

## Randwick Hospitals' Campus

# Green Travel Plan



FINAL October 2018

### **Document Verification**

# **ARUP**

Job title  Document title		Randwick Campus Redevelopment		Job number	
					257913-00
		Green Travel Plan			File reference
Document ref	i				
Revision	Date	Filename	20180713_Green Travel Plan.docx		
Draft 1	16 Jul 2018	Description	First draft		
			Prepared by	Checked by	Approved by
		Name	SG	АН	АН
		Signature			
Draft 2	25 Jul 2018	Filename	20180725_Green Travel Plan.docx		
		Description	Incorporated HI, PWC and Advisian comments		
			Prepared by	Checked by	Approved by
		Name	SZ	SG	АН
		Signature			
Draft 3	24 Aug 2018	Filename	20180824_Green Travel Plan.docx		
		Description	Incorporated additional comments from HI		
			Prepared by	Checked by	Approved by
		Name	SZ	SG	АН
		Signature			
Draft 4	10 Sep 2018	Filename	20180905_Draft Green Travel Plan.docx		
		Description	Incorporated comments from Travel Choices, TfNSW and Population Health		
			Prepared by	Checked by	Approved by
		Name	SZ	SG	АН
		Signature			
Final	3 Oct 2018	Filename	20181003_Green Travel Plan_Final.docx		
		Description	Incorporated additional comments from TfNSW		
			Prepared by	Checked by	Approved by
		Name	SZ	SG	АН
		Signature			

**Issue Document Verification with Document** 



#### The Green Travel Plan is a partnership between











#### The partners are also working with

- 1. Staff consultative committees
- 2. Consumer and Community reference groups
- 3. Local schools and surrounding community organisations

and





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### **Executive Summary**

South East Sydney Local Health District (SESLHD) is working across the Randwick Hospitals' Campus and with a wide range of stakeholders to lead the development and implementation of a Green Travel Plan.

The Green Travel Plan sets out the:

- a) Future staff travel mode share targets, specifically a reduction in car driver mode share,
- b) Travel demand management strategies, for visitors, patients, staff and supplier/service personnel to encourage sustainable travel to and from the Randwick Hospitals Precinct, and
- c) Initiatives to implement and monitor such travel measures.

A review of existing travel behaviour of staff, visitors and patients indicates that over 40% of staff live within 5km of the Randwick Hospitals' Campus (the Campus) and 12% live within the suburb of Randwick itself. Just over half of those accessing the Campus use private vehicles as a primary mode of transport, and staff public transport use is high relative to other hospitals.

A number of specific measures have been outlined in this Green Travel Plan to promote the use of public transport, walking and cycling by staff and visitors travelling to and from the Campus. These measures include:

- All new staff members are to be made aware of this Green Travel Plan as part of their induction process. This would involve informing staff of available sustainable transport options to and from the Campus;
- The Campus, as well as future expansion areas, are to provide new bicycle parking and end of trip facilities for staff to further support cycling as a sustainable travel choice. This will include secure bicycle parking, lockers, change rooms and showers; and
- Carpooling is to be encouraged through the implementation of a staff car sharing database. This could involve establishing a staff intranet page where staff can register their interest in carpooling by indicating where they live and their shift times. The Campus may also wish to consider participating in the Hospital Carshare scheme.
- Public transport information will be provided to staff and wayfinding through the hospital will be integrated with surrounding public transport nodes.
- Public transport information should be provided on visitor information stands and included in patient admission documents.

SESLHD will continue to proactively engage and consult with patients, families, community, staff and relevant government agencies to refine and implement the Green Travel Plan initiatives.

### 1. Introduction

### 1.1 Background

The Randwick Hospitals' Campus is being strengthened with new investment. A new Acute Services Building for the Prince of Wales Hospital will open in 2022 and the South East Sydney Light Rail will commence operation in late 2019.

The South Eastern Sydney Local Health District has agreed to coordinate the development of a Green Travel Plan with patients, families, staff, community and government agencies.

Key to any successful workplace travel plan is ensuring that the development process is broadly encompassing in order to capture the views of a range of stakeholders within the hospital and across the Campus. This helps ensure that the best information is incorporated into the plan to make it more effective and viewed as an important part of the hospitals' operations.

This first version of the Green Travel Plan must be submitted as part of the statutory requirements for planning approval for the Acute Services Building. Extensive consultation will continue over the coming years to ensure that all stakeholders can be involved with finalising and implementing the actions.

#### 1.2 Site Location

The Randwick Hospitals' Campus (Campus) is located approximately 7.2km south-east of the Sydney CBD and forms part of the Randwick Health and Education Precinct. The University of New South Wales (UNSW) is located to the west of the Campus, while Randwick Junction Town Centre is located immediately to the north.

