#### **SPRINGWOOD**

#### Description of the area surveyed

The Springwood study area is bounded to the north by the Great Western Highway and to the south by Springwood Avenue. To the west is Homedale Road and the eastern boundary is the Springwood Bowling Club. The study area includes Ferguson Road.

The town centre, focused on Macquarie Road, is located at the centre of the study area. Macquarie Road runs along an east-west ridge with the land on the southern side falling approximately 8-10 metres to Springwood Avenue. The Springwood Railway Station is located towards the centre of the study area with access via a pedestrian underpass from Macquarie Road and direct access to the commuter parking area to the north of the station. Civic buildings including the Springwood Theatre and Community Hub (The Hub), Springwood Library and the Braemar Gallery at the eastern end of the study area.

In April 2016 Council adopted a Town Centre Masterplan for Springwood. In 2015 a draft Transport and Parking Report was prepared by GTA Consultants to inform the Masterplan. The report notes parking demand percentages that are slightly lower, but similar, across the study area than those observed as part of this study, however the methodology was slightly different which may account for a variation in figures.



Fig. 1: Springwood Study Area

### Summary of parking in Springwood

The Springwood District Centre consists of a variety of on and off-street parking. Much of the study area parking has time restrictions. The main exception to the time restricted parking is the commuter car park located adjacent to the northern entrance to the railway station and on-street parking at the periphery of the study area. Professional and retail activities are located along Macquarie Road and Ferguson Street, with most on-street parking being utilised, particularly on Macquarie Road. Car parks are provided across the study area and these were heavily utilised at the time of the surveys.

The town centre has a high number of publicly accessible private car parking areas. These are generally located within the northern area of the town centre, with access off Greenway Lane, and off Raymond Road.

Parking in Springwood is relatively constrained, with limited opportunity for parking to overflow to adjacent streets during periods of extremely high demand.

Vehicular flow paths are generally logical within the car parks, with a few exceptions. However some employ designs that do not meet current best practice. There are blind aisles within the southern car park and the public car park off Raymond Lane.

The northern car park is accessible from Macquarie Road and the southern car park is accessible from Springwood Avenue. Greenway Lane car park is accessed from Greenway Lane.

#### Adjoining and adjacent land uses

The Springwood study area contains a range of uses including two mid-sized supermarkets (note: one of these, the IGA on Raymond road closed in June 2016), retail outlets, cafés and restaurants and professional suites. There is a large Telstra exchange in the centre of Macquarie Road as well as the Baby Clinic and the heritage listed Presbyterian Church.

A number of medical services are located at the western end of the study area fronting Macquarie Road. At the eastern end of the study area there is a focus on community buildings consisting of The Springwood Theatre and Community Hub (the Hub), Springwood library and Braemar Gallery, with the Springwood Sports Club further east along Macquarie Road. Some of the large houses fronting Macquarie Road in this precinct have been converted to professional offices.

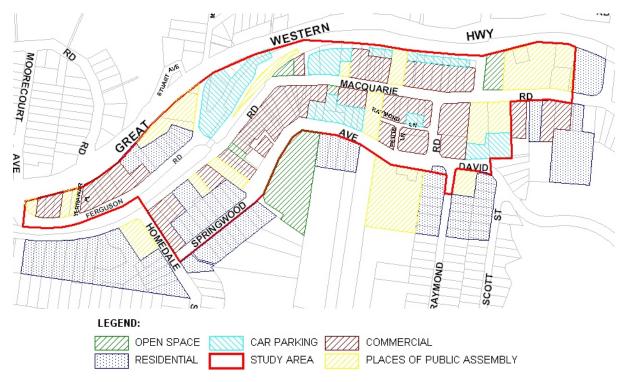


Fig. 2: Springwood Study Area Land Uses

Ferguson Road located in the north western sector of the study area, contains a mix of development including the police station, the ambulance station, dwellings, professional offices and the Springwood Arts Centre at the far western end.

The land fronting Springwood Avenue on the southern side includes the Fairy Dell Reserve, an electricity substation and detached dwellings.

