



Deicorp Projects (Crows Nest) Pty Ltd

Travel Plan

Planning Proposal

Crows Nest Five Ways Triangle

4 December 2020

ENGINEERING PLANNING SURVEYING CERTIFICATION

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TABLE OF CONTENTS

1	Intr	oduction4	ł
2	Exis	sting Conditions5	5
	2.1	Site Location	5
	2.2	Existing Road Conditions	>
	2.3	Public Transport, Pedestrians and Cyclists7	
	2.4	Australian Bureau of Statistics – Crows Nest Census Data8	
	2.5	Existing Sustainable Travel Options8	5
3	Stro	ategic Transport Planning10	
	3.1	North Sydney Transport Strategy 201710	
	3.2	North Sydney Integrated Cycling Strategy 201410	
	3.3	Sydney Metro11	
4	Tra	vel Mode Share	
	4.1	Development Description	
	4.1.		
		2 Travel by Public Transport	
	4.1.	.3 Travel by Bicycle	ŀ
5	Sus	tainable Travel Initiatives)
	5.1	Introduction15	5
	5.2	Transport Access Guide15	
	5.3	Wayfinding and Public Transport Options16	
	5.4	Car Pool System	
	5.5	Car Share System	
	5.6 5.6.	Walking and Cycling	
	5.6. 5.6.		
,			
6	-	olementing and Monitoring the Travel Plan21	
7	Со	nclusion/Recommendations23	5

Appendix A – Bus Maps

Appendix B – Sydney Trains Network Maps

Appendix C – Bicycle Maps

1 Introduction

Barker Ryan Stewart have been engaged by Deicorp Projects (Crows Nest) Pty Ltd to prepare a Travel Plan in accordance with the requirements of North Sydney Council for submission with a Planning Proposal for the Crows Nest Five Ways Triangle site.

Noting that more comprehensive information would be provided at DA stage, the purpose of the Travel Plan is to demonstrate how trips to and from the site could be facilitated. This includes opportunities for occupants of future development to make greater use of public transport, cycling, walking and car sharing for commuting and work-related journeys. Proposed output can be briefly outlined as follows:

- Preparation of a Transport Access Guide at future DA stage.
- Promotion and incentives to use public transport options to access the site.
- Promotion of car pool system for commercial users of the building.
- Car sharing scheme.
- Use taxis and public transport work related trips for commercial users of the building.
- Encourage walking and cycling.
- Implementing and monitoring of the plan

The benefits of implementing the strategies outlined in this plan generated from reducing the number of single-occupancy car trips, promote alternative transport options such as walking and cycling for shorter trips and public transport or carpooling for longer trips include:

- Reduced greenhouse gas emissions;
- Improved resident health from reduced exposure to vehicle fumes;
- Reduced contribution to photochemical smog;
- Relieving stress on local road networks (congestion, parking availability etc.);
- Encouraging a reduced personal dependence on finite fossil fuel resources; and
- Less local noise.

2 Existing Conditions

2.1 Site Location

The Five Ways Triangle comprises multiple sites on a triangular parcel of land bounded by the Pacific Highway in the west, Falcon Street in the north and Alexander Street in the east as shown in Figure 1.

The greater site area incorporates Lots 1 to 6 DP 16402, Lots 1 to 11 DP 29672, Lot 1 DP 127595 and Lot 1 DP 562966. The street addresses are 401 to 423 Pacific Highway, 3 to 15 Falcon Street and 8 Alexander Street, Crows Nest.

The site is zoned B4 Mixed Use pursuant to the North Sydney LEP 2013 which permits the development of a variety of land uses including residential flat buildings and commercial premises (business, office and retail).



Figure 1: Aerial view of site (Nearmap 2020)

2.2 Existing Road Conditions

The roads immediately surrounding the site that include Pacific Highway, Falcon street, Alexander Street and Shirley Road. Road conditions are discussed in more detail below.

Pacific Highway

The Pacific Highway is part of the state road network that provides the major north / south route through the locality from the Warringah Freeway at North Sydney to the M1 Motorway. It functions as an arterial road with 3 lanes in each direction, including a part-time bus lane (southbound) and a T3 Lane (northbound). It runs along the western boundary of the site where there are bus zones on either side of the road.

