

**CAR PARKING** MANAGEMENT STUDY

PART C – SWOT ANALYSES



# **VERSION CONTROL**

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# 1 SUMMARY OF SHIRE WIDE RESULTS

A site visit and drive through inspection of the 17 precincts in the Hornsby Shire Car Parking Management Study was undertaken by ARRB.

The Strengths, Weaknesses, Opportunities and Threats (SWOT) analyses were then developed using the evidence captured during the site visit, internal consultation, precinct survey results as well as reference to the background information and data provided by the Council.

SWOT analyses results that apply to all or most precincts are presented in Section 1 with detailed and specific precinct SWOT analyses presented in further Sections.

## 1.1.1 STRENGTHS

Each precinct has individual and specific strengths.

#### 1.1.2 WEAKNESSES

#### **AVAILABILITY OF SUITABLE LAND FOR ADDITIONAL PARKING**

 Council owns limited land suitable for additional parking within the town centres and precincts in the Hornsby Shire.

#### **INCREASING DEMAND FOR LIMITED BAYS**

• The demand for commuter parking exceeds the supply, resulting in drivers parking in the residential areas within and surrounding the town centres and activity centres.

#### **INFILTRATION INTO RESIDENTIAL AREAS**

 Current parking demands within many of the town and activity centres within Hornsby Shire impede on residential areas as the demand for long term and commuter parking is high. The train stations are located in the middle of the town centres where limited long-term parking is available.

## PARKING SUPPLY LIMITS WITHIN THE STUDY AREA

- Parking supply in the town and activity centres is limited by the available Council owned land, the location
  of arterial roads, train lines and zoned residential areas.
- The development priority for vacant land within Hornsby town centres and precincts is not parking, but rather usable and tenantable shops and offices, thus limiting further supply of parking in the town centre.

## IMPACT OF PARKING BEHAVIOUR ON ROAD NETWORK CAPACITY AND OPERATION

- Parking at certain locations creates a hazardous situation as it limits the carriageway width. This
  consequently creates a bottleneck and risky driving behavior.
- Typical locations include:
  - Romsey Street Remove 4 spaces south of the TCS southbound carriageway
  - Unwin Road Pacific Highway to Edward Rd Provide parking restrictions during peak periods (No Parking during school zone hours or earlier).
  - Linda Street east of Muriel St Remove parking on one side and provide No Parking
  - The Gully Road Remove parking on one side (No parking during peak period on one side).

## **RECLAIMED SPACES**

- There are several locations in the LGA where existing parking restrictions such as No Parking, are no longer required.
- Typical locations to be determined by Council's traffic engineering and transport planning staff.
- The actual number of car parking spaces that will be gained is subject to concurrence and approval of the Hornsby Shire LTC.

#### 1.1.3 OPPORTUNITIES

Many opportunities exist for Council to improve the availability and convenience of parking within the Hornsby Shire's town centres and activity centres.

#### CONTROL. INCOME AND EXPENDITURE

Revenue received from pay parking can be written into policy to be exclusively used for the
administration of the monies from pay parking, maintenance and upgrade of parking equipment and
facilities, further pedestrian and cyclist facilities within the town centres that have implemented pay
parking.

#### **IMPROVED ENFORCEMENT**

 New technology can be used to assist in enforcement, including handheld enforcement devices and LPR surveillance which decrease the amount of time taken to issue infringements and in return increase compliance of parking restrictions.

#### **WAYFINDING SIGNAGE**

- Clear signage indicating the type of parking (commuter/long stay or short stay) will allow drivers to find a parking bay which suits their needs.
- Improved parking signage will give drivers greater confidence in finding a parking bay and encourage people to travel to the town and activity centres throughout Hornsby knowing they will find a convenient bay.

## **BETTER PARKING INFORMATION**

On-street and off-street parking information as well as locations on a map available on Council's website
will ensure drivers are provided with up to date information when travelling to the various town and
precincts throughout Hornsby Shire.

## BETTER USE OF CURRENT SUPPLY

- Council has the opportunity to introduce on-street parking time restrictions to manage the current supply
  of parking and provide parking for short- and medium-term parkers within the town and precincts across
  the Hornsby Shire.
- Outside of peak demand parking times, parking restrictions can be relaxed to provide an increased number of parking bays closer to destinations for night parkers.
- Implementation of a simple parking time on-street within the town and precincts and payment regulation in the areas of higher demand will improve compliance.
- Parking management strategies can be varied to accommodate different user requirements.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

- In town centres and precincts that have train stations, more frequent bus services to and from the train station can increase mode share and decrease the number of commuter parking bays required near the train station.
- Installation of cycle markings on street and cycle parking in the town and activity centres will encourage
  people to cycle to their destination therefore reducing the number of parking bays required in the town
  and activity centres.

#### IMPACT OF PARKING BEHAVIOUR ON ROAD NETWORK CAPACITY AND OPERATION

- Provide 'No Parking' restrictions (all day or during peak periods 6 9am & 3 6pm week day) at locations experiencing constrained traffic flow. This action will result in loss of a limited number of kerb side parking at respective locations. The benefit of this action will outweigh the loss of spaces by enhancing safety and facilitation of traffic flow.
- There is already a precedence for this practice e.g. Miller Avenue in Hornsby LGA. This study
  proposes that this ad hoc practice should be formalised as Council policy for managing parking along
  collector roadway and major thoroughfares that are impacted by kerb side parking.

 The spaces lost would be offset elsewhere at locations where No Parking restrictions are no longer required.

## 1.1.4 THREATS

#### **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

• If changes to parking management are not implemented the demand for parking will continue to exceed supply and drivers will circulate through narrow streets searching for available parking bays.

## **EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT**

- Council does not currently generate parking income, impacting the ability to maintain and upgrade car
  parking facilities for future users.
- On-street pay parking is a new concept to the community.

## SPATIAL EXTENT OF CONTROLLED PARKING

• Without extending the current parking controls to include more streets in and surrounding the town centre, the turnover of bays will be limited in peak periods, causing driver frustration.

#### LEVELS OF ENFORCEMENT AND COMPLIANCE

• The frequency of enforcement needs to increase for compliance to increase. Additional technology and resources will assist in the perception of enforcement for parkers.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

 The inefficient integration of all transport modes and free parking will continue to encourage the use of private vehicles.

# **INFILTRATION INTO RESIDENTIAL AREAS**

 Without effective parking management, the increase in demand for parking will increase the number of vehicles parking in residential areas. This particularly applies to the high demand for commuter parking and limited free supply.

# **LIGHTING**

Poor lighting is a safety risk for streets with high pedestrian usage in the town and activity centres.

HORNSBY TOWN CENTRE
HORNSBY HOSPTIAL PRECINCT
WAITARA STUDY AREA
BEROWRA TOWN CENTRE PRECINCT

# 2 SWOT ANALYSES – STAGE 1

A site visit and drive through inspection of the Hornsby Town Centre, Hornsby Hospital Precinct and Waitara study area was undertaken by ARRB on 31 July 2018. ARRB was accompanied by Bruce Walker, Traffic Ranger Coordinator during the drive through of all streets in the study area. Video and photographic evidence was captured. An additional drive through of each precinct was undertaken on 20 August 2018, in the evening to capture evidence which identified pedestrian connectivity security as well as lighting issues.

The Strengths, Weaknesses, Opportunities and Threats (SWOT) analyses were then developed using the evidence captured during the site visit, internal consultation, precinct survey results as well as reference to the background information and data provided by Council.

## 2.1 HORNSBY TOWN CENTRE

## 2.1.1 STRENGTHS

#### **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- The 3P Council car parks on Dural Lane and Dural Street display high occupancy and high turnover.
- Westfield Hornsby allows free entry after 6pm, if exiting before midnight.

#### SPATIAL EXTENT OF CONTROLLED PARKING

- Hornsby Town Centre includes a range of on-street parking controls as detailed below:
  - 1P Coronation Street from Peats Ferry Road to Jersey Street.
  - 1P Peats Ferry Road between Station Street and Coronation Street.
  - P, 2P, 1P and 1/4P Peats Ferry Road between Coronation Street and Bridge Road.
  - P, 2P, 1P and 1/4P Jersey Street.
  - 3P William Street southern side from Lisgar Road to Frederick Street.
  - 3P and 1P William Street from Frederick Street to High Street.
  - 2P and 1P High Street western side from Ashley Street to Peats Ferry Road.
  - 2P near RSL on Ashley Street.
  - 1/4P Hunter Street western side south of Burdett Street.
  - 2P Hunter Street between Burdett Street and Linda Street.
  - 2P Hunter Street western side between Linda Street and Bridge Street.
  - 1/4P Muriel Street western side just south of Burdett Street.
  - 1P Albert Street eastern side from Florence Street halfway to Edgeworth David Avenue.
  - 1/2P Florence Street southern side between Albert Lane and Albert Street.
  - 2P Florence Street between Albert Street and Muriel Street.
  - 1P Dural Street near Peats Ferry Road.
  - 1P Dural Street southern side between Frederick Street and Lisgar Road.
  - 1P Government Road eastern side.
  - 1P Wanderers Way.
- Council operates four off-street car parks in the town centre:
  - Dural Lane (92 bays) 3P.
  - Dural Street (49 bays) 3P.
  - George Street (56 bays) commuter parking including motorbike bays.
  - Burdett Street (69 bays).

# LEVELS OF ENFORCEMENT AND COMPLIANCE

Nine full-time Council rangers patrol on-street and Council controlled off-street parking regularly to
ensure compliance. This particularly applies at the 1-hour parking zones to ensure there is opportunity
for others to park for 1-hour.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

Pedestrian signals are located on Peats Ferry Road adjacent to the TAFE, as presented in Figure 2-1.



Figure 2-1: Pedestrian signals on Peats Ferry Road outside TAFE

Numerous streets in the CBD are 40 km/h zones, as presented in Figure 2-2 towards the southern end
of Jersey Street.



Figure 2-2: 40 km/h zone and pedestrian crossing located towards the southern end of Jersey Street

- Numerous bus stops are located throughout the Town Centre, which are easily accessible.
- Taxi zones are located near the train station on the eastern side of Station Street.
- A taxi zone is situated on the eastern side of Hunter Street, south of Burdett Street.
- Hornsby Train Station is located in the middle of the Town Centre and is easily accessible from George Street on the eastern side. The station includes a pedestrian overpass, spanning across George Street to Florence Street.
- A bus station is located on the western side of the train station for passenger transport connections between train and bus, as presented in Figure 2-3.



Figure 2-3: Bus station on western side of Hornsby Train Station

# PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

• Multiple loading zones for commercial vehicles are located strategically throughout the Hornsby Town Centre. A loading zone, with a capacity of four parking bays, is situated on the western side of Albert Street leading to Florence Street, as presented in Figure 2-4.



Figure 2-4: Loading zone in Albert Street

- Multiple on-street and off-street parking bays for persons with a disability are situated in easily accessible locations, as presented in
- Figure 2-5.



Figure 2-5: Parking for persons with a disability on Florence Street

Westfield Hornsby parking is free of charge for disability permit holders, therefore providing safe and
accessible parking for persons with a disability. Disability permits must be presented to the centre
management for approval of free parking.

## **LIGHTING**

• Edgeworth David Avenue, George Street, Coronation Street, Station Street and the southern section of Peats Ferry Road are well lit as presented in Figure 2-6.

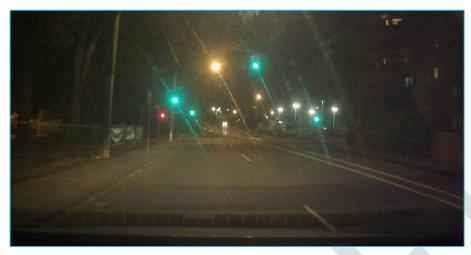


Figure 2-6: Edgeworth David Avenue lighting

 Pedestrian crossing facilities are well lit on Peats Ferry Road, Jersey Street and Station Street as presented in Figure 2-7.



Figure 2-7: Pedestrian Crossing lighting on southern end of Jersey Street

## 2.1.2 WEAKNESSES

# **ON-STREET AND OFF-STREET PARKING SUPPLY**

- Limited Council owned off-street parking supply is provided in the Town Centre.
- The on-street parking supply in the Town Centre is limited by numerous no parking zones implemented due to narrow roads such as the eastern side of Miller Avenue, as presented in Figure 2-8. The restrictions apply between 6:00am-9:00am and 3:00pm-6:00pm from Monday-Friday and 8:00am-12:00pm on Saturday.



Figure 2-8: No Parking on eastern side of Miller Street during peak hours

## **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- Parking demands differ throughout the town centre during different time periods.
- Real-time parking supply information is not easily accessible.
- TfNSW owns and operates limited free commuter car parks near Hornsby Train Station. These car parks
  operate at full capacity for the majority of the day throughout the week. These car parks are accessible
  from George Street on the eastern side of the station.

## **EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT**

- Council's involvement with parking issues to date has been reactive, providing inconsistent and bay or street specific solutions.
- There is no centralised coordination of parking management within Council.
- Numerous time restrictions apply within a short distance of each other in various streets, resulting in confusion for drivers and an overabundance of signage, such as:
  - P, 2P, 1P and 1/4P Peats Ferry Road between Coronation Street and Bridge Road.
  - P, 2P, 1P and 1/4P Jersey Street.
  - 3P and 1P William Street from Frederick Street to High Street.
  - 2P and 1P High Street western side from Ashley Street to Peats Ferry Road.
- The locations where paid parking applies in the Town Centre are Westfield Hornsby, Hornsby TAFE and the Hornsby Aquatic and Leisure Centre. The fee structures at these locations are provided in Table 2-1.

