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Balwyn Parking Precinct Plan

27 May 2013

ADOPTED

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Table Of Contents

Chapter / Section

Page No.

Executive Summary

1	Introduction	9
1.1	Parking Precinct Plan Objectives.....	9
1.2	The Study Area.....	9
1.3	Outline of the Report.....	10
2	Policy, Practice and Precedent	12
2.1	Context.....	12
2.2	State Plans and Policies.....	12
2.3	Local Plans and Policies.....	16
2.4	Parking Precinct Plan Practice.....	22
2.5	Summary of the Planning and Policy Review.....	24
3	Land Use, Demography and Road Safety	25
3.1	Overview of the Balwyn Activity Area	25
3.2	Commercial Profile	25
3.3	Demographics.....	26
3.4	Travel Behaviour.....	27
3.5	Road Safety	31
3.6	Key Findings and Implications	32
4	Parking Supply	34
4.1	Car Parking Supply.....	34
4.2	Accessible Parking Supply	39
4.3	Bicycle Parking Supply	40
4.4	Loading Provision/Supply.....	40
4.5	Taxi Rank Provision/Supply	40
5	Parking Demand	41
5.1	Car Parking Demand.....	41
5.2	Accessible Parking Demand	49
5.3	Bicycle Parking Demand	50
5.4	Motorbike Parking Demand.....	50
5.5	Loading Demand	50
5.6	Taxi Demand	51
6	Parking Supply and Demand Summary	52
6.1	Overall Situation.....	52
6.2	Situation by Quadrant.....	52
6.3	Key Findings and Implications	54
7	Community Feedback	55

Table Of Contents

Chapter / Section	Page No.
7.1 From the Structure Plan Process.....	55
7.2 From Other Recent Activity Area Surveys.....	55
7.3 From Ratio Surveys of Activity Area Traders	56
7.4 From Ratio Surveys of Activity Area Customers	59
7.5 Key Issues and Implications.....	60
 8 Strategic Issues and Opportunities	 61
8.1 Context.....	61
8.2 Improved Management of Existing Parking.....	62
8.3 Parking Provision for Future Development.....	65
 9 Recommendations	 72
9.1 Principles.....	72
9.2 Recommendation 1: REVIEW AND OPTIMISE PUBLIC PARKING TIME LIMITS	72
9.3 Recommendation 2: SUSTAINABLE TRANSPORT PARKING IMPROVEMENTS.....	72
9.4 Recommendation 3: ACCESSIBLE PARKING	73
9.5 Recommendation 4: REVISE OFF-STREET PARKING LAYOUTS.....	73
9.6 Recommendation 5: CAR PARKING PRECINCT PLAN	73
9.7 Recommendation 6: ECONOMIC ASSESSMENT	74
9.8 Recommendation 7: SUSTAINABLE TRANSPORT RATES.....	74
 10 Implementation Plan	 77

TABLES

Table 2.1 - Existing Clause 52.06 Parking Rates.....	13
Table 2.2 - Some of the Proposed New Clause 52.06 Parking Rates	15
Table 2.3 - Clause 22.03 Parking Rates.....	18
Table 2.4 – Boroondara Submission on the new Clause 52.06 Rates	19
Table 3.1 - Retail Profile in 2006.....	25
Table 3.2 - Mode Choice Data for Balwyn Residents in 2006	27
Table 4.1 - Main Off-Street Parking Areas	38
Table 8.1 – Future Growth and Parking Requirements	70
Table 8.2 – Parking Requirements by Structure Plan Area	71

Figures

Figure 1.1 - Study Area	11
Figure 3.1- Lane Use Zoning	30
Figure 3.2 - Pedestrian and Cyclist Crashes.....	33
Figure 4.1 - Parking Survey Area.....	35
Figure 4.2 - On-Street Parking Controls	36
Figure 4.3 - Off-Street Parking Controls and Public Bicycle Parking Rails	37
Figure 5.1 - Thursday Parking Occupancies.....	45
Figure 5.2 - Friday Night Parking Occupancies.....	46
Figure 5.3 - Saturday Parking Occupancies.....	47
Figure 9.1 - Parking Actions.....	76

Table Of Contents

Chapter / Section	Page No.
APPENDICES	
Appendix A	Parking Occupancy Surveys
Appendix B	Parking Duration Surveys
Appendix C	Consultation

EXECUTIVE SUMMARY

Balwyn is Boroondara's premier Neighbourhood Activity Area. The City of Boroondara recognises the importance of maintaining a good standard of parking in the Centre, and has commissioned a study to assess existing conditions and guide future parking directions. The study informs parking for private vehicles, commercial vehicles, scooters/motorbikes, community services, taxis and bicycles.

The study has been prepared to supplement the Balwyn Structure Plan of 2009, which is focussing on wider planning strategies for Balwyn. In addition, the study has been developed in parallel with an Access Plan which seeks to support healthier and more sustainable transport modes.

The study will inform the development of a Parking Precinct Plan and provide parking related recommendations that support alternatives to private car transport. In line with the Transport Integration Act 2010, the study (and related Parking Precinct Plan) will ensure that no one component of the transport system is considered in isolation and that policy direction in social inclusion, sustainability, efficiency, health and wellbeing, and economic prosperity are considered.

A review of the recent land use, demographic and travel data shows that:

- Balwyn Activity Area is predominantly a commercial office and retail precinct. Offices are generally small. The retail component is dominated by the Safeway supermarket.
- The Balwyn population is elderly and ageing further. However, it also has a higher than Boroondara average school aged population.
- Despite the convenient public transport (especially tram), journeys to work by Balwyn residents are predominantly by private car, with only 2% walking to work.
- Household car ownership is generally high, except for studio and one-bedroom dwellings where only 50% of households own a car (that is 0.5 cars per one-bedroom dwelling).

A series of parking surveys were carried out on Thursday 23, Friday 24 and Saturday 25

June 2011. A review of the survey results showed:

- Signage in some off-street areas is obscured and confusing.
- There is currently a generous amount of public parking available for the area as a whole.
- Some short-term areas are being occupied beyond their time limits.
- Some long-term (all-day) areas are being occupied for short stays.
- There are no areas specifically set aside for traders, excepting those assigned to Safeway.
- There is no designated motorbike/scooter parking although demand exists.
- A gap in accessible parking provision exists to the western side of the Activity Area.
- Demand is high for bicycle parking around the Balwyn Library and greater provision is required.
- The north-west precinct is the one with least public/shared parking available, and therefore with least scope to provide concessional parking for new developments.

Consultation with traders and other members of the local community identified the following parking issues for the Balwyn Activity Area:

- Although most employees currently drive private cars to/from the Activity Area, many of them have public transport or bike travel as available options. Providing improved facilities may tap this latent demand for more sustainable travel.
- Traders perceive that the majority of their customers (that is over 80%) drive, when in fact in-centre surveys indicate that mode share is more balanced; 58% drive and 31% walk. Maintaining and improving pedestrian facilities will be important in retaining and extending this activity.
- 20% of traders see a benefit in introducing car share to the Activity Area. A high proportion of traders are aware of Car Share.
- There is a need to improve management of off-street parking areas to match time limits to user needs, and to provide all-day areas for traders.
- There is substantial sharing of parking resources for multi-purpose trips, especially including the existing supermarket. New parking resources should be provided to continue and extend this practice.

A strategic assessment of the existing characteristics of the Balwyn Activity Area, and its future needs as identified in the Structure Plan and the Access Plan, set the following priorities for action in the study:

- To modify some time limits to improve parking efficiencies and support employees, business and the community;
- To strategically support bicycle, motorbike, accessible, taxi, and Car Share parking that would help to serve to manage private car parking demands;
- To require future development to provide less car parking on-site, more parking in publicly-available off-site locations (that would require a cash-in-lieu mechanism) where shared use can occur, and more complementary provision for Car Share, bikes, motorbikes and motor scooters.

A series of study recommendations was formulated to guide implementation, as follows:

1. Review and optimise public parking time limits, so that existing parking resources are more efficiently used.
2. Sustainable transport parking improvements are needed, notably more and better located parking for bikes, motorbikes and scooters, Car Share pods, taxi zones and community bus stops.
3. Accessible parking needs to be upgraded in layout and quantity.
4. Off-street (public) parking layouts should be revised, so that amenity and pedestrian convenience are improved. In particular:
 - Adjacent Weir Street, 90 degree parking both sides with slightly wider parking bays to accommodate vehicular turning movements;
 - Investigate closure of the southern end of Yerrin Street and provision of extra spaces across the road reserve in combination with the creation of park space.
5. A Car Parking Precinct Plan is required to give statutory effect to the study, as follows:
 - coverage to be land in Business 1 and 2 Zones;
 - car parking for new studio and one-bedroom dwellings to be 0.8 resident spaces each;
 - car parking for two-bedroom dwellings to be 1 resident space per dwelling;

- car parking for three-bedroom dwellings to be 2 resident spaces per dwelling;
- car parking for new office and shops to be at a rate of 3.0 spaces/100 sq m leasable floor area;
- car parking for new restaurants to be at a rate of 3.5 spaces/100 sq m leasable floor area;
- encouragement for visitor and customer parking to be provided off-site, financed by cash-in-lieu contributions where appropriate; and
- dispensation may be granted for residential visitor and commercial visitor/customer parking in mixed use developments if effective sharing of parking can be demonstrated.

The new PPP will need to include cash-in-lieu provisions related to parking improvement projects to which the funds will be allocated. The following projects, which are subject to further investigation, would likely qualify:

- closure of the southern end of Yerrin Street and provision of extra spaces (combined with open space provision);
- purchase of land to create extra shared use public parking.

6. Economic assessment is required to examine the most feasible configuration and location for providing cash-in-lieu car parking that would also allow an element of shared use, and also for bicycle parking. It would include the identification of location, land and infrastructure costing and contributions. An initial assessment of likely commercial and retail development of the next 15 years indicates a need for 86 parking spaces to be provided by cash-in-lieu, mostly in the retail core area east of Balwyn Road.

7. Sustainable transport rates are required for bicycle and motorbike parking, to complement the outlined car parking provisions of the Parking Precinct Plan. Car share will be considered as a component of residential planning applications in line with any future Council Car Share policy. The Parking Overlay is to give statutory effect to the following bicycle parking rates:

- Office development employees - 1 space per 200 sq m gross floor area;
- Office development visitors - 1 space per 1000 sq m of net floor area;
- Shop development employees - 1 bicycle space per 300 sq m;
- Residential apartment (secure accessible spaces) - 1 space per new studio and one-bedroom - 1.5 spaces per new two-bedroom dwellings - 2 spaces per new three-bedroom dwellings; and
- Residential apartment visitors (publically accessible) - 1 per 5 dwellings.

The Parking Overlay is to give statutory effect to a motorcycle parking rate of 1 motorbike space per 50 car parking bays within residential apartments.

The Balwyn Activity Area will continue to increase in terms of commerce, and as a place to live. Whilst additional residents within the Activity Area will strengthen daily retail catchment, particularly by walking, it will continue to be important to strengthen parking amenity as activity increases. It is critical that development needing a permit accommodates parking needs to all modes and helps to strengthen both car provision and more sustainable and healthier transport behaviour. This study, including its integral Parking Precinct Plan outline, provides the mechanism to deliver this result.

In May 2012 while the Balwyn Study was in progress, car parking provisions were reformed under Ministerial Amendment VC90 – New Format Car Parking Provisions. The new provisions have implications on Council's Car Parking Policy at Clause 22.03 of the Boorondara Planning Scheme and in effect, make the policy redundant because the uses and parking rates previously covered by the policy are now covered by the State provisions. The new provisions allow Council to consider the introduction of a Parking Overlay, which is a statutory control generally equivalent to a Parking Precinct Plan. The VC90 "Column B" parking provision rates, which are those proposed for areas covered by a Parking Overlay (or PPP) are set out in the following table. This indicated that the Balwyn PPP rates are generally lower, reflecting the emphasis on promoting sustainable transport.

Use	VC90 Column B Rate	PPP Rate	Is PPP rate higher or lower than Column B?
Dwelling 1-2 bedroom	1 space per dwelling	0.8 spaces per 1 bedroom 1 space 2 bedrooms	LOWER
Dwelling 3 or more dwelling	2 spaces per dwelling	2 spaces	SAME
Dwellings visitors	0 spaces	1 per 5 dwellings	HIGHER
Office	3 per 100 sq m net floor	3 per 100 sq m leasable floor area	SAME
Restaurants	3.5 per 100 sq m leasable floor are	3 per 100 sq m leasable floor area	LOWER
Shop	3.5 per 100 sq m leasable floor are	3 per 100 sq m leasable floor area	LOWER

1 Introduction

1.1 Parking Precinct Plan Objectives

Balwyn is Boroondara's premier Neighbourhood Activity Area. The City of Boroondara recognises the importance of maintaining a good standard of parking in the Centre, and has commissioned a study to assess existing conditions and guide future parking directions. The study informs parking for private vehicles, commercial vehicles, scooters/motorbikes, community services, taxis and bicycles.

The study has been prepared to supplement the Balwyn Structure Plan of 2009, which is focussing on wider planning strategies for the Centre. In addition, the study has been developed in parallel with an Access Plan which seeks to support healthier and more sustainable transport modes.

The study will inform the development of a Parking Precinct Plan and provide parking related recommendations that support alternatives to private car transport. The study also provides parking related recommendations that enable the implementation of improvements outlined in Balwyn Structure Plan (2009).

The Project Brief set out the following aims for the Balwyn Activity Area Parking Precinct Plan:

- To understand the existing parking characteristics of the area.
- To identify shortfalls in existing short and long term parking provision and strategies to address identified shortfall(s).
- To establish the future demand for parking spaces and develop strategies to meet this demand including the development of a Parking Precinct Plan for the Study Area.
- To establish appropriate management tools to manage existing and future parking demands and their impacts on the surrounding areas.
- To specify a way forward in terms of the application of the study and the mechanisms which could be adopted to apply the recommendations.
- To develop Planning Scheme Amendment documentation to incorporate the Parking Precinct Plan into the Boroondara Planning Scheme.

In the broader sense, the project responds to the Victorian Government's initiatives toward Parking Precinct Plans (PPPs) for Activity Areas, as outlined in the July 2002 Practice Note, and it provides the background data and establishes the framework for the future adoption of a PPP for the Balwyn Activity Area.

1.2 The Study Area

The Study Area for the Balwyn PPP is externally bounded Gordon Street and Yarrbat Avenue to the north, Millah Road and Vauxhall Road to the south, and extends along Whitehorse Road generally between Maleela Avenue in the west and Wharton Street in the east. Refer Figure 1.1 - Study Area.

1.3 Outline of the Report

The report structure is as follows:

- Section 2 summarises the relevant strategic and statutory background documents and creates context for the study;
- Section 3 presents the land use, demographic, and travel characteristics of the Study Area;
- Sections 4 and 5 summarise parking supply and demand surveys undertaken in the Centre
- Section 6 summarises the outcomes of the supply and demand evaluations.
- Section 7 presents some of the parking-related feedback revealed by recent consultation processes;
- Section 8 discusses strategic issues and opportunities for improved management of existing parking resources, and a sustainable framework from provision of parking for future developments;
- Section 9 sets out the study recommendations for the Centre based on the survey results and other findings.

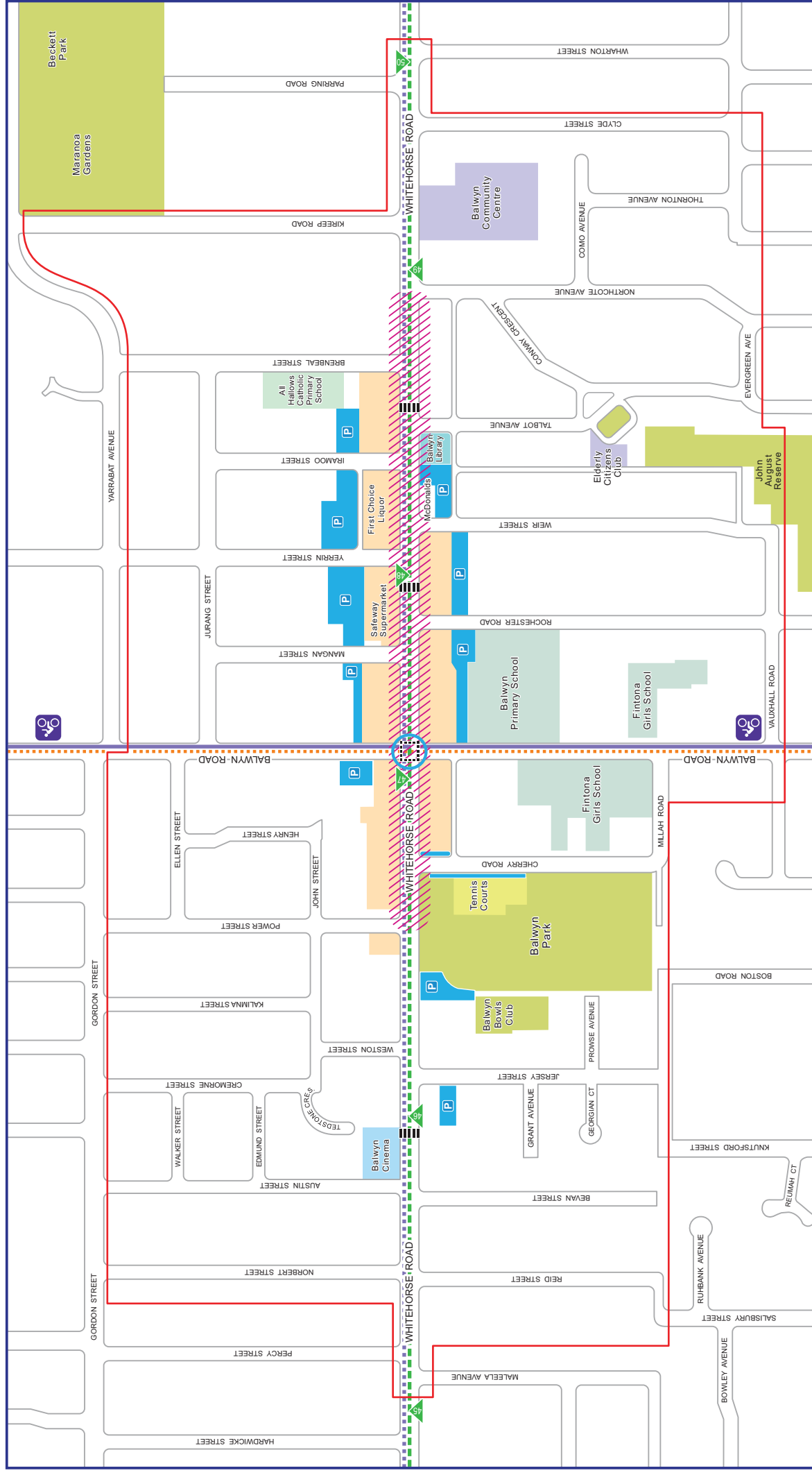


FIGURE 1.1 STUDY AREA

2 Policy, Practice and Precedent

2.1 Context

There are numerous State Government and City of Boroondara plans and policies which apply to land use, development and transport in the Study Area.

These documents, together with precedents from other Melbourne Councils, help us to understand the planning guidelines that would seek to shape and influence future development and changes within the Balwyn Activity Area.

2.2 State Plans and Policies

Transport

At the State Government level, the main plans and policies are summarised below and reflect global trends toward lower carbon emissions, sustainability and more active lifestyles.

The **Integrated Transport Act 2010** and **Clause 18 of the Boroondara Planning Scheme** support improved integration between the various transport modes, and the promotion of sustainable modes such as cycle, walk, public transport and Car Share, over private car use.

The State transport integration policies rely on the Principal Public Transport Network (PPTN), which is intended to provide accessibility options for travel, particularly to, from and within Activity Areas.

Melbourne 2030 was designed in 2002 as the long term plan for managing Melbourne's growth and development. Melbourne 2030 forms part of the State Planning Policy Framework and is referenced within all planning schemes in Victoria. It promotes increased population density in inner-areas, particularly around Activity Areas and along public transport corridors. A key focus is also better transport links, with recommendations to upgrade and develop the Principal Public Transport Network, and local public transport services to connect Activity Areas and provide faster, more reliable and efficient transport.

The current (2012) government has commenced preparing a new metropolitan planning strategy to manage Melbourne's growth and change as it moves beyond a city of four million people. The strategy will consider where new housing and business activities should be concentrated as well as transport connections, health services, schools, sports grounds and parks.

The **Victorian Transport Plan** is Victoria's most recent transport planning framework, which is currently in the process of being superseded by the current (2012) government. The Victorian Transport Plan maintains current relevance because it is referenced in the Transport Integration Act, Victoria's prime transport statute.

The Plan addresses future needs for transport infrastructure and services, together with the associated Victorian Walking Strategy, Cycling Strategy and Bus Reviews. Of relevance to the Balwyn Activity Area, The Plan recommends:

- Protecting the liveability of established suburbs. This can be achieved via locating more housing in and around Activity Areas, along tram routes and the orbital bus routes on the Principal Public Transport Network.
- Making trains, trams and buses more accessible and connected to one another, giving people more confidence about the safety of the network.

- Greater priority to trams and buses on shared roads to improve service performance.
- Building a connected network of on and off-road bicycle and walking paths.
- Responding to the recommendations of the Metropolitan Bus Service Reviews.

The **Principal Bicycle Network (PBN)** is a network of cycle routes that provide access to key destinations within the Melbourne metropolitan area. The old PBN is currently under review, and the new version will ultimately provide a network that:

- is more 'destination-focused', connecting Activity Areas, Central Activity Districts and the Melbourne CBD to their cycling catchments;
- maximises separation between cyclists and motorists, as well as other priority treatments;
- increases use of local roads;
- increases use of off-road paths;
- designates two levels of route development – 'PBN Priority Routes' and 'PBN Support Routes' - Priority routes will be pro-actively developed by VicRoads - Support routes will be developed opportunistically through other major road projects such as road or intersection upgrades.

The **VicRoads SmartRoads Network Operations Plans** define a functional classification for main roads, especially to identify priority routes for public transport, cycle and pedestrian usage (including the Principal Bike Network and Principal Public Transport Network). The Road Use Hierarchy Map for Boroondara shows that:

- Whitehorse Road is a 'tram priority' zone.
- The Balwyn Activity Area is designated as a 'pedestrian priority' zone.

The **Route 109 tram** which runs through Balwyn Activity Area is part of the Principal Public Transport Network (PPTN). In line with the State's level access tram stop strategy, Route 109 will ultimately be fitted with quieter low-floor trams and DDA compliant stops by 2032.

The Balwyn Road bus route is not included on the PPTN, an issue identified by the Balwyn Structure Plan study as requiring attention.

Car Parking

The main reference document for the provision and design of car parking in Victoria are the Victoria Planning Provisions, upon which the Boroondara and all other Planning Schemes are based.

Clause 52.06 of the Victoria Planning Provisions sets out the guidelines for the provision of parking for new developments and redevelopments, and specifies the car parking rates for a variety of land uses. Parking rates for some notable land uses are shown below:

Table 2.1 - Existing Clause 52.06 Parking Rates

Use	Rate	Measure
Office other than listed in this table	3.5	Car spaces to each 100 sq m of new floor area
Shop other than listed in this table	8	Car spaces to each 100 sq m of leasable floor area
Restaurant	0.6	Car spaces to each seat available to the public

Under the Clause, a permit may be granted to reduce or waive the number of spaces based on the following considerations:

- Any relevant parking precinct plan.
- The availability of car parking in the locality.
- The availability of public transport in the locality.
- Any reduction in car parking demand due to the sharing of car spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces.
- Any car parking deficiency or surplus associated with the existing use of the land.
- Any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement.
- Local traffic management.
- Local amenity including pedestrian amenity.
- An empirical assessment of car parking demand.
- Any other relevant consideration.

Further to the Clause 52.06 provisions, Clause 55 of the Planning Scheme relates specifically to the development of Two or More Dwellings on a Lot and Residential Dwellings. Parking provision for such developments are stipulated under Clause 55.03-11, which requires:

- 1 space per 1 and 2 bedroom dwellings;
- 2 spaces per 3+ bedroom dwellings
- 0.2 spaces per dwelling for visitors

Council decision guidelines for the aforementioned rates include consideration of the following:

- The reduction in the demand for on-site parking in rental housing, managed by not-for-profit organisations, intended for residents likely to have a low level of car ownership.
- The number, type and size of dwellings.
- The availability of public transport and on-street parking
- The practicality of providing car parking on the site, particularly for lots of less than 300 square metres.
- The reduction of on-street car parking spaces associated with the provision of car parking on the site, particularly for lots of less than 300 square metres.
- Local traffic and parking management plans and safety considerations.
- Any relevant local planning policy or parking precinct plan.

To better reflect recent policy directions and empirical trends, the Department of Planning and Community Development has developed a set of **Draft Victorian Planning Provisions for Car Parking**. The draft provisions are proposed to replace Clause 52.06, remove its associated schedule, and introduce a new Parking Overlay with associated schedule. The Car Parking Advisory Committee 2011 has been established to review the proposed changes.

The rates which have been proposed for some key land use categories including office, shop and restaurant are set out in the table below. In most cases, the proposed rates are lower than those currently specified under Clause 52.06. The new parking rates had not been approved at the time of this report.

Table 2.2 - Some of the Proposed New Clause 52.06 Parking Rates

Use	Rate	Measure
Dwelling		
in an Active Area Zone	0	Car spaces to each dwelling
in a Business Zone	1	Car space to each one or two bedroom dwelling
	2	Car spaces to each three or more bedroom dwelling (studios or studios that are separate rooms must be counted as bedrooms)
Office		
in a Business Zone or Activity Area Zone	3	car spaces to each 100 sq m of net floor area
in another Zone	3.5	car spaces to each 100 sq m of net floor area
Shop		
in a Business Zone or Activity Area Zone	3.5	car spaces to each 100 sq m of leasable floor area
in another Zone	4	car spaces to each 100 sq m of leasable floor area
Restaurant		
in a Business Zone or Activity Area Zone	3.5	car spaces to each 100 sq m of leasable floor area
in another Zone	0.4	Car spaces to each patron permitted

Accessible Parking

There is no rate for the provision of accessible parking spaces specified in the Boroondara Planning Scheme. Accessible parking provision requirements are outlined in the *Disability (Access to Premises – Buildings) Standards 2010*, which are incorporated into the Building Code of Australia 2011. The Austroads guides also provide guidance on provision rates.

Bicycle Parking Scheme

The Boroondara Planning specifies the requirements for bicycles for new developments under Clause 52.34 Bicycle Facilities. The Clause stipulates the following rates for some relevant land uses. Notably for offices and shops, the bicycle parking requirements are only triggered for large scale developments.

Residential Dwelling

- In developments of four or more storeys, 1 resident space to each 5 dwellings
- In developments for four or more storeys, 1 visitor spaces to each 10 dwellings

Office

- Employee bicycle spaces - 1 space per 300 sq m of net floor area over 1000 sq m.
- Visitor bicycle spaces - 1 space per 1000 sq m of net floor area over 1000 sq m.

Shop

- Employee bicycle spaces - 1 space per 600 sq m of leasable floor area over 1000 sq m.
- Visitor bicycle spaces - 1 space per 500 sq m of leasable floor area over 1000 sq m.

Restaurant

- Employee bicycle spaces - 1 space per 100 sq m of floor available to the public.

- Visitor bicycle spaces – 2 spaces plus 1 space per 200 sq m of floor available to the public if the floor area available to the public exceeds 400 sq m.

Motorbike/scooter Parking

No rate is provided in the Boroondara Planning Scheme.

2.3 Local Plans and Policies

Boroondara Transport Policies

In relation to transport policy and urban growth, the City of Boroondara mirrors the State Government's move toward increased residential densities in appropriate locations and the encouragement of sustainable transport modes. Through its parking policies, Boroondara has made some specific variations to the State guidelines and introduced local policies that seek to better reflect the City's approach to parking provision. Due to the particular relevance of Boroondara policy to the future planning and development of the Balwyn Activity Area, the specific implications of each policy are noted.

The **Our Boroondara (2008)** strategy provides a broad set of visions and goals to guide the municipality into the future. Under the vision theme *Connecting Our Community* it states *"our vision is for the people and neighbourhoods of Boroondara to be connected via walkways, bike paths and public transport networks."*

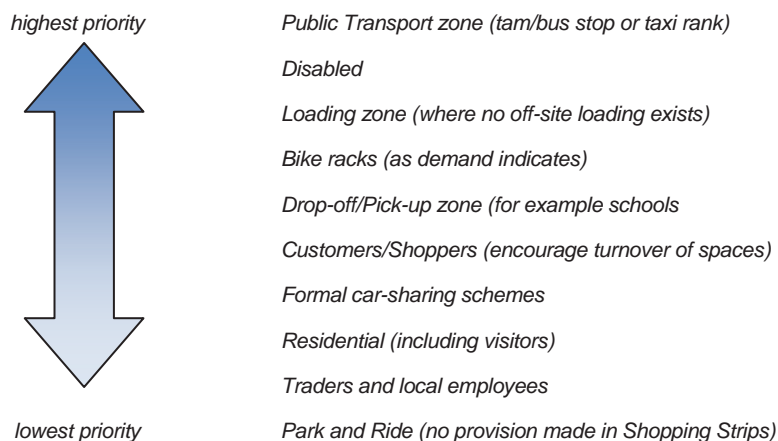
Implications for Balwyn: Supports priority for more sustainable and healthier modes of transport for travel to/from and within the Activity Area.

The **City of Boroondara Integrated Transport Strategy (2006)** aims to provide improved travel and access within, to and from Boroondara. In particular the Strategy seeks to provide improved public transport, walking and cycling provision and manage private car travel more effectively, as part of overall Council goals to pursue social, environmental and economic well-being and to protect and improve the built and natural environment.

Implications for Balwyn: Parking planning for the Activity Area should seek to reduce private car use and support more sustainable modes.

The **Boroondara Parking Management Policy (2006)** provides *"overarching principles and goals, objectives and strategic initiatives intended to guide future actions related to parking to maximise its effectiveness, whether it be to provide access to commercial areas or to maintain an appropriate level of residential amenity"*.

Implications for Balwyn: The Policy acknowledges the specific requirements of Shopping Strips and allocates priority to various parking user groups as follows (from highest priority to lowest):



The **Boroondara Bicycle Strategy (2008)** provides a plan to drive the development, improvement and expansion of Boroondara's bicycle network. The overall goal of the strategy 'is to increase the number of cyclists using Boroondara's bicycle network and facilities'.

Implications for Balwyn: Through the Balwyn precinct, bicycle infrastructure for commuting (that is east-west routes) is currently limited. Whitehorse Road is identified as a Proposed Wide Kerbside Lane, however the construction of these lanes is doubtful if any tram route improvements are to be achieved. The nearby Mont Albert Road route provides a dedicated cycle/parking lane. In the cross-town direction, the Balwyn Road cycle lanes to the north of Whitehorse Road have recently been extended toward Canterbury Road.

The **Boroondara Traffic Management Strategy (2006)** seeks to advocate for improvements to Arterial Roads and focuses on safety, speed and volume issues on local roads within Boroondara. It has a focus on improving the liveability of neighbourhoods through improved design outcomes and enhanced walkability measures.

Implications for Balwyn: Supports traffic management initiatives that promote walk trips to/from and within the Activity Area.

The **Residential Parking Permit Policy (Draft 2010)** facilitates reasonable vehicle access for residents and visitors. Permits are issued every second year and the maximum number of permits that can be issued per household is three. For multi-unit developments, where there is no on-site parking and the planning approval for the units occurred prior to August 2001, then one permit may be issued per unit.

Implications for Balwyn: The eligibility of parking permits for new multi-unit developments is relevant to the Centre. In this regard, the Policy states "owners and occupiers living within multi-unit developments will be eligible to apply for one residential parking permit where:

- The planning approval of the units pre-dates August 2001.
- The units have been built since August 2001 in accordance with a planning permit which does not contain a note stating that the units will not be eligible to participate in Council's Resident Parking Permit Scheme.

In all other circumstances residents of multi-unit developments will be **ineligible** to receive a permit. For 'shop top dwellings', a maximum of one vehicle permit will be available subject to the following:

- No permits will be issued for the arterial roads within a designated shopping precinct.

- *Permits will only be issued for the nearest appropriate side streets (as determined by Council Authorised Officers) and arterial roads outside shopping precincts.*
- *No permits will be issued for Council controlled off street car parks.*

The **Boroondara Planning Scheme at Clause 22.03 (Car Parking)** describes the amount and type of parking which is required within the City, with separate rates specified for Camberwell Junction. The Clause applies across Boroondara, and notably specifies parking rates that differ to the Clause 52.06 rates (both current and those under review), plus criteria for parking dispensations. The table below shows some relevant rates for Balwyn.

