# Lend Lease Pty Ltd

# Barangaroo South - R8 & R9 Residential Buildings

Travel Demand Management Plan

Issue | 10 October 2012

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 220316

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# 1 Introduction

This report supports a Project Application (MP11\_0002) submitted to the Minister for Planning pursuant to Part 3A of the Environmental Planning and Assessment Act 1979 (EP&A Act). The Application seeks approval for construction of two residential flat buildings (known as Buildings R8 and R9) and associated works at Barangaroo South as described in the Overview of Proposed Development section of this report.

# 1.1 Overview of Proposed Development

The R8 and R9 Project Application seeks approval for the construction and use of two residential flat buildings comprising 159 apartments, ground floor retail, allocation of car parking spaces from the Bulk Excavation and Basement Car Parking Project Application, and the construction of the surrounding ancillary temporary public domain and landscaping.

#### 1.2 Site Location

Barangaroo is located on the north western edge of the Sydney Central Business District, bounded by Sydney Harbour to the west and north, the historic precinct of Millers Point (for the northern half), The Rocks and the Sydney Harbour Bridge approach to the east; and bounded to the south by a range of new development dominated by large CBD commercial tenants.

The Barangaroo site has been divided into three distinct redevelopment areas (from north to south) – the Headland Park, Barangaroo Central and Barangaroo South.

The R8 and R9 Project Application Site area is located within Barangaroo South. The Project Application Site extends over land generally known and identified in the approved Concept Plan as Block X.

# 1.3 Purpose of this Report

This report has been prepared to accompany the Project Application for the R8 and R9 Residential Building and associated works at Barangaroo South. It addresses the relevant Director-General Requirements for the project. These Director-General Requirements are discussed in the Environmental Assessment Report (EAR) that has been prepared to support the application.

This document provides the framework to develop a Green Travel Plan addressing travel demand and sustainable travel initiatives for the R8 and R9 Residential Buildings.

#### 1.4 Document Structure

The diagram below illustrates the document structure established for Traffic and Transport Planning related reporting for the R8 and R9 Residential Buildings. There are three supporting documents to inform and feed into the required responses to the Director General's Requirements (DGR's). They are:

- 1. Transport Management and Accessibility Plan (TMAP) Supplementary to Barangaroo TMAP Stage 1 published by the NSW Government in September 2008.
- 2. Travel Demand Management Plan
- 3. Construction Traffic Management Plan

These supporting documents are the Project Application reports which respond to the DGR issues relating to Transport.

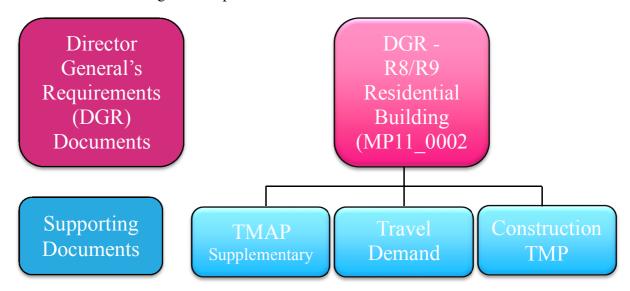


Figure 1 Document Structure

#### 1.5 What is a Green Travel Plan?

A general community Green Travel Plan (GTP) is a tool to minimise the negative impact of private vehicle travel on the environment. The Plan is a package of measures put in place to encourage more sustainable travel. GTP describes ways in which the use of sustainable transport may be encouraged. Using public transport, cycling, walking, working from home, carpooling, making business vehicles more fuel efficient and the use alternative fuels are all more sustainable means of transport than single occupant driving.

More generally, the principles of a Green Travel Plan are applied to all people travelling to and from a site. Government authorities around the nation are placing increasing emphasis on the need to reduce the number and lengths of motorised journeys and in doing so encourage greater use of alternative means of travel which have less environmental impact than cars.

