

GREEN TRAVEL PLAN
FOR THE
WOOLOOWARE BAY TOWN CENTRE -
STAGE 4 RESIDENTIAL / HOTEL
AT
CAPTAIN COOK DRIVE, WOOLLOOWARE

Prepared By:



Assessed and Approved by:



1 Introduction

McLaren Traffic Engineering (MTE) was commissioned by *Capital Bluestone* to provide a Green Travel Plan (GTP) for the Woollooware Bay Town Centre - Stage 4 Residential / Hotel at Captain Cook Drive, Woollooware.

1.1 Development Characteristics and Approvals

This Green Travel Plan (GTP) has been prepared to satisfy the requirements of the Secretary's Environmental Assessment Requirements (SEARS) relating to application MP 10_0229 (MOD 2) as quoted below:

- *measures for residents and visitors to make sustainable transport choices, including measures to:*
 - *improve public transport use and accessibility (in particular given the site's location in relation to public transport opportunities);*
 - *integrate with existing pedestrian and bicycle linkages within the area; and*
 - *implement a new or revised location specific sustainable travel plan.*

The development to which this GTP applies has the following characteristics:

- Retail centre including a total of 28,002m² ground floor area;
- Total of 222 residential apartments;
- Total of 1023 parking spaces.

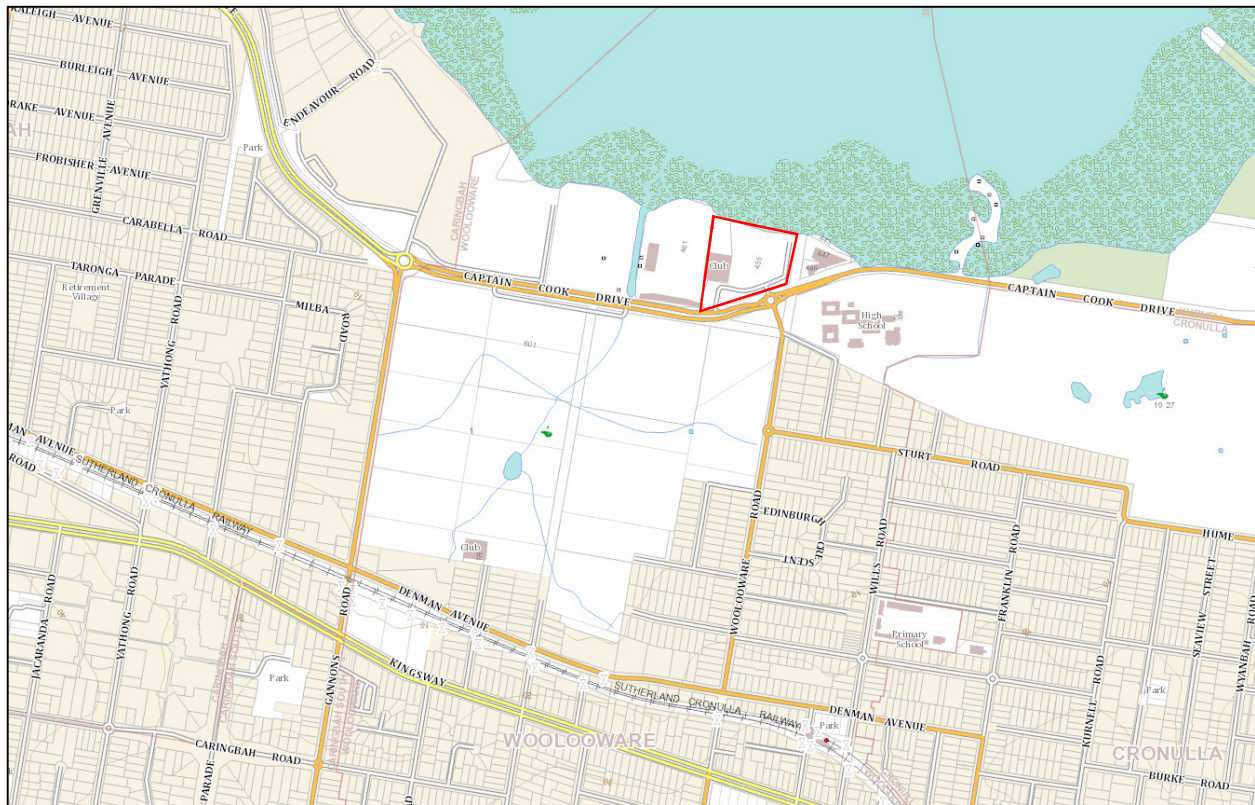
The development is located directly to the east of Southern Cross Stadium, with the approved residential precinct immediately to the west. The site location is shown in **Figure 1** and **Figure 2**.