#### Off-street parking

#### Restrictions

The northern car park is a time restricted car park with 2 hour parking during business hours. The southern car park has a combination of 2 hour, 4 hour during business hours and unrestricted parking. The parking areas located off Greenway Lane are 1 and 2 hour time restricted. The Hub has sections of unrestricted parking with some 2 hour restricted parking.

In addition to public parking there is a large number of spaces available on private land associated with businesses- some with time restrictions and some being restricted to customers parking only.

#### Accessible spaces

There are a total of 26 public accessible spaces in Springwood, with 14 of these located in the commuter car park.

There are 3 accessible spaces at The Hub, 2 accessible spaces in the southern car park, 4 spaces in the northern car park, and 1 accessible space in the Greenway Lane car park.

The northern car park is at the same grade as Macquarie Road making access to the shops easier. In contrast, the southern car park is approximately 1 metre below the Town Square and up to 7 metres below for the parking spaces adjacent to the southern boundary of this car park. Access to Macquarie Road is via a ramp or steps.

#### On-street parking

#### o Restriction

Generally on road parking is time restricted to 1 hour during business hours. There is a 15 min space outside the post office and also some 30 min spaces.

On road parking spaces are readily accessible and appeared, during observations, to be the first preference for most people. The action of entering or leaving a parking space interferes with the flow of traffic and this creates delays to the flow of traffic along Macquarie Road at times of peak traffic. All parking in Macquarie Road provides relatively level access to shops and businesses.

#### • Bus, train and taxi services

Springwood is well serviced by buses to and from Penrith, Hazelbrook, Winmalee and locations between. There are bus stops adjacent to the railway station entrance, near the centre of the town and near the civic centre.

Springwood is well serviced by trains, being an express stop on the Blue Mountains line. It is a staffed station and is wheelchair accessible.

A large multi level commuter car park is well patronised.

A taxi rank is located near the post office in Macquarie Road.

#### Links

#### Roads

Access to and within Springwood is restricted by the relatively narrow reserve of Macquarie Road, its position on the top of a ridge, and the number of vehicles that travel to, and through Springwood.

There are two access roads into Springwood from the Great Western Highway, Ferguson Rd to the west, and Macquarie Rd to the east.

#### **Footpaths**

Paved footpaths run along both sides of Macquarie Road within the study area with most shopfronts having awnings which provide protection from wet and hot weather for pedestrians. Within the study area all streets have a paved footpath on at least one side of the street.

There are a number of pedestrian links between Macquarie Road and parking areas to the north and south, including some laneways. A number of these links are neither well signposted nor inviting and therefore are not well patronised by customers.

There are numerous seats for the public to use in the central part of the town as well as cafés, some with outdoor seating.

#### Bike Path/Shared paths

The Blue Mountains Bike Plan has identified Routes L6B, L6a Ext North, L6. Regional route is located along the Great Western Highway.

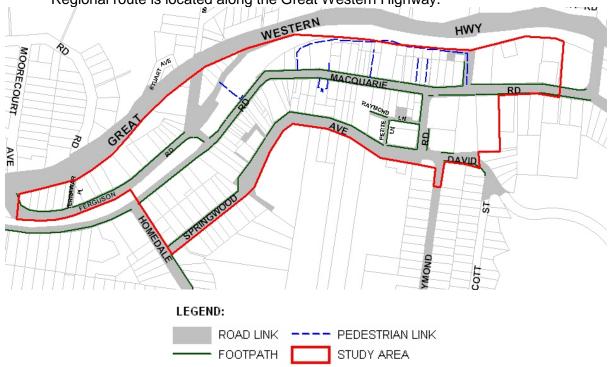


Fig. 3: Springwood Study Area Links

#### Safety & security

#### Lighting

Street lighting is provided to all the streets in the study area. The lighting in the central section of Springwood Avenue, between the southern car park and Raymond Road is partially obscured in places by the trees and there is a lack of lighting in the lower level of the southern car park.