The current Campus is bound by High Street to the north, Avoca Street to the east, Barker Street to the south and Hospital Road to the west. The Campus consists of four hospitals; Prince of Wales Hospital, Sydney Children's Hospital, Randwick, the Royal Hospital for Women and the Prince of Wales Private Hospital as well as associated research institutes; Black Dog Institute, Neuroscience Research Australia and the Bright Alliance.

As part of Stage 1 of the Randwick Campus Redevelopment, a new Acute Services Building (ASB) will bridge the physical gap between the Campus and UNSW. The ASB will include a new intensive care unit, operating theatres, extra beds and a new emergency department. The proposed ASB will enable education, training and research to be more closely integrated into the health care services provided across the precinct.

The location of the new ASB as part of the Campus is shown in Figure 1.

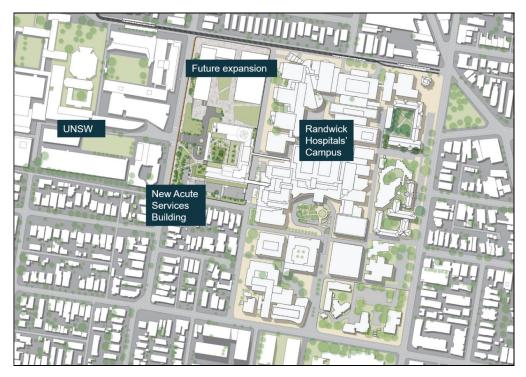


Figure 1: Randwick Hospitals' Campus and proposed ASB and future expansion area

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

A Green Travel Plan is a package of measures implemented by an employer to encourage more sustainable travel for the journey to and from work and also during the course of work. It is a means for an organisation to reduce the use of cars by staff, particularly driving to and from work and for work related travel. Through a Green Travel Plan, workplaces can also demonstrate commitment to a more proactive approach in improving people's health and wellbeing and the environmental sustainability of its activities.

The principles of a Green Travel Plan are applied to all people travelling to and from a site. Government authorities 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 with more environmentally positive outcomes.

The intention of this Green Travel Plan is to:

- a) Set future staff travel mode share targets, specifically a reduction in car driver mode share,
- b) Detail the travel demand management strategies, for visitors, patients, staff and supplier/service personnel to encourage sustainable travel to and from the Randwick Hospitals' Campus,
- c) Describe initiatives to implement and monitor such travel measures,
- d) Promote healthy living to staff by encouraging the integration of walking/cycling into their everyday routine.

### 1.4 Policy Support

NSW Health policy is well aligned to the intent of the Green Travel Plan and increasing the use of healthy and sustainable modes, including walking and cycling. The NSW State Health Plan Towards 2012, NSW Healthy Eating and Active Living Strategy 2013 – 2018 and the NSW Health Hospitals Car Parking Fees Policy (2013) all provide strong support for the Green Travel Plan approach.

The SESLHD is aligned to the purpose and intent of the Green Travel Plan. It has adopted the Journey to Excellence Strategy 2018 – 2021 (Strategy), following the Roadmap to Excellence 2014 -2017. It sets out the strategic priorities for the LHD in the short term, continuing a process of transformation.

The Strategy looks to a broad future vision, including:

"Much better links between health services and other agencies, such as education, community services, justice, transport, primary care and local councils so together, we can improve the health and wellbeing of our communities and whole population across our region."

While also identifying key strategic themes that include:

• "Community wellbeing and health equity: we will work together with our partners to achieve health, wellbeing and equality for our shared communities."

 "Workforce wellbeing: we will create an environment where our people can be accountable, happy and well, and supported to reach their potential."

In addition, The Randwick Hospitals' Campus has committed to broader planning of the Randwick Health and Education Precinct which includes improving the urban environment through four key principles:

- 1. Supporting a green environment,
- 2. Connecting open spaces, buildings and key centres of activity,
- 3. Integrating quality and diverse spaces that encourage people to gather to meet, relax and foster collaboration, and
- 4. Being responsive to the natural environment and respectful of the area's heritage and long history.

The Randwick Campus Redevelopment, which will deliver the new Acute Services Building, identifies the need for putting patients first, which includes addressing access issues in and outside of the hospital.

The six design principles are:

- Patients first
- People collocated and collaborative
- Services are integrated and not duplicated
- Evidence-based and/or evidence generating
- Flexible and future ready
- Support patient care beyond the boundaries of the hospital

### 1.5 Engagement

Health Infrastructure's guiding principles for capital projects in relation to communications and engagement are being used across the Campus. These are:

- Proactive stakeholder engagement
- Proactive and transparent communications
- Coordinated information
- Collaboration

The first public material focused on transport, access and car parking and was developed and presented to staff and community in April 2018.