The measures included in this Green Travel Plan are consistent with those included in the Green Travel Plan in effect for the residential precinct of the Woollooware Bay Town Centre development.



— Site Location

FIGURE 1: SITE CONTEXT – AERIAL IMAGE



— Site Location

FIGURE 2: SITE CONTEXT - MAP

The approved Woollooware Bay Residential development, which includes a total of 460 apartments to be constructed in three stages and ancillary retail areas, is situated to the west of Southern Cross Stadium and the proposed retail centre is expected to serve as the primary shopping and entertainment facility for these residents.

1.2 References

A number of sources have been consulted to inform the preparation of this report including:

- NSW State Government Long Term Transport Master Plan;
- Sutherland Shire 2011 Community Strategy Plan;
- NSW Journey to Work Data from the NSW Bureau of Transport Statistics;
- ABS Census Data;
- Public Transport or Private Vehicle: Factors That Impact on Mode Choice, Grace Corpuz (Transport Data Centre, New South Wales Ministry of Transport);
- Previous Traffic and Parking Impact Assessments and Traffic Management and Accessibility Plan completed by M^CLaren Traffic Engineering;
- Architectural plans prepared by Turner Architecture and HDR Rice Daubney.

2 Objectives

Alternative modes of transport including walking, cycling and public transport quantifiably promote positive transport and health outcomes. The NSW State Government *Long Term Transport Master Plan* emphasises the importance of alternative transport options in the growth of Greater Metropolitan Sydney. Locally, Sutherland Shire Council provides a number of objectives related to sustainable transport options in its 2011 Community Strategic Plan, emphasising the importance of:

“Providing effective and safe transport service options that enable us to get to, from and around the Shire. Options that provide flexible and responsive services, integrated modes and opportunities to get around on foot and by bike.”

This Green Travel Plan has been constructed to advise residents of and visitors to the Woollooware Bay Town Centre of sustainable and alternative transport options, with the overall objective to shift travel from private cars to active or public transport options, with the following positive implications:

- Reduced parking demand and occupancy;
- Reduced traffic congestion and trip duration;
- High benefit to cost (BCR) ratio;
- Positive health outcomes from walking and cycling;
- Improved air quality and reduced per-capita emissions.

3 Implementation

3.1 Management and Authority

The distribution of and implementation of the measures detailed in this Green Travel Plan is the responsibility of the separate management bodies of the Residential Building Management Committee (BMC) and the Hotel. Accordingly, authority is provided to each of these bodies as relevant to their individual responsibilities and patron classes to implement measures, review the plan and undertake further relevant and appropriate actions.

3.2 Distribution

3.2.1 Residents

The BMC will be responsible for the distribution of the Green Travel Plan to all residents and visitors to the site, made available on any community website related to the development and posted in community areas on-site. The BMC will make the GTP available to all new owners and tenants of the development.

3.2.2 Hotel

The management body of the Hotel will be responsible for the distribution of the Green Travel Plan to all guests, visitors to guests and staff. The GTP will be made available to all guests of the hotel.

4 Alternative Transport Strategy

4.1 Timeframe

This Green Travel Plan will apply from the issue of the Occupation Certificate for the residential component of the development.

4.2 Existing Transport Use

The Sutherland Local Government Area is typically characterised by high vehicle ownership and driver rates, with the average household owning 2.05 vehicles. To establish a baseline measure of transport mode split surrounding the site, the NSW Household Travel Survey data for residents living in the Sutherland Shire Local Government Area has been examined and is summarised in **Table 1** and **Figure 3**.

TABLE 1: SUTHERLAND SHIRE EXISTING TRAVEL MODE SPLIT

Mode of Transport	Usage Rate
Vehicle Driver	54%
Train	5%
Vehicle Passenger	22%
Walk	15%
Other	2%
Bus	2%

