for office developments that might be attracted to Latrobe on a 'trend' or 'do nothing' basis. This assumes that there is no external shock to the economy.

The following figure and table shows the forecasts of the number and value of building approvals for office space developments that might take place in Latrobe.

Forecast of Number of Building Approvals for Commercial Floorspace



Source: Derived from Building Commission Victoria (various years), "Building Victoria"

Forecast of Value of Building Approvals for Commercial Floorspace in Latrobe

Value of Building Approvals (\$'000, Constant 2001-02 Price)	
Year	
Actual	
1998	9,098
1999	4,012
2000	4,300
2001	5,320
2002	8,277
Forecasts	
2003	6,101
2004	6,068
2005	6,034
2006	6,001
2007	5,968
2008	5,934
2009	5,901
2010	5,867
2011	5,834
Total 2003 - 2011	53,709

Source: Derived from Building Commission Victoria (various years), "Building Victoria"

According to the 2002 edition of the Australian Construction Handbook (Rawlinsons), the cost of constructing regional two to three storey office building with standard finishes (excluding air conditioning, lifts and car parking) lies in the range of \$975 to \$1,070 per square metre. Applying the mid point of this range the projected floorspace provision in Latrobe would be as shown in the table below.

Projected Increments in Commercial Floorspace Based on Building Approvals Data (Method 1)

Year	Sqm.
2001	5,203
2002	8,095
2003	5,967
2004	5,934
2005	5,902
2006	5,869
2007	5,836
2008	5,804
2009	5,771
2010	5,738
2011	5,706
Total 2001 - 2006	31,767
Total 2006 - 2011	28,855

Hence, building approvals data suggests that there would be a net increase in office space of 52,500 square meters by 2011.

Trend Projections Based on Journey to Work Data

The methodology applied here uses data for changes in employment levels to estimate the demand for commercial floorspace in Latrobe – see table below.

Total employment levels in various industries for 1996 and 2001 are given in Column 2. Based on employments levels in 1996 and 2001, compound annual growth rate is calculated and is given in Column 3. Column 4 uses the annual growth rate to forecast the employment levels to 2006 and 2011. The 'office quotient', which indicates the proportion of jobs in each industry that are office based, that is, require office space to perform their activities, is then applied⁸. Column 6 uses the office quotient to calculate the total number of people in each industry that will demand commercial floorspace in 2006 and 2011. Column 7 shows the net change in office-based jobs. Using the floorspace ratio of 20 square metres per employee, Column 8 indicates additional commercial floorspace (in square metres) that may be demanded by each industry in 2006 and 2011.

Hence, by 2011 it is expected that Latrobe will demand an additional 42,000 square metres of office floor space.

Manufacturing, Government Administration & Defence, Health & Community Services, Retail Trade and Mining are the major sectors that are expected to demand additional office space.

As with all trend based analyses, the forecasts below do not take into account any changes or external shocks that might affect the economy.

⁸SGS has estimated an office quotient for each industry by analysing total employment by 3 digit category under the Australia New Zealand Standard Industrial Classification (ANZSIC) in terms of the Australia Standard Classification of Occupations (ASCO). This was achieved via special cross-tabulation provided by ABS.

Commercial Floorspace Forecasts for Latrobe (2001 - 2011) (method 2)

Column 1	Column 2		Column 3	Column 4		Column 5	Column 6			Column 7		Column 8		
1 Digit ANZSIC Industrial Classification	Total Employment		Compound Annual Growth Rate	Employment Forecasts		Office Quotient	Total Office Jobs			Net Increase in Office Jobs		Additional Demand for Office Space (Sqm)		
	1996	2001		2006	2011		2001	2006	2011	2001-2006	2006-2011	2006	2011	Total Demand (2001 to 2011)
Agriculture, Forestry and Fishing	682	660	-0.67%	638	617	6.44%	42	41	40	-1	-1	-28.12	-27.19	-55.31
Mining	222	354	9.78%	565	900	42.30%	150	239	381	89	142	1,780.65	2,839.30	4,619.95
Manufacturing	2142	2903	6.27%	3,935	5,334	28.39%	824	1,117	1,514	293	397	5,859.46	7,942.40	13,801.86
Electricity, Gas & Water Supply	1958	2063	1.05%	2,173	2,290	46.48%	959	1,010	1,064	51	54	1,026.15	1,081.07	2,107.22
Construction	1479	1465	-0.19%	1,451	1,437	22.22%	326	322	319	-3	-3	-61.50	-60.92	-122.41
Wholesale Trade	853	896	0.99%	941	988	46.15%	413	434	456	21	22	415.66	436.56	852.22
Retail Trade	3963	4348	1.87%	4,770	5,234	26.20%	1,139	1,250	1,371	111	121	2,213.52	2,428.63	4,642.15
Accommodation, Cafes & Rest.	858	958	2.24%	1,070	1,196	34.66%	332	371	414	39	43	777.19	868.12	1,645.31
Transport & Storage	427	566	5.80%	750	994	33.32%	189	250	331	61	81	1,227.50	1,627.02	2,854.52
Communication Services	408	315	-5.05%	243	187	62.81%	198	153	118	-45	-35	-902.01	-696.20	-1,598.20
Finance & Insurance	1170	751	-8.47%	483	310	93.30%	701	450	289	-251	-161	-5,014.16	-3,221.22	-8,235.37
Property & Business Services	1994	1854	-1.45%	1,724	1,602	61.16%	1,134	1,054	980	-80	-74	-1,595.87	-1,483.56	-3,079.43
Govt. Admin. & Defence	858	1188	6.73%	1,646	2,280	61.11%	726	1,006	1,393	280	387	5,592.75	7,746.42	13,339.17
Education	2316	2343	0.23%	2,370	2,398	22.24%	521	527	533	6	6	121.08	122.49	243.58
Health & Community Services	2280	3015	5.75%	3,987	5,272	21.38%	645	852	1,127	208	275	4,155.91	5,495.73	9,651.64
Cultural & Recreational Services	389	404	0.81%	421	438	32.50%	131	137	142	5	6	107.68	112.09	219.78
Personal & Other Services	796	916	2.84%	1,053	1,212	22.26%	204	235	270	31	35	612.31	704.25	1,316.55
Total	22794	24999	1.86%	27,417	30,070		8,634	9,448	10,744	814	1,296	16,288.22	25,915.00	42,203.22

Trend Projections Using Gross State Product Trends and Journey to Work Data

The employment level in each industry can be estimated as a ratio of total industry production. Therefore, if the growth in each industry sector is estimated then it is possible to forecast the associated level of employment. This method is applied below and is shown in the following tables.

As can be seen, the major sources for office-based employment in the Latrobe are Property & Business Services, Retail Trade and Wholesale Trade, Finance & Insurance, Government Administration and Manufacturing. This is largely due to the fact that these industries generate a substantial amount of office-based employment per production dollar, and that these industries are expected to grow over the next decade. In total, office based employment may increase by 2,429 employees by the year 2011, which in turn shows a demand for up to 48,500 sqm of commercial floorspace based on this method.

Industry	Current Production	GSP Growth Rate	Forecast Production	Employees per \$1million	Employee Growth	Office Quotient	Office Employees
Agriculture; hunting and trapping	\$54 m	+8.75%	\$59 m	9	43	5.84%	3
Forestry and fishing	\$26 m	+8.75%	\$28 m	6	14	18.52%	3
Mining	\$214 m	-44.19%	\$119 m	2	-156	42.30%	-66
Meat and dairy products	\$79 m	+18.64%	\$93 m	3	43	24.83%	11
Other food products	\$26 m	+18.64%	\$31 m	4	18	24.83%	4
Beverages, tobacco products	\$3 m	+18.64%	\$4 m	3	2	24.83%	0
Textiles	\$6 m	+18.64%	\$7 m	5	5	23.49%	1
Clothing and footwear	\$2 m	+18.64%	\$3 m	7	3	23.49%	1
Wood and wood products	\$44 m	+18.64%	\$52 m	7	61	22.58%	14
Paper, printing and publishing	\$195 m	+18.64%	\$232 m	6	204	37.63%	77
Petroleum and coal products	\$63 m	+18.64%	\$75 m	1	9	35.74%	3
Chemicals	\$22 m	+18.64%	\$26 m	3	12	35.74%	4
Rubber and plastic products	\$4 m	+18.64%	\$5 m	5	4	35.74%	1
Non-metallic mineral products	\$22 m	+18.64%	\$26 m	5	20	27.90%	5
Basic metals and products	\$67 m	+18.64%	\$80 m	3	37	25.96%	10
Fabricated metal products	\$37 m	+18.64%	\$44 m	4	30	29.33%	9
Transport equipment	\$18 m	+18.64%	\$22 m	5	16	29.33%	5
Other machinery and equipment	\$52 m	+18.64%	\$62 m	6	56	24.53%	14
Miscellaneous manufacturing	\$11 m	+18.64%	\$13 m	10	22	26.73%	6
Electricity, gas and water	\$863 m	-11.99%	\$759 m	2	-247	46.48%	-115
Construction	\$181 m	+19.53%	\$217 m	8	286	22.22%	64
Wholesale trade	\$131 m	+21.01%	\$159 m	7	188	46.15%	87
Retail trade	\$178 m	+21.01%	\$215 m	21	780	26.20%	204
Repairs	\$73 m	+21.01%	\$88 m	9	133	26.20%	35
Accommodation, cafes and restaurants	\$74 m	+21.01%	\$90 m	13	201	34.66%	70
Transport and storage	\$109 m	+21.27%	\$132 m	5	120	33.32%	40
Communication services	\$57 m	+21.27%	\$69 m	6	67	62.81%	42
Finance and insurance	\$124 m	+19.89%	\$149 m	6	149	93.30%	139
Ownership of dwellings	\$222 m	+15.44%	\$256 m	0	0	0.00%	0
Property and business services	\$242 m	+19.89%	\$290 m	8	369	61.15%	225
Government administration	\$140 m	+11.33%	\$156 m	8	135	61.11%	82
Education	\$115 m	+11.33%	\$129 m	20	266	22.24%	59
Health and community services	\$162 m	+11.33%	\$181 m	19	342	21.38%	73
Cultural and recreational services	\$37 m	+27.34%	\$47 m	11	111	32.50%	36
Personal and other services	\$56 m	+27.34%	\$72 m	16	250	22.26%	56
Total Office Employees to 2006							1,202
Total Commercial Floorspace to 2006							24,032 Sqm

Commercial Floorspace Forecast for Latrobe to 2006 (Method 3 Part 1)

Industry	Current Production	GSP Growth Rate	Forecast Production	Employees per \$1million	Employee Growth	Office Quotient	Office Employees
Agriculture; hunting and trapping	\$54 m	+25.17%	\$67 m	9	125	5.84%	7
Forestry and fishing	\$26 m	+25.17%	\$32 m	6	41	18.52%	8
Mining	\$214 m	-71.29%	\$61 m	2	-252	42.30%	-107
Meat and dairy products	\$79 m	+31.59%	\$103 m	3	73	24.83%	18
Other food products	\$26 m	+31.59%	\$35 m	4	31	24.83%	8
Beverages, tobacco products	\$3 m	+31.59%	\$4 m	3	3	24.83%	1
Textiles	\$6 m	+31.59%	\$8 m	5	9	23.49%	2
Clothing and footwear	\$2 m	+31.59%	\$3 m	7	4	23.49%	1
Wood and wood products	\$44 m	+31.59%	\$58 m	7	104	22.58%	23
Paper, printing and publishing	\$195 m	+31.59%	\$257 m	6	345	37.63%	130
Petroleum and coal products	\$63 m	+31.59%	\$83 m	1	15	35.74%	5
Chemicals	\$22 m	+31.59%	\$29 m	3	21	35.74%	7
Rubber and plastic products	\$4 m	+31.59%	\$6 m	5	6	35.74%	2
Non-metallic mineral products	\$22 m	+31.59%	\$29 m	5	33	27.90%	9
Basic metals and products	\$67 m	+31.59%	\$88 m	3	62	25.96%	16
Fabricated metal products	\$37 m	+31.59%	\$48 m	4	50	29.33%	15
Transport equipment	\$18 m	+31.59%	\$24 m	5	28	29.33%	8
Other machinery and equipment	\$52 m	+31.59%	\$69 m	6	95	24.53%	23
Miscellaneous manufacturing	\$11 m	+31.59%	\$15 m	10	37	26.73%	10
Electricity, gas and water	\$863 m	-17.04%	\$716 m	2	-352	46.48%	-163
Construction	\$181 m	+36.79%	\$248 m	8	539	22.22%	120
Wholesale trade	\$131 m	+38.34%	\$181 m	7	343	46.15%	158
Retail trade	\$178 m	+38.34%	\$246 m	21	1,424	26.20%	373
Repairs	\$73 m	+38.34%	\$101 m	9	243	26.20%	64
Accommodation, cafes and restaurants	\$74 m	+38.34%	\$103 m	13	367	34.66%	127
Transport and storage	\$109 m	+39.87%	\$153 m	5	226	33.32%	75
Communication services	\$57 m	+39.87%	\$80 m	6	125	62.81%	79
Finance and insurance	\$124 m	+44.02%	\$179 m	6	331	93.30%	309
Ownership of dwellings	\$222 m	+31.63%	\$292 m	302	21,137	0.00%	0
Property and business services	\$242 m	+44.02%	\$349 m	8	816	61.15%	499
Government administration	\$140 m	+22.61%	\$172 m	8	269	61.11%	164
Education	\$115 m	+22.61%	\$142 m	20	530	22.24%	118
Health and community services	\$162 m	+22.61%	\$199 m	19	682	21.38%	146
Cultural and recreational services	\$37 m	+51.72%	\$56 m	11	209	32.50%	68
Personal and other services	\$56 m	+51.72%	\$86 m	16	474	22.26%	105
Total Office Employees to 2011							2,429
Total Commercial Floorspace to 2011							48,590 Sqm

Export Based Employment and Commercial Floorspace Growth to 2006 (Method 4 Part 1)

Latrobe Commercial Floorspace Forecast - Input Output Model

A common form of economic impact analysis is via the use of a regional input output model. Such a model was developed for Latrobe by SGS Economics & Planning using statistical adjustment of the national input output coefficients based on location quotients. As part of the model, the total value of inter-regional exports for each industry was generated. It was assumed that these exports would grow in proportion to Victorian GSP levels. By using regional employment multipliers it was possible to predict the amount of employment generated in Latrobe as industries increase their production to meet export demand. This estimate is expected to be quite conservative, as it does not take into account surplus investment by corporations.

The tables below highlight that there would be a negative growth in total commercial floorspace required due to the significantly large negative growth in the demand for export sectors, especially Mining and Electricity, Gas & Water Supply. Hence, this modelling method suggests that the total demand for commercial floorspace will decline by 1,961 sqm by year 2011.

Industry	Exports	GSP Growth	Growth in Exports	Employment Multiplier	Employment Generated	Office Quotient	Office Employment
Agriculture; hunting and trapping	12.3	+8.75%	1.1	15	17	5.84%	1
Forestry and fishing	22.2	+8.75%	1.9	9	18	18.52%	3
Mining	192.8	-44.19%	-85.2	6	-496	42.30%	-210
Meat and dairy products	33.5	+18.64%	6.2	13	81	24.83%	20
Other food products	9.1	+18.64%	1.7	10	17	24.83%	4
Beverages, tobacco products	1.0	+18.64%	0.2	9	2	24.83%	0
Textiles	3.4	+18.64%	0.6	11	7	23.49%	2
Clothing and footwear	0.7	+18.64%	0.1	13	2	23.49%	0
Wood and wood products	28.6	+18.64%	5.3	11	61	22.58%	14
Paper, printing and publishing	118.5	+18.64%	22.1	9	209	37.63%	79
Petroleum and coal products	34.9	+18.64%	6.5	1	7	35.74%	2
Chemicals	8.7	+18.64%	1.6	6	9	35.74%	3
Rubber and plastic products	1.9	+18.64%	0.4	7	3	35.74%	1
Non-metallic mineral products	1.2	+18.64%	0.2	10	2	27.90%	1
Basic metals and products	34.1	+18.64%	6.4	7	45	25.96%	12
Fabricated metal products	3.5	+18.64%	0.6	12	8	29.33%	2
Transport equipment	10.7	+18.64%	2.0	7	14	29.33%	4
Other machinery and equipment	14.1	+18.64%	2.6	9	22	24.53%	6
Miscellaneous manufacturing	2.6	+18.64%	0.5	15	7	26.73%	2
Electricity, gas and water	805.9	-11.99%	-96.6	6	-624	46.48%	-290
Construction	0.3	+19.53%	0.1	13	1	22.22%	0
Wholesale trade	21.4	+21.01%	4.5	15	66	46.15%	30
Retail trade	7.9	+21.01%	1.7	27	46	26.20%	12
Repairs	3.4	+21.01%	0.7	13	9	26.20%	2
Accommodation, cafes and restaurants	6.3	+21.01%	1.3	18	24	34.66%	8
Transport and storage	18.9	+21.27%	4.0	11	44	33.32%	15
Communication services	8.1	+21.27%	1.7	11	19	62.81%	12
Finance and insurance	10.3	+19.89%	2.0	13	26	93.30%	24
Ownership of dwellings	0.0	+15.44%	0.0	2	0	0.00%	0
Property and business services	14.0	+19.89%	2.8	13	37	61.15%	23
Government administration	35.0	+11.33%	4.0	16	65	61.11%	40
Education	26.7	+11.33%	3.0	26	78	22.24%	17
Health and community services	8.6	+11.33%	1.0	23	23	21.38%	5
Cultural and recreational services	3.4	+27.34%	0.9	15	14	32.50%	4
Personal and other services	0.4	+27.34%	0.1	22	2	22.26%	0
Total Office Employees							-150
Total Office Floorspace							-3,009