Table 2.3 - Clause 22.03 Parking Rates

Land Use	Clause 22.03 Parking Generation Rate
Dwelling other than caretakers house if at least two in a lot – standard	1.5 spaces/dwelling for residents + 0.2 spaces/dwelling for visitors
Shop	3.0 spaces/100 sq m leasable floor area
Restaurant	0.5 spaces/seat dinner time 0.3 spaces/seat lunchtime

Boroondara Submissions on Clause 52.06 Review

The City of Boroondara responded to the Department of Planning and Community Development's Car Parking Advisory Committee in October 2011 in relation to the proposed changes to the Clause 52.06 parking rates.

The Boroondara submission supports the proposed objectives of the new Clause 52.06, subject to some modifications to specific rates, including those for shops, food and drink premises and restaurants. The modifications would seek to disaggregate the rates to reflect the needs of short term and long term parking demands.

The dominant focus of the Boroondara submission is the proposed new car parking rates, and whether these rates are in line with Boroondara's Local Policy rates under Clause 22.03, and more generally in line with the view's of Council.

The following table summarises some of the key land uses from the Boroondara submission document, which hold particular relevance to the Balwyn precinct.

Table 2.4 – Boroondara Submission on the new Clause 52.06 Rates

Land Use	Existing Clause 52.06 Rate	Draft Clause 52.06 Rate	Clause 22.03 Rate	Boroondara Submission Comments
Dwelling in an Activity Zone	2/Dwelling	0/Dwelling 1 Each for 1 or 2 bed 2 each for 3+ bed	Standard – 1.5/dwelling + 0.2 visitors/dwelling	Council does not support zero resident parking in Activity Zones
in another zone		1 each for 1 or 2 bed, 2 each for 3+ bed, 1 visitor per 5 dwellings	Townhouse style 2/dwelling	Council supports the ResCode Rates for Other Zones
Office other than listed in this table - in a business zone or Activity Area Zone - in another zone	3.5/100 sq m	3.0/100 sq m 3.5/100 sq m	Not listed	Council support 3.5 spaces per 100 sq m for both Activity and Business Zones
Shop other than listed in this table - in a business zone or Activity Area Zone - in another zone	8.0/100 sq m	3.5/100 sq m 4.0/100 sq m	3.0/100 sq m	Council support the proposed rates
Restaurant - in a business zone or Activity Area Zone - in another zone	0.6 seat	3.5 /100 sq m 0.4 /patron	0.3/seat lunch 0.5/seat dinner	Council support 3.5 for Activity Zones & 4.0 for Business Zones, subject to disaggregation of visitor/staff demands

Structure Plan for Balwyn

The recently prepared **Balwyn Structure Plan (2009)** identifies public transport routes together with infrastructure improvements for the Activity Area. In order to promote sustainable transport objectives, a key guiding principle of the Plan is to *"Encourage people to use cars less for local trips by providing and improving direct, convenient and high quality pedestrian access throughout the centre"*. Specifically, the Structure Plan identified the following issues and recommendations for Balwyn, which relate to car parking and access:

- *The availability of free parking that is close to Centre services is a strength.*
- *Background research for the Structure Plan indicates that car parking areas are not at capacity. However, the demand for parking in some areas remains high at certain times of the day, with specific areas (such as directly adjacent to the Safeway supermarket) being the most sought after places to park.*
- *The provision of car parking is adequate in number, but not in location or accessibility. There is a need to reconfigure the parking arrangements to better utilise existing supply.*
- *While there appears to be a large number of parking areas available within the centre, there remains a perception within the community that there is a lack of parking.*
- *Connections to the main street, including small laneways and rear parking areas have been identified as having poor amenity.*

- *The Balwyn Cinema, located to the western edge of the Centre, attracts a large number of people from a large area surrounding Balwyn. There exists some opportunity to provide complementary land uses opposite the cinema. In this regard, mixed use development comprising predominantly residential use at upper levels, but with some ground level café and dining facilities may be appropriate, particularly if this form of development can also provide car parking facilities for cinema users.*
- *Careful consideration must also be given to the particular needs of the retail and business community. These needs include appropriate loading and unloading facilities and arrangements for the management of waste collection.*
- *Recommendation to examine opportunities to reorganise the uses within Balwyn Park to enable better use of facilities, including car parking and sporting facilities.*
- *Recommendation to encourage properties along Whitehorse Road to provide secondary access and frontages to rear laneway and car parking areas where possible. This will open up these underused spaces and enhance existing business uses.*
- *Recommendation to encourage and investigate incentives to encourage rear opening of buildings to car parks including reconfiguration of car parking, either during construction period or over a longer term.*
- *Recommendation to improve rear laneways and car parks to provide safe and pleasant corridors between car parking areas and commercial spaces, which reduce vehicle/bicycle/pedestrian conflicts.*
- *Traffic congestion is acknowledged as a key problem, notably around the intersection of Balwyn Road and Whitehorse Road. With little ability to provide alternative car access through the Centre, there is a need to address alternatives to car use.*
- *There is a need to address the present imbalance and priority given to private vehicles, over pedestrians and cyclists. More alternative forms of transport should be encouraged, including community transport.*

As a response to these identified challenges, the key recommendations of the Plan are to:

- *Develop a community transport service to meet the local access needs of the community living in the north and north east of the Balwyn Activity Area.*
- *Upgrade car parking facilities to improve the functioning of the existing car parks, to minimise pedestrian/vehicle/bicycle conflict and to improve pedestrian access routes between Whitehorse Road and rear car parking areas.*
- *Encourage dual frontages for Whitehorse Road businesses/properties so that they provide passive surveillance of rear car parks and laneways. This will encourage car parking areas to the rear of Whitehorse Road businesses to be used more effectively.*
- *Reorganise existing car parking facilities for short and long term parking.*
- *Investigate opportunities to provide 'real time' signage for car parking availability in the Balwyn Activity Area car parks.*
- *Ensure new development provides parking based on current planning scheme provisions and Council policy at the time of development (other than investigations associated with the provision of affordable housing).*
- *Advocate for VicRoads to undertake functional improvements to the intersection of Balwyn and Whitehorse Roads, a designated 'Accident Black Spot'.*

- *Any development on Balwyn Park must provide car parking equal to or greater than currently provided, marked for the use of the Park and all West End Users.*

The **Balwyn Structure Plan, Transport and Access Technical Report (2006)** provided the access and movement component of the Structure Plan research document and included a comprehensive review of existing traffic and transport conditions. Some key outcomes were:

- *To provide consistently good facilities for pedestrians that are direct, convenient and safe.*
- *To improve connections with car parks.*
- *Public transport provision is currently very good.*
- *Improvements to public transport are contingent on improvements to the Route 109 Whitehorse Road tram and (to a lesser degree) the Route 285 Balwyn Road bus.*
- *The perceived shortfall in parking was for the most part untrue.*

In addition, the Technical Study included the collection (2005) and analysis of car parking supply and occupancy data, plus duration of stay data. The findings from these surveys are discussed in more detail under this document's Section 0.

Balwyn Access Plan (Draft)

Boroondara City Council is currently (2011/12) preparing an Access Plan for Balwyn Activity Area. The project builds upon the Balwyn Structure Plan through providing strategic access recommendations that support increased access to the Activity Area and improved transport choice. It examines each respective mode, identifying issues and opportunities to enhance connectivity with the Balwyn Activity Area. The project also identifies spatial and operational solutions that enable aspirations set out in the Structure Plan. Activity Area Recommendations are consistent with the broader Council emphasis on promoting sustainable travel.

Interim recommendations of the Access Study which specifically affect car parking provision and management are as follows:

- reduce obstructions on existing footpaths, especially along Whitehorse Road, so that parallel on-street parking can be more easily accessed;
- audit and improve pedestrian links to encourage walking and reduce parking demand;
- investigate a Yerrin Street Public Space at its southern end with Whitehorse Road that could integrate with tram, community bus and pedestrian crossing facilities where possible;
- modify on-street and Council off-street parking areas, such as by providing kerbing so parked cars do not encroach onto adjacent footpaths;
- investigate additional indented parking along Balwyn Road (between Whitehorse Road and Vauxhall Road) to minimise parked cars blocking kerbside bike lanes at school start/finish times;
- increase bicycle parking at Balwyn Library (and other strategic locations throughout the Activity Area);
- investigate a Community Bus and Taxi hub inclusive of DDA compliance and a taxi call service at the core of the Activity Area;
- investigate car share in the Balwyn Activity Area;
- investigate a new pedestrian crossing near Northcote Avenue and Kireep Road that integrates with tram stop provisions;

- investigate park and ride activity associated with Tram 109.

2.4 Parking Precinct Plan Practice

Background to Parking Precinct Plans

The Victoria Planning Provisions (VPPs) recognise that car parking characteristics within a specific area are affected by a number of factors, such as the:

- demographics of the surrounding population;
- types of land use and development in the area;
- parking demand profile of the various uses;
- interaction between different uses and developments;
- availability and use of public transport;
- impact of transport and parking policies, and the strategies that are designed to influence parking outcomes.

The VPPs further recognise that the car parking provisions outlined in Clause 52.06 of the Planning Scheme do not always reflect the above factors, and that in some cases an area-specific set of guidelines is more appropriate. Parking Precinct Plans thereby provide the Responsible Authority (Boroondara City Council in the case of Balwyn) with an alternative set of criteria by which to measure car parking requirements, as opposed to those provided by the Clause 52.06 guidelines.

A Parking Precinct Plan is a statutory document that forms one part of a suite of strategic plans designed to guide development and growth in activity precincts. According to the Victorian Government, July 2002 Practice Note, before a Parking Precinct Plan is prepared, the VPPs recommend undertaking a study of a precinct's characteristics to identify the factors to be considered and evaluated. Further to this, a strategy can be developed to guide the future planning and management of parking within the specified precinct.

To achieve their full effect, PPPs need to be incorporated into a Council's Planning Scheme. This is typically done as an amendment to include a special Schedule to that Scheme's car parking provisions (Clause 52.06). To date, the scope of PPPs has been limited to:

- revised (usually reduced) car parking rates for new or extended developments
- guidelines for additional dispensations in car parking provision (in return for Green Travel initiatives)
- guidelines for off-site parking provision via cash-in-lieu or similar mechanisms

There has not, as yet, been a situation where a PPP has sought to vary the (truck) loading and unloading provisions of Clause 52.07, or the bicycle parking provisions of Clause 52.34. These and other issues, such as improvements for walking, public transport, motorbikes and motor scooters, have been dealt with as contributions to car parking dispensations rather than as particular provisions.

This document represents a study for the Balwyn Activity Area which provides the basis for the preparation and adoption of a Parking Precinct Plan for the Balwyn Activity Area. A concept draft of key elements of the PPP is included in this document, to assist eventual incorporation of the PPP into the Boroondara Planning Scheme.

PPPs Elsewhere in Boroondara

Boroondara's Structure Planning process for many of its major Activity Areas is being supported by follow up Parking Studies. A study has been prepared for Kew Junction, and the Glenferrie Precinct and Camberwell Junction is also underway.

In Kew Junction, the study has recommendations that focus on the sufficiency of car parking to cater for each car parking type (staff and customer/ visitor). The study examined two strategies, to accommodate commercial parking overflow in residential streets or to provide additional commercial parking. .

For new development within Kew Junction, the study recommends the following precinct parking rates, with further reductions available subject to Green Travel Plan initiatives, and reductions for smaller residential dwellings at the discretion of Council. A cash in lieu scheme to fund additional commercial car parking is recommended where parking requirements cannot otherwise be met.

- *Office – 3.4 spaces /100 sq m NFA*
- *Shop – 3.4 spaces /100 sq m NFA*
- *Restaurant – 0.24 spaces / seat*
- *Café – 0.11 spaces / seat*
- *Convenience Restaurant – 0.24 spaces / seat*
- *Restricted Retail – 1.8 space /100 sq m NFA*
- *Supermarket – 4.4 spaces /100 sq m NFA*

PPPs in Neighbouring Municipalities

There are PPPs formally in place in two of the municipalities around Boroondara, as follows:

- **Banyule City Council** has a PPP for the Greensborough Principal Activities Centre, which sets specific lower car parking provision rates for shops (4.6 spaces/100 sq m), restaurants (0.4 spaces/seat) and restricted retail premises (2.5 spaces/100 sq m). It also allows off-site parking provision, subject to an acceptable Car Parking Management Plan covering location, management, accessibility and compatibility with any Integrated Transport Plan or Green Travel Plan.
- **Manningham City Council** has a PPP for Doncaster Hill, which sets lower car parking provision rates for offices (2.5 spaces/100 sq m), dwellings (1.1 spaces for 1 and 2 bedroom, 2.1 for 3 bedrooms), restaurants (0.36 spaces per seat), shops (4.0 spaces/100 sq m) and restricted retail premises (1.5 spaces/100 sq m). It also allows off-site parking provision, and has specific requirements to protect adjoining residential areas from "overspill" parking intrusion.

Neither of these PPPs includes provision rates for bike or motorcycle parking or for accessible parking.

Whitehorse City Council has an Integrated Transport Strategy which promotes sustainable travel, but it does not have any PPPs.

Other Council's Moving Towards PPPs

In addition to the above Council's with PPPs already in place, numerous other Melbourne Councils are moving towards PPPs, or have similar policies already in place, as follows:

Stonnington City Council has adopted a practice of requiring very low car parking provision rates (no more than 0.66 spaces per dwelling) in its Forrest Hill development precinct. This practice follows the adoption of its Prahran/South Yarra “Chapel Vision” Structure Plan, with its emphasis on promoting sustainable transport. The parking aspects of Chapel Vision are not yet converted into a PPP. Rather, the residential rate has emerged through Council’s negotiated approval of numerous Planning Permit applications, often supported on review by VCAT.

The **City of Port Phillip** has adopted a policy of allowing “sustainable” car parking provision rates for new dwellings in and around its Activity Areas. Rates of 0.8 spaces per dwelling are now routinely accepted for small apartments in locations well-served by public transport and within walking distance of supermarkets. Generous provision of bike parking, motorbike/motor scooter parking and other Green Travel Plan initiatives assist with approval of the “sustainable” rates. In special cases, residential development proposals have been permitted with no car parking at all. Council intends to incorporate the policy into the Port Phillip Planning Scheme as a PPP.

The **City of Melbourne** has had a long-standing Parking limitation Policy for the Capital Business District. This has recently been extended, by Melbourne Planning Scheme Amendment C.133, to allow zero car parking for new dwellings in adjoining CBD-fringe locations.

2.5 Summary of the Planning and Policy Review

The State and Local policies and guidelines for the provision of transport infrastructure and services that affect the Balwyn Activity Area provide a clear and consistent course toward sustainable transport. The priority modes are identified to be walking, cycling and public transport. Priority Pedestrian and Tram Priority is currently documented in the VicRoads SmartRoads Network Operation Plan that applies to the Centre. Also evident is that transport options need to be part of an integrated approach where transport and land use support each other to reduce motorised car trips and to achieve improved liveability outcomes.

Specifically in relation to car parking, the policies and guidelines provide consistent support for provision rates lower than Clause 52.06, and probably lower than Clause 22.03. They also call for design of parking areas to be more carefully integrated with existing and new land uses, and to have increased levels of safety, convenience and accessibility for all users. It is these elements which require further detailing and documentation towards a Balwyn Activity Area Parking Precinct Plan.

3 Land Use, Demography and Road Safety

3.1 Overview of the Balwyn Activity Area

The Balwyn Activity Area is located some 9 kilometres east of the Melbourne CBD along Whitehorse Road, extending beyond both sides of the Balwyn Road intersection over a distance of approximately 1.7 kilometres. In scale, Balwyn is the fourth largest Activity Area in Boroondara with approximately 3,500 employees working within 230 business addresses.

Figure 3.1- Lane Use Zoning shows the land use zoning throughout the Balwyn precinct, which is dominated by Business 1 and Business 2 Zones along Whitehorse Road.

3.2 Commercial Profile

On a retail and commercial level, Balwyn is classified as a Level 1 Neighbourhood Activity Area, and is regarded as an important centre with a comprehensive range of goods and services. As a commercial office precinct, it is more broadly regarded as a lower-order suburban office precinct, although office uses comprise the majority of overall floor space as compared to retail uses. In broad terms, commercial areas are as follows:

- Retail Space 19,005 sq m
- Commercial Office Space 30,000 sq m

The Centre also contains a number of key non-retail uses including the Palace Balwyn Cinema, Balwyn Park and a number of schools and churches. Most of the retail functions of the Centre are located to the east of Balwyn Road, anchored by the supermarket adjacent Mangan Street on the northern side of Whitehorse Road. The non-retail commercial tenancies are concentrated to the west of Balwyn Road.

Recent evaluations of the retail areas within the Centre were undertaken as part of the Structure Plan study in 2006, as shown in Table 2.1.

Table 3.1 - Retail Profile in 2006

Category	No. Of Businesses	Retail Floorspace (sq m)	% of retail Floorspace
Food, Liquor and Groceries	15	5,255	28%
Café and Restaurant	11	1,350	7%
Takeaway Food	8	1,070	6%
Total Non-Food	48	7,355	39%
Services	23	2,950	15%
Vacancy Rate	8	1,025	5%
Total Retail	113	19,005	100%

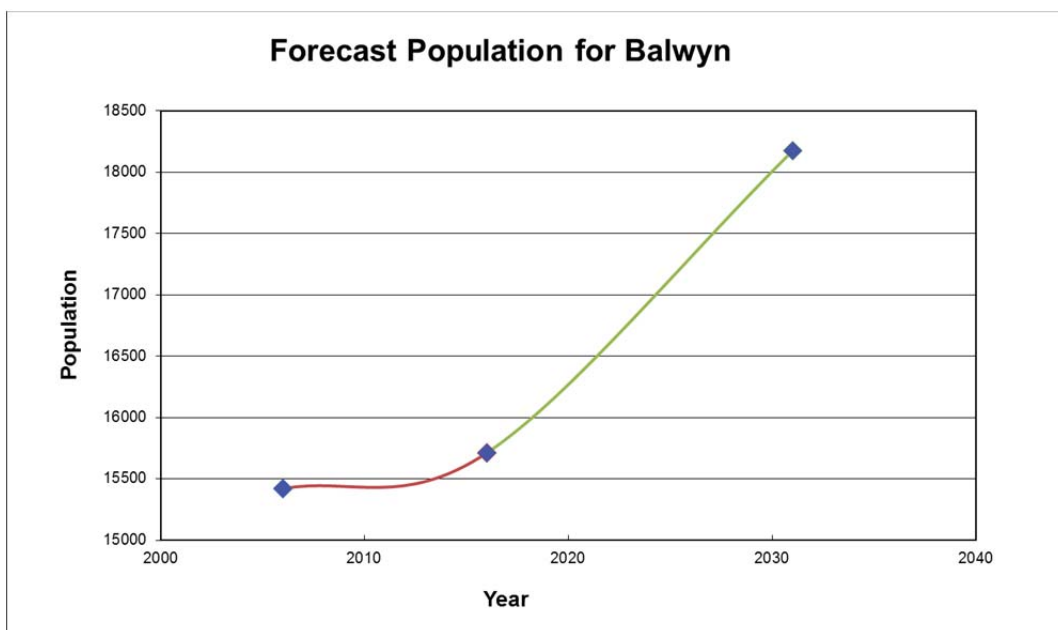
The Table highlights that there is a high percentage (41%) of food retail in the Centre, which includes the *Safeway* supermarket which is approximately 3,000 sq m in size.

The composition of the commercial office spaces includes around 17,000 sq m of larger scale commercial spaces, with the balance (approximately 13,000 sq m) made up of lower order service related office uses including real estate agents, accountants, travel agents, bank branches, post office, etcetera.

3.3 Demographics

Resident Population

Current and forecast population data for Balwyn provides a snapshot of the area's residential inhabitants including their age profiles. Balwyn is projected to steadily increase its population over the 2006 to 2031 period. By 2031, the population of Balwyn is forecast to grow to 18,175 from the 2006 population, which represents 0.7% annual growth (and higher than the Boroondara average of 0.5% growth).



Source: forecast.id.com.au –2006 Population and household forecasts, City of Boroondara (Balwyn)

Resident Age Structure

A review of the City of Boroondara's demographic profiles for the age structure of Balwyn in 2006 indicates that:

- 23.7% of the population in Balwyn is aged between 0 and 17 (22.5% Boroondara),
- 8.5% are 25 to 34 year olds (12.4% Boroondara),
- 22.1% were aged 60 years and over (18.7% Boroondara),
- 10.6 % are 70 to 84 years old (8.2% Boroondara).

The data shows the high proportion of older residents in Balwyn, with the over 60s making up almost 30%.

Between 2001 and 2006, the most rapidly growing age group was between the ages of 50 to 59. It is projected that the population of Balwyn will continue to increase in average age.

3.4 Travel Behaviour

Journey To Work of Balwyn Residents

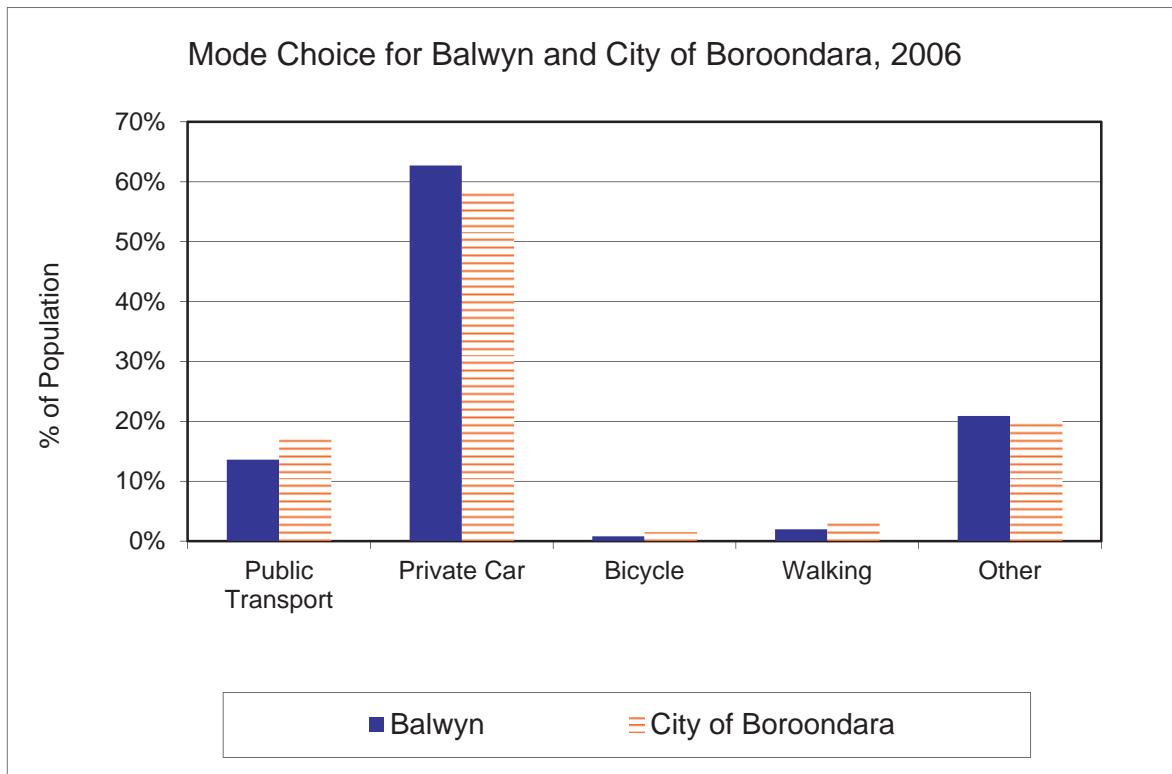
From the 2006 Census survey, the dominant mode of travel for Balwyn residents travelling to work was as a Car Driver and Car Passengers accounted for 3,695 people travelling to work on the road network. Significantly lower was Public Transport usage (train, bus or tram), which totalled 802 people. Mode choice for Balwyn residents in decreasing order of mode share is shown below.

Table 3.2 - Mode Choice Data for Balwyn Residents in 2006

Mode Choice	Number of People Traveling to Work	%
Car - as driver	3454	59%
Did not go to work	674	11%
Train	355	6%
Worked at home	350	6%
Tram	288	5%
Car - as passenger	241	4%
Bus	159	3%
Walked only	118	2%
Not stated	95	2%
Other	63	1%
Bicycle	49	1%
Truck	23	0%
Motorbike	22	0%
Taxi	5	0%
Total Number	5897	100%

Source: profile.id.com.au

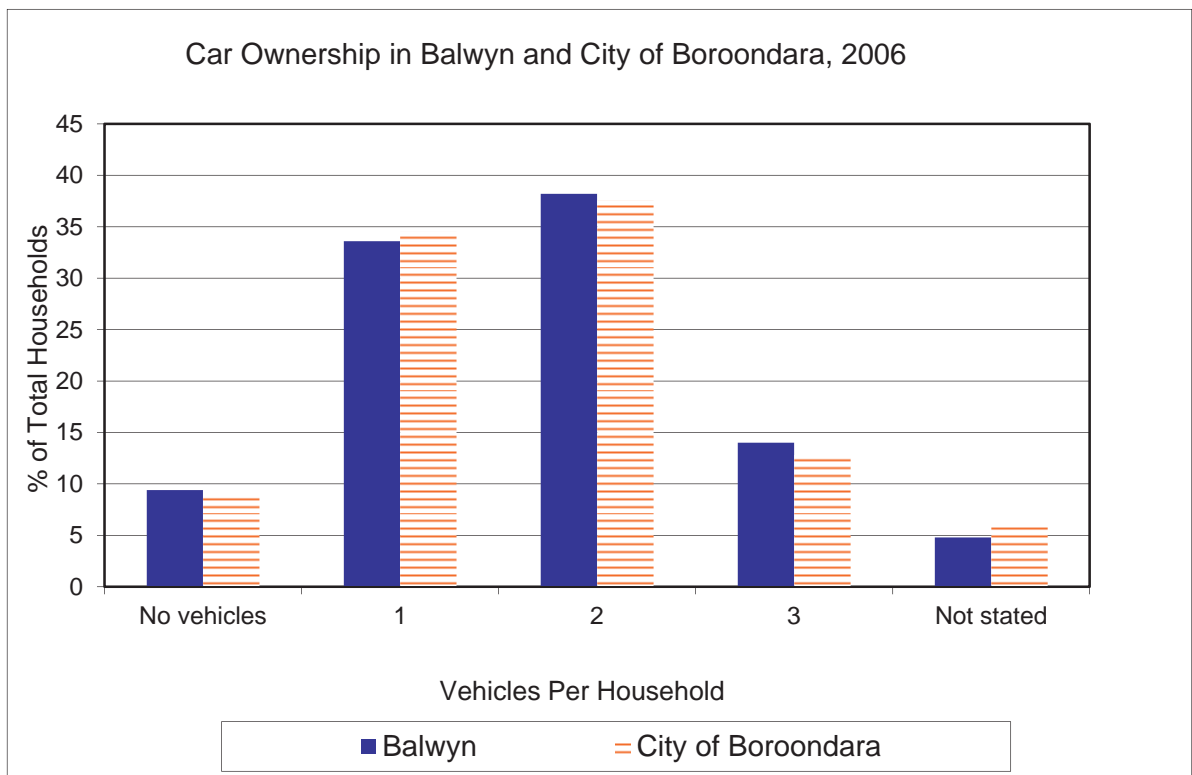
Mode choice for travel to work for Balwyn residents has been compared to the City of Boroondara as a whole for 2006. It reveals that more residents across Boroondara travel to work via the train network, which services large pockets of the municipality further south of Whitehorse Road (11% mode share for Boroondara compared to 5% for Balwyn). Conversely, more Balwyn residents rely on the private motorcar for travel to work (63% mode share for Balwyn compared to 58% for Boroondara). Walking and bicycle trips to work are generally low across Balwyn, compared to Boroondara as a whole.



Source: profile.id.com.au

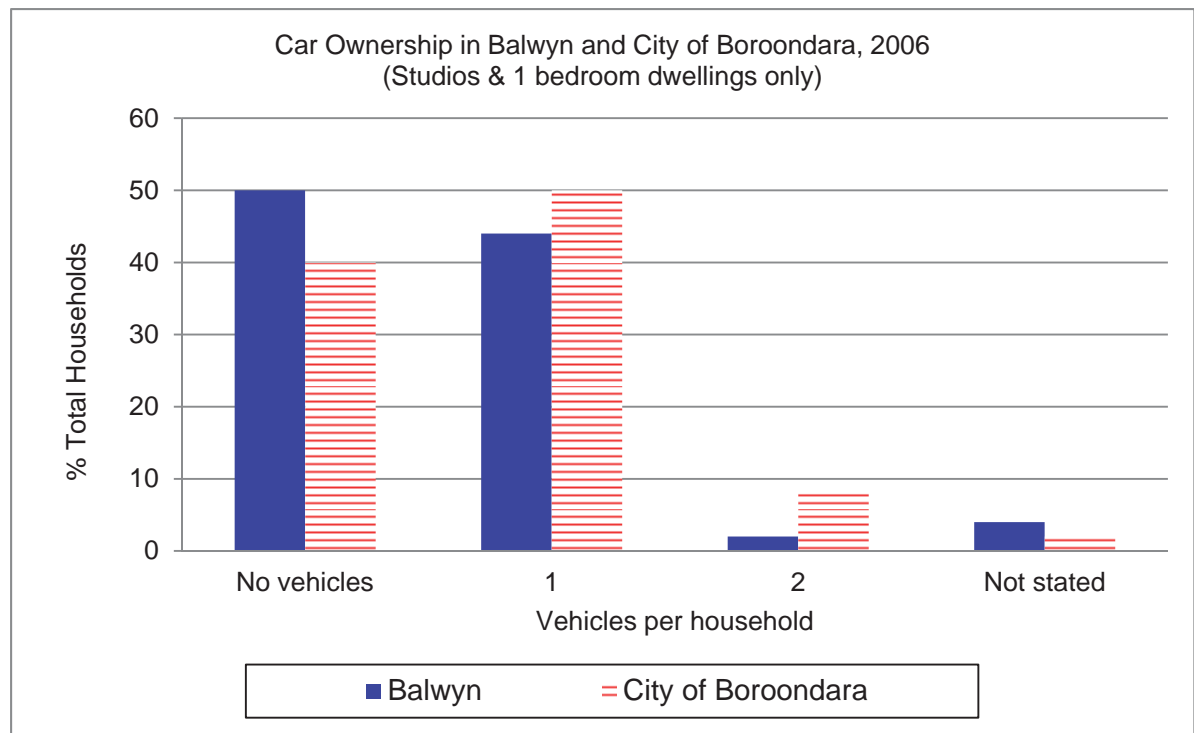
Household Car Ownership of Balwyn Residents

In 2006, most households in Balwyn owned one or two cars, while there was a higher proportion of zero and three car households compared to Boroondara as a whole. On a per person basis, this is an average one car per person between 17-74 years of age in Balwyn.



Source: profile.id.com.au

For small dwellings, in particular for studio and one-bedroom dwellings, the situation is quite different, with 50% of the householders occupying those dwelling not owning a car.



Source: profile.id.com.au

This indicates the strong reliance by occupants of small dwellings in Balwyn on walk, cycle, public transport and other modes.

On the other hand, only 19% of households occupying two-bedroom dwellings in Balwyn (16% for Boroondara) do not own a car.