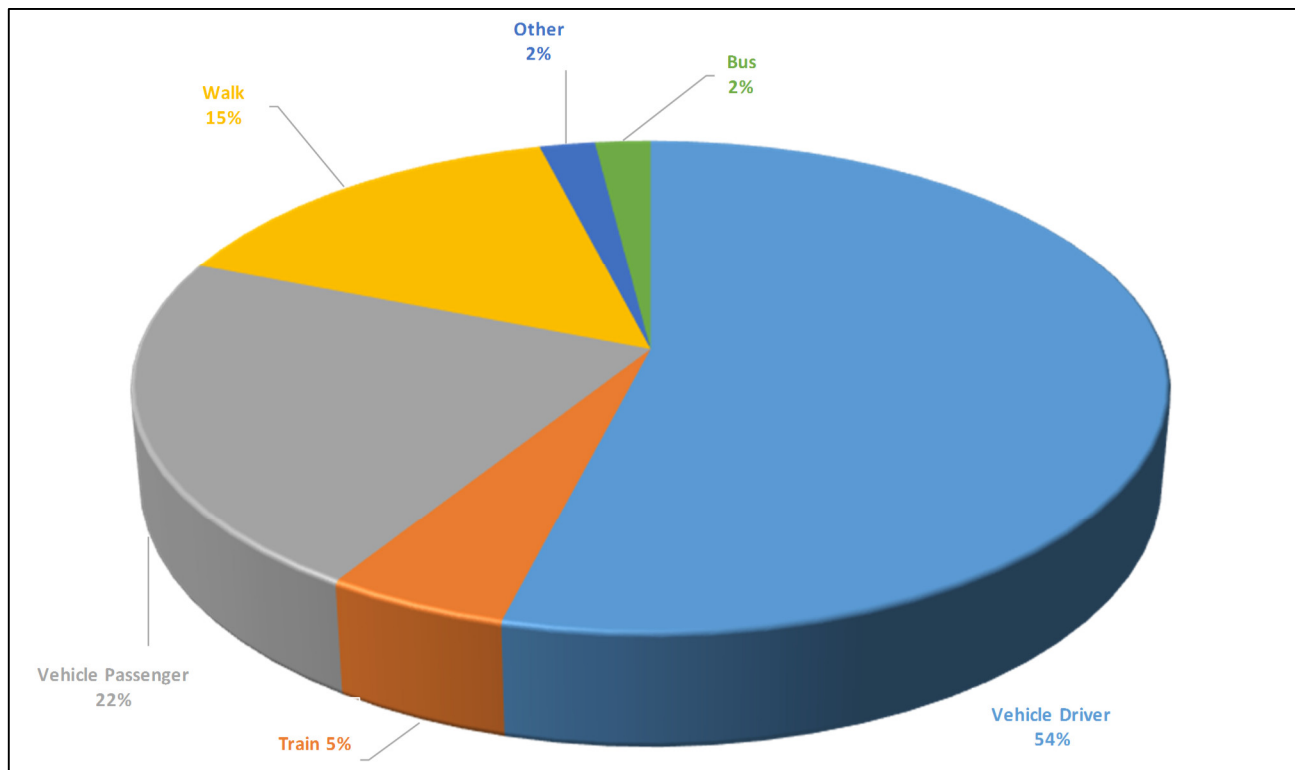


FIGURE 3: SUTHERLAND SHIRE EXISTING TRAVEL MODE SPLIT

4.3 Targets and Milestones

Through the implementation of the actions described in **Section 5**, continuous increases in alternative transport use are anticipated for the duration of this Green Travel Plan's effectiveness, with the overall target a 1% year on year growth in the use of public or active transport options. Considering no major upgrades to the public transport systems throughout the Sutherland LGA are proposed, the 1% year-on-year increase is assumed to occur proportional to the current alternative modes of transport, resulting in a target 10% shift over ten years. **Table 2 & Figure 4** depict the 1, 3, 5, and 10-year goals for travel mode split.

TABLE 2: TARGETED TRANSPORT MODE SPLIT

Mode of Transport	Usage Rate				
	Existing	1yr	3yr	5yr	10yr
Vehicle Driver	54%	52%	49%	47%	44%
Train	5%	5%	6%	6%	7%
Vehicle Passenger	22%	22%	21%	21%	20%
Walk	15%	16%	17%	18%	19%
Other	2%	2%	3%	3%	4%
Bus	2%	3%	4%	5%	6%