#### 1.6 Benefits of a Green Travel Plan

The Green Travel Plan can bring a number of benefits to Barangaroo residents and visitors:

- Residents can enjoy improved health, less stress, a better quality of life, cost and time savings, and greater travel choice;
- Reduced traffic congestion;

- Benefit from improved air quality, less noise and pollutants; and
- Deliver health benefits, tackle obesity and improve residents quality of life

#### 1.7 Green Travel Plan Framework

A Green Travel Plan for the R8 and R9 residential buildings will need to address the following issues:

- What are the **objectives** for the buildings in terms of travel journeys including trips to work, retail and other land uses.
- How are the set objectives going to be met? What **measures** are going to be implemented and encouraged?
- Who is going to be responsible for the management, implementation and administration of the measures?

In contrast to a workplace environment or other destination based land uses, where opportunities to influence travel demand are easier, the implementation of a green travel plan for residential buildings is more difficult to achieve. The key element to reducing the reliance on private vehicle for the Barangaroo site will be maximising the use of public transport and the promotion of car share vehicles.

## 1.8 Green Travel Plan Objectives

The main objectives of the Green Travel Plan are to reduce the need to travel and promotion of sustainable means of transport.

The more specific objectives include:

- To reduce the level of single occupancy car borne trips associated with commuting.
- To facilitate the sustainable and safe travel of visitors to the site.
- To reduce site traffic congestion and associated pollution in order to enhance, improve and make safe journeys of minority/sustainable transport mode users.
- To work in partnership with neighbouring organisations/developments, local authorities, retailers and other relevant bodies in achieving the maximum mode shift away from the private car.
- To continually develop, implement, monitor, evaluate and review the progress of the travel plan strategy.
- To facilitate all residents' access to key facilities such as retail, leisure, health and education.

Total

# 2 Transport and Access Service Strategy

## 2.1 Mode split

The mode split target for the R8 and R9 residential buildings is consistent with the overall mode split target for the Barangaroo South development presented in Table 1. Low car parking rates in line with City of Sydney guidelines have been adopted. These low rates, complemented by provision of a pedestrian and cycle friendly environment and planned public transport initiatives will help to achieve this target.

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Mode	2006 Census	R8/R9 Residential Building Final Target*		
Car	18.8%	4.0%		
Bus/Light rail	22.4%	20.0%		
Train	47.6%	63.0%		
Ferry	2.7%	1.0%		
Other (pedestrian, cyclists, motorcycles, taxi)	8.5%	12.0%		
		l .		

100%

Table 1 Comparison of the commuter transport task for the Journey to Work

## 2.2 Pedestrian Linkages

The R8 and R9 buildings will be one of a series of buildings forming the Barangaroo South development. Ultimately it will have pedestrian friendly access with low vehicular traffic and wide footpaths along Shelley Street, Napoleon Street extension and Globe Street.

100%

For the ultimate Barangaroo South development the following pedestrian linkages are proposed:

- Wynyard Walk: A new high-volume pedestrian tunnel from Barangaroo to the frequent rail and bus services at Wynyard Station and George Street (currently under construction)
- City Walk Wynyard Connection: A new pedestrian link bridge over Sussex Street/Hickson Road located close to the intersection of Hickson Road and Napoleon Street which links into the Wynyard Walk.
- **189 Kent Connection**: A new pedestrian link bridge over Hickson Road to be constructed and coordinated with the future development of 189 Kent Street.
- Maritime Staircase: A new staircase at the junction of Napoleon Street and Hickson Road which connects to the Maritime Centre providing a link to Kent Street.

<sup>\*</sup> Based on overall mode split target for the Barangaroo South development

## 2.3 Cycling Access

The R8 and R9 buildings will have bicycle access and onsite facilities for commuter cyclists, i.e. showers, changing rooms, lockers. One secure (caged) bicycle parking space per apartment (i.e. 159 spaces) has been adopted which aligns relevant Green Star requirements. Short term visitor parking will also be provided near the entrance to the buildings, visible to the public eye. The City of Sydney has recently commenced a roll out of a cycleway network where dedicated cycle lanes are being constructed throughout the CBD as part of its Cycle Strategy and Action Plan 2007-2017<sup>1</sup>. The Barangaroo cycling strategy will include integration with this cycleway network.