Table 2-1: Extent of Hornsby Town Centre paid parking

Duration	Westfield Hornsby	Hornsby TAFE	Hornsby Aquatic and Leisure Centre
0.0 – 3.0 hours	Free	\$8.50 daily	\$5.00 (non-aquatic centre parkers)
3.0 – 3.5 hours	\$4.00		
3.5 – 4.0 hours	\$6.00		
4.0 – 4.5 hours	\$7.00		

Duration	Westfield Hornsby	Hornsby TAFE	Hornsby Aquatic and Leisure Centre
4.5 – 5.0 hours	\$10.00		
5.0 – 5.5 hours	\$15.00		
5.5 – 6.0 hours	\$25.00		
6.0 – 6.5 hours	\$35.00		
6.5 – 7.0 hours	\$45.00		
7.0 + hours	\$50.00		

#### SPATIAL EXTENT OF CONTROLLED PARKING

- A variety of streets in and surrounding the town centre consist of no controlled parking, such as:
  - Parts of Jersey Street.
  - Peats Ferry Road south of Bridge Road.
  - Ashley Lane.
  - Ashley Street.
  - Frederick Street.
  - Forbes Street.
  - Webb Avenue.
  - Nursery Street.
  - Parts of Government Road.
  - Bridge Road.
  - Albert Street.
  - Railway Parade.
  - Miller Avenue.
  - Water Street.
  - Hunter Street eastern side.
  - Linda Street.
  - May Street.
  - Muriel Street.
  - Florence Street between Muriel Street and Sherbrook Road.
- The Dural Lane and Dural Street car parks are 3P parking and located within a short distance of Westfield Hornsby, where a 3-hour free parking limit applies. The parking fees at Westfield Hornsby are prohibitive for longer than 3 hours. As a result, drivers risk overstaying the 3P limit in the Dural Lane and Dural Street car parks.

## LEVELS OF ENFORCEMENT AND COMPLIANCE

• Council rangers encounter issues such as, drivers stopping their vehicles in the middle of streets or double parking to drop passengers off, as presented in Figure 2-9.



Figure 2-9: Vehicle stopped to drop off a passenger on Florence Street

• Drivers stop in the no stopping zone in the cul-de-sac of Hunter Street to drop passengers off, despite the vacancy of the passenger drop off zone on entry to the cul-de-sac, as presented in Figure 2-10.



Figure 2-10: Driver stopping in no stopping zone located in Hunter Street

## BALANCE BETWEEN CAR PARKING SUPPLY AND PROPOSED DEVELOPMENT

• High density residential units are being developed within the Town Centre, thus resulting in more vehicles parking on-street, despite off-street parking provisions.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• A high pedestrian desired line is present across Peats Ferry Road near the Aquatic Centre and the Court House. This is evidenced by the worn path in the centre median, as shown in Figure 2-11 below.



Figure 2-11: Worn pedestrian path in centre median of Peats Ferry Road near Court House

On-street cycle paths are not provided in the Town Centre.

## **INFILTRATION INTO RESIDENTIAL AREAS**

• Many residential streets were observed to be narrow which causes traffic congestion, such as Linda Street, as presented in Figure 2-12.

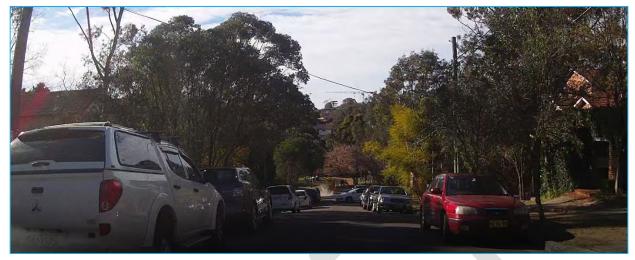


Figure 2-12: Traffic congestion in Linda Street due to commuter parking on both sides of the street

# PARKING SUPPLY LIMITS WITHIN THE STUDY AREA

The parking capacity at Westfield Hornsby 3,000 bays.

## **LIGHTING AND SECURITY**

 Many of the streets in and around the town centre have typical residential street lighting on every first or second power pole on one side of the street only. On the side of the street where the power poles are located there is often trees which obstruct the light as shown in Figure 2-13 below.

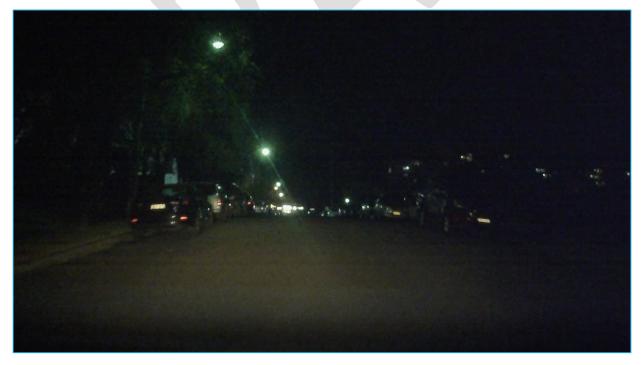


Figure 2-13: Trees obstruct lighting of street on Ashley Street

• Jersey Street is a well utilised street for parking and is poorly lit across the side of the street with the 90-degree parking as presented in Figure 2-14.

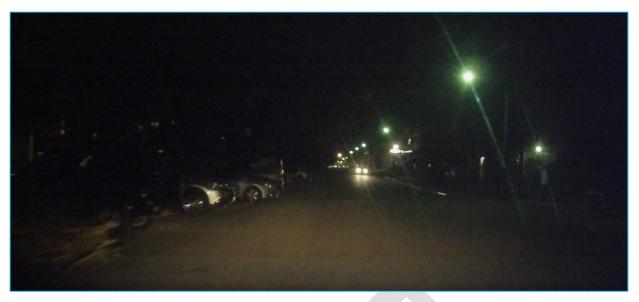


Figure 2-14: Poorly lit Jersey Street on-street parking

 Albert Lane from Florence Street to the ramp through the car park is very poorly lit as presented in Figure 2-15.

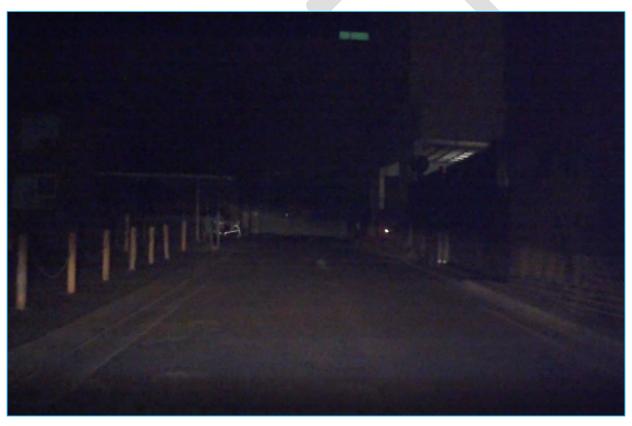


Figure 2-15: Albert Lane from Florence Street to carpark ramp

• The lighting in the Council car parks off Dural Street and Dural Lane is inconsistent across the car park with one section in complete darkness and another section very well-lit as shown in Figure 2-16.



Figure 2-16: Dural Lane and Dural Street Council car parks inconsistently lit

 Security patrols of Council's parking areas are not undertaken regularly. After-hours patrols are undertaken by Parks Rangers and they cover outlying areas such as Fagan Park and Crosslands Reserve.

#### 2.1.3 OPPORTUNITIES

Many opportunities exist for Council to improve the availability and convenience of parking within the Hornsby Town Centre.

## **PAY PARKING**

- The introduction of pay parking, utilising various forms of new technology, will benefit all stakeholders. These benefits include:
  - Improved turnover, and hence availability of bays for users with the ability to pay for parking via coin, credit card or smart phone.
  - An increase in the number of local business customers occupying bays, therefore increasing profit for these businesses and creating opportunity to subsidise customer parking.
  - Revenue for Council to enable more parking facilities to be provided to a high standard as well as
    parking information which can be used to manage the parking demands as more sites are developed
    and the demand for parking changes. Management changes may include amending time limits,
    expanding pay parking areas and increasing enforcement in problem areas.
- Benefits can be obtained via the introduction of pay parking in the Dural Lane and Dural Street car parks to allow more efficient turnover, hence enabling more drivers to utilise these highly desirable bays.
- On-street pay parking in the town centre will complement the Westfield Hornsby pay parking by
  encouraging drivers to park in the off-street parking areas at a cheaper rate than paying more for premium
  on-street bays. The on-street bays would become cheaper the further from the town centre they are
  located.

## PARKING MANAGEMENT DEPARTMENT

- A single parking management authority will allow efficient coordination of on-street and off- street parking bays.
- Parking surveys undertaken every three years will provide data which can be used to compare demand and supply issues and assist in managing parking into the future.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

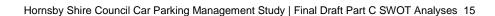
 Installation of an additional pedestrian crossing across Peats Ferry Road adjacent to the Court House will remove the safety risk of pedestrians crossing the road unsafely at this location.

#### **LIGHTING**

- Review location of streets trees with respect to street lighting to ensure lighting is not obstructed by foliage.
- Improve the lighting on Jersey Street due to the high utilisation and low levels of lighting.
- Provide lighting on Albert Lane from Florence Street to the car park ramp.
- Provide consistent lighting in the Council car parks off Dural Street and Dural Lane.

## 2.1.4 KEY FINDINGS

- The lighting in the Council car parks off Dural Street and Dural Lane is inconsistent across the car park with one section in complete darkness and another section very well-lit as shown in Figure 2-16.
- Many residential streets were observed to be narrow which causes traffic congestion, such as Linda Street, as presented in Figure 2-12.
- Drivers stop in the no stopping zone in the cul-de-sac of Hunter Street to drop passengers off, despite the vacancy of the passenger drop off zone on entry to the cul-de-sac, as presented in Figure 2-10.
- The Dural Lane and Dural Street car parks are 3P parking and located within a short distance of Westfield Hornsby, where a 3-hour free parking limit applies. The parking fees at Westfield Hornsby are prohibitive for longer than 3 hours. As a result, drivers risk overstaying the 3P limit in the Dural Lane and Dural Street car parks.
- Pedestrian crossing facilities are well lit on Peats Ferry Road, Jersey Street and Station Street as presented in Figure 2-7.



## 2.2 HORNSBY HOSPITAL PRECINCT

## 2.2.1 STRENGTHS

## **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- There are 2P on-street parking bays on Derby Road and Palmerston Road near the hospital.
- Where there is space, the on-street bays have been converted to 90-degree parking on Derby Road, Lowe Road, Jubilee Street and Burdett Street which are all close to the hospital.

## SPATIAL EXTENT OF CONTROLLED PARKING

- The extent of on-street controlled parking in the Hornsby Hospital precinct is limited to the following:
  - 2P Derby Road western side from Burdett Street halfway to Lowe Road.
  - 2P Palmerston Road from Burdett Street halfway to Northcote Road.
  - 2P Palmerston Road from Burdett Street south to pedestrian path from Herbert Street.
  - 1P Balmoral Street south eastern corner.
  - 1P Edgeworth David Avenue northern side from Balmoral Street to Palmerston Road.

#### LEVELS OF ENFORCEMENT AND COMPLIANCE

Nine full time Council rangers patrol the parking regularly to enforce compliance.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There is a pedestrian crossing on Palmerston Road just south of Northcote Road as presented in Figure 2-17.



Figure 2-17: Pedestrian crossing on Palmerston Road

A pedestrian path links the cul-de-sac of Herbert Avenue with Palmerston Road as presented in Figure 2-18.



Figure 2-18: Pedestrian path from Herbert Avenue to Palmerston Road

• Jubilee Street and Balmoral Street have traffic calming with raised platforms and kerb widening creating a narrower road width for crossing pedestrians as presented in Figure 2-19.



Figure 2-19: Balmoral Street raised platform and kerb widening

- There are numerous bus stops on the streets surrounding the hospital and across the precinct as presented in
- Figure 2-20.



• NSW Health encourages staff to travel by train to Hornsby Station and they provide a free shuttle bus that transports them to Palmerston Road as presented in Figure 2-21.



Figure 2-21: Free shuttle bus for staff from Hornsby Station stopping on Palmerston Road

• There is a taxi zone on Palmerston Road located behind the free shuttle bus passenger drop off area.

## PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

- All loading for the hospital occurs within the hospital confines at their loading docks. There is only one loading zone located on Palmerston Road.
- Disability parking is available within the hospital car parks and there are some disability parking bays located on Lowe Road near James Park.

## **LIGHTING**

Palmerston Road is well lit between Burdett Street and Northcote Road as presented in Figure 2-22.



Figure 2-22: Palmerston Road well-lit despite excessive tree foliage

• The pedestrian refuge on Northcote Road is well lit as presented in Figure 2-23.



Figure 2-23: Well-lit pedestrian refuge island on Northcote Road

## 2.2.2 WEAKNESSES

## **ON-STREET AND OFF-STREET PARKING SUPPLY**

There is no Council owned off-street parking in the Hospital precinct.

# **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- The 90-degree parking bays adjacent to James Park are all day parking and are quickly occupied by hospital staff leaving no free bays for James Park users.
- The majority of the on-street parking around the hospital is all day parking leaving few on-street short term bays for patients and visitors to the hospital precinct.

## PARKER USER GROUP BEHAVIOUR AND HIERARCHIES

- Hospital staff require long term parking near the hospital in a safe location should they be finishing or starting their shift outside of daylight hours. Typically, they will seek parking as close to the hospital as possible.
- Patients require short term to medium term parking within a short distance to the hospital depending on their condition.
- · Visitors require short term parking near the hospital.

## **EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT**

- Council's involvement with parking issues to date has been very reactive, providing inconsistent space or street specific solutions.
- There is no structured parking management department within Council.
- There is no paid parking in the hospital precinct.