Regular engagement and consultation will continue as certain actions are further developed and implemented which will include:

 Engaging with all of the community and consumer reference groups across the Campus

- Establishing a staff car parking reference group
- Establishing an online forum to collect staff and visitor feedback
- Establishing user groups on cycling and other issues from time to time as needed
- Undertaking regular staff updates

SESLHD will also work collaboratively with other key stakeholders such as UNSW, Randwick City Council, Transport for New South Wales and local schools and community groups.

This Green Travel Plan will be updated and amended as the implementation progresses.

### 2. Existing Travel Patterns and Infrastructure

### 2.1 Mode Split

The most notable features of the existing hospital campus staff travel patterns are:

- Over 40% of staff live within the Eastern Suburbs (within 5 km of the Campus); and
- Randwick currently accommodates 12% of the total staff population of the Campus.

The high proportion of staff living in close proximity to the Campus provides great opportunities for travel via non-car modes of transport – such as public transport, walking and cycling.

### 2.2 Travel patterns

The latest known stated preference surveys were conducted in March 2012 (TTW, 2012) to understand the travel behaviours of staff and visitors. Key insights from these were:

- Just over half of staff drive to work (52%) and 6% travel as a car passenger). Public transport accounts for 25% of the mode share, while 14% access the Campus via walking (see Figure 2); and
- The majority of visitors and outpatients access the Campus via private vehicle, and approximately 20% utilised public transport (see Figure 3).

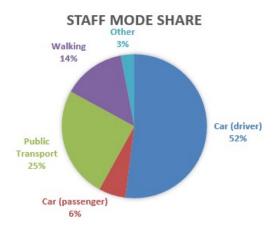


Figure 2: Staff mode share (TTW, 2012)

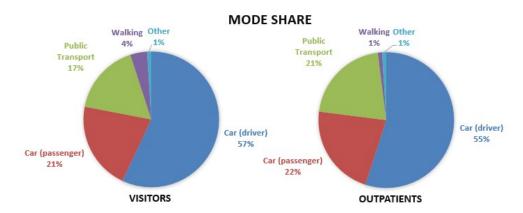


Figure 3: Visitor and outpatient mode shares (TTW, 2012)

To have a clear understanding of the current travel behaviours, it is important to compare the results of the 2012 staff survey with the latest (2016) Census data (Destination Zone 115700003 which encompasses the Campus<sup>1</sup>). This comparison is shown in Table 1.

Table 1: Mode share comparison between 2012 surveys and 2016 Census data

	Proportion of Total Trips			
Mode of Travel	2012 Survey (TTW)	2016 Census DZ 115700003		
Car Driver	52%	59%		
Car Passenger	6%	5%		
Public Transport	25%	22%		
Walk	14%	14%		
Other	3%	0%		
Total	100%	100%		

<sup>&</sup>lt;sup>1</sup> The Campus makes up the majority of the Destination Zone, with the exception of Randwick Girls' High School, Randwick Boys' High School and some other land uses that are assumed to not draw a large number of employees

The results of this comparison suggest that, since the 2012 surveys, car trips account for a slightly higher percentage of trips for staff to the Campus, with walking being similarly popular choices as in 2012. The increase in car based trips may be attributed to the CBD and South East Light Rail (CSELR) construction occurring near the Campus, causing some disruption to public transport.

### 2.3 Pedestrian and Bicycle Networks

The existing bicycle network surrounding the Campus is shown in Figure 4. The road shoulder on Doncaster Avenue and Houston Road provides a north-south bicycle route that connects Kingsford and Kensington to the Anzac Parade bicycle route at Centennial Park, continuing on to the Sydney CBD. A shared path (shared by pedestrians and cyclists) on Alison Road and Wansey Road provides a connection between the Campus, Randwick Racecourse and Centennial Park. It should be noted however, that Wansey Road is temporarily unavailable to bicycles due to construction works for the CSELR.