There will be bike parking available on Globe Street for short term visitor use adjacent to the R8 and R9 buildings. A cycling strategy for the entire Barangaroo South site which responds to the external connections and the various cycling activities anticipated is being developed to inform the ground plane design development.

## 2.4 Public Transport Accessibility

The site is well located to a number of public transport hubs, including rail, bus and ferry. A future light rail line corridor has been identified for Hickson Road and will complement these existing modes. Public transport accessibility to Barangaroo is a key area where there has been further development since the TMAP 2008. At the time of the TMAP 2008 assessment, the mode share to public transport was focused on train and bus with a very low ferry mode share. There is now the potential for a number of changes to transport modes to influence the mode of choice to Barangaroo; these being Sydney Light Rail and Ferry services.

## 2.4.1 Sydney Light Rail

The first stage of the inner-west light rail extension is a 5.6km extension running between Lilyfield and Dulwich Hill. It will run from the current light rail terminus at Lilyfield, along the disused freight rail corridor, to Dulwich Hill. The NSW Government's 2012-13 Budget has allocated \$116 million for the construction of the railway, which is expected to be operational by 2014. It could be expected that public transport patronage to Barangaroo from the inner west would shift mode from bus and rail as a result of these extensions.

The NSW Government has allocated \$25m in the 2012-13 Budget to plan for future light rail development across Sydney. The Government recently appointed consultants to prepare a Light Rail Strategic Plan for an area approximately 10km in radius from the Sydney CBD to consider light rail extensions as part of a wider integrated light rail network. This plan will specifically investigate the feasibility of extending light rail through the CBD, to the University of NSW and to Sydney University. The integration of existing and planned light rail networks would further enhance patronage by this mode to Barangaroo.

The Draft NSW Long Term Transport Masterplan presents the key findings from the Sydney Light Rail Study, highlighting that a light rail option serving

<sup>&</sup>lt;sup>1</sup> Refer City of Sydney's publication entitled Cycle Strategy and Action Plan 2007-1017, City of Villages dated February 2007

Barangaroo via The Rocks would 'provide fewer customer benefits, and therefore (is) considered a lower priority.'

#### **2.4.2** Ferry

Existing commuter ferry services providing access to Barangaroo and the CBD in general arrive and depart from King Street Wharf (number 3) and Circular Quay. The potential for a new Barangaroo Wharf Ferry terminal to service the western side of the city has the potential bring additional ferry services and routes, contributing to an to increase ferry mode share. The current TMAP assigns only a 1% mode to ferry for journey to work. Larger tenants in this area have recorded ferry mode share as high as 7% indicating that there is good potential for an increased ferry mode share with increased services and improved frequencies.

#### 2.4.3 Wynyard Walk

The NSW Government's 2012-13 Budget includes \$61 million to building the Wynyard Walk (previously Barangaroo Pedestrian Link), a direct pedestrian link between the new Barangaroo development and Wynyard Station and transport interchange. The Wynyard Walk, expected to be complete by 2015, will provide a high level of access to public transport for the growing western corridor of the CBD, including Barangaroo and the King Street Wharf.

#### 2.4.4 North West/South West Rail Links

The NSW Government is committed to building the North West Rail Link and South West Rail Link, allocating more than \$750 million to continue work on the projects in the 2012-13 Budget which includes:

- \$360 million to develop the 23km North West Rail Link between Epping and Rouse Hill. This includes funding the preparation of major construction sites, property acquisition and the development of a second Environmental Impact Assessment (EIS). An EIS for the major civil construction works was placed on public exhibition in April 2012
- \$397 million to continue construction of the South West Rail Link, which includes 10.5km of twin track between Glenfield and Leppington, two new stations at Edmondson Park and Leppington, car parking and a train stabling facility at Rossmore. The project will be finalised in 2016

## 2.4.5 Improving Public Transport Services and Facilities

The NSW Government's 2012-13 Budget includes a range of improvements to public transport including:

- \$124 million towards delivering electronic ticketing for ferries, trains, buses and light rail.
- \$127 million to acquire 269 buses for Sydney and the outer Metropolitan area
- \$148 million for the new transport access program to improve access to the public transport network, including station upgrades, better access to CityRail Stations, improved transport interchanges and commuter wharf improvements.