Export Based Employment and Commercial Floorspace Growth to 2011 (Method 4 Part 2)

Industry	Exports	GSP Growth	Growth in Exports	Employment Multiplier	Employment Generated	Office Quotient	Office Employment
Agriculture; hunting and trapping	12.3	+25.17%	3.1	15	48	5.84%	3
Forestry and fishing	22.2	+25.17%	5.6	9	52	18.52%	10
Mining	192.8	-71.29%	-137.4	6	-800	42.30%	-338
Meat and dairy products	33.5	+31.59%	10.6	13	136	24.83%	34
Other food products	9.1	+31.59%	2.9	10	29	24.83%	7
Beverages, tobacco products	1.0	+31.59%	0.3	9	3	24.83%	1
Textiles	3.4	+31.59%	1.1	11	12	23.49%	3
Clothing and footwear	0.7	+31.59%	0.2	13	3	23.49%	1
Wood and wood products	28.6	+31.59%	9.0	11	103	22.58%	23
Paper, printing and publishing	118.5	+31.59%	37.4	9	354	37.63%	133
Petroleum and coal products	34.9	+31.59%	11.0	1	11	35.74%	4
Chemicals	8.7	+31.59%	2.7	6	16	35.74%	6
Rubber and plastic products	1.9	+31.59%	0.6	7	4	35.74%	2
Non-metallic mineral products	1.2	+31.59%	0.4	10	4	27.90%	1
Basic metals and products	34.1	+31.59%	10.8	7	76	25.96%	20
Fabricated metal products	3.5	+31.59%	1.1	12	13	29.33%	4
Transport equipment	10.7	+31.59%	3.4	7	23	29.33%	7
Other machinery and equipment	14.1	+31.59%	4.5	9	38	24.53%	9
Miscellaneous manufacturing	2.6	+31.59%	0.8	15	12	26.73%	3
Electricity, gas and water	805.9	-17.04%	-137.4	6	-887	46.48%	-412
Construction	0.3	+36.79%	0.1	13	2	22.22%	0
Wholesale trade	21.4	+38.34%	8.2	15	120	46.15%	55
Retail trade	7.9	+38.34%	3.0	27	83	26.20%	22
Repairs	3.4	+38.34%	1.3	13	16	26.20%	4
Accommodation, cafes and restaurants	6.3	+38.34%	2.4	18	44	34.66%	15
Transport and storage	18.9	+39.87%	7.5	11	83	33.32%	28
Communication services	8.1	+39.87%	3.2	11	35	62.81%	22
Finance and insurance	10.3	+44.02%	4.5	13	57	93.30%	53
Ownership of dwellings	0.0	+31.63%	0.0	2	0	0.00%	0
Property and business services	14.0	+44.02%	6.2	13	83	61.15%	50
Government administration	35.0	+22.61%	7.9	16	130	61.11%	80
Education	26.7	+22.61%	6.0	26	155	22.24%	34
Health and community services	8.6	+22.61%	1.9	23	46	21.38%	10
Cultural and recreational services	3.4	+51.72%	1.8	15	26	32.50%	8
Personal and other services	0.4	+51.72%	0.2	22	4	22.26%	1
Total Office Employees							-98
Total Office Floorspace							-1,961

Summary of Commercial Forecasts

An overview of the possible future change in commercial floorspace in Latrobe, made using the four methods detailed above, is provided in the table below. It should be noted that all of these estimates are trend based. That is, they do not explicitly allow for the structural shifts that can be caused due to technological change or improved physical infrastructure. However, to the extent that these shifting drivers are embedded in production processes, the projections based on GSP trends may be the most reliable.

Total Office Floorspace Forecasts for Latrobe (sqm)

Forecast Method	2001-06	2006-11	Total
Building Approvals	31,767	28,855	60,622
Employment Projections	16,288	25,915	42,203
GSP Production Based	24,032	24,558	48,590
Input Output Modelling / Export Based	-3,009	1,049	-1,961

It is important to note that not all of the floorspace indicated in the projections will be delivered in the form of conventional, 'activity centre' office buildings. Much of the office space in question will be in ancillary buildings in other land use settings. Research by SGS Economics & Planning suggests that around 50% of the estimated gross requirement indicated above will be supplied in conventional office buildings in activity centres, and the other half across a variety of employment settings, including attaching to power plants, factories, warehouses and other non activity centre locations. Hence the potential for office development in the Transit Centred Precincts is provided by the following ranges.

Total Office Floorspace Development Potential for the Transit Centred Precincts in Latrobe (sqm)

Forecast Method	2001-06	2006-11	Total
Building Approvals	15,884	14,428	30,311
Employment Projections	8,144	12,958	21,102
GSP Production Based	12,016	12,279	24,295
Input Output Modelling / Export Based	-1,505	525	-981

The modelling methods provide a range of possibilities for Latrobe and its Transit Centred Precincts. At a broad level the conclusions are:

- Up to 60,000 sqm of new office space may be captured in Latrobe over 10 years; and
- Up to 30,000 sqm of new office space may be captured in Transit Centred Precincts in Latrobe.

Note that this provides a broad guide only. This information was developed only for the purpose of informing design options for the Transit Centred Precincts.

Public Sector Facility Planning

Government departments and agencies have a key role to play in facilitating Transit City / Centre outcomes by locating appropriate facility investments in the designated precincts.

This section presents the findings of a review of facility planning intentions of government agencies in the Gippsland region.

Agency Survey

The following table displays those agencies that were surveyed regarding their current location (relevant to this study) and their facility planning intentions.

Government Agency	Response
Latrobe Council	Relocating to new office complex in Morwell.
Dept. Justice	New Justice Precinct in Morwell.
Australian Broadcasting Corp.	Have facilities in Sale and Morwell. New building being constructed in Ballarat. No apparent other plans.
Education, Science and Training	Have an office in Morwell. No apparent plans.
ASIC	New facility in Traralgon.
Industry Tourism and Resources	Have an office in Traralgon. No apparent plans.
Migrant Resource Centre	Have an office in Morwell. Uncertainty over funding. No apparent plans for expansion.
Training and Tertiary Education	Have an office in Moe (regional office) and Morwell (district office). Melbourne CBD office relocating.
Vic Roads	Renovating Traralgon regional office.
Regional Development	Have an office in Traralgon. No apparent plans.
Victoria Legal Aid	Have an office in Traralgon. No apparent plans.
Victoria Police	New stations being built in Moe and Morwell. Both sites have been finalised in consultation with Latrobe Council. No plans to relocate Traralgon facility.
Country Fire Authority	No apparent plans – Sale facility relocated two years ago.

Educational Institution	Response
East Gippsland Institute of TAFE	No plans for campus / facility expansion. Partnership with RMIT to deliver programs at Lakes Entrance facility.
Central Gippsland Institute of TAFE	Refurbishment of Yallourn Campus near completion. Warragul Campus at the design stage of \$1m extensions. Refurbishment of existing space - completion date Jan 2004. West Gippsland identified as growth area. CGIT does not believe growth in either Moe, Morwell or Traralgon is guaranteed. Complete review of masterplan to be completed in 2003. Some opportunity for further discussion.
LaTrobe University	No apparent plans.
Melbourne University	Renovations at Dookie and Glenormiston campuses – no apparent plans for expansion.
Monash University	New precinct development at Churchill campus. \$14m / 10,000 sqm facilities. All within Churchill.
RMIT	Completed development of Hamilton Learning Centre. Partnership with EGIT - new facility at Lakes Entrance.

Health / Medical Facilities	Response
Bairnsdale Regional Health Service	Recently completed masterplan. Aiming to build new accommodation facilities (\$7.2m) and living facilities (\$350k). Subject to Government approval. Bairnsdale the preferred location.
Central Gippsland Health Service	Space is urgently required for a new rural training centre – offices and accommodation. Preferred location is on existing campus. Negotiations possible, however opportunities limited.
LaTrobe Regional Hospital	No apparent plans for expansion beyond existing facilities.

Opportunities for Intervention

There may be opportunities to influence organisations in the education and health sectors to locate / invest in the Transit Centred Precincts in the future. Various planning strategies and funding bids can be expected in the near future and hence these organisations should be encouraged to locate any new facility in the Precincts subject to this study.

Possible strategies include:

- Understanding facility investment planning systems of agencies and establishing facility investment protocols with agencies consistent with the objectives of Transit Cities / Centres program.
- Marketing Latrobe's Transit Centres as cost effective locations for public sector expansion and relocation.
- Facilitating site assembly and development within the Precincts.
- Providing infrastructure required by agencies.

Retail Development Possibilities

This analysis focuses on the potential future demand for retail (food and non-food) and hospitality floorspace. Hospitality space refers to uses like cafes, restaurants, pubs and the like.

The purpose of the analysis is to identify broad demand changes between 2001 and 2021 in retail / hospitality floorspace to help inform design options for the Transit Centred Precincts, in the context of the current brief. Note that this section does not provide a detailed retail analysis.

Existing Conditions

It is possible to gain an overview of the current retail levels in Latrobe by analysing employment data within locations. Past studies have shown that there is a strong relationship between retail turnover and retail employment in a region. On this basis, the table below shows the reported retail employment in the region and the implied annual turnover.

This shows that Traralgon has about 44% of municipal retail and hospitality activity, followed by Morwell 34% and Moe 22%.

Retail and Hospitality Employment and Turnover in Latrobe

Employment				
	Food	Non Food	Hospitality	Total
Latrobe – Moe	374	357	207	938
Latrobe – Morwell	522	560	331	1,413
Latrobe – Traralgon	616	817	419	1,852
Latrobe - Bal	3	6	0	9
Total	1,515	1,740	957	4,212

Turnover				
	Food	Non Food	Hospitality	Total
Latrobe – Moe	\$52,080,613	\$53,628,962	\$21,302,768	\$127,012,343
Latrobe – Morwell	\$72,690,053	\$84,123,861	\$34,063,846	\$190,877,760
Latrobe – Traralgon	\$85,779,833	\$122,730,705	\$43,120,095	\$251,630,633
Latrobe - Bal	\$417,759	\$901,327	\$0	\$1,319,086
Total	\$210,968,257	\$261,384,854	\$98,486,708	\$570,839,819

Source: Derived from ABS Journey to Work 2001

Demand Trends and Projections

Total estimated resident population in Latrobe's SLAs are shown over time in the table below. Population projections for every five-year interval to 2021 are displayed. This shows that the population in the area is expected to grow marginally, from about 70,673 in 2001 to approximately 73,366 in 2021.

Note that this information is based on Department of Infrastructure population projections (Victoria in Future, 2000). Actual Census figures in 2001 show a lower population in Latrobe (ie. 67,564) than that shown in the projected 2001 figures. Although this suggests that the projection is marginally out, this is not a significant issue for the current analysis. This is because the current analysis estimates, in broad terms, demand **change** from 2001 to 2021. The key data variable is change between these periods and for this purpose Department of Infrastructure projections are assumed to be reasonably reflective of what is likely to happen, irrespective of the figure of the base year (2001).

Retail expenditure was adapted for Latrobe residents using the 1998-1999 ABS Household Expenditure Survey (publication 6535.0). This publication shows how different income demographics affect retail expenditure. A calculation for the average Latrobe resident is shown below. For use for analysing retail catchments, this calculation was preformed on each SLA within the study area.

Latrobe Population Projections

Population	Projected 2001	Projected 2006	Projected 2011	Projected 2016	Projected 2021
Latrobe - Moe	18,846	18,862	18,910	19,155	19,465
Latrobe - Morwell	23,512	23,459	23,437	23,663	23,933
Latrobe - Traralgon	25,604	25,555	25,754	26,352	27,028
Latrobe - Bal	2,711	2,703	2,747	2,840	2,940
Total	70,673	70,579	70,848	72,010	73,366

Source: ABS Household Expenditure Survey 1998-1999 6535.0, ABS Census 2001.

Latrobe HH Retail Expenditure Variation by Income (1998\$)

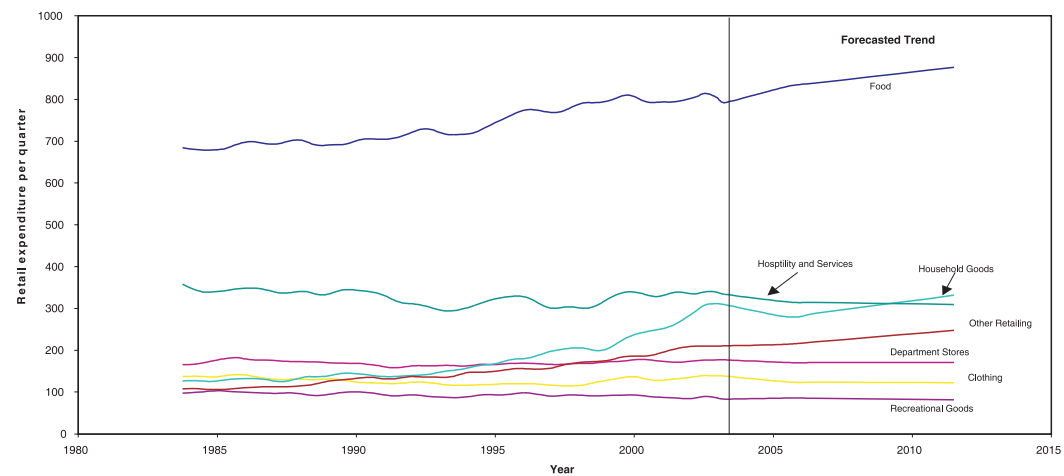
HES Income Quintile	Lower	Second	Third	Forth	Upper	Totals
Percentage of La Trobe Households	23.24%	25.99%	17.46%	16.50%	16.80%	100.00%
Variation from the Average	-1.76%	0.99%	-7.54%	-8.50%	-8.20%	
Retail Expenditure per HH per week - Aust Average	\$142	\$210	\$268	\$350	\$490	\$292
Retail Expenditure per HH per week - Study Area	\$165	\$273	\$234	\$289	\$412	\$274
Percentage Variation from Australian Average						-6.00%

Source: ABS Household Expenditure Survey 1998-1999 6535.0, ABS Census 2001.

To estimate the changing patterns of retail expenditure, regression analysis was performed on historical data as published in the ABS Retail Trade publication (8501.0). This enabled an estimate of the real growth in national retail expenditure per capita over time. Results of the regression analysis are shown below.

National Retail Spending per Capita (constant 2003 \$)

As shown opposite, the proportion of money spent on food has been increasing over time, and is expected to continue to do so in the near future. In comparison, the amount spent at department stores and on clothing has stagnated and is currently undergoing slight decline. This does not necessarily mean that people are buying fewer clothes, but instead may be an indication of how the price of clothes has decreased in recent times due to wider economic forces. The table below summarises the effect this pattern will have on retail expenditure per capita between years 2001 and 2021.



Source: Derived from ABS Retail Trade Publication (8501.0).

Projected Retail Expenditure Per Capita (2001\$)

It must be stressed that the results opposite represent the change to retail expenditure assuming it will grow in accordance to current trends. In reality, it is unlikely that this growth will be sustained for an extended length of time (there is only so much people are willing and able to spend on retail items).

Retail Category	2001	2006	2011	2016	2021
Supermarkets	\$2,407	\$2,541	\$2,657	\$2,773	\$2,889
Department Stores	\$698	\$694	\$695	\$696	\$697
Other Food	\$881	\$930	\$973	\$1,015	\$1,057
Clothing and Soft Goods	\$530	\$499	\$493	\$487	\$482
Household Goods	\$1,079	\$1,146	\$1,356	\$1,532	\$1,707
Other Retailing	\$1,179	\$1,223	\$1,341	\$1,440	\$1,539
Hospitality and Services	\$1,375	\$1,279	\$1,275	\$1,234	\$1,214
Total	\$8,149	\$8,312	\$8,790	\$9,177	\$9,585

Retail Floorspace Assessment

An indicative retail floorspace analysis model was constructed for the region surrounding Latrobe (ie. Latrobe, Baw Baw, South Gippsland and Wellington). The model estimates the retail catchment of each SLA in the region (in 2001) and forecasts expected capture to 2021 based on population change in Scenario 1 and change in both population and retail expenditure patterns over time in Scenario 2. The models assume that each SLA can maintain market share throughout the study period.

Scenario 1 – No Growth in Per Capita Retailing Spending

The results of the model for Scenario 1 are shown in the table below. This assumes that current expenditure growth on retail items remains constant (in real terms) and indicates that the region will be able to support an additional 8,000 sqm (approx.) of retail floorspace to 2021. This is based on population growth.

Latrobe - Scenario 1

	Required Floorspace			
	Food	Non Food	Hospitality	Total
2001	52,742	104,554	49,243	206,539
2006	-116	380	-53	211
2011	75	804	114	994
2016	840	2,290	794	3,924
2021	1,784	4,212	1,672	7,668

Scenario 2 – With Growth in Per Capita Retail Spending

As discussed previously, it is possible that the amount of retail expenditure per capita will continue to grow over time. Scenario 2 forecasts the retail floorspace required if expenditure growth follows observed past trends. This forecast could be considered optimistic, as the current growth levels may not be sustained over a twenty-year period.

Scenario 2 suggests that Latrobe will be able to support an additional 42,000 sqm (approx.) of floorspace to the year 2021. This estimate should be interpreted as being an indicative upper limit for Latrobe over this period.