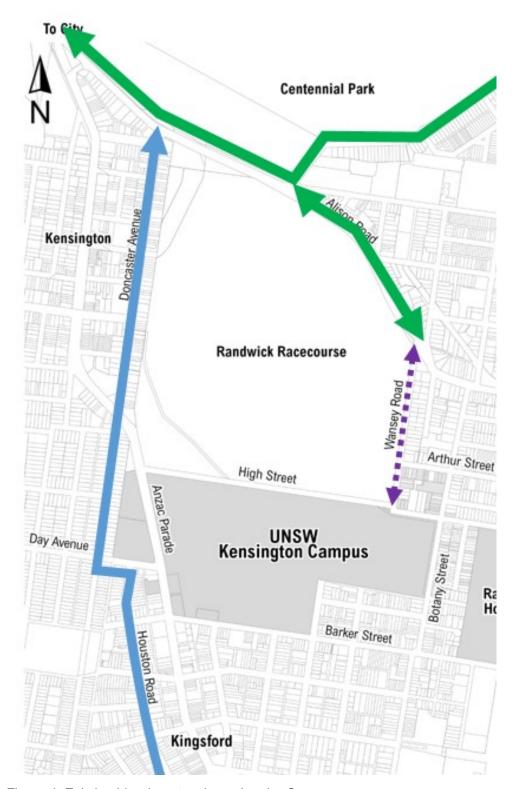


Figure 4: Existing bicycle network serving the Campus

5, 10, 15 and 20 minute walking and cycling isochrones for the Randwick Campus are shown in Figure 5 and Figure 6, respectively. Key desire lines around the Campus for walking and cycling are accentuated by Strava (a popular website/mobile application used to track walking, running and cycling activity) outputs shown in Figure 7.

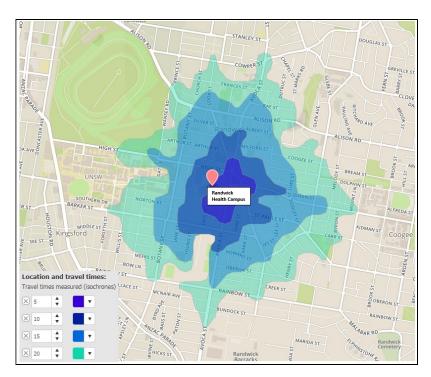


Figure 5: Walking isochrones to/from Randwick Campus

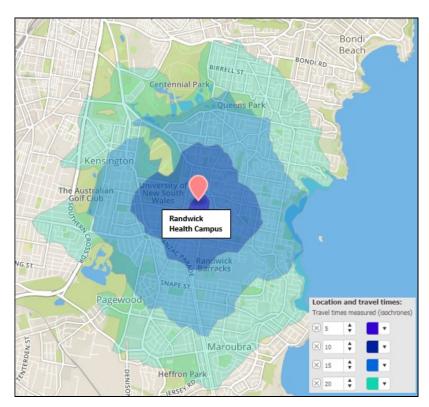


Figure 6: Cycling isochrones to/from Randwick Campus



Figure 7: Heat map showing key pedestrian and cyclist routes and intensity of use (Strava, 2018)

Randwick City Council has developed a network of priority bike routes that will be implemented as part of Randwick's 20-year City Plan. The eleven routes include seven east-west links that help to improve access towards the coast and west towards Green Square, and four north-south routes that allow cyclists to travel safely towards the city.

Figure 8 shows the new separated cycleway connections proposed as part of the City Plan.

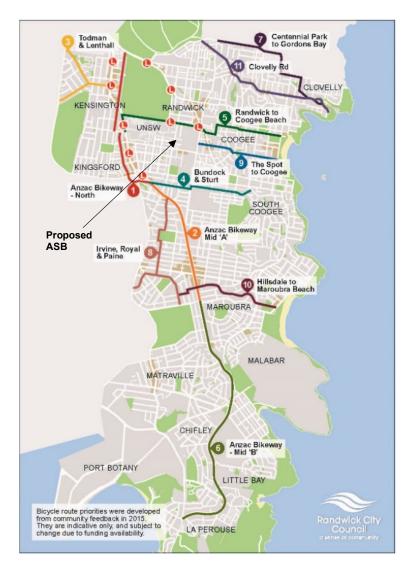


Figure 8: Proposed cycle network (Randwick City Council, 2017)

### 2.4 Public Transport Accessibility

#### **Bus accessibility**

The southern end of Belmore Road, which is located at the north-eastern boundary of the Randwick Campus, is a district hub for buses in Sydney's Eastern Suburbs. Figure 9 below shows the bus stops in the vicinity of the Campus.

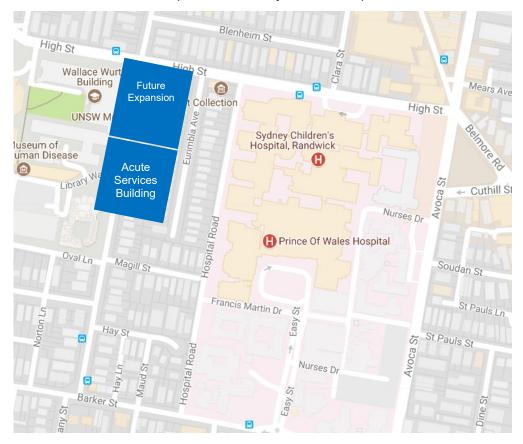


Figure 9: Bus stops in the vicinity of the Campus (Basemap source: Google, accessed July 2018)

A number of bus routes, shown in Figure 10, frequent these stops, including:

- All-day services connecting the south-eastern suburbs with Central Station and the Sydney CBD via Moore Park – routes 372, 373, 374, 376, 377 and M50;
- A range of express service variants of these routes that operate during peak hours;
- North-south services that connect centres in the Eastern Suburbs, including Bondi Junction and Maroubra Junction – routes 314, 316, 317;
- East-west services that connect Randwick with Bondi Junction, Green Square, Mascot and various locations in the inner western and southern suburbs – routes 348, 400, 410 and 418:
- Leichhardt to Coogee route 370; and
- Central Station UNSW express bus services routes 891, 893 and 898.