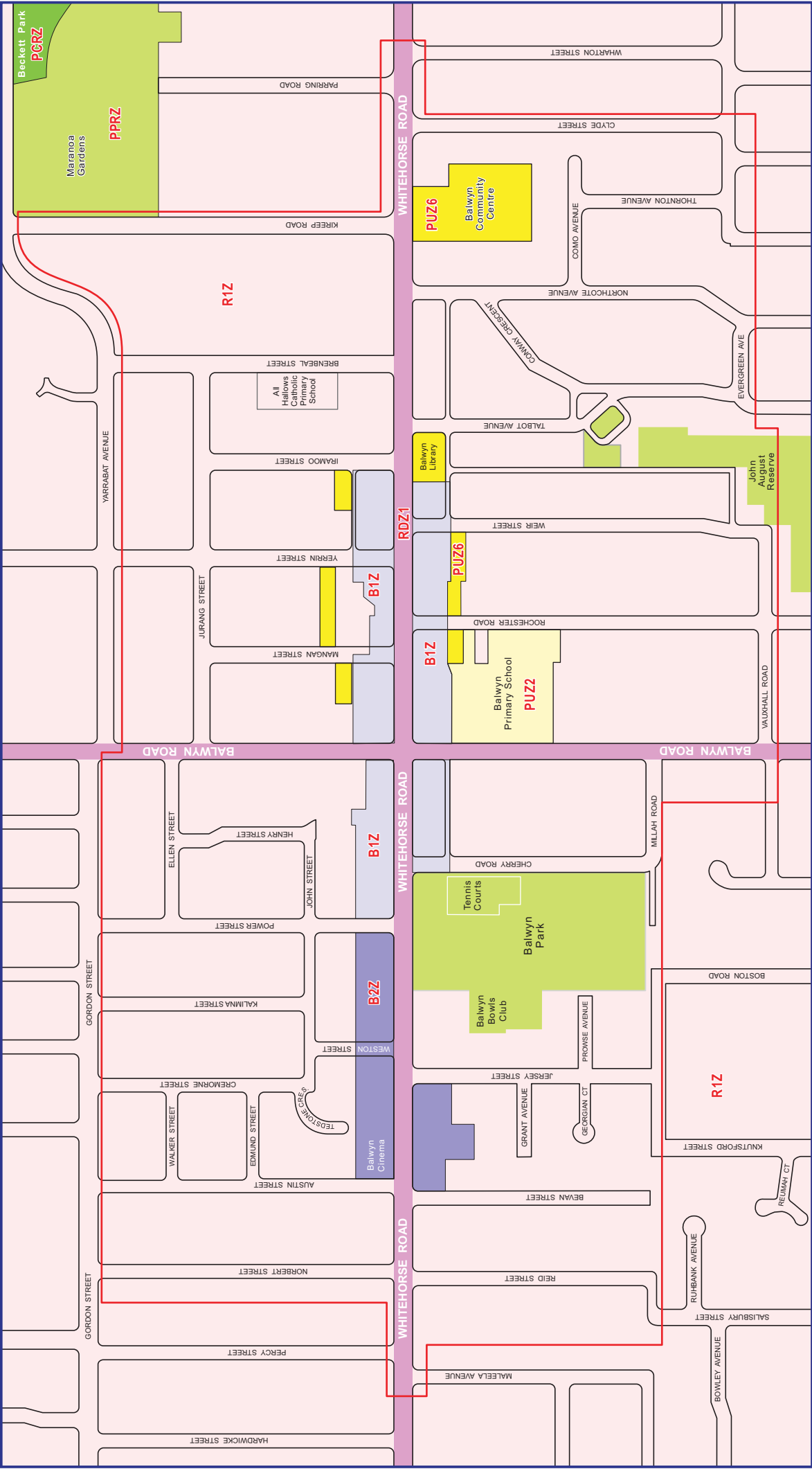
Households and Family Types

The City of Boroondara's demographic profiles show that the dominant household type in Balwyn is the 'one family household' which makes up 70% of dwellings. These households include families with and without children.

Single person households make up 25% of Balwyn households (compared with 24% for Boroondara and 23% for the MSD).

Recent analysis by the Australian Bureau of Statistics¹ indicates that the number of households in Australia is projected to grow. But whilst the number of households is projected to increase, the average number of people within each household is projected to decline. The fastest growing household type is lone person households, projected to grow by an average of 2.2% per year.

¹ Refer Australian Social Trends December 2010, Australian households: the future, **ABS**



LEGEND

B1Z - Business 1

B2Z - Business 2

PCRZ - Public Conservation & Resource

PPRZ - Public Park & Recreation

PUZ2 - Public Use - Education

PUZ6 - Public Use - Local Government

R1Z - Residential 1

RDZ1 - Road - Category 1

Balwyn Activity Centre Precinct

FIGURE 3.1
LAND USE ZONING MAP

Project : 10624 October 2012

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3.5 Road Safety

Crash Analysis

Our analysis of the casualty crash record has been undertaken using the VicRoads crash database for the 5-year period January 2006 to December 2010.

The results show a total of 47 crashes, including those involving private vehicles, pedestrians, cyclists and motorcyclists.

Pedestrian and Cyclist Crashes

To obtain a measure of the current level of safety specifically for vulnerable users in the precinct, we have undertaken an analysis of the same crash record for pedestrians and cyclists. The results are presented in Figure 3.2 - Pedestrian and Cyclist Crashes, and summarised below.

Of relevance, 40 kph speed limits along Whitehorse Road were introduced in April 2004.

The results show that overall, there is a high incidence of pedestrian crashes along the main spine of the Centre, and an even slightly higher incidence of cyclist crashes, despite cyclist volumes that are observed to be quite low in comparison to other metropolitan routes/centres.

There were 12 crashes involving pedestrians (that is one quarter of all crashes), all along Whitehorse Road. This is considered to be a high representation of pedestrians in the crash record.

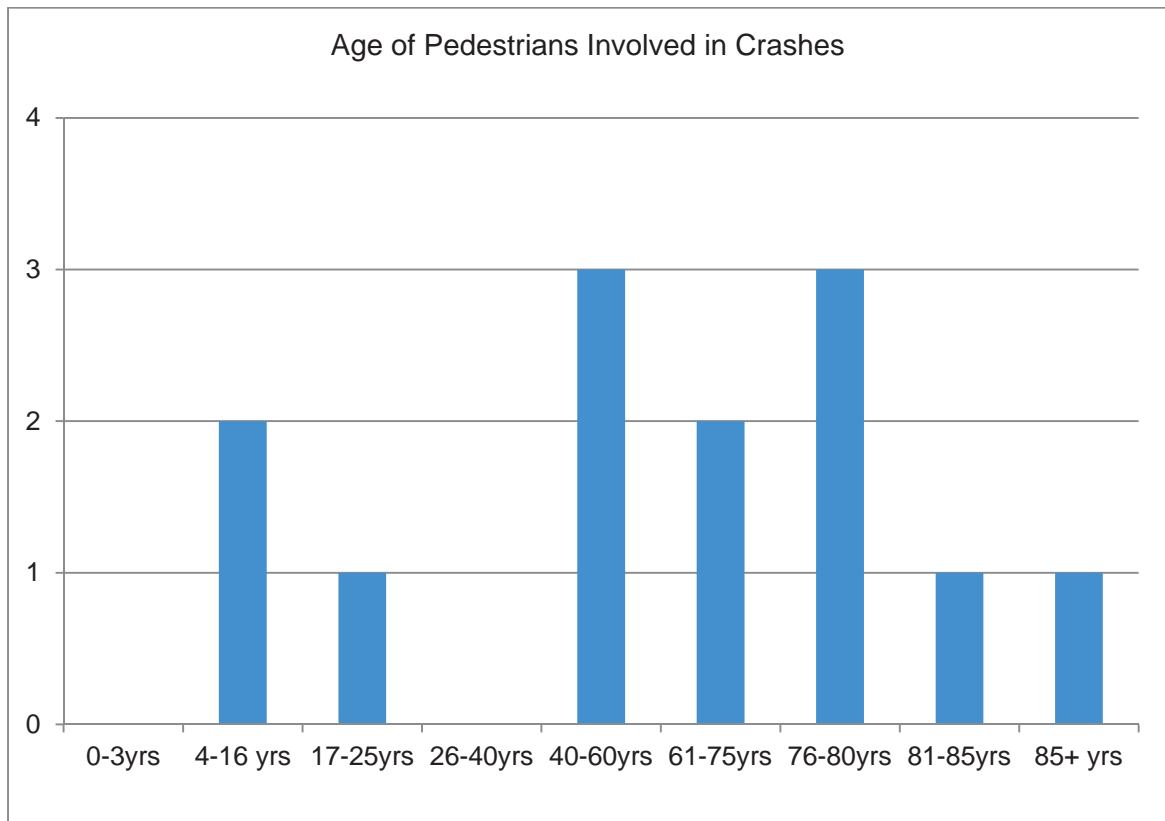
The record shows a mix of crash types including:

- Pedestrian being hit while crossing mid-block along Whitehorse Road.
- Pedestrian being hit while crossing side streets (at Yerrin and Weir Streets).
- Pedestrian being hit while crossing at the Balwyn Road signalised intersection during night time conditions.
- Pedestrian being hit by when emerging from between parked vehicles or being hit by a parking vehicle.
- Pedestrian falling from a Tram.

Most evident in the crash record is the number of elderly pedestrians. The following chart shows the high proportion of pedestrians in the over 60s age groups (that is over half).

There were also 14 crashes involving cyclists (that is 30% of all crashes), mainly along Whitehorse Road. This is considered to be a high representation of cyclists in the crash record. The record shows a mix of crash types including:

- Cyclist being hit by a vehicle departing a driveway.
- Cyclist being hit by (opening) car door.
- Cyclist being hit at unsignalised intersection.



Source: vicroads.vic.gov.au

Interpretation of the Crash Data

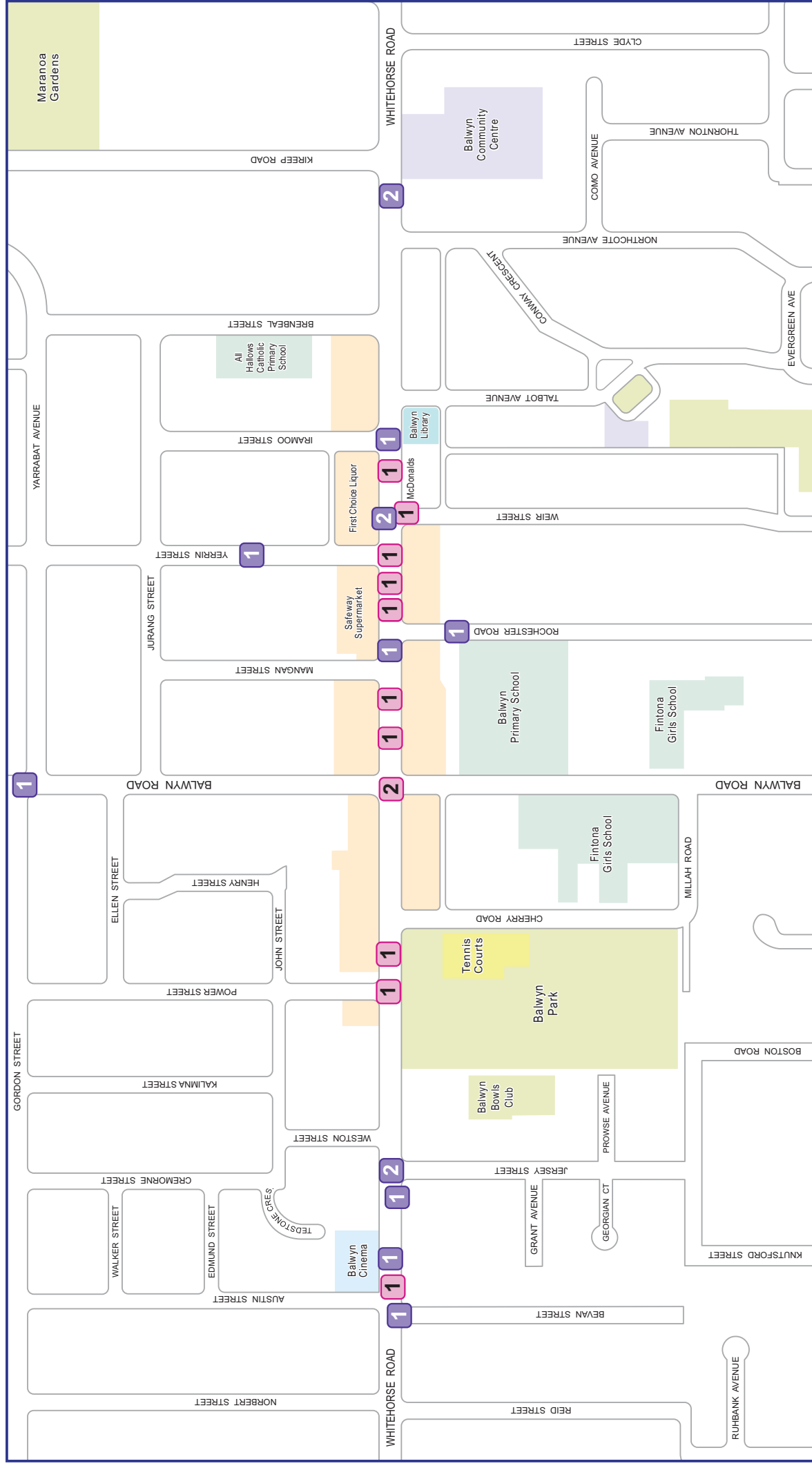
The crash analysis suggests a number of evident safety related issues for the Balwyn Activity Area precinct, which may have scope for improvement through traffic engineering solutions and enforcement / awareness campaigns.

Crash data indicates notable risk for an increasingly older demographic that uses the Balwyn Activity Area. Elderly pedestrian crashes are a particular concern along Whitehorse Road.

3.6 Key Findings and Implications

Our key findings of the land use, demography and road safety analysis are:

- Balwyn Activity Area is predominantly a commercial office and retail precinct. Offices are generally small. The retail component is dominated by the *Safeway* supermarket.
- The Balwyn population is elderly and ageing further. However, it also has a higher than Boroondara average school aged population.
- Lone person households across Australia are growing.
- Despite the convenient public transport (especially tram), journeys to work by Balwyn residents are predominantly by private car, with only 2% walking to work.
- Household car ownership is generally high, except for studio and one-bedroom dwellings where only 50% of households own a car (that is 0.5 car per one-bedroom dwelling).
- Crash data shows high levels of cyclists and elderly pedestrians involved, especially along and crossing Whitehorse Road.



2 CYCLIST - 14 Crashes

1 PEDESTRIAN - 12 Crashes

Recorded between January 1, 2006 and December 31, 2010.

4 Parking Supply

4.1 Car Parking Supply

The parking research for the PPP Study commenced with an inventory of the existing on and off-street public parking supply in the Balwyn Activity Area. It is considered accurate as at June 2011.

The area covered by the parking surveys is shown as Figure 4.1 - Parking Survey Area. For comparative purposes, the survey area shows the extent of the 2005 parking surveys (undertaken as part of the 2009 Structure Plan study), plus the expanded 2011 Ratio survey area².

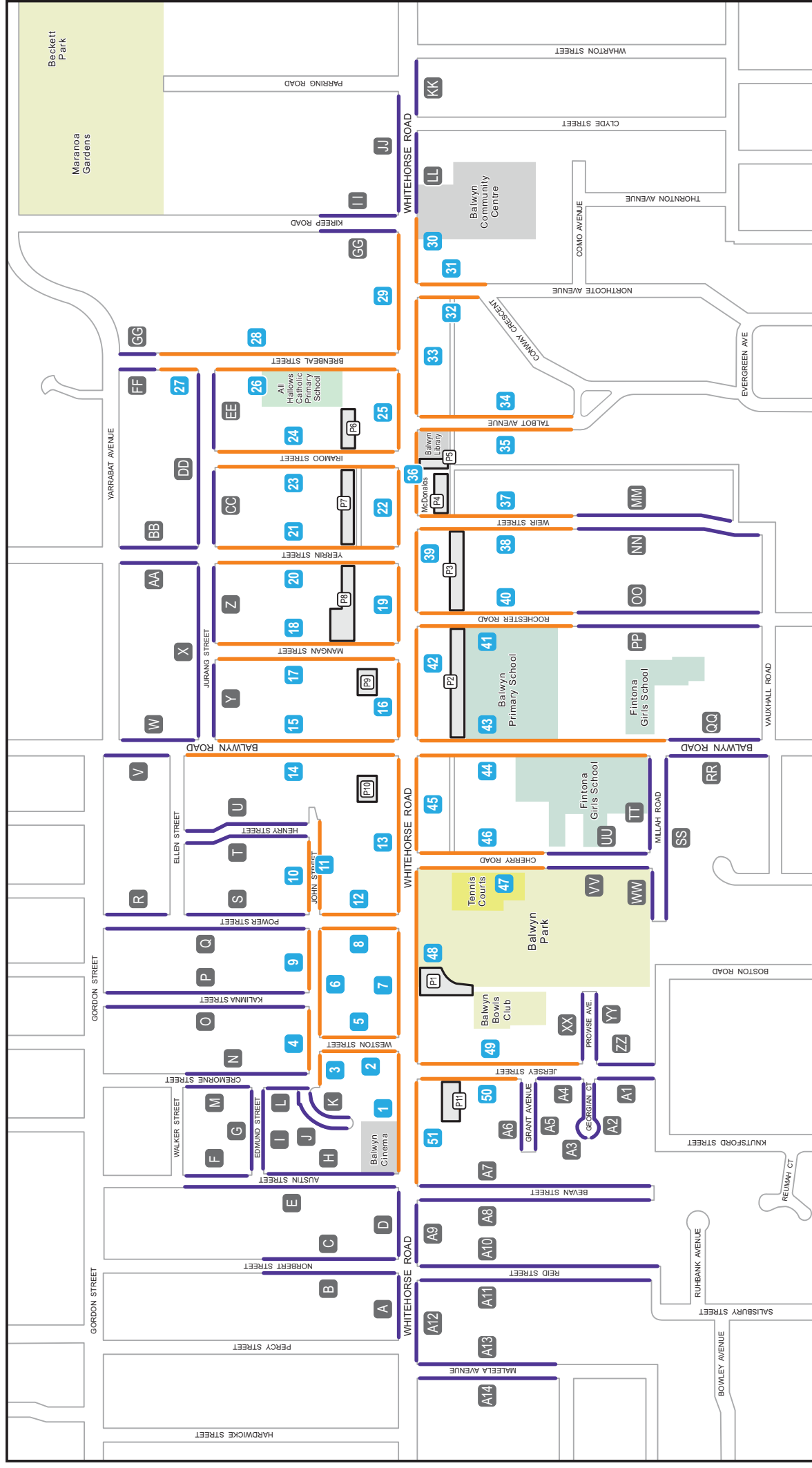
The inventory of parking supply data details the amount, type, and location of all public parking areas within the Activity Area, as summarised in the sections below. Figure 4.1 - Parking Survey Area, shows the on-street parking restrictions, and Figure 4.3 - Off-Street Parking Controls and Public Bicycle Parking Rails, shows the location and restrictions of the main off-street public and customer car parks, plus the location of public bicycle parking rails. Private off-street parking, such as at the rear of shops or in office basements, is not included in the inventory.

On-Street Parking Supply

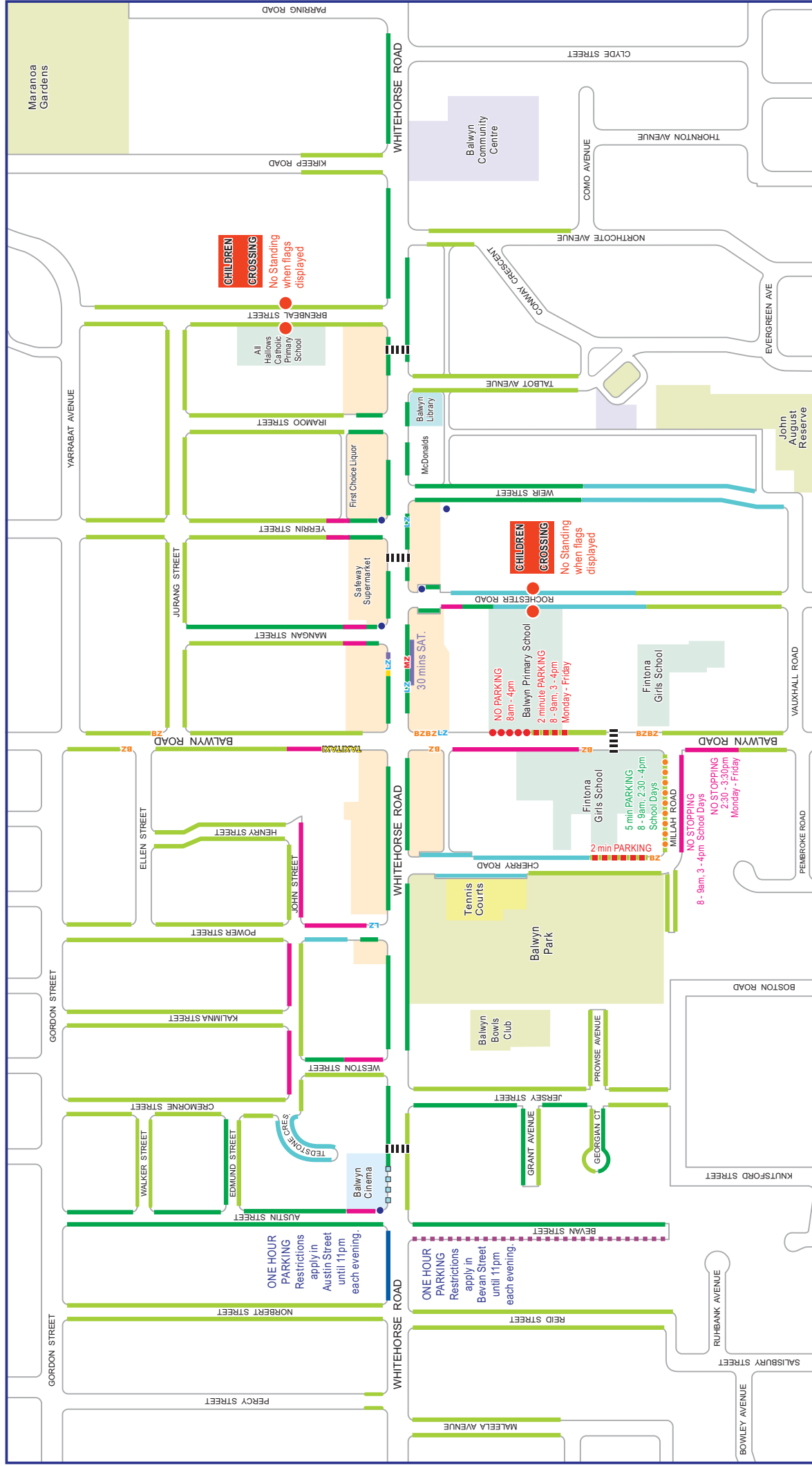
There are approximately **1783 on-street spaces** available (outside arterial road Clearway periods) for public parking on a typical weekday over the Study Area. Our detailed appraisal of the on-street parking supply reveals that:

- Parallel parking is available along both sides of most streets in the Study Area.
- There are sections of angled parking along some streets proximate to Whitehorse Road, including parts of Cherry Road, Mangan Street, Yering Street, Iramoo Street and Brenbeal Street.
- There are approximately **727 time-limited** on-street parking spaces, which include a mix of mainly 'One Hour' (1P) and 'Two Hour' (2P) time limits generally applying from 8am-6pm Monday-Friday and 8am-1pm Saturday. Extended zones of 2P parking are found along Cherry Road, Weir Street and Rochester Street.
- Extended 1P time limits (8am-11pm) apply around the Cinema precinct (for example Austin St).
- There is limited short-stay parking (for example 15 minute, 30 minute) in the precinct.
- There are approximately **1056 unrestricted** on-street parking spaces, most of which are located in the residential streets, beyond the commercial frontages.
- There are currently no charges for on-street parking within the precinct.

² A discussion of the comparative parking demands of the 2005 and 2011 surveys is provided in Section 0 of this document.



**FIGURE 4.1
BALWYN PARKING PRECINCT SURVEY AREAS**

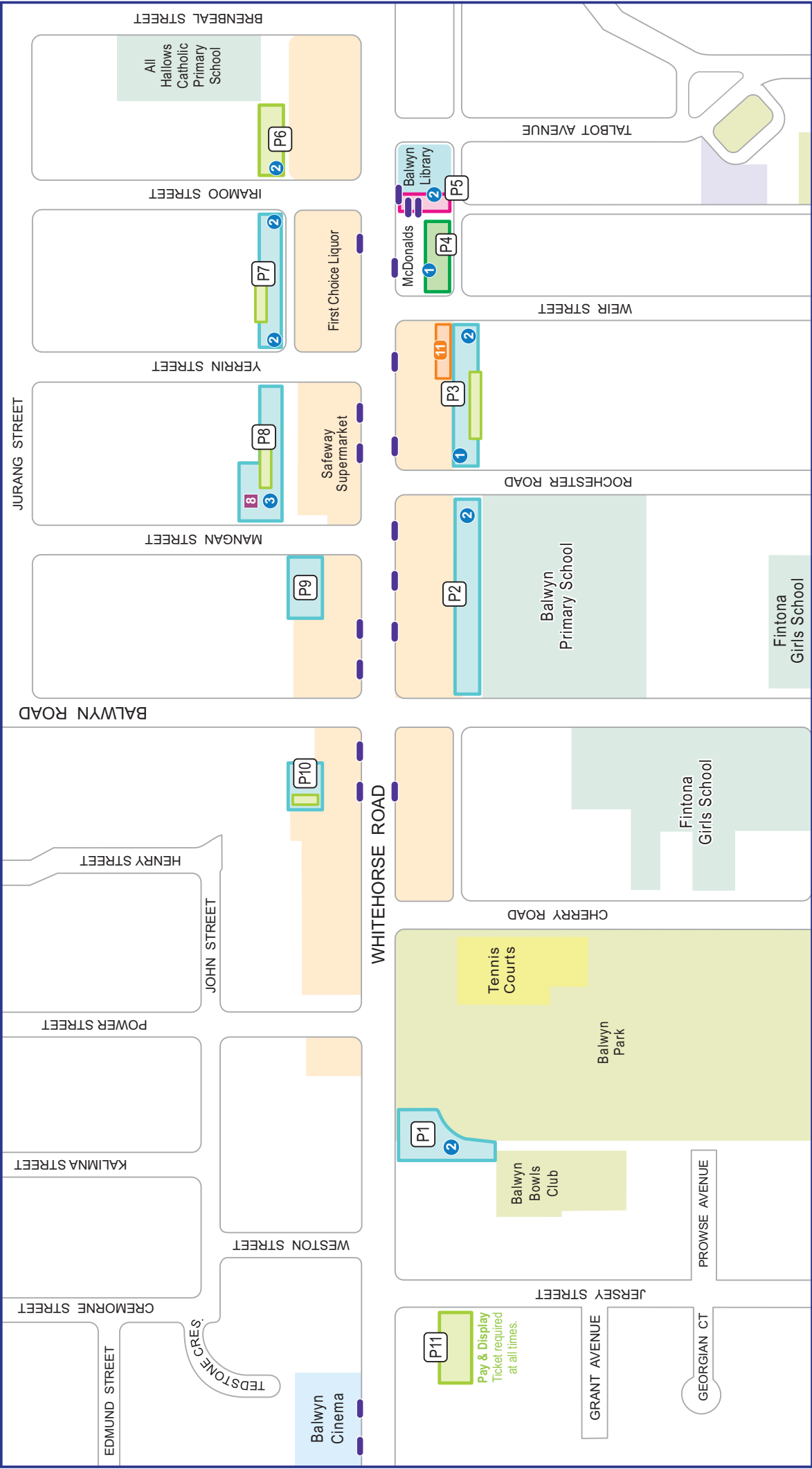


LEGEND

1 P	5 minutes P	BZ	Bus Zone
2 P	2 minutes P	TAXI	Taxi
3 P	Unrestricted	LZ	Loading Zone
30 minutes P	Permit Zone	MZ	Mail Zone
15 minutes P	No Stopping	Blue Dot	Disabled Parking
10 minutes P	No Parking	Red Line	Pedestrian Crossing

Additional symbols: U-turn arrow, red 'X' over a blue circle, and a red 'X' over a blue circle with a red dot.

FIGURE 4.2
PUBLIC PARKING CONTROLS - ON STREET



4 P

2 P

1 P

Unrestricted

Private Property

Permit Zone (Qty)

Bicycle Rails

Disabled Parking (Qty)

P1 - 52 spaces

P2 - 69 spaces

P3 - 51 spaces

P4 - 35 spaces

P5 - 22 spaces

P6 - 35 spaces

P7 - 101 spaces

P8 - 153 spaces

P9 - 36 spaces

P10 - 42 spaces

P11 - 23 spaces

Strip Shopping

Off-Street Public Parking Supply

There are approximately 619 off-street parking spaces within the Study Area as shown in the table below. Parking is charged only in the car park off Jersey Street.

Table 4.1 - Main Off-Street Parking Areas

Ratio Map Reference	Car Park Location/Description		Weekday Parking Supply @ 2pm	Restriction	Cost
P1	South of Whitehorse Road	Balwyn Park	50 + 2 A/B	2P 8am-12:30pm Mon-Fri	Free
P2		b/w Balwyn Rd & Rochester Rd	67 +2 A/B	2P 8am-6pm Mon-Fri, 8am-1pm Sat	Free
P3		b/w Rochester Rd & Weir St	29	2P 8am-6pm Mon-Fri, 8am-1pm Sat	Free
			19 + 3 A/B	Unrestricted	Free
P4		McDonalds	34 + 1 A/B	1P	Free
P5		Balwyn Library	20 + 2 A/B	4P	Free
P6	North of Whitehorse Road	East of Iramoo St	33 + 2 A/B	Unrestricted	Free
P7		b/w Iramoo St & Yerrin St	74	2P 8am-6pm Mon-Sat	Free
			23 + 4 A/B	P	Free
P8		b/w Yerrin St & Mangan St (behind Safeway)	120	2P 8am-6pm Mon-Sat	Free
			19 + 3 A/B	P	Free
			11	Supermarket Permit Zone	Not Known*
P9		West of Mangan St	36	2P 8am-6pm Mon-Fri, 8am-1pm Sat	Free
P10		West of Balwyn Rd	32	2P 8am-6pm Mon-Fri, 8am-1pm Sat	Free
			10	P	Free
P11	South of Whitehorse Road	Privately owned car park behind Petrol Station adjacent Jersey St	23	P Ticket Pay and display Ticket required at all time	\$3 for 3hrs \$5 for 10hrs
A/B - Accessible Parking Bays					
Not Known - Council charges may apply					

The table above shows that off-street public parking is mainly restricted to 2P during business hours, with some smaller pockets of parking allowing for all day parking. There are a total of 127 unrestricted or 'P' spaces located in:

- the eastern Iramoo Street car park (33 spaces);
- small pockets of the rear Iramoo to Mangan Street rear car parks (42 spaces);
- a small part of the car park west of Balwyn Road behind the Petrol outlet (10 spaces);
- a small part of the car park between Rochester Road and Weir Street (19 spaces);

- the Jersey Street car park behind the *Safeway Petrol* outlet (23 x P Ticket spaces), however this area is not likely to be available in the future as it is the subject of a development application.

In addition to the public parking areas, there are numerous private or restricted parking areas that are not available for general public usage (including 11 *Safeway* permit spaces). Many of these areas are accessed by the rear laneways behind each side of Whitehorse Road. Refer also Section 7.3 which presents trader feedback on the availability of on-site parking.

The off-street car park to the north of the *Safeway* supermarket includes eight spaces for traders with permits. Such traders are exempt from the 2P controls which apply to the rest of that section.

Car Parking Supply Summary

The parking inventory and survey identify 1783 on-street spaces plus 619 off-street spaces, that is a total of 2402 publicly-available car parking spaces in the Balwyn Activity Area.

The generosity of this level of supply can be demonstrated by applying the “empirical” rates from Council’s submission to the VPP review (Section 2.3) to the existing commercial floor spaces (Table 3.1 - Retail Profile in 2006) as follows:

19,005m ² retail @ 3.5 spaces/100m ²	665 spaces
30,000m ² office @ 3.5 spaces/100m ²	<u>1050 spaces</u>
	1715 spaces

Thus, even without including the private off-street parking spaces in the analysis (that is in the rear yards or basements of properties facing Whitehorse Road) it is clear that Balwyn Activity Area currently has a generous level of car parking supply. This has two direct implications:

- providing that the existing parking supply is effectively managed, there should be no major availability and accessibility issues;
- there is a substantial opportunity to convert numerous existing car parking spaces to Car Share, taxi, commercial vehicle, disabled, motorbike/motor scooter or bike parking, or to improve the Activity Area’s amenity by converting some car parking spaces to landscaping or open space.

4.2 Accessible Parking Supply

Accessible parking is provided mainly in the off-street parking areas (19 spaces) and along some of the precinct side streets (5 spaces) proximate to Whitehorse Road, including in Mangan Street, Yerrin Street, Rochester Street and Austin Street. The provision rates equate to 1 accessible parking space per 33 spaces for the off-street areas but only 1 accessible space per 54 spaces for the total commercial area. Industry standards recommend a provision rate of 1 space in 50 for shopping precincts³.

Limited accessible parking is provided between Mangan Street and the Balwyn Cinema with the exception of accessible parking within the Balwyn Park off-street car park.

Observations identify that existing off-street accessible parking design does not conform to Australian Standard 2890.6 2009.

³ The Australia/New Zealand Standard Part 6: Off-Street Parking for People with Disabilities recommends Accessible Parking be provided at a rate of not less than 1 in 50 spaces (or 2%).

4.3 Bicycle Parking Supply

There is no information available detailing the amount of staff bicycle parking facilities within the precinct. Public visitor bicycle parking in the form of bike hoops is provided across the Centre, mainly along Whitehorse Road. Refer Figure 4.3 - Off-Street Parking Controls and Public Bicycle Parking Rails.

There is no dedicated public motorcycle/scooter parking within the precinct.