Latrobe - Scenario 2

	Required Floorspace			
	Food	Non Food	Hospitality	Total
2001	52,742	104,554	49,243	206,539
2006	2,811	2,655	-3,466	1,999
2011	5,556	12,866	-3,457	14,965
2016	8,980	22,790	-4,315	27,456
2021	12,693	33,499	-4,284	41,907

The Need for New Space

The two scenarios provide a low (8,000 sqm) and high (42,000 sqm) estimate of future retail and hospitality demand. The question arises whether this level of demand will:

- Involve better utilisation of existing used space, resulting in higher dollars per square metre achieved by existing retailers;
- Necessitate expansion of retail area, in terms of construction of new buildings; or whether this will
- Involve take-up of existing vacant space or redevelopment over existing obsolete space.

It is beyond the scope of the current indicative demand assessment to provide a definitive answer to these issues, but it is likely that new demand over time will have a combination of impacts in terms of: better utilisation of existing space, take-up of existing vacant space and development of totally new space. New space is likely to be developed for newer forms of retailing, such as bulky goods / highway retail and other large and modern floorplate users.

Nevertheless, for the purpose of the current Transit Centred Precinct assignment, it is felt that design solutions should seek to accommodate the lower end of the projections, that is, **8,000 sqm**. This provides a conservative estimate which is perhaps more likely because Latrobe's centres have significant vacancies and relatively low retail turnover densities reported.

Market Shares Across the Three Transit Centred Precincts

For the purpose of informing broad design principles, the following apportionment is provided as a general guide (this is based on expected population change between 2006 and 2021).

- Moe 22% = 1,760 sqm expansion.
- Morwell 17% = 1,360 sqm expansion.
- Traralgon 53% = 4,240 sqm expansion.
- Other centres 8% = 720 sqm expansion.

Note that this provides a broad guide only. This information was developed only for the purpose of informing design options for the Transit Centred Precincts.

Other Development Possibilities

Other Transit Centre Development Options

The Transit Centred Precincts can also seek to attract other forms of development. These include:

- Tourism oriented activities (see following sub-section); and
- Community facilities like health facilities, higher education, sports complexes and health clubs.

The capacity of the Precincts to attract these land uses will in large part depend on population and employment growth in and around the Precincts and growth in tourism. Hence the main opportunities discussed earlier – housing, office and retail – will driver other opportunities.

Tourism Development Potential

The data presented earlier in the report suggests that Latrobe's tourism economy has been growing relatively strongly, if measured by employment change in Accommodation, Cafes and Restaurants (+2.25% pa). But the data also shows that this sector is coming off a low base (with Latrobe having an under-representation of jobs in this sector compared to the national average (location quotient of 0.77)).

Tourism has been identified as a growth sector for the region. In this context Latrobe has develop various tourism development initiatives which are documented in the Tourism Plan.

Tourism Plan

Latrobe Tourism Plan 2002-2005 (Latrobe City) seeks to document the tourism strengths and products of Latrobe with a view to initiate marketing and promotion strategies with other organisations and tourism bodies. The document audits the tourism offer of the City, reviews organisation and funding systems, summarises broader tourism trends and establishes a mission statement as follows: *"for Latrobe City to provide leadership in tourism marketing through development partnerships with other organisations."*

Latrobe's competitive advantages are considered to be its location (proximity to Melbourne and access to a wide range of activities and sites) and its branding (it is a well known and identifiable location).

Product strengths are considered to be industrial tourism, sports tourism, adventure tourism, conference tourism and leisure tourism. Particular attractions in the general area include:

- The Alpine region and snowfields;
- Historic towns such as Walhala;
- Gourmet foods;
- Farms, lakes and forests.

The tourism markets include day visitors, tourists passing through the region and executive and other labour visiting the region for work.

Implications for the Transit Centred Precincts

The main opportunities for the Transit Centred Precincts are in accommodating the following forms of tourism oriented development:

- Accommodation (hotels, motels, backpackers / hostels);
- Pubs, clubs, cafes and restaurants;
- Tourist oriented retail premises such as souvenir shops and various hire shops;
- Galleries, museums and other built attractions;
- Business tourism facilities such as conference centres;
- Event & festival facilities; and
- Supporting infrastructure and services such as transport services, bike trails, visitor information centres and the like.

All three Transit Centred Precincts can seek to play some or all of these roles.

However, **Moe** is strategically positioned to play a core tourism role by virtue of its location as the 'gateway' to Latrobe (from Melbourne) and the gateway to the Mountain Rivers district, Thompson Valley, Mount St Gwinear snowfields, Baw Baw Alpine National Park and gold mining town of Walhalla.

Morwell has good links to Churchill and Monash University, and can therefore seek to position itself as a student accommodation and entertainment centre.

Traralgon is likely to have strengths in attracting executive labour / business tourist due to its growing private sector business base.

1.4 Options Development Input

This section summarises the analysis and provides recommendations regarding land use development directions for the three precincts looking forward. Refer to the main body of the report for details on the various land uses.

Overview of Regional Positives

Latrobe has undergone significant structural adjustment in recent decades, but indicators show that it has 'turned the corner'. Latrobe is now in a phase of growth and renewal. This provides a number of strategic opportunities for development. Key positives are summarised below.

Jobs: Latrobe is already the employment hub of the region, and its stock of jobs is growing strongly.

- Latrobe's jobs increased by over 2,200 in the five years to 2001.
- Should current trends continue, Latrobe could have about 5,000 more jobs in about 10 years time.
- Unemployment has fallen significantly in recent years (by over 5 percentage points in the four years to 2002).

Population: Latrobe's population was fairly stable in the five years to 2001 but is expected to grow over time.

- Latrobe's population was just over 67,000 in 2001 – which is high by regional Victorian standards.
- Latrobe's population is expected to grow over time, and is expected to be over 73,000 by 2021.

Households: Latrobe's average household size is falling, which is a function of a maturing and diversifying population. This means the number of households formed will be higher than population growth, and will generate demand for a range of housing forms and goods and services to suit the growing pool of smaller households.

- Household numbers are expected to grow by about 5,400 to 2021 (off a 2001 base).
- Household income data suggests that Latrobe's households have become richer in the five years to 2001.

Property Prices: Housing prices have grown strongly since 2001 in Latrobe. Prices are responding to a growing economy, population and household base.

- There have been a significant number of residential house sales and an upward trend in prices from 2001. In Moe and Morwell house prices have increased from about \$500 / sqm in 2000/01 to about \$800 / sqm in early 2003. In Traralgon house prices have increased to about \$1,000 / sqm.
- There have been a relatively low number of apartment sales with high variability in prices achieved, but a general upward movement can be seen from 2001 in all towns. Prices in the order of \$1,000 to \$2,000 / sqm may be achievable at the current time, with higher prices likely to be available for quality developments in some areas.

Public Investments: Latrobe is expected to benefit from planned development of the fast rail system, fibre optic / broadband rollout, freeway improvements and ongoing improvements to higher education and health services. New government facilities are also being developed.

Major Projects in Exporter Sectors: Latrobe is a utilities, manufacturing and mining exporter region, and has a number of major projects in the 'pipeline'. Millions may be injected into the region in the form of a few major projects over the next few years. This could have significant benefits in terms of job generation, population growth and 'knock on' benefits to regional businesses.

Fast Rail Benefits: A potential benefit of linking regional centres to Melbourne via fast rail services is redistributing some population growth from Melbourne to the regional centres (where people can more easily access work in Melbourne from their regional base). This would have 'knock on' benefits for regional centres in terms of generating opportunities for retail and other business development. The reverse may also be true, where people live in Melbourne but more easily commute to a regional location for work and other activities. On this basis, the fast rail project can have benefits in terms of expanding Melbourne's 'economic and social footprint' to more fully include the regional centres.

Development Potential

Smaller Housing Opportunities: The market for smaller housing in Latrobe is growing. The key markets for townhouse and apartment style living in the Transit Centred Precincts are older persons such as retirees and 'empty nesters', students that live in single or group households; 'executive labour', and other smaller household types (such as single women and lone parent families).

- Demand for townhouses is likely to be strong in the three towns. At least 500 townhouses may be needed in Latrobe over a 20-year period.
- The demand analysis for apartments suggests that at a sale price of \$250,000, there is likely to be demand for 15 apartments per year in the initial development cycle rising to about 57 per year when the apartment market is established. At a lower price, the demand for apartments is higher.

Office Development Opportunities: The market for office space in Latrobe is likely to grow. The key markets for offices in Latrobe are Government Services, Local Business Services, Back Offices of Large Firms and possibly Advanced Business Services.

- The demand analysis for offices suggests that Latrobe may generate demand for between 0 sqm and 60,000 sqm over ten years, depending on the trajectory of the regional economy.
- Half of the generated level of demand is likely to go in town centre settings, and hence this means that the Transit Centres have potential to absorb up to 30,000 sqm of office space over ten years.

Retail Development Opportunities: The market for retail space in Latrobe is growing. Retail development will continue to respond to the needs of the local population – which is growing and diversifying – and tourism, which is likely to grow over time.

- Conservative retail demand projections suggest 8,000 sqm of new retail space may be needed in Latrobe by 2021.
- Optimistic retail demand projections suggest 42,000 sqm of new retail space may be needed in Latrobe by 2021.

Institutional Development Opportunities: Public sector organisations regularly review their facility needs. This study has revealed that there may be short-term opportunities to facilitate education and health facility developments in the Transit Centres. Other opportunities are likely to emerge over time.

Tourism Opportunities: In line with broader growth patterns, Latrobe may benefit from growth in tourism oriented activities like: accommodation (hotels, motels, backpackers / hostels); pubs, clubs, cafes and restaurants; tourist oriented retail premises such as souvenir shops and various hire shops; galleries, museums and other built attractions; business tourism facilities such as conference centres; and event & festival facilities.

Impact of Major Projects: Major investments in regional utilities, manufacturing and mining facilities would boost the *existing potential* for housing, office, retail and other land use development in the Transit Centred precincts. Specifically, the benefits could be to:

- Enhance the viability of the higher density housing market shown in this analysis;
- Increase the chance of the higher end office projections being achieved;
- Enhance the flow-on potential to the retail sector; and
- Generally add to the range of other land use possibilities.

The Risk of Spreading Demand 'Too Thinly': The potential to develop Transit Centred precincts with a 'critical mass' of activity and intensity may be diluted by the fact that three Centres are competing for regional demand across a number of land use opportunities. Furthermore, Warragul may emerge as another centre that competes for regional Transit Centre style development demand.

Moe Transit Precinct Opportunities

Key Drivers of Activity	<ul style="list-style-type: none"> ▪ A growing and diversifying population, generating housing, retail and local service opportunities. ▪ The tourism economy, generating accommodation, retail and entertainment uses. ▪ Broader economic drivers, generating various other land uses including back offices.
Higher Density Residential Development	<ul style="list-style-type: none"> ▪ It is envisaged that Moe can develop a higher density housing offer in the Transit Centre, to provide smaller housing integrated with services, and take advantage of views in the area. ▪ The market for higher density housing is likely to be older persons such as retirees and 'empty nesters' and other smaller household types. ▪ Moe will be in the market for Latrobe's 15 apartment units per year (in initial stages) rising to 57 units per year when the market is mature (using \$250,000 as the required selling price for an apartment as a benchmark).
Commercial Development	<ul style="list-style-type: none"> ▪ Moe does not have a significant commercial / office sector at the current time but future growth can be expected in sectors like Local Business Services and Back Offices of Large Firms. ▪ Moe will be in the market for Transit Centre office development potential of between 0 sqm and 30,000 sqm over ten years.
Retail and Hospitality Development	<ul style="list-style-type: none"> ▪ A low level of retail expansion can be expected resulting from population growth, and tourism impacts (say 8,000 sqm across the Transit Precincts and 2,000 sqm in this Centre). ▪ The retail centre of Moe has vacant and under-utilised space and hence any future demand is likely to involve better use of space, take-up of vacant space and some new development to replace obsolete stock and cater for expansion.
Tourism and Other Development	<ul style="list-style-type: none"> ▪ Other development possibilities for Moe include tourism oriented activities and community facilities like health facilities, education, sports complexes and health clubs. ▪ Moe is strategically positioned to play a core tourism role by virtue of its location as the 'gateway' to Latrobe (from Melbourne) and the gateway to the Mountain Rivers district, Thompson Valley, Mount St Gwinear snowfields, Baw Alpine National Park and gold mining town of Walhalla.
Strategy	<ul style="list-style-type: none"> ▪ Introduce higher density housing, following the diffusion recommendations noted earlier in the report. ▪ Reconfigure the retail space to pare back vacant / obsolete stock and allow for modern expansion at a low level. ▪ Facilitate office developments, especially back offices, at strategic transport hub locations. ▪ Establish a tourism precinct comprising a critical mass of accommodation and complementary retail and entertainment uses.

Key Drivers of Activity	<ul style="list-style-type: none"> ▪ A growing and diversifying population, generating housing, retail and local service opportunities. ▪ The public sector headquarters role of Morwell, generating office development and related business services. ▪ Broader economic drivers, generating various other land uses including uses associated with industry and transport.
Higher Density Residential Development	<ul style="list-style-type: none"> ▪ It is envisaged that Morwell can develop a higher density housing offer in the Transit Centre, to provide smaller housing integrated with services. ▪ The market for higher density housing is likely to be older persons such as retirees and 'empty nesters', students (especially those associated with the University in Churchill), and other smaller household types. ▪ Morwell will be in the market for Latrobe's 15 apartment units per year (in initial stages) rising to 57 units per year when the market is mature (using \$250,000 as the required selling price for an apartment as a benchmark).
Commercial Development	<ul style="list-style-type: none"> ▪ Morwell has a growing commercial / office sector. Future growth can be expected in sectors like Local Business Services and Government Services. ▪ Morwell will be in the market for Transit Centre office development potential of between 0 sqm and 30,000 sqm over ten years.
Retail and Hospitality Development	<ul style="list-style-type: none"> ▪ A low level of retail expansion can be expected resulting from population growth (say 8,000 sqm across the Transit Precincts and 1,500 sqm in this Centre). ▪ The retail centre of Morwell has significant vacant and under-utilised space and hence any future demand is likely to involve better use of space, take-up of vacant space and some new development to replace obsolete stock and cater for expansion.
Tourism and Other Development	<ul style="list-style-type: none"> ▪ Other development possibilities for Morwell include tourism oriented activities and community facilities like health facilities, education, sports complexes and health clubs. ▪ Morwell has good links to Churchill and Monash University, and can therefore seek to position itself as a student accommodation and entertainment centre.
Strategy	<ul style="list-style-type: none"> ▪ Introduce higher density housing, following the diffusion recommendations noted earlier in the report. ▪ Reconfigure the retail space to pare back vacant / obsolete stock and allow for modern expansion at a low level. ▪ Build on the potential for café culture retail development north of the rail line associated with higher density housing. ▪ Facilitate office developments at strategic transport hub locations. ▪ Leverage upon higher education and health development opportunities in the region. This should include initiatives to attract faculties / departments and provide related services such as housing. ▪ Facilitate and expand on the Government Services role of Morwell.

Key Drivers of Activity	<ul style="list-style-type: none"> Consolidation of Traralgon as a regional 'flagship' centre due to economic and population conditions favouring this town. A growing and diversifying population, generating housing, retail and local service opportunities. A significant private and public sector role, generating office development and related business services. The tourism economy, generating accommodation, retail and entertainment uses. Broader economic drivers, generating various other land uses including back offices.
Higher Density Residential Development	<ul style="list-style-type: none"> It is envisaged that Traralgon can develop a higher density housing offer in the Transit Centre, to provide smaller housing integrated with services. The market for higher density housing is likely to be older persons such as retirees and 'empty nesters', students, executive labour and other smaller household types. Traralgon will be in the market for Latrobe's 15 apartment units per year (in initial stages) rising to 57 units per year when the market is mature (using \$250,000 as the required selling price for an apartment as a benchmark).
Commercial Development	<ul style="list-style-type: none"> Traralgon has a strong private and public commercial / office sector. Future growth can be expected in sectors like Local Business Services, Back Offices, Government Services and potentially Advanced Business Services (due to the growing critical mass of skills in this centre). Traralgon will be in the market for Transit Centre office development potential of between 0 sqm and 30,000 sqm over ten years.
Retail and Hospitality Development	<ul style="list-style-type: none"> A moderate level of retail expansion can be expected resulting from population growth (say 8,000 sqm across the Transit Precincts and 4,500 sqm in this Centre). The retail centre of Traralgon is generally well utilised. Any future demand is likely to involve new development to replace obsolete stock and cater for expansion.
Tourism and Other Development	<ul style="list-style-type: none"> Other development possibilities for Traralgon include tourism oriented activities and community facilities like health facilities, education, sports complexes and health clubs. Traralgon is likely to have strengths in attracting executive labour / business tourist due to its growing business base.
Strategy	<ul style="list-style-type: none"> Take advantage of potential to position Traralgon as a regional flagship centre in a Gippsland context. Introduce higher density housing, following the diffusion recommendations noted earlier in the report. Allow for modern retail expansion at a moderate level, within the retail core. Facilitate office developments at strategic transport hub locations, including back offices. Facilitate other development opportunities including government services, tourism, café culture retail development, higher education and health development.

2 Transport Overview

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2.1 Transport context

Information on transport infrastructure and services in the three town centres has been collected through site visits, reviews of previous documents and discussion with key stakeholders. This section provides an overview of the existing transport context of the three towns, further details on each of the towns is provided in the following sections.