Falcon Street

Falcon Street is part of the state road network providing an east-west link between the Pacific Highway and the Warringah Freeway and runs along the northern boundary of the site. In the immediate vicinity of the site Falcon Street is a clearway in both directions. Further east of Alexander Street there is time-limited parking permitted on both sides of the road. There is a bus zone located on the northern side of the road opposite the site.

Alexander Street

Alexander Street is a local street aligned generally in a north / south direction along the eastern boundary of the site. It is line marked as a four-lane, two-way road with a BB centreline. There is a bus zone on the eastern side of the road, time-limited parking on both sides outside of peak periods and No Stopping during peak periods.

Street-level shops are located along both sides of Alexander Street immediately surrounding the site and there is a Woolworths supermarket and 4-storey carpark on the corner of Alexander Street and Falcon Street.

Shirley Road

Shirley Road is a local street that provides a connection between the Pacific Highway and the residential area of Wollstonecraft east of the north shore rail line. It also connects with River Road, a local collector road providing an east/west connection between Lane cove and Crows Nest.

The section of Shirley Road between the Pacific Highway and River Road is line marked as a four-lane, two-way road with a BB centreline and full-time No Stopping restrictions on both sides.

Intersections

The 3 intersections surrounding the site, Pacific Highway / Alexander Street, Pacific Highway / Falcon Street / Shirley Road and Falcon street / Alexander Street are all controlled by traffic signals. At the Pacific Highway / Falcon Street intersection the right turn movement from the Pacific Highway south leg to Falcon Street is not permitted. Access from the Pacific Highway to Falcon Street is facilitated by right turns at the Pacific Highway / Alexander Street intersection and at the Alexander Street / Falcon Street intersection.



Figure 2: Location Map (Six Maps 2020)

2.3 Public Transport, Pedestrians and Cyclists

The following extract is provided from the revised Traffic and Parking Impact Assessment (November 2020) prepared by Barker Ryan Stewart:

The site is located close to several bus routes providing the services along the Pacific Highway, Falcon Street, Shirley Road and Alexander Street to a wide range of destinations including King Street Wharf, North Sydney, Chatswood, Lane Cove, McMahons Point, Bondi, Epping, Mascot, Gore Hill, Ryde, Riverview, Denistone east, Manly, Balmoral Beach, Spit Junction and Kingsford.

Bus stops are located within 100 metres of the site in the Pacific Highway, Falcon Street, Shirley Road and Alexander Street.

St Leonards Station is located 1km to the north-west along the Pacific Highway and the new Crows Nest Metro Station will be located on the eastern side of the Pacific Highway generally bounded by Oxley Street, Clark Lane and Hume Street. Station access will be via the corner of Clark Street and Hume Street and at the corner of Pacific Highway and Oxley Street. The closest station entrance will be 400 metres from the site.

Sydney Metro will create connections between Sydney's north-west, west and south-west regions to Sydney's CBD and is scheduled for completion by 2024.

The site is therefore well-serviced by public transport offering a convenient alternative to the use of private vehicles for access to and from the site.

Pedestrian access to and from the site is facilitated by the existing network of pedestrian footways connecting the site to the nearby supermarket and a variety of cafes, restaurants and speciality shops located along both sides of Willoughby Road.

Figure 2 identifies existing public bus and transport options in close proximity to the site.

A bus transport map is attached at Appendix A and a Sydney Rail Network Map at Appendix B.

2.4 Australian Bureau of Statistics – Crows Nest Census Data

The following extract is provided from the Australian Bureau of Statistics for the Crows Nest suburb and outlines the various travel to work methods as indicated by respondents in the 2016 census.

In 2016 only 29% of respondents stated that they travelled to work by car compared to an average of 57.8% for NSW and 61.5% for Australia. A higher proportion of people travelled to work via train, 10.4% of respondents compared to 7.5% on average for NSW and 4.6% on average for Australia. Also, a high portion of respondents indicated that they walked to work at 14.9% compared to the NSW average of 3.9% and the Australian average of 3.5%.