4.4 Loading Provision/Supply

Loading is provided mainly from the rear laneway network, but also on-street along Whitehorse Road and some side streets (five on-street locations in total).

4.5 Taxi Rank Provision/Supply

There is currently only one taxi rank, that being on a sloping section of Balwyn Road, north of Whitehorse Road on the western side (near the service station). The rank is not well located to support key destinations in the Activity Areas, particularly for those who have mobility limitations.

5 Parking Demand

5.1 Car Parking Demand

Car Parking Occupancy Surveys and Results

To quantify the current levels of parking demand in the Study Area, Ratio Consultants conducted parking demand surveys through the period June to October, 2011.

Experience shows that Thursdays and Saturdays represent typical peak weekday and weekend conditions in busy commercial centres, so daytime parking demand surveys were undertaken on these days (see details below). In addition, surveys were conducted in the western portion of the Study Area around the Balwyn Cinema on a Friday night, to coincide with peak cinema demand.

The surveys were undertaken during the standard school terms, during months that are considered typical in terms of annual activity levels. The surveys are therefore considered suitable for evaluation and design purposes. The survey days and times were:

- Thursday 23rd June and 20th October 2011 between 8:00am and 6:00pm (typical business day)
- Friday 24th June 2011 between 5:00pm and 9:00pm (busy Cinema night)
- Saturday 25th June 2011 between 9:00am and 3:00pm (typical busy weekend day)

For evaluation purposes, measured car parking occupancies across the Study Area have been rated using the following system:

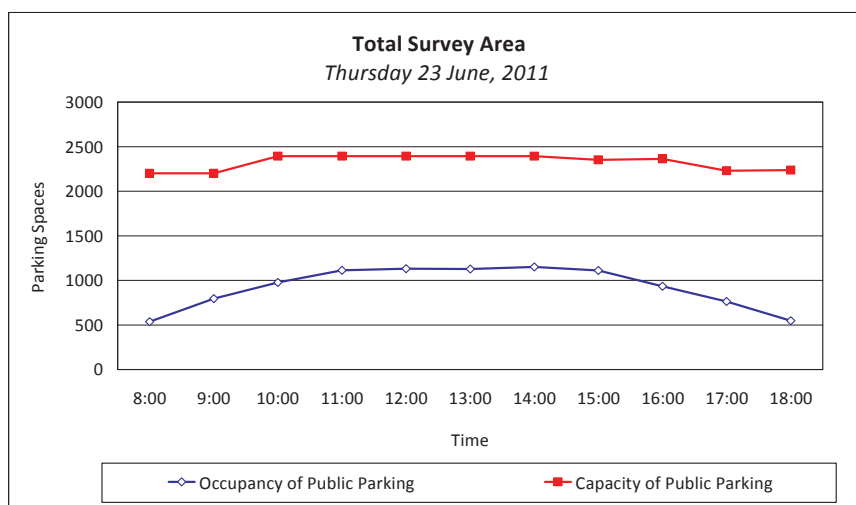
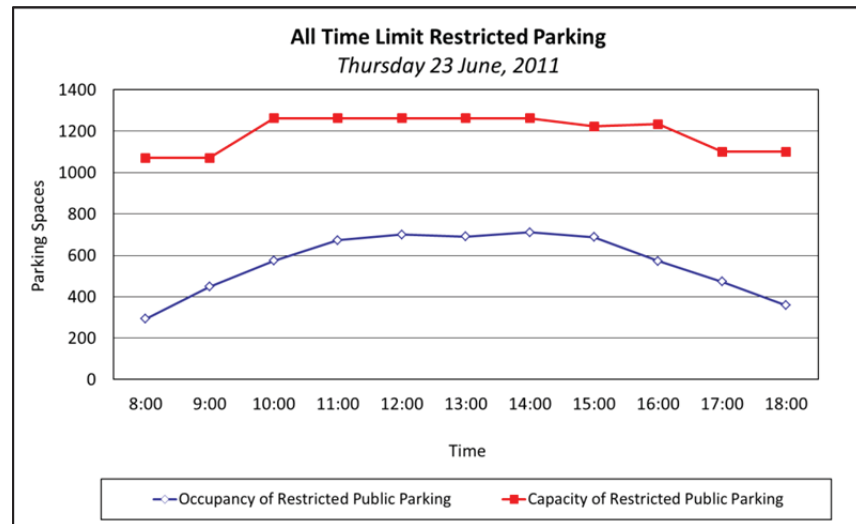
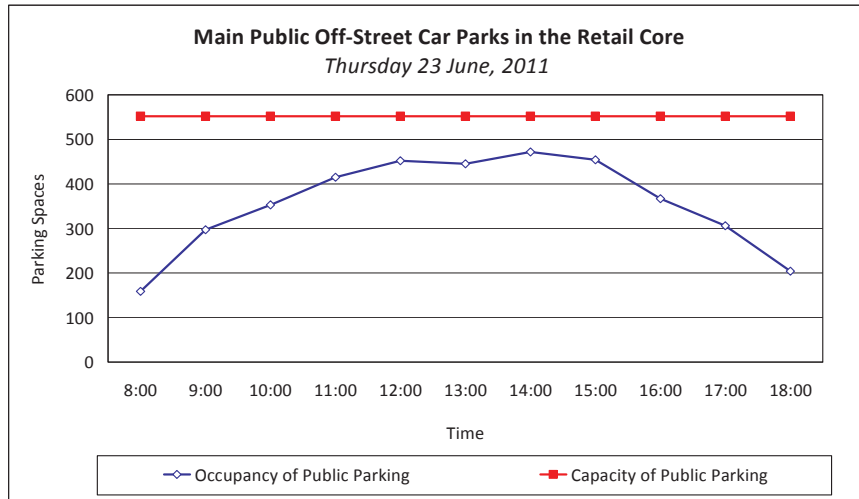
- | | |
|--------------------|-----------|
| ▪ > 85% occupancy | Very High |
| ▪ 75-84% occupancy | High |
| ▪ 50-74% occupancy | Moderate |
| ▪ < 49% occupancy | Low |

The findings from the parking occupancy surveys are presented below. The detailed outputs are provided in Appendix A and Appendix B, and mapped in Figure 5.1 to Figure 5.3.

Thursday Survey

The peak parking demand for the total Study Area was recorded at **2:00pm on the Thursday**, at which time 1116 of the 2391 available parking spaces (subject to restriction) were recorded occupied (47% occupancy). This reflects higher occupancies proximate to the retail core, and lower occupancies in the outlying side streets. In summary:

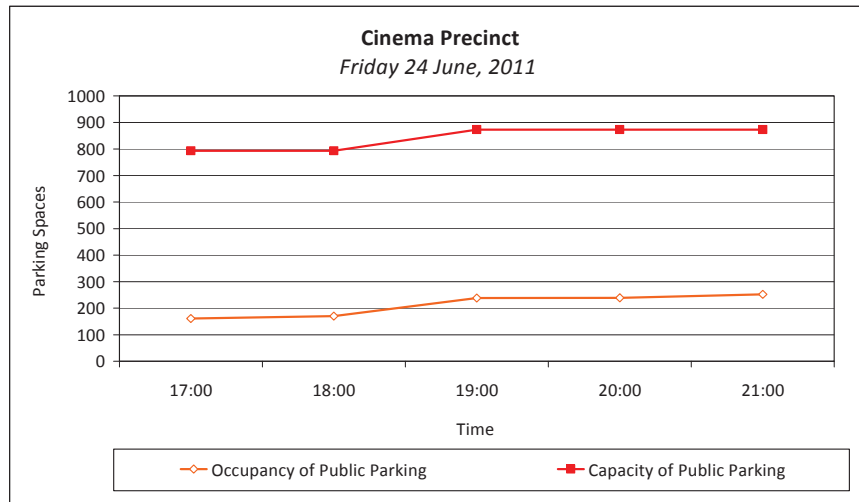
- During the peak 2:00pm period, High to Very High levels of on-street car parking occupancy were observed in all of the off-street car parks in the core retail area. Only the Balwyn Park and Jersey Street car parks recorded Low occupancies.
- Occupancies along Whitehorse Road were Moderate to Very High in the retail core between Balwyn Road and Iramoo Street.
- On the side streets, occupancies were mainly Low to Moderate, except around the office precinct west of Cherry Road, where some Very High occupancies were recorded in the unrestricted areas.



Friday Night Survey

The peak demand for the precinct around the Balwyn Cinema occurred from 7:00pm to 9:00pm when 252 vehicles out of a total of around 753 were recorded. This represents a peak occupancy rate of 33%. In summary:

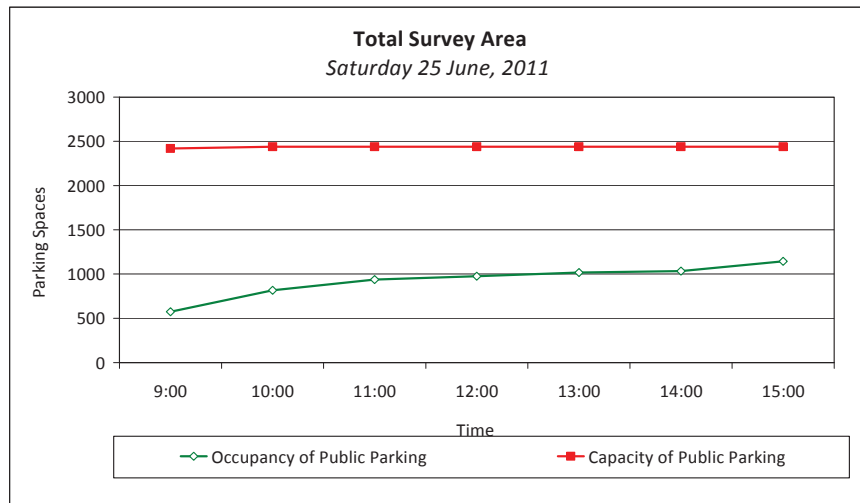
- During the peak period, parking demands along Whitehorse Road varied from Low to Very High.
- Demands for the off-street car parks (Balwyn Park and Jersey Street) were both Low.



Saturday Survey

Total peak parking occupancies on the Saturday was comparable to the Thursday, although weekend activities resulted in a locational shift of demands. The peak occurred at 3:00pm when 1145 vehicles out of a total of around 2439 were recorded. (The difference between the Thursday and Saturday supplies is due to variations in time limit restrictions). This represents a peak occupancy rate of 47%. In summary:

- During the above peak period, Very High levels of parking occupancy were recorded in the Balwyn Park and *McDonalds* off-street car parks.
- Occupancies along Whitehorse Road were generally Moderate to Very High in the retail core between Balwyn Road and Iramoo Street.
- Very High levels of on-street parking occupancy were observed around the streets proximate to Balwyn Park.



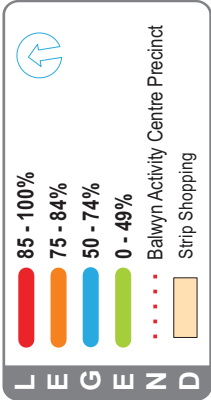
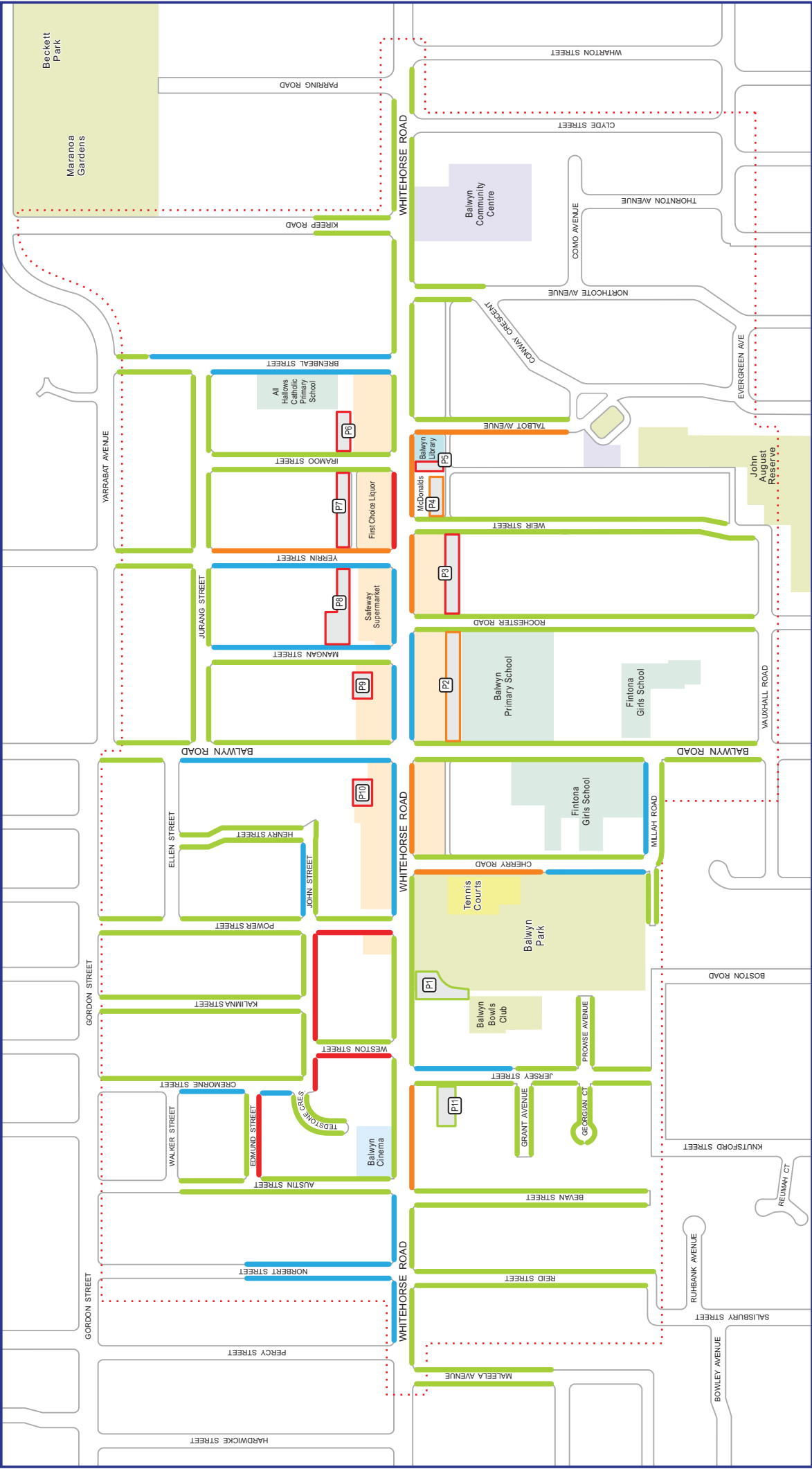


FIGURE 5.1
SURVEYED PARKING OCCUPANCIES
THURSDAY 23 JUNE, 2011 at 1:00pm

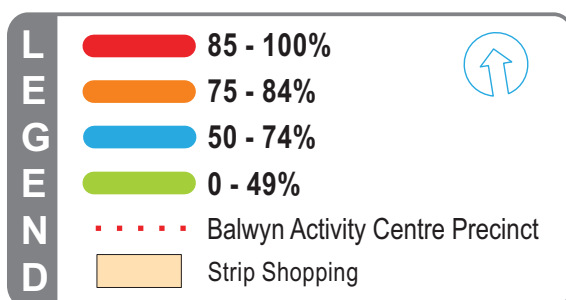
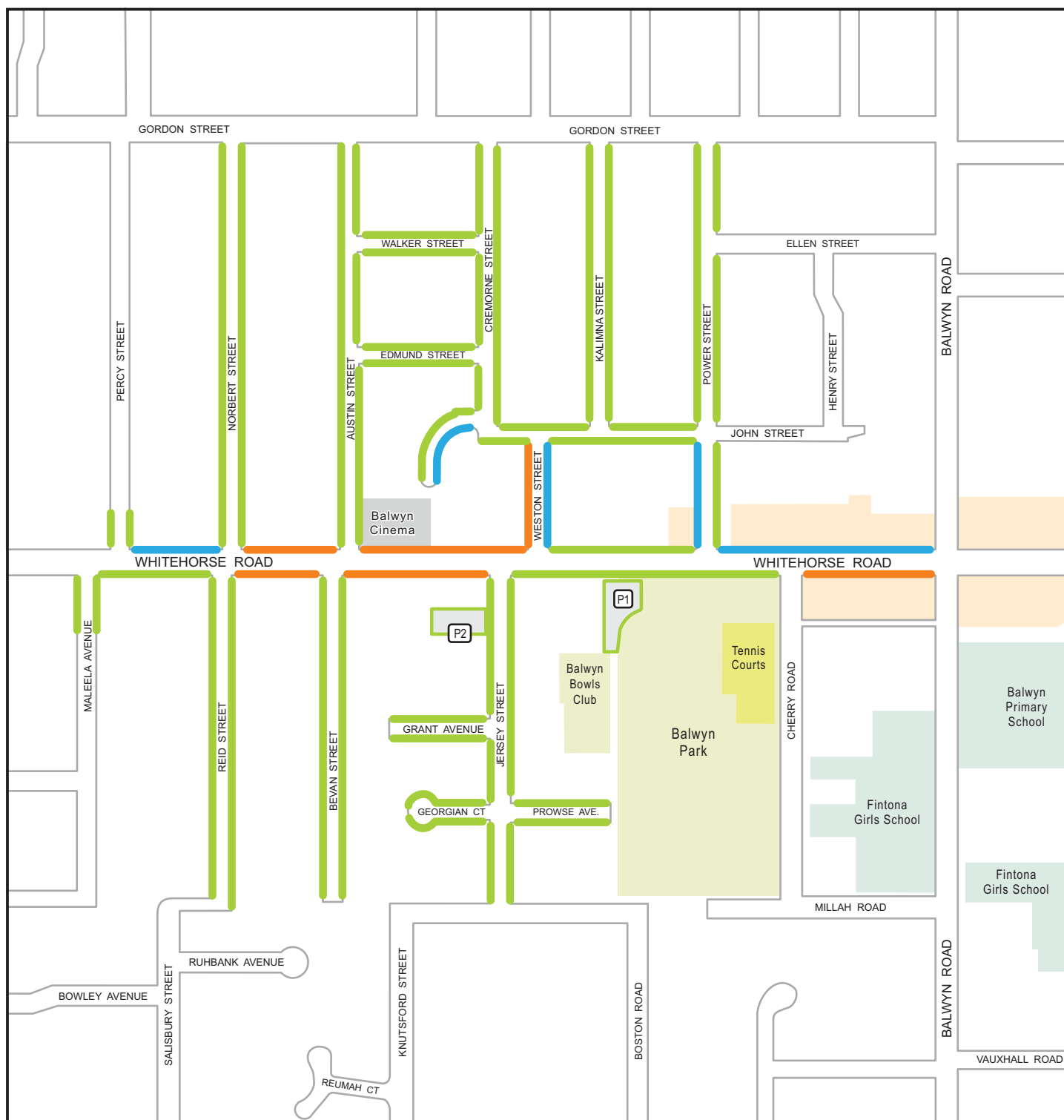


FIGURE 5.2
SURVEYED PARKING OCCUPANCIES
FRIDAY 24 JUNE, 2011 at 9:00pm

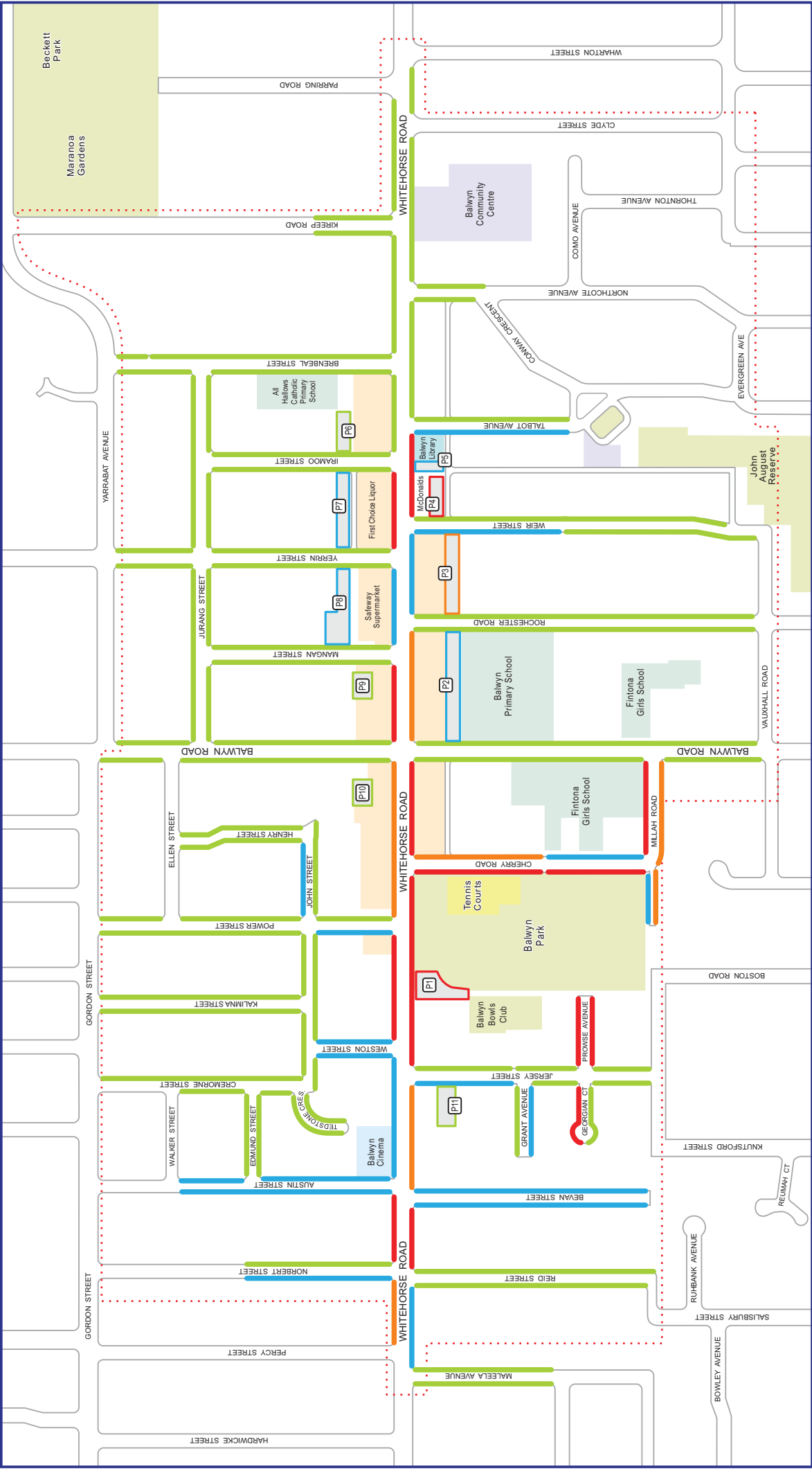


FIGURE 5.3
SURVEYED PARKING OCCUPANCIES
SATURDAY 25 JUNE, 2011 at 3:00pm

Car Parking Duration-of-Stay Surveys

Following on from the parking occupancy surveys, sample duration-of-stay parking surveys were undertaken by Ratio Consultants on Thursday 23rd June and 20th October 2011. The selection of the sample survey areas was informed by:

- Locations identified by Council as incurring parking infringements during the January to August 2011 period;
- the 2011 parking occupancy surveys undertaken by Ratio;
- the 2005 parking duration of stay surveys; and

The surveys were undertaken between 8:00am and 6:00pm in the following areas:

- | | |
|------------------------------------|------------------|
| ▪ Each of the off-street car parks | ▪ Weir Street |
| ▪ Cherry Road | ▪ Rochester Road |
| ▪ Austin Road | ▪ Bevan Street |
| ▪ Jersey Street | |

The 2011 duration-of-stay survey results for Balwyn show that:

- There is generally negligible overstaying in most of the 2-hour zones in the main off-street car parks, excepting the car park behind the petrol outlet west of Balwyn Road which showed considerable overstaying.
- There were some minor overstaying in the short term areas recorded in:
 - The off-street car park west of Mangan Street (Section P09), which is entirely 2-hour
 - The Balwyn Park, which is entirely 2-hour (Section P01)
 - Austin Street (Section E)
- Many of the unrestricted (P) spaces within the main off-street car parks are being used for short stays (e.g. one to three hour durations).

Car Parking Comparison with the 2005 Surveys

A review of the 2011 parking occupancy surveys against the (smaller) comparable area of the 2005 surveys shows that:

- the 2011 surveys were undertaken on a Thursday, Friday night and half Saturday; whereas the 2005 surveys were undertaken on a Friday and half Saturday;
- the peak weekday period in 2011 was at around 2pm on the Thursday, compared to around 11am on the Friday in 2005;
- overall peak parking demand at each of the peak times was comparable, each showing:
 - > 75% occupancies in the main off-street car parks
 - 50-85% occupancies along Whitehorse Road
 - 50-85% along some side streets including Yerrin Street, Talbot Avenue, John Street, Weir Street and Cherry Road
 - lower occupancies along most of the other side streets

- overall, parking demand did not exceed supply in either 2005 or 2011

A review of the 2011 parking duration of stay surveys against the comparable area of the 2005 surveys shows that:

- overstaying in the off-street car parks was also previously recorded in the 2P areas of the Balwyn Park Car Park and the car park west of Balwyn Road (Section P10).
- There was some minor overstaying in Jersey Street in 2005, which has not shown up in the 2011 surveys.
- overstaying in the off-street car parking areas has continued from 2005 to 2011 in the Balwyn Park and rear of petrol outlet car park west of Balwyn Road, whilst overstaying in the on-street parking areas remains negligible.

Long Term Car Parking Demand

At the eastern end of the Study Area around the retail core, the off-street car park east of Iramoo Street provides 33 unrestricted car parking spaces. The survey data shows that this car park is busy between around 11:00am and 2:00pm and that there is surplus capacity either side of this peak period.

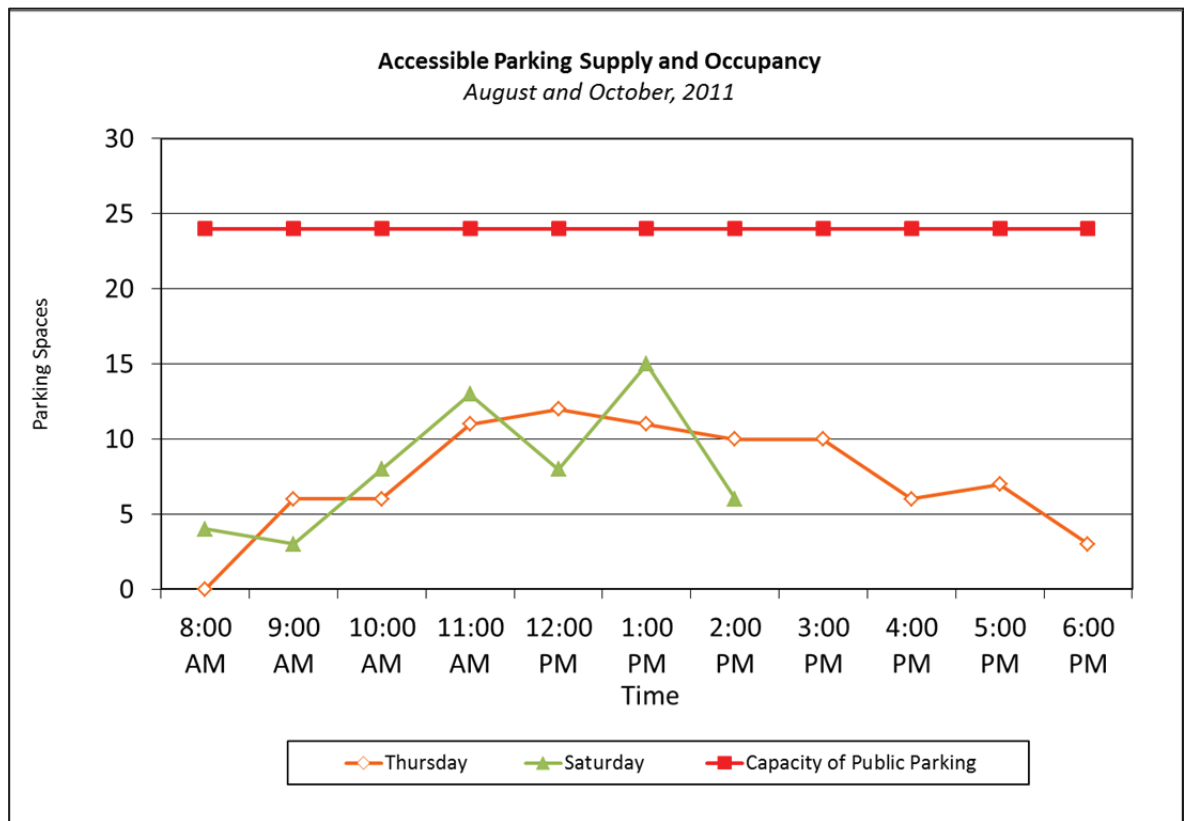
There are also pockets of unrestricted parking within some of the other rear off-street car parks on the eastern side of Balwyn Road, which are predominantly signed as '2P unless otherwise signed'. The unrestricted bays are denoted by P signage, which is not easily identified with the current post or pole signs. There are a further 61 unrestricted spaces in these scattered pockets east of Balwyn Road. Demands for the unrestricted spaces was generally high during the middle part of the day (9am-2pm).

Just west of Balwyn Road is the off-street car park behind the petrol outlet. It is a combination of 2P and unrestricted, and again the restrictions were not easily identified. Demands in this car park were very high during business hours, with up to four (4) extra vehicles observed illegally in the aisles.

At the western end of the Study Area around the commercial office spaces and the Balwyn Cinema, there is all-day parking in the Pay and Display private off-street car park off Jersey Street (23 spaces) and in many of the surrounding side streets. The survey data shows that demand for the convenient free on-street spaces is very high (for example along Weston Street, John Street and Power Street), whilst demand in the Pay and Display off-street car park is low (zero occupancies for much of the survey period); this shows that people are prepared to park and walk to/from (sometimes) quite remote locations in local streets, rather than to pay for all-day parking.

5.2 Accessible Parking Demand

The utilisation of the precinct's accessible parking supply is summarised below, and shows less than 50% occupancy at most times.



5.3 Bicycle Parking Demand

Existing bicycle parking is generally underutilised along Whitehorse Road with sufficient bicycle hoops to accommodate peak demands observed on a Saturday.

The exception is evident between Weir Street and Balwyn Library to the southern side of Whitehorse Road. Demand frequently exceeds supply and bicycles are attached to any available street furniture and at times obstruct pedestrians. Up to 8 bicycles have been observed immediately adjacent the Balwyn library.

No observations have been made of parking at night.

5.4 Motorbike Parking Demand

Whilst no specific motorbike bays are provided, demand exists particularly between Iramoo Street and Mangan Street. Demand for up to 5 motorbike spaces has been noted in this area.

Motorbikes and scooters are observed frequently using footpaths as parking locations. Along Whitehorse Road where pedestrian path width is already constrained, the parking of motorbikes and scooters further compound the problem.

5.5 Loading Demand

Through site observations and trader questionnaire surveys, no evident issues exist with existing loading provision.

5.6 Taxi Demand

Due to the drop off/pick up nature of taxis, utilisation levels cannot be comprehensively measured through hourly parking surveys. Site observations indicate that the Balwyn Road taxi rank is not used and poorly located in terms of its proximity with key areas of activity and retail opportunity. This is particularly problematic for people with a disability.

With the imminent development of a new supermarket opposite the Balwyn Cinema, a taxi provision (rank or call forward) may be well located in this area.

It is evident that dialogue is required with the community and the taxi organisations to determine improved taxi integration.

6 Parking Supply and Demand Summary

6.1 Overall Situation

For the Balwyn Activity Area as a whole, the current supply of car parking comfortably satisfies peak demands. Much of the available parking supply is along residential side streets off Whitehorse Road, but that is generally not occupied so fully as to represent major amenity problems.

There are, however, some localised issues and supply/demand imbalances, which require attention, as set out below.

Additional parking for people with a disability, taxi, bicycle parking and motorcycle parking is required at some locations.

6.2 Situation by Quadrant

The Balwyn Activity Area can be conveniently described as four quadrants, located in the four precincts radiating out from the intersection of Whitehorse Road and Balwyn Road. Specific precinct parking issues are as follows:

Northeast Quadrant

- The supermarket adjacent Mangan Street dominates the parking generation, but the generous off-street car parking supply is readily accommodating the demands in this quadrant.
- The major car park between Yerrin and Mangan Streets (behind the supermarket adjacent Mangan Street) experiences peak demands of around 90% occupancy, but the duration of stay surveys and other observations indicate that turnover is high and the car park is rarely at capacity.
- There is a good supply of all day car parking in this quadrant so, even without time limit protections in the side streets, commercial overspill along the surrounding residential frontages is reasonably contained (that is along the key streets of Mangan, Yerrin and Iramoo).
- The findings of the supply and demand analyses do not signify a need to create additional off-street car parking areas in this quadrant to cater for existing demands.
- This quadrant is the most likely area in which an extra taxi rank would be best located given the supermarket and level of surrounding activity.
- Demand exists for motorcycle/scooter parking, no provision is provided at this time other than pedestrian areas which compound footpath width limitations.