#### Vegetation

There is a mix of exotic and native street trees throughout most of the study area. The street trees do not reduce visibility for drivers. Casual surveillance is restricted in parts of Springwood Avenue due to low foliage on the trees. The existing trees contribute positively to the character of Springwood and provide shade in summer.

#### Signage

#### Directional

There is directional signage at the approaches to Springwood town centre advising of public parking areas, including the commuter parking area. There are signs at the approach to the commercial centre directing motorists to the southern car park and to Greenway Lane. The Springwood masterplan notes that signage to parking could be improved.

#### Parking restrictions

Parking restriction signs are generally in good repair however maintenance is required on some of the signs. Some parking spaces in Macquarie Road have shared use, being available for buses at certain times and for car parking at other times. The parking restriction signs are complex in that they are conveying multiple parking restrictions depending on the day of the week and the time of day.

#### Community demographics

In 2016 Springwood had a population of 8,480 residents which is an increase of 47 persons from 2011. There were 3,452 dwellings, an increase of 16 from 2011. The average household size is 2.44 persons which have remained steady from 2011 where it was 2.47. In 2016, the population density in Springwood was 4.48 persons per hectare.

In 2016, around 87% of households in Springwood had access to one or more motor vehicles.

Forecast i.d.<sup>1</sup> estimate that the population of the Springwood-Valley Heights area will increase by around 3.5% by 2036.

In 2011, 2,599 residents travelled to work in a private vehicle which is an increase from the 2006 and 2001 figures. In 2011, approximately 530 Springwood residents used public transport for at least some of their journey to work, which is slightly higher than the number in 2006, and 77 residents walked to work and 13 rode a bicycle.

#### **Capacity**

For the purposes of the strategy, parking areas in Springwood were divided into four precincts.

The commuter car park, located on the northern side of the railway station has a large capacity and is very well patronised especially during the week. An increase in the average parking demand from 77% in the 2011-2012 to 89% in the 2015-2016 counts was observed. While the commuter car park is on the north side of the railway some people still park there when the purpose of their journey is shopping.

For people conducting business in Springwood, the highest demand was observed for parking places in Macquarie Road, Northern Car Park and Greenway Lane car parks. The average parking occupancy in this precinct was observed to be 94%, with several locations having a maximum occupancy of 100%. These car parking areas have good access and grades to the shops and businesses. The weekday demand

٠

<sup>&</sup>lt;sup>1</sup> i.d. community 2017. Blue Mountains City Council Population Forecast, Forecast i.d. http://forecast.id.com.au/blue-mountains

for parking remained unchanged in this precinct between the 2011-2012 and 2015-2016 counts.

The parking demand for the Southern Car Park was observed to be lower than the Northern Car Park and Macquarie Road. An average weekday occupancy of 90% was observed in 2015-2016 for this carpark, with maximum occupancy in excess of 100% (with people parking illegally). The average demand (90%) has increased significantly from 78% in the 2010-2012 counts.

The demand for parking in the vicinity of The Hub relates directly to activities occurring in this location. An average of 68% occupancy was observed. For major events, overflow parking is available along Macquarie Road and in adjacent car parks and residential streets.

An overall increase in the average demand for parking was observed between the initial data collected in 2010-2012 and the data collected in 2015-2016. While there was no increase observed in the Northern Precinct on weekdays, the observed total of 94% indicates this area is at maximum capacity. The other parking areas experienced an increase in demand.

Car parking demand is relatively consistent during the day with a distinct demand drop off at 5:00pm which would be anticipated as retail stores close and commuter parking drops.

#### Rangers' comments

A mini bus used by disabled or elderly persons has issues when day tours are organised, and the driver is also assisting on the tour. There is adequate space to stop close to the station however the driver has to then move the bus to a position where it can be parked for the day. Frequently this is well removed from the station as the bus is unable to enter the multi-level parking station due to the height of the vehicle.

The parking signage in the main street is complex, with multiple options for parking. There is an incorrect assumption that parking in a bus zone is permissible when there is no bus present.

#### **Tourist Bus Parking**

There is currently no demand for dedicated tourist bus parking.