Most bus services travel along Belmore Road, with some using High Street, Alison Road and Avoca Street. Recent changes associated with the construction and operation of the CSELR have resulted in buses using Arthur Street instead of High Street.

Transport for NSW (TfNSW) are currently designing a new bus network for Sydney's south-east to support the introduction of the CSELR. The new bus network will continue to support local links to Randwick's Health and Education precinct.

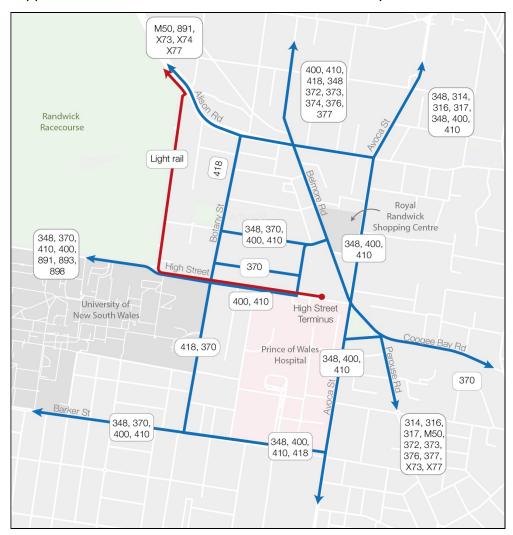


Figure 10: Existing bus services and future light rail servicing the Randwick Campus

A summary of the frequency of services of the bus routes mentioned above is included in Table 2.

Table 2: Bus service frequencies (weekday)

Bus route	Number of bus services (per day)
372 – Coogee to Central Railway Square	79
372 – Central Railway Square to Coogee	67
373 – Coogee to City Circular Quay	104
373 – City Circular Quay to Coogee	120
374 – Coogee to City Circular Quay	45
374 - City Circular Quay to Coogee	46
376 – Maroubra Beach to Central Railway Square	35
376 – Central Railway Square to Maroubra Beach	31
377 – Maroubra Beach to City Circular Quay	46
377 – City Circular Quay to Maroubra Beach	50
M50 – Coogee to Drummoyne	66
M50 – Drummoyne to Coogee	66
314 – Coogee to Bondi Junction	36
314 – Bondi Junction to Coogee	37
316 – Eastgardens to Bondi Junction	22
316 – Bondi Junction to Eastgardens	24
317 – Eastgardens to Bondi Junction	24
317 – Bondi Junction to Eastgardens	26
348 – Wolli Creek to Bondi Junction	37
348 – Bondi Junction to Wolli Creek	37
400 – Burwood to Bondi Junction	126
400 – Bondi Junction to Burwood	126
410 – Bondi Junction to Rockdale	15
410 – Rockdale to Bondi Junction	16
418 – Bondi Junction to Burwood	46
418 – Burwood to Bondi Junction	48
370 - Leichhardt Marketplace to Coogee	71
370 - Coogee to Leichhardt Marketplace	68
X73 – City to Coogee	15
X73 – Coogee to City	24
X74 – City to Coogee	7
X74 – Coogee to City	14
891 – Central Station to UNSW	139
893 – UNSW to Central Station	107
898 – UNSW to Central Station	49

#### **CBD** and South East Light Rail

The CBD and South East Light Rail (CSELR) is a new light rail network for Sydney. It is currently under construction and the first services are anticipated to begin in late 2019. The 12km route will feature 19 stops, extending from Circular Quay along George Street to Central Station, through Surry Hills to Moore Park, then to Kensington and Kingsford via Anzac Parade and Randwick via Alison Road and High Street. The proposed light rail alignment and stops are shown in Figure 11.

The eastern end of High Street, which forms the northern boundary of the Randwick Campus, will feature a terminus for the CSELR. Light rail services will terminate at a stop on High Street immediately west of the Belmore Road and Avoca Street intersection.

Light rail services will travel from High Street towards the Sydney CBD every eight minutes between 7am and 7pm on weekdays, when the CSELR commences operation. There will be a number of bus operational changes associated with the introduction of light rail including amendments city-bound bus services, potentially decreasing the number of bus services using Belmore Road, particularly at peak times.