Travel to work, top responses Employed people aged 15 years and over	Crows Nest (NSW)	%	New South Wales	%	Australia	%
Car, as driver	865	29.0	1,953,399	57.8	6,574,571	61.5
Bus	638	21.4	133,903	4.0	323,201	3.0
Walked only	446	14.9	130,957	3.9	370,427	3.5
Train	312	10.4	252,786	7.5	488,012	4.6
Worked at home	178	6.0	163,026	4.8	503,582	4.7
People who travelled to work by public transport	1,137	37.8	540,215	16.0	1,225,668	11.5
People who travelled to work by car as driver or passenger	971	32.3	2,182,854	64.6	7,305,271	68.4

In Crows Nest (NSW) (State Suburbs), on the day of the Census, the most common methods of travel to work for employed people were: Car, as driver 29.0%, Bus 21.4% and Walked only 14.9%. Other common responses were Train 10.4% and Worked at home 6.0%. On the day, 37.8% of employed people used public transport (train, bus, ferry, tram/light rail) as at least one of their methods of travel to work and 32.3% used car (either as driver or as passenger).

Figure 5: Australian Bureau of Statistics – Crows Nest Census Data

2.5 Existing Sustainable Travel Options

The area is well connected to public transport, with bus connections located directly adjacent to the site and St Leonards Train Station 1km to the north.

Pedestrian and Cycling Network

The site is well connected with extensive pedestrian footpath infrastructure and signalised intersections which facilitate safe access to surrounding buildings within the Crows Nest CBD. This existing pedestrian network of footpaths on public roads encourages people to walk from destination to destination or use a combination of public transport and walking. In accordance with concept plans, future pedestrian and cycling access will be prioritised to complement existing pedestrian infrastructure.

In proximity to the site is a number of marked on-road bicycle routes as identified in Figure 3. These routes link the site, depicted by the blue star, with a number of existing recommended off and on-road cycle routes or areas of high bicycle usage.



Figure 3: North Sydney Cycling Guide Map

<u>Train Service</u>

St Leonards railway station is located within 1km walk from the site and is easily accessible by public bus connection on the 252, 254, 286, 287, 290 and 648w routes.

The station sits on the "T1 North Shore", "T1 Northern" and "T1 Western" line which provides access to the greater Sydney train network. The Sydney Trains Network Map is attached in **Appendix B**.

St Leonards Station supports a high frequency of transport services with trains operating every 3-6 minutes to the city during weekday peak hours.

Bus Service

The site is located along a number of bus routes with bus stops located on the Pacific Highway that form part of the "North Shore and West" and the "Northern Beaches and Lower North Shore" bus transit routes.

Relevant bus maps are attached in Appendix A.

Car Share

There are existing GoGet car share pods at the intersection of West Street and Emmett Street approximately 500m south east of the site and on the corner of West Street and Hayberry Street approximately 300m to the East of the site.

This is discussed in more detail in Section 4.5 of this report.

3 Strategic Transport Planning

3.1 North Sydney Transport Strategy 2017

The North Sydney Transport Strategy was prepared to assist with delivery of transport planning and management functions in the North Sydney LGA. The objectives of the strategy include:

- Defining a holistic Vision for transport in North Sydney;
- Setting a principled, best practice approach to achieving this Vision;
- Identifying requirements for the development of mode specific action plans;
- Defining a Council-wide transport implementation framework;
- Outlining a delivery methodology that will help to ensure quick, consistent and robust responses to increasingly complex transport issues; and
- Re-assessing shared CSP/NSTS measuring and reporting requirements.

Demographics and mode choice are discussed with key findings identified below:

- The age demographic is generally younger with greater number of households without children (84.6%);
- Younger persons are more likely to reside closer to multi-modal public transport links and urban centres and are less likely to acquire private vehicles; and
- Younger persons are more likely to engage in car share memberships and utilise alternative transport options like Uber.