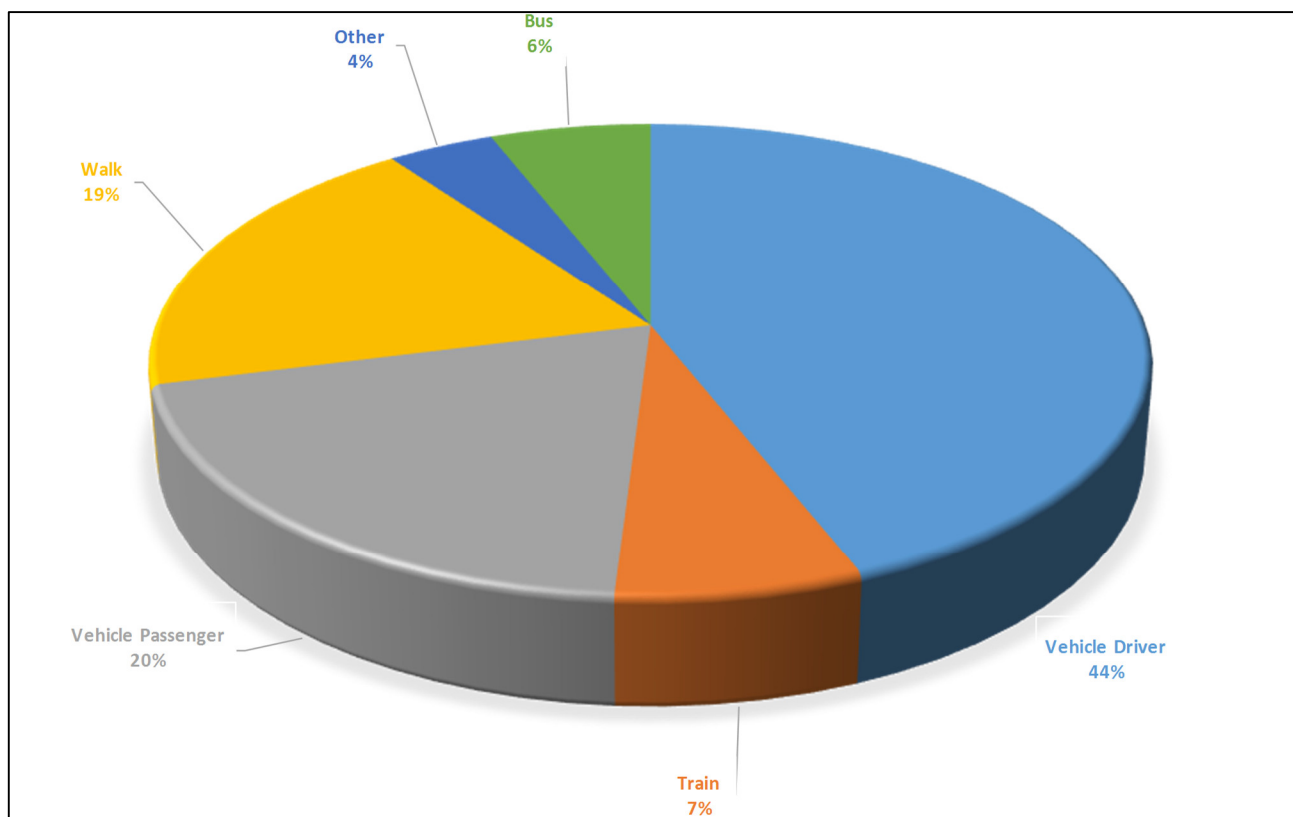


FIGURE 4: TARGETED TRANSPORT MODE SPLIT

The initial focus of the alternative transport initiatives will be on increasing the proportion of public transport use, particularly the rate of bus use. The commencement of Bus Route 985 (as shown in **Annexure A** for reference) is intended to provide a convenient transport alternative for residents and employees travelling to and from the surrounding suburbs and will be strongly promoted following the date of occupation, with the aim to establish a strong user base.

4.4 Measurement and Reporting

4.4.1 Frequency

Travel mode surveys will be undertaken annually for the first three years of the occupation of the residential units, and once every three years thereafter.

4.4.2 Method

The building management committee will engage an independent team to undertake the travel mode surveys; which will include residents, employees and visitors for a weekday and weekend day. The surveys would take the following form in order to capture a sufficient sample size:

- Surveyor conducting brief interview at the car park exit / entrance to determine trip destination / purpose and to count car occupancy;
- Surveyor conducting brief interview at the major pedestrian / cyclist / public transport entrances and exits to determine trip destination / purpose.

By undertaking the surveys on such a basis the travel mode of a large proportion (estimated at 80%) of residents and staff moving into and out of the development could be ascertained.

4.4.3 Reporting

Following the completion of surveys, the results will be compiled into a report and provided to the Club and all residents and businesses, with new initiatives suggested in this report when a shortfall is identified in any targeted travel mode.

5 Projects and Programs

The following actions form the basis for implementation of the Green Travel Plan.

Collectively, these actions have been designed to help achieve the targets and milestones set out in **Section 4.3**. It should be noted, that these actions are not necessarily a compulsory task but rather a potential option that should be investigated and implemented as appropriate for the future occupants of the site.