# SPATIAL EXTENT OF CONTROLLED PARKING

- Most of the streets within and surrounding the hospital precinct have no controlled parking. These
  include:
  - Jubilee Street.
  - Herbert Street.
  - Balmoral Street.
  - Palmerston Road between Herbert Avenue pedestrian path to Edgeworth David Avenue.
  - Wentworth Avenue.

- Burdett Street.
- Northcote Road.
- King Road.
- Lowe Road.
- Derby Road from halfway to Lowe Road.

# **SEASONAL PARKING SHORTFALLS**

• Short- and medium-term parking demand increases for the parking located near James Park during sporting seasons, however it is typically occupied with long term hospital staff.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There is no provision on-street for cyclists in the area. The trees and parking limit the opportunities to provide consistent on-street cyclist lanes.

## **INFILTRATION INTO RESIDENTIAL AREAS**

• Current parking demands in the hospital precinct, primarily from long term parking hospital staff, impede on residential areas and parking overspill is evident in residential streets as presented in Figure 2-24.



Figure 2-24: Long term parking on Herbert Avenue

• Some of the residential streets are narrow causing traffic congestion such as King Road as presented in Figure 2-25.



Figure 2-25: Traffic congestion on King Road

# PUBLIC PARKING PROVISION THROUGH DEVELOPER CONTRIBUTIONS

 NSW Health is not required to provide any contributions towards parking when developing or expanding their site. The current on-site parking does not satisfy demand for staff, patients and visitors.

# **LIGHTING**

• The LATM (local area traffic management) devices in Balmoral Street are not well lit as presented in Figure 2-26 below.

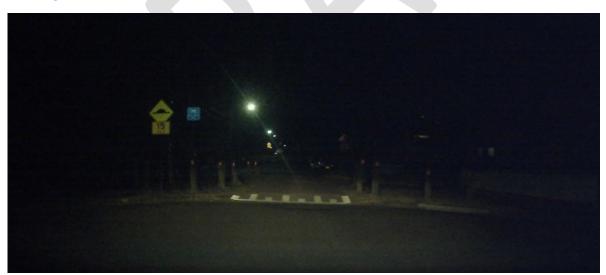


Figure 2-26: Poorly lit LATM devices in Balmoral Street

• Burdett Street to the south of the hospital and Lowe Street to the north of the hospital provide 90 degree on-street parking that is poorly lit as presented in Figure 2-27 and Figure 2-28.



Figure 2-27: Poor lighting on Burdett Street to the south of the hospital

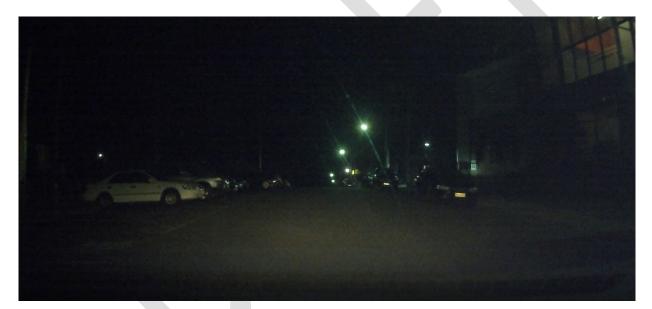


Figure 2-28: Poor lighting on Lowe Street to the north of the hospital

• Jubilee Street is narrow with street parking and is poorly lit as presented in Figure 2-29.



Figure 2-29: Poorly lit parking along Jubilee Street

#### 2.2.3 OPPORTUNITIES

Hornsby Shire Council has opportunities to improve the availability and convenience of parking within the Hornsby Hospital precinct.

## **BETTER USE OF CURRENT SUPPLY**

- On-street parking in the streets adjacent to the hospital should be short to medium term parking.
- Outside of peak demand parking times, parking restrictions close to the hospital can be relaxed to allow more parking spaces closer to the hospital for night parkers.
- Parking near James Park should be medium term parking to allow James Park users to park close to their destination.
- Parking management strategies should be varied to accommodate different user requirements.

# PARKING MANAGEMENT DEPARTMENT

- A single parking management authority will allow efficient coordination of on-street and off- street parking spaces.
- Parking surveys undertaken every three years will provide data that can be used to compare demand and supply issues and help to manage the parking into the future.

## PARKER USER GROUP BEHAVIOUR AND HIERARCHIES

 Long term parkers should be encouraged to park further from the hospital to allow patients and visitors to access the closest bays.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

 Encouraging NSW Health to add more bus services to and from the train station or extend the operating times may increase mode share and decrease the number of commuter parking spaces required near the hospital.

#### **LIGHTING**

- Increase lighting on the streets surrounding the hospital where there is 90-degree parking available.
- Increase lighting at LATM devices on Balmoral Street.

## 2.2.4 THREATS

#### PARKER USER GROUP BEHAVIOUR AND HIERARCHIES

• Without the provision of short to medium term parking near the hospital, patients will need to park at unreasonable distances and walk the steep terrain to the hospital as presented in Figure 2-30 below.



Figure 2-30: Steep Burdett Street

## POTENTIAL FUTURE DISRUPTORS

 Hornsby Ku-ring-gai Hospital expansion, without the adequate supply of additional staff and visitor parking, will cause further issues in the surrounding streets.

# 2.2.5 KEY FINDINGS

- Current parking demands in the hospital precinct, primarily from long term parking hospital staff, impede on residential areas and parking overspill is evident in residential streets as presented in Figure 2-24.
- Short- and medium-term parking demand increases for the parking located near James Park during sporting seasons, however it is typically occupied with long term hospital staff.
- Most of the streets within and surrounding the hospital precinct have no controlled parking.
- All loading for the hospital occurs within the hospital confines at their loading docks. There is only one loading zone located on Palmerston Road.
- NSW Health encourages staff to travel by train to Hornsby Station and they provide a free shuttle bus that transports them to Palmerston Road as presented in Figure 2-21.

# 2.3 WAITARA

## 2.3.1 STRENGTHS

## SPATIAL EXTENT OF CONTROLLED PARKING

- Waitara study area has a range of on-street parking controls as detailed below:
  - 1P, 1/2P Romsey Street south of Pattison Avenue.
  - 4P Pattison Avenue.
  - 4P James Street.
  - 1P Park Avenue near Alexandria Parade.
  - 1P Pacific Highway northern side between James Street and Carden Avenue.
  - 1P Pacific Highway eastern side between Edgeworth David Avenue and Leonard Street.
  - 1P, 3P Waitara Avenue north of train line.
  - 2P Waitara Avenue south of train line.
  - 2P, 4P Orara Street.
  - 1P Balmoral Street eastern side near Edgeworth David Avenue.
  - 2P Alexandria Parade between Romsey Street and Orara Street.

## LEVELS OF ENFORCEMENT AND COMPLIANCE

 Council rangers patrol parts of the Waitara study area on a daily basis to enforce compliance and ensure turnover of parking bays.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

There is a signalised pedestrian crossing on the Pacific Highway as presented in Figure 2-31 below.



Figure 2-31: Signalised pedestrian crossing on the Pacific Highway

 A shared zone is on Park Lane near the PCYC at the corner of Waitara Avenue as presented in Figure 2-32.



Figure 2-32: Shared zone on Park Lane

• There are multiple pedestrian crossings on roads adjacent to Barker College. A pedestrian crossing on Clarke Road is presented in Figure 2-33.

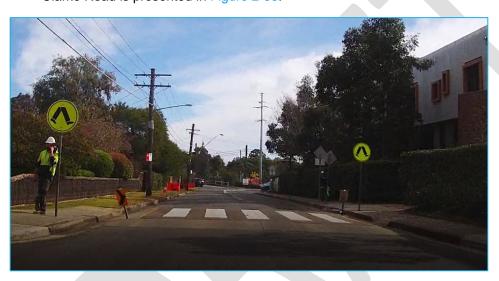


Figure 2-33: Clarke Road pedestrian crossing

 Pedestrian refuge islands have recently been installed on Balmoral Street and Ingram Road as presented in Figure 2-34.



Figure 2-34: Pedestrian refuge on Balmoral Road

- There are numerous bus stops throughout the Town Centre that are easily accessible.
- Waitara Train Station is located on Alexandria Street and accessible from the Pacific Highway via Waitara Avenue.

## LIGHTING

• There is excellent lighting outside the train station at the intersection of Alexandria Parade and Waitara Avenue as presented in Figure 2-35.



Figure 2-35: Excellent lighting outside the train station entrance on Alexandria Parade

• The Pacific Highway is well lit with street lighting and shop and business lighting as presented in Figure 2-36 below.

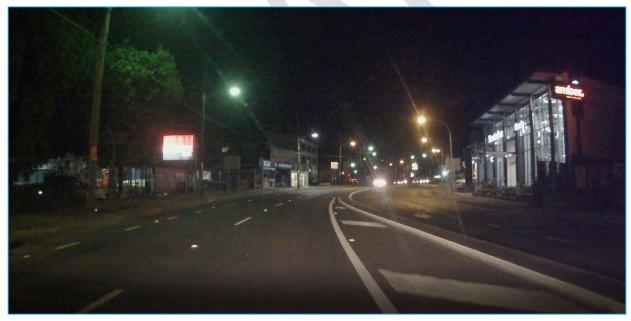


Figure 2-36: Well-lit Pacific Highway

• Park Avenue Lighting is complemented by the pedestrian path and cricket ground lighting as presented in Figure 2-37.

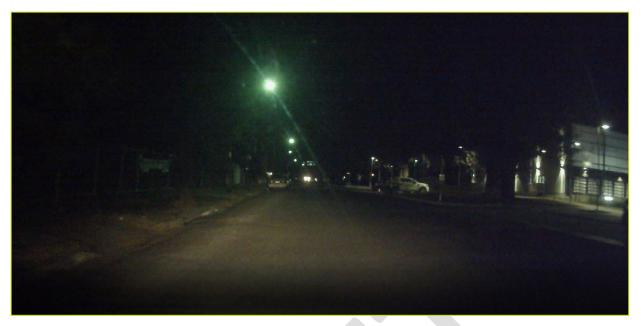


Figure 2-37: Lighting on Park Avenue

• The shared zone on Park Lane is well lit by the street lights and pedestrian path lights beside the buildings as presented in Figure 2-38.



Figure 2-38: Lighting on Park Lane

#### 2.3.2 WEAKNESSES

## **ON-STREET AND OFF-STREET PARKING SUPPLY**

• There is no Council owned off-street parking supply in the Town Centre.

## **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- The current on-street parking supply has varying parking controls within a single street with limited consistency of time restrictions.
- Parking demands differ throughout the town centre and at different times.
- New South Wales Train Link owns and operates limited free commuter car parks near Waitara Train Station that are at full occupancy for the majority of the day during the week. The car park is accessible from Waitara Avenue on the southern side of the station.

## EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT

- Council's involvement with parking issues to date has been very reactive providing inconsistent space or street specific solutions.
- There is no structured parking department within Council tasked with the overall management of parking.
- There is no paid parking in Waitara study area.

## SPATIAL EXTENT OF CONTROLLED PARKING

- There are many streets in and around the town centre with no controlled parking such as:
  - Most of Romsey Street.
  - Most of Alexandria Parade.
  - Balmoral Street.
  - Park Avenue.
  - Yardley Avenue.
  - Ingram Road.
  - Unwin Road.
  - Clarke Road.
  - College Crescent.
  - Fuller Avenue.
  - Thomas Street.
  - Leonard Street.

## LEVELS OF ENFORCEMENT AND COMPLIANCE

• Rangers have issues with business owners parking their vehicles on-street as presented in Figure 2-39.



Figure 2-39: Truck for hire parked on-street in Leonard Street

• Trucks park in no parking and no standing zones causing traffic congestion. Two trucks were parked in a no parking zone on Pattison Avenue just after a corner blocking the lane to through traffic as presented in Figure 2-40.



Figure 2-40: Trucks parked illegally in no parking zone on Pattison Avenue

## **INCREASING DEMAND FOR LIMITED BAYS**

• The demand for on-street parking bays has increased due to major residential development as evidenced along Waitara Avenue as shown in Figure 2-41.



Figure 2-41: Residential units in Waitara Avenue with P on the left and 3P on the right

## **SEASONAL PARKING SHORTFALLS**

• During Summer there is a high demand for parking on Waitara Avenue, Park Avenue and other streets surrounding the Mark Taylor Oval resulting from cricket matches occurring.

## BALANCE BETWEEN CAR PARKING SUPPLY AND PROPOSED DEVELOPMENT

Many residential towers are being built in and around Waitara study area. These developments have
one supplied parking bay off-street per residence. Owners and tenants own more than one vehicle and
park their second vehicle on-street utilising highly desirable town centre parking bays.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• The two pedestrian crossings on Unwin Road are unmarked giving the impression they are just a raised platform (outside of School Zone hours) and giving way to pedestrians is unnecessary as presented in Figure 2-42.



Figure 2-42: Unwin Road unmarked pedestrian crossings

• Cyclists lock their bicycles to the fence outside the Waitara Train Station along Alexandria Road which can be a trip hazard, as presented in Figure 2-43.



Figure 2-43: Bicycles locked to the fencing along Alexandria Parade

# PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

• There are limited loading zones on-street and trucks double park to unload as presented in Figure 2-44.



Figure 2-44: Truck double parking to unload on James Street

There are limited disability parking bays available on-street in Waitara study area.

# **LIGHTING**

• The lighting for the 90-degree parking along Alexandria parade is limited as presented in Figure 2-45.



Figure 2-45: Poor lighting for the 90-degree parking along Alexandria Parade

• The raised pedestrian crossing on Clarke Road has inadequate lighting as presented in Figure 2-46.