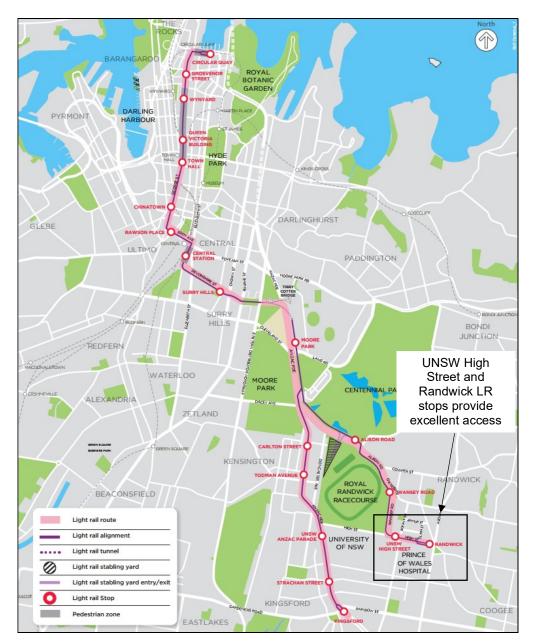


Figure 11: Proposed CSELR rail route alignment (TfNSW, 2017)

A review of the CSELR Environmental Impact Statement (EIS – TfNSW, 2013) shows the forecast line loading for the light rail at 2021. The CBD bound and Randwick bound line loading for the 2021 AM peak scenario is shown in Figure 12 and Figure 13, respectively.

While the majority of light rail passenger trips will be CBD bound in the AM peak, a balance of contraflow movements is anticipated given the demand generated by UNSW and the Randwick Hospitals' Campus. AM peak line loading of approximately 80% is forecast for Randwick bound services, with the majority of passengers alighting at the UNSW High Street stop. This indicates that there is sufficient forecast capacity to meet additional demand resulting from increased patronage by hospital staff and visitors.

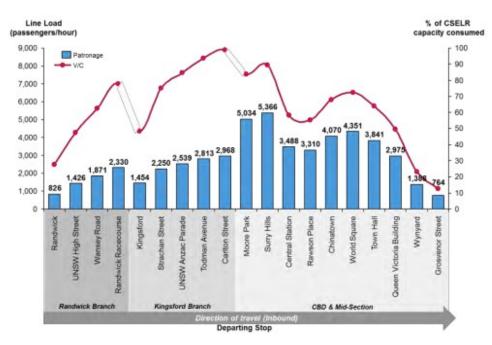


Figure 12: CSELR line load and capacity consumed - 2021 CBD bound AM peak (TfNSW, 2013)

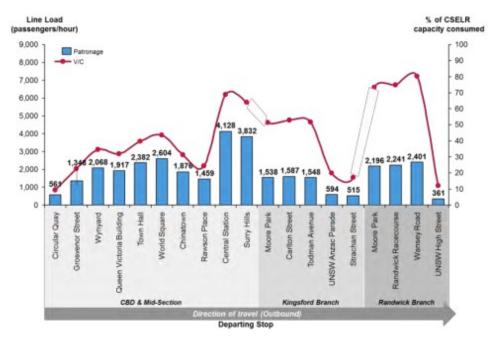


Figure 13: CSELR line load and capacity consumed - 2021 Randwick bound AM peak (TfNSW, 2013)

### 3. Green Travel Plan Framework

### 3.1 Objectives

The main objectives of the Green Travel Plan are to reduce car driver mode share and encourage the use of more sustainable means of transport.

The more specific objectives include:

- Meet the targets to increase mode share for public transport, cycling and walking to/from work journeys;
- Provide adequate facilities at the Campus to support staff and visitors to commute by sustainable transport modes;
- Reduce the number of car journeys to and from the Campus;
- Promote the health benefits of active transport;
- Encourage new employees to use sustainable transport from the outset; and
- Raise awareness of sustainable transport amongst staff and visitors.

### 3.2 Proposed Green Travel Plan Measures

#### 3.2.1 Green Travel Plan

#### **Description of measure**

The green travel plan will be implemented to promote the uptake of public transport, walking and cycling by staff and visitors for travel to and from the Campus and discourage the use of private vehicles where possible.

#### Monitoring mechanisms

- Annual travel survey of staff and visitors to be conducted to understand travel patterns and trends of people travelling to and from the Campus.
- Comparison of staff travel mode data collected at orientation and then three months
  following orientation, to reveal if there are any changes to travel mode as a result of
  Campus initiatives.

#### 3.2.2 Staff induction

#### **Description of measure**

To ensure new members of staff are aware of the Green Travel Plan, all new staff members will be made aware of the Plan as part of their induction process, which will include:

- A brief introduction to the plan and its purpose;
- Map of the Campus showing public transport stops, bicycle parking areas, lockers, and shower and changing facilities;

- Staff access to a designated end of trip facility (based on the specific working location);
   and
- Provision of transport information packs to new staff explaining the various ways (other than motor vehicle) of travelling to and from the Campus.

