



Carrington Commercial Facility

Port of Newcastle

Green Travel Plan

September 2021

SECAsolution >>>

Carrington Commercial Development,
46 Fitzroy Street, Carrington

Green Travel Plan

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Contents

1	Purpose of Report and Study Objectives	1
1.1	Background	1
1.2	Scope of Report.....	1
1.3	Planning Context	2
1.4	Methodology	2
2	Existing Transport Services and Facilities.....	3
2.1	Site Location.....	3
2.2	Parking	3
2.3	Train Travel	4
2.4	Light Rail.....	4
2.5	Bus Travel	5
2.6	Ferry Travel	8
2.7	Taxi and Uber Services	8
2.8	Trip Planning	8
2.9	Pedestrians.....	9
2.10	Cycling.....	9
3	Access for Future Travel Demands	14
4	Transportation Analysis.....	16
4.1	Opportunities to reduce commuter car dependency	16
5	How to influence Change	20
5.1	Background on Workplace and Sustainable Travel Plans	20
5.2	Spheres of Influence.....	20
6	Predicted transport mode shift	22
7	Active Travel Plan Recommendations.....	23
7.1	Active Transport	23
7.2	Public Transport.	23
7.3	Carpooling	23
7.4	Bicycle and Pedestrian Travel	24
7.5	Telecommuting	24
7.6	Reduce demand for private vehicles for work-day travel.....	24
7.7	Parking Policy.....	24
7.8	Monitoring and Review	24
	Attachment A - Site Plan.....	25

1 Purpose of Report and Study Objectives

1.1 Background

Seca Solution Pty Ltd has been commissioned by Ramboll Australia Pty Ltd on behalf of the Port of Newcastle to prepare a Green Travel Plan for the proposed commercial development at 46 Fitzroy Street, Carrington. This Green Travel Plan has been prepared to meet the requirements of the Department of Planning, Industry & Environment.

A Green Travel Plan is seen as a way of supporting active travel, making it easier for employees to get to and from the workplace and to reduce dependence on private vehicles and parking space.

“A travel plan typically includes support for walking, cycling, public transport and car sharing reinforced with promotion and incentive and the management of workplace parking.”

Premier's Council for Active Living New South Wales (PCAL)

Active Workplaces are identified by the PCAL as a means by which workplace health and wellbeing can be promoted and supported. Investing in workplace health promotion (such as physical activity programs) has the potential to increase economic return for employers through enhanced worker productivity, reduced absenteeism and improved corporate image. (PANORG (2009) *Evidence module: Workplace physical activity and nutrition interventions.*)

The PCAL outlines Travel Plans as a “business management tool designed to address an organisation's travel needs and impacts. It can deliver efficiencies, savings and benefits to an organisation, its operation and its employees. A GreenTravel Plan can include promotion of ‘sustainable’ travel choices such as walking, cycling, using public transport and car-sharing, as well as reducing the need to travel by encouraging the use of video-conferencing and remote working. This will be reinforced with promotion and incentives and by the management of workplace parking.”

The report has been prepared by Sean Morgan (qualified traffic engineer, road safety auditor) and Cathy Thomas (road safety auditor, qualified to prepare traffic management plans, undertaken courses at the University of Technology Sydney in preparing workplace travel plans).

1.1.1 Spheres of Influence

The areas which may be influenced by the implementation of a travel plan include:

- Reduction in private motor vehicle travel by individuals, the impact on the road network and associated environmental costs and costs to the employee
- Increased walking, cycling and public transport use and its resulting increase in physical exercise and health benefits
- Parking policy, covering parking pricing and supply
- Reduction in parking demand, its associated cost of provision and in turn the cost to employees for parking usage

1.2 Scope of Report

The plan has been developed in conjunction with the Port of Newcastle with consideration to the future plan of Transport for New South Wales (TfNSW) and Newcastle Transport as well as the City of Newcastle DCP and City of Newcastle Parking Strategy. It is noted that the end users for the site are not yet determined. The various tasks identified and completed have included:

1. Include objectives and modes share targets to define the direction and purpose of the GTP	Chapter 6
2. Include specific tools and actions to help achieve the objective and mode share targets	Chapter 7
3. Include measures to promote and support the implementation of the plan, including financial and human resource requirements, roles and responsibility for relevant employees involved in the implementation of the GTP	Chapter 7
4. Include details regarding the methodology and monitoring/review program to measure the effectiveness of the objectives and mode share targets of the GTP, including the frequency of monitoring and the requirement for travel surveys to identify travel behaviours of users of the development	Chapter 7
5. Include tools, actions and processes to address the scenario where the mode share targets are not achieved, including the approach to provide additional management and mitigation measures and infrastructure (where deemed necessary)	Chapter 7

1.3 Planning Context

In developing this study the following has been considered:

Workplace Travel Plans	Premiers Council for Active Living NSW
Green Travel Plans	Newcastle City Council
Guide to Traffic Management Park 11: Parking	Austroads Inc 2016
Austroads Guides to cycling (various)	Austroads
Guide to Road Design Part 6A: Pedestrian and Cycling Paths	Austroads Inc 2009
NSW Planning Guidelines for Walking and Cycling	
On Our Bikes – City of Newcastle Cycling Plan 2021-2030	
On the Streets– City of Newcastle Parking Implementation Plan 2021-2030	

1.4 Methodology

The methodology applied to the development of this plan focussed on the following key questions:

1. What travel options are available in the local area?
2. What are the potential travel needs of the future staff?
3. How can staff be supported and encouraged to utilise active travel measures over single car use?
4. What sustainable transport goals can be established for the site?

2 Existing Transport Services and Facilities

2.1 Site Location

The subject site is located at 46 Fitzroy Street Carrington as shown in Figure 2-1. It has frontage to both Fitzroy Street and Denison Street with access provided from both streets.

The surrounding land use consists of predominately commercial and industrial uses being part of the adjacent port area with the residential village of Carrington to the north-east.

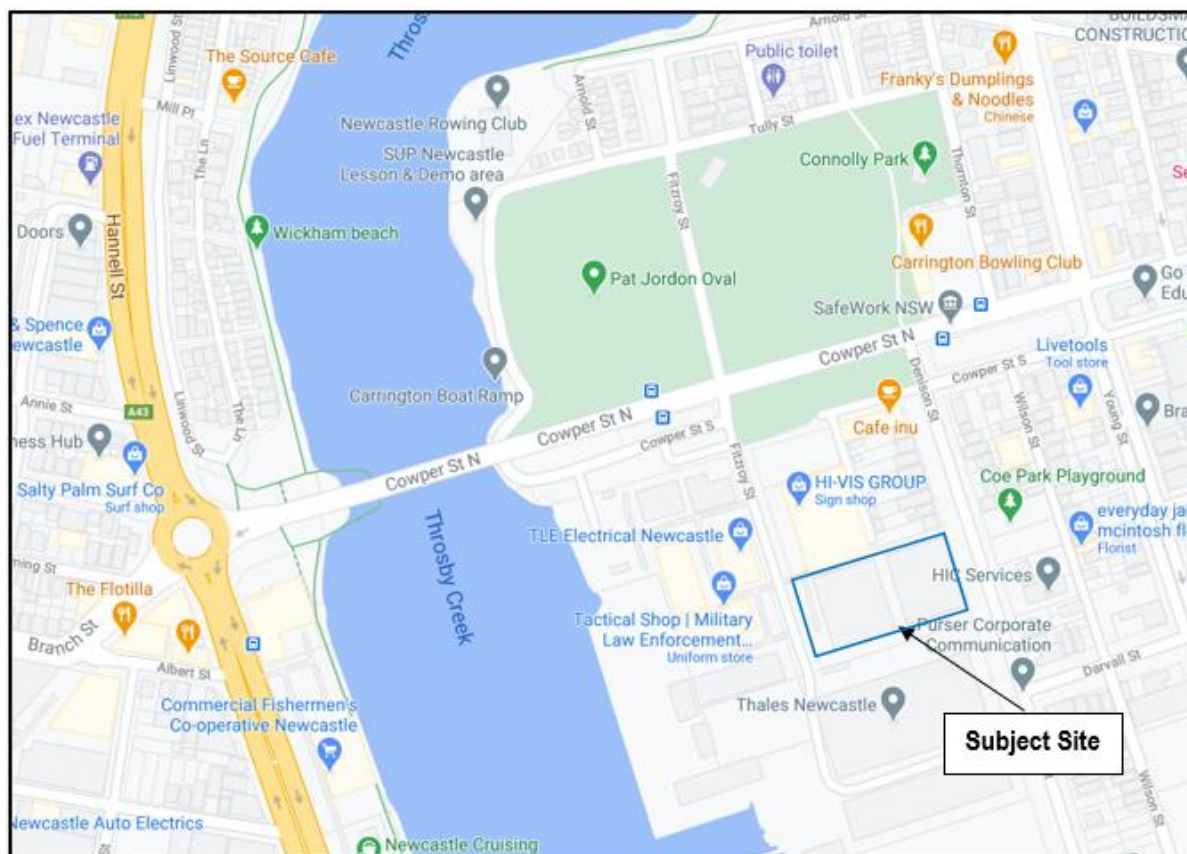


Figure 2-1 Site Location (Source: Google maps)

2.2 Parking

The Greater Newcastle Future Transport Plan outlines a strategic approach to parking considerations for the Greater Newcastle area, identifying the need for a consistent approach to managing parking throughout the region.