The Strategy identified a number of emerging transport trends which are likely to alter the way residents and employees approach transportation. These include the construction of the Crows Nest Sydney Metro Station (refer to section 3.3) which will provide rapid transport opportunities between the north west and Sydney CBD. The network will accommodate 20-30,000 trips in the peak hour which will represent a marked shift. The site is well located to capitalise on the metro advancements and further reduce the mode share of private vehicles in the North Sydney LGA.

The recent coronavirus pandemic is also likely to significantly influence transport planning given the influx of employees working from home and virtual meeting flexibility that mitigates the need for travel between offices. This modal flexibility was identified in the strategy and whilst design refinements are not generally required to capitalise on the 'working from home' trend, the shift will assist with the meeting of reduction objectives for private vehicle usage.

3.2 North Sydney Integrated Cycling Strategy 2014

The North Sydney Integrated Cycling Strategy was prepared to address inadequacies in the existing cycle network and increase cycling mode share in accordance with sustainable transport objectives. Council identified a range of measures designed to increase cycling participation in North Sydney. Table 1 identifies opportunities for compliance with Councils goals and potential site specific cycling initiatives that can be integrated within the design of the precinct at future DA stage.

Table 1: Cycling Initiatives

North Sydney Integrated Cycling Strategy Initiatives	Site Specific Design Initiatives
Implement priority routes to address key gaps in the network	N/A No site specific initiatives required to support Council implementation of priority routes.
Advocate for step free access to the Sydney Harbour Bridge Cycleway	N/A

Update existing routes and improve quality across the network	No site specific initiatives required to support Council implementation of priority routes. N/A No site specific initiatives required to support Council implementation of priority routes
Install consistent and coherent bicycle wayfinding signage	 Site specific design initiatives to include: Implementation of a Bicycle Facilities Wayfinding Plan which is to provide directions to cycle routes, bicycle storage, end of trip facilities and lifts suitable for bicycles.
Provide supporting infrastructure such as public maps, bicycle pumps and water refill stations to support the cycling network	Mapping to be provided within building entry points, lobby's, bicycle storage areas and end of trip facilities to facilitate easy identification of safe cycle routes. Water refill stations, signage and maintenance facilities to be integrated within residential and commercial bike storage areas.
Conduct communications, events and programs to promote cycling and increase safety and awareness.	Building management to consider implementing a Cycling Committee as part of the Sustainable Transport Committee to review initiatives and refine end of trip facilities based on feedback sourced from users of the site. Communication to be provided to residents and employees via newsletters and online group platforms which will promote monthly initiatives aimed at increasing cycling participation within the precinct.

3.3 Sydney Metro - Crows Nest Station

Sydney Metro will provide access to the city from Sydney's north-west via Chatswood, Crows Nest and North Sydney as shown in **Figure 4**. Crows Nest will be located on the Bankstown Line with the station to be accessed via two entrances; one located on the Pacific Highway between Oxley Street and Hume Street and one located on Clarke Street near the corner of Hume Street.

The Crows Nest Metro Station will be located within direct walking distance approximately 250m to the north of the site. The service is scheduled to open in 2024 and will significantly improve rail connectivity to the Sydney CBD. The service is likely to be popular with residents and users of the site due to the prompt travel times to Chatswood (4 minutes), Barangaroo (5 minutes) and Martin Place (7 minutes).

A Draft Crows Nest Station Design and Precinct Plan has been prepared to assist with consideration of existing and planned public and private developments. To assist with delivery of the underground metro station, Sydney Metro will provide the following built form upgrades that are likely to positively influence public transport usage in the Crows Nest Precinct:

- public domain works including footpaths, street tree planting, lighting and street furniture;
- new pedestrian crossing with traffic lights at the Pacific Highway and Oxley Street intersection;
- new pedestrian crossings on Clarke and Hume Streets;
- new bike parking on Hume Street, Pacific Highway, Clarke Street and Oxley Street;
- new on-road marked cycle link on Hume Street;
- new kiss-and-ride and taxi bays on Clarke Street and Oxley Street relocation of two bus stops on the Pacific Highway; and
- installation of wayfinding signage and Sydney Metro information.