Southeast Quadrant

- The two rear off-street car parks that effectively run between Weir Street and Balwyn Road provide a good supply of parking to this quadrant, where peak parking demands are high to very high.
- Long term or all day parking is limited in this quadrant. Due to the extensive 2P protections along Weir and Rochester Streets, demand for the few unrestricted spaces within the off-street car parks (Section P03) is very high. Talbot Avenue is unrestricted and therefore also used for all day parking.

- *Balwyn Primary School* and *Fintona Girls School* each generate regular car parking demands in this quadrant.
- The findings of the supply and demand analyses do not signify a need to create additional off-street car parking areas in this quadrant to cater for existing demands.
- Bicycle parking in this quadrant is limited adjacent the Balwyn Library and demand indicates a need to create off-street bicycle parking to accommodate up to 10 bicycles.

Northwest Quadrant

- Off-street car parking is very limited in this quadrant, and narrow side streets with limited capacity for on-street parking contribute to an overall undersupply in this quadrant.
- Car parking demands for the all day spaces in the off-street car park behind the service station, and along Weston, Power and John Streets is very high.
- Even so, beyond this core area of high demand, parking occupancies are generally low (for example Kalimna Street).
- The streets around the Cinema (predominantly Austin Street) are protected from late night visitor parking through extended time limit restrictions (through to 11pm). Surveys and observations indicate that compliance is generally good.
- Night time parking around the Cinema is generally contained along Whitehorse Road.
- The findings of the supply and demand analyses indicate that existing on and off-street car parking resources are at capacity, and that any future growth in this quadrant would need to provide parking on-site and/or contribute to new public parking.
- There is very limited accessible parking provision in this quadrant and additional supply is required.

South-west Quadrant

- Offstreet car parking is mainly within the Balwyn Park car park. The car park is generally underutilised outside peak sports/recreational periods.
- There is currently a small commercial car park off Jersey Street, but it is temporary as it will likely be incorporated into surrounding residential/mixed use redevelopments.
- The generous width of Cherry Road provides for angle car parking, thereby creating an important parking resource for short and long term parking in the quadrant. No accessible parking is provided on Cherry Road.
- The findings of the supply and demand analyses indicate that the convenient on-street parking resources are well utilised, and that any future development in this quadrant may be able to utilise some of the spare capacity of the Balwyn Park car park, but would also need to provide parking on-site and/or contribute to new public parking.
- With the imminent development of a new supermarket opposite the Balwyn Cinema, a taxi provision (rank or call forward) may be well located in this area. Further consultation is required.
- Notable residential development is scheduled to occur opposite the Balwyn Cinema, a Car Share initiative in this area with the future residential population would provide improved amenity and reduce parking demands.

6.3 Key Findings and Implications

The surveys of parking supply and demand produced the following key findings for the Balwyn Activity Area:

- signage in some off-street areas is obscured and/or not easily identified, and therefore confusing;
- there is currently a generous amount of public parking available for the area as a whole;
- some short-term areas are being occupied beyond their time limits;
- some long-term (all-day) areas are being occupied or short stays;
- there are no areas specifically set aside for traders, excepting the few *Safeway* spaces;
- there is no designated motorbike/scooter parking although demand exists;
- a gap in accessible parking provision exists to the western side of the Activity Area;
- demand is high for bicycle parking around the Balwyn Library and greater provision is required.

These findings indicate a need for revised parking time limits and controls in some areas.

7 Community Feedback

7.1 From the Structure Plan Process

The 2009 Structure Plan process included detailed research into the attitudes of Balwyn⁴ residents and revealed a range of issues still relevant to the planning of transport, including car parking in the Activity Area. The key consultation outcomes were:

- Two pockets in the northern part of the Balwyn suburb do not meet the requirements for public transport provision, based on the criteria of being within 400 metres.
- Generally people in Balwyn are happy with the tram and train service offered, but those who rely on bus as their nearest connection are less satisfied due to the irregularity of the service.
- Community transport rated with negative levels of satisfaction.
- Walkability, public transport access and free parking were identified as positive attributes of the Activity Area.
- The lack of accessible parking, traffic speed/congestion and general lack of safety were identified as negative attributes of the Activity Area.

7.2 From Other Recent Activity Area Surveys

As part of its ongoing monitoring of its Activity Areas, the City of Boroondara recently commissioned The Loyalty Zone consultants to conduct consumer surveys in the Balwyn Activity Area.

A survey sample of 200 respondents was collected during a weekday (9am-5pm), Friday (3-5.30pm) and Saturday 9am-3pm period. Demographic characteristics of the survey respondents were as follows:

- 76% female and 24% male
- 76% of those interviewed were over the age of 50
- 76% indicated that they were a local resident, 4% indicated that they worked nearby and 20% indicated that they were visitors

A higher proportion of the respondents were female and elderly, than for the population of Balwyn as a whole. The sample may be reflective of those who use the Activity Area but not representative of the whole community.

Respondents indicated that they use the following means of accessing the Activity Area:

- 66% by car (dominant mode overall, predominantly weekly visitors)
- 22% as a pedestrian (dominant mode for daily visitors)
- 11% by public transport

Other significant transport insights include:

- Very few car drivers indicated that they would use healthier or more sustainable transport modes. 49% indicated nothing would encourage them, 21% indicated they prefer to drive.

⁴ In this section, *Balwyn* refers to the residential suburb, as distinct from the Balwyn Activity Area as mentioned in other sections of this document.

- 66% of respondents indicated that they owned a car, 6% of respondents indicated that they owned a bicycle and a car, and 1% indicated that they only owned a bicycle.
- 51% of respondents lived within Postcode 3103, a large part of which is within a kilometre of the Activity Area.
- 72% of respondents indicated that they stay an hour or less in the Activity Area.

Comments received regarding streetscape included:

- *I think there should be more trees along the footpaths.*
- *It's pretty good but perhaps create a park like the one in East Kew. They need to decorate the streets with trees and have places to sit.*
- *The pavement and around the seats are full of weeds. No one has taken responsibility for it. All the seats are dirty and you get splinters from them.*

Comments received regarding traffic included:

- *The traffic along here brings a lot of noise to the area.*
- *They could look at traffic though, just be here for a couple of hours to see what it's like.*
- *Someone needs to take responsibility for keeping traffic lights working properly. Even the pedestrian lights you can't trust, they should be checked more often.*
- *The traffic is a put-off at times. The speed limit is too high and people are impatient.*
- *The parking is often a problem especially with the Clearways and there is a great congestion of traffic towards Balwyn Road.*

7.3 From Ratio Surveys of Activity Area Traders

As part of the 2011 PPP Study, a questionnaire survey prepared by Ratio Consultants was issued by the Boroondara Council to 200 businesses within the Balwyn Activity Area seeking information on business type and various transport related matters. The questionnaire survey was issued on 12 July 2011 by mail. Refer Appendix C for a copy of the cover letter and questionnaire form.

A total of 37 responses were received (19% response rate), the results of which are summarised below:

% mode of travel on day of survey:	
Car driver	80%
Car passenger	3%
Bus	0.5%
Tram	7.5%
Walk	4%
Cycle	2%
Train	1%
No response	2%
For drivers, % of staff that parked:	
On-site	57%
Public Parking Areas	43%

Percentage of traders who estimate that 80% or more of their customers drive	81%
% of businesses that nominated the following modes as options for alternative travel	
Car Passenger	13%
Bus	19%
Tram	28%
Walk	9%
Cycle	6%
Other	6%
Train	5%
None	14%
% awareness of Car Share and whether Balwyn would be a suitable location	
Aware	54%
Unaware	46%
Supportive of Car Share	20%
Suggestions for improving parking in Balwyn (with Ratio comment in bold):	
-	<i>utilise grass area of Balwyn Park for parking</i>
-	<i>allow unrestricted parking instead of 2P (comment received from office and shop traders)</i>
-	<i>stop granting permits to developers</i>
-	<i>limit all new buildings to two storeys</i>
-	<i>set up parking areas for compact (small) cars</i>
-	<i>consider a small shuttle bus to transport employees from remotely located parking</i>
-	<i>investigate opportunities to convert parallel parking to angle parking to increase supply (from trader opposite Cherry Road)</i>
-	<i>utilise remnant rear areas for parking</i>
-	<i>reduce parking time limits (from pool shop trader)</i>
-	<i>build new multistorey car park (would also allow more times for Clearways)</i>
-	<i>multistorey car parks to go with increased property development</i>
-	<i>need more long term parking</i>
-	<i>more unrestricted parking for staff</i>
-	<i>more public parking spaces</i>
-	<i>more parking at Safeway</i>
-	<i>more off-street parking for staff, more parking along activity strip</i>
-	<i>more available spaces</i>
-	<i>more disabled bays, designated long/short term areas (from cinema)</i>

-	<i>longer parking hours</i>
-	<i>increase parking duration from 2 to 3hr</i>
-	<i>dedicated staff parking</i>
-	<i>Cherry Road – provide 4hr parking for clients</i>
Suggestions for improving walking/cycle/public transport in Balwyn:	
-	<i>shuttle bus between Canterbury or Camberwell train station, safe bike paths through parks</i>
-	<i>parking stations for bicycle (from office trader)</i>
-	<i>more services, more diverse bus routes</i>
-	<i>more public transport</i>
-	<i>more bicycle parking and clearer tram stops (from shop trader)</i>
-	<i>need closer train station than Box Hill</i>

Interpretation of the Trader Feedback

The Ratio trader consultation process has provided some useful information in relation to transport and parking:

- The findings are generally consistent with previous trader surveys undertaken in the precinct in relation to mode share
- 57% of employees have access to private on-site car parking, and this is reflected in the high driver mode of 80%.
- While only 7.5% of employees use the Whitehorse Road tram to travel to work, a further 28% of employees nominated the tram as being an option for travel.
- While only 0.5% of employees use the Balwyn Road bus to travel to work, a further 19% of employees nominated the bus as being an option for travel.
- Only 4% of employees currently walk to work but another 9% see that mode as an option.
- Only 2% of employees currently ride bikes to work, but another 6% see that mode as an option.
- The majority of traders (81%) perceive that at least 80% of their customers drive to the Centre.
- The awareness for Car Share schemes amongst Activity Area employees is relatively high at 54%, and 20% support such a program for Balwyn.
- The trader comments are varied and highlight the range of issues that affect individual traders. The suggestion to convert more parallel parking may relate to Cherry Road, and the potential to extend the angle parking along the length of the park.

Furthermore, by combining the trader survey results with our knowledge of the precinct characteristics and the parking supply and demand findings, we can extract some more detailed information on empirical parking generation in the precinct. Our methodology is set out below:

Input Data

- *Parking demand for the entire precinct peaked at approximately 1151 cars parked in public areas on a weekday.*
- *The Activity Area currently comprises 30,000 sq m of office space and 19005 sq m of retail space.*

- *Total parking demand is made up mainly of Activity Area staff and visitors (that is negligible resident parking on streets and public transport commuters).*
- *57% of Activity Area staff park in private off-site parking areas, which were not picked up in the parking surveys, and therefore not represented in the demand figure of 1151 spaces.*

Assumptions

- *Office and retail uses generate parking demand at approximately the same rate.*
- *Office parking demand comprises 90% staff parking and 10% visitor parking.*
- *Retail parking demand comprises 20% staff parking and 80% visitor parking.*

By extrapolating from the above inputs and assumptions, we can broadly estimate the average parking generation of the Balwyn commercial precinct. In summary, at the peak weekday period, parking demand comprises 1151 public spaces plus approximately 946 private staff spaces, for a total peak parking demand of 2077 spaces.

From this, the average calculated rate of parking generation across the precinct is 2.4 spaces per 100 sq m of commercial (office plus retail) floor area, when considering the public spaces only.

This rate increases to 4.2 spaces per 100 sq m of commercial (office plus retail) floor area, when also taking into account the private parking demand estimates.

7.4 From Ratio Surveys of Activity Area Customers

In addition to the Trader surveys, an in-centre interview questionnaire survey of visitors to the Balwyn Activity Area was undertaken by Ratio Consultants on Thursday 8 September, 2011. The sample was collected in the core retail sector of the precinct, east of Balwyn Road. The main purpose of the survey was to establish the trip purposes of visitors, and specifically the proportion of shared trips that occur. A random sample of 130 visitors were interviewed in Whitehorse Road, the results of which are summarised below:

% mode of travel on day of survey:

Car driver	58%
Car passenger	9%
Bus	0%
Tram	2%
Walk	31%
Cycle	0%

For drivers, % of parking locations

On-street	49%
Off-street parking areas	45%
No response	7%

Trip purpose:

Supermarket only	33%
Café/restaurant only	25%
Personal business only	4%
Other only	13%
Pick up school kids only	1%
Small shops only	1%
Shared (multi-purpose) trips	24%

Interpretation of the Customer Feedback

The customer consultation process has provided some useful information in relation to transport and car parking:

- 67% of customers arrive to the Activity Area by car, which is consistent with previous customer surveys undertaken by Council (similar to the Loyalty Zone results).
- 31% of customers walked to the Activity Area (this is even higher than the Loyalty Zone finding of 22% pedestrians). A detailed review of walking highlights that walking is the dominant mode when it comes to daily visitors (based on Loyalty Zone findings).
- The supermarket (adjacent Mangan Street) is the dominant attraction to Activity Area.
- The proportion of multi-purpose trips (24%) is generally consistent with the role and scale of the Activity Area.
- Of the 24% shared (multi-purpose) trips, about three quarters involved the supermarket.

7.5 Key Issues and Implications

The various community feedback processes indicated the following key issues and implications for Balwyn Activity Area:

- By assuming that parking generation rates for office and retail uses are similar, it is estimated that average commercial car parking generation across the precinct is in the range 2.4 – 4.2 spaces per 100 sq m. This range is consistent with empirical rates for shopping precincts of around 3.0 spaces per 100 sq m.
- Although most employees currently drive private cars to/from the Activity Area, many of them have public transport or bike travel as available options, and only 14% indicated they had no alternative to driving. Providing improved facilities may tap this latent demand for more sustainable travel.
- Traders perceive that the majority of their customers (that is over 80%) drive when in fact in-centre surveys indicate that mode share is more balanced; 58% drive and 31% walk.
- Car use is the dominant mode of access to the Balwyn Activity Area. Drivers are most likely to visit the Activity Area once a week.
- Walking is the dominant mode for daily visitors/customers. Maintaining and improving pedestrian facilities will be important in retaining and extending this activity.
- 20% of traders see a benefit in introducing Car Share to the Activity Area. A high proportion of traders are aware of Car Share.
- There is a need to improve management of off-street parking areas to match time limits to user needs, and to provide all-day areas for traders.
- There is substantial sharing of parking resources for multi-purpose trips, especially including the existing supermarket. New parking resources should be provided to continue and extend this practice.

8 Strategic Issues and Opportunities

8.1 Context

The information and analysis in previous sections indicates the following strategic issues for parking in the Balwyn Activity Area:

- the local community is ageing and generally has a very high level of car ownership and car use, but it also has available and uses a wide range of transport options (other than private car) for travel to/from and within the Balwyn Activity Area;
- walking is the dominant mode for daily visitors to the Activity Area whilst the car is undoubtedly the dominant mode for weekly visitors;
- a high proportion (50%) of local residents occupying studios and small apartments do not own cars;
- the current provision of publicly-available car parking in the Activity Area is generous (albeit that much of the on-street parking supply is along residential frontages in side streets, off Whitehorse Road);
- bicycle parking is consistently provided along Whitehorse Road although demand only notably exceeds supply between Weir Street and the Balwyn Library;
- there is currently no public parking provision for motorbikes/scooters or Car Share, and public provision for taxis is not well integrated with key activity;
- loading arrangements are mainly provided via the rear laneway network, which conflicts with Structure Planning recommendations to activate laneway environments and better connect car parking and pedestrian networks;
- available public parking is well-used at peak times, with some overstay of short-stay spaces and under staying of all-day spaces;
- traders indicate that employees predominantly drive private cars, but the majority do have other transport options readily available;
- the majority of traders perceive that over 80% of their customers drive, however a substantial proportion (31%) walk to the Centre;
- there is extensive sharing of parking spaces for multi-purpose trips which encourages and supports commerce in the Activity Area.

There is a resulting series of opportunities for on-going management of existing parking facilities, and for provision of parking for future development in the Activity Area:

- there are opportunities to modify some time limits to improve parking efficiencies and support employees, business and the community;
- there are opportunities to strategically support bicycle, motorbike, accessible, taxi, and Car Share parking that would help serve to manage private car parking demands;
- there are opportunities to require future development to provide less car parking on-site, more parking in publicly-available off-site locations (that would require a cash in lieu mechanism) where shared use can occur, and more complementary provision for Car Share, bikes, motorbikes and motor scooters.

8.2 Improved Management of Existing Parking

Revised Time Limits

The analysis of current durations-of-stay within the Study Area reveals that the current supply of long term parking in the off-street car parks is being regularly utilised for short stays. This effectively reduces the available supply to local employees and this is reflected in the perception of insufficient staff parking for traders.

The principles which should apply to improved managing of existing parking facilities are:

- Continue to provide predominantly short term on-street parking (for example 1P) along Whitehorse Road and the abutting sections of the side streets.
- Continue to provide predominantly 2P off-street parking in the off-street car parks to cater for the majority of visitor demands.
- Convert the off-street car park west of Balwyn Road (behind the petrol outlet) to a combination of short to medium term parking to cater for the various parking needs of precinct visitors.
- Provide some medium term parking along Cherry Road to cater for the various parking needs of precinct visitors.

Improved Parking Signage and Linemarking

Some of the off-street parking areas contain signage that is inconspicuous. In many cases, the pockets of unrestricted parking within the otherwise 2P zones are not easily identified.

For each of the major public off-street car parks within the Study Precinct, we recommend that a parking signage audit be undertaken by the respective Council Officers that are responsible for the installation, maintenance and enforcement of the parking signs. The objective of the audit is to create a signage scheme that:

- Is appropriate to the users;
- Clearly identifies time limits, including pockets of unrestricted parking;
- Is enforceable; and
- Is regularly maintained (for example sets a plan for the pruning of trees and replacement of damaged signs).

Some specific locations that require attention are:

- Along fence lines of the rear off-street car parks on the northern side of Whitehorse Road between Iramoo Street and Balwyn Road;
- Along the fence lines and laneways of the rear off-street car parks on the southern side of Whitehorse Road west of Weir Street.
- In the off-street car park west of Balwyn Road behind the petrol outlet.

Some possible improvement measures are:

- Additional signage in areas where sightlines to signs are obscured by vegetation; and
- Use of different coloured linemarking to define distinct parking zones.

Car Share Parking

Car sharing has proven to reduce car dependency and car use by providing a service that removes the need to own a private vehicle. Car Share results in transport choices that deliver a multitude of benefits. These include reduced parking pressures, increased accessibility for those without a car, sustainable outcomes, and increased incidental physical activity that results in community health benefits.

The City of Melbourne estimates that a single Car Share removes 7.8 private vehicles from circulation; in the City of Sydney this is marginally higher. At isolated Car Share locations, the number has been up to 14 private cars removed from circulation (2009 VicRoads Traffic Management Note No.28 'Guidelines for the Implementation of Car Share Parking'). Whilst re-allocating a car parking space for Car Share may seem counter intuitive, this would be beneficial as a mechanism to help manage increasing parking pressures. Importantly, Car Share allows individuals within the community to remain car free which helps to manage ever increasing car ownership levels and resulting increasing parking and traffic pressures.

A Car Share location can serve the car needs of approximately 20-30 people in the immediate community. Flexicar in Melbourne for example have 120 vehicles that serve 2,800 members.

There are currently no Car Share pods in the Balwyn Precinct, however the feedback from the trader consultation shows relatively good awareness of the concept and at least 20% of those traders that responded to the questionnaire survey supported the introduction of such a scheme for Balwyn. Locational support for Car Share is focused around the Whitehorse Road and Balwyn Road intersection, particularly on the northern side of the road.

With a high proportion (50%) of local residents occupying studios and small apartments without cars, Car Share provides a car amenity that encourages those residents to remain car free or to further reduce car ownership.

Accessible Parking (Parking for People with Disabilities)

On-street Accessible parking spaces in the Study Area are located generally in the side streets and within the off-street car parks.

The Australian Standard for the design of off-street Accessible parking spaces was recently updated⁵, and reflects the preference for standard width bays adjoining a shared access area. The current supply of off-street Accessible parking in Balwyn does not meet the current standard; where possible existing bays should be upgraded and all new bays should meet the Australian Standard.

Through mapping Accessible parking locations, there is an evident low number of bays between Mangan Street and Austin Street.

Taxi Zones

The existing taxi rank on Balwyn Road, north of Whitehorse Road, provides for demands in that immediate vicinity, but is remote from key destinations along Whitehorse Road. To encourage taxi usage, additional ranks should be established and integrated where demand is likely to exist. Demand is often high where pedestrians require goods to be carried or locations that attract a high proportion of people with a disability. Appropriate locations may include:

⁵ Refer Australian/New Zealand Standard 2890.6.2009

- To the eastern end of the Activity Area near the existing supermarket at Mangan Street and the future supermarket opposite the Balwyn Cinema, and
- To the western end of the Activity Centre near the proposed new supermarket opposite the Balwyn Cinema.

Additional consultation is required with the taxi organisations, traders and the community to establish a suitable location. Provision may also vary from a taxi rank to a pickup/call forward zone.

Loading Parking

Many businesses in Balwyn take advantage of the rear laneway network for their door-to-door deliveries. Notably, the consultation process did not reveal any dissatisfaction with loading arrangements in the precinct, which strongly suggests that traders are generally happy with their current (generous) provisions from the rear.

However this arrangement creates some challenge with the objective of encouraging rear opening of buildings to the car parks including activation of the laneway and the provision of improved pedestrian links/environments.

Options exist to:

- convert on-street parking spaces, such as at the start and finish of each block along Whitehorse Road, into Loading Zones. These would need to operate only outside clearway times. There could also serve short stay (5 min parking) including pick up and drop off.
- continue delivery along the laneways outside peak pedestrian periods including 10 kph speed limit for deliver vehicles (walking speed)

Community Bus Parking

There is a need to provide a better community transport service to meet local access needs, especially for people living north and north-east of Balwyn Activity Area. The operational characteristic of the service requires clarification, subject to this, an improved convenient parking and amenity provision is required. Given an increasingly elderly proportion of the community, the requirements/demands of such a service will likely increase.

The existing minibus service needs a more convenient and permanent on-street parking location, such as in Mangan Street just north of Whitehorse Road (possible conversion of two existing car parking spaces). Alternatively a limited waiting location along Whitehorse Road may suffice subject to seating and shelter supportive of community bus users.

Bicycle Parking

Existing public bicycle parking is provided by bike “hoops” along the footpaths, mainly along the extent of Whitehorse Road. The provision is primarily used by visitors/customers and generally meets demand with the exception of between Weir Street and the Balwyn Library where bicycle demand often far exceeds supply.

Between Weir Street and the Balwyn Library, particularly in front of the library, the re-allocation of space is required. Typically 10 bicycles can park within a single car park. Where demand exists, a greater proportion of the community is served efficiently from this re-allocation.

Motorbike and Motor Scooter Parking

Converting some existing on-street car parks into motorbike/motor scooter spaces would also encourage riders to park on-street rather than on footpaths, which would improve pedestrian access and safety. It would also encourage some car drivers to use these more sustainable modes.

The City of Melbourne applies a rate of one motorbike space for each 50 car parking spaces. Applying that rate to Balwyn's 2356 existing parking spaces would yield 47 motorcycle spaces; they would require conversion of (only) 12 car parking spaces.

However, demand at this times does not does not indicate a need for this extent of motorbike/scooter parking. Suggested provision should be based on current demand and site observations. Accordingly, the provision of 3 motorbike parking bays at 3 separate locations would accommodate existing demand with a small element for growth. It is proposed that motorcycle/scooter bays be provided at:

- Mangan Street (West Side) near Whitehorse Road,
- Yerrin Street at a suitable location, and
- at Balwyn Library.

Growth in demand requires monitoring and future review.

8.3 Parking Provision for Future Development

Car Parking Rates

Residential Development

Council's submission to the VPP review maintains the existing Clause 55 (ResCode) car parking provision rates for new developments throughout Boroondara. For the Balwyn Activity Area, there is a compelling rationale for reducing these rates; in particular, the analysis in Section 3.4 shows that, at least for small dwellings, a substantial proportion of residents (50%) have no car.

There are not yet any cases in Balwyn where car parking provision for residential occupants of new residential developments have been approved by Council (or reviewed by VCAT) at lower than Clause 55 rates. However, there have been several instances (such as mixed use proposals for 184 and 188 Whitehorse Road) where reduced provision for residential visitors has been approved, subject to:

- residential visitors being able to share parking spaces with shop and restaurant customers;
- the development having an approved Green Travel Plan to assist access to alternative travel modes.

Residential visitor car parking demands typically peak on weekday evenings and on weekends, whereas shop and office visitor car parking demands peak on weekdays and Saturday mornings. This means that the demands can efficiently share a common parking supply. So, for all future mixed use developments in the Balwyn Activity Area, this principle of shared visitor parking should apply; subject to applicants demonstrating that sharing arrangements can be achieved, dispensations in residential visitor parking should be permitted.

Beyond that, there is a case for permitting less than one resident (occupant) parking space for new small dwellings in the Balwyn Activity Area. The "sustainable" rate now routinely applied by the City of Port Phillip in and near its Activity Areas, that is 0.8 car parking spaces for one-bedroom apartments, is strongly supported with the Balwyn household car ownership rate of 0.5 cars per household.

ABS data for Balwyn, and for Boroondara more generally show that most two-bedroom and larger dwellings are occupied by householders owning at least one car. On this basis, such dwellings should continue to be provided with car parking at the Clause 55 rates, that is:

- one car parking space for two-bedroom dwellings;
- two car parking space for three+ bedroom dwellings.

Similarly, for all sizes of dwellings which are in residential only developments (that is not in mixed use developments where visitor spaces can be efficiently shared) the Clause 55 visitor rate of 0.2 car parking spaces per dwelling should continue to apply.

Office and Shop Development

As outlined in Table 2.2, the review of VPP parking provision rates has recommended car parking for “office in a Business Zone or Activity Area Zone” at 3.0 spaces per 100m² net floor area. For “shop in a Business Zone or Activity Area Zone”, the VPP review rate is slightly higher at 3.5 spaces per 100m² leasable floor area (versus 3.0 spaces/100m² for Clause 22.03).

As per Ratio’s previous Boroondara Parking Code Report and empirical information collected since, parking demands for offices and shops (except supermarkets) in Activity Centres do tend to peak at about 3.0 spaces per 100m² floor area.

For future office and shop development in Balwyn, a consistent rate of 3.0 spaces per 100m² floor area is close to, but slightly less than an (unconstrained) demand situation. Accordingly, it would still justify a demonstration by a developer/applicant of practicality, and it would still justify robust Green Travel Plans.

The Balwyn trader survey did not allow an accurate estimate of parking demands separately for staff and visitors/customers but, in broad terms:

- offices require 2.0 spaces/100m² for staff and 1.0 spaces/100m² for visitors.
- shops require 1.0 spaces/100m² for staff and 2.0 spaces/100m² for customers;

For offices and shops in the Balwyn Activity Area, providing parking at a rate of 3.0 spaces/100m² floor area, about half of the provision (less for offices, more for shops) should be publically accessible:

- to make it easy for visitors and customers to find and use the parking;
- to maximise opportunities for shared usage, with different businesses having peak demands at different times.

A direct and convenient method of providing publicly-accessible parking is via a cash-in-lieu scheme, whereby developers make a financial contribution for (say) half of their project’s parking requirement, and Council puts that towards purchasing land and construction public off-street parking. Such a mechanism also allows Council to include Car Share, accessible, motorbike and bicycle parking in any new parking project.

The significant “shop” exception to a provision rate of 3.0 spaces/100m² would be a supermarket. As indicated by the VPP review, supermarkets typically generate up to 5.0 spaces/100m². Reductions below that are generally not sought by developers.

The presence of a supermarket with parking provision at around 5.0 spaces/100m², assists in minimising parking needs of nearby shops. As shown by the trader surveys, in Balwyn there is a high level of multi-purpose shopping travel including (or generated by) the existing supermarket.

Restaurant and Cafe Development

As outlined in Table 2.2, the review of VPP parking provision rates has recommended 3.5 spaces per 100 sq m leasable floor area for restaurant in a Business Zone or Activity Area Zone. This rate recognises that restaurants and cafes in shopping centres such as Balwyn have patronage patterns which:

- at lunchtimes include many shared trip purposes, as confirmed by the in-centre surveys;
- at dinner times are provided mainly by local residents, or others who can park in available public areas.

The VPP review rate has been previously supported by Council and is therefore considered appropriate for Balwyn, subject to the applicants demonstrating the availability of off-site car parking (for example to ensure that new restaurants west of Balwyn Road have adequate parking available).

Bicycle Parking Rate

Residential Development

To allow cycling as a viable mode choice, future development needs to accommodate amenity for bicycle ownership including ease of access.

Whilst the consumer questionnaire surveys indicate a low level of bicycle use and ownership; the demographic captured is much older and not representative of the overall community. Those who live within or near the Activity Area in smaller dwellings are also much less likely to own a car.

A report by VicRoads in 1999 "Cycling in Melbourne: Bicycle Ownership" indicates that 50% of all houses have bicycles, those with bicycles have an average of 2.3 bicycles. ABS in 2009 indicated that 52% of households have a bicycle with nearly 36% of households with two or more bicycles.

The Victorian Planning Scheme (Clause 52.34) outlines one space per five residential dwellings for developments of four or more storeys. This is not reflective of bicycle ownership across Melbourne and does not reflect increasing bicycle ownership and demand.

AustRoads (2011) outlines bicycle parking provision that is more in line with general levels of bicycle ownership. For apartment houses:

- 1 bicycle space per 4 habitable rooms for residents
- 1 bicycle space per 16 habitable rooms for visitors

In line with the AustRoads standard guidance, the following rates would be evident:

- Bicycle parking (secure) for residential development - 1 per new studio and one-bedroom - 1.5 per new two-bedroom dwellings - 2 per new three-bedroom dwellings
- Bicycle parking (publically accessible) for residential development visitors - 1 per 5 dwellings

Offices

Victorian Planning Scheme (Clause 52.34) indicates office bicycle parking provision to be as follows:

- Employee bicycle spaces - 1 space per 300 sq m of net floor area if the net floor area exceeds 1000 sq m.
- Visitor bicycle spaces - 1 space per 1000 sq m of net floor area if the net floor area exceeds 1000 sq m.

Accordingly no provision is provided if development is less than 1000 sq m. Based on a typical occupancy ratio of 1 office employee per 15 sq m, over 60 employees could work in an office building before any bicycle parking is required under the current planning scheme.

If compared with AustRoads (2011) guidelines, the Bicycle Victoria Bicycle Parking Handbook (2004), score guidelines set out by the green Building Council, and results from the trader questionnaire survey (existing and potential demand), it is clear that a rate more in line with the following is required:

- Bicycle parking for office development - employees - 1 per 200 sq m gross floor area (in line with AustRoads and trader surveys)
- Bicycle parking for office development - visitors - 1 space per 1000 sq m of net floor area if the net floor area exceeds 1000 sq m (in line with AustRoads)

Shops

Under the Victorian Planning Schemes, bicycle parking is not required for development under 1000 sq m.

The trader questionnaire surveys indicates both existing demand and a latent demand that is ill considered under the existing Victorian Planning Scheme given that most shops are less than 1000 sq m in the Activity Centre.

A rate in line with Austroads (2011) would be appropriate for the Activity Centre and would help encourage a greater number of employees that indicate that cycling is a viable choice to use a bicycle. The rate outlined in the AustRoads guidance is as follows:

- 1 bicycle space per 300 sq m for employees

Cash in lieu considerations should be considered at locations where providing accessible bicycle parking is not possible.

Cafes and Restaurants

Victorian Planning Scheme rates are considered appropriate. Cash in lieu considerations should be considered at locations where providing accessible bicycle parking is not possible.

Car Share Rates

A Car Share location can serve the car needs of approximately 20-30 people in the immediate community. Flexicar in Melbourne for example have 120 vehicles that serve 2,800 members. Both internationally and amongst many inner Melbourne municipalities, Car Share has proven a reduction in car ownership and use. Typically about 8 vehicles are removed from the street as a result of Car Share and more importantly a significant number (about half) remain car ownership free.