- \$95 million for infrastructure upgrades for the rollout of the new Waratah trains
- \$22m for capital improvements on the Sydney Ferry fleet and infrastructure

#### **2.4.6** Long Term Transport Masterplan

The draft NSW Long Term Transport Masterplan was released in September 2012 and outlines a 20 year plan for the direction of transport services across NSW. The plan presents an integrated approach to transport planning and identifies the roles different modes of transport play in meeting the future needs of the State population.

The *Draft NSW Long Term Transport Masterplan* confirms that the proposed Barangaroo Ferry Hub is an integral component of Sydney's transport network, supporting commercial development of Barangaroo and take pressure off Circular Quay.

The masterplan aims to integrate public transport services to maximise future use as well as improve the overall customer experience. The masterplan discusses the implementation of the 'Opal' card – the future integrated public transport ticketing system for NSW.

## 2.4.7 Barangaroo Integrated Transport Plan

In August 2012 the BDA released the Barangaroo Integrated Transport Plan, which was prepared by a taskforce chaired by Transport for NSW and included City of Sydney, BDA, Lend Lease and other Government agencies. The plan outlines a series of transport strategies and actions to accommodate the significant employment growth in the northern CBD over both the short and long term. A selection of the recommended actions include:

- Plan for investigation of a future bus corridor along Hickson Road in lieu of light rail;
- To accommodate the significant increase passenger throughput over the short and long term (up to 26%), prepare a costed implementation plan to upgrade the station and improve capacity;
- Investigate options to relieve congestion at the Wynyard bus interchange and increase the number of bus stops and layovers;
- Commence planning for a new ferry interchange at Barangaroo;
- Complete the Sydney Light Rail strategic plan to determine the feasibility of light rail on George Street and Hickson Road;
- Construct Wynyard Walk, City Walk Bridge and other bridges over Hickson Road as per existing planning approvals;
- Improving cycling access to Barangaroo by extending the City of Sydney's bicycle network, including upgrading existing bicycle shoulder lanes on Hickson Road; and
- Locate sufficient taxi ranks in consultation with City of Sydney, BDA and the Taxi Council.

### 3 Green Travel Plan Measures

In order to meet the objectives and targets of the Green Travel Plan, the following physical and management measures should be implemented.

#### 3.1 Residents' Travel Packs

A new development provides an opportunity to offer residents advice on travel modes to and from the site. At this time, new travel habits are being established and people may particularly welcome information about the travel services and facilities available to them.

A travel pack could be supplied to all residents. The pack will include information on the development travel plan, bicycle and walking routes, bus and rail timetables, information on car sharing and membership information for the development car club. The pack could also include discount vouchers for a local bicycle retailer and a questionnaire about travel behaviour. An example resident travel survey is presented in **Appendix A**. Short term membership to a car share organisation may also be provided in the travel pack.

## **3.2** General Marketing and Promotion

The objectives of the Green Place Travel Plan will only be achieved with the support of R8 and R9 building residents. Marketing the benefits and promoting the sustainable alternatives available are therefore crucial in encouraging residents to adopt the Green Place Travel Plan measures. It is important that at an early stage, residents are made aware of the need for the Green Travel Plan, and that it is emphasised that the measures are being introduced to support and encourage people to use cars more wisely. In addition to raising general awareness, any successes achieved will be fully publicised to residents in order to motivate them to use sustainable modes of transport.