Figure 4: Extract from future Sydney Metro Station Map

4 Travel Mode Share

4.1 Development Description

The concept design prepared by Turner incorporates a mixed-use development precinct comprising 8,002m² commercial GFA and 233 residential units. Access to vehicle parking is to be provided from Alexander Street.

Basement parking will include:

- 385 vehicle spaces;
- 12 car share spaces;
- 404 bicycle spaces; and
- 22 motorcycle spaces.

An extract from the concept ground floor plan is provided in **Figure 5** for reference.



Figure 5: Extract from Indicative Ground Plan

4.1.1 Travel by Car

The estimated vehicle trip generation rate is indicated in the table below.

Land Use	Yield	AM Peak Hour Trip Rate	AM Peak Hour Trips	PM Peak Hour Trip Rate	PM Peak Hour Trips
Residential	233 units	0.19 trips / unit	45	0.15 trips / unit	35
Retail	1,830 m ²	1.94 trips / 100m ²	36	2.7 trips / 100m ²	51
Commercial	6,172 m ²	1.6 trips / 100m ²	99	1.2 trips / 100m ²	74
Total	-		180		160

Table 2: Vehicle Trip Generation

4.1.2 Travel by Public Transport

Based on the Bureau of Statistics census data in Section 2.4 of this report, 32.4% of Crows Nest residents travelled by car to/from work, 37.8% by public transport and 14.9% walked to work. The North Sydney Transport Strategy also indicates that 16.5% of households do not own a vehicle.

According to the 2016 Census, the average persons per household in the Crows Nest suburb is two (2). As the concept development consists of 233 apartments, it is therefore assumed that the development will accommodate around 470 residents.

The census also indicated that 88.9% of the population in Crows Nest is employed which equates to approximately 417 future residents. In addition, 37% of the population travelled to work by public transport (train and bus) or cycled / walked (14.9%), which provides an estimated 213 people that will regularly walk between the site and adjacent bus stops during the two hour peak periods.

4.1.3 Travel by Bicycle

The 2016 census indicated that only 1.1% of the Crows Nest and St Leonards population cycled to and from work. This would equate to a small number of residents cycling to work each day which is likely to significantly under-represent the true number of persons utilising a bicycle for travel to work purposes. The North Sydney Transport Strategy indicates that whilst cycling in the LGA is still low compared to international standards, cycling mode share doubled from 2006 to 2011 and is expected to similarly grow in the future.

It is considered that employees in future commercial tenancies would be more likely to travel to work via a bicycle given they are likely to reside outside the Crows Nest suburb and high quality, secure bike parking is to be provided in the precinct. A conservative estimate of approximately 2% of employees (8,0002m² GFA) travelling to the site via bicycle would equate to approximately 20 persons utilising bicycle storage facilities daily.

5 Sustainable Travel Initiatives

5.1 Introduction

A number of sustainable travel initiatives should be incorporated into the design and management of the precinct to complement the existing transport options and provide a holistic strategy to positively influence occupant behaviour.

The overall site strategy should be based around two main 'streams', reducing car ownership with public transport as the primary mode for distance trips and pedestrian/cyclist provisions for shorter trips.

5.2 Transport Access Guide

As part of the implementation of this Travel Plan at future DA stage, a Transport Access Guide should be developed using this Travel Plan as a basis. The Transport Access Guide should be a brochure approximately two pages long to provide information and recommendations on sustainable travel options to and from the development and would be readily available and structured in a manner that provides concise, relevant and easily understood information for the targeted readers.

The purpose of the Transport Access Guide differs from that of the Travel Plan (this document). The Travel Plan has been developed to demonstrate the sustainable transport initiatives and opportunities available for future occupants of the site, inclusive of future building management measures to encourage residents and staff to adopt the preferred modes. A Transport Access Guide however is targeted directly at the building occupants and provides simple, easily identifiable information for the public.