Residential Development

City of Sydney introduced rules requiring 1 car-share space for every 50 apartments in new developments. Experience in many municipalities in Melbourne indicates (VCAT cases) a ratio of approximately 1 car-share space for every 100 apartments.

Car ownership rates for studio and one-bedroom apartments highlight that approximately half do not own a car. Support for those without cars should be provided in order that they remain car free rather than contributing to increasing rates of car ownership. A rate of 1 Car Share per 50 residential units would be supportive of the existing community remaining car free and in future would support residents to reduce their car ownership.

CAR SHARE – Car Share to be considered as a component of planning applications in the Balwyn Activity Area. Car Share provision is to be located on-site in a convenient, accessible (to the general public) and visible location and marked for use by Car Share vehicles only.

- Car Share for **residential development** that is not accessible to the general public will only be considered when the development is over 50 units in size and Council is satisfied that the body corporate structure will ensure that the Car Share amenity remains given any resulting parking dispensation.

Motorbike Parking Rates

In 2010, motorbikes account for approximately 4% of all vehicles registered in Australia and Victoria and is rapidly growing. This would indicate a rate of 1 motorbike parking bay per 25 car parking bays. Without adequate parking provision motorbikes are parked in the pedestrian environment and within Activity Areas this becomes particularly problematic.

The City of Melbourne applies a rate of one motorbike space for each 50 car parking spaces. The City of Sydney is considering "increasing the requirement for developers to allocate a minimum of one space to motorcycles and scooters for every 20 parking spaces provided" (CoS, 2008. Motorcycle and Scooter Strategy and Action Plan 2008-2011).

Residential Development

A rate of 1 motorbike parking bay per provision of 50 car parking bays (prior to any dispensation of the car parking rate) would help to provide amenity within future residential developments within the context of Balwyn.

Design Options for Car Parking Provision

The Balwyn Activity Area Parking Precinct Plan must encourage future developments to provide their parking in ways which support the planning and design objectives of the Structure Plan and Access Plan. To achieve this, required design elements include:

- provision of parking at the rear of sites fronting Whitehorse Road, with access off side roads, so that visual and vehicular access intrusion is minimised;
- a proportion of parking to be publically-available, so that efficiencies of shared use can be maximised;
- a high standard of pedestrian access, and inclusion for provision for Car Share, disabled drivers, motorbikes, motorbike/scooters and bicycles.

For the part of the Activity Area where there are existing and continuous rear lanes (that is Balwyn Road to Iramoo Street on the north side and Cherry Road to Northcote Avenue on the south side) there is an additional requirement, namely to encourage activation of those laneways. For narrow sites seeking redevelopment, even modest amounts of parking could compromise such activation and so a mechanism of concessional cash-in-lieu contributions is required to provide most or all parking off-site.

The draft Access Plan highlights the potential conversion of the southern end of Yerrin Street into open space, and connecting the two existing car parks across the road reserve adjacent to the north; this would produce a net gain of about 10 car parking spaces. Those extra spaces could be the ones funded by a cash-in-lieu scheme for development proposals involving extensions at the rear of Whitehorse Road properties, to assist in the activation of the east-west laneway.

For the parts of the Activity Centre where there are no continuous rear laneways, Council should encourage individual developments to coordinate east-west rear access, or purchase strategically-located properties to allow efficient and accessible provision of off-site parking. An economic assessment would be required to identify, cost and substantiate contributions towards a shared parking arrangement. Given property prices, the cost of providing cash-in-lieu parking may be in the region of about \$40,000 for each parking space.⁶

Future Shared Parking Requirements

The purpose of this section is to estimate the additional future shared parking required to accommodate increased activity at the Balwyn Activity Area. It is expected that future developments will not be able to accommodate their entire parking requirement on site and in such cases cash-in-lieu contributions would be sought to expand shared parking arrangements at the centre. The benefit of providing shared parking is that parking is generally used more efficiently by multiple land uses that may have very different parking patterns and importantly peak demands.

It is assumed that all residential car parking provisions will be accommodated on site. Residential visitor car parking spaces will be accommodated on site unless available shared parking capacity can be demonstrated. The assessment assumes that no significant change will occur within the Health and Community precinct.

The assessment therefore focuses on the shared parking arrangement predicted for retail and commercial non-retail developments.

Basis for predicting growth is as follows:

- Retail growth is predicted to be 15% in 15 years, this equates to approximately 2,700 sq m between 2006 and 2021 (Essential Economics, 2007. Balwyn Retail and Commercial Assessment)
- Only modest commercial non-retail prospects are foreseen, no growth factors are outlined (Essential Economics, 2007. Balwyn Retail and Commercial Assessment)

Given that commercial prospects are modest but have no defined rate of growth, an assumption has been made that non-retail growth will occur at a rate of 10%.

Table 8.1 – Future Growth and Parking Requirements

	Existing	Growth (15 year)	Increase in activity (Sq m)	Additional Parking ^[1]	Estimated proportion of off-site provision	Additional Shared Parking Bays (cash-in-lieu)
Commercial Non Retail	30,000	10%	3,000	90	20% ^[2]	18
Retail	19,005	15%	2,851	85	80% ^[3]	68

⁶ Assuming land value of \$1.0 million per standard residential allotment and construction of 30 spaces @ \$5,000 each, or about \$1.2 million total cost and \$40,000 per space

1. Based on office, restaurant and retail rate of 3 parking spaces per 100 sq m.
2. Non-retail 80% of parking spaces located on site for employees, 20% shared off-site
3. Retail 80% of parking spaces shared off-site, 20% on-site for employees

Should development proceed as predicted, it is anticipated that 86 shared car parking spaces will need to be accommodated off-site through a cash-in-lieu mechanism over the next 15 year timeframe.

For the purpose of this assessment the centre was divided into the Structure Plan precincts; West End, Office Commercial and Retail Core, as detailed in Figure 8.2. The potential growth capacity was estimated per precinct in line with the Balwyn Structure Plan. Each precinct was examined block by block and recently developed or approved development disregarded from forecasts. The forecasts were used to understand the potential distribution of growth from precinct to precinct; these proportions are highlighted in the table below.

The following table considers the potential distribution and need for cash-in-lieu parking during a 15 year timeframe based on the estimated growth.

Table 8.2 – Parking Requirements by Structure Plan Area

Precincts (as per Balwyn Structure Plan)	Distribution of shared parking based on potential growth capacity		Distribution of cash-in-lieu parking based on potential growth		Cash in Lieu Car Parking Estimated
	Retail	Non-Retail (office etcetera)	Retail	Non-Retail	
West End	-	27%		5	30
Office/Commercial	31%	23%	21	4	
Retail Core	69%	50%	47	9	56

An increasing proportion of the retail core falls to the western side of Balwyn Road. Accordingly, a small proportion of the Retail Core parking needs to be considered to the west of Balwyn Road and this provision may be better placed with the West End and Office/Commercial precincts.

Limitations

- There is limited basis for predicting non-retail growth.
- The location and timing of development cannot be predicted.
- Transport infrastructure interventions may provide improved accessibility and change the commercial/retail prospects of the centre.
- Increased residential populations at the centre may result in the need for increased retail/commercial services, this cannot easily be predicted and therefore not included in the estimate.

9 Recommendations

9.1 Principles

In response to the strategic issues and opportunities in Section 8, a set of recommendations have been prepared for the Balwyn Activity Area, aiming to:

- Achieve improved management of existing on-street parking resources, so that time limits encourage short stays and discourage unnecessary all-day occupancy (especially along residential frontages in fringe areas).
- Convert some existing spaces into provision for accessible parking, carshare, taxi, bike, motorbike and motor scooter parking.
- Identify parking projects/strategies which support the various objectives of the Access Plan and the Structure Plan; in particular the potential creation of a Yerrin Street park and improvements to pedestrian amenity, convenience and safety.
- Formulate a Parking Precinct Plan with provision rates for new developments which are compatible with existing and preferred future travel behaviour, and with cash-in-lieu incentives to provide some off-site parking to maximise accessible and multiple/shared-use opportunities.

9.2 Recommendation 1: REVIEW AND OPTIMISE PUBLIC PARKING TIME LIMITS

- Audit all time limit signs and replace those which are confusing or contradictory.
- Convert the off-street car park west of Balwyn Road (behind the service station) to 3P parking to enable longer stays and retain some 2P parking.
- Convert 90 degree spaces along the west side of Cherry Road along the Balwyn Park frontage from 2P to 3P.

9.3 Recommendation 2: SUSTAINABLE TRANSPORT PARKING IMPROVEMENTS

- Convert a single car space to accommodate up to 10 visitor bicycle parking bays to accommodate existing demand at the Balwyn Library.
- Introduce additional bicycle parking adjacent the Weir Street/Whitehorse Road intersection.
- Undertake a review of bicycle parking provision as part of the Balwyn Park Concept Master Plan.
- Introduce 3 motorbike parking bays at each of the following locations: Mangan Street (west side) near Whitehorse Road, Yerrin Street at a suitable location, and at Balwyn Library.
- Investigate potential future Car Share locations at Mangan Street (adjacent Whitehorse Road), in the off-street car park adjacent Weir Street, and near the Balwyn Cinema (subject to the adoption of a Car Share Policy).
- Investigate taxi call and pick up zones to be located adjacent the supermarket at Mangan Street and the future supermarket opposite the Balwyn Cinema.

- Investigate suitable amenity (parking/shelter/seating) near Mangan Street and the supermarket to better support the community bus service.

9.4 Recommendation 3: ACCESSIBLE PARKING

- Audit existing off street parking for people with disabilities within the Balwyn Activity Area precinct and upgrade to comply with the current Australian Standard AS2890.6.2009.
- Introduce additional on-street or off-street accessible parking bays between Mangan Street and Austin Street to address limited provision.

9.5 Recommendation 4: REVISE OFF-STREET PARKING LAYOUTS

- Modify off-street parking bays adjacent Weir Street and introduce 90 degree parking both sides with slightly wider parking bays to accommodate vehicular turning movements.
- Investigate the possible closure of the southern end of Yerrin Street and provision of extra spaces across the road reserve in combination with the creation of park space.

9.6 Recommendation 5: CAR PARKING PRECINCT PLAN

Include the following rates within the Boroondara Planning Scheme covering land in Business 1 and 2 Zones (refer Figure 3.1):

- car parking for new studio and one-bedroom dwellings to be 0.8 resident spaces each (actual car ownership is 0.5, Australian Bureau of Statistics);
- car parking for two-bedroom dwellings to be 1 resident space per dwelling (in line with the Planning Scheme and Australian Bureau of Statistics data);
- car parking for three-bedroom dwellings to be 2 resident spaces per dwelling (in line with the Planning Scheme and Australian Bureau of Statistics data);
- car parking for new office, shops and restaurants to be at a rate of 3.0 spaces/100m² leasable floor area;
- dispensation may be granted for residential visitor and commercial visitor/customer parking in mixed use developments if effective sharing of parking can be demonstrated;
- other car parking rates to be provided as per Clause 52.06 and Clause 55.

The new PPP will need to include cash-in-lieu provisions. Cash-in-lieu provisions can only be sought if there is a parking improvement project to which the funds will be allocated. The following projects would likely qualify:

- possible closure of the southern end of Yerrin Street and provision of extra spaces (combined with open space provision); and
- purchase of land to create extra shared use public parking.

These two projects and/or others, need to be planned in detail to establish feasibility and cost. Their planning and funding would logically be fully integrated with other aspects of Access Plan and Structure Plan implementation.

9.7 Recommendation 6: ECONOMIC ASSESSMENT

- Investigate funding mechanisms (Cash-in-Lieu and Development Contribution Plan Overlay).

Cash-In-Lieu

A framework is required to outline a cash-in-lieu scheme for when parking cannot be accommodated on site. The primary benefit of seeking cash-in-lieu is to realise shared parking arrangements which more efficiently provide for the parking needs of a mixed-use centre and to realise urban and sustainable transport aspirations. In order to develop a Cash-in-Lieu mechanism a clear framework is required that:

- forecasts future development and likely parking shortfall based on past parking waiver trends;
- develops a standard and transparent cash-in-lieu formula to be applied consistently within relevant Boroondara Parking Precinct Plans;
- adopts an acceptable form for future public car parking (at-grade or multi-deck) including phasing of construction and scalability in line with future development needs;
- design and cost (land and infrastructure) parking projects to allow the identification of a quantified cash-in-lieu rate; and
- develop Planning Scheme Amendment documentation for incorporation into the Boroondara Planning Scheme.

Development Contributions Plan Overlay (DCPO)

Not all access requirements are parking related and consideration is required in terms of accommodating the future transport needs of development in relation to good pedestrian, bicycle and public transport access given the expected increase in population and the intensification of the retail and commerce offer in Balwyn. A DCPO is required to help support the future sustainable transport needs of the Activity Centre in line with the Balwyn Access Plan. In order to develop a DCPO mechanism a clear framework is required that involves the following tasks:

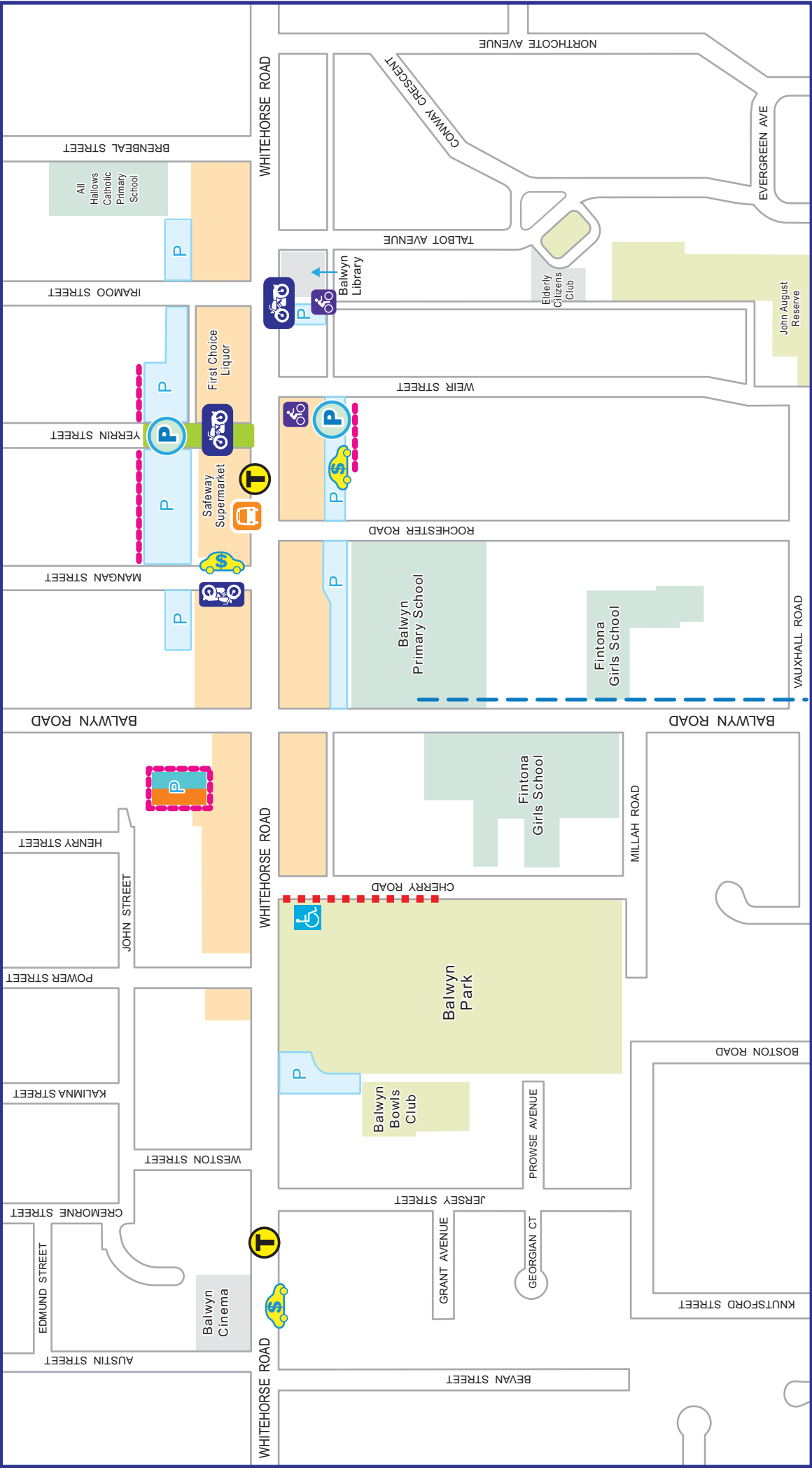
- conceptual design and indicative cost of access projects;
- identify the nexus between access projects and the relevant development area and type of development; and
- planning Scheme Amendment documentation for incorporation into the Boroondara Planning Scheme.

9.8 Recommendation 7: SUSTAINABLE TRANSPORT RATES

Investigate the incorporation of the following sustainable transport parking rates in the Boroondara Planning Scheme:

- bicycle parking for **office development employees** - 1 per 200 sq m gross floor area (in line with AustRoads and trader surveys);
- bicycle parking for **office development visitors** - 1 space per 1000 sq m of net floor area if the net floor area exceeds 1000 sq m (in line with AustRoads);
- bicycle parking for **shop development employees** - 1 bicycle space per 300 sq m (in line with VicRoads);
- bicycle parking (secure) for **residential development** - 1 per new studio and one-bedroom - 1.5 per new two-bedroom dwellings - 2 per new three-bedroom dwellings;

- bicycle parking (publically accessible) for **residential development visitors** - 1 per 5 dwellings;
- motorbike parking (secure) for **residential development** - 1 motorbike parking bay per provision of 50 car parking bays (prior to any car parking dispensation); and
- investigate Car Share for **residential development** when the development is over 50 units in size.



Extra spaces for accessible parking
 Convert 2P spaces to 3P spaces
 Potential Extra / Modified Parking
 Improve signage and linemarking to better define time limits.

Potential Taxi Rank / Call Forward
 More Indented School Parking clear of Bike Lanes.
 Support Community Bus
 Mix of 3P and 2P spaces.

Extra Motorcycle parking
 Extra Bicycle parking
 Yerrin Street Public Space (refer Access Plan)
 Potential locations for Carshare

Strip Shopping

10 Implementation Plan

The following table identifies the considered priorities, possible timeframes for implementation and high level cost for consideration. The following bands adopted as part of this assessment are outlined below.

Timeframe	Cost to Council and/or State Stakeholders
<ul style="list-style-type: none"> Short: 1-3 years; Medium: 3-7 years; and Long: 7+ years 	<ul style="list-style-type: none"> Low: Up to \$50,000 Medium: Between \$50,000 and \$100,000; Intermediate: Between \$100,000 and \$500,000; and Expensive: Above \$500,000

Recommendation	Priority	Timeframe	Cost	Key Stakeholders
Recommendation 1: review and optimise public parking time limits	High	Short	Low	VicRoads Council
Recommendation 2: sustainable transport parking improvements	High	Short	Low	Council
Recommendation 3: accessible parking	High	Short	Low	Council
Recommendation 4: revise off-street parking layouts	Medium	Short-Medium	Medium	Council
Recommendation 5: car parking precinct plan	High	Short	Low	Council
Recommendation 6: economic assessment	High	Short	Intermediate - Expensive	Council
Recommendation 7: sustainable transport rates	High	Short	Low	Council

APPENDIX A PARKING OCCUPANCY SURVEYS

Parking Occupancy Survey
Balwyn Parking Precinct Study
Thursday 23 June & 20 October, 2011

Map Ref #	Street / Area	Street Section	Side	Weekday Parking Limit	Restrictions and Clearways	Parking Occupancy at Time										Capacity	
						8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM		6:00 PM
1	Whitehorse Rd	Weston St to Austin St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	4	3	6	5	9	7	7	6	8	0	1	13
1	Whitehorse Rd	Weston St to Austin St	N	P 10min	Clearway 4:30-6:30pm Mon-Fri; P 10min All Other Times	0	0	0	1	0	0	0	1	0	0	0	3
2	Weston St	Whitehorse Rd to John St	W	Unrestricted		3	10	10	10	10	10	10	10	9	7	2	10
3	John St	Weston St to Telstone St	S	Unrestricted		0	2	3	4	4	4	3	2	3	2	0	3
4	John St	Cremorne St to Kalimna St	N	No Stopping		0	0	0	0	0	0	0	0	0	0	0	9
5	Weston St	Whitehorse Rd to John St	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	0	0	3	1	3	2	1	5	3	2	2	6
6	John St	Weston St to Power St	S	Unrestricted		3	13	14	14	14	13	15	15	14	13	5	15
7	Whitehorse Rd	Weston St to Power St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	7	6	6	8	5	10	8	8	3	0	0	17
8	Power St	John St to Whitehorse Rd	W	2P	8am-6pm Mon-Fri, 8am-1pm Sat	1	3	5	5	5	4	5	5	4	1	0	4
8	Power St	John St to Whitehorse Rd	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	0	1	1	1	1	1	1	1	2	2	1	2
9	John St	Kalimna St to Power St	N	No Stopping		0	0	0	0	0	0	0	0	0	0	0	9
10	John St	Power St to Henry St	N	Unrestricted		6	11	13	12	12	12	10	12	12	9	8	14
11	John St	Power St to end	S	No Stopping		0	0	0	0	0	0	0	0	0	0	0	12
12	Power St	John St to Whitehorse Rd	E	Loading Zone	30min Mon-Fri, No Stopping All Other Time	1	0	0	0	0	0	0	0	0	0	0	4
12	Power St	John St to Whitehorse Rd	E	No Stopping		0	0	0	0	0	0	0	0	1	1	0	5
13	Whitehorse Rd	Balwyn Rd to Power St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	10	16	21	25	12	18	19	9	5	0	0	31
14	Balwyn Rd	Whitehorse Rd to Ellen St	W	Unrestricted		9	11	10	12	12	10	8	8	6	6	3	10
14	Balwyn Rd	Whitehorse Rd to Ellen St	W	Taxi Zone		0	0	0	1	1	0	0	0	0	0	0	2
15	Balwyn Rd	Whitehorse Rd to Jurang St	E	Unrestricted		9	13	11	15	12	15	11	14	13	11	6	24
16	Whitehorse Rd	Balwyn Rd to Mangan St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	6	7	7	9	8	8	8	9	5	0	0	10
16	Whitehorse Rd	Balwyn Rd to Mangan St	N	1/4 P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	1	1	1	1	1	1	1	0	0	0	0	2
16	Whitehorse Rd	Balwyn Rd to Mangan St	N	Loading Zone 15min	8am-4:30pm Mon-Fri; 1/2P 8:30am-12:30pm Sat, Clearway 4:30pm-6:30pm Mon-Fri;	1	1	0	0	1	0	0	1	0	0	0	2
17	Mangan St	Whitehorse Rd to Jurang St	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	2	2	2	2	3	3	2	2	2	2	1	2
17	Mangan St	Whitehorse Rd to Jurang St	W	Unrestricted		4	6	8	10	9	6	6	9	9	7	5	16
18	Mangan St	Whitehorse Rd to Jurang St	E	Unrestricted		2	3	4	5	10	10	10	4	1	1	3	16
18	Mangan St	Whitehorse Rd to Jurang St	E	No Parking		0	0	0	0	0	0	0	0	0	0	0	2
18	Mangan St	Whitehorse Rd to Jurang St	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	1	2	2	2	2	2	2	2	2	2	2	2
18	Mangan St	Whitehorse Rd to Jurang St	E	Disabled		0	0	1	0	1	1	1	0	0	1	0	1
19	Whitehorse Rd	Mangan St to Yerrin St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	7	8	8	8	9	8	7	9	3	0	0	10
20	Yerrin St	Whitehorse Rd to Jurang St	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	4	4	2	3	4	3	4	4	3	4	2	4
20	Yerrin St	Whitehorse Rd to Jurang St	W	Unrestricted		3	4	7	7	6	8	10	5	5	4	2	19
21	Yerrin St	Whitehorse Rd to Jurang St	E	Unrestricted		6	8	7	10	11	9	10	9	5	5	4	14
21	Yerrin St	Whitehorse Rd to Jurang St	E	Unrestricted		2	3	4	4	4	4	4	4	3	2	0	5
21	Yerrin St	Whitehorse Rd to Jurang St	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	6	6	6	6	6	4	6	6	5	5	4	6
21	Yerrin St	Whitehorse Rd to Jurang St	E	Disabled		0	1	0	1	1	1	1	0	0	1	1	1
22	Whitehorse Rd	Yerrin St to Iramoo St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	2	12	11	11	12	10	11	8	13	0	0	12

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Map Ref #	Street / Area	Street Section	Side	Weekday Parking Limit	Restrictions and Clearways	Parking Occupancy at Time										Capacity	
						8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM		6:00 PM
23	Iramoo St	Whitehorse Rd to Jurang St	W	Unrestricted		2	2	2	3	4	5	6	8	6	5	4	23
23	Iramoo St	Whitehorse Rd to Jurang St	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat		1	3	4	2	2	4	4	3	2	4	4
24	Iramoo St	Whitehorse Rd to Jurang St	E	Unrestricted		2	3	3	1	2	3	4	2	1	0	2	19
24	Iramoo St	Whitehorse Rd to Jurang St	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	0	0	1	4	2	3	4	4	2	1	4	4
25	Whitehorse Rd	Iramoo St to Brenbeal St	N	1P	8am-4.30pm Mon-Fri, 8am-1pm Sat, Clearway 4.30pm-6.30pm Mon-Fri	0	0	1	3	0	0	0	1	0	0	0	5
26	Brenbeal St	Whitehorse Rd to Jurang St	W	Unrestricted		5	9	11	12	7	6	6	7	7	5	2	14
26	Brenbeal St	Whitehorse Rd to Jurang St	W	No Stopping	When Flags Displayed	0	0	0	0	0	0	0	0	0	0	0	3
26	Brenbeal St	Whitehorse Rd to Jurang St	W	Unrestricted		6	11	18	15	13	11	16	10	13	10	8	19
27	Brenbeal St	Jurang St to House #21	W	Unrestricted		0	1	0	0	2	0	0	0	1	0	1	3
28	Brenbeal St	Whitehorse Rd to House #26	E	Unrestricted		3	2	8	8	4	4	6	4	5	6	5	10
28	Brenbeal St	Whitehorse Rd to House #26	E	No Stopping	When Flags Displayed	0	0	1	0	0	0	0	0	0	0	0	1
28	Brenbeal St	Whitehorse Rd to House #26	E	Unrestricted		9	10	11	12	8	10	10	10	6	6	3	17
29	Whitehorse Rd	Brenbeal St to Kireep Rd	N	Unrestricted	Clearway 4.30pm-6.30pm Mon-Fri	2	2	1	1	1	2	0	0	2	0	0	19
30	Whitehorse Rd	Northcote Ave to Kireep Rd	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	0	0	0	0	0	0	0	0	0	0	12
31	Northcote Ave	Whitehorse Rd to Conway Crescent	E	No Stopping	7.30am-9am, 3pm-6pm Mon-Fri	0	0	0	0	0	1	1	1	0	0	0	3
31	Northcote Ave	Whitehorse Rd to Conway Crescent	E	Unrestricted		3	3	4	4	3	4	3	3	4	3	4	7
32	Northcote Ave	Whitehorse Rd to Conway Crescent	W	Unrestricted		8	6	8	8	8	4	4	3	3	5	1	11
33	Whitehorse Rd	Talbot Ave to Northcote Ave	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	0	0	1	0	0	0	0	0	1	1	0	17
34	Talbot Ave	Whitehorse Rd to House #44	E	Unrestricted		2	8	12	12	12	13	12	13	6	6	2	30
35	Talbot Ave	Whitehorse Rd to House #47	W	Unrestricted		3	6	10	12	11	13	14	11	4	5	1	18
36	Whitehorse Rd	Weir St to Talbot Ave	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	0	6	7	12	10	12	10	9	7	10	5	12
37	Weir St	Whitehorse Rd to House #30	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	2	2	2	1	2	2	2	1	2	2	1	2
37	Weir St	Whitehorse Rd to House #30	E	2P	8am-6pm Mon-Fri	4	6	4	5	8	5	5	10	4	8	6	20
38	Weir St	Whitehorse Rd to House #29	W	2P	8am-6pm Mon-Fri	8	7	6	7	12	6	7	8	8	5	7	19
38	Weir St	Whitehorse Rd to House #29	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	1	2	3	2	2	2	3	3	3	2	2	3
39	Whitehorse Rd	Rochester Rd to Weir St	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	2	3	7	6	7	4	7	6	6	4	3	8
39	Whitehorse Rd	Rochester Rd to Weir St	S	Loading Zone	9am-6pm Mon-Fri, 1P 9am-1pm Sat, Clearway 7am-9am Mon-Fri	0	0	2	2	2	1	2	2	1	1	1	3
40	Rochester Rd	Whitehorse Rd to House #102	E	Disabled		0	0	0	0	0	0	0	0	0	0	0	1
40	Rochester Rd	Whitehorse Rd to House #102	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	1	2	1	1	3	2	3	3	2	3	1	3
40	Rochester Rd	Whitehorse Rd to House #102	E	2P	8am-6pm Mon-Fri When Flags Displayed	0	0	0	0	0	0	0	0	0	0	0	5
40	Rochester Rd	Whitehorse Rd to House #102	E	2P	8am-6pm Mon-Fri When Flags Displayed	0	0	0	0	0	0	0	0	0	0	0	12
40	Rochester Rd	Whitehorse Rd to House #102	E	2P	8am-6pm Mon-Fri	0	0	0	0	0	0	0	0	0	0	0	3
41	Rochester Rd	Whitehorse Rd to House #89	W	2P	8am-6pm Mon-Fri	0	0	0	0	0	0	0	4	0	0	0	4
41	Rochester Rd	Whitehorse Rd to House #89	W	No Parking	8am-9am, 3pm-4pm School Days	0	0	0	0	0	0	0	0	0	0	0	11
41	Rochester Rd	Whitehorse Rd to House #89	W	No Parking	When Flags Displayed	1	0	0	0	0	0	0	0	0	0	1	0
41	Rochester Rd	Whitehorse Rd to House #89	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	2	2	0	1	1	1	1	2	0	1	1	4
41	Rochester Rd	Whitehorse Rd to House #89	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	2	2	2	1	3	4	4	3	3	2	1	4
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	4	5	5	7	9	6	8	7	6	5	8	10
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	1P	9am-6pm Mon-Fri, 1/2P 9am-1pm Sat, Clearway 7am-9am Mon-Fri	1	1	3	1	4	3	2	3	3	2	4	4