- Travel information and poster could be set up at public area, for example, lobby, notice board, or inside the elevators;
- A Green Travel Plan 'e-flyer' should be distributed to residents during the launch of the Plan. The 'e-flyer' will provide a summary of the benefits to residents of the Travel Plan, its objectives and measures. This could be distributed to residents via the managing strata corporation;
- Events such as National Bike Week, Bike2Work Days, walk to work day should be promoted to residents through notice board posters and email;

# 3.3 Car Sharing

Car sharing is a proven means of reducing the number of car journeys generated by a development. A recent study on the effectiveness of car sharing schemes across Sydney (e.g. GoGet) shows that every car share space replaces the need for 12 private vehicle spaces<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> SGS Economics & Planning (2012), Benefit-Cost Analysis of Car Share within the City of Sydney

Car share arrangements should form an integral part of new project applications and this can be conditioned at the appropriate time and would form part of a Travel Plan. Information on local car sharing schemes would be provided in the residents travel pack.

Consultation with car share operators such as Go Get would be undertaken to provide car share vehicles within the proposed future road network or basement car park, for use by local residents. This will be dependent upon the requirements of car share operators although the development is considered to be a suitable candidate site for the provision of on-street facilities for car share vehicles. This would also form part of a Travel Plan. There are already a number of nearby carshare spaces in the area (see Figure 2) and this is expected to grow following the occupancy of the residential buildings.

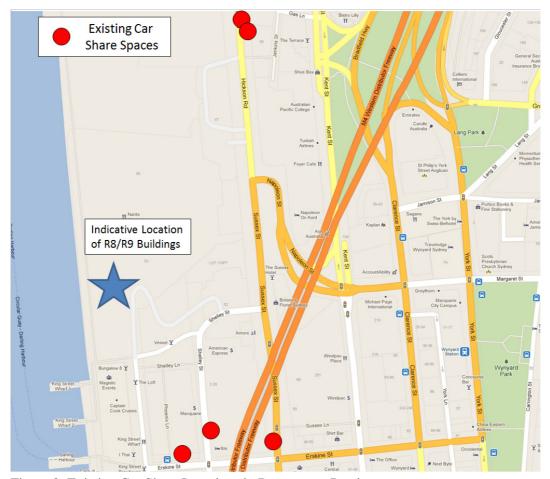


Figure 2 Existing Car Share Locations in Barangaroo Precinct

# 3.4 Travel During the Day

To provide Barangaroo residents with a choice of convenient sustainable transport options for travelling during the day, the following initiatives should be promoted:

- Provide bus, train and ferry timetable and routes information specific to the building location at lobby;
- Provide walking and cycling maps to the surrounding public transport nodes, recreational area and local attractions; and
- Promote use of bikes for short journeys within the CBD;

## 3.5 Cycling

Both R8 and R9 buildings will have good access to the Sydney cycling network and onsite facilities for cyclists. One secure bicycle parking space will be provided for each residential dwelling in the R8 and R9 buildings, complying with Green Building Council Green Star requirements. Additional visitor parking spaces will be provided near the entrances to the building at a rate of one space for every 10 dwellings.

In order to activate and promote cycling the following measures should be taken:

- Supply a communal bike toolkit-this can consist of puncture repair equipment, a bike pump, a spare lock and lights;
- Come to an arrangement with a local cycle retailer for cheap servicing of resident bikes. Negotiate group buying discount on bicycle, equipment and accessories purchase.
- Provide Sydney cycle maps to residents;
- Participate in annual events such as 'Ride to Work Day';
- Notice boards in public areas should have news of events / generic posters promoting cycling;
- Provide pool bikes for common use by residents of the buildings;
- The building management should have a transport website specific for their location containing details of bike storage areas, and links containing useful journey planning websites in Sydney;
- Inform residents on public transport cycling carriage policies and cycle storage facilities at rail stations;
- Formation of a Bicycle User Group in order to provide a body of regular cyclists who can discuss on issues relating to the provision of on-site cycling facilities and the maintenance of off-site cycle routes; and
- Promote City of Sydney's free community cycling training program to residents. Provide information of the training courses available to residents.