In addition, a parking strategy was developed by TfNSW (*The Newcastle City Centre Parking Strategy*) which set out a series of principles and opportunities for parking in the Newcastle city centre. The strategy quantified the impact of Newcastle light rail, its associated roadworks, and Newcastle Interchange on parking supply in the city centre, within the context of broader parking supply in the city centre and its immediate surrounds. This follows a study previously commissioned by NCC which considered a short, medium and long term strategic vision for parking. The strategy was designed to improve parking efficiency and supply in the short term, with efficient and cost effective parking in the medium term able to partner with the use of parking as a travel demand management tool. Ultimately the long-term vision (5+ years) would see a culture of public transport, cycling and walking in the city with parking used strongly as a travel demand management tool. The 2021 Parking Implementation Plan provides the guidance to parking management in the CBD.

2.2.1 On-street Parking Provision

Kerbside parking is available on streets surrounding the site with restrictions associated with approaches to driveways and intersections. A 1 hour Parking sign is located on Fitzroy Street pointing north of the site.

On-street parking is generally heavily utilised adjacent to the various businesses in this area.

2.2.2 Off-Street Parking Provision

At grade car parking will be provided for 172 cars along with motorbike parking and bicycle storage.

- 138 external staff parking (rear). This includes one accessible parking space.
- 10 external visitor parking (front) spaces. This includes one accessible parking space
- 15 staff spaces (secure undercover)
- eight spaces suitable for charging of electric vehicles (secure undercover)
- 1 loading space (front).

2.3 Train Travel

2.3.1 Range of Services

Newcastle is serviced by both intercity and regional train services provided by CityRail. The Newcastle Interchange at Wickham allows for connection to the heavy rail at this location.

The rail network in Newcastle provides access to the Hunter Line which connects Scone or Dungog via Maitland and Warabrook to Newcastle whilst the Central Coast Newcastle Line connects the city with the western side of Lake Macquarie through to Wyong, Gosford and Sydney via Broadmeadow.

2.3.2 Frequency of services

On the Central Coast Line trains run every hour with higher frequencies in weekday peak hours. Minor stations have a two hourly service at weekends.

On the Hunter Line services run every half hour between Newcastle and Maitland however less frequent services are available to Scone or Dungog. Minor stations have hourly services during weekends.

2.3.3 Connection to Carrington

The Newcastle Interchange is 1350m walking distance to the south-west of the subject site.

2.4 Light Rail

Light Rail

The development of the light rail network along Worth Place, Hunter Street, Scott Street and beyond includes six stations providing convenient commuting throughout the CBD (Figure 2-2). It provides an effective inner-city transport system enabling residents and workers within the city centre to commute throughout the CBD as well as connect with the Newcastle Interchange.

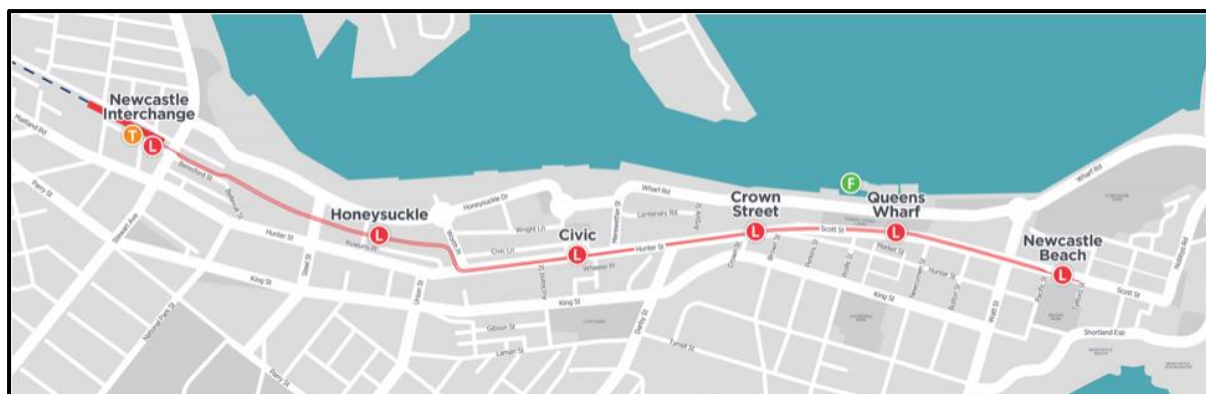


Figure 2-2 Newcastle Light Rail Route

2.4.1 Frequency of Service

The turn-up-and-go service operates from 5am to 1am, seven days a week. Services every 7.5 minutes during the peak periods (7am-10am and 3pm-7pm) and every 15 minutes at other times.

2.4.2 Connection to Carrington

There is no direct connection between the light rail and Carrington however it does provide a connection to bus services at the Newcastle Interchange as well as pedestrian links available at Wickham.

2.5 Bus Travel

Newcastle Transport (Keolis Downer) is the major provider of bus services throughout the greater Newcastle region with bus routes through the area shown in Figure 2-4.

Route 24 operates between Newcastle and Wallsend via Mayfield. During the start and finish of the working day it provides regular services which provide Carrington with bus connection to the CBD including Newcastle Interchange.

Monday to Friday										
King St at National Park St, Newcastle West	05:10	05:47	06:45	07:13	07:55	08:27	09:09	10:04	10:59	
Bourke St near Elizabeth St, Carrington	05:21	05:58	06:56	07:26	08:08	08:40	09:22	10:17	11:12	
Ingall St opp Mayfield East Public School, Mayfield	05:26	06:03	07:02	07:33	08:15	08:47	09:27	10:22	11:17	
Maitland Rd near Hanbury St, Mayfield	05:34	06:11	07:10	07:41	08:24	08:56	09:35	10:30	11:25	
Georgetown Rd at Coolamin Rd, Waratah	05:40	06:17	07:16	07:50	08:33	09:05	09:41	10:36	11:31	
Lorna St at Angus Ave, Waratah West	05:45	06:22	07:22	07:56	08:40	09:12	09:47	10:42	11:37	
Ring Rd opp Mathematics Building, Callaghan	05:52	06:29	07:29	08:04	08:48	09:20	09:55	10:50	11:45	
Stockland Jesmond Shopping Centre, Blue Gum Rd, Jesmond	05:56	06:33	07:32	08:09	08:53	09:25	09:59	10:54	11:49	
Tyrrell St at Council St, Wallsend	06:04	06:41	07:41	08:19	09:03	09:35	10:09	11:04	11:59	
Wallsend District Library, Bunn St, Wallsend	06:05	06:42	07:42	08:20	09:04	09:36	10:10	11:05	12:00	
Monday to Friday										
Wallsend District Library, Bunn St, Wallsend	12:15	13:15	14:05	15:10	16:10	16:45	17:15	17:45	18:17	
Stockland Jesmond Shopping Centre, Blue Gum Rd, Jesmond	12:25	13:25	14:15	15:20	16:20	16:55	17:25	17:55	18:27	
Mathematics Building, Ring Rd, Callaghan	12:30	13:30	14:20	15:25	16:25	17:00	17:30	18:00	18:32	
Edith St opp Calvary Mater Newcastle, Waratah	12:38	13:38	14:28	15:34	16:34	17:07	17:37	18:07	18:39	
Georgetown Rd opp Coolamin Rd, Waratah	12:43	13:43	14:33	15:40	16:40	17:11	17:40	18:10	18:42	
Maitland Rd near Hanbury St, Mayfield	12:49	13:49	14:39	15:47	16:47	17:17	17:46	18:16	18:48	
Mayfield East Public School, Ingall St, Mayfield	12:57	13:57	14:47	15:55	16:55	17:25	17:54	18:24	18:56	
Bourke St near Elizabeth St, Carrington	13:02	14:02	14:52	16:00	17:00	17:30	17:59	18:29	19:01	
Hannell St after Cowper St, Wickham	13:08	14:08	14:58	16:07	17:07	17:36	18:05	18:34	19:06	
Marketown Shopping Centre, Steel St, Newcastle West	13:16	14:16	15:06	16:15	17:15	17:44	18:12	18:40	19:12	