5.1 Public Transport Initiatives

The following actions are focused on encouraging staff, residents, visitors and customers to partake in public transport when travelling to and from the site. The strategies to be implemented are not limited to the following actions as shown in **Table 2**, but these are the basis for further development of public transport options.

TABLE 3: POSSIBLE PUBLIC TRANSPORT INITIATIVES

Action	Cost	Date
Develop a map showing public transport routes to work	Minimal	Ongoing
Put up a notice board with leaflets and maps showing the main public transport routes to and from work	Minimal	From date of occupation
Encourage public transport for business travel	Nil	From date of occupation
Ensure tickets are available at the workplace for work travel during the day	Nil	From date of occupation

5.2 Walking and Cycling Initiatives

5.2.1 Walking

The following actions are focused on encouraging staff, residents, visitors and customers to partake in walking when travelling to and from the site. The strategies to be implemented are not limited to the following actions as shown in **Table 4**, but these are the basis for further development of active transport options.

TABLE 4: POSSIBLE WALKING INITIATIVES

Action	Cost	Date
Identify employees living near work that may be interested in walking to work	Nil	Ongoing
Produce a map showing safe walking routes to and from your site with times, not distances, to local facilities, such as shops and public transport	Minimal	From date of occupation
Provide showers and changing room facilities	As per construction	From date of occupation
Take part in 'National Walk to Work Day'	Nil	Annually
Have some TravelSmart Get to Work days encouraging staff to come by alternative	Nil	Annually

5.2.2 Cycling

The following actions are focused on encouraging staff, residents, visitors and customers to partake in cycling when travelling to and from the site. The strategies to be implemented are not limited to the following actions as shown in **Table 5**, but these are the basis for further development of active transport options.

TABLE 5: POSSIBLE CYCLING INITIATIVES

Action	Cost	Date
Organise an after work ride. It doesn't have to be long or strenuous, and could end up somewhere for dinner or drinks. This idea is to encourage people who might be reluctant to cycle to give it a go!	Nil	Quarterly
Provide sufficient bicycle parking to meet peak needs	As per construction	From date of occupation
Have good, secure parking in an easily accessible location	As per construction	From date of occupation
Provide bicycle parking for visitors	As per construction	From date of occupation
Ensure bicycle parking is clearly visible or provide signage to direct people to cycle bays	As per construction	From date of occupation
Provide showers and changing rooms	As per construction	From date of occupation
Produce a map showing more leisurely bicycle routes to work	Nil	Ongoing
Participate in annual events such as 'Ride to Work Day'	Nil	Annually

5.3 Sustainable Transport Initiatives

5.3.1 Carpooling

The following actions are focused on encouraging staff, residents, visitors and customers to partake in carpooling and limiting the number of cars used to travel when travelling to and from the site. The strategies to be implemented are not limited to the following actions as shown in **Table 6**, but these are the basis for further development of alternative transport.

TABLE 6: POSSIBLE CARPOOLING INITIATIVES

Action	Cost	Date
Set up a carpooling database	Nil	From date of occupation
Organise postcode lunches	Nil	From date of occupation

5.3.2 Car Parking

The following actions are focused on encouraging staff, residents, visitors and customers to partake in alternative options when travelling to and from the site. The strategies to be implemented are not limited to the following actions as shown in **Table 7**, but these are the basis for further development of alternative transport.

TABLE 7: POSSIBLE CAR PARKING INITIATIVES

Action	Cost	Date
Identify priority users of car park e.g. people with disabilities, shift workers, carpoolers	Nil	From date of occupation
Introduce or increase charges for car parking and use money raised for TravelSmart initiatives	Nil	From date of occupation
Re-allocate car parking spaces for bicycle spaces	As per construction	From date of occupation

5.4 Use of Incentives

Many of the alternative transport initiatives described above require the willing participation of residents and employees and would not otherwise be effective. The incentivisation of alternative transport options could increase the number of residents and employees using alternative transport options.

A review of the NSW Household Travel Survey by Grace Corpuz identified a number of factors that affected the usage of alternative travel options, identifying the following factors as most influential on alternative transport use (in order of importance):

- Parking capacity and arrangements (destination factor);
- Where a vehicle is not available or accessible (origin factor);
- Where it is cheaper (origin & destination factor);
- Travel time (origin & destination factor);
- Convenience (origin & destination factor);
- Accessibility (origin & destination factor).

In addition to the above, the direct advertisement of and incentives for alternative transport use is suggested as a part of increasing alternative transport utilisation. Some incentivisation strategies are outlined below.