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						8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM		6:00 PM
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	0	1	1	2	2	1	2	2	2	2	2	2
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	Mail Zone	9am-7pm Mon-Fri; Clearway 7am-9am Mon-Fri	0	0	0	0	0	0	0	1	0	0	0	1
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	Loading Zone	9am-6pm Mon-Fri; 1P 9am-1pm Sat, Clearway 7am-9am Mon-Fri	0	1	0	0	1	0	0	1	0	0	1	2
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	0	0	0	0	1	1	1	0	0	1	1	1
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	Bus Zone		0	0	0	0	0	0	0	0	0	0	0	1
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	Loading Zone		0	0	0	0	0	0	0	0	0	0	0	2
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	No Parking	8am-4pm Mon-Fri	0	1	0	0	0	0	0	6	0	0	0	7
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	P 2min	8am-9am, 3pm-4pm Mon-Fri; 1P 9am-3pm Mon-Fri	2	4	1	2	0	2	1	3	0	1	0	3
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	Unrestricted		8	11	7	7	7	7	7	12	6	1	2	11
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	Bus Zone		0	0	0	0	0	0	0	0	0	0	0	1
44	Balwyn Rd	Whitehorse Rd to Millah Rd	W	Bus Zone		1	0	0	0	0	0	0	1	1	0	0	2
44	Balwyn Rd	Whitehorse Rd to Millah Rd	W	No Stopping		0	0	0	0	0	0	0	0	0	0	0	0
44	Balwyn Rd	Whitehorse Rd to Millah Rd	W	Bus Zone													
45	Whitehorse Rd	Balwyn Rd to Cherry Rd	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	0	7	9	11	12	13	13	15	11	9	14	16
46	Cherry Rd	Whitehorse Rd to House #11	E	2P	8am-6pm Mon-Fri, 8am-1pm Sat	1	2	10	10	10	10	10	5	5	6	8	12
46	Cherry Rd	Whitehorse Rd to House #11	E	2P	8am-6pm Mon-Fri, 8am-1pm Sat	0	0	3	4	2	2	2	2	1	0	0	18
47	Cherry Rd	Whitehorse Rd to House #11	W	Unrestricted		18	24	26	24	25	25	26	29	23	6	6	27
47	Cherry Rd	Whitehorse Rd to House #11	W	2P	8am-6pm Mon-Fri, 8am-1pm Sat	3	5	14	15	11	8	8	10	9	8	8	18
48	Whitehorse Rd	Jersey St to Cherry Rd	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	0	3	8	8	9	8	9	7	12	10	4	21
48	Whitehorse Rd	Jersey St to Cherry Rd	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	0	7	2	4	3	3	4	4	5	3	8
49	Jersey St	Whitehorse Rd to Grant Ave	E	Unrestricted		5	8	10	11	12	15	13	11	12	11	5	23
50	Jersey St	Whitehorse Rd to Grant Ave	W	1P	8am-Midnight	1	2	2	4	2	1	2	2	1	1	4	11
51	Whitehorse Rd	Jersey St to Bevan St	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	1	2	3	2	3	3	3	2	1	1	3
A	Whitehorse Rd	Percy St to Norbert St	N	Unrestricted	Clearway 4:30pm-6:30pm Mon-Fri	4	3	4	3	2	5	5	3	0	0	0	8
B	Norbert St	Whitehorse Rd to house #15	W	Unrestricted		2	3	2	7	8	10	9	9	4	5	3	16
C	Norbert St	Whitehorse Rd to house #16	E	Unrestricted		3	4	5	7	5	9	11	10	5	5	5	20
D	Whitehorse Rd	Norbert St to Austin St	N	3P	8am-4:30pm Mon-Fri; 7pm-11pm Sat+Sun; Clearway 4:30pm-6:30pm	0	2	3	8	4	8	4	5	5	0	0	8
E	Austin St	Whitehorse Rd to Walker St	W	1P	8am-11pm	10	10	12	15	15	12	6	6	8	14	8	28
F	Austin St	Edmund St to Walker St	E	1P	8am-11pm	1	0	2	3	3	0	2	3	3	4	5	10
G	Edmund St	Austin St to Cremorne St	N	1P	8am-11pm	0	0	0	0	0	0	0	0	1	1	3	11
H	Austin St	Whitehorse Rd to Edmund St	E	1P	8am-11pm	3	3	3	4	5	5	3	6	4	4	4	15
H	Austin St	Whitehorse Rd to Edmund St	E	3P	8am-11pm	0	3	2	3	3	3	3	2	3	2	3	3
H	Austin St	Whitehorse Rd to Edmund St	E	4P Disabled		0	0	0	2	2	2	1	1	1	2	2	2
I	Edmund St	Austin St to Cremorne St	S	Unrestricted		5	8	12	11	9	11	11	10	10	10	6	13
J	Tedstone St	Cremorne St to end	W	2P	8am-11pm	0	1	1	0	0	0	0	0	1	1	1	6
K	Tedstone St	Cremorne St to end	E	2P	8am-11pm	2	2	2	1	1	1	1	1	1	1	2	3
L	Cremorne St	Edmund St to Tedstone St	W	Unrestricted		1	2	3	4	3	4	3	4	3	3	2	5
M	Cremorne St	Edmund St to Walker St	W	Unrestricted		1	3	6	6	7	7	5	3	3	2	2	10

Parking Occupancy Survey
Balwyn Parking Precinct Study
Thursday 23 June & 20 October, 2011

Map Ref #	Street / Area	Street Section	Side	Weekday Parking Limit	Restrictions and Clearways	Parking Occupancy at Time										Capacity	
						8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM		6:00 PM
N	Crenome St	John St to Walker St	E	Unrestricted		1	8	8	7	6	7	6	7	10	9	5	20
O	Kalina St	Gordon St to John St	W	Unrestricted		1	3	6	7	7	9	8	8	8	6	3	29
P	Kalina St	Gordon St to John St	E	Unrestricted		4	4	8	8	8	9	9	8	7	8	4	27
Q	Power St	Gordon St to John St	W	Unrestricted		7	5	5	3	4	4	5	8	5	3	2	27
R	Power St	Gordon St to Ellen St	E	Unrestricted		5	0	2	1	1	1	1	1	2	2	2	8
S	Power St	Ellen St to John St	E	Unrestricted		3	7	7	9	8	6	6	6	7	7	5	18
T	Henry St	Ellen St to John St	W	Unrestricted		5	6	5	7	7	6	5	5	7	4	4	18
U	Henry St	Ellen St to John St	E	Unrestricted		1	2	3	6	5	6	5	4	4	5	4	18
V	Balwyn Rd	Ellen St to Gordon St	W	Unrestricted		2	2	2	2	2	2	3	2	1	1	2	8
V	Balwyn Rd	Ellen St to Gordon St	W	Bus Zone		0	0	0	0	0	0	0	0	0	0	0	1
W	Balwyn Rd	Jurang St to Yarrabat Ave	E	Unrestricted		3	4	3	2	2	2	1	2	2	2	2	8
W	Balwyn Rd	Jurang St to Yarrabat Ave	E	Bus Zone		0	0	0	0	0	0	0	0	0	0	0	1
X	Jurang St	Yerrin St to Balwyn Rd	N	Unrestricted		2	3	2	5	4	4	2	2	2	2	2	23
Y	Jurang St	Balwyn Rd to Mangian St	S	Unrestricted		2	2	2	4	4	3	4	0	0	0	0	11
Z	Jurang St	Mangan St to Yerrin St	S	Unrestricted		0	0	0	0	0	0	0	0	0	0	0	11
AA	Yerrin St	Jurang St to Yarrabat Ave	W	Unrestricted		0	1	0	1	0	0	0	1	2	2	0	9
BB	Yerrin St	Jurang St to Yarrabat Ave	E	Unrestricted		0	0	0	0	0	0	0	0	0	1	0	11
CC	Jurang St	Yerrin St to Iramoo St	S	Unrestricted		0	0	0	0	0	0	1	0	0	0	0	11
DD	Jurang St	Brenbeal St to Yerrin St	N	Unrestricted		1	3	1	1	1	1	5	3	3	3	3	28
EE	Jurang St	Brenbeal St to Iramoo St	S	Unrestricted		0	0	0	2	1	4	1	1	1	1	0	11
FF	Brenbeal St	House #21 to Yarrabat Ave	W	Unrestricted		4	3	3	0	2	3	1	1	1	1	2	7
GG	Brenbeal St	House #26 to Yarrabat Ave	E	Unrestricted		1	1	2	2	2	2	1	1	3	1	1	6
HH	Kireep Rd	Whitehorse Rd to House #10	W	Unrestricted		3	4	4	4	4	3	6	5	5	4	3	23
II	Kireep Rd	Whitehorse Rd to House #10	E	Unrestricted		5	4	5	6	8	3	5	5	5	6	4	17
JJ	Whitehorse Rd	Kireep Rd to Farring Rd	N	Unrestricted	Clearway 4:30pm-6:30pm Mon-Fri	1	0	1	0	0	1	0	0	0	1	0	29
KK	Whitehorse Rd	Cyde St to Wharton St	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	0	0	0	0	0	1	0	0	0	0	12
LL	Whitehorse Rd	Kireep Rd to Cyde St	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	0	0	0	0	1	1	2	1	1	1	17
MM	Weir St	House #28 to House #12	E	2P	8am-6pm Mon-Fri	9	5	6	5	6	4	4	5	6	4	4	21
NN	Weir St	House #29 to Vauxhall Rd	W	2P	8am-6pm Mon-Fri	8	6	6	3	3	4	5	5	3	4	8	21
OO	Rochester Rd	House #100 to Vauxhall Rd	E	2P	8am-6pm Mon-Fri When Flags Displayed	0	0	0	0	0	0	0	3	0	0	0	4
OO	Rochester Rd	House #100 to Vauxhall Rd	E	Unrestricted		4	5	5	4	3	5	8	5	4	1	0	17
PP	Rochester Rd	House #87 to Vauxhall Rd	W	Unrestricted		5	7	7	5	5	4	5	8	8	9	0	18
PP	Rochester Rd	House #87 to Vauxhall Rd	W	2P	8am-6pm Mon-Fri	0	0	0	1	1	1	1	0	1	1	0	5
QQ	Balwyn Rd	Millah Rd to Vauxhall Rd	E	Unrestricted		7	6	1	2	3	2	2	3	3	3	0	17
RR	Balwyn Rd	Millah Rd to Penbroke Rd	W	Unrestricted		0	0	0	0	0	0	0	0	0	0	0	5
RR	Balwyn Rd	Millah Rd to Penbroke Rd	W	No Stopping	2:30pm-3:30pm Mon-Fri	0	0	0	0	0	0	0	0	0	0	0	11
SS	Millah Rd	Balwyn Rd to Cherry Rd	S	No Parking	8am-9am, 3pm-4pm School Days	0	0	1	1	3	3	3	0	0	1	1	15
TT	Millah Rd	Balwyn Rd to Cherry Rd	N	P 5min	8am-9:30am, 2:30pm-4pm School Days	2	2	0	0	2	1	1	2	0	0	0	5
TT	Millah Rd	Balwyn Rd to Cherry Rd	N	Unrestricted		9	9	7	6	8	8	7	9	6	3	3	11
UU	Cherry Rd	House #11 to Millah Rd	E	P 2min/P 5min	8am-9am, 3pm-4pm School Days	0	0	0	0	0	1	0	3	1	0	0	13
UU	Cherry Rd	House #11 to Millah Rd	E	Bus Zone	8am-6pm School Days	0	0	1	1	0	0	0	0	0	0	0	6
VU	Cherry Rd	House #11 to Millah Rd	W	Unrestricted		7	7	8	7	6	6	6	7	7	1	2	12
VW	Millah Rd	Cherry Rd to end	N	P 5min	8am-9:30am, 2:30pm-4pm School Days	1	1	2	2	0	0	0	0	0	0	2	9
VW	Millah Rd	Cherry Rd to end	S	No Stopping	8am-9am, 3pm-4pm School Days	0	0	0	0	0	0	0	0	0	0	0	5
XX	Prowse Ave	Jersey St to end	N	Unrestricted		1	2	1	1	1	0	1	2	3	2	1	5
YY	Prowse Ave	Jersey St to end	S	Unrestricted		0	0	0	1	0	1	0	0	0	0	0	5
ZZ	Jersey St	Prowse Ave to end	E	Unrestricted		1	2	2	2	2	2	3	3	2	3	1	8

Parking Occupancy Survey
 Balwyn Parking Precinct Study
 Thursday 23 June & 20 October, 2011

Map Ref #	Street / Area	Street Section	Side	Weekday Parking Limit	Restrictions and Clearways	Parking Occupancy at Time										Capacity	
						8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM		6:00 PM
A1	Jersey St	Provie Ave to end	W	Unrestricted		3	3	3	3	4	3	4	4	3	2	2	9
A2	Georgian Ct	Jersey St to end	S	1P	8am-Midnight	0	0	0	0	0	0	0	0	0	0	0	6
A3	Georgian Ct	Jersey St to end	N	Unrestricted		3	2	2	1	0	1	1	1	2	2	2	6
A4	Jersey St	Georgian Ct to Grant Ave	W	1P	8am-Midnight	3	3	3	0	3	2	2	2	1	1	0	6
A5	Grant Ave	Jersey St to end	S	Unrestricted		2	4	3	5	6	5	4	4	2	1	1	10
A6	Grant Ave	Jersey St to end	N	1P	8am-Midnight	1	0	0	0	1	1	2	1	1	2	2	12
A7	Bevan St	Whitehorse Rd to end	E	1P	8am-11pm	9	4	2	3	5	2	3	4	5	5	3	32
A8	Bevan St	Whitehorse Rd to end	W	Permit Zone		11	8	7	6	6	5	5	5	7	3	5	28
A9	Whitehorse Rd	Reid St to Bevan St	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	0	1	7	4	7	3	5	4	3	3	8
A10	Reid St	Whitehorse Rd to end	E	Unrestricted		1	1	2	6	3	7	6	4	5	6	3	34
A11	Reid St	Whitehorse Rd to end	W	Unrestricted		7	5	6	5	6	3	4	6	4	4	5	41
A12	Whitehorse Rd	Reid St to Maleela Ave	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	0	0	5	2	0	1	1	1	2	2	12
A13	Maleela Ave	Whitehorse Rd to Crest Ave	E	Unrestricted		0	0	3	0	1	2	3	1	1	1	1	27
A14	Maleela Ave	Whitehorse Rd to Crest Ave	W	Unrestricted		1	3	4	3	4	2	4	4	3	2	5	23

Parking Occupancy Survey
Balwyn Parking Precinct Study
Thursday 23 June & 20 October, 2011

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						8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM		6:00 PM
P1	Off-Street	South of Whitehorse Rd		2P	8am-12:30pm Mon-Fri	0	7	8	27	29	25	19	19	18	18	20	50
P1	Off-Street	South of Whitehorse Rd		Disabled		0	0	0	0	0	0	0	0	0	0	0	2
P2	Off-Street	West of Rochester Rd		2P	8am-6pm Mon-Fri, 8am-1pm Sat	4	27	38	40	39	59	56	67	28	41	34	67
P2	Off-Street	West of Rochester Rd		Disabled		0	0	0	0	0	0	0	2	0	0	0	2
P3	Off-Street	West of Weir Rd		Private Property	Authorised Parking Only Offender Prosecuted	1	4	6	7	7	7	7	7	7	7	5	7
P3	Off-Street	West of Weir Rd		Unrestricted		14	19	18	19	19	18	19	18	18	16	5	19
P3	Off-Street	West of Weir Rd		Private Property	O'Henry "Big" Menswear	0	0	1	1	1	1	1	1	1	1	0	1
P3	Off-Street	West of Weir Rd		Private Property	O'Henry "Big" Menswear Staff Parking only ANZ	0	2	3	3	3	3	3	3	3	3	0	3
P3	Off-Street	West of Weir Rd		2P	8am-6pm M-F, 8am-1pm Sat	8	16	24	23	25	20	17	24	18	17	8	29
P3	Off-Street	West of Weir Rd		P Disabled		0	0	1	1	1	1	1	2	2	2	0	3
P4	Off-Street	McDonald Car Park		1P Disabled		0	1	0	1	1	1	1	1	1	0	0	1
P4	Off-Street	McDonald Car Park		1P		9	14	15	21	18	31	28	20	25	23	9	34
P5	Off-Street	Balwyn Library		Disabled		0	0	0	1	2	0	2	1	0	0	0	2
P5	Off-Street	Balwyn Library		4P		0	5	9	19	20	15	17	17	14	18	3	20
P6	Off-Street	East of Iramoo St		Disabled		0	0	0	0	1	1	0	0	0	1	0	2
P6	Off-Street	East of Iramoo St		Unrestricted		8	16	25	26	29	31	30	31	23	14	10	33
P7	Off-Street	West of Iramoo St		P Disabled		0	2	2	3	2	1	2	1	1	0	0	4
P7	Off-Street	West of Iramoo St		2P	8am-6pm Mon-Sat	9	23	41	38	39	45	44	45	43	29	21	74
P7	Off-Street	West of Iramoo St		P		14	23	23	22	22	23	23	19	16	16	11	23
P8	Off-Street	West of Iramoo St		2P	8am-6pm Mon-Sat	32	61	89	95	108	107	92	105	92	95	97	120
P8	Off-Street	West of Iramoo St		P		4	13	17	18	18	18	17	16	15	16	13	19
P8	Off-Street	West of Iramoo St		Permit Zone	Safeway	7	7	10	10	11	11	11	11	11	10	4	11
P8	Off-Street	West of Iramoo St		P Disabled		0	2	2	2	1	3	1	2	1	0	0	3
P9	Off-Street	West of Mangan St		2P	8am-6pm Mon-Fri, 8am-1pm Sat	18	25	32	34	33	24	36	36	29	25	18	36
P10	Off-Street	West of Balwyn Rd		2P	8am-6pm Mon-Fri, 8am-1pm Sat	32	32	32	31	32	32	32	32	30	26	15	32
P10	Off-Street	West of Balwyn Rd		P		8	8	10	10	10	10	10	10	10	9	1	10
P10	Off-Street	West of Balwyn Rd		No Parking		0	0	2	3	4	4	4	3	4	2	0	4
P11	Off-Street	West of Jersey St		P	Pay and display Ticket required at all time	0	0	0	9	9	9	3	2	2	0	0	23

Parking Occupancy Survey
Balwyn Parking Precinct Study
Friday 24 June 2011

Ratio Map Ref #	Street / Area	Street Section	Side	Parking Type	Time Restrictions	Parking Occupancy at Time					Capacity
						17:00	18:00	19:00	20:00	21:00	
A	Percy St	Whitehorse Rd to House #1A	W	Unrestricted		0	0	0	0	0	7
B	Percy St	Whitehorse Rd to House #1A	E	Unrestricted		2	1	2	2	1	4
C	Whitehorse Rd	Percy St to Norbert St	N	Clearway	4:30pm-6:30pm	1	0	3	5	5	8
D	Norbert St	Gordon St to Whitehorse Rd	W	Unrestricted		3	4	5	5	7	41
E	Norbert St	Gordon St to Whitehorse Rd	E	Unrestricted		6	7	8	8	10	41
F	Whitehorse Rd	Norbert St to Austin St	N	3P	8am-4:30pm Mon-Fri; 7pm-11pm Sat-Sun; Clearway 4:30pm-6:30pm	0	2	7	5	6	8
G	Austin St	Gordon St to Whitehorse Rd	W	1P	8am-11pm	12	12	11	10	9	38
H	Austin St	Gordon St to Walker St	E	1P	8am-11pm	1	2	3	3	3	11
I	Walker St	Austin St to Cremorne St	N	Unrestricted		1	1	1	1	1	12
J	Walker St	Austin St to Cremorne St	S	Unrestricted		4	4	3	3	3	15
K	Austin St	Walker St to Edmund St	E	1P	8am-11pm	4	5	6	6	4	10
L	Edmund St	Austin St to Cremorne St	N	1P	8am-11pm	2	2	2	2	2	11
M	Edmund St	Austin St to Cremorne St	S	Unrestricted		2	2	3	3	4	13
N	Austin St	Edmund St to Whitehorse Rd	E	1P	8am-11pm	5	5	3	1	0	15
N	Austin St	Edmund St to Whitehorse Rd	E	3P	8am-11pm	3	3	3	3	3	3
N	Austin St	Edmund St to Whitehorse Rd	E	4P Disabled		1	1	0	0	0	2
O	Tedstone Cres	Cremorne St to end	N	2P	8am-11pm	0	0	0	0	0	6
P	Whitehorse Rd	Weston St to Austin St	N	1P	8am-4:30pm Mon-Fri; 8am-1pm Sat; Clearway 4:30pm-6:30pm Mon-Fri	0	1	12	11	13	13
P	Whitehorse Rd	Weston St to Austin St	N	P 10min	Clearway 4:30-6:30pm Mon-Fri; P 10min All Other Times	0	0	0	0	0	3
Q	Tedstone Cres	Cremorne St to end	S	2P	8am-11pm	1	1	2	2	2	3
R	Cremorne St	Edmund St to Tedstone Cres	W	Unrestricted		2	2	2	2	2	5
S	Cremorne St	Walker St to Edmund St	W	Unrestricted		1	1	2	2	2	10
T	Cremorne St	Gordon St to Walker St	W	Unrestricted		1	1	0	0	0	8
U	Cremorne St	Gordon St to John St	E	Unrestricted		4	4	4	3	3	30
V	John St	Cremorne St to Kalinna St	N	No Stopping		0	0	0	0	0	9
W	John St	Tedstone Cres to Weston St	S	Unrestricted		1	0	0	0	0	3
X	Weston St	John St to Whitehorse Rd	W	Unrestricted		8	8	7	7	8	10
Y	Weston St	John St to Whitehorse Rd	E	1P	8am-6pm Mon-Fri; 8am-1pm Sat	1	1	2	2	4	6
Z	Kalinna St	Gordon St to John St	W	Unrestricted		3	3	4	4	6	29
AA	Kalinna St	Gordon St to John St	E	Unrestricted		4	4	3	3	4	27

Parking Occupancy Survey
Balwyn Parking Precinct Study
Friday 24 June 2011

Ratio Map Ref #	Street / Area	Street Section	Side	Parking Type	Time Restrictions	Parking Occupancy at Time					Capacity
						17:00	18:00	19:00	20:00	21:00	
BB	John St	Kalimna St to Power St	N	No Stopping		0	0	0	0	0	9
CC	John St	Weston St to Power St	S	Unrestricted		5	5	4	4	7	15
DD	Whitehorse Rd	Weston St to Power St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	0	0	5	4	6	17
EE	Power St	John St to Whitehorse Rd	W	2P	8am-6pm Mon-Fri, 8am-1pm Sat	3	3	2	2	3	4
EE	Power St	John St to Whitehorse Rd	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	0	0	0	0	0	2
FF	Power St	Gordon St to John St	W	Unrestricted		2	2	3	3	6	27
GG	Power St	Gordon St to Ellen St	E	Unrestricted		2	2	2	2	2	8
HH	Power St	Ellen St to John St	E	Unrestricted		0	1	4	5	4	18
II	Power St	John St to Whitehorse Rd	E	Loading Zone	30min Mon-Fri; No Stopping All Other Times	0	0	0	0	0	4
II	Power St	John St to Whitehorse Rd	E	No Stopping		0	0	0	0	0	5
JJ	Whitehorse Rd	Power St to Balwyn Rd	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	0	0	20	23	20	31
KK	Whitehorse Rd	Cherry Rd to Balwyn Rd	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	13	6	11	13	11	14
LL	Whitehorse Rd	Jersey St to Cherry Rd	S	Unrestricted	Clearway 7am-9am Mon-Fri	1	3	2	3	3	8
LL	Whitehorse Rd	Jersey St to Cherry Rd	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	6	7	6	8	7	20
MM	Jersey St	Whitehorse Rd to Grant Ave	E	Unrestricted		6	9	8	7	9	23
NN	Prowse Ave	Jersey St to end	N	Unrestricted		1	1	1	1	1	5
OO	Prowse Ave	Jersey St to end	S	Unrestricted		0	0	0	0	0	5
PP	Jersey St	Prowse Ave to end	E	Unrestricted		3	1	3	3	2	8
QQ	Jersey St	Prowse Ave to end	W	Unrestricted		1	2	1	1	2	9
RR	Georgian Ct	Jersey St to end	S	1P	8am-Midnight	0	0	0	0	0	6
SS	Georgian Ct	Jersey St to end	N	Unrestricted		2	2	4	3	2	6
TT	Jersey St	Georgian Ct to Grant Ave	W	1P	8am-Midnight	2	2	2	2	2	6
UU	Grant Ave	Jersey St to end	S	Unrestricted		2	3	3	2	2	10
VV	Grant Ave	Jersey St to end	N	1P	8am-Midnight	1	1	2	1	1	12
WW	Jersey St	Whitehorse Rd to Grant Ave	W	1P	8am-Midnight	4	3	2	2	4	11
XX	Whitehorse Rd	Jersey St to Bevan St	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	3	2	1	3	3
YY	Bevan St	Whitehorse Rd to end	E	1P	8am-11pm	6	8	9	6	7	32
ZZ	Bevan St	Whitehorse Rd to end	W	Permit Zone		7	7	8	6	9	28

Parking Occupancy Survey
 Balwyn Parking Precinct Study
 Friday 24 June 2011

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						17:00	18:00	19:00	20:00	21:00	
A1	Whitehorse Rd	Reid St to Bevan St	S	Unrestricted	Clearway 7am-9am Mon-Fri	6	6	7	5	6	8
A2	Reid St	Whitehorse Rd to end	E	Unrestricted		1	2	6	10	9	34
A3	Reid St	Whitehorse Rd to end	W	Unrestricted		6	6	13	14	15	41
A4	Whitehorse Rd	Reid St to Maleela Ave	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	6	8	10	5	12
A5	Maleela Ave	Whitehorse Rd to House #25	E	Unrestricted		0	1	0	0	0	6
A6	Maleela Ave	Whitehorse Rd to House #26	W	Unrestricted		0	3	2	1	1	5
P1	Off-Street	South of Whitehorse Rd		2P	8am-12:30pm Mon-Fri	12	4	5	7	5	50
P1	Off-Street	South of Whitehorse Rd		Disabled		0	0	0	0	0	2
P2	Off-Street	West of Jersey St		P	Pay and display Ticket required at all time	4	4	3	3	5	23

Parking Occupancy Survey
 Balwyn Parking Precinct Study
 Saturday 25 June 2011

Ratio Map Ref #	Street / Area	Street Section	Side	Weekday Parking Limit	Restrictions and Clearways	Parking Occupancy at Time							Capacity
						9:00	10:00	11:00	12:00	13:00	14:00	15:00	
1	Whitehorse Rd	Weston St to Austin St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	4	6	5	10	13	13	11	13
1	Whitehorse Rd	Weston St to Austin St	N	P 10min	Clearway 4:30-6:30pm Mon-Fri, P 10min All Other Times	0	0	0	0	0	0	0	3
2	Weston St	Whitehorse Rd to John St	W	Unrestricted		0	0	2	5	3	5	7	10
3	John St	Weston St to Tedstone St	S	Unrestricted		0	0	0	0	0	0	0	3
4	John St	Cremorne St to Kalinda St	N	No Stopping		0	1	0	0	0	0	0	9
5	Weston St	Whitehorse Rd to John St	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	0	0	0	0	1	2	4	6
6	John St	Weston St to Power St	S	Unrestricted		5	4	4	2	3	3	6	15
7	Whitehorse Rd	Weston St to Power St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	4	5	1	4	7	13	17	17
8	Power St	John St to Whitehorse Rd	W	2P	8am-6pm Mon-Fri, 8am-1pm Sat	2	2	3	3	3	3	3	4
8	Power St	John St to Whitehorse Rd	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	1	2	0	0	2	2	1	2
9	John St	Kalinda St to Power St	N	No Stopping		0	0	0	0	0	0	0	9
10	John St	Power St to Henry St	N	Unrestricted		6	6	6	9	6	6	9	14
11	John St	Power St to end	S	No Stopping		0	0	0	0	0	0	0	12
12	Power St	John St to Whitehorse Rd	E	Loading Zone	30min Mon-Fri; No Stopping All Other Time	0	0	0	0	0	0	0	4
12	Power St	John St to Whitehorse Rd	E	No Stopping		0	0	0	0	0	0	0	5
13	Whitehorse Rd	Balwyn Rd to Power St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	11	21	25	22	18	24	27	31
14	Balwyn Rd	Whitehorse Rd to Ellen St	W	Unrestricted		5	5	5	3	7	4	4	10
14	Balwyn Rd	Whitehorse Rd to Ellen St	W	Taxi Zone		0	0	0	0	0	0	0	2
15	Balwyn Rd	Whitehorse Rd to Jurang St	E	Unrestricted		7	7	6	6	6	5	3	24
16	Whitehorse Rd	Balwyn Rd to Mangan St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	5	10	10	5	10	8	11	10
16	Whitehorse Rd	Balwyn Rd to Mangan St	N	1/4 P	8am-4:30pm Mon-Fri, 1/2P 8:30am-12:30pm Sat; Clearway 4:30pm-6:30pm Mon-Fri;	1	1	1	1	1	1	1	2
16	Whitehorse Rd	Balwyn Rd to Mangan St	N	Loading Zone 15min		0	1	3	2	1	2	2	2
17	Mangan St	Whitehorse Rd to Jurang St	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	2	2	2	2	2	2	2	2
17	Mangan St	Whitehorse Rd to Jurang St	W	Unrestricted		3	3	2	3	2	4	2	16
18	Mangan St	Whitehorse Rd to Jurang St	E	Unrestricted		4	2	3	4	3	3	3	16
18	Mangan St	Whitehorse Rd to Jurang St	E	No Parking		0	0	0	0	0	0	0	2
18	Mangan St	Whitehorse Rd to Jurang St	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	2	2	2	2	2	2	2	2
18	Mangan St	Whitehorse Rd to Jurang St	E	Disabled		0	0	1	0	1	1	1	1
19	Whitehorse Rd	Mangan St to Yerrin St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	7	6	6	6	9	7	7	10
20	Yerrin St	Whitehorse Rd to Jurang St	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	4	4	4	2	2	4	2	4
20	Yerrin St	Whitehorse Rd to Jurang St	W	Unrestricted		1	1	3	2	2	5	1	19
21	Yerrin St	Whitehorse Rd to Jurang St	E	Unrestricted		2	2	6	5	3	4	4	14
21	Yerrin St	Whitehorse Rd to Jurang St	E	Unrestricted		2	3	2	4	1	1	1	5
21	Yerrin St	Whitehorse Rd to Jurang St	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	6	6	7	6	6	4	6	6
21	Yerrin St	Whitehorse Rd to Jurang St	E	Disabled		0	1	1	1	0	1	0	1
22	Whitehorse Rd	Yerrin St to Iramoo St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	10	11	12	10	9	8	12	12
23	Iramoo St	Whitehorse Rd to Jurang St	W	Unrestricted		3	1	2	5	3	6	5	23

Parking Occupancy Survey

Balwyn Parking Precinct Study

Saturday 25 June 2011

Ratio Map Ref #	Street / Area	Street Section	Side	Weekday Parking Limit	Restrictions and Clearways	Parking Occupancy at Time							Capacity
						9:00	10:00	11:00	12:00	13:00	14:00	15:00	
23	Iramoo St	Whitehorse Rd to Jurang St	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	3	3	4	4	3	4	4	4
24	Iramoo St	Whitehorse Rd to Jurang St	E	Unrestricted		2	3	6	5	7	4	3	19
24	Iramoo St	Whitehorse Rd to Jurang St	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	2	3	4	3	3	4	3	4
25	Whitehorse Rd	Iramoo St to Brenbeal St	N	1P	8am-4:30pm Mon-Fri, 8am-1pm Sat, Clearway 4:30pm-6:30pm Mon-Fri	0	0	0	0	1	2	2	5
26	Brenbeal St	Whitehorse Rd to Jurang St	W	Unrestricted		3	4	4	2	2	2	1	14
26	Brenbeal St	Whitehorse Rd to Jurang St	W	No Stopping	When Flags Displayed	0	0	0	0	0	0	0	3
26	Brenbeal St	Whitehorse Rd to Jurang St	W	Unrestricted		6	8	9	9	11	12	11	19
27	Brenbeal St	Jurang St to House #21	W	Unrestricted		1	1	1	1	1	1	0	3
28	Brenbeal St	Whitehorse Rd to House #26	E	Unrestricted		5	4	4	5	3	3	3	10
28	Brenbeal St	Whitehorse Rd to House #26	E	No Stopping	When Flags Displayed	1	1	1	1	1	1	1	1
28	Brenbeal St	Whitehorse Rd to House #26	E	Unrestricted		8	8	8	8	8	8	7	17
29	Whitehorse Rd	Brenbeal St to Kireep Rd	N	Unrestricted	Clearway 4:30pm-6:30pm Mon-Fri	1	0	1	0	0	3	3	19
30	Whitehorse Rd	Northcote Ave to Kireep Rd	S	Unrestricted	Clearway 7am-9am Mon-Fri	1	0	0	1	0	1	2	12
31	Northcote Ave	Whitehorse Rd to Conway Crescent	E	No Stopping	7:30am-9am, 3pm-6pm Mon-Fri	2	2	2	1	2	2	1	3
31	Northcote Ave	Whitehorse Rd to Conway Crescent	E	Unrestricted		2	1	2	2	2	2	2	7
32	Northcote Ave	Whitehorse Rd to Conway Crescent	W	Unrestricted		4	3	3	4	4	4	3	11
33	Whitehorse Rd	Talbot Ave to Northcote Ave	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	1	1	3	2	0	3	0	17
34	Talbot Ave	Whitehorse Rd to House #44	E	Unrestricted		6	12	7	9	6	11	7	30
35	Talbot Ave	Whitehorse Rd to House #47	W	Unrestricted		4	9	10	9	3	5	13	18
36	Whitehorse Rd	Weir St to Talbot Ave	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	4	9	7	11	11	12	12	12
37	Weir St	Whitehorse Rd to House #30	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	1	2	2	2	2	2	2	2
37	Weir St	Whitehorse Rd to House #30	E	2P	8am-6pm Mon-Fri	5	10	9	9	15	11	7	20
38	Weir St	Whitehorse Rd to House #29	W	2P	8am-6pm Mon-Fri	7	10	8	10	8	8	8	19
38	Weir St	Whitehorse Rd to House #29	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	1	3	2	2	3	2	3	3
39	Whitehorse Rd	Rochester Rd to Weir St	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	4	7	8	5	6	7	6	8
39	Whitehorse Rd	Rochester Rd to Weir St	S	Loading Zone	9am-6pm Mon-Fri, 1P 9am-1pm Sat, Clearway 7am-9am Mon-Fri	1	2	2	3	2	2	2	3
40	Rochester Rd	Whitehorse Rd to House #102	E	Disabled		0	0	1	1	0	1	1	1
40	Rochester Rd	Whitehorse Rd to House #102	E	1P	8am-6pm Mon-Fri, 8am-1pm Sat	1	3	3	2	2	2	2	3
40	Rochester Rd	Whitehorse Rd to House #102	E	2P	8am-6pm Mon-Fri When Flags Displayed	0	0	0	0	0	1	0	5
40	Rochester Rd	Whitehorse Rd to House #102	E	2P	8am-6pm Mon-Fri When Flags Displayed	0	0	0	0	0	0	0	12
40	Rochester Rd	Whitehorse Rd to House #102	E	2P	8am-6pm Mon-Fri	0	0	0	0	0	0	0	3
41	Rochester Rd	Whitehorse Rd to House #89	W	2P	8am-6pm Mon-Fri	2	2	3	3	3	4	1	4
41	Rochester Rd	Whitehorse Rd to House #89	W	No Parking	8am-9am, 3pm-4pm School Days	2	3	2	1	3	2	3	11
41	Rochester Rd	Whitehorse Rd to House #89	W	No Parking	When Flags Displayed	0	0	0	0	0	0	0	0
41	Rochester Rd	Whitehorse Rd to House #89	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	1	1	1	1	1	1	2	4
41	Rochester Rd	Whitehorse Rd to House #89	W	1P	8am-6pm Mon-Fri, 8am-1pm Sat	1	2	2	1	3	4	3	4
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	2	7	6	7	7	7	8	10
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	1P	9am-6pm Mon-Fri, 12P 9am-1pm Sat, Clearway 7am-9am Mon-Fri	1	2	3	2	4	4	4	4
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	1P	9am-6pm Mon-Fri, 9am-1pm Sat, Clearway 7am-9am Mon-Fri	1	2	2	0	2	1	2	2