Figure 2-3 Excerpt of Route 24 bus timetable

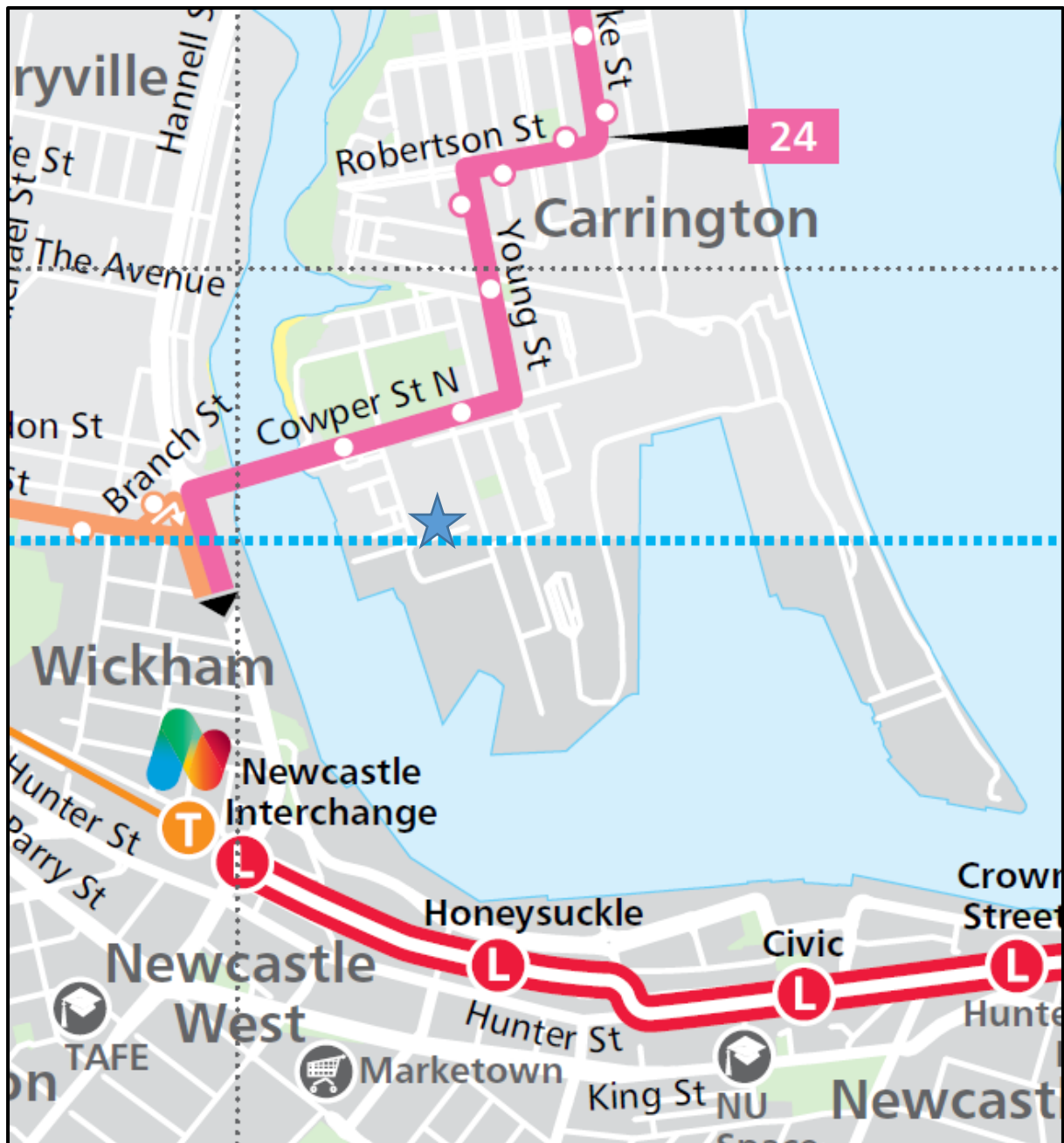




Figure 2-4 Bus routes servicing Carrington (Subject site ★) (Source: Newcastle Transport)

The Hunter Region is supported by further private bus services in addition to the Newcastle transport service available within Newcastle.

Table 2-1 Bus Services and Key Service Areas

Bus Company	Key Services
Hunter Valley Buses	<p>Hunter Valley Buses serving the Hunter region. Serving the areas of Singleton, Maitland, Newcastle, Edgeworth, Toronto and Morisset.</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;">  <p>Region Network Map for Region 4</p> <p>Hunter Valley Buses services for Region 4 cover the areas of Barnsley, Minmi, Edgeworth, Glendale, Toronto, Morisset, Wangi and Newcastle.</p> <p>Barnsley, Minmi, Edgeworth, Toronto and Morisset Region Map</p> </div> <div style="width: 50%;"> <p>Maitland (local services) linking to Singleton, Branxton, Maitland, Woodberry and Thornton.</p> <p>Raymond Terrace and Newcastle via Hexham and Medowie</p> <p>Lemon Tree Passage to Raymond Terrace and Newcastle</p> </div> </div> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-top: 20px;"> <div style="width: 45%;">  <p>Region Network Map for Region 2</p> <p>Hunter Valley Buses services for Region 2 cover the areas of Singleton, Branxton, Rutherford, Maitland, Medowie, Raymond Terrace and Newcastle.</p> <p>Maitland & Raymond Terrace Region Map</p> </div> <div style="width: 50%;"></div> </div>
Busways	<p>Southern Lake Macquarie; linking Charlestown and Swansea with Lake Haven.</p> <p>Taree, Tea Gardens, Hawks Nest, Bulahdelah with Newcastle.</p>
Rover Coaches	<p>Cessnock (local services); linking Cessnock with Kurri Kurri, Maitland, Newcastle and Morisset.</p>
Port Stephens Coaches	<p>Local services between Fingal Bay, Soldiers Point, Nelson Bay and Raymond Terrace and between Soldiers Point and Newcastle via Newcastle Airport.</p>

2.5.1 Bus Service providers

Newcastle Transport

152 Hunter Street, Newcastle NSW 2300

Phone: 131 500

Website: www.newcastletransport.info

Hunter Valley Buses

6 Glenwood Drive, Thornton NSW 2322

Phone: 4935 7200

Email: hvbinfo@cdcbus.com.au

Website: <https://www.cdcbus.com.au/huntervalley-buses>

Busways

Email: infoline@busways.com.au

Website: www.busways.com.au

Rover Coaches

231 – 233 Vincent Street, Cessnock NSW 2325

Phone: 4990 1681

Website: rovercoaches.com.au

Port Stephens Coaches

17A Port Stephens Dr, Anna Bay NSW 2316

Phone: 4982 2940

Email: info@pscoaches.com.au

Website: www.pascoaches.com.au

2.5.2 Bus Facilities

2.5.2.1 Bus stops within the vicinity

There are bus stops located on both sides of Cowper Street, west of Fitzroy Street and east of Denison Street providing access to bus service 24.

On the westbound side of the road the bus stop provides a shelter and seat with the others being sign posted only.

The Newcastle Interchange provides connection to various bus services and is approximately 1350 metres to the south-west of the site.

Bus stops are also located on both sides of Hannell Street, to the west of the site, approximately 600 metres from the subject site.

2.5.2.2 Pedestrian connections

Footpaths are available along both sides of Denison Street and Cowper Street connecting bus stops to the subject site. There are no footpaths, only grass nature strips along Fitzroy Street.

Pedestrian crossings are available to the east of the site on Cowper Street at Young Street however there are no crossings on Cowper Street in the immediate vicinity of Fitzroy Street and Denison Street. This is consistent with the straight alignment and good visibility for pedestrians in this location as well as the level of pedestrian and vehicle demand.

A shared pathway runs north south along Throsby Creek, providing a quality pedestrian connection south to the Newcastle CBD.

2.6 Ferry Travel

Whilst Newcastle Transport operates a harbour ferry service between Queens Wharf and Stockton there is no connection available to Carrington.

2.7 Taxi and Uber Services

Newcastle Taxis operate in the greater Newcastle area 24 hours a day. Taxis can be booked by phoning 133 300 or 13 2227 (13CABS). Online booking is also available as well as a Cab App.

Uber services are also readily available in Newcastle.

2.8 Trip Planning

TfNSW provides a range of services to assist in planning bus and train travel throughout Newcastle and the Hunter.



Information can be sought online <https://transportnsw.info/trip/#/> and by calling 131 500 and selecting option 2.

The online planner provides the commuter with a mobile friendly option with real time data. This means that one can determine which service is scheduled and when it will arrive. It also includes service alerts to advise when services are delayed. Next departure information and being able to use an interactive map all improve the public transport option for commuters.

There are a number of apps promoted for mobile devices and available through app stores.