In the three centres, pedestrian facilities are generally good. Footpaths are of high quality and street furniture is generally of a consistent theme and well maintained. Accessibility issues seem to have been addressed, with plenty of examples of pedestrian kerb outstands, pram ramps and pedestrian refuges. Formal pedestrian crossings are well supported by numerous less formal crossing points. The abundance of mid-block car parking areas also provides informal (but generally unattractive) access for pedestrians across streets. Within each of the town centres the rail line presents a barrier to pedestrian and movement, with few formal crossing points.

Cycle facilities are minimal in all three centres. Bike racks, where installed, are generally of a low quality, however cyclists were observed in all three centres during our site visits. Cyclists are provided for in the sealed shoulder of the highway for travel between the three towns. An off-road RailTrail has been created on the disused rail line between Moe and Yallourn Power Station, although this route is not connected to any other cycle facilities. Discussion with local cyclists indicated that the distances and facilities linking the towns is a deterrent to longer distance trips, however much could be done to improve local facilities within each centre.

Each of the town centres is served by a rail station. Each

station has only one functioning platform. Physical barriers to prevent pedestrian movement across the rail tracks are minimal and pedestrians were observed stepping over the rail tracks to cross, rather than using the formal crossing points. The station buildings and facilities were of a consistent quality, with well maintained waiting rooms, information and staffed ticket offices. The rail line is not electrified.

V/Line provides 14 services to Melbourne and 12 from Melbourne each weekday, with fewer services on weekends. Two of the weekday services and one Saturday service require passengers to travel by coach between Moe and Warragul Station. Service frequency is summarised in the following table:

Route	Weekdays			Saturday	Sunday
	AM (- 9:00)	Off Peak	PM (17:00-)		
To Melbourne	6	7	1	6	4
From Melbourne	1	6	5	6	4

Bus services operate to link the three towns, provide services to outlying areas and link the residential suburbs of each town with the centre. Services operate on weekdays and on Saturday mornings, with no services in the evenings, on Saturday afternoons or on Sundays. Each centre has a main bus terminal, with varying facilities for waiting passengers. Passenger numbers were low in all services observed during the site visits. Waiting passengers were observed in each centre.

Bus and rail services are not coordinated to provide convenient interchange between the two modes, both in terms of the location of stops and terminus points as well as timetabling.

Taxi companies operate in each of the three towns and are an important mode of transport within the Latrobe Valley, particularly for shopping and medical trips (including Latrobe Valley Hospital). Facilities for waiting passengers at the taxi ranks are generally poor, with no shelter or seating and poor lighting provided. Discussions with taxi operators suggest that passengers are generally local people, some of whom are eligible for the Multi-Purpose Taxi Program (a scheme whereby some people with mobility difficulties can travel in taxis at a reduced fare).

On-road parking restrictions are quite extensive, with most of the streets in the town centres having some form of restriction (typically 1-2 hrs). Each of the centres also has large areas off-street parking available for visitor/customer/staff parking, although in many of these car parks it is unclear what restrictions apply, in terms of user or time limit.

The three town centres are linked by the Princes Highway, which bypasses Moe and Morwell but passes through the southern edge of Traralgon Town Centre. Moe and Morwell town centres are linked to the highway via slip roads to the east and west of each centre.

Throughout the site visits there was no evidence of congestion in any of the centres, or on the highway linking them. The most heavily trafficked areas are the main streets of Traralgon. Vehicular access within and between the three town centres is therefore generally fairly easy.

In addition to the work undertaken for this project, there have been a number of previous relevant studies that provide useful information. In particular the Latrobe Valley Access and Mobility Study (LVAMS), details of which are included in Section Six - The VLAMS Study.

2.2 The LVAMS Study

The LVAMS was commissioned by the Latrobe Valley Ministerial Taskforce in response to concerns raised by the local community in relation to the effectiveness of public transport services and the subsequent mobility restrictions and poor accessibility, in particular for employment and other purposes. The study is currently being finalised in consultation with key stakeholders.

LVAMS was undertaken by a consultant team on behalf of DOI. The study included surveys, data analysis and consultation methods to determine access issues before identifying a range of measures to address issues, which were evaluated using a framework approach.

The study identified the transport issues and needs of the community, in relation to the development of the Master Plans this includes:

- The population is expected to remain relatively stable over the next 20 years;
- The majority of the City's oldest residents live in the main towns;
- The unemployment rate is high at around 14% (March 2001);
- Areas with a high proportion of households without a car are generally located in the main towns;
- Private car is the dominant mode, capturing around 80% of trips;
- Walking is the second most dominant mode, with around 14% of all trips;

- More than 30% of the workforce have no access to public transport;
- Traralgon is the main employment area for the valley;
- The Mid-Valley Shopping Centre captures more shopping trips than any of the three CBDs;
- There are no significant trips to destinations outside the City;
- There are some residential areas within town centres that are not served by a bus route (ie within 400m of a route);
- Bus routes are fairly comprehensive, but the 'circular' nature of the routes leads to often long journey times;
- Bus parking capacity at the Traralgon Centre Plaza is not sufficient to accommodate all services that need to use it;
- Lack of communication between public transport operators leads to little or no coordination between services;
- Many bus stops lack shelters, information and access to them is difficult;
- Travel time surveys show that car travel is far faster than travel by public transport;
- There is a strong reliance on family and friends for travel;
- Access to the main transport demand generators located outside of the main urban centres (Mid-Valley, Latrobe Valley Hospital and Monash University) was highlighted as an issue;

- Cycling is not a significant form of travel yet most of the main town areas are geographically suited to cycling;
- Buses are poorly utilised and services are infrequent in urban areas or non-existent in rural areas;
- Existing bus service hours of operation and frequencies are not conducive to attracting work trips or recreational/entertainment trips and
- No major traffic congestion or impediments to private car access and mobility were identified.

Specific transport needs were identified as follows:

- Community members need better access to a broad range of services, facilities and opportunities;
- Develop walking and cycling as modes of travel, particularly to schools;
- Review bus services, focusing on route coverage, operating hours and frequency of services;
- Undertake detailed market research to identify the likely potential new ridership which would result from improved RPT services;
- Examine access options to major transport generators ie Mid-Valley Shopping Centre and Latrobe Regional Hospital;
- Improved interchange facilities;
- New or modified bus stop locations particularly in relation to locations with high proportions of elderly or young people;

- Improved coordination of bus and train timetables, especially at major interchanges;
- Provision of integrated information for bus and trains; and
- Develop a more formal approach to car pooling and ride sharing systems.

The LVAMS identifies a prioritised list of 80 proposals to be implemented in order to address the issues and needs raised. Those that are relevant to the development of this Master Plan include:

- Create the position of Transport Development and Coordination Officer to take forward the plan;
- Integrate and coordinate bus/rail timetables;
- Provide timetables at key bus stops;
- Extend RPT services to evenings and weekends;
- Increase frequencies of bus services during the day;
- Provide improved interchange facilities in Moe and Traralgon;
- Implement VicRoads Cycle network;
- Review bus stop locations in relation to key transport generators such as shopping centres and retirement villages;
- Physically upgrade key stops including lighting;
- Install help points at key stops and in town centres;
- Undertake ongoing needs analysis and market research to assess actual and potential passenger demand;

- Express bus services linking town centres, Mid-Valley and hospital;
- Shuttle train service linking town centres, Mid-Valley and hospital;
- Audit approach paths to bus stops and implement 'safe routes to stops';
- Audit of pedestrian facilities and implement a safe and accessible walking program;
- Provide for bikes on buses;
- Promote cycling to school, including the provision of end-of-trip facilities and bicycle safety programs for school children; and
- Audit pedestrian routes to schools and implement a 'safe routes to school' program.
- Based on this prioritised list, the LVAMS report provides a list of next steps for all agencies and an outline of estimated costs associated with the priority improvement initiatives.

Customer Satisfaction Survey

As part of LAMS a Customer Satisfaction Survey of public transport passengers was undertaken (Latrobe Valley Access and Mobility Study Customer Satisfaction in the Latrobe Valley, Market Solutions Pty Ltd, September 2002). The survey consisted of a series of interviews with passengers on trains, buses and taxis to gain an appreciation of their satisfaction with existing facilities, services and infrastructure. In total 450 surveys were undertaken 150 with train passengers, 150 with bus passengers and 150 with taxi passengers.

The study aimed to achieve a representative sample of passengers across each of the modes and included:

- A higher proportion of women than men 67%;
- A good cross-section of age groups, with a slightly higher proportion aged 65+;
- 54% of respondents were classed as being single/widow/widower;
- 45% fell into the occupation categories of either performing home duties or retired; and
- 27% resided in Traralgon, 22% live in Moe and 22% in Morwell only 3% live in rural Latrobe Valley.

The outcomes of the survey for each of the modes provides a useful indication of existing travel patterns and issues with facilities and services to be used as input to the development of the Master Plans.

Trains

- 82% of respondents resided in the Latrobe Valley Municipality;
- The majority of passengers boarded the train in either Traralgon (22%), Morwell (25%) or Moe (26);
- Over half of passengers (60%) disembarked in metropolitan Melbourne, including Flinders/Spencer St stations;
- 89% of all respondents stated that they use train services at some time;
- Train users were similar to other respondents, although they were more likely to be employed on a full time basis;
- 51% of train passengers were either visiting relatives/friends or going to/from a leisure purpose. 17% were going to/from work;
- Overall a moderate to high level of satisfaction (74%) was reported with train services in the Latrobe Valley;
- Retired persons and residents of Morwell recorded higher levels of satisfaction than average;
- 62% of train travellers normally purchase concession or student tickets, rising to around 70% for those travelling at weekday off-peak times or for leisure;
- Low satisfaction ratings were reported with the frequency of services in the evenings and at weekends;
- High satisfaction ratings were reported in relation to the provision and ease of understanding of timetable information; and
- All aspects relating to train stations rated as high, with very high ratings for staff.

Buses

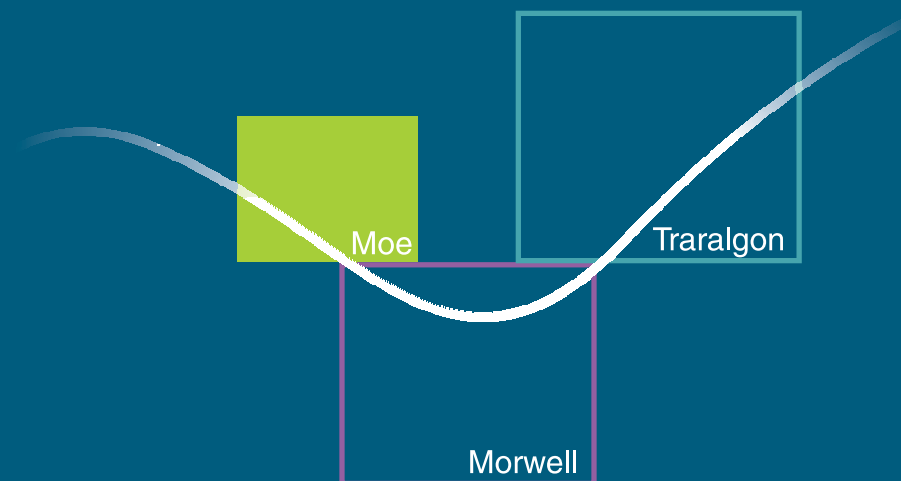
- Over half of all people interviewed across all modes used bus services within the Latrobe Valley on a regular basis;
- The sample of bus users was similar to the overall sample of passengers;
- 57% of passengers were on a shopping trip, with around 9% going to/from education and a further 9% on personal business;
- Bus boardings were split between town centres, however a higher proportion of people alighted at Morwell/Mid-Valley;
- Overall bus services received a moderate satisfaction rating;
- Retired people were more likely to be satisfied, with residents of Morwell and those on commuting/education trips being less satisfied;
- 85% of bus passengers normally travel on a concession or student ticket;
- Frequency of bus services in the evenings and at weekends and the seating and shelter provided at bus stops (particularly in Morwell) rated with low satisfaction ratings; and
- Punctuality, travelling time considering the distance, routes and staff rated highly.

Taxis

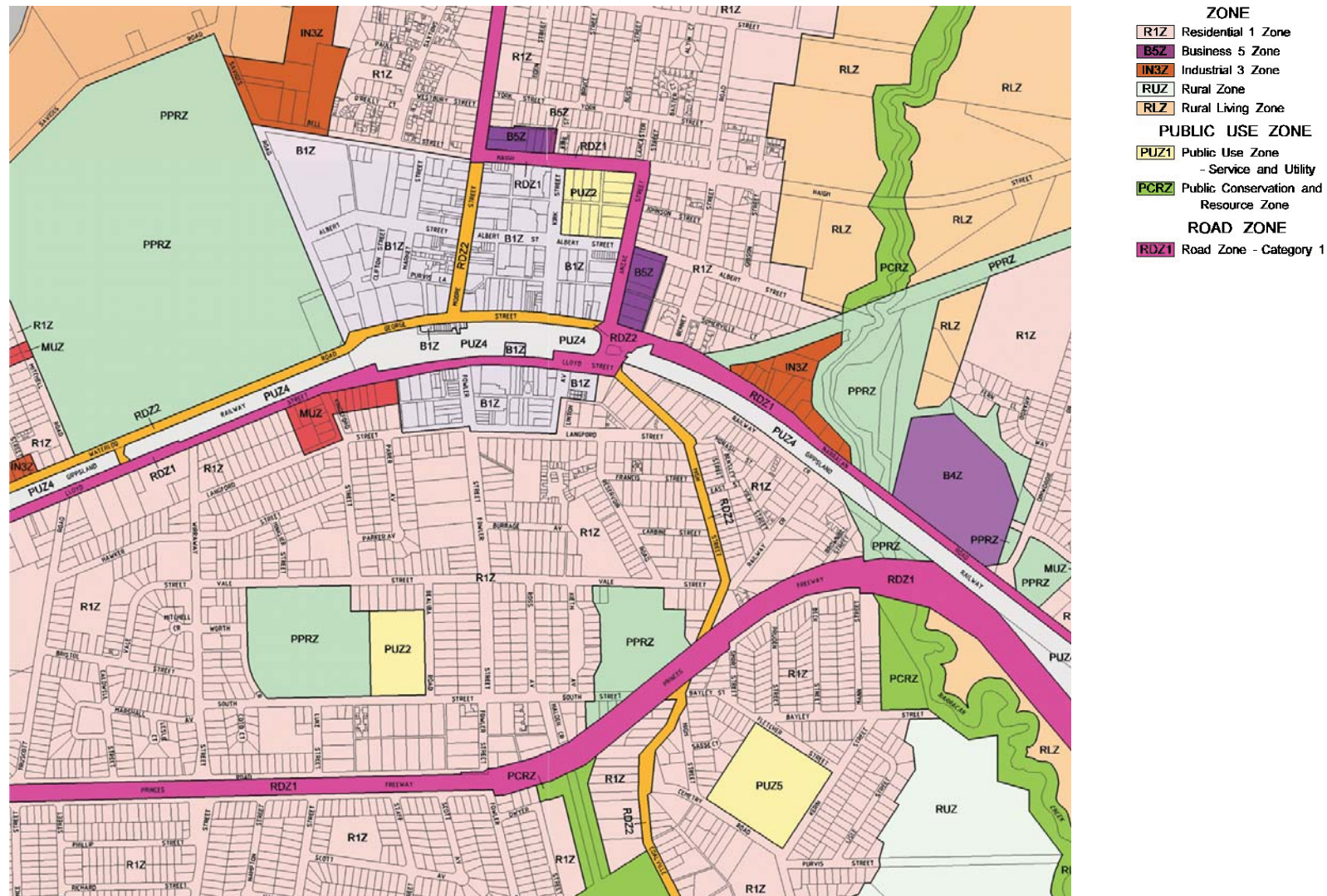
- Overall a high satisfaction rating was recorded for taxi services, with slightly higher levels being recorded by residents of Traralgon;
- Of the 126 respondents that replied to the question, 35% normally utilise the Multi-Purpose Taxi Program;
- The availability of taxis at ranks and late at night, the location and facilities at ranks and fare prices rated lower than other aspects of service delivery; and
- It was generally noted that more taxis were needed to meet trains with the appropriate taxi rank and other facilities provided.

Moe

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3.1 Land Use Zones



3.2 Activities

The Moe town centre is located predominantly on the north side of the train line. The two main retail strips are Moore St on the northern side and Fowler St on the south. These are the strongest retail areas, with the highest rates of occupancy.

There is only a very small amount of open space located in the town centre.

Retail

Key attractors in the town centre are KMART, COLES and SAFEWAY.

Residential

Residential dwellings are located on the fringe of the town centre. This is mostly detached houses, predominantly built in the post-war period. There has been some recent development of medium density housing with most occurring north-west of the town centre.

Offices

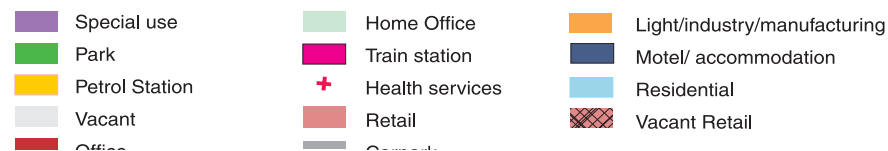
There are few offices and even fewer home offices located in Moe. Those that are there are mostly scattered throughout the northern town centre.

Other

There is one primary school in the town centre



Land Use Diagram



3.3 Public Realm

The public realm of the Moe town centre is considered to be of good quality.