5.4.1 Residents

- A new bus route, Route 985, commenced on November 20th 2016 to provide convenient transport from the site to the surrounding area, including train stations and town centres; increasing both the convenience and accessibility of public transport and reducing travel times for those working in the Sutherland Shire.
- Advertisement of the annual Walk to Work and Ride to Work days in any community newsletters and in common areas on-site will increase the awareness of the benefits of alternative transport options.

5.4.2 Employees (Both Club and Retail)

- Parking on-site could be restricted to car-pooling vehicles to encourage the use of car-pooling and alternative transport options;
- Flexible start and finish times could be implemented to facilitate the catching of schedules bus and train services;
- Use of alternative transport options could be rewarded with periodic free breakfast days;
- Public transport ticketing costs could be subsidised by business owners to encourage public transport use.

The above incentivisation strategies could be implemented to boost uptake of alternative travel modes if annual targets are not met.

ANNEXURE A

TRAVEL ACCESS GUIDE



TRAVEL ACCESS GUIDE

WOOLOOWARE BAY TOWN CENTRE

Woollooware Bay Town Centre (WBTC) is located on Captain Cook Drive, north of Woollooware Golf Club on the Woollooware Bay foreshore. The retail centre is well serviced by public transport with Route 985 travelling to and from the surrounding train stations.

The site also offers taxi pick up and drop off bays as well as pedestrian and cycle networks surrounding the centre offering a diverse travel options to WBTC. Numerous bicycle parking facilities are provided enabling secure lock-up and peace of mind while shopping.

This Travel Access Guide provides information to assist travel to and from the site and is available from all shops and outlets within WBTC as well as online. This access guide is recommended for all residents, visitors, customers and employees of WBTC. There are a range of benefits for choosing public transport, walking and cycling as your main method of travel which include:

- Walking and Cycling provides a level of exercise to assist in your overall health and wellbeing;
- Reduce your carbon footprint as well as cost of travel by saving on public transport tickets or free methods of travel such as walking and cycling;
- Avoid the stress of lengthy travel times and possible traffic jams or the time taken to find a park.



ACTIVE TRANSPORT

WALKING AND CYCLING

“Creating a walkable and cycleable city is an important part of creating a sustainable city one that is equitable, livable, cost-effective, healthy, environmentally sound and safe.”

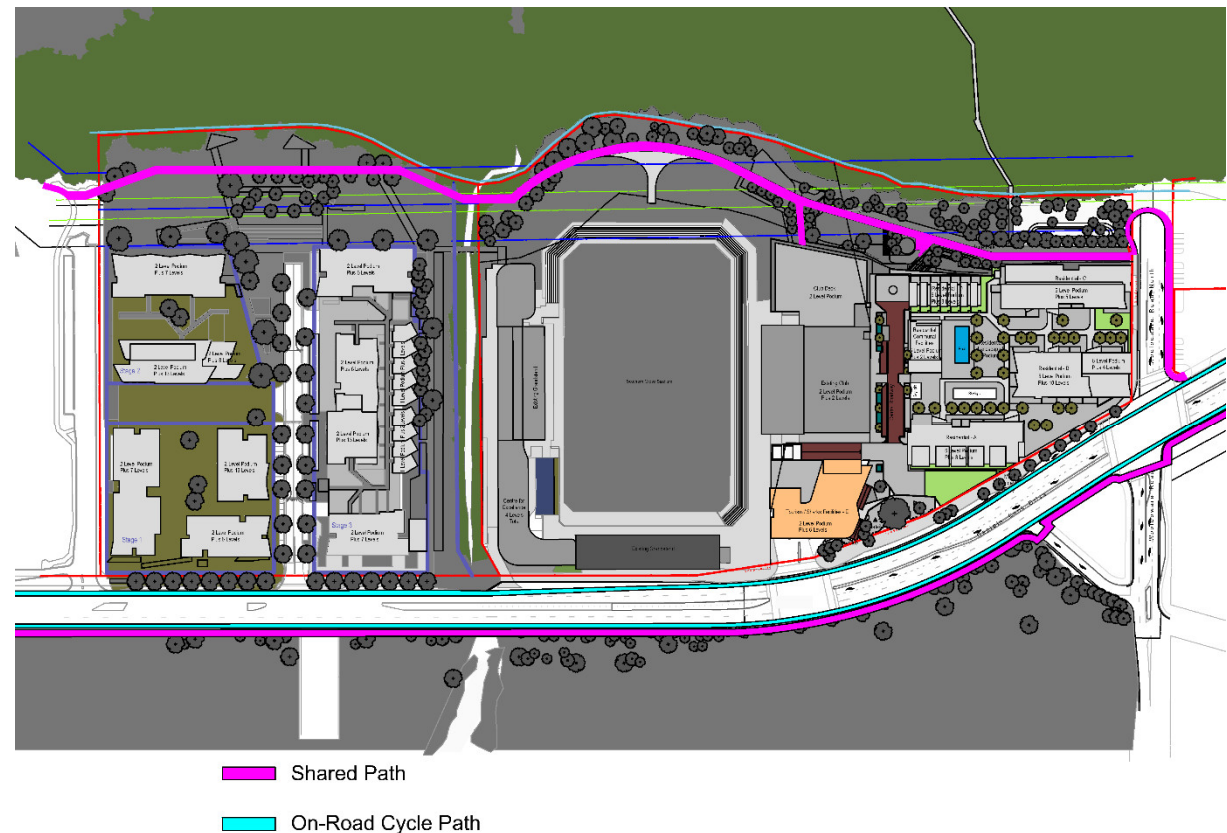
Planning guidelines for walking and cycling (NSW Government 2004)