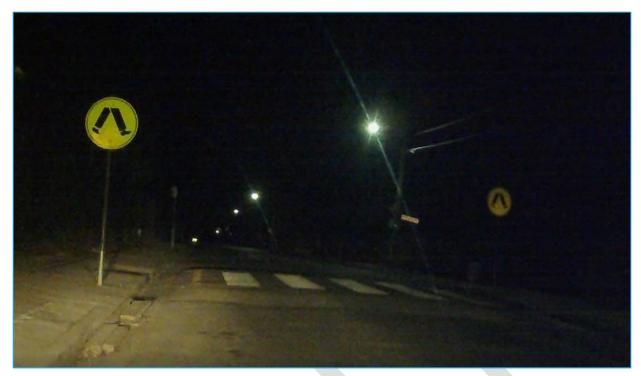


Figure 2-46: Poor lighting at the raised pedestrian crossing on Clarke Road

• There is no lighting at the pedestrian refuge islands on Balmoral Street and Ingram Road as presented in Figure 2-47 and Figure 2-48.

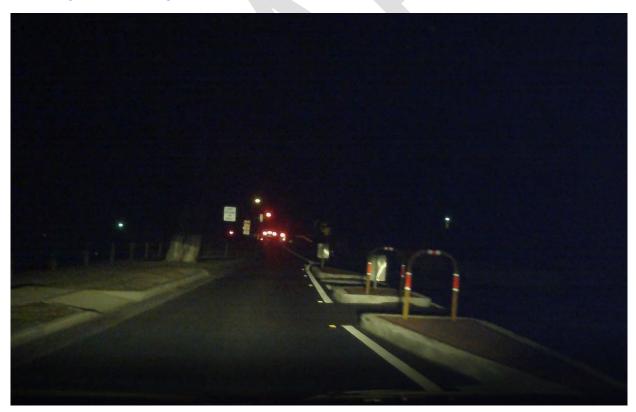


Figure 2-47: No lighting at the pedestrian refuge island on Ingram Road



Figure 2-48: No lighting at the pedestrian refuge island on Balmoral Street

There is limited street lighting along the parking on Leonard Street as presented in Figure 2-49.



Figure 2-49: Limited street lighting on Leonard Street

# 2.3.3 OPPORTUNITIES

The Council has many opportunities to improve the availability and convenience of parking within the Waitara study area.

#### **RESIDENT PARKING SCHEME TRIAL**

• The trial of a Resident Parking Scheme within the Hornsby Local Government Area is recommended to be undertaken at Waitara. This should be monitored and expanded to other areas if successful.

#### **PAY PARKING**

- The introduction of pay parking utilising various forms of new technology will benefit all stakeholders:
  - Improved turnover of spaces and the increased availability of spaces for users with the ability to pay for parking via coin, credit card or smart phone.

- More bona fide customers using spaces leading to increasing profit for businesses and opportunity to subsidise customer parking.
- Revenue for Council to enhance parking facilities and disseminate parking information. Funds can be
  used to manage the parking demands as more sites are developed and the demand for parking
  changes. Management changes will include amending time limits, expanding pay parking areas and
  increasing enforcement in problem areas.
- The on-street parking fees would reduce depending on distance from the town centre.

#### IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

Installation of pedestrian refuge islands halfway along Waitara Avenue and Park Avenue to encourage
pedestrians to cross the road at these locations. This will discourage pedestrians from walking out
between two parked cars to cross the road and possibly be unseen by oncoming vehicles.

#### **LIGHTING**

- Review the lighting at the pedestrian crossing at Clarke Road and pedestrian refuges on Balmoral Street and Ingram Road and upgrade where necessary.
- Increase the lighting in high parking areas such as Alexandria Parade and Leonard Street.

#### 2.3.4 KEY FINDINGS

- If changes to parking management are not implemented the demand for parking in the Waitara study area will continue to exceed the supply which will discourage medium-term parkers from visiting the suburb.
- Current parking demands within Waitara impede on residential areas as the demand for long term commuter parking is high. The train station is located in the middle of the suburb and there is limited long term parking available.
- There is limited street lighting along the parking on Leonard Street as presented in Figure 2-49.
- There are limited disability parking bays available on-street in Waitara study area.
- There are limited loading zones on-street and trucks double park to unload as presented in Figure 2-44.
- Many residential towers are being built in and around Waitara study area. These developments
  have one supplied parking bay off-street per residence. Owners and tenants own more than one
  vehicle and park their second vehicle on-street utilising highly desirable town centre parking
  bays.
- Rangers have issues with business owners parking their vehicles on-street as presented in Figure 2-39.
- The current on-street parking supply has varying parking controls within a single street with limited consistency of time restrictions.
- There is excellent lighting outside the train station at the intersection of Alexandria Parade and Waitara Avenue as presented in Figure 2-35.

# 2.4 BEROWRA TOWN CENTRE

#### 2.4.1 STRENGTHS

### SPATIAL EXTENT OF CONTROLLED PARKING

- Berowra Town Centre has a range of on-street parking controls as detailed below:
  - 2P Berowra Waters Road
  - 1/2P, 1P, 2P western side of Pacific Highway
  - 1/4P, P, No P 12 noon 9PM Sundays and Public Holidays
  - 2P, 4P Berowra Parade

### **ON-STREET AND OFF-STREET PARKING SUPPLY**

- Council owns the off-street parking supply at:
  - The Community Centre off The Gully Road
  - Car Park off The Gully Road opposite the Community Centre entrance
  - Car Parking off Berowra Parade

#### LEVELS OF ENFORCEMENT AND COMPLIANCE

• Council rangers patrol parts of the Berowra Town Centre on a daily basis to enforce compliance and ensure turnover of parking bays.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There is a signalised pedestrian crossing on the Pacific Highway at the entrance to the train station as presented in Figure 2-3150 below.



Figure 2-50: Signalised pedestrian crossing on the Pacific Highway

• There is a bike locker hire service near the train station off the Pacific Highway as presented in Figure 2-3151 below.



Figure 2-51: Bike locker hire near the train station off the Pacific Highway

• There are dedicated, on-street bicycle lanes along Berowra Waters Road from the intersection with Crowley Road extending past High Street as presented in Figure 2-3152 below.



Figure 2-52: Berowra Waters Road dedicated on-street bicycle lanes

There are two raised pedestrian crossings with refuge islands on Berowra Waters Road, north of King Street and south of High Street as presented in Figure 2-3153 below.



Figure 2-53: Raised pedestrian crossing with refuge island on Berowra Waters Road

- There is a pedestrian refuge island on The Gully Road between the Community Centre driveway and Berowra Parade.
- There are numerous bus stops throughout the Town Centre that are easily accessible.
- Berowra Train Station is located on and accessible from the Pacific Highway.

#### PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

- On the eastern side of the Pacific Highway there are numerous on-street 1/4P parking to allow drop off and pick up of commuters.
- Disability parking is available within the train station commuter car parks, the Club Berowra car park along Berowra Parade and in the Community Centre car park.

### 2.4.2 WEAKNESSES

# **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- The Community Centre car park is underutilised on weekdays.
- The 4P Berowra Road car parking area near Club Berowra is underutilised on weekdays.
- The 1P and 2P on-street parking along the western side of the Pacific Highway is underutilised on weekdays.
- The No P 12 noon -9PM Sundays and Public Holidays on the eastern side of the Pacific Highway, south of the train station is underutilised on weekdays.
- Commuter parking at Berowra is in high demand and the utilisation of the current supply doesn't provide
  enough parking for this growing demand. This is due to the fact that Berowra is a key station on the
  Northern Rail Line and the northerly most station on the metropolitan network. It is also a stop for express
  services originating from Sydney and from the Central Coast. The station provides a main regional
  access point for commuters from the surrounding area and it is also heavily used by commuters from the
  Central Coast.
- The existing commuter car park at Berowra Rail Station does not meet the volume of commuters who
  park and ride. Insufficient commuter car spaces result in cars being parked in the outer lanes of the
  north and south bound Pacific Highway.
- The 1/4P parking on the eastern side of the Pacific Highway is underutilised on weekdays.as presented in Figure 2-3154 below.



Figure 2-54: Underutilised 1/4P parking on eastern side of the Pacific Highway

# SPATIAL EXTENT OF CONTROLLED PARKING

- Council has no power to change on-street parking restrictions within 1km from Berowra Railway Station as specified in the delegation for nominated stations.
- Some of the streets within and surrounding Berowra have no controlled parking. These include:
  - The Gully Road
  - Berowra Waters Road between The Gully Road and High Street.
  - King Street
  - High Street
  - Boundary Street
  - Hill Street
  - Eastern side of the Pacific Highway south of the train station (weekdays)

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

- Despite the provision of bike lockers off the Pacific Highway, there is no provision for cyclists on-street or off-street to access the end of trip facilities.
- There is no footpath beside some of the 1/4P parking bays along the Pacific Highway.

### LEVELS OF ENFORCEMENT AND COMPLIANCE

• Council rangers encounter issues such as, drivers stopping their vehicles in the exit driveway of the commuter car park at the train station to drop off or pick up train commuters as presented in Figure 2-955.



Figure 2-55: Vehicle stopped to drop off a passenger in the exit lane of the commuter car park

#### 2.4.3 OPPORTUNITIES

Many opportunities exist for Council to improve the availability and convenience of parking within the Berowra Town Centre.

### IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• Extension of the existing footpath on the eastern side of the Pacific Highway to at least the end of the 1/4P parking bays to allow safe pedestrian travel from their vehicles to the train station.

#### **INCREASED PARKING SUPPLY**

• There is a need to provide additional, formal car parking facilities to improve access and convenience for commuters who park and ride at this station. A larger off-street car parking facility, possibly a multi deck structure at the existing at grade car park would also provide increased safety and security. Future urban growth is expected within Sydney metropolitan including Hornsby LGA. Along with urban growth in the Central Coast, this is expected to increase demand for commuter car parking at Berowra.

#### 2.4.4 KEY FINDINGS

- Council has no power to change on-street parking restrictions within 1km from Berowra Railway Station as specified in the delegation for nominated stations.
- More bus services to and from the train station may increase mode share and decrease the number of commuter parking spaces required near the station.
- There are plenty of options for people to access this area, either through public or private transport.
- There is a limited range of parking controls in both on-street and off-street carparks.
- The on-street parking in this area is limited by no-parking zones, particularly along the Pacific Highway.
- Utilisation of the current supply could be increased through changes to the time restrictions to guide drivers to park in the currently underutilised parking bays.
- More proactive measures to control parking is required such as increased areas with time restrictions and the enforcement of time restricted zones throughout, especially during peak demand parking times.
- Signage could be improved to allow drivers to make the best decision regarding where to park for the time they require.
- The improvement of integration of all transport modes will encourage less use of vehicles in this area.
- Limited dedicated bicycle lanes/paths discourage cyclists within the town centre.

**BROOKLYN ACTIVITY CENTRE ASQUITH TOWN CENTRE BEECROFT TOWN CENTRE** CHELTENHAM TOWN CENTRE PENNANT HILLS TOWN CENTRE NORMANHURST TOWN CENTRE THORNLEIGH TOWN CENTRE CHERRYBROOK METRO PRECINCT CHERRYBROOK TOWN CENTRE **FAGAN PARK** GALSTON VILLAGE PRECINCT **PLACE** SALISBURY LEIGHTON & RD INDUSTRIAL PRECINCT

# 3 STAGE 2 - SWOT ANALYSES

# 3.1 BROOKLYN

### 3.1.1 STRENGTHS

#### IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

- Brooklyn acts as an intermodal transportation hub for both the Brooklyn residents and the surrounding
  river residents of Dangar Island, Little Wobby, Broken Bay, Bar Point, Milsons Passage and others. River
  residents rely on Brooklyn as a place to moor and park their cars, before continuing via car or taking
  public transport to the surrounding centres.
- The Central Coast and Newcastle Rail Line provides public transport connections to the surrounding local centres such as Hornsby as well as connecting to the major centres of the Sydney CBD and Newcastle.
- Kangaroo Point, Dangar Road, Brooklyn Central and Parsley Bay are all accessible by boat ramp, providing an additional method of transportation to the Brooklyn precinct.
- Karoola and George Streets provide parking for trailer boats as seen in Figure 3-1



Figure 3-1: Boat and trailer parking along Karoola Street

• There are numerous pedestrian crossing locations along Brooklyn Road, all with pedestrian refuges, as shown outside Brooklyn Public School in Figure 3-2.



Figure 3-2: Pedestrian crossing outside Brooklyn Public School

 Brooklyn Road has an off-street shared pedestrian/cycle path to provide accessibility for pedestrians and cyclists, as presented in Figure 3-3. The figure also shows the bus indent providing free flow for through traffic along Brooklyn Road.



Figure 3-3: Shared pedestrian/cycle path and bus indent on Brooklyn Road

Bicycle parking is provided near the bus shelters outside Brooklyn Public School, as shown in Figure 3-4.



Figure 3-4: Bicycle Parking outside Brooklyn Public School

- Numerous bus stops are located along Brooklyn Road which are easily accessible.
- Hawkesbury River Station is located near the Brooklyn Wharf and is easily accessible from Brooklyn Road and Dangar Road.

# **AVAILABILITY OF SUITALE LAND FOR ADDITIONAL PARKING**

- The land on the corner of Brooklyn Road and Cole Street near the Rural Fire Brigade is Council owned.
   It is located just 1.7km from the corner of Bridge Street in the centre of the Brooklyn Activity Centre and takes 11 minutes by bus that services Brooklyn Road every 30 minutes.
- The disused State Rail and on Long Island is a possible location for further parking supply.

### LEVELS OF ENFORCEMENT AND COMPLIANCE

 Council rangers patrol the Brooklyn Activity Centre on the weekends when there is a significant increase in vehicle and boat parking in the area.

#### 3.1.2 WEAKNESSES

### IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

- There is inadequate pedestrian access to parking at Parsley Bay.
- Pedestrian access to McKell park is unsafe.