Public Amenity

Public amenity in Moe is of a good standard. It is particularly good in the retail core of the town centre - particularly along Fowler and Moore Sts (and their intersecting streets). The block of Moore St closest to the station is a shared zone with pedestrian right-of-way.

Footpath widening has occurred at most street intersections in the retail core centre. This provides good amenity with larger street trees, street seating and pedestrian outstands that assist in road crossings. These also enhance the priority given to the pedestrian in the town centre.

Footpaths are generally of a good quality throughout the town, with only a few minor exceptions.

Street Activity

The streets of Moe are active in the retail core centre. However, outside of these main retail streets there are a large number of blank frontages due to vacant shops fronts or large big-box retail outlets that provide no surveillance to the street. This is particularly a problem in the north-west of the town.

Pedestrian Connections

The formal footpath network along roads in Moe is of a good quality, and the pedestrian permeability within Moe is enhanced by a number of laneways and large areas of off-street parking. As pedestrian connections, however, these laneways and parking areas have limitations during poor weather or at night. For example:



Public Realm Diagram

- Large car parks do not offer shelter for pedestrians in adverse weather conditions and are often poorly lit;
 - Laneways such as those around Purvis Lane, the northern half of the pedestrian rail level crossing and the lanes south of the rail line such as Buckland Lane are lined by the backs of retail commercial properties and do not provide a satisfactory level of passive surveillance;
 - A small number of laneways within the town centre such as Purvis Lane and Moore Lane are quite narrow, with poor sight lines and restricted sight distances; and
 - Many of the laneways have poor lighting, such as Buckland Lane and Collins Lane south of the rail line, and Trinity Lane to the east.
- The generally low level of activity in areas of the town centre, particularly at non-peak times, further reduces perceptions of personal security for pedestrians.

3.4 Built Form Character and Development Opportunities

There are a number of development opportunities in Moe, predominantly on the south side of the station. Most of these sites present an opportunity as a result of being larger vacant lots, or sites that are currently underutilised. Most development opportunities occur on the fringes of the town centre.

Built Form Character

Predominantly 1-2 storey buildings. Most commercial buildings were either brick or concrete construction, with most residential buildings constructed of timber or brick. Predominantly these were built post-war.



3.5 Public Transport

Bus Services

Bus services in Moe can be categorized into those servicing areas to the south west of the centre, or those servicing the precinct of Newborough. In addition, 11 daily intercity services link Moe to Morwell, Midvalley and Traralgon. Service frequencies are summarized below:

Destination	AM (7:00-9:00)	Off Peak (9:00-5:00)	PM (5:00-7:00)	Days of Service
Margaret St	1	8	1	Mon-Sat
Staff St	0	8	1	Mon-Sat
Old Newborough	0	7	0	Mon-Sat
North Newborough	0	7	0	Mon-Sat
Yallourn North	0	2	0	Mon-Fri
Morwell	2	7	2	Mon-Sat

The main Moe Bus stop is located on Market Street, consisting of two shelters in an open, paved area adjacent to the Coles supermarket car park. The shelters are basic but well maintained with seating, lighting and information. The information is in the form of printed timetables and notices in display cases.

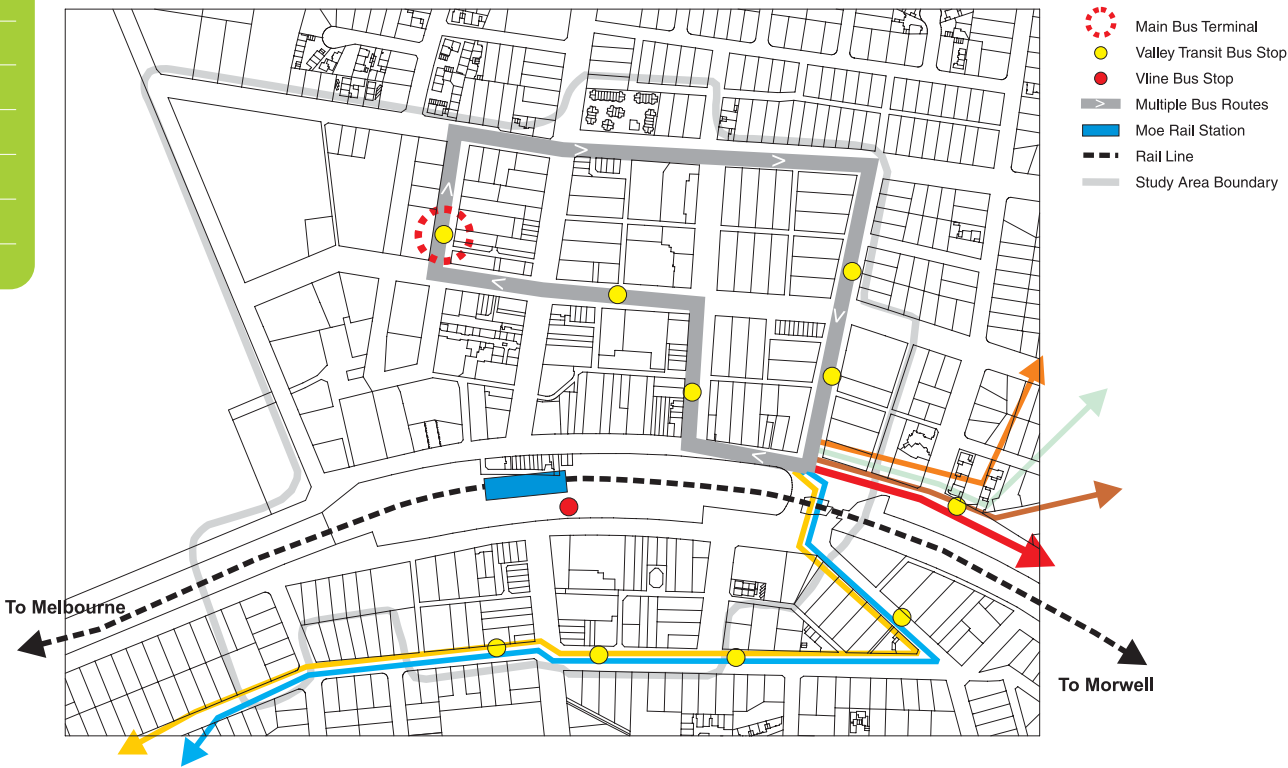
The remaining bus stops in and around Moe Town Centre range in level of amenity and quality, from single shelters with seating and information to a bus stop sign only.

VLine provides inter-town bus services, with timetables coordinated to connect with rail services. VLine bus services operate from the bus stop immediately outside the station, accessed from Lloyd Street.

Rail Facilities

The main station entrance provides a satisfactory level of accessibility, being at grade with the station car park. The waiting room is integrated with the ticket office, providing enclosed shelter, comfortable seating, security and clear information.

An at-grade pedestrian crossing of the rail line is located immediately east of the station, providing access to the station from the north. The station provides parking facilities for approximately 30 vehicles at the station entrance. More than 100 spaces are available in adjacent car parking spaces to the north and east of the station. Supply of parking at the station is far greater than demand.



3.6 Cycle Routes

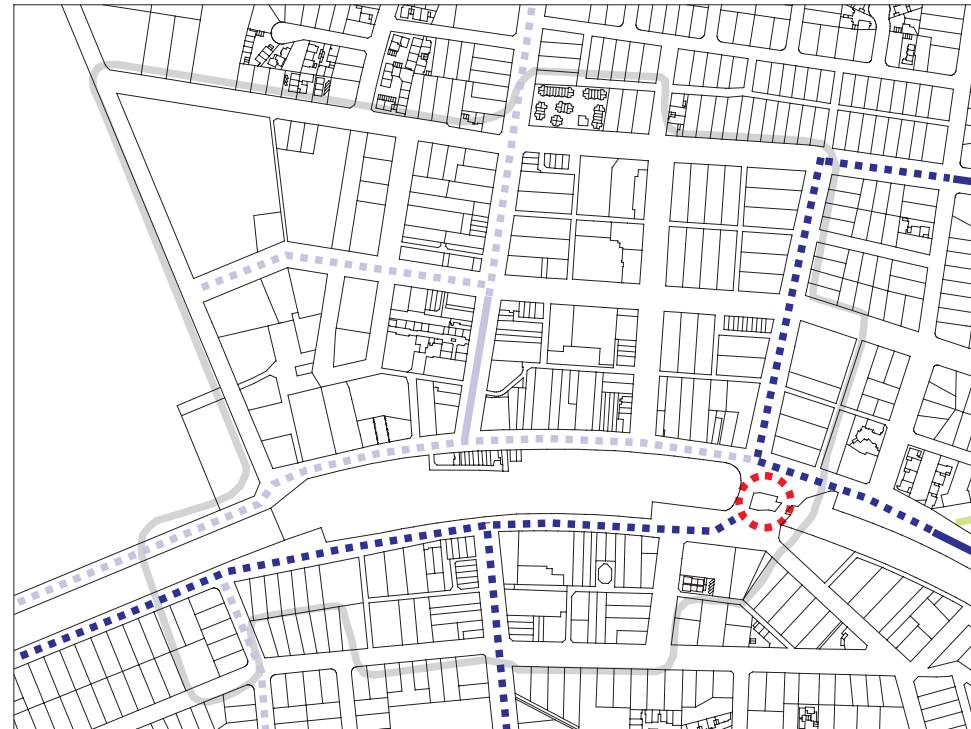
Existing cycle facilities within Moe are limited to:

- the shared zone on Moore Street between George Street and Albert Street;
- the Moe-Yallourn Rail Trail which provides an off-street link that runs from the eastern edge of the study area to Yallourn Power Station; and
- A number of cycle racks for short term storage on town centre streets.

The map opposite shows Council's proposed cycle network which is being implemented over time using funding from VicRoads.

The proposed cycle network will improve the network, however additional issues that need to be addressed include:

- The rail line provides a barrier to cycle movement - existing crossing points are limited to the level crossing to the west of the town centre, the pedestrian level crossing to the east of the station (cyclists must dismount) and the roundabout at the eastern edge of the town centre;
- The design of the shared environment on Moore Street does not encourage vehicles to slow down;
- The Moe-Yallourn Rail Trail provides a valuable link but is not physically connected to the town centre and is poorly signposted;
- Facilities for the integration of cycle trips with bus and rail trips are poor or non-existent; and
- The proposed cycle network contains gaps and 'dead ends'.



Local Routes

- On-Road - Existing
- On-Road - Proposed
- Off-Road - Existing
- Off-Road - Proposed

Priority Routes

- On-Road - Existing
- On-Road - Proposed
- Off-Road - Existing
- Off-Road - Proposed



Barrier to cyclists

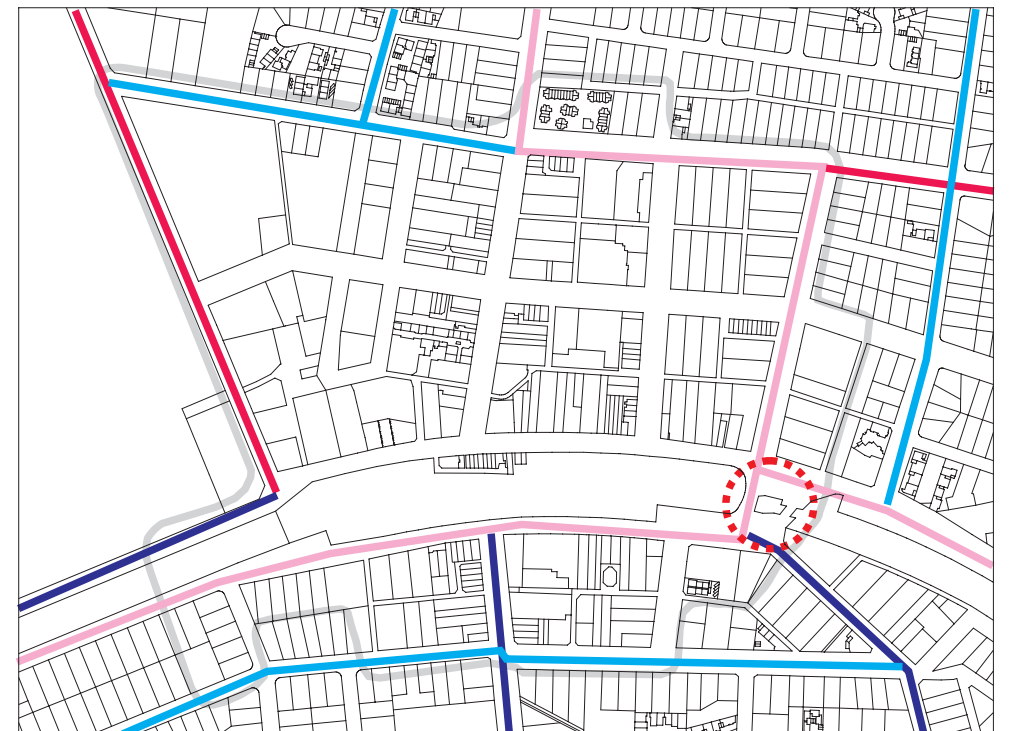
3.7 Road Network

The plan shows the designated road hierarchy within the town centre - roads that are not identified on the plan are classified as Minor Access Streets.

Access to the Princes Highway is via Lloyd Street in the west or Narracan Drive to the east. Most intersections within the town centre are either priority or roundabouts.

A number of existing issues have been raised in relation to the street network:

- The roundabout at the eastern end of the town centre is busy and provides the main access across the rail line, however the layout often leads to confusion by drivers;
- There are limited crossing points of the rail line for traffic - existing crossing opportunities are limited to a level crossing to the west of the town centre and the roundabout at the eastern end of the town;
- Signing of through traffic from the highway to Walhalla is a concern - many people feel that the town economy would benefit from this through traffic passing closer to the main activity areas;
- Existing streets are wide and do not encourage traffic to travel at the speed limit of 50kph;
- The shared zone on Moore Street appears to work well although traffic exceeds the 10kph speed limit, possibly because the current design does not force drivers to slow down; and
- Higher levels of activity are observed in the general road network during school start and finish times. Bus operators have indicated that the increased traffic levels during these periods result in some delays to road users, with particular mention made of delays to school bus services around the intersection of Lloyd Street and Fowler Street."



VicRoads Controlled

— M road, A road, B Road
— C road (Main Road)

Council Controlled

— Secondary Arterial
— Collector
— Access Street - Major



Conflict Area

Road Network Diagram

3.8 Parking

On-street

On-street parking restrictions radiate out from the shared zone on Moore Street, where restrictions are typically 1 hour or less. In general, the supply of on-street parking in the town centre area exceeds demand, which could be due to the significant number of vacant retail and commercial properties in the area, for example on Kirk Street.

South of the railway line on-street parking restrictions are in place in areas of commercial or retail land use, extending approximately 200 metres in each direction from the station.

Off-street

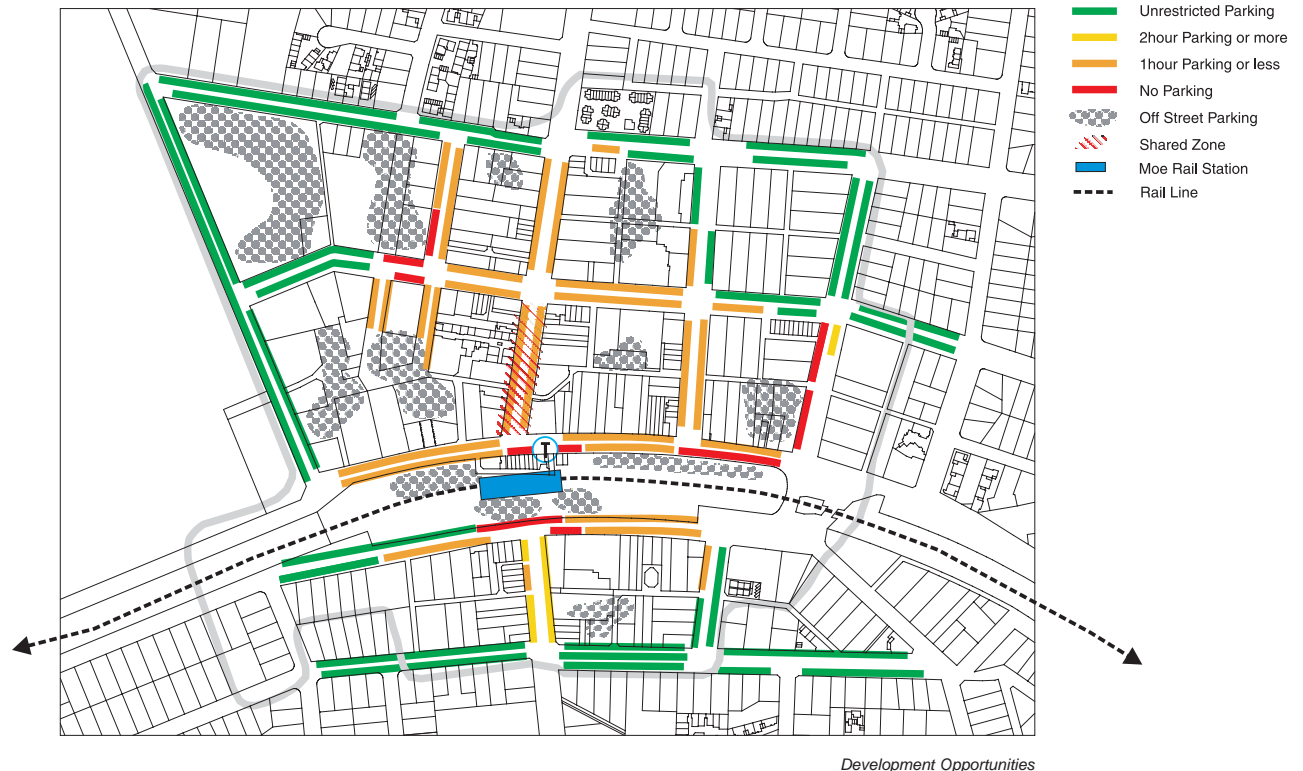
The most significant areas of off-street parking are situated to the north and northwest of the centre, associated with the retail centres around Market Street and the Kmart and Coles supermarkets between Albert and Bell Streets. Other areas of off-street parking are available in proximity to the government buildings and community facilities on Schurman and Gregory's lanes, and the Safeway supermarket to the east of the centre and the railway station. Many of these off-street parking areas are well used, however supply generally seems to exceed demand, particularly in the large Kmart customer parking.