<http://www.transportnsw.info/en/travelling-with-us/keep-updated/apps/real-time-transport.page?#services>

These apps allow commuters to track their service in real-time:

- Where a train and bus is now
- Train service updates such as cancellations and delays
- If selected train stations have a lift or escalator
- The closest bus stops and routes
- Estimated bus arrival times

2.9 Pedestrians

There are quality pedestrian footpaths in the vicinity of the site, which extend from Carrington west along Cowper Street to Hannell Street.

A shared pathway runs north south on the western side of Throsby Creek (see Cycling below).

The surrounding residential suburbs of Wickham, Maryland, Hamilton and Newcastle CBD are generally well connected with footpaths reflecting the historical nature of these suburbs.

2.10 Cycling

The site includes a bike hub with storage for in the order of 50 bicycles. End of trips including showers are accessed directly from the hub.

There is a north-south shared pathway along Throsby Creek which extends south to the Newcastle CBD and the harbour foreshore through Wickham and north along Throsby Creek where it becomes part of the No 6 cycling route to Callaghan Campus. The shared pathway loops through Carrington and along Cowper Street (on-street), with a number of sections of parking / cycle lanes provided in the locality of the site.

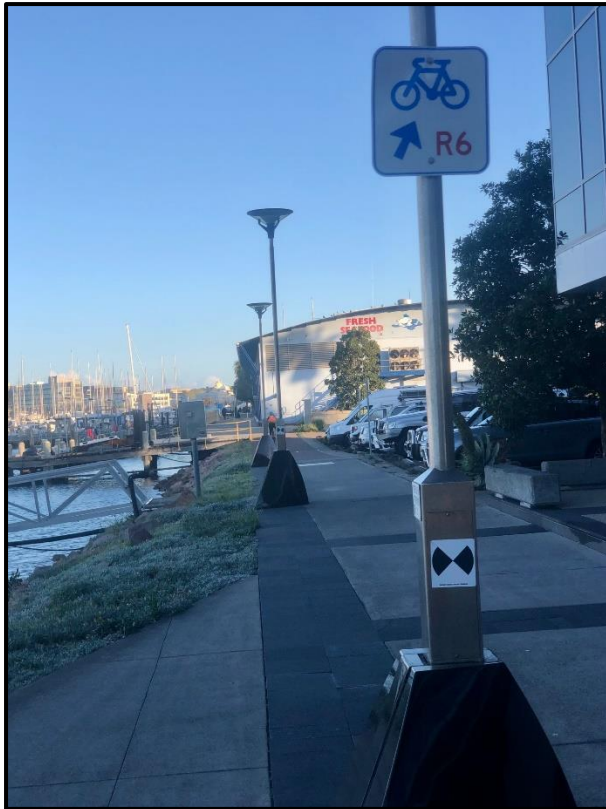


Photo 1 Shared path on western side of Throsby Creek

There are a number of regional and local cycle routes signposted in this location, which allow for access to residential areas including the CBD, Hamilton, Waratah and beyond.

Newcastle City Council provides cycling route maps with several shown to follow in Figure 2-5 and Figure 2-6.

TfNSW web site has a Cycleway Finder tool which enable cyclists to nominate their location and they will be provided various routes within the vicinity. The route information then includes degree of difficulty, lighting, conditions etc.

<http://www.rms.nsw.gov.au/roads/bicycles/cyclewayfinder>

Council has a dedicated cycling web site that promotes cycling in the city.
<http://www.newcastle.nsw.gov.au/OnYourBike/Home>

The Newcastle City Centre Cycleway Network Strategy 2017 was developed which outlines proposed changes to cycling facilities to provide quality riding opportunities as well as supporting cycling as a mode of travel in the city. These have been considered in the development of the City of Newcastle Bike Plan 2021-2030. Figure 2-7 to follow illustrates these proposed improvements to the cycling network.

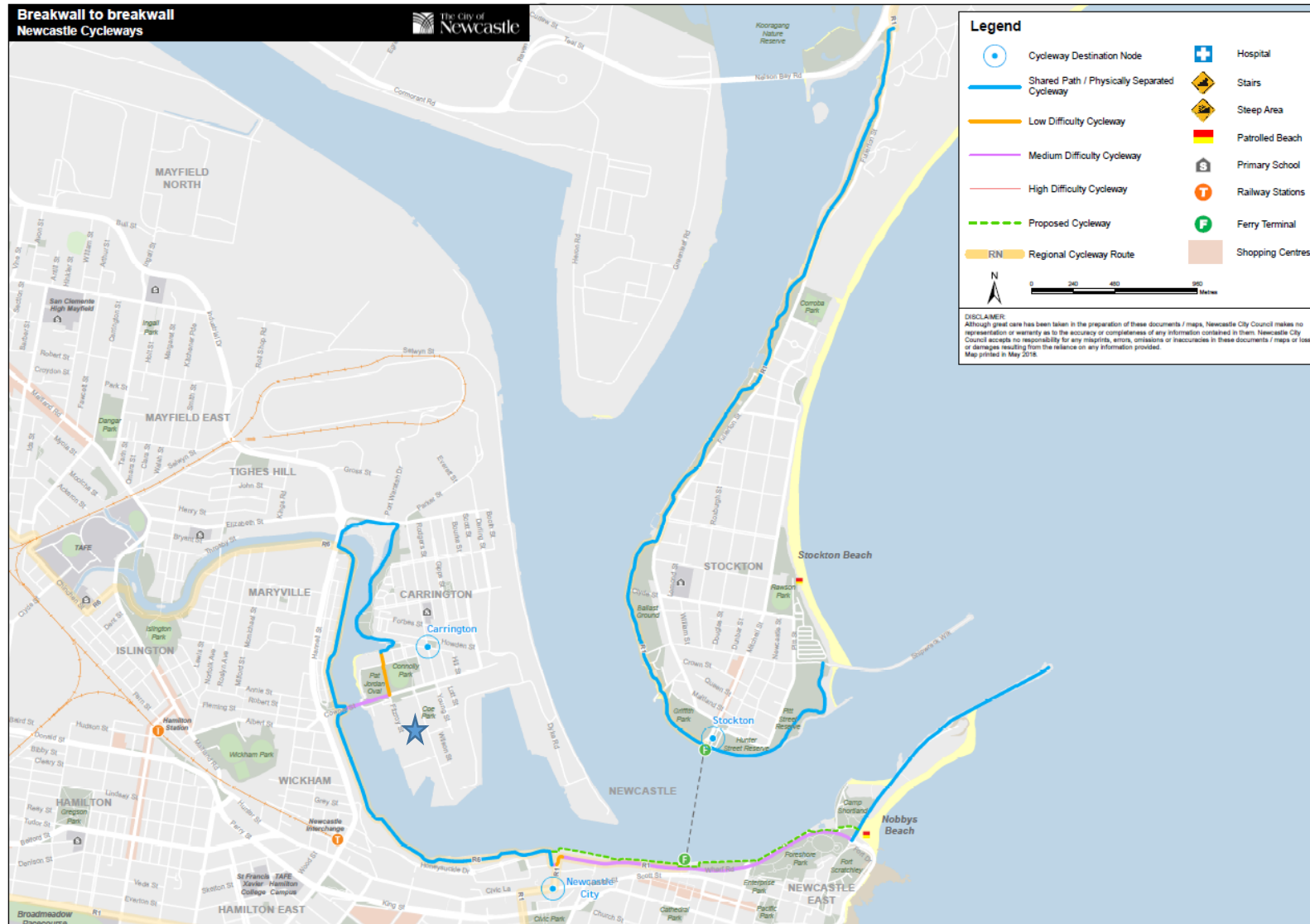


Figure 2-5 Newcastle Cycling Routes – Subject Site (★) (Source: Newcastle City Council)