For the future commercial use of the building, workplaces should look to review any relevant company policies to understand existing incentives that can be reinforced to staff. This may include:

- What is the policy/framework regarding the use of onsite parking spaces? What costs are attached to these parking spaces?
- What is the policy/framework relating to fleet vehicles? Do they create incentives that encourage staff to drive to work?
- What is the policy/framework relating to taxis? Do perceived travel time savings result in taxi use being preferred over public transport?
- Are mileage allowances relatively low or high? Are these creating incentives for use of a particular mode?
- Do any incentives exist to encourage sustainable transport modes?

For residential use of the precinct, building management need to ensure that there are no future building regulations which detrimentally impact mode choice. For example, rules banning bicycles in lifts or storage of bicycles in common areas would severely limit the implementation of bicycle initiatives within the precinct. Certain actions may also unintentionally affect travel behaviour, such as poorly located or inadequately secured bicycle parking.

Topics to be covered in the Transport Access Guide may include;

- Access to public transport infrastructure, including
 - Directions
 - Walking distances and times
- Services provided by local public transport, covering
 - o Availability train and bus services
 - Routes covered by local services, including connections to other services

- Ticketing information for public transport, including:
 - Prices and coverage of zones
 - Locations of Opal Card top-up stations / machines
 - Overview of a potential free Opal card incentive scheme for the staff of the commercial/retail businesses.
- Location of local facilities and amenities within walking distance and cycling distance
- Overview of cyclist provisions (bicycle storage etc.)
- Details of car-pooling benefits and strategy as well as eligibility / value for fuel voucher and rewards scheme.
- Detail recommended company policies that should be implemented for the commercial use of the site.
- Detail recommended building regulations for the residential and commercial use of the site.

5.3 Wayfinding and Public Transport Options

Transport for NSW is providing a new integrated approach to wayfinding and signage for the NSW transport network. The key benefits are to provide consistent easy to follow messages and to make using public transport easier for users particularly those travelling on unfamiliar routes and across various different types of transport modes.

The wayfinding approach includes new consistent signage, electronic notice boards, timetables, realtime smart apps and via Transport for NSW website and through social media.

The Sydney public transport ticketing system has transitioned to the Opal card. Since the start of 2016 paper tickets have been phased out. The Opal carding system has advantages such as the provision of off-peak discounts, and daily and weekly caps. This encourages the use of public transport for the likely demographic that will reside, use or work in the precinct once constructed.

Figure 6 below shows the opportunity to purchase opal cards at nearby establishments. Four (4) Opal retailers are located within 500m of the site at EzyMart Crows Nest, 7-Eleven Crows Nest, Crows Nest Newsagency and At Your Convenience Store. Relevant addresses are provided below:

EzyMart Crows Nest

Shop 1, 250 Pacific Highway Crows Nest 2065

7Eleven Crows Nest

28 Willoughby Road Crows Nest 2065

Crows Nest Newsagency 86 Willoughby Road

Crows Nest 2065

At Your Convenience Store

Shop 4 333 Pacific Highway Crows Nest 2065



Figure 6: Opal Card Retailers

Suggested Opal Card Initiative

The site location provides good access to public transport, being only a short walking distance to public bus stops and 1km from St Leonards train station. Crows Nest Metro Station will be delivered in 2024 only 250m to the north of the site. As such, building design management teams should focus on encouraging staff to avoid car use and adopt public transport as their primary mode of transport.

To promote this behaviour, a commitment could be made by future businesses located in the commercial/retail component of the building to provide vouchers for their staff to top up the Opal card for the first 12 months of work.

By providing a voucher that staff use to personally top-up their cards (rather than automatically topping them up), the staff receive regular reminders of the available service and are personally engaged in the process.

This initiative aims to establish public transport as a viable option from the beginning for new staff, which discourages the adoption of personal vehicle usage from the outset. It is then anticipated that after the 12-month period of establishment, staff will continue to use public transport based on their knowledge of the system and travel habits that were developed during the first 12 months of occupancy.

Train and Bus Timetable Boards

A train and bus timetable board could also be established at prominent locations within the precinct to increase the visibility and awareness of the availability of public transport. This would enable staff/ residents or users of the space to easily identify public transport arrival and departure times.