#### Monitoring mechanisms

- Annual travel survey of staff and visitors to be conducted to understand travel patterns and trends of people travelling to and from the Campus (will include question for staff regarding commencement date), and
- South Eastern Sydney Local Health District (SESLHD) to maintain a record of the number of staff inducted through the updated process.

#### 3.2.3 Cycling

#### **Description of measure**

Barriers to the use of bicycles as a mode of transport to work likely include:

- Provision and quality of end of trip facilities (including showers, secure bike parking, etc.);
- Lack of cycling infrastructure;
- Distance from home to work;
- Shift start/end time; and
- Rider confidence.

To support cycling as an option for staff traveling to and from work, bicycle parking and end of trip facilities (showers, change facilities and lockers) for staff will be identified and augmented as necessary.

The project is currently exploring opportunities during detailed design for the construction of appropriately sized and specified end of trip facilities in close proximity to the Acute Services Building, within the existing hospital car park. The end of trip facilities will be sized and specified to meet needs and encourage a greater take up of cycling. All staff will be made aware of the bicycle parking and end of trip facilities available.

Events such as National Bike Week and Bike2Work Day, which encourage the usage of bikes as a mode of transport, should also be promoted. Events can also be timed to promote the use of the local cycleway network as Council opens new connections.

A bicycle user group was established by SESLHD in June 2018. This group will be an important stakeholder in defining future cycle user provision across the Campus. It is recommended that this user group:

- Investigate potential additional barriers to those identified above that may be deterring staff from cycling to work through a survey;
- Initiate and promote a Buddy Cycling initiative (the pairing of an experienced rider with a new/less-confident rider to help familiarise them with cycle routes); and
- Provide staff with access to bike maps.

The Campus may initiate a trial with a private bike company to provide rental bicycles to staff. This would provide staff with an opportunity to trial cycling as a mode of travel to work, before committing financially by purchasing a bike. This external company may also organise training for staff who are beginner cyclists.

#### Monitoring mechanisms

- SESLHD to monitor the demand for bicycle parking at the Campus through an occupancy survey undertaken annually; and
- Annual travel survey of staff and visitors to be conducted to understand travel patterns and trends of people travelling to and from the Campus.

#### 3.2.4 Walking

#### **Description of measure**

Given the large proportion of staff living nearby to the Campus, there is opportunity to increase the proportion of people walking to work. The identification and provision of end of trip facilities is anticipated to encourage more staff to walk to the Campus. There is also opportunity to improve existing connections between the Campus and the wider pedestrian network, including:

- Improved signage and wayfinding; and
- Improved lighting along pedestrian routes.

#### Monitoring mechanisms

- SESLHD to monitor the percentage of staff walking to the Campus through travel survey
- Obtain feedback from staff regarding issues they may have walking certain routes and liaise with local authorities regarding improvements (e.g. lighting and security issues)

### 3.2.5 Carpooling

#### **Description of measure**

Currently only a small number of staff who drive to the Campus have a passenger. Staff intercept surveys conducted by TTW (2012) indicate an average vehicle occupancy of 1.2 passengers per vehicle. This presents an excellent opportunity to promote car-pooling as method of commuting to work.

This would involve the implementation a staff car sharing database. This could involve a staff intranet page where staff would register their interest in carpooling by indicating where they live and their shift times.

A website has recently been established (www.hospitalcarshare.com.au) which allows staff members at participant hospitals (Hornsby Ku-ring-gai Hospital participates) to connect with each other to encourage sharing a lift to and/or from work. Randwick Campus could participate in this scheme and promote the website to their staff members.



Figure 14: Example hospital car share website

The Campus may also consider offering a subsidised parking rate to people with four or more people in the car.

#### Monitoring mechanisms

 Annual travel survey of staff and visitors to be conducted to understand travel patterns and trends of people travelling to and from the Campus.

#### 3.2.6 Other measures

SESLHD will work with all stakeholders to explore other measures that could be implemented. These could include:

- Conduct a review of fleet management operations against the objectives outlined in this Green Travel Plan
- Establish a working group with Transport for NSW to consider how the surrounding bus network can better support the Campus
- Conduct a review of the current car parking operations contract against the objectives outlined in this Green Travel Plan and explore opportunities to improve parking and management efficiency
- Work with the SESLHD public health promotion team to support active transport and highlight the 'Make Healthy Normal' campaign
- Expand Opal top-up facilities across the Campus
- Expand on NSW Health 'Make Healthy Normal' Program by working with SESLHD Health Promotion Service

The measures and initiatives outlined above are not a prescriptive or exhaustive list. These measures should be considered relative to the outcomes associated with monitoring of this Green Travel Plan and implemented only on agreement and consensus of the SESLHD.