To the south of the station, off street parking facilities are limited to the railway station and a number of informal gravel areas in undeveloped blocks.

For many of the off-street car parks it is unclear who the car park is intended for although, given the plentiful supply of parking in the town centre, this does not appear to be a problem.

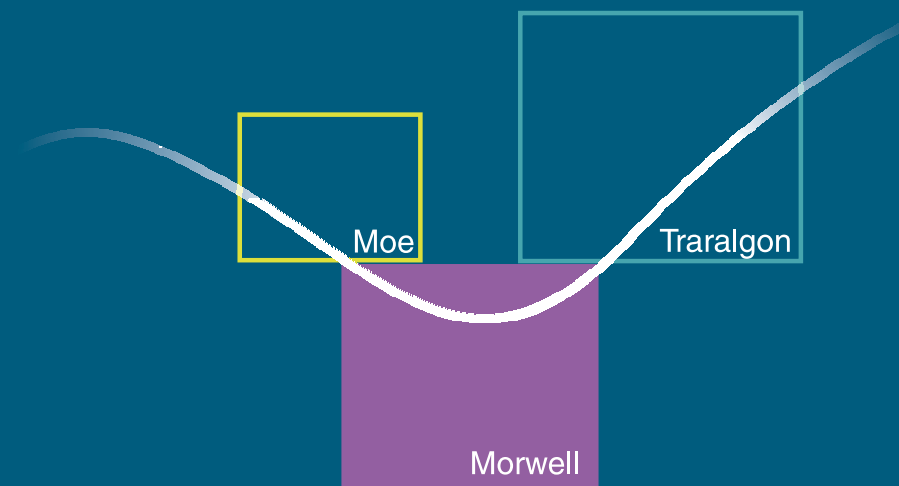
Taxis

The taxi rank is located on the southern side of George Street, however at night taxis prefer to wait at the service station on Lloyd Street opposite the hotel. Facilities at the taxi rank are poor - the shelter and seating are difficult to access, particularly for people with mobility difficulties.

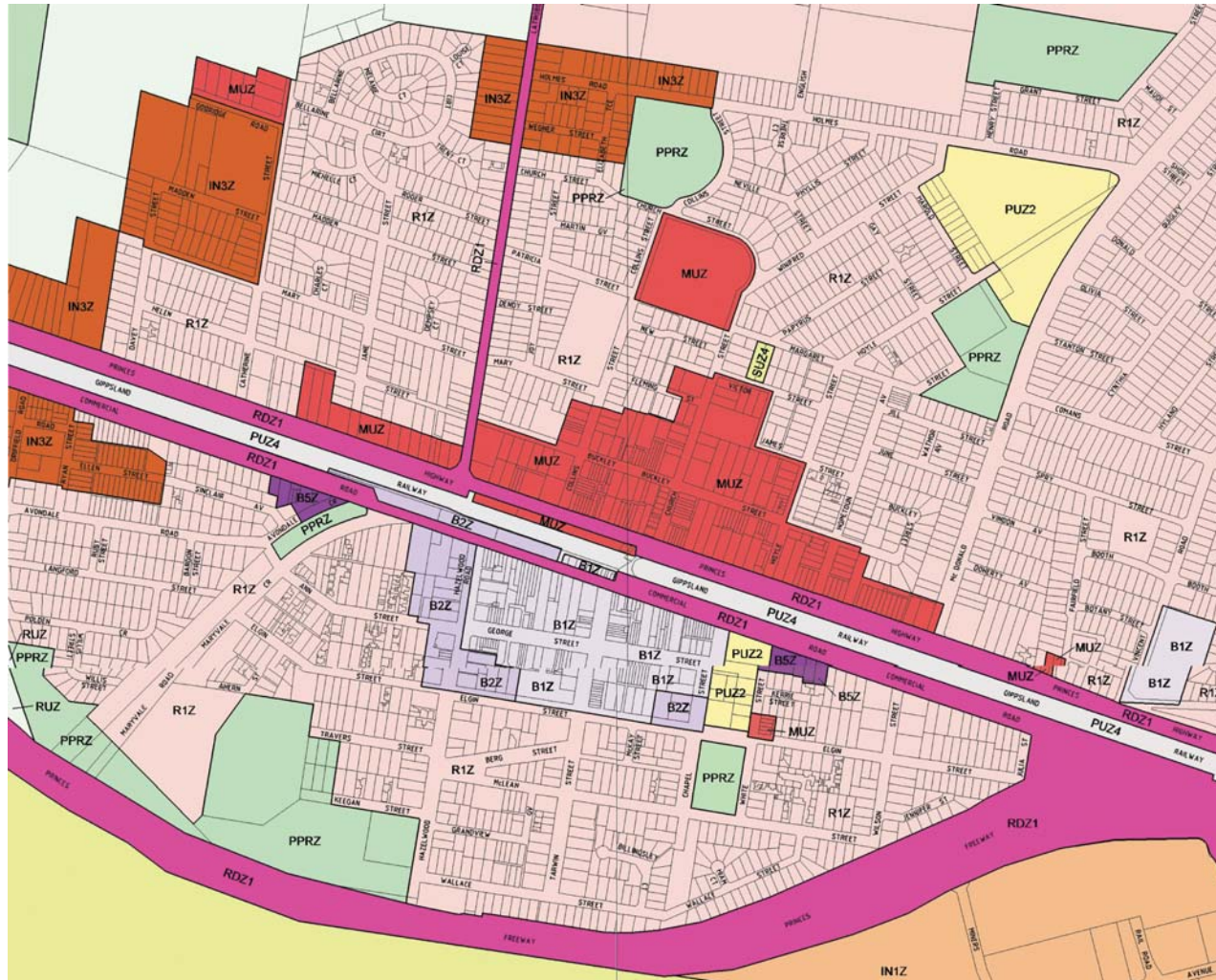


4 Morwell

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4.1 Land Use Zones



ZONE	
R1Z	Residential 1 Zone
MUZ	Mixed Use Zone
PUBLIC USE ZONE	
PUZ1	Public Use Zone - Service and Utility
PUZ2	Public Use Zone - Education
PUZ6	Public Use Zone - Local Government
PPRZ	Public Park and Recreation Zone
ROAD ZONE	
RDZ1	Road Zone - Category 1

4.2 Activities

Morwell town centre is effectively bisected by the railway line. There is a distinct difference in land use on the north and south sides. The south side is much more vibrant and robust with a high occupancy rate, a strong mix of land uses with a substantial commercial core. Alternatively, the north side is marked by a demise in the quality and intensity of land use, with a large number of vacant and derelict buildings, a lower quality and lower intensity of built form and land uses.

The intensity of use currently on the south side is being reinforced through existing and proposed public developments, with both the council offices and the justice precinct to be built on the south-western side of the town centre.

Other land use features include green, open space located on both the northern and southern edges of the town centre, the medical and ancillary services located in the northeast and the significant number of motels located within the town centre, or on its fringes.

Retail

The key retail core is located on the southern side of the railway line. Most shops are small, independent local suppliers of goods and services. Coles is the only remaining larger supermarket in the town centre. In contrast, the northern town centre is predominantly occupied by secondary retail uses - autoshops, op shops, party hire, a wine merchant etc.

Residential

Residential dwellings are located on the fringe of the town centre. This is mostly detached houses, predominantly built in the post-war period. There is some medium density development, mostly occurring in the south-west of town.

Offices

There are a number of offices located in Morwell. These are mostly located adjacent to the southern retail centre. There are offices located in the northern town centre, although there are fewer than in the south. Of particular community importance, are those associated with the Aboriginal Cooperative located on Buckley Street and the Medical services located in Princes Drive and Hoyle Street, in the northeast of the town centre.



Special use	Home Office	Light/industry/manufacturing
Park	Train station	Motel/ accommodation
Petrol Station	Health services	Residential
Vacant	Retail	Vacant Retail
Office	Carpark	

4.3 Public Realm

The public realm of the Morwell town centre is distinctly divided by the railway line. The southern part of town is of fair quality and consistency. However, the northern side of town is distinctly marked by a lower degree of public amenity, less street activity and poorer pedestrian connections.

Public amenity

South - Streetscape works in the south part of town are of good quality providing excellent public amenity. This includes provision of street trees, seating and good footpaths, particularly on Tarwin street where the footpaths have been widened (at the intersection with Commercial Road) and medians provided.

North - Streetscape works on the northern side are less consistent and of a lower quality design with the only significant works occurring in the southern block of Church St.

Street Activity

The streets of Morwell are particularly active in the retail core centre on the south side of town. Active shop frontages, with high occupancy rates assist in creating a vibrant town centre. Commercial Road and Tarwin Street are the busiest shopping streets. On the northern side of the railway, street activity is inconsistent, with a high vacancy rate of retail outlets, large vacant sites and numerous abandoned buildings creating blank, faceless street frontages.

Pedestrian Connections

Pedestrian connections through Morwell are of an average quality, with areas south of the rail line enjoying a higher level of permeability and better quality connections than the north. As with the town of Moe, Morwell's informal pedestrian connections created by laneways and areas of off-street parking areas enhance the formal footpath network. While these features help to increase permeability, they do present actual and perceived safety issues to pedestrians, and their use is often restricted to good weather and daylight hours.

Examples include:

- -A number of parking areas immediately adjacent to the station offer no shelter for pedestrians and little in the way of passive surveillance from surrounding properties;
- Laneways such as Rowells Lane in the south, which are lined by walls or fences and do not provide a satisfactory level of passive surveillance. They are often also quite narrow, with poor sight lines; and
- Poorly lit lanes particularly to the north of the rail line, such as Karma and Buckley Lanes, and the pedestrian laneway onto Fleming Street make those areas particularly unattractive to pedestrians after dark..
- As with Moe, the generally low level of activity in the town centre further reduces perceptions of personal security for pedestrians. This is most noticeable north of the rail line.



Public Realm Diagram

4.4 Built Form Character and Development Opportunities

There are many development opportunities in Morwell. Most of these occur on the northern side of the station where there are many vacant and some derelict buildings, and large vacant sites. In particular a large number of opportunities occur on Buckley Street.

Two key vacant sites are located on the northern side of town. One, the old Ericson site (at the northern end of Church St) is currently occupied by a largely disused industrial shed. The other is the primary school site. The school has been demolished and the site cleared. Both sites are of significant size.

The justice precinct is currently under construction. This is a \$25 million dollar project incorporating a courthouse, a police station and divisional headquarters. It should be noted that this consolidation involves the relocation of existing activities.

The Council Offices are also being proposed for Morwell, on the south side of the station.

Built Form Character

Predominantly 1-2 storey buildings. Most commercial buildings are of either brick or concrete construction, with most residential buildings constructed of timber or brick. Predominantly these were built post-war.



Development Opportunities

Development Opportunities Diagram

4.5 Public Transport

Bus services in Morwell link to the Mid Valley Shopping Centre, Central Gippsland TAFE and the Monash University Gippsland campus in Churchill. In addition, 11 daily intercity services link Morwell to both Moe and Traralgon. Services are summarized below:

Destination	AM (7:00-9:00)	Off Peak (9:00-5:00)	PM (5:00-7:00)	Days of Service
Churchill via Midvalley (Route 1)	0	7	0	Mon-Sat
Churchill via Midvalley (Route 2)	2	0	0	Mon-Fri
Churchill (Route 3)	0	1	0	Sunday
Midvalley via Robertson St	0	8	0	Mon-Sat
Midvalley via Crinigan Rd	3	8	1	Mon-Sat
Moe	1	8	2	Mon-Sat
Traralgon	1	8	2	Mon-Sat

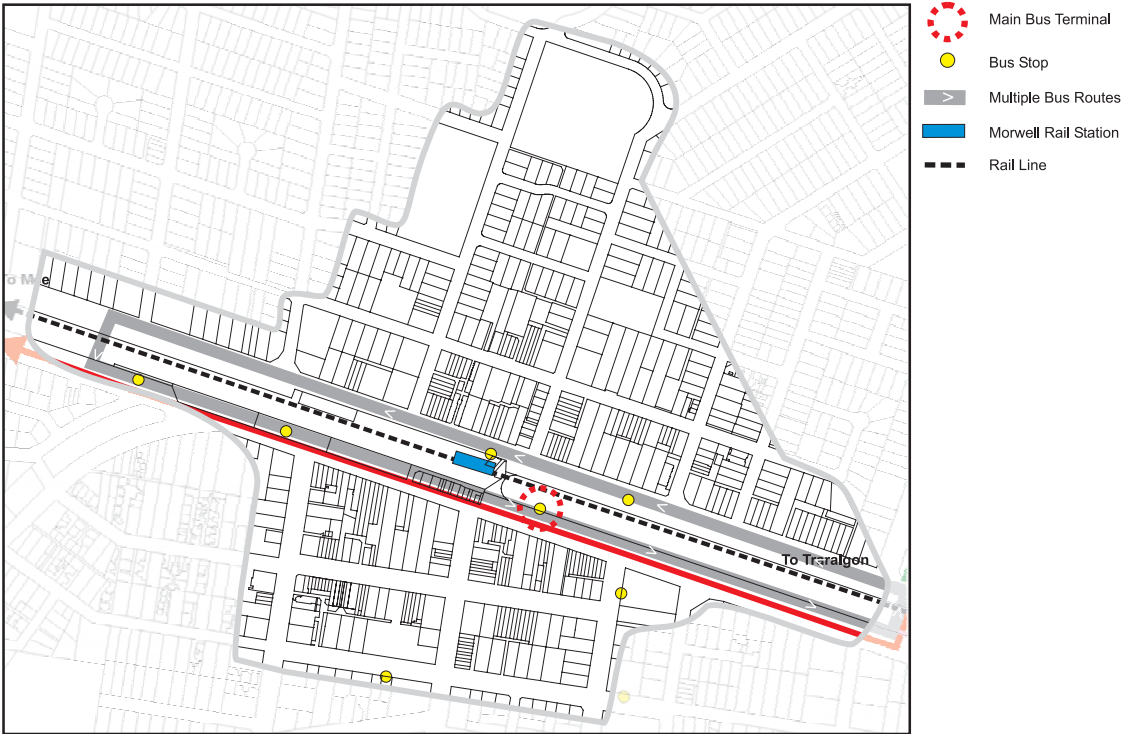
The main Morwell Bus terminal is a large structure, south of the rail line on Commercial Road. It is linked to the rail station via a circuitous route including a pedestrian tunnel under the rail line, and a number of well maintained footpaths. The station consists of three undercover platforms offering a good standard of shelter for waiting passengers. Information at the terminal is in the form of printed timetables which were in poor condition at the time of this report. All bus services through the town centre stop at this bus station.

The two smaller shelters located at Morwell station entrance are marked as a V/Line bus stop, however other occasional services do appear to use these facilities. The remainder of stops in the Morwell Study Area are simple bus stop signs, several of which have a small printed timetable.

Rail Facilities

Morwell station is located to the north of the rail line on Princes Drive. A ramp carries pedestrians from the the station car park to the main station entrance which opens to a passenger waiting room with an integrated, staffed ticket office. The waiting room can accomodate approximately 30 seated passengers, and offers a good level of shelter, lighting, information and security.

The main station parking area can accomodate some 30 vehicles of which the majority are usually occupied. Well in excess of 100 spaces are also available in nearby off-street parking facilities close to the station. In general, supply of parking around the station well exceeds demand.