5.4 Car Pool System

Each business that secures a commercial or retail tenancy/ownership has an opportunity to encourage and implement a car pooling strategy within its staff and management operations. The main commercial factors that are likely to assist with car-pooling are:

- A committed and stable workforce for the businesses.
- The majority of staff will work the same or similar shifts.
- Staff are likely to be drawn from nearby or similar residential areas or along travel paths to the site.

Therefore, the car-pooling initiative will require the management team of respective tenancies/ businesses to consider undertaking the following:

- Provide access to the most convenient car parking spaces on site.
- Regularly review staff residential addresses to identify groups of staff who could benefit from a car pooling system;
- Encourage car-pooling by looking to roster these groups of staff on regular and equivalent shifts;
- Provide further encouragement for car-pooling by providing fuel vouchers to an agreed value to the drivers to help cover any additional travel costs associated with the car-pooling.
- Provide a reward scheme (monthly prizes) for those involved in the car pooling scheme.

Likewise, the strata/body corporate/owners corporation of the residential units could also promote a car pooling strategy for the residents.

5.5 Car Share System

Car sharing schemes provide a convenient, affordable and sustainable transport option for residents and businesses. It enables sustainable travel habits, keeps people connected and provides an efficient use of parking space – a single car share vehicle can replace any number of private vehicles that would otherwise compete for local parking.

In the Crows Nest area within 500m walking distance of the subject site, there are three (3) GoGet car sharing pods that park at least one car share vehicle. In addition to surrounding car share pods, GoGet currently operate approximately 900 vehicles throughout the City region for use by members.

The concept development will provide twelve (12) car share spaces at Basement 01 level as shown in **Figure 7**. The concept of car share schemes are conducive to commercial, retail and residential developments located in the vicinity of a CBD. The membership and car hire rates preclude the need to maintain and register a vehicle. Petrol is also included in the car hire, thus the only financial considerations that car share customers need to be mindful of, is the membership and car hire rate. GoGet's membership rates are tailored for specific users. Considering the location of the development, this is likely to be an attractive travel option for the times when cycling or public transport are not viable options



Figure7: Car share spaces at Basement 01 Level

5.6 Walking and Cycling

5.6.4 Site Pedestrian Access

Extensive public pedestrian paths exist in Crows Nest. As the site is located in the centre of the suburb, a number of key public facilities are sited within walking distance to the site.

The location of the site has also been assessed using the "Walkscore" locational performance tool. The tool was developed in 2007, by Front Seat, using Google maps tools. This tool takes into account the number of facilities within close proximity and provides a numerical score between 0 and 100. A development with a score 0 would be heavily car dependant and 100 would indicate that numerous facilities are easily accessible. The proposed development site achieved a rating of 92 out of 100, which is defined on the Walkscore website as a "a walker's paradise - daily errands do not require a car in Crows Nest".

Given the concept is not yet at DA design stage, the proposed ground floor plan of the building should be designed to open up the site lines around the physical corners enhancing pedestrian movement and connectivity between the site and the surrounding areas.

Walking could be further promoted through integration of pedestrian mapping within lobby areas and lifts.

5.6.5 Bicycle Facilities

To promote bicycle usage by occupants of the site, high quality storage areas accommodating 404 bikes are provided to encourage alternative modes of transport for residents, staff and customers. Bike storage will be provided as follows:

Residents	233 spaces
Visitors	23 spaces
Commercial	56 spaces
Retail	91 spaces

To assist with promotion of bicycle participation, bicycle storage design should incorporate the following at DA design stage:

- Facilities should be located in close proximity to lift cores or pedestrian entry points to ensure residents, employees and users of the site are more inclined to consider using a bicycle;
- Bicycle storage areas be signposted with clear and concise wayfinding directions to and from entry points;
- Incorporate mapping within the bicycle storage areas, lifts and lobby's identifying surrounding cycle routes.
- Building management should explore options to integrate accessible end of trip facilities in accordance with the North Sydney DCP 2013. This would include provision of showers, toilets, change rooms and suitable storage facilities for employees and retail users.