Parking Occupancy Survey
Balwyn Parking Precinct Study
Saturday 25 June 2011

Ratio Map Ref #	Street / Area	Street Section	Side	Weekday Parking Limit	Restrictions and Clearways	Parking Occupancy at Time							Capacity
						9:00	10:00	11:00	12:00	13:00	14:00	15:00	
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	Mail Zone	9am-7pm Mon-Fri; Clearway 7am-9am Mon-Fri	0	0	1	0	1	0	1	1
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	Loading Zone	9am-6pm Mon-Fri; 1P 9am-1pm Sat; Clearway 7am-9am Mon-Fri	2	2	2	1	2	2	2	2
42	Whitehorse Rd	Balwyn Rd to Rochester Rd	S	1P	9am-6pm Mon-Fri; 9am-1pm Sat; Clearway 7am-9am Mon-Fri	1	1	0	0	1	1	0	1
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	Bus Zone		0	0	0	0	0	0	0	0
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	Loading Zone		0	0	0	0	0	0	0	2
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	No Parking	8am-4pm Mon-Fri	0	0	0	0	0	0	0	7
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	P 2min	8am-9am, 3pm-4pm Mon-Fri; 1P 9am-3pm Mon-Fri	0	0	0	0	0	0	1	3
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	Unrestricted		0	0	0	0	0	0	0	11
43	Balwyn Rd	Whitehorse Rd to Millah Rd	E	Bus Zone		0	0	0	0	0	0	0	1
44	Balwyn Rd	Whitehorse Rd to Millah Rd	W	Bus Zone		0	0	0	0	0	0	0	2
44	Balwyn Rd	Whitehorse Rd to Millah Rd	W	No Stopping		0	0	0	0	0	0	0	0
44	Balwyn Rd	Whitehorse Rd to Millah Rd	W	Bus Zone		0	0	0	0	0	0	0	0
45	Whitehorse Rd	Balwyn Rd to Cherry Rd	S	1P	9am-6pm Mon-Fri; 9am-1pm Sat; Clearway 7am-9am Mon-Fri	11	12	15	12	12	16	18	16
46	Cherry Rd	Whitehorse Rd to House #11	E	2P	8am-6pm Mon-Fri; 8am-1pm Sat	2	5	8	11	12	11	12	12
46	Cherry Rd	Whitehorse Rd to House #11	E	2P	8am-6pm Mon-Fri; 8am-1pm Sat	8	6	4	10	11	13	13	18
47	Cherry Rd	Whitehorse Rd to House #11	W	Unrestricted		21	19	23	24	25	25	25	27
47	Cherry Rd	Whitehorse Rd to House #11	W	2P	8am-6pm Mon-Fri; 8am-1pm Sat	5	3	15	18	18	18	18	18
48	Whitehorse Rd	Jersey St to Cherry Rd	S	1P	9am-6pm Mon-Fri; 9am-1pm Sat; Clearway 7am-9am Mon-Fri	1	7	7	5	12	19	23	21
48	Whitehorse Rd	Jersey St to Cherry Rd	S	Unrestricted	Clearway 7am-9am Mon-Fri	3	4	3	1	2	6	7	8
49	Jersey St	Whitehorse Rd to Grant Ave	E	Unrestricted		1	5	9	9	10	8	11	23
50	Jersey St	Whitehorse Rd to Grant Ave	W	1P	8am-Midnight	0	0	0	1	2	2	6	11
51	Whitehorse Rd	Jersey St to Bevan St	S	Unrestricted	Clearway 7am-9am Mon-Fri	1	1	3	2	1	2	3	3
A	Whitehorse Rd	Percy St to Norbert St	N	Unrestricted	Clearway 4:30pm-6:30pm Mon-Fri	1	1	1	3	3	2	6	8
B	Norbert St	Whitehorse Rd to house #15	W	Unrestricted		3	2	2	4	4	4	9	16
C	Norbert St	Whitehorse Rd to house #16	E	Unrestricted		3	2	3	3	2	4	8	20
D	Whitehorse Rd	Norbert St to Austin St	N	3P	8am-4:30pm Mon-Fri; 7pm-11pm Sat-Sun; Clearway 4:30pm-6:30pm	2	5	8	6	5	8	8	8
E	Austin St	Whitehorse Rd to Walker St	W	1P	8am-11pm	10	8	9	9	11	10	17	28
F	Austin St	Edmund St to Walker St	E	1P	8am-11pm	5	3	4	4	5	4	6	10
G	Edmund St	Austin St to Cremorne St	N	1P	8am-11pm	1	1	2	2	2	2	2	11
H	Austin St	Whitehorse Rd to Edmund St	E	1P	8am-11pm	1	1	3	2	2	3	6	15
H	Austin St	Whitehorse Rd to Edmund St	E	3P	8am-11pm	1	2	2	3	1	3	3	3
H	Austin St	Whitehorse Rd to Edmund St	E	4P Disabled		0	0	0	1	1	2	1	2
I	Edmund St	Austin St to Cremorne St	S	Unrestricted		2	2	2	4	5	4	4	13
J	Tedstone St	Cremorne St to end	W	2P	8am-11pm	0	0	0	0	0	0	1	6
K	Tedstone St	Cremorne St to end	E	2P	8am-11pm	2	2	2	0	0	0	0	3
L	Cremorne St	Edmund St to Tedstone St	W	Unrestricted		1	1	1	2	3	0	0	5
M	Cremorne St	Edmund St to Walker St	W	Unrestricted		2	1	2	1	3	2	2	10
N	Cremorne St	John St to Walker St	E	Unrestricted		2	2	1	2	4	2	4	20

Parking Occupancy Survey
Balwyn Parking Precinct Study
Saturday 25 June 2011

Ratio Map Ref #	Street / Area	Street Section	Side	Weekday Parking Limit	Restrictions and Clearways	Parking Occupancy at Time							Capacity
						8:00	10:00	11:00	12:00	13:00	14:00	15:00	
O	Kalima St	Gordon St to John St	W	Unrestricted		4	4	6	5	7	5	7	29
P	Kalima St	Gordon St to John St	E	Unrestricted		6	3	5	6	5	7	8	27
Q	Power St	Gordon St to John St	W	Unrestricted		3	5	4	5	4	7	6	27
R	Power St	Gordon St to Ellen St	E	Unrestricted		1	1	2	0	1	2	2	8
S	Power St	Ellen St to John St	E	Unrestricted		6	5	5	5	3	6	8	18
T	Henry St	Ellen St to John St	W	Unrestricted		7	5	3	4	8	6	5	18
U	Henry St	Ellen St to John St	E	Unrestricted		4	5	3	4	4	5	6	18
V	Balwyn Rd	Ellen St to Gordon St	W	Unrestricted		2	2	3	2	2	2	2	8
V	Balwyn Rd	Ellen St to Gordon St	W	Bus Zone		0	0	0	0	0	0	0	1
W	Balwyn Rd	Jurang St to Yarrabab Ave	E	Unrestricted		3	3	2	1	1	1	1	8
W	Balwyn Rd	Jurang St to Yarrabab Ave	E	Bus Zone		0	0	0	0	0	0	0	1
X	Jurang St	Yerrin St to Balwyn Rd	N	Unrestricted		4	3	5	5	4	3	3	23
Y	Jurang St	Balwyn Rd to Mangan St	S	Unrestricted		0	1	1	1	1	3	3	11
Z	Jurang St	Mangan St to Yerrin St	S	Unrestricted		0	0	0	0	0	0	0	11
AA	Yerrin St	Jurang St to Yarrabab Ave	W	Unrestricted		0	2	2	1	1	0	1	9
BB	Yerrin St	Jurang St to Yarrabab Ave	E	Unrestricted		0	0	0	2	2	2	2	11
CC	Jurang St	Yerrin St to Iramoo St	S	Unrestricted		0	0	0	0	0	0	0	11
DD	Jurang St	Brenbeal St to Yerrin St	N	Unrestricted		1	1	0	1	1	4	2	28
EE	Jurang St	Brenbeal St to Iramoo St	S	Unrestricted		0	1	1	1	1	0	0	11
FF	Brenbeal St	House #21 to Yarrabab Ave	W	Unrestricted		2	2	1	1	1	1	2	7
GG	Brenbeal St	House #26 to Yarrabab Ave	E	Unrestricted		1	1	1	1	1	1	1	6
HH	Kreep Rd	Whitehorse Rd to House #10	W	Unrestricted		6	6	7	3	3	6	6	23
II	Kreep Rd	Whitehorse Rd to House #10	E	Unrestricted		8	8	4	4	4	6	7	17
JJ	Whitehorse Rd	Kreep Rd to Farring Rd	N	Unrestricted	Clearway 4:30pm-6:30pm Mon-Fri	0	0	0	0	0	0	0	29
KK	Whitehorse Rd	Clyde St to Wharton St	S	Unrestricted	Clearway 7am-9am Mon-Fri	1	1	0	0	0	1	1	12
LL	Whitehorse Rd	Kreep Rd to Clyde St	S	Unrestricted	Clearway 7am-9am Mon-Fri	1	1	1	1	3	3	3	17
MM	Weir St	House #28 to House #12	E	2P	8am-6pm Mon-Fri	11	9	10	14	7	5	7	21
NN	Weir St	House #29 to Vauxhall Rd	W	2P	8am-6pm Mon-Fri	10	10	10	9	7	8	6	21
OO	Rochester Rd	House #100 to Vauxhall Rd	E	2P	8am-6pm Mon-Fri When Flags Displayed	0	0	0	0	0	0	0	4
OO	Rochester Rd	House #100 to Vauxhall Rd	E	Unrestricted		3	2	0	3	3	2	2	17
PP	Rochester Rd	House #87 to Vauxhall Rd	W	Unrestricted		4	3	3	5	7	5	7	18
PP	Rochester Rd	House #87 to Vauxhall Rd	W	2P	8am-6pm Mon-Fri	0	0	0	1	1	0	3	5
QQ	Balwyn Rd	Millah Rd to Vauxhall Rd	E	Unrestricted		1	0	0	1	0	0	0	17
RR	Balwyn Rd	Millah Rd to Pembroke Rd	W	Unrestricted		0	0	0	0	0	0	0	5
RR	Balwyn Rd	Millah Rd to Pembroke Rd	W	No Stopping	2:30pm-3:30pm Mon-Fri	0	0	0	0	0	0	0	11
SS	Millah Rd	Balwyn Rd to Cherry Rd	S	No Parking	8am-9am, 3pm-4pm School Days	1	1	1	1	1	8	10	15
TT	Millah Rd	Balwyn Rd to Cherry Rd	N	P 5min	8am-9:30am, 2:30pm-4pm School Days	1	2	2	4	5	5	5	5
TT	Millah Rd	Balwyn Rd to Cherry Rd	N	Unrestricted		1	2	2	5	7	8	9	11
UU	Cherry Rd	House #11 to Millah Rd	E	P 2minP 5min	8am-9am, 3pm-4pm School Days	12	13	3	12	12	12	13	13
UU	Cherry Rd	House #11 to Millah Rd	E	Bus Zone		2	4	2	4	5	5	0	6
VV	Cherry Rd	House #11 to Millah Rd	W	Unrestricted	8am-6pm School Days	6	7	6	11	12	12	12	12

Parking Occupancy Survey
Balwyn Parking Precinct Study
Saturday 25 June 2011

Ratio Map Ref #	Street / Area	Street Section	Side	Weekday Parking Limit	Restrictions and Clearways	Parking Occupancy at Time							Capacity
						9:00	10:00	11:00	12:00	13:00	14:00	15:00	
WW	Milian Rd	Cherry Rd to end	N	P 5min	8am-9:30am, 2:30pm-4pm School Days	1	1	1	2	5	7	7	9
WW	Milian Rd	Cherry Rd to end	S	No Stopping	8am-9am, 3pm-4pm School Days	0	1	0	0	0	0	0	5
XX	Prowse Ave	Jersey St to end	N	Unrestricted		0	1	0	0	3	2	5	5
YY	Prowse Ave	Jersey St to end	S	Unrestricted		0	0	0	0	2	1	5	5
ZZ	Jersey St	Prowse Ave to end	E	Unrestricted		1	1	1	1	0	1	3	8
A1	Jersey St	Prowse Ave to end	W	Unrestricted		0	0	0	0	1	0	1	9
A2	Georgian Ct	Jersey St to end	S	1P	8am-Midnight	0	0	0	0	0	1	0	6
A3	Georgian Ct	Jersey St to end	N	Unrestricted		2	3	4	3	3	3	6	6
A4	Jersey St	Georgian Ct to Grant Ave	W	1P	8am-Midnight	2	2	2	1	1	1	2	6
A5	Grant Ave	Jersey St to end	S	Unrestricted		1	1	1	2	3	4	6	10
A6	Grant Ave	Jersey St to end	N	1P	8am-Midnight	3	2	2	2	2	3	3	12
A7	Bevan St	Whitehorse Rd to end	E	1P	8am-11pm	7	7	5	6	9	9	16	32
A8	Bevan St	Whitehorse Rd to end	W	Permit Zone		10	13	12	10	13	13	15	28
A9	Whitehorse Rd	Reid St to Bevan St	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	0	2	7	3	8	8	8
A10	Reid St	Whitehorse Rd to end	E	Unrestricted		3	4	6	7	5	4	7	34
A11	Reid St	Whitehorse Rd to end	W	Unrestricted		4	5	5	11	10	13	8	41
A12	Whitehorse Rd	Reid St to Maleela Ave	S	Unrestricted	Clearway 7am-9am Mon-Fri	0	0	1	2	5	2	6	12
A13	Maleela Ave	Whitehorse Rd to Crest Ave	E	Unrestricted		0	1	1	1	1	1	8	27
A14	Maleela Ave	Whitehorse Rd to Crest Ave	W	Unrestricted		3	3	4	3	3	2	7	23

Parking Occupancy Survey
 Balwyn Parking Precinct Study
 Saturday 25 June 2011

Ratio Map Ref #	Street / Area	Street Section	Side	Weekday Parking Limit	Restrictions and Clearways	Parking Occupancy at Time							Capacity
						8:00	10:00	11:00	12:00	13:00	14:00	15:00	
P1	Off-Street	South of Whitehorse Rd		2P	8am-12:30pm Mon-Fri	3	13	25	42	50	50	50	50
P1	Off-Street	South of Whitehorse Rd		Disabled		0	0	0	0	0	0	0	2
P2	Off-Street	West of Rochester Rd		2P	8am-6pm Mon-Fri, 8am-1pm Sat	23	42	38	33	43	35	42	67
P2	Off-Street	West of Rochester Rd		Disabled		0	0	0	1	0	0	0	2
P3	Off-Street	West of Weir Rd		Private Property	Authorised Parking Only Offender Prosecuted	3	6	6	6	7	6	6	7
P3	Off-Street	West of Weir Rd		Disabled		1	0	1	1	0	2	0	3
P3	Off-Street	West of Weir Rd		2P	8am-6pm Mon-Fri, 8am-1pm Sat	22	46	45	43	45	40	42	48
P3	Off-Street	West of Weir Rd		Private Property	O'Henry "Big" Menswear	1	1	1	1	1	1	1	1
P3	Off-Street	West of Weir Rd		Private Property	O'Henry "Big" Menswear Staff Parking only ANZ	0	0	1	0	0	0	0	3
P4	Off-Street	McDonald Car Park		1P Disabled		0	0	1	1	1	1	1	1
P4	Off-Street	McDonald Car Park		1P		8	28	30	34	24	20	30	34
P5	Off-Street	Balwyn Library		Disabled		0	0	1	2	2	1	0	2
P5	Off-Street	Balwyn Library		4P		2	7	16	16	15	17	16	20
P6	Off-Street	East of Iramoo St		Disabled		0	0	0	0	0	1	1	2
P6	Off-Street	East of Iramoo St		Unrestricted		9	13	12	22	20	14	13	33
P7	Off-Street	West of Iramoo St		Disabled		0	0	0	1	1	0	0	2
P7	Off-Street	West of Iramoo St		2P	8am-6pm Mon-Sat	28	62	86	78	73	53	60	97
P7	Off-Street	West of Iramoo St		Disabled		0	0	0	1	1	2	0	2
P8	Off-Street	West of Iramoo St		2P	8am-6pm Mon-Sat	41	88	116	104	110	100	103	142
P8	Off-Street	West of Iramoo St		Permit Zone		5	5	5	5	5	5	5	8
P8	Off-Street	West of Iramoo St		Disabled		3	2	2	3	1	3	1	3
P9	Off-Street	West of Mangan St		2P	8am-6pm Mon-Fri, 8am-1pm Sat	8	16	32	19	17	19	17	36
P10	Off-Street	West of Balwyn Rd		2P	8am-6pm Mon-Fri, 8am-1pm Sat	13	15	15	11	11	10	7	41
P11	Off-Street	West of Jersey St		P	Pay and display Ticket required at all time	0	1	2	2	1	2	9	23

APPENDIX B

PARKING DURATION SURVEYS

Parking Duration Survey
 Balwyn Parking Precinct Study
 11 August, 2011

Ratio Map Ref #	Street / Area	Street Section	Side	Parking Type	Time Restrictions	Supply	Duration (hours)											Total
							up to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	
E	Austin St	Whitehorse Rd to Walker St	W	1P	8am-11pm	28	14	3	5	2	1	0	0	0	1	0	3	29
F	Austin St	Edmund St to Walker St	E	1P	8am-11pm	10	1	0	4	2	0	0	0	1	0	0	1	9
H	Austin St	Whitehorse Rd to Edmund St	E	1P	8am-11pm	15	8	6	3	0	0	0	0	0	0	0	0	17
H	Austin St	Whitehorse Rd to Edmund St	E	3P	8am-11pm	3	2	1	3	1	0	0	1	0	0	0	0	8
H	Austin St	Whitehorse Rd to Edmund St	E	4P Disabled		2	0	2	0	2	0	0	0	0	0	0	0	4
Y2	Austin St	Walker St to Gordon St	E	1P	8am-11pm	11	1	0	0	0	0	1	0	0	0	0	0	2
Y1	Austin St	Walker St to Gordon St	W	1P	8am-11pm	10	1	1	0	1	0	0	0	0	0	0	0	3
A7	Bevan St	Whitehorse Rd to end	E	1P	8am-11pm	32	9	4	1	1	1	1	0	0	1	0	1	19
A8	Bevan St	Whitehorse Rd to end	W	Permit Zone		28	7	3	2	1	0	0	0	0	2	0	5	20
46	Cherry Rd	Whitehorse Rd to House #11	E	2P	8am-6pm M-F 8am-1pm Sat	18	50	18	3	0	1	0	0	0	0	0	0	72
47	Cherry Rd	Whitehorse Rd to House #11	W	Unrestricted		27	5	1	3	4	2	1	5	1	11	4	0	37
47	Cherry Rd	Whitehorse Rd to House #11	W	2P	8am-6pm M-F; 8am-1pm Sat	18	22	19	4	3	1	0	0	0	0	0	0	49
UU	Cherry Rd	House #11 to Milliah Rd	E	P 2min/P 5min	8am-9am; 3pm-4pm School Days	13	8	1	0	0	0	0	0	0	0	0	0	9
UU	Cherry Rd	House #11 to Milliah Rd	E	Bus Zone	8am-6pm School Days	6	2	1	0	0	0	0	0	0	0	0	0	3
VV	Cherry Rd	House #11 to Milliah Rd	W	Unrestricted		12	9	2	0	1	2	2	1	3	0	2	0	22
49	Jersey St	Whitehorse Rd to Grant Ave	E	Unrestricted		23	5	4	4	0	1	1	2	2	3	2	0	24
50	Jersey St	Whitehorse Rd to Grant Ave	W	1P	8am-Midnight	11	7	3	0	0	0	0	0	0	0	0	0	10
A1	Jersey St	Prowse Ave to end	W	Unrestricted		9	4	1	0	0	0	2	0	0	0	0	0	7
A4	Jersey St	Georgian Ct to Grant Ave	W	1P	8am-Midnight	6	0	0	0	0	0	0	0	0	0	0	1	1
ZZ	Jersey St	Prowse Ave to end	E	Unrestricted		8	1	0	1	1	1	0	0	0	1	1	0	6
P01	Off-Street	South of Whitehorse Rd		2P	8am-12:30pm M-F	50	25	12	7	5	4	2	6	1	2	1	0	65
P01	Off-Street	South of Whitehorse Rd		P Disabled		2	1	0	1	0	0	0	0	0	0	0	0	2
P02	Off Street	West of Rochester Rd		2P	8am-6pm M-F; 8am-1pm Sat	67	246	66	8	5	1	1	0	0	0	0	0	327
P02	Off Street	West of Rochester Rd		P Disabled		2	3	0	2	0	0	0	0	0	0	0	0	5
P04	Off Street	McDonald Car Park		1P Disabled		1	6	0	0	0	0	0	0	0	0	0	0	6
P04	Off Street	McDonald Car Park		1P		34	115	18	2	3	1	0	0	0	1	0	0	140
P05	Off Street	Balwyn Library		P Disabled		2	4	0	0	0	0	0	0	0	0	0	0	4
P05	Off Street	Balwyn Library		4P		20	52	15	7	2	3	1	1	2	0	0	0	83
P06	Off Street	East of Iramoo St		Disabled		2	1	0	0	0	0	0	0	0	0	0	0	1
P06	Off Street	East of Iramoo St		Unrestricted		33	11	0	3	3	2	2	4	5	12	5	0	47
P09	Off-Street	West of Mangan St		2P	8am-6pm M-F 8am-1pm Sat	36	76	33	3	3	1	2	3	3	1	2	6	133
P11	Off-Street	West of Jersey St		P	Pay and display Ticket required at all time	23	1	4	3	0	0	0	0	0	0	0	0	8
40	Rochester Rd	Whitehorse Rd to House #102	E	P Disabled		1	1	1	0	0	0	0	0	0	0	0	0	2
40	Rochester Rd	Whitehorse Rd to House #102	E	1P	8am-6pm M-F; 8am-1pm Sat	3	17	3	0	0	0	0	0	0	0	0	0	20
40	Rochester Rd	Whitehorse Rd to House #102	E	2P	8am-6pm M-F when flags displayed	5	5	0	0	0	0	0	1	1	0	0	0	7
40	Rochester Rd	Whitehorse Rd to House #102	E	2P	8am-6pm M-F when flags displayed	12	10	0	2	2	0	0	0	0	0	0	0	14
40	Rochester Rd	Whitehorse Rd to House #102	E	2P	8am-6pm M-F	3	0	0	0	0	0	0	0	0	0	0	0	0
41	Rochester Rd	Whitehorse Rd to House #89	W	2P	8am-6pm M-F	4	5	1	1	0	0	0	0	0	0	0	0	7
41	Rochester Rd	Whitehorse Rd to House #89	W	No Parking	8-9am; 3-4pm School Days	11	1	0	0	0	0	0	0	0	0	0	0	1
41	Rochester Rd	Whitehorse Rd to House #89	W	No Parking	When Flags displayed	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Rochester Rd	Whitehorse Rd to House #89	W	1P	8am-6pm M-F; 8am-1pm Sat	4	6	1	0	0	0	0	0	0	0	0	0	7
41	Rochester Rd	Whitehorse Rd to House #89	W	1P	8am-6pm M-F; 8am-1pm Sat	4	33	0	0	0	0	0	0	0	0	0	0	33
OO	Rochester Rd	House #100 to Vauxhall Rd	E	2P	8am-6pm M-F when flags displayed	4	0	1	0	0	0	0	0	0	0	0	0	1
OO	Rochester Rd	House #100 to Vauxhall Rd	E	Unrestricted		17	6	1	1	1	2	0	0	0	0	0	1	12
PP	Rochester Rd	House #67 to Vauxhall Rd	W	Unrestricted		18	3	3	2	2	0	3	0	0	3	0	1	17
PP	Rochester Rd	House #67 to Vauxhall Rd	W	2P	8am-6pm M-F; No.87 to end	5	3	0	0	0	0	0	0	0	0	0	0	3
37	Weir St	Whitehorse Rd to House #30	E	1P	8am-6pm M-F; 8am-1pm Sat	2	15	0	0	0	0	0	0	0	0	0	0	15
37	Weir St	Whitehorse Rd to House #30	E	2P	8am-6pm M-F	20	13	7	2	2	0	1	0	0	0	1	0	26
38	Weir St	Whitehorse Rd to House #29	W	2P	8am-6pm M-F Whitehorse Rd to No.29	19	4	3	4	2	1	0	1	0	0	0	1	16
38	Weir St	Whitehorse Rd to House #29	W	1P	8am-6pm M-F; 8am-1pm Sat	3	12	4	0	0	0	0	0	0	0	0	0	16
MM	Weir St	House #28 to House #12	E	2P	8am-6pm M-F	21	9	2	0	0	0	0	0	0	0	0	1	12
NN	Weir St	House #29 to Vauxhall Rd	W	2P	8am-6pm M-F	21	8	3	1	0	2	1	1	1	0	0	0	17

Parking Duration Survey
Balwyn Parking Precinct Study
 20 October, 2011

Map Ref #	Location	Parking Type	Restriction	Space	Parking Duration (hours)											
					up to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	Total
P03	Off Street	Private Property	Authorised Parking Only Offender Prosecuted	7	2	0	0	1	0	0	1	2	4	0	0	10
P03	Off Street	Unrestricted		19	15	3	2	2	1	2	3	11	4	4	1	48
P03	Off Street	Private Property	O'Henry "Big" Menswear	1	0	0	0	0	0	0	0	1	0	0	0	1
P03	Off Street	Private Property	O'Henry "Big" Menswear Staff Parking only ANZ	3	0	0	0	0	0	0	0	1	2	0	0	3
P03	Off Street	2P	8am-6pm M-F; 8am-1pm Sat	29	107	26	9	1	2	0	0	0	0	0	0	145
P03	Off Street	P Disabled		3	8	0	1	0	0	0	0	0	0	0	0	9
P07	Off-Street	P Disabled		4	7	1	0	0	1	0	0	0	0	0	0	9
P07	Off-Street	2P	8am-6pm M-Sat	74	206	52	5	1	3	2	1	0	1	0	0	271
P07	Off-Street	P		23	6	2	4	0	0	1	4	4	2	4	6	33
P08	Off-Street	2P	8am-6pm M-Sat	120	585	86	8	4	7	7	3	4	2	1	2	709
P08	Off-Street	P		19	40	8	2	0	5	0	2	2	2	3	0	64
P08	Off-Street	Permit Zone	Safeway	11	8	2	0	1	2	0	2	2	3	2	0	22
P08	Off-Street	P Disabled		3	15	0	0	0	0	0	0	0	0	0	0	15
P10	Off-Street	2P	8am-6pm M-Fri; 8am-1pm Sat	32	13	4	2	2	1	2	1	1	6	15	5	52
P10	Off-Street	P		10	0	1	3	0	0	0	0	2	1	6	0	13
P10			No Parking Zone	4	0	1	1	0	0	0	3	0	0	0	0	5

APPENDIX C CONSULTATION



Planning and development consultants
Traffic and transportation engineers
Urban designers

12 July 2011
Our Ref. 10624/RS:eg

The Occupier

Ratio Consultants Pty Ltd
ABN 47 005 725 413
Riverwalk first floor
649 Bridge Road
Richmond VIC 3121
Australia
T +61 03 9429 3111
F +61 03 9429 3011
E mail@ratio.com.au
www.ratio.com.au

City of Boroondara Parking Study of Balwyn Activity Centre

The City of Boroondara is in the process of developing a Parking Study for the Balwyn Activity Centre. The objective of the study is to assess the existing and future parking needs of the area and to recommend improvements for traders, shoppers and other visitors.

As part of developing this study, Council have appointed Ratio Consultants to survey traders in order to determine the travel characteristics of their staff and customers, and to establish the current demand and location of staff and customer parking.

The survey involves a short questionnaire for you to complete (please turn over). Enclosed is a reply-paid envelope for return to us of the completed survey form.

All data collected will be kept strictly confidential.

For more information you may contact Hywel Rowlands from the City of Boroondara on 9278 4799 (Hywel.rowlands@boroondara.vic.gov.au) or Russell Symons from Ratio Consultants on 9429 3111(russells@ratio.com.au).

Yours sincerely,

Russell Symons
Director
Ratio Consultants Pty Ltd

BALWYN ACTIVITY CENTRE
TRADERS QUESTIONNAIRE



Name: _____

Address: _____

Email: _____

The personal information requested on this form is being collected by the City of Boroondara for the purpose of understanding trader's, views and travel characteristics. The personal information will be used solely by Council for that primary purpose or directly related purposes. You may apply for access to and/or amendment for the information you provide. Requests for access and/or correction should be made to the Council's Privacy Officer.

Q.1: What type of business do you own or operate?

Business	Tick your business type
Shop	
Office	
Restaurant	
Café	
Other (please specify)	

Q.2: What is the size of the premises which your business occupies (include all floor levels)?

Measure	Size (leasable floor area)
Square metres of floor area (for office, shop, etc)	
Total seat number for restaurant or café	

Q.3: Do you have any on-site parking, or do you and your staff park off-site?

Car parking	
On-site parking provision	_____ (number of parking spaces)
Off-site parking leased arrangement (please indicate location)	_____ (location)
Public parking (please indicate locations)	_____ (location/s)

Q.4: How many staff are on-site during a typical day?

Staff category	Number of staff
Full time	
Part time	

Q.5: Where do you and your staff live?

Staff	Suburb
1	
2	
3	
4	
5	

Q.6: How many of your staff traveled to work today by each of the following modes? If more than one mode of transport, please choose the mode for the longest (distance) part of the journey.

Mode of travel	Number of staff
Car driver	
Car passenger	
Bus	
Tram	
Walk	
Cycle	
Other	

Q7: For those who drove, where did they park their car?

Car parking	Number of drivers
On-site car park	
Off-site parking leased arrangement	
Public parking (on-street or off-street parking areas)	

Q.8: What other transport choices are available to the car drivers to get to work?

Mode of travel	Number of staff
Car passenger	
Bus	
Tram	
Walk	
Cycle	
Other	
None	

Q.9: What is the most number of customers you would have at any one time and what percentage of those would you estimate drive to your business?

Maximum number	% Who drive

Q.10: How long do your customers spend on your premises?

Time spent	Minutes
Minimum	
Maximum	

Q.11: Do you have any suggestions on how to improve parking in the area?

Q.12: Do you have any suggestions on how to improve public transport, cycling and walking for travel to/from Balwyn Activity Centre?

Q.13: Are you aware of the term 'car share' and how 'car share' operates (please tick)?

Yes	No

Car share is a membership based pay as you go extension to the public transport system. Car sharing members have access to cars on demand for rent either by the hour or by the day (all costs included). Car share is accessible to both residents and local businesses and can be picked up from on-street parking spaces ("pods") and left there. There are currently no 'car sharing pods' in Balwyn although car share is expanding rapidly in other municipality areas.

Q.14: Would you consider Balwyn Activity Centre to be an appropriate area to host a 'car sharing' pod and if so, can you identify the locations you believe would be suitable?

Please return the completed questionnaire by **Monday 29 August 2011** to:

Strategic Planning Department
City of Boroondara
8 Inglesby Road
CAMBERWELL VIC 3124