A map indicating the existing and future cycling network surrounding the R8 and R9 buildings is presented in Figure 3.

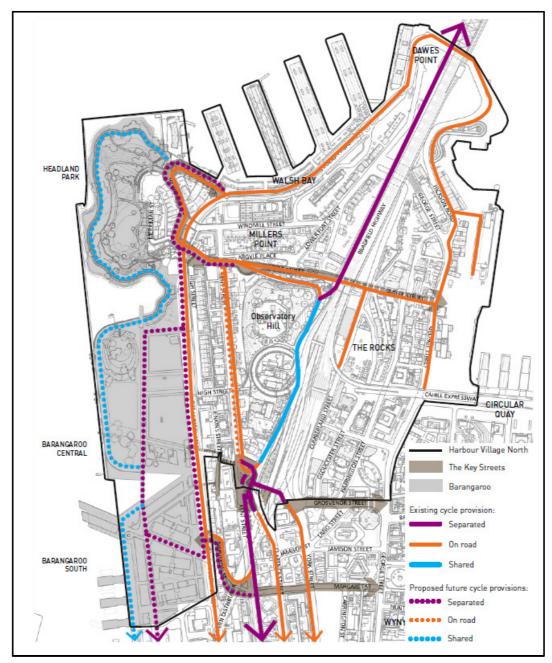


Figure 3 Existing / Future Bicycle Network

Source: Harbour Village North Public Domain Study (City of Sydney, 2012)

# 3.6 Public Transport

To promote the use of public transport.

- Provide information of useful website links to journey planning websites in Sydney;
- Provide useful public transport maps and promotional items to potential and current public transport users;
- Notice boards in public areas should have news of events / generic posters promoting public transport;

 provision of bus passes for the initial occupation of the units so that residents would be encouraged to make public transport their modal choice from the day they moved into the unit

## 3.7 Walking

Specific Travel Plan measures designed to encourage more walking trips for short distance trips.

- Create and maintain an e-flyer 'useful walking routes' containing useful routes
  to key parts of the Sydney CBD, including public transport nodes at Circular
  Quay, Martin Place and Town Hall rail stations;
- Improvements to (and maintenance of) the walking network and signage;
- Formation of local walking group using Heart Foundation Walking Walkers kit (www.heartfoundation.org.au/walking). Hold regular recreational walks for residents;
- Investigating potential participation in www.walksmart.net website; and
- Participate in Walk to Work day and look into holding a 'healthy breakfast' as a reward to all those who participate.

## 3.8 Working from Home

Lend Lease will work with suppliers to facilitate full broadband services to all residences on the site. Broadband availability will encourage working from home through the provision of high-quality data transfer between the workplace and home.

# 3.9 Way finding and Urban Informatics

As an entirely new precinct, Barangaroo South will need a careful wayfinding strategy. Key transport nodes, ferry terminal and other public spaces will need to be located quickly. These would be identified in the resident information pack.

# 3.10 Residents' Travel Plan Group

It is proposed that a travel plan group made up of the members of the building executive committee is created. A committee member, in liaison and working with the building management group, will take the lead in driving the strategies and initiatives contained in the travel plan. The implementation of the travel plan would form an item of discussion at every executive committee meeting, particularly in the initial stages of building occupancy. At the annual general meeting of the building, the travel plan group co-ordinator will report back to attendees on the status of the travel plan and further measures to be adopted for the coming year.

## 4 Monitoring

Monitoring is crucial to the successful implementation of any travel plan. Monitoring will primarily be conducted by the development's travel plan co-ordinator and the residents' travel plan group.

The primary means of monitoring the travel behaviour of residents will be through completion of questionnaires delivered to all residences on the development. These questionnaires will be distributed at all the residential units that are occupied at the end of the first phase. Further questionnaires will be conducted once the other phases are completed, and one year and three years after full occupation of the whole site.