#### Conclusion

Springwood has a high level of parking demand with an overall average of 88% occupancy. Demand was highest in the northern precinct on weekdays, with an average at peak times of 94% occupancy. At the same time there is an average of 90% peak occupancy in the southern precinct. The northern car park has the highest demand due to the ease of access to Macquarie Road and its location at the centre of the town area. The southern car park, while centrally located, is a less desirable location due to topography. Turnover in the northern car park and on Macquarie Road was high, indicating that the time restrictions were appropriate for the demand.

The commuter parking area was observed to have an average of 89% capacity on weekdays, which is significantly more than the 70% occupancy observed in the 2010-2012 data collection period. This may reflect changes to train timetables in 2013 which included express stopping trains. The demand for parking at The Hub was relatively low however it fluctuates depending on events. The monthly growers market is one such event, as it is held on Sundays (a quieter day for shops); it has been observed that there is sufficient parking in surrounding areas to accommodate visitors. The Hub parking area could be better utilised by the public accessing Macquarie Road.

Overall there has been an increase in demand for parking in Springwood from the 2010-2012 data collection period compared to the 2015-2016 data collected. In the interval between the two data collection periods The Hub was developed resulting in additional parking spaces being provided at this location.

There is limited opportunity for overflow parking in Springwood for periods of very high demand for parking, with Raymond Road, Ferguson Road and Springwood Avenue being the available roads.

Springwood's centre is nearing capacity and parking is spreading into surrounding residential streets. The lower storey of the commuter car park could be part-utilised for town centre parking by time-restricting places, however alternatives for commuters may be needed once that car park reached capacity.

The Springwood Masterplan has identified investigation sites for redevelopment, and any new development would need to provide sufficient on-site parking and ideally, additional capacity.

#### Recommendations

- SW.1 Review and implement parking restriction and direction signage particularly to parking on Greenway Lane and The Hub to encourage parking in these underutilised areas, reducing pressure on the Northern Carpark.
- SW.2 Enforce current parking restrictions.
- SW.3 Investigate the introduction of electronic parking on Macquarie Road in the main shopping area to increase car turnover and reduce overstay. This would require the demarcation of spaces, which would also facilitate more efficient use of space.
- SW.4 Undertake review of Accessible Parking in Springwood Town Centre.
- SW.5 Improve lighting in the Southern Carpark to increase safety at night.
- SW.6 Review and implement findings of Springwood Masterplan and associated traffic Studies.
- SW.7 Review the requirements for parking within the Development Control Plan to ensure that adequate parking is provided on-site, and undertake enforcement where necessary to ensure that parking areas are used for parking not storage.
- SW.8 Investigate the introduction of time-limited parking for some spaces on the lower story of commuter parking to alleviate pressure on other parking locations and help to activate the commuter carpark and improve safety.
- SW.9 Implement Springwood Town Centre Masterplan Action to improve safety and activation of commuter carpark.
- SW.10 Improve links from carpark off Raymond Road to Macquarie Rd. Formalise Carpark off Raymond Road.
- SW.11 Review parking restriction signage on Macquarie Road and rationalise where required to avoid confusion.
- SW.12 Consider development of a Traffic Management Plan for regular monthly growers markets.
- SW.13 Development and implementation of a Parking Precinct Plan.

# **Springwood Data and Analysis**

## **NORTHERN PRECINCT PARKING - WEEKDAYS & WEEKENDS**



## Number of vehicles parked- weekdays

	2010-2012 2015-2016 Maximu							
	Spaces		_				Maximum number/	
	available	Average occupancy - vehicles	Average percentage occupancy	Average occupancy - vehicles	Average percentage occupancy	Difference	percentage occupancy	
Northern car park – incl. IGA car park	107	101	94%	104	97%	+3%	107/100%	
Greenway Lane (east)	44	44	100%	41	93%	-7%	46/105%	
Greenway Lane (centre)	14	12	86%	14	96%	+10%	14/100%	
Macquarie Rd Royal Hotel to underpass	26	23	87%	21	81%	-6%	25/96%	
Macquarie Rd Royal Hotel to Raymond Rd	53	50	94%	51	96%	+2%	53/100%	
Total	244	229	94%	230	94%	II		

**Note for all tables:** Occupancy data and percentages are rounded to nearest whole number. Where percentage occupancy is shown to be over 100% it is because additional vehicles were parked illegally.