### SPATIAL EXTENT OF CONTROLLED PARKING

- Brooklyn Activity Centre includes a limited range of on-street parking controls as detailed below:
  - 4P limited sections of Dangar Road

- 4P Bridge Street near the intersection with Brooklyn Road
- 4P limited spaces in Dangar Road car park

#### **ON-STREET AND OFF-STREET PARKING SUPPLY**

- Limited Council owned off-street parking supply is provided in the precinct.
- There is numerous off-street parking supply in private car parks along Brooklyn Road.
- The on-street parking supply is limited by no parking zones and narrow streets such as the steep section of Karoola Street leading to Upper McKell Park as shown in Figure 3-5.
- There is no formal parking available at Little Wobby Beach so visitors park on the side of the Pacific Trail.



Figure 3-5: Karoola Street narrow street parking

# **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- Parking demands differ throughout the precinct during different time periods due to the various destinations of parkers including commuters, shoppers and people accessing the wharf and parks.
- The parking delineation both on-street and in off-street parking areas is poor with limited aisle widths as presented in Figure 3-6.



Figure 3-6: Dangar Road Car Park narrow parking aisles

- Real-time parking supply information is not accessible.
- TfNSW owns and operates a 27-bay free commuter car parks near Hawkesbury River Station. These car parks operate at full capacity for the majority of the day throughout the week and are currently under

construction to improve the disability access to and from the platform, provide a disability parking bay, kiss and ride facilities and toilets. These car parks are accessible from Brooklyn Road to the south of the station.

 Long stay parking by houseboat owners along Lower McKell Park is not under surveillance and risks break ins.

#### **WAYFINDING SIGNAGE**

There is very limited parking wayfinding signage along Brooklyn Road on approach to the activity centre.
 A simple P parking sign is located on Dangar Road providing no indication of the type of parking available as seen in Figure 3-7.



Figure 3-7: P parking wayfinding sign on Dangar Road

Some of the signage is obstructed by foliage as highlighted in Figure 3-8



Figure 3-8: No Parking sign obstructed by foliage outside Hawkesbury River Station

#### EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT

- Council's involvement with parking issues to date has been reactive, providing inconsistent and bay or street specific solutions.
- There is no centralised coordination of parking management within Council.

# SPATIAL EXTENT OF CONTROLLED PARKING

- There are many streets in and around the precinct with no controlled parking such as:
  - Most of Bridge Street

- George Street
- Most of Dangar Street
- Karoola Street
- Brooklyn Road
- William Street
- The car park near Brooklyn Wharf has some 4P parking but the majority of the parking is unrestricted. It is located right near Hawkesbury River Station and is used by commuters.

#### LEVELS OF ENFORCEMENT AND COMPLIANCE

- Due to the lack of on-street parking along Brooklyn Road Council regularly has problems with residents along parking illegally along Brooklyn Road causing traffic flow issues.
- Brooklyn Activity Centre is rarely patrolled by Council rangers on weekdays.

### **AVAILABILITY OF SUITABLE LAND FOR ADDITIONAL PARKING**

 Council owns limited land in the centre of the Brooklyn precinct that would be suitable for additional parking.

### **INCREASING DEMAND FOR LIMITED BAYS**

- The demand for parking in the Brooklyn precinct already exceeds the supply. As the location is surrounded by water, once in the centre, there is no other option for parking. The Town Centre is accessible from the surrounding major centres by vehicle via the Pacific Motorway and lesser used Old Pacific Highway connecting to the only road in and out of Brooklyn, Brooklyn Road.
- Some of the streets are at 100% occupancy such as Lower McKell Park towards the Brooklyn Playground as seen in Figure 3-9.



Figure 3-9: High occupancy parking is residential streets

# **SEASONAL PARKING SHORTFALLS**

Major problems occur in the centre with river settlement residents accessing parking on weekends.

# **INFILTRATION INTO RESIDENTIAL AREAS**

• Despite the topography being quite steep, parking on streets such as the upper section of Bridge Street is common as shown in Figure 3-10.



Figure 3-10: Unrestricted parking in the upper section of residential Bridge Street

# PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

 There are limited parking spaces for persons with a disability that have poor access due to the unstable surface condition from the car park to the person's destination as shown at the Brooklyn Wharf car park off Dangar Road in Figure 3-11.



Figure 3-11: Parking for persons with a disability at Brooklyn Wharf

No on-street loading zones were observed throughout the Brooklyn Activity Centre.

### 3.1.3 OPPORTUNITIES

The Council has many opportunities to improve the availability and convenience of parking within the Brooklyn Activity Centre study area.

#### PARKING MANAGEMENT DEPARTMENT

- A single parking management authority will allow efficient coordination of on-street and off- street parking bays.
- Parking surveys undertaken every three years will provide data which can be used to compare demand and supply issues and assist in managing parking into the future.

#### 3.1.4 THREATS

#### SPATIAL EXTENT OF CONTROLLED PARKING

 The existing time restriction for boat trailers of 28 days on-street needs to be limited to areas of less parking demand by installing parking time restrictions or more boat trailers will occupy highly desired parking bays.

#### 3.1.5 KEY FINDINGS

- There are plenty of options for people to access this area, either through public or private transport.
- There is a limited range of parking controls in both on-street and off-street carparks.
- The on-street parking in this area is limited by no-parking zones and narrow streets.
- Utilisation of the current supply could be increased through the improvement of the delineation of parking.
- Large demand for parking on weekends effects the residents' ability to park in carparks as well
  as in residential areas due to infiltration, resulting in drivers navigating through narrow streets
  for parking.
- There is little parking for disabled individuals as well as no observed loading zones.
- More proactive measures to control parking is required such as increased areas with time restrictions and the enforcement of time restricted zones throughout, especially during peak demand parking times.
- Signage could be improved to show drivers where a parking bay that suit their needs could be.
- The improvement of integration of all transport modes will encourage less use of vehicles in this area.



# 3.2 BEROWRA WATERS ACTIVITY CENTRE

#### 3.2.1 STRENGTHS

### **ON-STREET AND OFF-STREET PARKING SUPPLY**

• The Bay Road car park provides numerous off-street parking bays in the Activity Centre.

#### SPATIAL EXTENT OF CONTROLLED PARKING

- The Bay Road off-street parking area has marked boat trailer parking areas.
- The Bay Road upper deck car park is marked as single vehicle only parking.

### IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

Due to the high pedestrian activity there is a shared zone on exit from the ferry to Berowra Waters Road as shown in Figure 3-12.



Figure 3-12: Shared zone near ferry terminal

 A pedestrian crossing and footpath are provided on entrance to the Bay Road Car Park as seen in Figure 3-13



Figure 3-13: Pedestrian crossing in Bay Road Car Park

- A bus stop is located inside the Bay Road car park beside the parking for persons with a disability due to the lack of width for a bus stop along Bay Road.
- A ferry provides access across the Berowra Creek for vehicles, persons, motorcyclists and cyclists.

# PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

There are four marked disability parking bays in the Bay Road car park as shown in Figure 3-14.



Figure 3-14: Bay Road Car Park parking for persons with a disability

### **LIGHTING AND SECURITY**

 Both Kirkpatrick Way and Bay Road Car Park are marked as having security cameras in use as shown in Figure 3-15



Figure 3-15: Security cameras in use along Kirkpatrick Way

# 3.2.2 WEAKNESSES

# SPATIAL EXTENT OF CONTROLLED PARKING

• Berowra Waters precinct has no controlled parking limits on-street.

### **ON-STREET AND OFF-STREET PARKING SUPPLY**

- Limited Council owned off-street parking supply is provided off Kirkpatrick Way. The parking that is provided is signed as 'resident only' parking.
- Due to the widths of Bay Road and Kirkpatrick Way there is very limited parking as shown in Figure 3-16.



Figure 3-16: Kirkpatrick Way narrow street parking

# **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

 There is high resident parking demand and visitor parking demand along Kirkpatrick Way. The current fenced and gated resident parking section is underutilised while the visitor parking increases to full capacity as shown in Figure 3-17.



Figure 3-17: Kirkpatrick Way resident parking

• Figure 3-18 shows that during the week and on weekends the upper deck single car parking area off Bay Road is underutilised while single cars are parked in the boat trailer parking bays as seen in Figure 3-19.



Figure 3-18: Underutilised upper deck car park



Figure 3-19: Single cars parking in boat trailer parking in Bay Road car park

 Parking overspill occurring on weekends onto Bay Road due to the underutilisation of the available offstreet parking. Trailers parked on Bay Road create a safety issue for through traffic.

### **WAYFINDING SIGNAGE**

• There are limited parking wayfinding signs along Bay Road on approach to the activity centre as shown in Figure 3-20.



Figure 3-20: Limited parking signs for Bay Road car park

• There is no parking wayfinding signs for the Council owned car parking at the end of Kirkpatrick Way as seen in Figure 3-21.



Figure 3-21: No parking wayfinding signage at the entrance to Kirkpatrick Way

#### EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT

- Council's involvement with parking issues to date has been reactive, providing inconsistent and bay or street specific solutions.
- There is no centralised coordination of parking management within Council.

#### SPATIAL EXTENT OF CONTROLLED PARKING

- The following streets have either no parking or unrestricted parking areas dependent on the width of the road:
  - Bay Road
  - Kirkpatrick Way

# LEVELS OF ENFORCEMENT AND COMPLIANCE

• Single cars are often parked in the boat trailer parking areas rather than parking in the dedicated upper deck car park.

### **INCREASING DEMAND FOR LIMITED BAYS**

• The demand for parking in the Berowra Waters precinct already exceeds the supply on the Kirkpatrick Way side of the Berowra Creek as shown in Figure 3-22.



Figure 3-22: Kirkpatrick Way parking both sides

# **SEASONAL PARKING SHORTFALLS**

Major problems occur in the centre with visitors to the area accessing parking on weekends.

### PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

• The uneven surface along Kirkpatrick Road is prohibitive for disabled persons so none of them are marked as parking for persons with a disability.

#### 3.2.3 OPPORTUNITIES

The Council has many opportunities to improve the availability and convenience of parking within the Berowra Waters precinct.

#### **BETTER USE OF CURRENT SUPPLY**

- Council has the opportunity to introduce off-street parking time restrictions to the Bay Road car park to manage the current supply of parking and provide parking for short and medium term parkers within the precinct.
- Providing parking for visitors and residents in the residents parking area will alleviate weekend parking issues along Kirkpatrick Way.

#### PARKING MANAGEMENT DEPARTMENT

- A single parking management authority will allow efficient coordination of on-street and off- street parking bays.
- Parking surveys undertaken every three years will provide data which can be used to compare demand and supply issues and assist in managing parking into the future.

#### 3.2.4 THREATS

# **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

If changes to parking management are not implemented the use of parking near Bay Road will continue
to exceed supply and drivers will continue to park on Bay Road instead of searching for available parking
off-street in the Bay Road Car park.

### 3.2.5 KEY FINDINGS

- Large amounts of vehicle and pedestrian activity on both sides of Berowra Creek.
- There are no controlled parking limits for on-street parking.
- The demand for parking is not satisfied by the limited Council owned off-street parking supply in Kirkpatrick Way.
- Disabled individuals will have trouble with the uneven surfaces of the roads and lack of disabled parking bays.
- The Bay Rd upper deck single car parking area is underutilised while single cars are parked in boat trailer bay as seen in Figure 3-18 and Figure 3-19. Parking management strategies to accommodate different levels of demand throughout the week.
- Parking information should be available to the public on an online platform so that drivers may have information about parking, especially on weekends.
- The frequency of parking enforcement needs to increase for compliance to increase.

# 3.3 ASQUITH TOWN CENTRE

#### 3.3.1 STRENGTHS

### SPATIAL EXTENT OF CONTROLLED PARKING

- Asquith Town Centre area has limited on-street parking controls as detailed below:
  - 1/4P Amor Street opposite Wattle Street
  - 1/2P Pacific Highway western side opposite the train station
- Asquith Town Centre area has a limited off-street parking controls as detailed below:
  - Coles car park is 3P parking
  - Public Car Park off Wattle Street 2P as seen in Figure 3-23.



Figure 3-23: Wattle Street 2P off-street parking

# LEVELS OF ENFORCEMENT AND COMPLIANCE

• Council rangers patrol the Asquith Town Centre daily on the North Patrol to ensure parking turnover is achieved in the high demand parking bays.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There is a large signalised pedestrian crossing connecting the western side the of town centre to the train station and the eastern side across the busy Pacific Highway as see in Figure 3-24.



Figure 3-24: Signalised pedestrian crossing on the Pacific Highway

• There is a raised pedestrian crossing on Peats Ferry Road near Hyacinth Street as shown in Figure 3-



Figure 3-25: Raised pedestrian crossing on Peats Ferry Road

• A pedestrian crossing is located outside Asquith Girls High School on Sherbrook Road near Winston Street as seen in Figure 3-26.



Figure 3-26: Pedestrian crossing on Sherbrook Road

• There are many bus stops and bus routes along major arterials including Peats Ferry Road, the Pacific Highway, Sherbrook Road and Royston Parade.

# 3.3.2 WEAKNESSES

#### **ON-STREET AND OFF-STREET PARKING SUPPLY**

There is limited Council owned off-street parking supply in the Town Centre.

# **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- The current on-street parking supplies limited parking controls.
- Parking demands differ throughout the town centre and at different times.
- New South Wales Train Link owns and operates limited free commuter car parks near Asquith Train Station that are at full occupancy for the majority of the day during the week. The southern commuter car park is difficult to access. Asquith train station is not a main stop on the train line.

#### EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT

- Council's involvement with parking issues to date has been very reactive providing inconsistent and space or street specific solutions.
- There is no structured parking department within Council tasked with the overall management of parking.
- There is no paid parking in Asquith Town Centre.