The travel plan questionnaire delivered to all dwellings will investigate residents' current mode of travel to work; mode of travel for shopping, leisure and other personal business; use of travel plan measures; and attitudes towards alternative transport and aspirations to enable travel plan development. As part of the questionnaire, residents will also be asked to complete a one-day travel diary, on a Tuesday, Wednesday or Thursday. This will enable the number of car trips on a typical weekday to be measured.

The headline findings from the monitoring exercise will be reported back to residents in an easily digestible newsletter. A more detailed report will be produced with copies supplied to the travel plan group and local authority. This will ensure that decision makers are informed about residents' travel behaviour.

# **5** Targets, Indicators and Timescales

The following proposed initiatives and measures are suggestions only and will be refined closer to the initial occupancy of the residential buildings.

No.	Measure/Initiative	Implementation Date	Responsibility	Indicator	
Resid	Residents Travel Packs				
1	A travel pack could be supplied to all residents as they move into the building.	Launch date	Residents' Travel Plan Group (RTPG)	Feedback from residents	
2	Travel questionnaire to all residents contained in the travel pack	As residents move into the building	Residents' Travel Plan Group (RTPG)	No. of responses	
Gene	eral Marketing and Promotion			•	
3	Travel information and poster could be set up at public area, for example, lobby, notice board, or inside the elevators	Launch date	Building Management	Feedback from residents	
4	A Green Transport Plan 'e-flyer' will be distributed to residents during the launch of the GTP.	Launch date	Residents' Travel Plan Group (RTPG)	Feedback from residents	
5	Events such as National Bike Week, Bike2Work Days, walk to work day promoted to residents through notice board posters and email	Annually	Residents' Travel Plan Group (RTPG)	No. of attendees	
Car	Sharing				
6	Consultation with car share operators to increase provision of car share spaces nearby to the building	Prior to building occupancy	Developer (Lend Lease)	No. of new car share members	
Trav	Travel During the Working Day				
7	Provide bus, train and ferry timetable and routes information specific to the building location at lobby	Ongoing	Residents' Travel Plan Group (RTPG)	Feedback from residents	

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No.	Measure/Initiative	Implementation Date	Responsibility	Indicator
8	Provide walking and cycling maps to the surrounding public transport nodes, recreational area and local attractions in residents travel packs	Launch date	Residents' Travel Plan Group (RTPG)	Feedback from residents
Cycli	ing			
9	Provide pool bikes for common use by residents of the buildings	Initial building occupancy	Developer (Lend Lease)	Usage
10	Come to an arrangement with a local cycle retailer for cheap servicing of resident bikes. Negotiate group buying discount on bicycle, equipment and accessories purchase	Launch date	Residents' Travel Plan Group (RTPG)	Take-up by residents
11	Formation of a Bicycle User Group in order to provide a body of regular cyclists who can discuss on issues relating to the provision of on-site cycling facilities and the maintenance of off-site cycle routes	Launch date	Residents' Travel Plan Group (RTPG)	Number of participating residents
Publi	ic Transport			
12	Provide useful public transport maps and promotional items to potential and current public transport users	Launch date	Residents' Travel Plan Group (RTPG)	Feedback from residents
13	Notice boards in public areas should have news of events / generic posters promoting public transport	Launch date	Building Management	Feedback from residents
Wall	king			-
14	Create and maintain an e-flyer 'useful walking routes' containing useful routes to key parts of the Sydney CBD, including public transport nodes at Circular Quay, Martin Place and Town Hall rail stations	Launch date	Residents' Travel Plan Group (RTPG)	Feedback from residents
15	Formation of local walking group using Heart Foundation Walking Walkers kit (www.heartfoundation.org.au/walking). Hold regular recreational walks for residents	Launch date	Residents' Travel Plan Group (RTPG)	Number of participating residents
16	Participate in Walk to Work day and look into holding a 'healthy breakfast' as a reward to all those who participate	Annually	Residents' Travel Plan Group (RTPG)	No. of attendees
Worl	king From Home			
17	Broadband availability will encourage working from home through the provision of high-quality data transfer between the workplace and home	Prior to building occupancy	Developer (Lend Lease)	Take-up by residents