6 Implementing and Monitoring the Travel Plan

A Travel Plan prepared at DA is not a one-off document – it is a process of ongoing implementation, review and improvement. The support and commitment of the management teams of the businesses that will occupy the commercial component of the proposed building and the strata/body corporate/owners corporation for the residential component is essential.

Implementing the Travel Plan

Workplace Travel Plans should identify the executive level position that will hold overall responsibility for the plan, whilst residential Travel Plans need to recognise the role and responsibilities of the strata/body corporate/owners corporation.

It will be necessary to appoint a coordinator to oversee the process over time. This might be a single person who can act as a Travel Plan Coordinator, or a committee of people who can work together to implement the Travel Plan. Attaching the responsibility of implementation to a particular person or position is a necessary element of any Travel Plan.

For workplaces, the staff member who is appointed as a Travel Plan Coordinator should be someone who has a good overview of the activities of the organisation. This doesn't mean they need to be a senior manager – a suitable coordinator might be someone in HR, OH&S, sustainability or facilities management.

For residential developments, the Travel Plan Coordinator might be a member of the strata/body corporate/owners corporation, appointed on an annual basis, a staff member from the managing agency, or a motivated resident.

Responsibilities of the Travel Plan Coordinator will include:

- Coordinating implementation efforts;
- Conducting surveys or other data collection processes to measure progress;
- Communicating the travel plan to stakeholders;
- Coordinating events to promote awareness of the plan and associated initiatives; and
- Coordinating marketing and promotional programs.

The Coordinator will also be responsible for monitoring, reviewing and updating the travel plan over time. It is likely that coordinators will require assistance from 'champions' to promote specific actions and encourage the uptake of initiatives.

Monitor and reviewing the Travel Plan

Monitoring and reviewing a Travel Plan is one of the most critical components of the travel planning process. It is crucial to understand whether, and how, the travel plan is having an impact on mode share. On-going monitoring should be conducted for a minimum of five years together with annual reviews.

A building or organisation should aim to collect new data on an annual (or bi-annual) basis to understand how mode share has changed over time. This will help in understanding whether progress is being made. Surveys can also help to identify which actions are having an impact on people's travel behaviour, and whether some are more effective than others. It might also help to identify ongoing or unresolved issues and barriers that are preventing greater improvement.

Once the data has been updated, the targets and actions of the Travel Plan will need to be reviewed.

The steps outlined above should not be considered as a linear process, but rather an on-going cycle. Travel planning requires regular review and adjustment – a review may reveal the need to reconsider objectives or targets, or to add new actions to create greater incentives for the uptake of sustainable transport choices.

7 Conclusion/Recommendations

This Travel Plan has been prepared in accordance with the direction provided by North Sydney Council to accompany a Planning Proposal for building height and density increases.

The Concept Architectural Plans prepared by Turner Architects have been designed to significantly improve the pedestrian connections across the site through integration of through site public pedestrian links.

The proposed ground floor plan of the building has been specifically designed to open up the site lines around the physical corners enhancing pedestrian movement and connectivity between the site and surrounding areas.

The proposed number of bicycle parking spaces will be provided as assessed against the requirements of North Sydney Council's DCP 2013.

At future Development Application stage, a more comprehensive Travel Plan and Transport Access Guide should be prepared and submitted to Council for assessment. Using this Travel Plan as basis, the guide should provide information and recommendations on sustainable travel options to and from the development. This information is to be readily available and structured in a manner that provides concise, relevant and easily understood information for the targeted readers.

Implementing the Sustainable Travel Initiatives outlined in Section 4 of this Travel Plan at DA will encourage the occupants of the proposed building to make greater use of public transport, cycling walking and car sharing for commuting and work-related journey.

A Travel Plan is not a one-off document – it is a process of ongoing implementation, review and improvement. The support and commitment of the management teams of the businesses that will occupy the commercial component of the proposed building and the strata/body corporate/owners corporation for the residential component is essential.

Appendix A

Bus Maps





Appendix B

Sydney Trains Network Maps

Sydney rail network



Metro 🕕 Trains



Appendix C

Bicycle Map