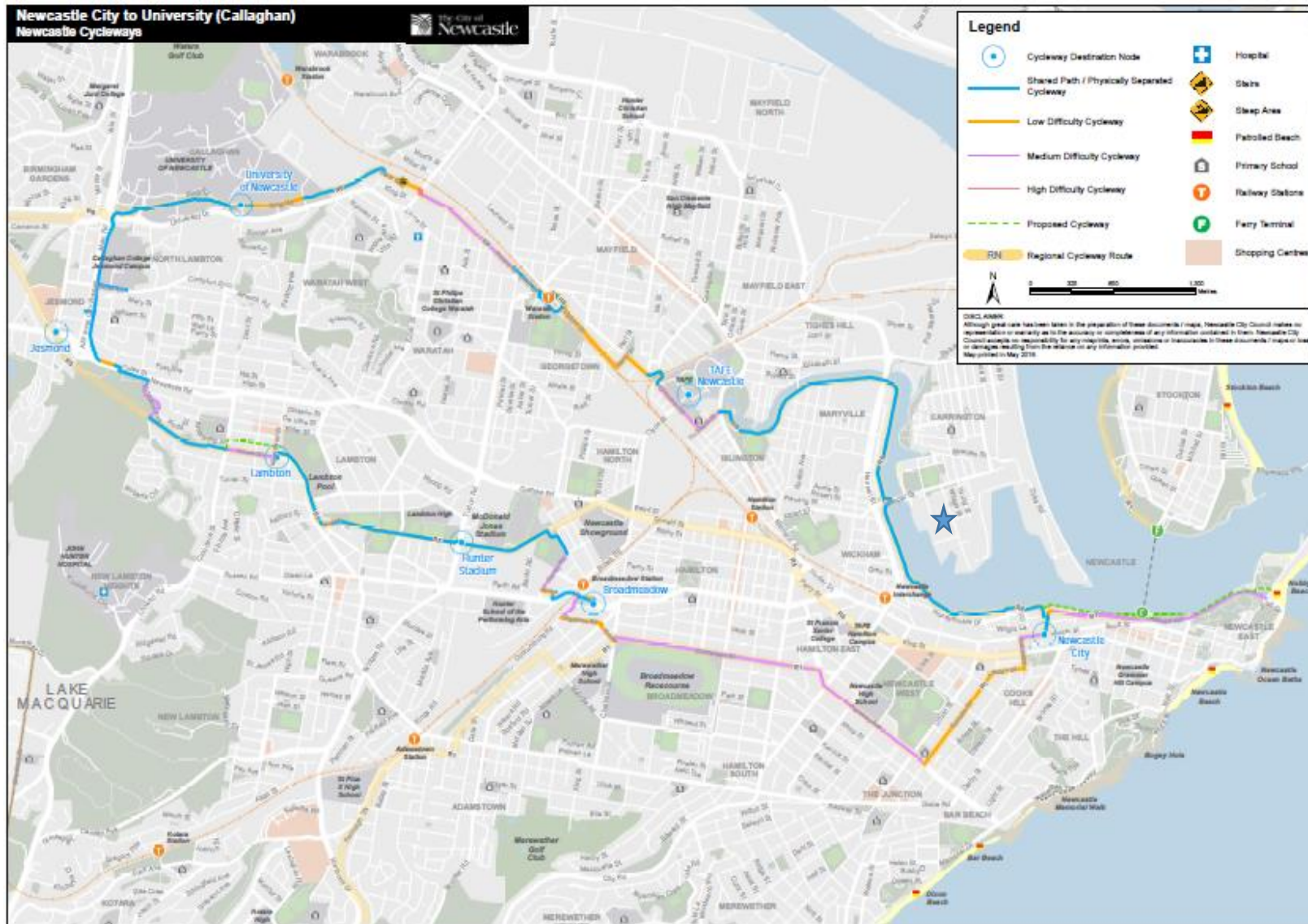


Figure 2-6 City to Callaghan Campus Cycling Map – Subject Site (★) (Source: Newcastle City Council)

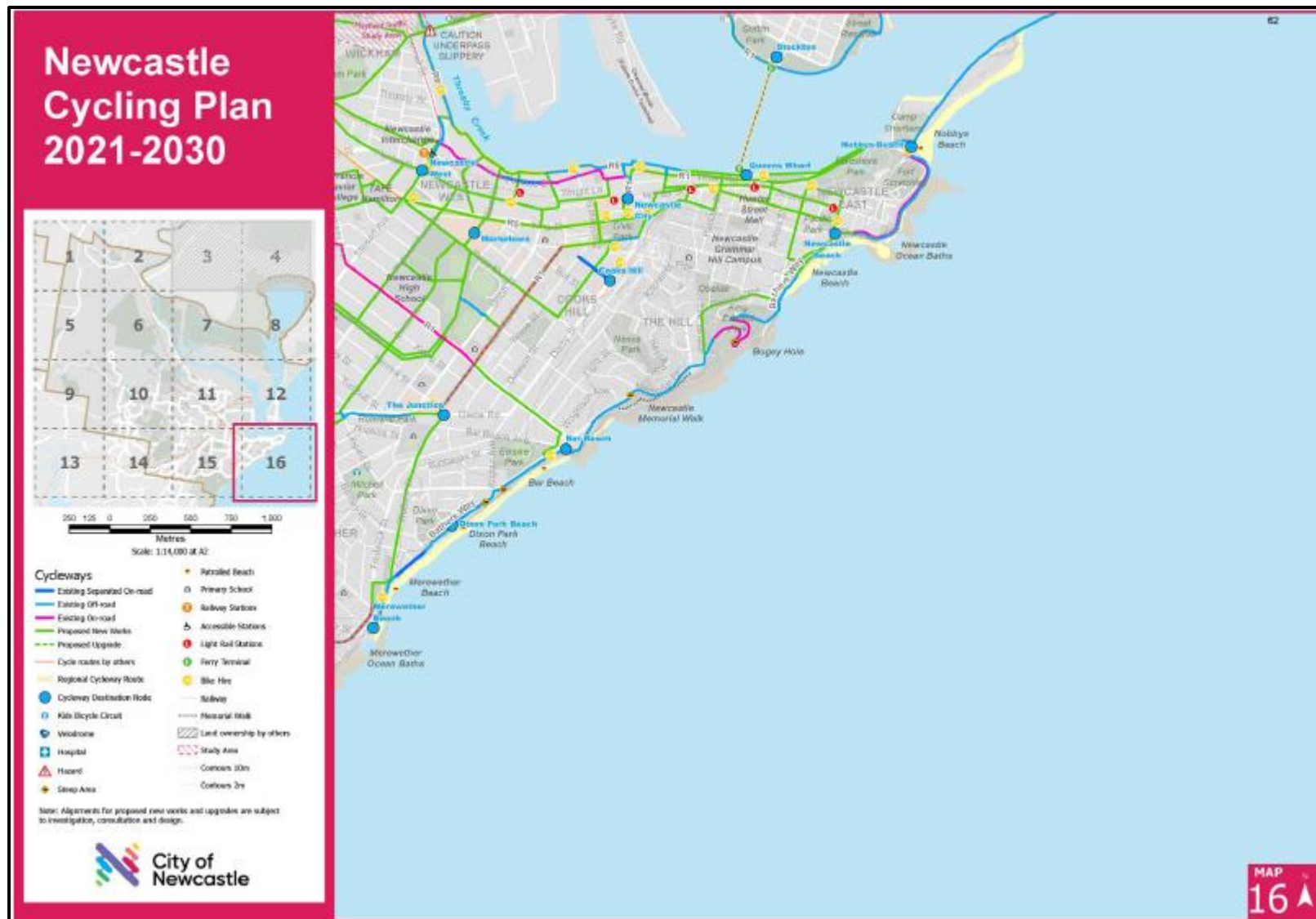
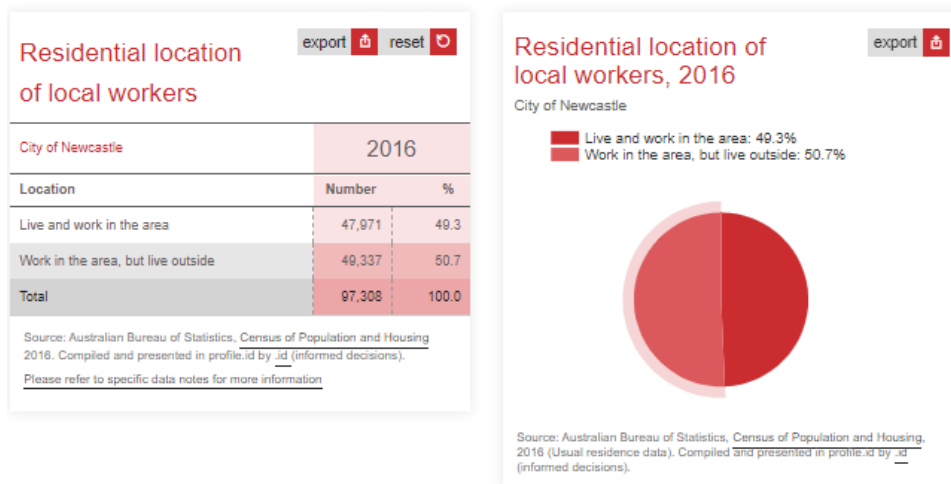


Figure 2-7 Proposed Cycling Network

3 Access for Future Travel Demands

The subject site has been designed taking into consideration the potential travel requirements for the future end users.

A review of the Newcastle Community profile (<http://profile.id.com.au/newcastle>) provides data on the likely catchment area for employees at the commercial development. This data shows that 49.3% of people working in the Newcastle LGA also live in this area. The next largest area is that of Lake Macquarie.