4.6 Cycling

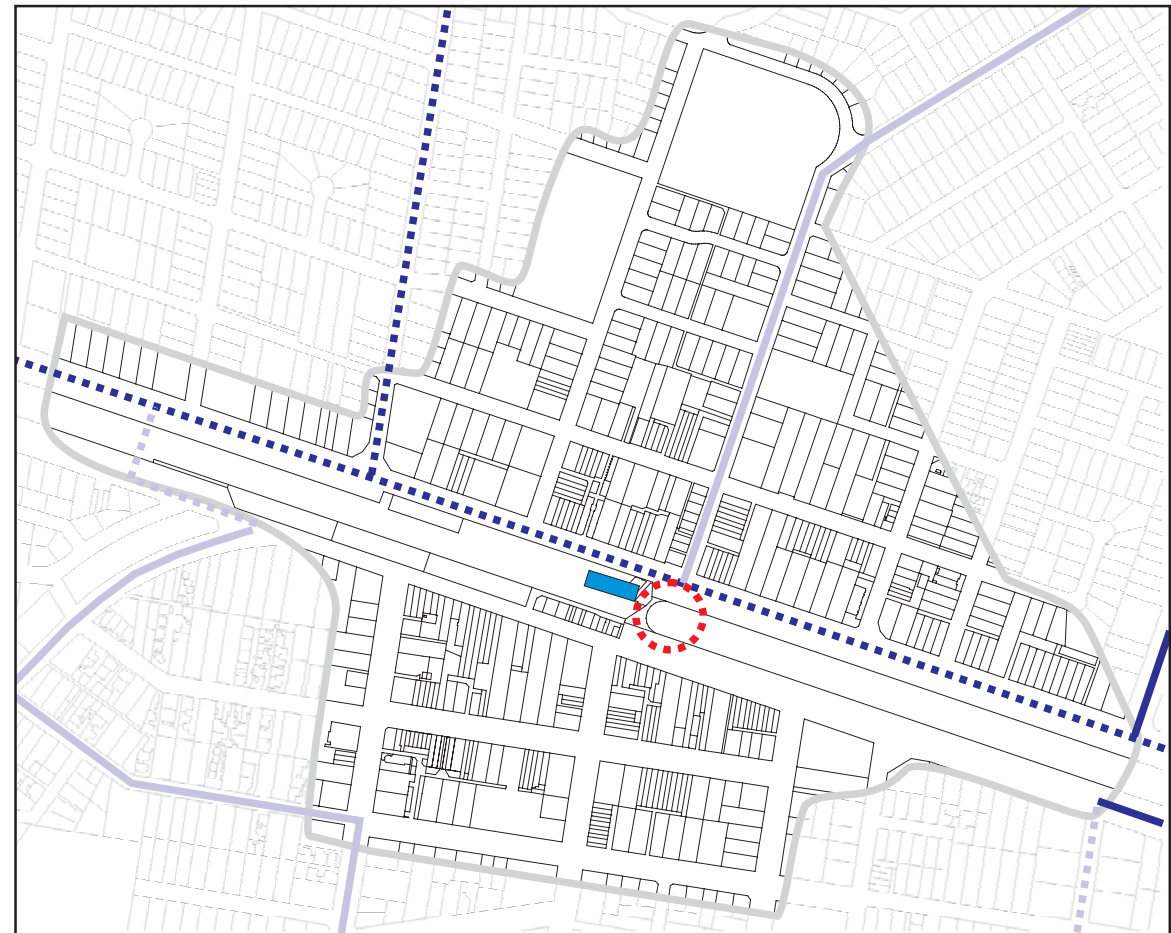
Existing cycle facilities within Morwell are limited to:

- On-street cycle lanes on Church Street; and
- On-street cycle lanes on Princes Drive to the east of the town centre; and
- A number of cycle racks for short term storage on town centre streets.

The map opposite shows Council's proposed cycle network which is being implemented over time using funding from VicRoads.

The proposed cycle network will improve the network, however additional issues that need to be addressed include:

- The rail line provides a barrier to cycle movement - existing crossing points are limited to the road bridges at either end of the town centre and informal use of the pedestrian underpass close to the station;
- Cycle storage facilities within the town centre are poor;
- Facilities for the integration of cycle trips with bus and rail trips are poor or non-existent; and
- The proposed cycle network contains gaps, particularly on the southern side of the town centre.



Priority Routes

- On-Road - Existing
- On-Road - Proposed
- Off-Road - Existing
- Off-Road - Proposed

Local Routes

- On-Road - Existing
- On-Road - Proposed
- Off-Road - Existing
- Off-Road - Proposed

- Barrier to cyclists
- Morwell Rail Station

Cycle Network Diagram

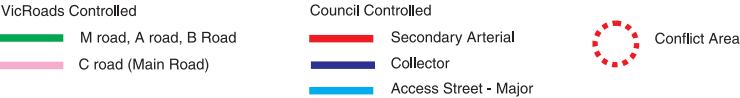
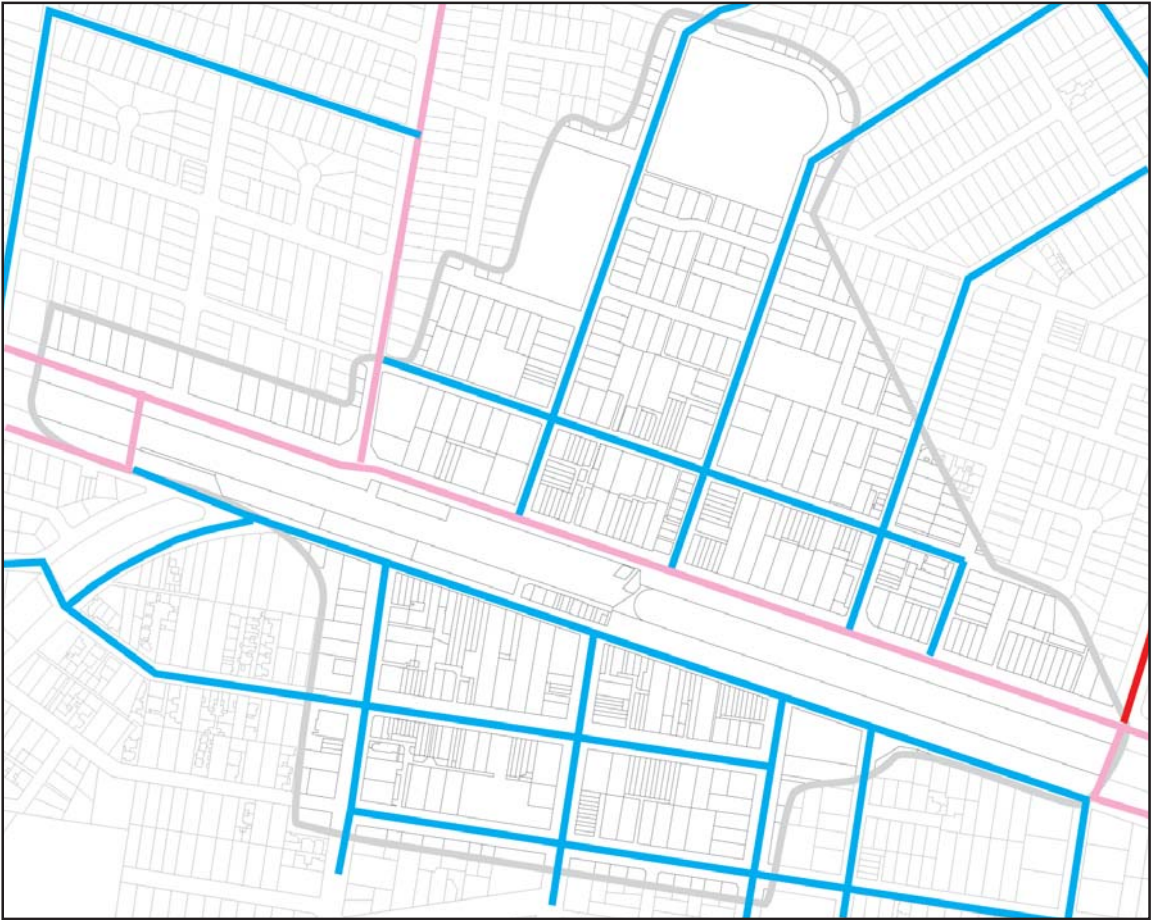
4.7 Road Network

As shown in the road hierarchy, the road network of Morwell is dominated by access streets, with Latrobe Road and Princes Drive the only main roads identified. Congestion is not an issue for Morwell as the Princes Freeway, bypassing the town centre to the south, carries the vast majority of east-west traffic.

A key feature of Morwell's road network is the use of local area traffic management. This has been achieved by extensive use of roundabouts, and parallel parking on the central section of the road reservation. This is particularly a feature of the areas to the south of the rail line.

The rail line is a significant barrier to vehicular access through the town centre, with vehicles restricted to crossing the rail line to either the east or west of the town centre.

A number of traffic signals control the flow of traffic through key intersections, including a pedestrian only signal of Commercial Road, immediately south of the pedestrian underpass of the rail line. At the time of this report, traffic signals were being constructed at the intersection of Church Street and Princes Drive, in conjunction with improvements to the Morwell pedestrian underpass and station car park.



Road Network Diagram

4.8 Parking

On-street

On-street parking restrictions radiate out from Morwell railway station, with restrictions of 1 hour or less in streets between Buckley Street, Princes Drive and Commercial Road. Areas of 2 hour parking extend for a further block in each direction.

Much of the on-street parking in Morwell is underutilised. This situation is particularly obvious in areas to the north of and including Buckley Street where an abundance of short-stay parking spaces outside vacant retail and commercial premises remain empty for most of the day. On-street parking to the south of the rail line is dominated by parallel, central road reservation parking with 2 hour limits, which are also commonly underutilised.

Off-street

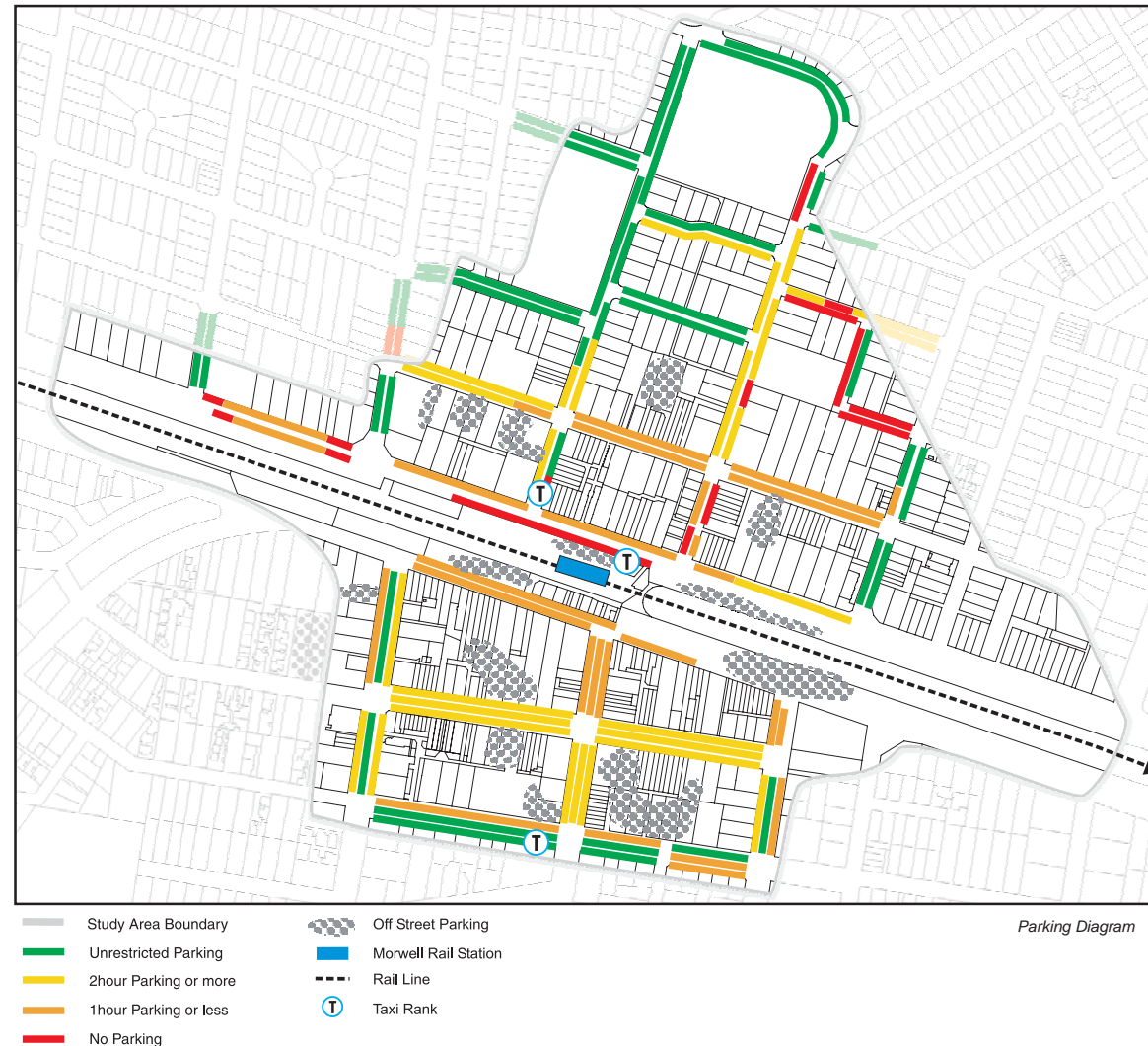
The most significant areas of off-street parking are situated to the south of the town centre associated with the retail outlets on either side of George Street. A section of the large Coles car park is under cover. Sections of formal and informal parking are located adjacent to the railway station and bus terminal, on both sides of the rail line.

To the north of the rail line the public carpark on Foster's Lane, behind the Post Office, is relatively well utilized, however the large carpark on Buckley Lane, is generally unused.

A number of off-street car parks are not well signposted, with little indication as to who the facility is provided for what time restrictions are in place.

Taxis

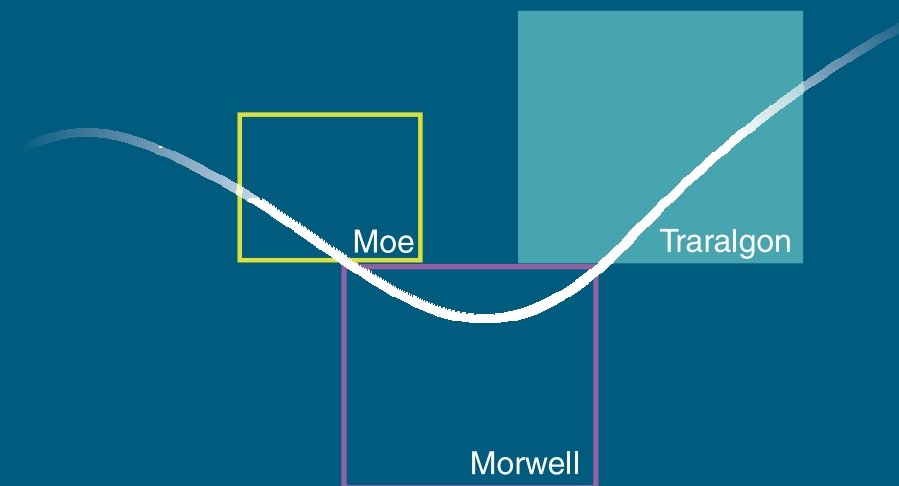
Taxi ranks are provided on Princes Drive close to the station, at the southern end of Collins Street and Elgin Street outside the RSL. Generally facilities at ranks are poor, however the current building works at the interchange will improve facilities at this location.



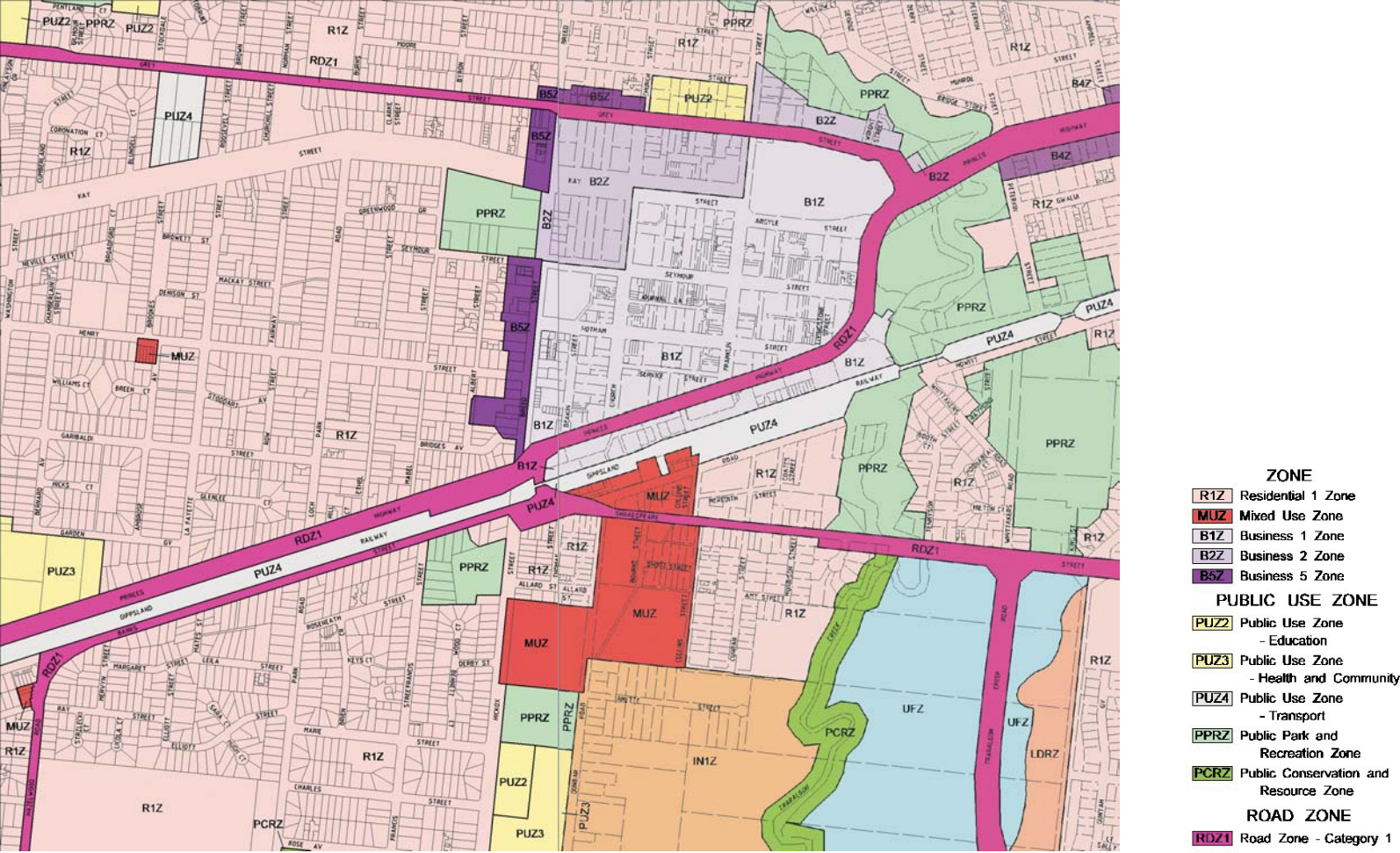
Parking Diagram

5 Traralgon

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5.1 Land Use Zones



Cycle routes Diagram

5.2 Activities

Traralgon is a vibrant and robust town centre. The commercial core of the town is consolidated on the northern side of the rail line, with light industrial and residential uses located immediately to the south. The northern, commercial precinct has high occupancy rates and a strong mix of uses. The uses include entertainment uses- pubs, cafes and clubs. There is a greater diversity of entertainment uses in Traralgon than in Moe and Morwell.