### 3.3 Summary of key monitoring mechanisms

- Feedback from staff as to the effectiveness and usefulness of the Green Travel Plan;
- Annual travel survey of staff and visitors to be conducted to highlight key transport issues and outline travel patterns and trends of people travelling to and from the Campus, enabling the SESLHD to monitor the effectiveness of measures in increasing use of non-car driver travel options;
- SESLHD to monitor the demand for bicycle parking at the Campus through an occupancy survey undertaken annually.

### 4. Forecast Levels of Activity

Based on data provided by HI and SESLHD, it is expected that the development of the ASB will increase the number of beds at the Randwick Campus by 111 by 2027, and increase the number of full-time equivalent (FTE) staff by 563 in 2027. These anticipated increases are outlined in Table 3 below.

Table 3: Forecast increase in beds and staff for the Prince of Wales Hospital (Source: South Eastern Sydney Local Health District, 2017)

Increases compared to existing supply	Forecast 2022	Forecast 2027
Beds	+ 58	+ 111
Staff (FTE)	+ 386	+ 563

Significant change in visitor and outpatient travel behaviour is unlikely for the increased number of beds. Mode share targets for staff are outlined in Section 5.

### 4.1 Construction worker parking

Construction workers should primarily be encouraged to use modes other than private vehicle to access the site, and carpooling initiatives should be promoted.

Lendlease will work with the Royal Randwick Racecourse to establish a "park and ride" and associated shuttle bus service that would run between the Racecourse and site between 6:00am - 9:00am and 3:00pm - 6:00pm. This shuttle service is to be in place during the demolition and construction phases. Monitoring should also be included to ensure utilisation by workers and that workers are not parking on-street or in hospital/public car parks near the development site.

Lendlease propose that the area to the north of site for future development could be primarily utilised for materials handling, lay down area and site storage, however this 130m x 100m section of the site could provide on-site parking for up to around 100 workers should this be needed. This proposal is to be worked through with TfNSW, SESLHD and HI through the detailed design phases.

Access to all of the Campus car parks will be strictly prohibited. The contractor will allow for maintaining a temporary car park for safe use by construction contractors / staff to deliver tools and equipment to secure onsite storage areas.

### 5. Mode Share Targets

The implementation of the measures identified in this Green Travel Plan will encourage staff currently driving to and from the Campus to use more sustainable travel modes. This plan sets a minimum target mode share shift away from single occupancy private vehicle use of 6% by 2022. This equates to a car driver mode share for staff of approximately 46%, in comparison to 52% in 2012. It is anticipated that this shift will offset the increased parking demand generated from Stage 1 of the Randwick Campus Redevelopment.

The mode share targets for each mode and the respective shift from current behaviours is shown in Table 4.

Mode	Existing Staff Mode Share	Target Staff Mode Share	Difference
Driver	52%	46%	-6%
Car (Passenger)	6%	7%	+1%
Public Transport	25%	28%	+3%
Walking	14%	14%	-
Other (incl. cycling)	3%	5%	+2%

Table 4: Target mode share

- Car (Passenger) With introduction of car pool programmes, increased staff awareness and potential incentives to registered car pool vehicles, a 1% increase in mode share is likely reasonable.
- Public Transport Given NSW government's significant investment in public transport (CSELR, Sydney Metro, etc.), this is a mode that has the greatest propensity for change. The introduction of CSELR will improve the legibility of transport services to the Campus from the CBD. The potential subsequent improvements to north-south bus services towards the south of the Campus will likely increase the current public mode share in this area. As result, a 3% increase in mode share is likely reasonable.
- Walking Analysis of staff postcodes relative to reasonable walking distances indicate that this mode is likely saturated. As a result, no mode shift is expected.
- Cycling Analysis of staff postcodes relative to reasonable cycling distances, proposed
  major upgrades to the surrounding cycle network by Randwick City Council and
  improvements in bicycle parking and end of trip facilities indicate that there is an
  excellent opportunity to promote cycling as a mode of transport for staff. As result, a
  2% increase in mode share is likely reasonable.

An annual travel survey is recommended as the mechanism to monitor progress in reaching the target. Survey data will be used to further tailor the Green Travel Plan measures to ensure the target is achieved.

### 6. Next Steps

The SESLHD will work with the Randwick Hospitals' Campus partners (Prince of Wales Hospital, Prince of Wales Private, Sydney Children's Hospital, Randwick and the Royal Hospital for Women) as well as UNSW, the research institutes and other providers across the campus to develop and implement the Green Travel Plan.

SESLHD will continue to proactively engage and consult with patients, families, community, staff and relevant government agencies to refine and implement the Green Travel Plan initiatives.