Detailed breakdown by LGA

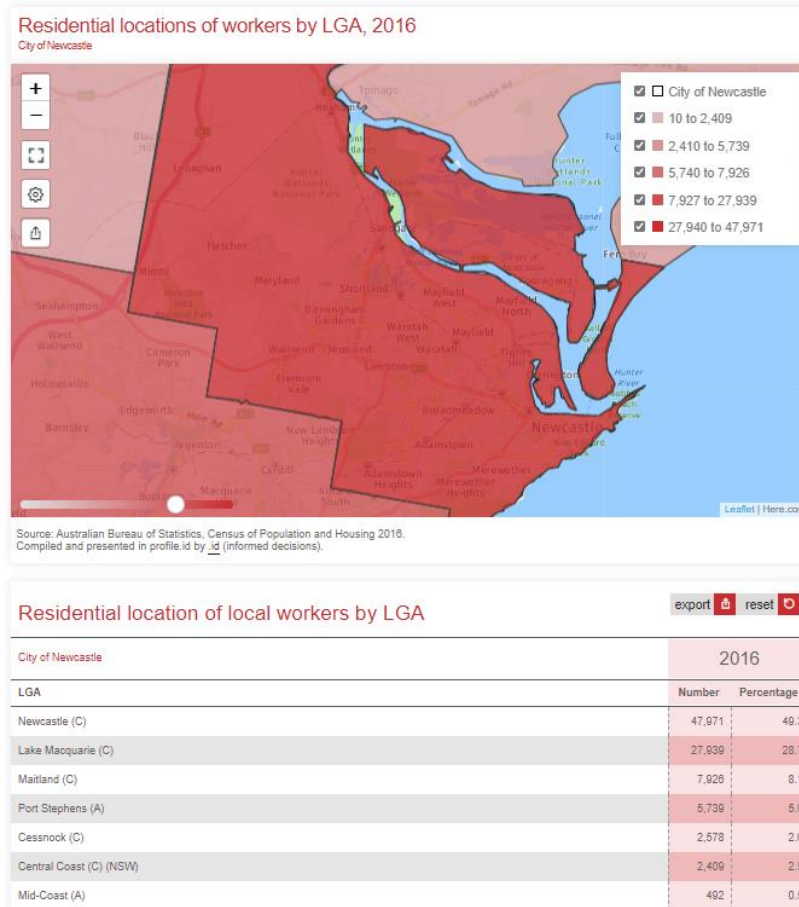


Figure 3-1 Location of Workers in the Newcastle LGA

On Census Day 2016 in the City of Newcastle, 72.3% of people travelled to work in a private car, 3.8% took public transport and 5.8% rode a bike or walked. 3.5% worked at home. Of these 67.6% were as a driver and 4.7% were as passengers.

There is however a large residential area within a 2 kilometre walk or cycle from the site which provides opportunities for active travel to the site.

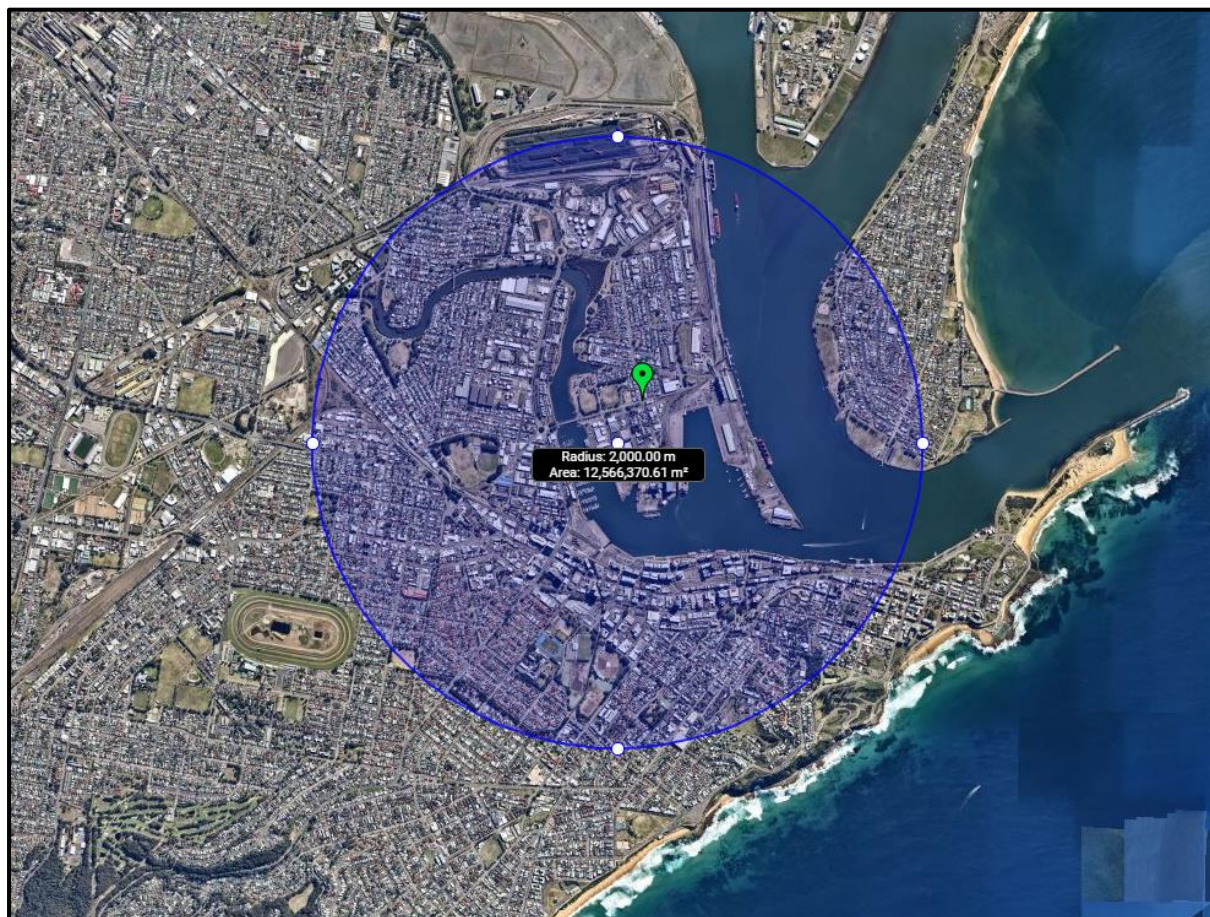


Figure 3-2 Location of subject site with 2km catchment for walking or cycling

As outlined above, the existing pedestrian and public transport routes are primarily focused on the Newcastle Interchange. The site can connect to these using the existing routes available and facilities available.

Connection to local bus routes are available to the north of the site on Cowper Street. Each of these bus stops is supported by pedestrian access.

Access from the site to the adjacent shared pathway along Throsby Creek is readily available.

4 Transportation Analysis

Taking into consideration the location of the subject site, existing travel patterns and the availability of transport options the primary spheres of influence include:

- **Bus Travel** – ensure all staff who are open to using public transport are supported in this choice. The site can connect with quality bus connections and so can provide an effective transport option for staff not living within walking distance of the subject site.
- **Train Travel** – ensure that staff who can travel by train understand that it is a viable option to travel to the subject site.
- **Car Pooling** – reduce number of individual private car drivers by encouraging carpooling, both to and from work
- Ensure staff who indicate that they are prepared to **walk or cycle** are supported in this choice.
- **Work related travel** – reduce dependence on private car travel. Promote teleconferencing as an efficient means of communication for meetings etc
- **Parking policy** – ensure it supports alternative transport options.

4.1 Opportunities to reduce commuter car dependency

4.1.1 Public transport

Staff who are open to use public transport as part of their journey to work should be encouraged to do so. The Newcastle Interchange, some 1350m from the site, can be walked to in 20 minutes or a bus from Cowper Street can see the trip undertaken in 12 minutes including walking to and from the bus stops.