#### SPATIAL EXTENT OF CONTROLLED PARKING

- There are many streets in and around the town centre with no controlled parking such as:
  - Bouvardia Street
  - Peats Ferry Road
  - Wattle Street
  - Most of the Pacific Highway
  - Heath Street
  - Olive Street
  - Sherbrook Road
  - Most of Amor Street
  - Haldane Street
  - Winston Street
  - Baldwin Avenue
  - Lords Avenue
  - Royston Parade
  - Victory Street
  - Dudley Street

### **INCREASING DEMAND FOR LIMITED BAYS**

- The Coles car park is operating at full capacity and shopper parking overflows into Wattle Street offstreet car park and the surrounding streets.
- Commuter parking overflows into many streets in and around the town centre as there are limited offstreet commuter parking bays.

# BALANCE BETWEEN CAR PARKING SUPPLY AND PROPOSED DEVELOPMENT

- Bavarda Street and Lords Avenue have experienced substantial recent residential multi-storey developments increasing the number of vehicles using the town centre.
- There are large numbers of residential multi-storey developments currently in construction. These
  developments have one supplied parking bay off-street per residence. Owners and tenants own more
  than one vehicle and park their second vehicle on-street utilising highly desirable town centre parking
  bays.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There are limited on-street cycle markings to provide drivers with a reminder to share the road with cyclists.

# PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

There are limited disability parking bays available on-street in Asquith Town Centre.

#### 3.3.3 OPPORTUNITIES

The Council has many opportunities to improve the availability and convenience of parking within the Asquith Town Centre.

#### **PAY PARKING**

- The introduction of pay parking utilising various forms of new technology will benefit all stakeholders:
  - Improved turnover of spaces and the increased availability of spaces for users with the ability to pay for parking via coin, credit card or smart phone.
  - More bona fide customers using spaces leading to increasing profit for businesses and opportunity to subsidise customer parking.
  - Revenue for Council to enhance parking facilities and disseminate parking information. Funds can be used to manage the parking demands as more sites are developed and the demand for parking changes. Management changes will include amending time limits, expanding pay parking areas and increasing enforcement in problem areas.
- The on-street parking fees would reduce depending on distance from the town centre.

#### 3.3.4 KEY FINDINGS

- Demand for parking for the train station and the Coles shopping centre has overflowed into many streets in and around the train station, with many of these streets having no parking controls.
- Residents of multi-storey developments park their second vehicles in highly desirable town centre parking bays.
- The addition of pay parking is highly recommended as it will benefit all stakeholders.
- Implementation of restricted parking will force commuters to park beside the train line, instead of residential streets.
- More bus services to and from the train station may increase mode share and decrease the number of commuter parking spaces required near the station.

# 3.4 BEECROFT TOWN CENTRE

#### 3.4.1 STRENGTHS

### SPATIAL EXTENT OF CONTROLLED PARKING

- Beecroft Town Centre has a range of on-street parking controls as detailed below:
  - 15 min York Street near Copeland Road
  - 2P Chapman Avenue northern side between Beecroft Road and Wongala Crescent
  - 2P, 1P, 1/4P Wongala Crescent

#### **ON-STREET AND OFF-STREET PARKING SUPPLY**

- There are two car parks located at the Beecroft Train Station, one accessible from Sutherland Road near Copeland Road and one accessible from Wongala Crescent.
- Beecroft Car Park is accessible from Wongala Road.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

- There are pedestrian crossing facilities at the following locations:
  - Chapman Avenue west of the intersection with Wongala Crescent
  - Wongala Crescent north of Hannah Street (see Figure 3-27)
  - Wongala Crescent north of Copeland Drive
  - Copeland Road west of Beecroft Road
  - Beecroft Road south of Copeland Road
  - Sutherland Road south of Malton Road
  - Sutherland Road north of Copeland Road



Figure 3-27: Pedestrian crossing on Wongala Crescent outside the train station

- Bus stops in Beecroft Town Centre are located:
  - Outside the train station on Wongala Crescent
  - At various locations along Beecroft Road
  - Outside Beecroft Public School on Copeland Road
  - West of Wongala Crescent on Chapman Avenue (see Figure 3-28)



Figure 3-28: Bus stop on Chapman Avenue west of Wongala Crescent

### PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

• There are two parking bays for persons with a disability located on-street on Wongala Crescent outside the train station as shown in Figure 3-29.



Figure 3-29: Wongala Crescent parking for persons with a disability

# LEVELS OF ENFORCEMENT AND COMPLIANCE

The Council rangers patrol the Beecroft Town Centre daily on the South Patrol to ensure turnover of vehicles in high demand parking bays.

# 3.4.2 WEAKNESSES

# **ON-STREET AND OFF-STREET PARKING SUPPLY**

There is limited Council owned off-street parking supply in the Town Centre.

#### **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- The current on-street parking supply has varying parking controls within a single street with limited consistency of time restrictions.
- Parking demands differ throughout the town centre and at different times.
- New South Wales Train Link owns and operates limited free commuter car parks near Beecroft Train Station that are at full occupancy for the majority of the day during the week.

#### EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT

- Council's involvement with parking issues to date has been very reactive providing inconsistent space or street specific solutions.
- There is no structured parking department within Council tasked with the overall management of parking.
- There is no paid parking in Beecroft Town Centre.

#### SPATIAL EXTENT OF CONTROLLED PARKING

- There are many streets in and around the town centre with no controlled parking such as:
  - Most of York Street between Copeland Road and Chapman Avenue
  - Chapman Avenue between York Street and Beecroft Road
  - Copeland Road between York Street and Beecroft Road
  - Hannah Street
  - Sutherland Road between Chapman Avenue and Copeland Road
  - Copeland Road East
  - Wandeen Avenue
  - Seale Close
  - Malton Road

### LEVELS OF ENFORCEMENT AND COMPLIANCE

• Parents park in the no parking zone on Copeland Road outside Beecroft Public School to drop off their children as seen in Figure 30-30. This creates further traffic congestion around the school peak period.



Figure 3-30: Illegal parking along Copeland Road

# **INCREASING DEMAND FOR LIMITED BAYS**

- The demand for commuter parking has increased since the Northwest Metro was constructed.
- There is high demand in Chapman Avenue (see Figure 3-31), Beecroft Street and Wongala Crescent.



Figure 3-31: High parking demand in Chapman Avenue

### IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

There are no cycle markings on street to remind drivers to share the road with cyclists.

#### PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

There are limited loading zones on-street throughout Beecroft Town Centre.

#### 3.4.3 OPPORTUNITIES

The Council has many opportunities to improve the availability and convenience of parking within the Beecroft Town Centre.

#### **PAY PARKING**

- The introduction of pay parking utilising various forms of new technology will benefit all stakeholders:
  - Improved turnover of spaces and the increased availability of spaces for users with the ability to pay for parking via coin, credit card or smart phone.
  - More bona fide customers using spaces leading to increasing profit for businesses and opportunity to subsidise customer parking.
  - Revenue for Council to enhance parking facilities and disseminate parking information. Funds can be
    used to manage the parking demands as more sites are developed and the demand for parking
    changes. Management changes will include amending time limits, expanding pay parking areas and
    increasing enforcement in problem areas.
- The on-street parking fees would reduce depending on distance from the town centre.

# **IMPROVED ENFORCEMENT**

This will be particularly helpful during school peak periods outside Beecroft Public School.

# 3.4.4 KEY FINDINGS

- Beecroft has a wide range of on-street parking controls, such as 15min, 2P, and 4P parking, but there are many streets with no controlled parking. With the increasing demand for commuter parking, many parkers will overflow to these uncontrolled streets.
- There is no paid parking in Beecroft Town Centre, the introduction of paid parking using various technologies will benefit all stakeholders.
- More enforcement is needed during school peak periods in areas around Beecroft Town Centre, as seen in Figure 3-30.

# 3.5 CHELTENHAM TOWN CENTRE

#### 3.5.1 STRENGTHS

#### SPATIAL EXTENT OF CONTROLLED PARKING

- Cheltenham town centre has some on-street parking controls as detailed below:
  - Clearway during morning and evening peak hours along Beecroft Road
  - No stopping between 8-9am and 2:30 3:30pm M-F on the eastern side of The Promenade from The Crescent for a third of the length of the street
  - 1/4P 8-9am and 2-4pm school days on the western side of The Promenade south of the Cheltenham Girls High School main entrance

#### **ON-STREET AND OFF-STREET PARKING SUPPLY**

• Council has provided excessive supply of 90 degree and parallel unrestricted parking along The Crescent, east of Cheltenham Road as seen in Figure 3-32. Extra parking supply is available further from the station to the east as seen in Figure 3-33.



Figure 3-32: The Crescent 90 degree and parallel parking provision



Figure 3-33: The Crescent excess parking capacity

#### **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

 There are limited parking generating developments in comparison to the commuter parking required for the train station and the Cheltenham Girls' High School morning and afternoon peak demands. Council has provided adequate supply with appropriate restrictions for the current demands.

### LEVELS OF ENFORCEMENT AND COMPLIANCE

Cheltenham Town Centre is patrolled by Council rangers on a daily basis on the South Patrol especially
around the schools and the train station to ensure turnover of high demand parking bays.

### IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

- There are pedestrian footpaths along both sides of Cheltenham Road.
- There is a pedestrian footpath along one side of most streets in the town centre.
- Bus stops are located along Beecroft Road.
- Cheltenham Train Station is located parallel to Sutherland Road and The Crescent and directly accessible from Cheltenham Road.
- The traffic signals at the intersection of Sutherland Road and Cheltenham Road provide excellent signalised pedestrian crossings as seen in Figure 3-34.



Figure 3-34: Signalised intersection of Sutherland Road and Cheltenham Road

• Pedestrian crossings are located at major pedestrian desire lines like the intersection of The Crescent and Cheltenham Road, which is adjacent to the train station, see Figure 3-35.



Figure 3-35: Pedestrian crossings at the intersection of The Crescent and Cheltenham Road

#### PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

• There is a kiss'n'ride located on The Crescent outside the train station entrance as shown in Figure 3-36.



Figure 3-36: The Crescent kiss'n'ride

#### 3.5.2 WEAKNESSES

### SPATIAL EXTENT OF CONTROLLED PARKING

- The streets close to the train station entrance have no parking restrictions including:
  - Cheltenham Road
  - The Boulevard
  - Sections of The Promenade

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

- There are no visible provisions for cyclists either on-street or off-street in the town centre.
- No bicycle parking was observed at the train station.

# **INFILTRATION INTO RESIDENTIAL AREAS**

• There is some infiltration into residential areas due to the proximity of the streets to the train station. Cheltenham Road has high parking occupancy as presented in Figure 3-37.



Figure 3-37: Cheltenham Road high occupancy parking

### PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

No on-street parking was observed for persons with a disability.

#### 3.5.3 OPPORTUNITIES

The Council has some opportunities to improve the availability and convenience of parking within the Cheltenham Town Centre.

#### **BETTER USE OF CURRENT SUPPLY**

Implementation of simplified on-street time restricted parking within the town centre will force commuters
to park beside the train line, removing the commuters from parking in the residential streets near the
station.

### IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

 Installation of cyclist parking and on-street cycle lanes in the wider streets like The Crescent may encourage commuters to cycle to the train station.

#### 3.5.4 KEY FINDINGS

- As seen in Figure 3-33, there is an excessive supply of unrestricted parking along The Crescent.
- Council has provided adequate restrictions for the current demands for the train station and the Cheltenham Girls' High School.
- There are streets close to the train station that have no parking restrictions, with some infiltration to the streets near the train station as seen in Figure 3-37. Implementation of simplified on-street time restricted parking within the town centre will force commuters to park beside the train line, removing the commuters from parking in the residential streets near the station.

## 3.6 PENNANT HILLS TOWN CENTRE

### 3.6.1 STRENGTHS

## **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

 The 2P Council operated car park at Pennant Hills Market Place displays high occupancy and high turnover.

#### SPATIAL EXTENT OF CONTROLLED PARKING

- Pennant Hills Town Centre includes a range of on-street parking controls as detailed below:
  - 3P Weemala Road from Greycliffe Avenue to Ramsay Road
  - 3P Hillcrest Road from Weemala Road to Pennant Hills Market Place
  - 1P, 1/2P and 1/4P Hillcrest Road from Pennant Hills Market Place to Yarrara Road
  - 3P Fisher Avenue
  - 1P Yarrara Road
  - 1P The Crescent from Pennant Hills Road for a few bays
  - 3P and 1P sections of Ramsay Road
  - 3P Werona Street
  - 3P Warne Street
- Council operates the 2P Pennant Hills Market Place off-street car park in the town centre.

### LEVELS OF ENFORCEMENT AND COMPLIANCE

 Council rangers patrol the on-street and off-street parking within Pennant Hills Town Centre at least three times per week and at times daily.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

 There is a pedestrian overpass across the Pennant Hills Road from Hampden Road to Railway Street as seen in Figure 3-38.



Figure 3-38: Pedestrian overpass across the Cumberland Highway

• There is a shared zone on Hillcrest Road from the Pennant Hills Market Place driveway to Geeves Lane as seen in Figure 3-39.



Figure 3-39: Shared zone on Hillcrest Road

 A pedestrian crossing is located on Ramsay Road west of Rosemount Avenue as presented in Figure 3-40.



Figure 3-40: Ramsay Road pedestrian crossing

• Share the road bicycle and vehicle signs with associated line marking on street are located along The Crescent and Britannia Street as seen in Figure 3-41.



Figure 3-41: Share the road sign on Britannia Street

• Railway Street has a pedestrian crossing and the street is a dedicated bus station located adjacent to the train station as seen in Figure 3-42.