Woollooware Bay Town Centre has been designed to provide access transport options to residents, visitors and employees by proposing new and integrating with existing pedestrian and cycling facilities in the surrounds of the site. These facilities include:

- A new shared pathway along the foreshore from Woollooware Road towards Captain Cook Bridge to the north;
- Dedicated bicycle lanes on both sides of Captain Cook Drive at the front of the site;
- Shared pathway on the south side of Captain Cook Drive connecting to existing facilities to both the east and west.

Active transport provides many health and environmental advantages. Being active daily can strongly reduce the risk of common diseases and improve quality of life.

Participating in active transport also provides great benefit to the environment by reducing emissions and overall contributes to a cleaner environment to live and work in.



PUBLIC TRANSPORT TRAINS AND BUSES

Buses

Route 985, a new bus service by Transdev, commenced in November 2016 in part to provide alternative transport options to and from the Woollooware Bay Town Centre. The route travels between Cronulla Station and Westfield Miranda, providing residents, visitors and employees with a convenient alternative to private car use. residents with an easy alternate travel path to the major shopping centre in the Sutherland Shire. The frequency of the bus service is every 30mins during peak times on weekdays and every hour during off peak times and weekends. The full timetable (as of November 2016) is provided at the rear of this Travel Access Guide.

Trains

The closest train station is Woollooware, located a 15 minute walk south of the site or a 5 minute bicycle ride. Woollooware station has bike racks located nearby the station for safe and convenient bicycle storage. Trains run in both directions towards Sutherland / Sydney CBD and Cronulla at 15 minute intervals.

Typical Travel Times

The typical commute to and from the site to Sydney's CBD would take approximately 1 hour and 5 minutes on the Eastern Suburbs and Illawarra line. Consisting of a 15 minute walk to Woollooware station and a 50 minute train trip to Central station.

The typical commute between the site and Sutherland both to and from will take approximately 35 minutes on the Eastern Suburbs and Illawarra line. Consisting of a 15 minute walk to Woollooware station, and a 20 minute train trip to Sutherland Station.



★ Site Location

ALTERNATIVE TRANSPORT

CAR SHARING AND COMMUNITY TRANSPORT

The Woollooware Bay Town Centre is part of the roll out of the GoGet Car Sharing service into the Sutherland Shire, with 5 GoGet cars to be provided within the car park. The advantages of car sharing include:

- Reduced expense in the operation and maintenance of a private vehicle;
- Provides cars for residents who cannot afford to own a car;
- Provides residents an alternate option if they use cars infrequently;
- Provides more options and flexibility for the resident's transport needs;
- Employees can use the cars as an on demand staff transport reducing the number of cars required in a fleet.

Community Transport

A number of community transport services operate in the Sutherland Shire to provide group transport options to and from popular locations.

Sutherland Shire Community Transport is a service that provides door to door transport of frail aged and disabled people of all ages PH: 9548 0122

Shire Shuttle Bus is a service that can provide group transport to special events or airport transfers.