Traralgon has excellent green, open spaces with substantial parkland provided adjacent to the Traralgon Creek. Good recreational facilities are also provided in the parks.

A significant number of heritage railway items are also located to the south-east of the station.

Retail

Traralgon has a strong retail core providing a large and varied range of goods and services from smaller, independent shops to a number of supermarkets and larger, key chain stores.

Residential

On the northern side of the station dwellings are located on the north and west sides of the retail centre. On the south, residential uses are immediately adjacent to industrial uses and abut railway land.

Offices

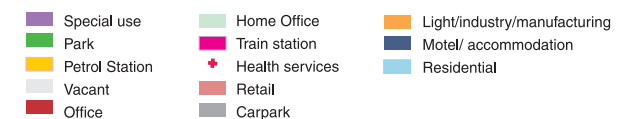
There is a large number of offices in Traralgon. These largely occur adjacent to the core retail area. Most banks and professional services are located in Traralgon.

Light Industry

Traralgon has a number of light industrial uses located to the south of the station. These include petrol depots, concrete manufacturing and a brick works as well as smaller automotive services.



Land use Diagram



5.3 Public Realm

Traralgon boast a public realm of good, consistent quality.

Public Amenity

Public amenity is consistently good through the town centre. This includes an excellent quality and provision of street furniture, street trees, and paving surfaces.

Street Activity

The streets of Traralgon are active and vibrant with a strong retail centre. There are very few vacant buildings and generally each building provides excellent frontage to the street. This lessens somewhat at the fringes of the centre, where there are a larger number of offices that provide less activity to the street. However, even in these locations buildings present well to the street.

There is a less pedestrianised environment on the south side with more light industry and less active uses facing the street.

Pedestrian Connections

Pedestrian connections through the Traralgon town centre on the north side of the railway are generally good. However, many informal pedestrian connections cut internally through blocks which involve passing through informal car parks with poor surveillance provided from adjacent buildings.

The entrance to the railway overpass from the north is largely hidden. The ramped access is steep and of low quality. Access is equally poor from the south. The journey over the overpass is overly long and awkward, with poorly placed entrances and exits.

Those with mobility difficulties, such as some disabled or elderly people, are generally well catered for in terms of pedestrian facilities in the town centre, particularly to the north of the rail line. Footpaths south of the rail line are also of satisfactory quality however the links across the rail line are poor.

The most direct pedestrian link across the rail line is at the railway station. However for the reasons discussed above, this facility is unsuitable for those with mobility difficulties. The other crossing options are less attractive for reasons of personal security and due to their circuitous nature.



- No footpath
- Typical Residential
- Semi-Active Frontage
- Inactive Frontage
- Active Frontage
- Pedestrian Connection
- No Edge [Carpark/Vacant]

Public Realm Diagram

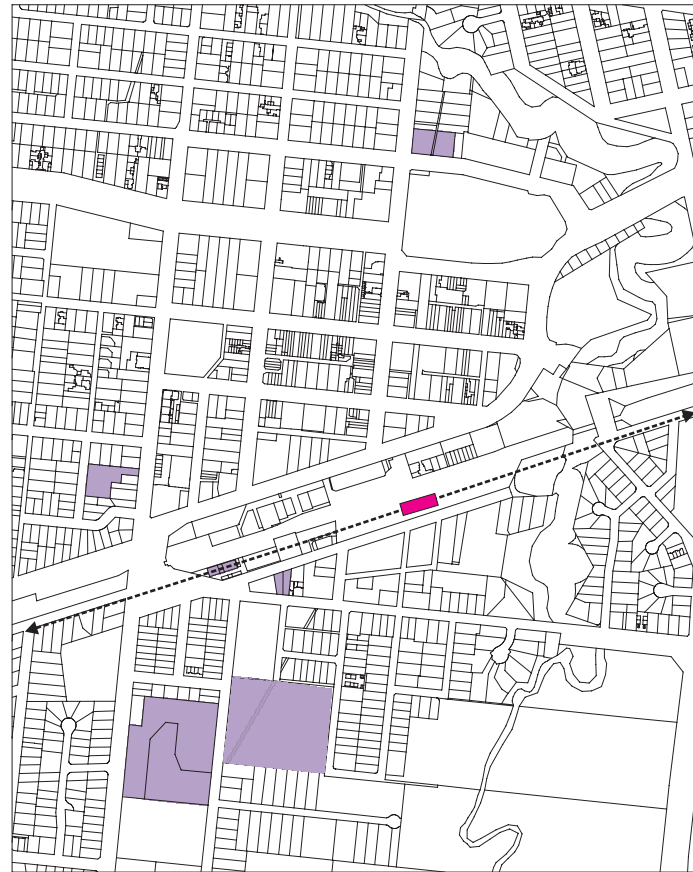
5.4 Built Form Character and Development Opportunities

There are a number of development opportunities in Traralgon. These are primarily located on railway land adjacent to the tracks and on larger sites - primarily to the south - previously and presently used for industrial purposes. These include:

- The concrete works site to the south of the station
- Manny's market in the north of town
- The disused council depot to the south of the station

Built Form Character

Predominantly 1-2 storey buildings, with a small number of 3-4 storey buildings on the northern edge of town. Most commercial buildings are either brick or concrete construction, with most residential buildings constructed of timber or brick.



Development Opportunities

Development Opportunities Diagram

5.5 Public Transport

Bus Services

Bus services in Traralgon are largely focused on serving the local neighbourhood areas surrounding the town centre. Many of the services link the town centre to the surrounding schools and hospitals in the area. The majority of services make a loop through the town centre in a clockwise direction along Franklin, Seymour, Church and Kay streets. Service frequencies are outlined in the following table:

Destination	AM (7:00-9:00)	Off Peak (9:00-5:00)	PM (5:00-7:00)	Days of Service
Rangeview	0	8	0	Mon-Sat
Freeman Park	1	7	0	Mon-Sat
Park Lane	0	1	0	Mon-Fri
Kosciusko St	1	7	0	Mon-Sat
Hazelbank	0	4	0	Mon-Fri
Traralgon East	1	7	1	Mon-Sat
Lansdowne Rd	1	6	1	Mon-Sat
Traralgon East/ Lansdowne Rd	1	0	0	Mon-Fri
Moe via Morwell	2	7	2	Mon-Sat

The main Traralgon bus terminal consists of two large adjoining bus shelters immediately adjacent to the entrance of Traralgon Centre Plaza on Franklin Road. The shelters are located on a paved pedestrian island, with a taxi rank on one side of the island and bus zone on the other, with the shelters facing the taxi rank. The shelters provide adequate quality shelter and seating. Information is basic and haphazardly arranged, consisting of a display case with a number of printed timetables and route maps. Access to the bus stop requires pedestrians to cross the lane created by the taxi rank.

A bus shelter is also located on Princes St in front of Traralgon rail station, however only the 11 daily intercity bus routes linking to Midvalley. Morwell and Moe use this stop. The majority of other bus stops in the town centre consist of shelter with simple information.

VLine bus services, linking with train services, use the bus stop immediately outside the station entry.

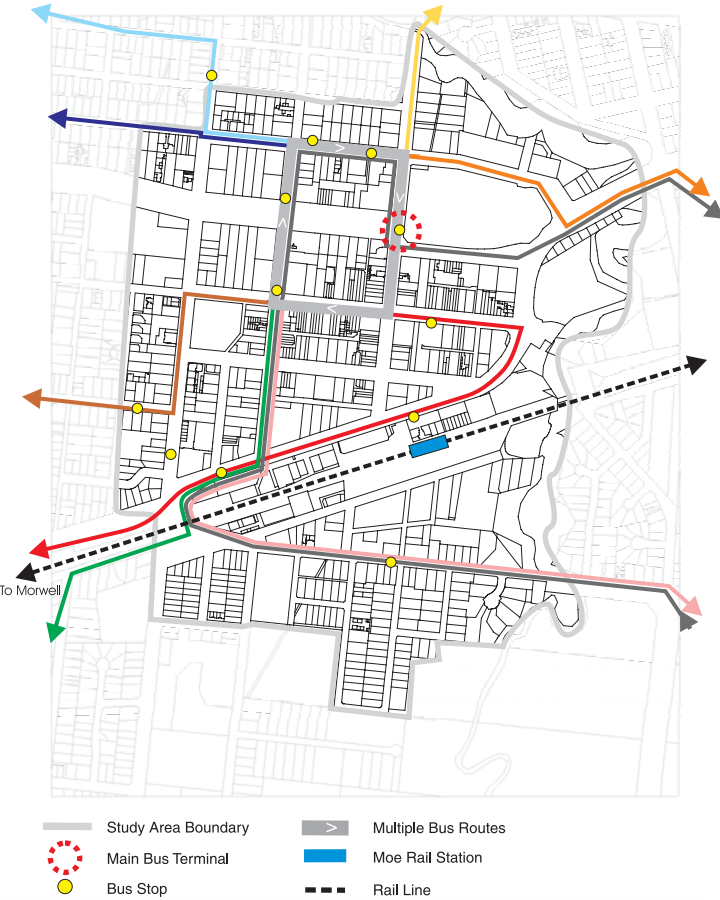
Rail Facilities

From Traralgon, services take approximately 2 hours 10 minutes to reach Melbourne. The Fast Rail Link project to the Latrobe Valley, due for completion in mid 2005, will reduce the travel time by approximately 20 minutes for express services from Traralgon.

The Princes Highway separates Traralgon town centre from the rail station. The main station entrance is accessed from the northern side of the rail line, and is integrated into the Southside Central shopping centre to such an extent that it is not immediately clear where the station entrance is located. The main station entrance opens to large waiting room with entrances to local shops, and a pedestrian ramp up to a ticket office and the platform. The waiting room has a small number of seats available and an electronic indicator board as well as adequate shelter and lighting.

Of the two platforms, only the northern one is functioning, with pedestrian access from the south via a rudimentary pedestrian overpass. The southern platform is inaccessible, and is currently used as an exhibition hall/art studio. A small bus zone immediately adjacent to the rail station entrance is used by the supplementary V/Line coach service only.

The station car park is located to the west of the station entrance, and can accommodate approximately 80 vehicles, of which a large proportion are typically occupied. A significant number of car spaces are available in other areas surrounding the station, particularly to the south of the rail line, near Queens Parade.



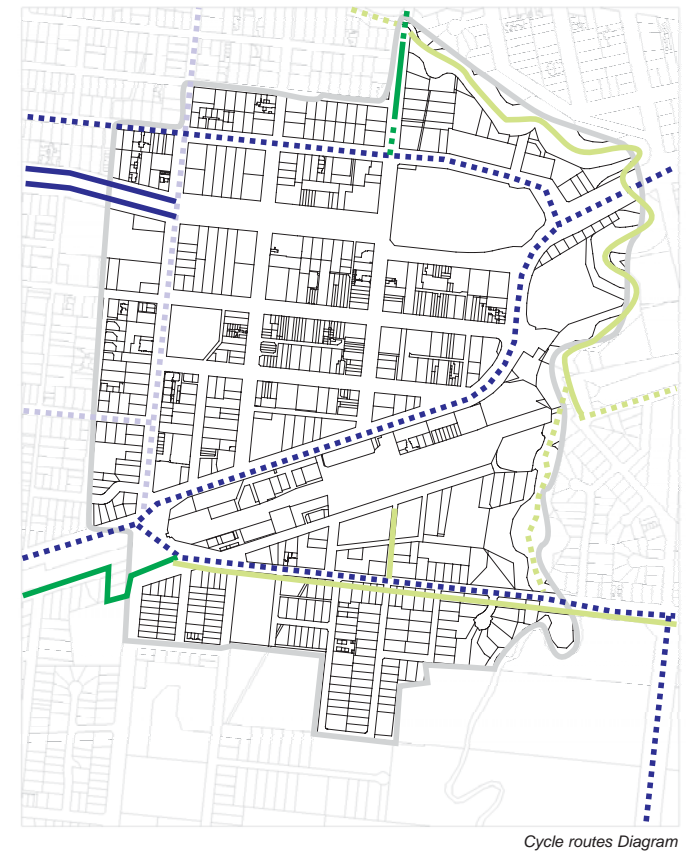
5.6 Cycling

The plan opposite shows the proposed cycle network for Traralgon. In general existing facilities comprise:

- Off-street shared path along the southern side of Shakespeare Street;
- Off-street shared path along the creek to the east of the town centre;
- Off-street path along Kay Street to the west of the town centre;
- Short term cycle parking on the Traralgon Centre Plaza.

Discussions with local cyclists and site observations have raised the following issues to be addressed:

- Existing off-street paths provide good facilities but some are poorly marked and integrated with the rest of the transport network;
- Signposting could be improved to inform people of the opportunities;
- The highway presents a barrier to cyclists;
- There are no facilities to encourage modal interchange between cycles and bus/train;
- The proposed network will improve the choice of routes but does not link to the main activity centres or the station; and
- Existing access across the rail line is poor, with crossing points limited to the road under the rail line in the west, the pedestrian bridge at the station (which requires bikes to be carried) or the path alongside the creek. This access is also limited with sections of this path occasionally submerged as a result of the flooding of Traralgon Creek during periods of excessively wet weather.



Local Routes		Priority Routes			
	On-Road - Existing		On-Road - Existing		Barrier to cyclists
	On-Road - Proposed		On-Road - Proposed		
	Off-Road - Existing		Off-Road - Existing		
	Off-Road - Proposed		Off-Road - Proposed		

5.7 Road Network

The road hierarchy for the town centre is shown on the adjacent plan. The plan clearly shows that the major routes maintained by VicRoads are:

- Princes Street, running immediately north of the rail line, forms the town centre link of the Princes Highway, and the overall east-west route through southern Victoria;
- Grey Road, passing through the north of the town centre, linking it with Traralgon West via Tyers Road; and
- Shakespeare Street, passing through the south, forming a link on the Hyland Highway and through the precinct of Loy Yang.

A number of issues have been raised in relation to the road network, including:

- The Princes Highway carries high volumes of traffic, including a relatively high proportion of heavy vehicles, which can affect the amenity of the area, but could also assist the local economy. A bypass route, passing well south of Traralgon Town Centre is currently being investigated by VicRoads, however construction of this route is not expected to take place for another 15-20 years;
- Signalised crossing points of the highway are provided for pedestrians, however at the eastern end of the town centre crossing opportunities are limited and the highway creates a barrier to local movement;

- Taxi and bus operators have noted that the pedestrian crossing points within the town centre cause delays and some congestion at peak times;
- Many streets within the town are wide with little encouragement to drivers to remain below the 50kph speed limit; and
- Currently buses and private vehicles use one of the driveways of the adjoining Mobil petrol station and car wash, passing over a section of private land to access the South Side Central car park and bus station from the east. This practice seems to be an informal arrangement accepted by the existing petrol station owners.



5.8 Parking

On-street

The demand for on-street parking in Traralgon is focused along Franklin, Seymour, Church and Hotham streets. Accordingly, the parking restrictions are most limiting in these areas, with the majority of on-street parking being restricted to 1 hour or less. Two hour on-street parking generally extends one block to the north and west of this area, with on-street parking beyond this typically being unrestricted.

To the east, the barrier created by Traralgon Creek and the Princes Highway severely restricts the supply of on-street parking. To the south of the rail line there are very few restrictions to on-street parking and demand appears to be low.

Off-street

The most significant supply of off-street parking is located under and adjacent to Traralgon Centre Plaza, with well over 500 spaces available. This carpark is heavily utilized throughout the day and mitigates the severe limitations to on-street parking in the north east of the town centre. The next largest off-street parking supply is located at the Safeway supermarket on Breed street, between Hotham and Seymour streets.

Large off-street parking areas are available to employees of the private and government offices to the north of the centre, and to customers and staff of retail outlets between Seymour and Kay streets.

Sections of off-street parking are available for customers of the retail outlets in the Southside Central Shopping Centre, south of the Princes Highway, and for commuters using the rail station.

In addition, a large area of public parking is available to the north of the ASIC building, with access from Wright Street and Franklin Street, north of Grey Street.

Taxis

The main taxi rank is located outside the Traralgon Centre Plaza, which is heavily used throughout the day. Access and egress by taxis is limited at this location by the road layout. Facilities for waiting passengers are also poor.

A second taxi rank, located on Seymour Street is used at night.

Discussions with the local taxi operator indicate that a taxi is dispatched to meet arriving trains, using the taxi rank provided outside the station.

In addition, the Shell Service Station on Princes Street is used as an unofficial taxi rank during the evenings.