Figure 3-42: Railway Street bus station

- Many of the pedestrian footpaths in the town centre are covered due to the shop and business awnings.
- There are pedestrian paths through Wollundry Park allowing access for people from the residential streets in the west of the town centre to Yarrara Road where the train station and bus station is located as seen in Figure 3-43.



Figure 3-43: Pedestrian paths through Wollundry Park

- The Pennant Hills Train Station is next to Pennant Hills Road with easy access for pedestrians.
- Motorbike Parking is provided on Yarrara Road as seen in Figure 3-44.



Figure 3-44: Motorbike parking on Yarrara Road

#### PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

- A 5 minute drop off zone is located on Yarrara Road opposite the train station.
- There are parking bays for persons with a disability located in the Pennant Hills Market Place car park that are easily accessible.

#### **AVAILABILITY OF SUITABLE LAND FOR ADDITIONAL PARKING**

 Council owns Pennant Hills Park on the edge of the town centre which has land suitable for additional parking.

#### 3.6.2 WEAKNESSES

### **ON-STREET AND OFF-STREET PARKING SUPPLY**

- Limited Council owned off-street parking supply is provided in the Town Centre.
- There are numerous no parking zones on-street due to the large traffic volumes using the major arterials through the Town Centre.

#### **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- Parking demands differ throughout the town centre during different time periods due to the competing demands of commuters, shoppers, staff of the businesses in the town centre and the Pennant Hills Library visitors.
- Real-time parking supply information is not easily accessible.
- TfNSW owns and operates limited free commuter car parks near Pennant Hills Train Station. These car parks operate at full capacity for the majority of the day throughout the week.
- The Yarrara Road 1P parking is underutilised during the weekday peak hours as seen in Figure 3-45.



Figure 3-45: Yarrara Road underutilised 1P parking

 Pennant Hills Park off Britannia Street has 5 parking areas but fills due to cross over of sporting events and leads to illegal parking and inconsiderate and unsafe parking as shown in Figure 3-46.



Figure 3-46: Pennant Hills Park parking overflow from main car park

### **EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT**

- Council's involvement with parking issues to date has been reactive, providing inconsistent bay or street specific solutions.
- There is no centralised coordination of parking management within Council.
- Numerous time restrictions apply within a short distance of each other in various streets, resulting in confusion for drivers and an overabundance of signage, such as:
  - P, 3P, 1P, 1/2P, 1/4P on Hillcrest Road
  - P, 3P, 1P on Ramsay Road

#### SPATIAL EXTENT OF CONTROLLED PARKING

- There are many streets in and around the town centre with no controlled parking such as:
  - Most of The Crescent
  - Charlotte Road
  - Britannia Street
  - Harold Avenue
  - George Street
  - Stevens Street
  - Rosemount Avenue

# LEVELS OF ENFORCEMENT AND COMPLIANCE

- Council rangers encounter issues with the prevalence of parking overstays in Hillcrest Street.
- Council rangers do not patrol the Pennant Hills Town Centre daily to increase the risk of enforcement and in return encourage compliance.
- There was a car on one side of the road and van on the other side of the road parking in the Yarrara Road bus stops outside the train station as presented in Figure 3-47.



Figure 3-47: Illegal parking in Yarrara Road bus stops

### **SEASONAL PARKING SHORTFALLS**

 On Saturdays and during sporting events at Pennant Hills Park there is significant overflow of parking from the available parking at Pennant Hills Park into the surrounding streets.

## **INFILTRATION INTO RESIDENTIAL AREAS**

 Many residential streets were observed to be fully occupied such as Ramsay Road, as presented in Figure 2-12.



Figure 3-48: Commuter parking in Ramsay Road

## 3.6.3 OPPORTUNITIES

The Council has many opportunities to improve the availability and convenience of parking within the Pennant Hills Town Centre.

### **PAY PARKING**

- The introduction of pay parking utilising various forms of new technology will benefit all stakeholders:
  - Improved turnover of spaces and the increased availability of spaces for users with the ability to pay for parking via coin, credit card or smart phone.
  - More bona fide customers using spaces leading to increasing profit for businesses and opportunity to subsidise customer parking.
  - Revenue for Council to enhance parking facilities and disseminate parking information. Funds can be
    used to manage the parking demands as more sites are developed and the demand for parking

changes. Management changes will include amending time limits, expanding pay parking areas and increasing enforcement in problem areas.

The on-street parking fees would reduce depending on distance from the town centre.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

- Bus services from Pennant Hills Park to the Railway Street bus station in the morning and afternoon
  peak hours will make use of the Pennant Hills Park car parks that are currently underutilised during the
  week.
- More bus services to and from Pennant Hills Park on the weekends may increase mode share and decrease the overflow of parking into the residential streets.

### 3.6.4 KEY FINDINGS

- Strong levels of utilisation, spatial extent of controlled parking, and enforcement and compliance.
- There are varying levels of demand throughout the town centre due to competing demand such as commuters, shoppers, and staff of businesses in the town centre and Pennant Hills Library.
- Commuter carparks operate at full capacity for most of the day throughout the week.
- Numerous time restrictions apply within short distance of each other, resulting in confusion for drivers and an overabundance of signage.
- Pay parking should be introduced as it may benefit all stakeholders.
- Outside of peak demand times, parking restrictions can be relaxed to allow more parking spaces closer to destinations for night parkers.

## 3.7 THORNLEIGH TOWN CENTRE

### 3.7.1 STRENGTHS

## SPATIAL EXTENT OF CONTROLLED PARKING

- Thornleigh Town Centre includes a range of on-street parking controls as detailed below:
  - 3P Pritchard Street
  - P. 2P Wells Street
  - 1P The Esplanade
- Secure Parking manages a 1P off-street car park for Aldi accessible from Station Street.

## LEVELS OF ENFORCEMENT AND COMPLIANCE

 Council rangers patrol the Thornleigh Town Centre three times a week to ensure turnover in high demand parking bays.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There is a pedestrian overpass across the Pennant Hills Road from Station Street to Railway Parade as seen in Figure 3-49.



Figure 3-49: Pedestrian overpass across the Pennant Hills Road

• The Esplanade has a line marked and signed bicycle lane on both sides of the road providing easy access for cyclists through the Town Centre as seen in Figure 3-50.



Figure 3-50: The Esplanade Bicycle Lane

• There is a signalised intersection at The Esplanade and Eddy Street providing signalised pedestrian crossings for pedestrians to the station on the east of the intersection as shown in Figure 3-51.



Figure 3-51: The Esplanade signalised pedestrian crossing

• A pedestrian crossing is located outside McDonalds on Central Avenue as seen in Figure 3-52.



Figure 3-52: Central Avenue Pedestrian Crossing

- There is a bus stop located outside the Thornleigh Train Station on The Esplanade.
- The Thornleigh Train Station is located to the west of Pennant Hills Road near the town centre.

## 3.7.2 WEAKNESSES

# **ON-STREET AND OFF-STREET PARKING SUPPLY**

- Limited Council owned off-street parking supply is provided in the Town Centre.
- There are numerous no parking zones on-street due to the large traffic volumes using the major arterials through the Town Centre.
- Due to the narrow width of some of the roads there is only parking permitted on one side of the road.

### **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

- Parking demands differ throughout the town centre during different time periods due to the competing demands of commuters, shoppers and staff of the businesses in the town centre.
- Real-time parking supply information is not easily accessible.
- TfNSW owns and operates limited free two-level car park near Thornleigh Train Station. These car parks operate at full capacity for the majority of the day throughout the week as seen in Figure 3-53.



Figure 3-53: Thornleigh Train Station car park at full capacity

• The Thornleigh Community Centre car park is underutilised during the weekday peak hours as seen in Figure 3-54.



Figure 3-54: Underutilised parking at Thornleigh Community Centre

# **EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT**

- Council's involvement with parking issues to date has been reactive, providing inconsistent bay or street specific solutions.
- There is no centralised coordination of parking management within Council.

# SPATIAL EXTENT OF CONTROLLED PARKING

- There are many streets in and around the town centre with no controlled parking such as:
  - Wood Street
  - Station Street
  - Thornleigh Street
  - Parts of Bellevue Street
  - Most of Wells Street
  - Eddy Street
  - Janet Avenue
  - Lovett Street
  - Tillock Street

### 3.7.3 OPPORTUNITIES

The Council has many opportunities to improve the availability and convenience of parking within the Thornleigh Town Centre.

#### **PAY PARKING**

- The introduction of pay parking utilising various forms of new technology will benefit all stakeholders:
  - Improved turnover of spaces and the increased availability of spaces for users with the ability to pay
    for parking via coin, credit card or smart phone.
  - More bona fide customers using spaces leading to increasing profit for businesses and opportunity to subsidise customer parking.
  - Revenue for Council to enhance parking facilities and disseminate parking information. Funds can be used to manage the parking demands as more sites are developed and the demand for parking changes. Management changes will include amending time limits, expanding pay parking areas and increasing enforcement in problem areas.
- The on-street parking fees would reduce depending on distance from the town centre.

### 3.7.4 KEY FINDINGS

- There is limited Council owned off-street parking supply that is provided in the Town Centre, especially on the Eastern side of Thornleigh station, with the Thornleigh Train Station car park operating at full capacity for the majority of the day throughout the week.
- Parking demands differ throughout the town centre during different time periods due to the competing demands of commuters, shoppers and staff of businesses in the town centre.
- As seen in Figure 3-54, Thornleigh community centre carpark is underutilised during the weekday peak hours.
- Introduction of pay parking will benefit all stakeholders.

# 3.8 CHERRYBROOK TOWN CENTRE

### 3.8.1 STRENGTHS

## **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

• The Cherrybrook Village Shopping Centre car park has 3P parking between 7am-9pm and is managed by Council.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

 A pedestrian crossing is located along Purchase Road for use by school students as seen in Figure 3-55.



Figure 3-55: Purchase Road pedestrian crossing

• There are 'share the road' signs on Purchase road for cyclists and motorists and bicycle line marking on both sides of the road as presented in Figure 3-56.



Figure 3-56: Share the road sign on Purchase Road

• Bus stops are located on all arterial roads throughout the Cherrybrook town centre and within Greenway Park as shown in Figure 3-57.



Figure 3-57: Greenway Park bus stop sign

### LEVELS OF ENFORCEMENT AND COMPLIANCE

 Council rangers patrol Cherrybrook Town Centre three times per week as per the contract they have with the Cherrybrook Village Shopping Centre.

#### 3.8.2 WEAKNESSES

## **ON-STREET AND OFF-STREET PARKING SUPPLY**

Limited Council owned parking is provided off-street in the town centre.

### **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

• Greenway Park car parking is underutilised during the week as shown in Figure 3-58 and in high demand on the weekend when sporting activities are occurring. This causes overflow into the surrounding streets.



Figure 3-58: Greenway Park underutilised car park on weekdays

## **EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT**

- Council's involvement with parking issues to date has been reactive, providing inconsistent bay or street specific solutions.
- There is no centralised coordination of parking management within Council.

### SPATIAL EXTENT OF CONTROLLED PARKING

There are many streets in and around the town centre with no controlled parking such as:

- Shepherds Drive
- Purchase Road
- Hancock Drive
- Gwynellen Place
- Macquarie Drive
- Kenburn Avenue

## **AVAILABILITY OF SUITABLE LAND FOR ADDITIONAL PARKING**

There is limited space within Greenway Park to increase the parking available and needed on weekends.

## **INCREASING DEMAND FOR LIMITED BAYS**

- The Cherrybrook Technology High School is a large school and the teachers and students park in the surrounding streets such as Purchase Road, Hancock Drive and Gwynellen Place.
- Staff from the Cherrybrook Village Shopping Centre park in Kenburn Avenue.
- Bus commuters park on-street in Macquarie Drive and Shepherds Drive as shown in Figure 3-59.



Figure 3-59: Macquarie Drive bus commuters

## **SEASONAL PARKING SHORTFALLS**

• During peak sporting season and on weekends there is not enough parking at Greenway Park so the parkers overflow into the surrounding streets.

# **INFILTRATION INTO RESIDENTIAL AREAS**

 Parking from shoppers, staff, bus commuters park in the unrestricted residential streets within the town centre.

## 3.8.3 OPPORTUNITIES

The Council has many opportunities to improve the availability and convenience of parking within the Cherrybrook town centre.

#### **BETTER USE OF CURRENT SUPPLY**

 Parking management strategies can be varied to accommodate different user requirements. For example, the sporting parking demands on the weekends at Greenway Park.

#### **AVAILABILITY OF SUITABLE LAND FOR ADDITIONAL PARKING**

• Council needs to find some land within or on the perimeter of Greenway Park suitable for additional parking within the town centre to alleviate the high weekend demand for parking at this location.

#### 3.8.4 THREATS

### **INFILTRATION INTO RESIDENTIAL AREAS**

 Without effective parking management, the increase in demand for parking will increase the number of vehicles parking in residential areas. This particularly applies to the high demand for commuter parking and limited free supply and the high demand for weekend sporting parking and limited supply in Greenway Park.

### 3.8.5 KEY FINDINGS

- Underutilisation of Greenway Park car parking during the week, but high demand during the
  weekend, resulting in the overflow into surrounding streets. Council needs to find some land
  within or in the perimeter of Greenway Park for additional parking within the town centre to
  alleviate the high weekend demand.
- Limited parking controls in and around the town centre.

# 3.9 NORMANHURST TOWN CENTRE

### 3.9.1 STRENGTHS

## SPATIAL EXTENT OF CONTROLLED PARKING

- Normanhurst Town Centre has some on-street parking controls as detailed below:
  - 1P eastern side of Buckingham Avenue near Denman Parade
  - 1P Denman Parade between Normanhurst Road and Buckingham Avenue as presented in Figure 3-60.