No.	Measure/Initiative	Implementation Date	Responsibility	Indicator
Way Finding and Urban Informatics				
18	Local travel guides and maps to be contained in resident travel packs	Launch date	Residents' Travel Plan Group (RTPG)	Feedback from residents
Residents Travel Plan Group				
19	Formation of resident travel plan group to co-ordinate and implement Green Travel Plan strategies and actions	Launch date	Building Management / Developer	Feedback from residents

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# **6** Conclusions

Implementation of a Green Travel Plan and travel demand measures are essential for providing access to and from the R8 and R9 buildings in a sustainable way and meeting the low car mode share target for journey to work. The Green Travel plan will contribute to a healthier and better quality of life for residents and a reduction in air and noise pollution.

# **Appendix A**

Example Resident Travel Survey

1. Gender	<ul><li> Park and ride</li><li> Taxi</li><li> Car</li></ul>			
○ Male				
○ Female				
	Other (please specify)			
2. Age				
<ul><li>○ Under 25</li><li>○ 25-34</li></ul>	6. If you travel to work by car what is your main reason for doing so?			
○ 35-44	o Car essential to perform job			
o 45-54	o Dropping off/collecting children			
○ Over 55	<ul> <li>Personal chores during lunchtime</li> </ul>			
	- • Health reasons			
3. Where do you work or go to school?	• Lack of alternative (please explain)			
Postcode	7. How far do you travel to work/ School?  • Less than 1km			
	○ 1-2 km			
	○ 3-5 km			
4. What times do you normally work/ study?	° 6-10 km			
• Full-time	○ 11-20 km			
<ul><li>Full-time (flexi hours/shifts)</li><li>Part-time</li></ul>	○ 20+ km			
5. How do you normally travel to work/school?	8. How long does it take you to get to work/school?			
○ Walk	o 0-15 minutes			
○ Cycle	o 16-30 minutes			
○ Motorbike/moped	o 31-60 minutes			
○ Train	<ul><li>61-90 minutes</li><li>90+ minutes</li></ul>			
○ Bus (number(s) if available)	o you minutes			

9. Which of the following measures would encourage you to walk or cycle to work/school? (If you already walk or cycle, what measures would you like to see more)

#### TICK NO MORE THAN TWO

- Safer/better lit streets/ pathways
- Better changing and showering facilities
- o Better securing facilities for bikes
- Information on safer routes
- o Loans/discounts for buying equipment
- Free travel home in an emergency

10. Which of the following measures would encourage you to use public transport on your journey to work/school? (If you presently use public transport, what measures would you like to see more of?)

#### TICK NO MORE THAN TWO

- Cheaper public transport
- More reliable public transport
- Improved waiting areas
- Better/clearer transport information
- Better connections with other transport
- Other (please state)

#### 11. Would you be prepared to car share?

- o Yes
- $\circ$  No
- Better/ clearer transport information
- Better connections with other modes of transport
- Other (please state)

# 12. Which of the following would encourage you to car share?

#### TICK NO MORE THAN TWO

- Help finding a car-sharing partner
- Free travel home in an emergency
- Reduced parking costs
- Share with someone
- o Permit holder
- Free parking
- Pay to park

13. If you presently drive to work/ school, would you consider trying an alternative form of transport – even occasionally?

- o Yes
- $\circ$  No

# 14. Do you currently use public transport to access

- Shops
- o Leisure facilities
- Health facilities
- Visit friends and family

15. Which of the following measures would encourage you to use Public Transport for the journeys in question 14? (If you currently use public transport, what measures would you like to see more of?)

#### TICK NO MORE THAN TWO

- Cheaper public transport
- More reliable public transport
- Improved waiting areas