PH: 1300 857 589 or www.shireshuttlebus.com.au



Weekday Timetable

Stop	Departure Time																					
Cronulla St opp Cronulla Station, Cronulla																						
223021	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:30	11:30	12:30	13:30	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	19:00	20:00
Gerrale St before Ocean Grove Av, Cronulla 223061	06:31	07:01	07:31	08:01	08:31	09:01	09:31	10:31	11:31	12:31	13:31	14:31	15:01	15:31	16:01	16:31	17:01	17:31	18:01	18:31	19:01	20:01
Elouera Rd near Burke Rd, Cronulla 223062	06:33	07:03	07:33	08:03	08:33	09:03	09:33	10:33	11:33	12:33	13:33	14:33	15:03	15:33	16:03	16:33	17:03	17:33	18:03	18:33	19:03	20:03
Elouera Rd near Bando Rd, Cronulla 223063	06:33	07:03	07:33	08:03	08:33	09:03	09:33	10:33	11:33	12:33	13:33	14:33	15:03	15:33	16:03	16:33	17:03	17:33	18:03	18:33	19:03	20:03
Hume Rd Shops Elouera Rd, Cronulla																						
223064	06:34	07:04	07:34	08:04	08:34	09:04	09:34	10:34	11:34	12:34	13:34	14:34	15:04	15:34	16:04	16:34	17:04	17:34	18:04	18:34	19:04	20:04
Elouera Rd near Links Av, Cronulla 223065	06:34	07:04	07:34	08:04	08:34	09:04	09:34	10:34	11:34	12:34	13:34	14:34	15:04	15:34	16:04	16:34	17:04	17:34	18:04	18:34	19:04	20:04
Elouera Rd opp Bate Bay Rd, Cronulla 223066	06:35	07:05	07:35	08:05	08:35	09:05	09:35	10:35	11:35	12:35	13:35	14:35	15:05	15:35	16:05	16:35	17:05	17:35	18:05	18:35	19:05	20:05
Woollooware Bay, Captain Cook Dr, Woollooware																						
2230185	06:38	07:08	07:38	08:08	08:38	09:08	09:38	10:38	11:38	12:38	13:38	14:38	15:08	15:38	16:08	16:38	17:08	17:38	18:08	18:38	19:08	20:08
Kingsway near Oleander Pde, Caringbah 2229109	06:42	07:12	07:42	08:12	08:42	09:12	09:42	10:42	11:42	12:42	13:42	14:42	15:12	15:42	16:12	16:42	17:12	17:42	18:12	18:42	19:12	20:12
Kingsway after Jacaranda Rd, Caringbah 2229225	06:43	07:13	07:43	08:13	08:43	09:13	09:43	10:43	11:43	12:43	13:43	14:43	15:13	15:43	16:13	16:43	17:13	17:43	18:13	18:43	19:13	20:13
Kingsway opp Caringbah Station, Caringbah																						
2229196	06:44	07:14	07:44	08:14	08:44	09:14	09:44	10:44	11:44	12:44	13:44	14:44	15:14	15:44	16:14	16:44	17:14	17:44	18:14	18:44	19:14	20:14
Kingsway near Willarong Rd, Caringbah 222941	06:45	07:15	07:45	08:15	08:45	09:15	09:45	10:45	11:45	12:45	13:45	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	18:45	19:15	20:15
Kingsway near Hinkler Av, Caringbah 222936	06:47	07:17	07:47	08:17	08:47	09:17	09:47	10:47	11:47	12:47	13:47	14:47	15:17	15:47	16:17	16:47	17:17	17:47	18:17	18:47	19:17	20:17
Sutherland Hospital, Kingsway, Caringbah																						
222937	06:48	07:18	07:48	08:18	08:48	09:18	09:48	10:48	11:48	12:48	13:48	14:48	15:18	15:48	16:18	16:48	17:18	17:48	18:18	18:48	19:18	20:18
Kingsway near Carramar Cr, Miranda 2228101	06:49	07:19	07:49	08:19	08:49	09:19	09:49	10:49	11:49	12:49	13:49	14:49	15:19	15:49	16:19	16:49	17:19	17:49	18:19	18:49	19:19	20:19
Logeman Court Retirement Malvern Rd, Miranda 2228102	06:50	07:20	07:50	08:20	08:50	09:20	09:50	10:50	11:50	12:50	13:50	14:50	15:20	15:50	16:20	16:50	17:20	17:50	18:20	18:50	19:20	20:20
Kingsway near Miranda Rd N, Miranda 2228103	06:50	07:20	07:50	08:20	08:50	09:20	09:50	10:50	11:50	12:50	13:50	14:50	15:20	15:50	16:20	16:50	17:20	17:50	18:20	18:50	19:20	20:20
Miranda Interchange, Kiora Rd - Stand 3, Miranda																						
2228111	06:52	07:22	07:52	08:22	08:52	09:22	09:52	10:52	11:52	12:52	13:52	14:52	15:22	15:52	16:22	16:52	17:22	17:52	18:22	18:52	19:22	20:22
W - Wheelchair accessible	W	W	W	W	W	W	W	W	W	W			W		W		W		W		W	

Weekend Timetable	
-------------------	--

[illegible]