Figure 3-60: Denman Parade 1P parking

## LEVELS OF ENFORCEMENT AND COMPLIANCE

Council rangers patrol the streets of Normanhurst Town Centre three times per week to ensure turnover
of the high demand parking bays.

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There is a taxi zone and pedestrian crossing located on Denman Parade outside the station and to the west of Normanhurst Road as seen in Figure 3-61.



Figure 3-61: Taxi Zone and Pedestrian crossing on Denman Parade

• There are bus stops along Pennant Hills Road, Malsbury Road and Denman Parade as seen in Figure 3-62.



Figure 3-62: Denman Parade bus stop

• A pedestrian refuge is located on Buckingham Avenue providing a safe crossing location for pedestrians walking along Denman Parade as seen in Figure 3-63.



Figure 3-63: Denman Parade pedestrian refuge

Normanhurst Train Station is accessible from Denman Parade.

## 3.9.2 WEAKNESSES

# **ON-STREET AND OFF-STREET PARKING SUPPLY**

• There is no Council owned off-street parking supply in the Town Centre.

# SPATIAL EXTENT OF CONTROLLED PARKING

- There are many streets in and around the town centre with no controlled parking such as:
  - Buckingham Avenue
  - Huddart Avenue
  - Milson Parade
  - Malsbury Road
  - Eaton Street
  - Hammond Avenue

- Normanhurst Road
- Most of Denman Parade

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There are no on-street cycle markings to remind drivers to share the road with cyclists.

#### **INFILTRATION INTO RESIDENTIAL AREAS**

- The commuter parking overflows into the following residential streets:
  - Huddart Avenue (see Figure 3-64)
  - Buckingham Avenue
  - Normanhurst Road
  - Denman Parade
  - Eaton Avenue
  - Johns Avenue
  - Hammond Avenue
  - Malsbury Road



Figure 3-64: Commuter parking in Huddart Avenue

# PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

• There are no observed on-street parking bays for persons with a disability located in the Normanhurst Town Centre.

# 3.9.3 KEY FINDINGS

- There is very little Council owned off-street parking supply in the town centre, with streets in and around the town centre with no controlled parking, and no on-street parking bays for persons with a disability.
- Commuter parking overflows into residential streets.

## 3.10 CHERRYBROOK METRO PRECINCT

### 3.10.1 STRENGTHS

## **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

The Cherrybrook Station Car Park is a 400-bay commuter car park.

## SPATIAL EXTENT OF CONTROLLED PARKING

- The extent of on-street controlled parking in the Cherrybrook Metro Precinct is limited to the following:
  - 4P parking one side only along Robert Road from Bradfield Parade to Dalkeith Road

### LEVELS OF ENFORCEMENT AND COMPLIANCE

- Council is contracted to patrol the Cherrybrook station car park.
- Council rangers patrol the Cherrybrook Metro Precinct every weekday to ensure turnover of high demand parking bays.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

 Bradfield Parade is a 40 shared zone as seen in Figure 3-65 as it is the main access road to the train station.



Figure 3-65: Bradfield Parade 40 shared zone

 There are two main pedestrian crossings along Bradfield Road, one near the intersection with Franklin Road as shown in Figure 3-66 and one directly outside the train station entrance as shown in Figure 3-67.



Figure 3-66: Bradfield Road pedestrian crossing near Franklin Road



Figure 3-67: Bradfield Road pedestrian crossing outside station

• There is undercover bicycle parking in the Opal bicycle shed as shown in Figure 3-38 and bicycle parking near the bus stops along Bradfield Road.



Figure 3-68: Bicycle parking along Bradfield Road

• There is a bus station located on Bradfield Road outside the Cherrybrook Train Station as shown in Figure 3-69.



Figure 3-69: Bus station on Bradfield Road

# PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

• There are easily accessible on-street parking spaces for persons with a disability located directly outside the train station on Bradfield Road as seen in Figure 3-70.



Figure 3-70: Bradfield Road on-street parking for persons with a disability

# 3.10.2 WEAKNESSES

### **ON-STREET AND OFF-STREET PARKING SUPPLY**

- The Cherrybrook Station Car Park was supposed to be constructed with 800 bays but only 400 bays are provided.
- There is no other off-street car parking available around the station for commuters.

## **INCREASING DEMAND FOR LIMITED BAYS**

• The Cherrybrook Station Car Park is at full capacity in the morning peak with vehicles overflowing onto the surrounding streets.

# **INFILTRATION INTO RESIDENTIAL AREAS**

 Commuter overspill in surrounding streets including Robert Road and John Road as seen in Figure 3-71.



Figure 3-71: Commuter parking in John Road

### 3.10.3 OPPORTUNITIES

The Council has some opportunities to improve the availability and convenience of parking within the Cherrybrook Metro Station Precinct.

### PARKING MANAGEMENT DEPARTMENT

• Parking surveys undertaken every three years will provide data that can be used to compare demand and supply issues and help to manage the parking into the future.

#### 3.10.4 KEY FINDINGS

- There are plenty of opportunities for commuters to use different modes of travel, with the provision of undercover bicycle parking, kiss and drop areas, bus stations on Bradfield and plenty of pedestrian crossings around the area.
- The Cherrybrook Station car park was supposed to be constructed with 800 bays, but only 400 bays are provided, resulting in commuter overspill in surrounding areas.
- Without effective parking management in this area with high demand for commuter parking and limited free supply, there will continue to be parking overspill.



# 3.11 FAGAN PARK

### 3.11.1 STRENGTHS

## SPATIAL EXTENT OF CONTROLLED PARKING

All off-street parking in Fagan Park is pay and display parking at a cost of \$6 per day.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There is a pedestrian crossing located on Arcadia Road outside the main entrance to Fagan Park as shown in Figure 3-72.



Figure 3-72: Pedestrian crossing on Arcadia Road

• There are pedestrian and cyclist paths all throughout Fagan Park accessible through the carpark.

# PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

 There are easily accessible sections of parking for persons with a disability within the Fagan Park car parks as shown in Figure 3-73.



Figure 3-73: Parking for persons with a disability in Fagan Park

#### **PAY PARKING**

 An annual pass is available for private vehicles up to 8 seats for \$41 per annum for residents of Hornsby Shire Council area.

### 3.11.2 WEAKNESSES

### **ON-STREET AND OFF-STREET PARKING SUPPLY**

• There is no on-street parking on Carrs Road around Fagan Park due to the narrow width as shown in Figure 3-74.



Figure 3-74: Narrow Carrs Road has no on-street parking

### **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

The parking within Fagan Park is underutilised during the weekdays as shown in Figure 3-75.



Figure 3-75: Fagan Park underutilised parking on weekdays

## LEVELS OF ENFORCEMENT AND COMPLIANCE

- Without vigilant enforcement it is observed that compliance with the \$6 parking fee is varied due to the location of the car park.
- Council rangers do not currently patrol Fagan Park car parks.

# **SEASONAL PARKING SHORTFALLS**

• Due to the size of the park and various different activities available within the park, weekends and holidays result in high occupancy within the off-street parking.

## 3.11.3 OPPORTUNITIES

The Council has some opportunities to improve the occupancy and convenience of parking within Fagan Park.

### CONTROL. INCOME AND EXPENDITURE

- The review of pay parking fees within the park during the underutilised weekdays with a view to reducing the fee will benefit all stakeholders.
- Advertising the existing \$41 annual parking permit to residents will increase revenue and encourage more occupancy of the car park during the week.

### PARKING MANAGEMENT DEPARTMENT

• Parking surveys undertaken every three years will provide data that can be used to compare demand and supply issues and help to manage the parking into the future.

### **3.11.4 THREATS**

#### LEVELS OF ENFORCEMENT AND COMPLIANCE

Without effective enforcement there will be limited compliance for weekday parking at Fagan Park.

#### 3.11.5 KEY FINDINGS

- All off-street parking in Fagan Park is pay and display parking at a cost of \$6 per day, with a \$41 annual parking permit.
- The parking within Fagan Park is underutilised during the weekdays as shown in Figure 3-75, with the Carrs Road car park being underutilised throughout the week.
- Advertising the existing \$41 annual parking permit to residents will increase revenue and encourage more occupancy of the car park during the week.
- Without effective enforcement there will be limited compliance for weekday parking at Fagan Park.

# 3.12 GALSTON

### 3.12.1 STRENGTHS

## SPATIAL EXTENT OF CONTROLLED PARKING

- Galston study area has some on-street parking controls as detailed below:
- 30 min 90-degree parking on Galston Road outside the shops.
- Galston study area has some off-street parking controls as detailed below:
- 5-minute parking for limited bays in the Galston Village Shopping Complex

## PARKING FOR LOADING AND COMMERCIAL VEHICLES AND THE DISABLED

 There is a loading zone on Arcadia Road from the roundabout with Galston Road to the Galston Shopping Village Complex driveway that is restricted to operation between 9am – 4pm as seen in Figure 3-76.



Figure 3-76: Arcadia Road loading zone

# IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There is a pedestrian refuge on Galston Road adjacent to the shops and bus stops as shown in Figure 3-77.



Figure 3-77: Galston Road pedestrian refuge

• Undercover bicycle parking is located just off Griffith Close on the ground floor of the Aldi carpark as seen in Figure 3-78.



Figure 3-78: Undercover bicycle parking

• There are bus stops on either side of Galston Road outside the shops as seen in Figure 3-79.



Figure 3-79: Bus stops on Galston Road outside the shops

## **ON-STREET AND OFF-STREET PARKING SUPPLY**

• The on-street parking supply along Arcadia Road, The Glade, Glen Street and Galston Road is underutilised as seen in Figure 3-80.



Figure 3-80: Underutilised parking along Galston Road

• The off-street parking at Galston Village Shopping Complex is less than 50% occupancy as shown in Figure 3-81.



Figure 3-81: Off-street parking utilisation

# 3.12.2 WEAKNESSES

# LEVELS OF ENFORCEMENT AND COMPLIANCE

• Turnover of the 30-minute 90-degree parking outside the shopping complex as seen in Figure 3-82 requires effective enforcement.



Figure 3-82: 30-minute 90-degree parking

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

 There are no on-street cycle markings to remind drivers to share the road and beware of cyclists travelling to, from and through Galston.

## 3.12.3 OPPORTUNITIES

The Council has some opportunities to improve the availability and convenience of parking within the Galston study area.

## **IMPROVED ENFORCEMENT**

 New enforcement technology will help improve the turnover of vehicles in the 90-degree 30 minute parking along Galston Road.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• Cycle line marking on street along Galston Road and Arcadia Road would assist in reminding drivers to share the road with cyclists in the area.

## 3.12.4 KEY FINDINGS

- Turnover of the 30-minute 90-degree parking outside the shopping complex as seen in Figure 2-83 requires effective enforcement.
- The on-street and off-street parking supply around the Galston town centre is underutilised throughout the week.

## 3.13 SALISBURY ROAD AND LEIGHTON PLACE INDUSTRIAL PRECINCT

#### 3.13.1 STRENGTHS

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There are bus stops located along Salisbury Road and Leighton Place that are marked as bus zones between 6-9am and 3-6pm for employees of the industrial estate as shown in Figure 3-83



Figure 3-83: Bus zones on Leighton Place

Pedestrian footpaths are provided through the industrial estate.

#### LEVELS OF ENFORCEMENT AND COMPLIANCE

 Council rangers patrol the streets of Salisbury Road and Leighton Place Industrial Precinct three times per week and also in response to abandoned vehicle complaints.

### 3.13.2 WEAKNESSES

# **ON-STREET AND OFF-STREET PARKING SUPPLY**

 Staff and employees park on-street despite the businesses in the industrial estate having a reasonable supply of off-street parking.

# **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

 Off-street parking is underutilised causing on-street parking to be at full occupancy for most of the weekdays as seen in Figure 3-84.



Figure 3-84: Salisbury Road on-street parking occupancy

#### EXISTING COUNCIL POLICIES AND CURRENT PARKING MANAGEMENT

 Council doesn't encourage businesses to use their development approved off-street staff and employee parking spaces.

#### SPATIAL EXTENT OF CONTROLLED PARKING

 Leighton Place and Salisbury Road have no controlled parking, encouraging employees to park easily on-street all day.

## IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

• There are no on-street cycle markings or signage in the industrial area and no observed cycle parking.

#### 3.13.3 OPPORTUNITIES

The Council has some opportunities to improve the availability and convenience of parking within the Salisbury Road and Leighton Place Industrial Precinct.

#### **BETTER USE OF CURRENT SUPPLY**

- Council should encourage business owners to provide parking on-site for their staff.
- Business owners should remove any stock or items that are prohibiting access to development approved parking on-site.
- Removing employees from parking on-street will provide parking for customers directly outside their destination business.

#### IMPROVEMENT OF THE PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT ENVIRONMENT

Providing cycle signage and line marking with end of trip facilities throughout the industrial precinct will
encourage employees to cycle to the Salisbury Road and Leighton Place Industrial Precinct.

# **3.13.4 THREATS**

## **EFFECTIVE UTILISATION OF CURRENT SUPPLY**

 Without removal of the current occupancy of employees on-street, the businesses in the Salisbury Road and Leighton Place Industrial Precinct will experience lack of customers as there is a perception that there are no free parking spaces available.

### 3.13.5 KEY FINDINGS

- Staff and employees park on-street despite the businesses in the industrial estate having a
  reasonable supply of off-street parking, resulting in off-street parking being underutilised and
  on-street parking to be at full occupancy for most weekdays as seen in Figure 3-84.
- Council should encourage business owners to provide parking on-site for their staff and remove any stock or items that may prohibit access to development approved parking on-site.
- Without removal of the current occupancy of employees on-street, the businesses in the Salisbury Road and Leighton Place Industrial Precinct will experience lack of customers as there is a perception that there are no free parking spaces available.