# Number of vehicles parked- weekends

		2010-	-2012	2015-	-2016		Maximum
	Spaces available	Average occupancy - vehicles	Average percentage occupancy	Average occupancy - vehicles	Average percentage occupancy	Difference	number/ percentage occupancy
northern car park - incl Franklins car park	107	103	97%	102	95%	-2%	10598%
Greenway Lane (east)	44	27	61%	42	95%	+34%	42/95%
Greenway Lane (centre)	14	9	62%	14	100%	+38%	14/100%
Macquarie Rd Royal Hotel to railway underpass	26	23	90%	24	92%	+2%	26/100%
Macquarie Rd Royal Hotel to Raymond Rd	53	51	97%	53	100%	+3%	53/100%
Total	244	214	88%	235	96%	+8%	

# Number of Vehicles parked in private parking areas available to staff and/or customers only - weekdays

		2010-2012 2015-2016		2015	-2016	016	
	Spaces available	Average occupancy - vehicles	Average percentage occupancy	Average occupancy - vehicles	Average percentage occupancy	Difference	number/ percentage occupancy
161-163 Macquarie	15	14	92%	15	100%	+8%	15/100%
157 Macquarie	7	6	86%	4	57%	-29%	7/100%
147 Macquarie	10	10	100%	6	60%	-40%	10/100%
135-141 Macquarie	16	15	94%	16	100%	+6%	16/100%
127-129 Macquarie	25	15	58%	16	64%	+6%	17/68%
123-125 Macquarie	30	27	88%	28	93%	+5%	30/100%
121 Macquarie	9	9	97%	6	67%	-30%	10/111%
117-119 Macquarie	12	8	63%	8	67%	+4%	10/83%
Total	124	102	82%	99	80%	-2%	

# **SOUTHERN PRECINCT PARKING – WEEKDAYS & WEEKENDS**



# Numbers of vehicles parked- weekdays

		2010-	-2012	2015-2016			Maximum
	Spaces available	Average occupancy - vehicles	Average percentage occupancy	Average occupancy - vehicles	Average percentage occupancy	Difference	number/ percentage occupancy
Southern car park – 2hr restricted	12	12	96%	11	89%	-7%	12/100%
Southern car park – 4 hr restricted	85	63	74%	79	96%	+22%	82/96%
Southern car park – unrestricted	29	25	88%	26	91%	+3%	28/97%
Raymond Rd north David Rd	9	8	85%	6	70%	-15%	9/100%
Raymond Rd south David Rd	15	9	61%	12	77%	+16%	12/80%
David Rd	4	4	95%	3	75%	-20%	4/100%
Springwood Ave	23	16	71%	22	94%	+23%	22/96%
Springwood Lane	8	5	63%	6	71%	+8%	7/88%
Raymond Lane car park (134 Macquarie)	17	17	99%	17	100%	+1%	17/100%
Total	202	158	78%	181	90%	+12%	

## Numbers of vehicles parked- weekends

		2010-2012		2015	-2016		Maximum
	Spaces available	Average occupancy - vehicles	Average percentage occupancy	Average occupancy - vehicles	Average percentage occupancy	Difference	number/ percentage occupancy
southern car park - 2 hr restricted	12	11	89%	12	100%	+11%	12/100%
southern car park - 4 hr restricted	85	62	73%	59	69%	-4%	64/75%
southern car park - unrestricted	29	12	41%	4	14%	-27%	15/52%
Raymond Road north of David Rd	9	8	89%	6	67%	+14%	9/100%
Raymond Road south of David Rd	15	2	13%	3	20%	+7%	3/20%
David Road	4	2	50%	2	50%	=	4/100%
Springwood Ave	23	12	54%	19	83%	+29%	19/83%
Springwood Lane	8	3	38%	5	63%	+25%	5/63%
Raymond Lane car park	17	15	86%	18	106%	+20%	18/106%
Total	202	126	63%	128	63%	=	