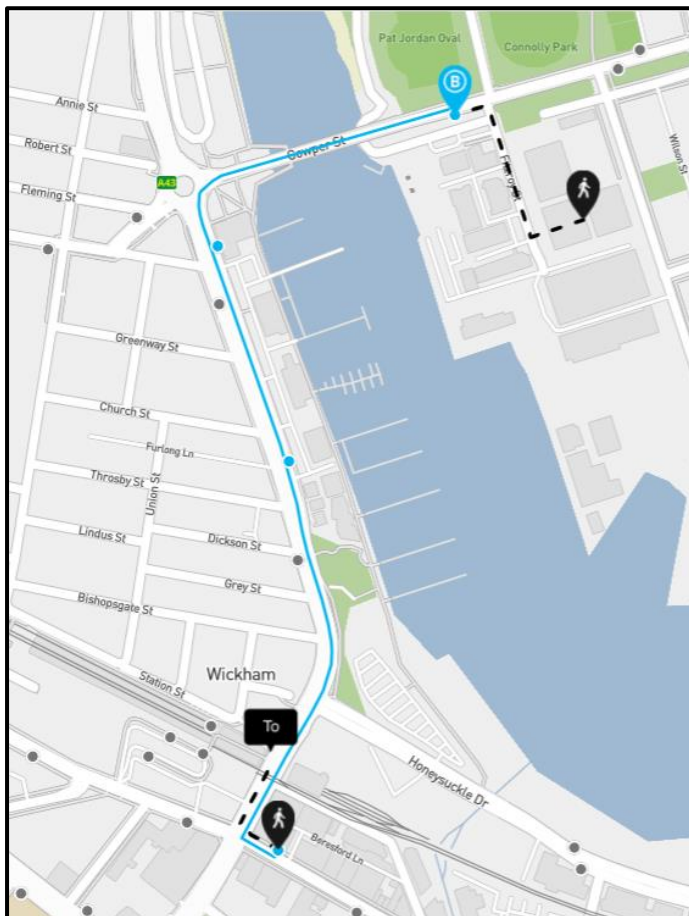


Figure 4-1 Route between subject site and Newcastle Interchange

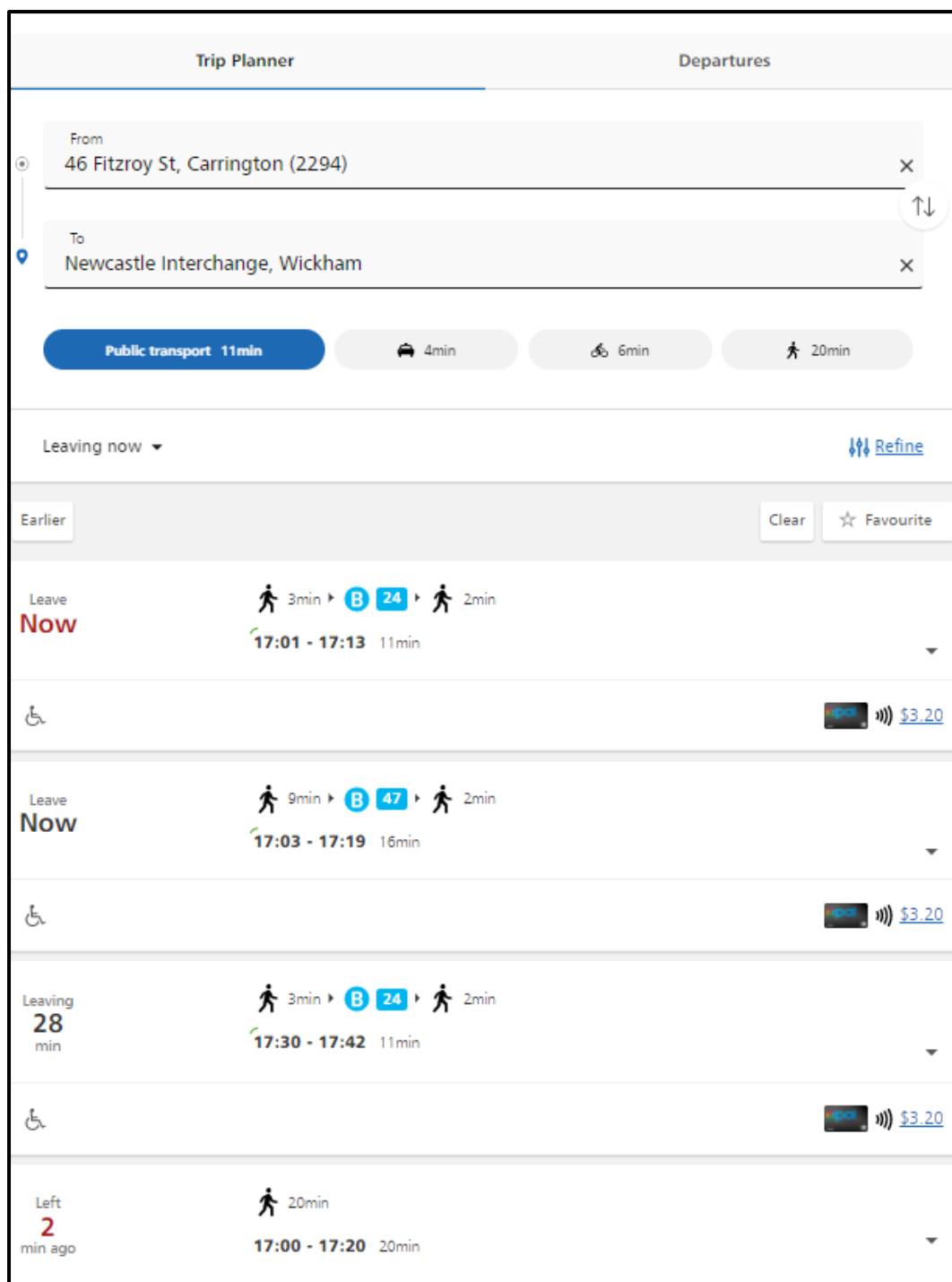


Figure 4-2 Travel times between subject site and Newcastle Interchange

Ensuring staff who believe they will travel by public transport have sufficient information and support for this to be a positive experience is important. Should their first day of travel not be a positive one then their problems should ideally be dealt with as best as possible to encourage them to travel by public transport again. If this second journey is a positive one then these staff are more likely to continue to travel by public transport and become advocates for this mode of travel.

By providing easy connection to updates on public transport and traffic information staff will have confidence in relying on public transport. Promoting the use of Phone Apps and adding the Transport Info Trip Planner to work computers gives staff access to up-to-date public transport trip planning information. This supports everyone in their trip planning and promotes public transport use to all.

4.1.2 Car Pooling

Formal carpooling programs can be run by organisations and can provide a practical alternative to being single commuter driving daily. Surveys of carpooling participants has shown that there is a demand for part time carpooling, participating for say two days a week and driving on the other days. Such flexibility is still considered an appealing option, reducing single car travel on these days.

Informal carpooling can also be promoted throughout the workplace through staff newsletters, email enquiries etc.

Car pooling can be supported in the work place through priority parking for car pool participants.

4.1.3 Cycling and Walking

Cycling is a popular mode of travel in Newcastle with cyclists regularly observed in Carrington and Wickham. There is an opportunity to increase the cycling numbers should cycling objections be appropriately overcome (eg understanding suitable routes, level of end of ride facilities etc). Staff may consider cycling for part of their week through the promotion of appropriate cycle routes and familiarity with the end of ride facilities being provided at the site.

Cycling tools such as Cycleway Finder as well as tools being developed by Newcastle City Council to promote local routes should be freely promoted to encourage local cycling.

Encouraging ride to work days, and supporting new riders through Bike Buddies, riding with a group to work from a designated meeting place can encourage this mode of travel.

It is anticipated that walking to the subject site from the surrounding suburbs of Wickham, Maryville, Tighes Hill etc will be an appealing option for staff.

Given the age of the area there is generally good pedestrian facilities available. There is also a series of shared pathways available to both cyclists and pedestrians.

4.1.4 Telecommuting and Working from Home

The federal government had established a goal that by 2020 Australia would have doubled its level of teleworking so that at least 12 per cent of Australian employees will have a teleworking arrangement with their employers. The Covid-19 pandemic has forced these arrangements to be implemented and as such there has been a paradigm shift in this as a way of reducing the need for workplace travel with day to day work and meetings being able to be connected by phone or video conferencing.

As an office the development is well positioned to benefit from telecommuting. This could be encouraged and supported as an option for staff with an active working from home policy and whenever practical meetings to be by teleconferencing platforms.

4.1.5 Reduce need for private vehicles for work-day travel

Although staff may perceive the need to travel for work related trips by private vehicle, it is important that staff see the opportunity to utilise an alternative to their own personal vehicle, thus enabling them to travel work by alternate modes. Although there may be a preference for using their own vehicle, this preference may be based on financial and convenience reasons but doesn't necessarily consider aspects such as the impact on private vehicle insurance being used for business purposes, OHS policies and the need to carry work related equipment etc in private vehicles.

The provision of a shared company vehicle which provides staff with certainty of travel can remove the perception that their own vehicle is necessary to undertake such trips. Such a vehicle could also be by providing access through private contractors (GoGet and similar car share systems) or taxis/uber.

4.1.6 Parking Policy

The City of Newcastle "Newcastle Transport Strategy" acknowledges the role of parking in influencing travel choices whilst the CN On the Street parking strategy notes that the "challenge is to provide enough parking spaces

to support reasonable access by car, particularly where other options are limited, while making changes that support more walking, riding, public transport and shared arrangements”.

The need to provide “enough” on site parking for future users of the site, given the chance that such businesses may operate 24 hour per day as the Port of Newcastle operates 24/7, and the limited supply of on street parking has driven the proposed parking supply for the site. Daytime workers are more likely to use active travel options with shift workers more likely to drive given reduced availability of public transport and less appeal for walking and cycling at night.

This parking supply however includes EV chargers, recognising a future more sustainable fleet of vehicles, and includes a bike hub with storage for 50 bicycles.

There is the opportunity for the provision of parking on site to be allocated in ways that support this Green Travel Plan. Incentivising staff through a parking policy that provides priority spaces for carpooling for example can reinforce the benefits of active transport while ensuring the operational needs of the site and the parking demands of the surrounding neighbourhood can be best managed.

5 How to influence Change

5.1 Background on Workplace and Sustainable Travel Plans

Travel Plans are seen as a way of supporting active travel, making it easier for employees and visitors to get to and from the workplace and to reduce dependence on private vehicles and parking space.

“A travel plan typically includes support for walking, cycling, public transport and car sharing reinforced with promotion and incentive and the management of workplace parking.”

Premier's Council for Active Living NSW (PCAL)

Active Workplaces are identified as a means by which workplace health and wellbeing can be promoted and supported. Investing in workplace health promotion (such as physical activity programs) has the potential to increase economic return for employers through enhanced worker productivity, reduced absenteeism and improved corporate image. (PANORG (2009) *Evidence module: Workplace physical activity and nutrition interventions.*)

A Workplace Travel Plan is a “business management tool designed to address an organisation's travel needs and impacts. It can deliver efficiencies, savings and benefits to an organisation, its operation and its employees. A Workplace Travel Plan can include promotion of ‘sustainable’ travel choices such as walking, cycling, using public transport and car-sharing, as well as reducing the need to travel by encouraging the use of video-conferencing and remote working. This will be reinforced with promotion and incentives and by the management of workplace parking.”

5.2 Spheres of Influence

The areas which may be influenced by the implementation of a travel plan include:

- Reduction in parking demand, its associated cost of provision and in turn the cost to employees for parking usage where paid parking is required.
- Reduction in private motor vehicle travel by individuals, the impact on the road network and associated environmental costs and costs to the employee.
- Increased walking, cycling and public transport use and its resulting increase in physical exercise and health benefits.
- Parking restrictions.

Those factors which may influence, both positively and negatively, staff travel choices relevant to this development are detailed below.

The following provides examples of actions that may be considered appropriate for this site and be included in a workplace travel plan.

Active Transport

1. Introduce the role of Transport Coordinator to oversee the implementation and management of the Workplace Travel Plan
2. Install an online Travel Access Guide for the site providing links to online resources and services
3. Educate all staff about their travel choices and provide an information pack to encourage active transport and shared travel as part of the staff induction procedure. Include local public transport, carpooling and cycling information.
4. Provide participants with information that makes their travel choices easy to make

Public Transport

1. Ensure staff who are open to travelling by public transport have sufficient information and support for this to be a positive experience. Deal with any problems that arise to assist in them trying public transport travel again.
2. Add up to date travel information and trip planning to individual workstations and intranet. Include new technology being implemented by Transport for NSW
3. Investigate new technology being implemented by Transport NSW and incorporate into staff information

4. Provide emergency options for staff who need to travel unexpectedly or who may miss their usual travel options due to late work requirements (eg taxi vouchers)
5. Provide information about public transport to new staff as part of the induction program
6. Investigate the demand for a site specific shuttle to provide connection from the station/interchange to the site and return. This could be a small people mover depending upon the anticipated demand
7. Investigate the potential demand for train commuters across the Carrington area to better connect with train arrivals and departures at the Newcastle Interchange.

Carpooling

1. Promote carpooling through priority parking
2. Investigate the scope of establishing an internal online carpooling system
3. Investigate feasibility of implementing carpool program in conjunction with other employers in the Carrington area

Bicycle and Pedestrian Travel

1. Ensure that those who are intending to ride are well supported including allocation of lockers, provision of route information
2. Promote Ride to Work days
3. Install NSW Transport Cycling trip planners on staff workstations
4. Promote the benefits of walking to all staff that live within 2 kilometres of the site
5. Consider an alternate emergency transport option (eg taxi) for staff that walk and have to get to their home in an emergency

Telecommuting/Work from Home

1. Support staff to telecommute (work from home)
2. Promote opportunities for staff to telecommute between sites for meetings etc

Parking Policy

1. Implement parking policy which supports the Workplace Travel Plan
2. Prioritise parking as an incentive to maximise non-single driver vehicle trips

6 Predicted transport mode shift

Given the uncertainty of the end users, their staffing patterns (eg shift workers) and travel needs, it is difficult to provide mode targets. The CN Parking Strategy On the Street has been reviewed for guidance on future mode share targets however it doesn't nominate rates but rather a reduction in Car Driving and an increase in Active Travel. Base level mode targets have therefore been provided to provide guidance as to the minimum level desirable as well as the more aspirational levels that this plan can provide.

Based on the successful implementation of the sustainable transport initiatives described in this Green Travel Plan, the following mode shifts presented in Table 6-1 below would see an improvement over statistical Journey to Work modes.

Table 6-1 Mode split based on sustainable transport initiatives.

Transport Mode	Mode Split based on JtW data for Newcastle LGA	Base Level Mode Split	Mode Split based on sustainable transport initiatives
Car - Driver	67.6%	61%	50%
Car- Passenger	4.7%	7%	7%
Public Transport	4%	5%	9%
Walked or Cycled	5.8%	7%	9%
Worked from Home	3.5%	10%	20%
Other (inc did not go to work)	14.4%	10%	5%

7 Active Travel Plan Recommendations

Having completed the above analysis, an action plan has been developed to support the subject site and a commitment to sustainable transport. As a new development, there is the opportunity to promote a sustainable mode of travel from the outset.

The objective of this Green Travel Plan is to identify and implement measures that will increase active transport and the use of public transport while reducing the dependence on car-based travel.

7.1 Active Transport

1. Develop an online Transport Portal to provide an electronic one stop shop where various links to external transport providers can be placed. This will ensure that changes to travel and transport options are updated by the transport providers.

Links could include:

Cycling

<http://www.rms.nsw.gov.au/roads/bicycles/cyclewayfinder>

<http://www.newcastle.nsw.gov.au/OnYourBike/Home>

Trip planning

<https://beta.transportnsw.info>

<http://www.transportnsw.info/en/travelling-with-us/keep-updated/apps/real-time-transport.page?#service>

Taxi and Uber

<http://www.newcastletaxis.com.au/>

<https://www.uber.com/en-AU/ride/>

2. Implement the role of **Transport Coordinator** to oversee the ongoing implementation and management of this Green Travel Plan
3. Educate all staff about their travel choices and provide an information pack to encourage active transport
4. Provide participants with information that makes their travel choices easy to make

7.2 Public Transport.

1. Ensure staff have sufficient information and support for this to be a positive experience. Deal with any problems that arise to assist in them trying public transport again.
2. Add TfNSW information and trip planning to individual workstations and mobile phones
3. Provide emergency options for staff who need to travel unexpectedly (eg taxi vouchers)
4. Provide information about public transport to new staff as part of their orientation
5. Request Newcastle Transport monitor the bus service to Carrington to provide convenient connection to train services

7.3 Carpooling

1. Encourage carpooling between staff
2. Promote carpooling through priority parking on site

7.4 Bicycle and Pedestrian Travel

1. Ensure that those who are intending to ride are well supported and are aware of the end of trip facilities available on site
2. Promote Ride to Work days and Bike Buddy groups
3. Encourage a walk to work day
4. Maintain NSW Transport Cycling trip planners and City of Newcastle cycling information on Transport Portal
5. Promote the benefits of walking to all staff that live within 2 kilometres of the site

7.5 Telecommuting

1. Encourage staff to teleconference for meetings rather than driving.
2. Promote telecommuting/working from home for staff at least one day per week

7.6 Reduce demand for private vehicles for work-day travel

1. Consider opportunity for shared company vehicle for essential work day travel over private vehicle use

7.7 Parking Policy

1. Maintain a policy which supports the Green Travel Plan through the management of parking
2. Monitor the use of the parking within the site and consider a strategy to continue to support the GTP, for example the conversion of parking spaces for carpooling etc
3. Prioritise parking as an incentive to maximise non-private vehicle trips eg carpooling

7.8 Monitoring and Review

A Green Travel Plan is a living document which to ensure a successful outcome needs to be monitored and the actions reviewed and modified to support changing circumstances.

Actions implemented should be monitored to ensure they are having a positive impact in achieving the goals of reducing the degree of private car usage

Such a review should be initially undertaken with the end user once that party/parties is determined, with a further review during the first year of implementation to adjust and modify as necessary.

Once the plan has been fully implemented then an annual review is appropriate. This should include a survey of all staff of the building to quantify modes of travel to confirm the mode splits and ensure the mode share targets are being achieved. Where such targets are not being achieved it is important to understand as part of the survey the barriers to active travel. This will inform necessary mitigation measures, support or changes to the Green Travel Plan to enable the mode share targets to ultimately be achieved.

Attachment A - Site Plan