# Number of Vehicles parked in private parking areas available to staff and/or customers only

		2010-	-2012	2015	-2016		Maximum
	Spaces available	Average occupancy - vehicles	Average percentage occupancy	Average occupancy - vehicles	Average percentage occupancy	Difference	number/ percentage occupancy
28-30 Springwood Ave	6	5	78%	8	133%	+55%	8/133%
268 Macquarie	6	6	100%	6	100%	=	6/100%
236 Macquarie	8	5	63%	4	50%	-13%	6/75%
150 Macquarie	27	24	88%	29	107%	+19%	29/107%
148 Macquarie	6	6	92%	6	100%	+8%	6/100%
130 Macquarie	8	8	99%	11	138%	+39%	11/138%
8-12 Raymond	28	25	88%	23	82%	-6%	29/104%
7-9 Raymond	12	12	96%	12	100%	+4%	13/108%
7-9 Raymond U/G	37	34	91%	32	85%	-6%	34/92%
Total	138	123	89%	131	95%	+6%	

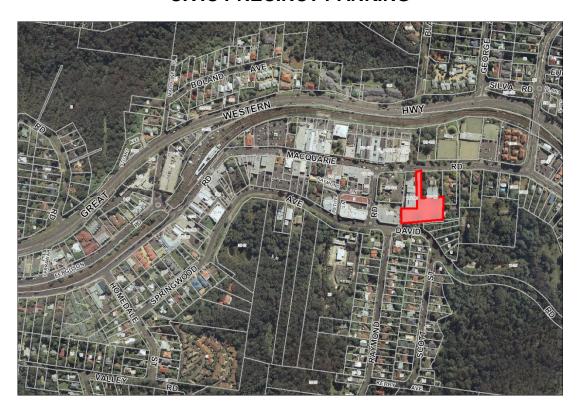
## **COMMUTER PARKING - WEEKDAYS**



# Number of vehicles parked

		2010-	2012	2015	-2016		Maximum
	Spaces available	Average occupancy - vehicles	Average percentage occupancy	Average occupancy - vehicles	Average percentage occupancy	Difference	number/ percentage occupancy
Commuter car park	513	396	77%	454	88%	+17%	484/94%
Commuter  - accessible spaces	26	15	59%	26	98%	+44%	26/100%
Commuter 1hr restricted	16	14	85%	16	97%	+21%	16/100%
Total	555	425	77%	495	89%	+12%	

## **CIVIC PRECINCT PARKING**



# Number of vehicles parked

		2010-	2012	2015	-2016		Maximum
	Spaces available	Average occupancy - vehicles	Average percentage occupancy	Average occupancy - vehicles	Average percentage occupancy	Difference	number/ percentage occupancy
Civic Centre, Library & Gallery	83	53	64%	57*	62%*	-2%	71/62%
Macquarie Rd Raymond Rd to Hawk'by Rd	52	38	74%	49	94%	+20%	50/96%
Raymond Rd	28	25	88%	22	58%	-30%	29/104%
Total	163	116	63%	128	68%*	+5%	

<sup>\*</sup>The Hub (Civic Centre, Library, meeting rooms and Braemar Gallery) was refurbished with changes and additions to the parking. The average occupancy takes into account the changes to the number of parking spaces available.

# **Sunday monthly Growers markets**

### (Blue Mountains Theatre and Community Hub)

	Spaces available	average occupancy - vehicles	average percentage occupancy	Difference	Maximum percentage occupancy
Civic Centre	35	30	86%	N/A	86%
Library/Braemar/Council offices	48	38	79%	N/A	79%
8-12 Raymond Road (IGA)	28	27	104%	N/A	104%
Macquarie Road Raymond Rd to Hawkesbury Rd	52	52	100%	N/A	100%
Raymond Road north of David Road	9	9	100%	N/A	100%
David Road	4	4	100%	N/A	100%
Greenway Lane (east)	49	45	92%	N/A	92%
Total	225	214	94%	N/A	

