

The Sutherland Hospital Operating Theatre Upgrade Project Green Travel Plan

PREPARED FOR HEALTH INFRASTRUCTURE NSW | November 2023

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Revision schedule





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Quality statement

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1 Introduction

1.1 Background

Stantec has been commissioned by NSW Health Infrastructure to prepare a Green Travel Plan to support the Sutherland Hospital Operating Theatre Upgrade Project (THSHOTUP). The upgrade will provide new operating theatres, procedure rooms, endoscopy suites, Central Sterile Supply Department (CSSD) and an MRI suite. In addition, new facilities for admissions and discharges will be created as well as new staff amenities and workspaces. These upgrades will increase the number of staff and visitors to the site, creating the requirement to refresh the Green Travel Plan previously completed in March 2021. The Green Travel Plan is required to satisfy the Department of Planning, Industry and Environment SSD-11099584 terms of consent Part D17 for the Green Travel Plan.

The purpose of a Green Travel Plan is to promote and encourage the use of sustainable travel and reduce the overall reliance on private vehicles. The overall purpose of a Green Travel Plan is not to be 'anti-car', but to encourage and support people's aspirations for carrying out their daily business in a more sustainable way. Green Travel Plans can provide both:

- measures that encourage reduced car use (disincentives or 'sticks').
- measures that encourage or support sustainable travel (also known as Active Transport), reduce the need to travel or make travelling more efficient (incentives or 'carrots').

The definition of active transport relates to undertaking physical activity as a means of transport. This includes travel by foot, bicycle, and other non-motorised vehicles. The use of public transport is also included in this definition, as it often involves some walking or cycling to/ from pick-up and drop-off points.

The Green Travel Plan should promote the use of transport, other than the private car, for choice of travel to and from the site, which is more sustainable and environmentally friendly. Ultimately, however, end-users shall determine their most suitable means of transport.

1.2 Site Location

Sutherland Hospital is located at the intersection of Kingsway and Kareena Road in Caringbah. This region falls within the Local Government Authority of Sutherland Shire Council, a region otherwise known as 'The Shire'. The hospital is a major metropolitan teaching hospital that cares for approximately 50,000 patients in the emergency department on an annual basis. The hospital has 375 inpatient beds and cares for around 28,000 patients that are admitted to the hospital each year. The proximity of the hospital in the context of wider Metropolitan Sydney is shown in Figure 1.



Figure 1: Sutherland Hospital Location



1.3 Conditions of Consent

The Green Travel Plan must satisfy the requirements of *Section 4.38 of the Environmental Planning and Assessment Act 1979 – D17*, and must be completed prior to the commencement of operation to promote the use of active and sustainable transport modes. Table 1 below details the requirements that must be met to satisfy the requirements defined in the Environmental Planning and Assessment Act 1979.

Table 1: Green Travel Plan Requirements

The Green Travel Plan must:	Response
<i>be prepared by a suitably qualified traffic consultant in consultation with TfNSW</i>	<p>Stantec is a highly qualified Transport design and advisory consultancy that have vast experience in delivering Green Travel Plans across the public and private sectors. Further details on Stantec's capabilities can be found on our website if required. All planning data and information has been conducted using TfNSW data, information and plans. Any further consultation can be completed through a review with a local representative.</p> <p>Matthew Todd's CV as the author of the GTP has been provided.</p> <p>Following comments received from DPE in Feb 2023, further consultation was enacted with TfNSW. Contact was initiated with TfNSW, with comments received back from Rosie Selby in May 2023. The GTP was updated to satisfy comments received from Rosie Selby of TfNSW and was incorporated into version 5 of the GTP.</p>
<i>incorporate data from available sources including surveys of staff and visitors</i>	A staff travel survey was conducted between February and March 2022. The findings from the survey are discussed in Section 3 .
<i>include objectives and aspirational, achievable, and specific modes share targets (i.e., Site and land-use specific, measurable, and achievable timeframes for implementation) to define the direction and purpose of the Green Travel Plan</i>	Objectives, mode share targets and implementation measures are detailed in Sections 4 and 5 .
<i>include specific tools and actions to help achieve the objectives and mode share targets</i>	Target modes and actions are discussed in Section 4.2 .
<i>address potential to reduce and manage car parking spaces for staff with the ability to travel to the site by public and active transport, and prioritising car parking for the use of staff, patients, and visitors</i>	Parking restrictions are detailed in Section 2.1.2 , with measures to encourage active and public transport use discussed from Section 4 onwards.
<i>include measures to promote and support the implementation of the plan, including financial and human resource requirements, roles and responsibilities for relevant employees involved in the implementation of the Green Travel Plan</i>	Measures to promote and support the implementation of the Green Travel Plan are discussed in Sections 4 and 5
<i>include details regarding the methodology and monitoring/review program to measure the effectiveness of the objectives and mode share targets of the Green Travel Plan, including the frequency of monitoring and the requirement for travel surveys to identify travel behaviours of users of the development</i>	Monitoring measures are discussed in Section 5 .
<i>identify an appropriate mechanism for the transfer and delivery of ongoing actions from Health Infrastructure to the Local Health District, post-occupancy</i>	NSW Health/HI already have a process adopted to provide advice to the Operator at handover, in relation to conditions of the consent and any reporting requirements or obligations. Handover is a current adopted process for all of NSW Health's Capital Projects.

2 Background

2.1 Existing Conditions and Travel Patterns

2.1.1 Road Network

Sutherland Hospital is located at the corner of Kingsway and Kareena Road. It is bounded by Kingsway to the north, Kareena Road to the west and Hinkler Avenue to the east. The southern extent of the hospital is bounded by the T4 rail line. The following key roads are located within proximity to Sutherland Hospital:

Kingsway

Kingsway is a state road with a maximum speed limit of 60 km/h. Kingsway runs in an east-west direction from Cronulla to Princes Highway in Kirrawee. Kingsway functions as an arterial road and provides access to the local key centres of Cronulla, Woollooware, Caringbah, Miranda, Gymea, and Kirrawee. The Kingsway merges with the A1 Princes Highway, which connects Sutherland, Wollongong, and suburbs north of Georges River via Tom Uglys Bridge.

Port Hacking Road

Port Hacking Road is a state road with a maximum speed limit of 60 km/h. It adjoins Kingsway at the Kareena Road intersection. The road supports north-west to south-east movements and connects to Miranda via The Boulevarde at the Five Ways intersection.

Taren Point Road

Taren Point Road is situated to the north-east of Sutherland Hospital. Taren Point Road is a state road with a maximum speed limit of 60 km/h. Taren Point Road extends north before merging with Rocky Point Road at Captain Cook Bridge.



Figure 2: Local Road Network

2.1.2 Car Parking

Sutherland Hospital is serviced by a variety of off-street and privately managed on-site parking. There are four main on-site car parks located within the hospital boundary, this includes a multi-storey car park and several at-grade car parks. On-site parking is managed by Wilsons Parking and is in operation 24 hours, 7 days a week. Parking is free for the first 25 minutes and is capped at \$20.20 for 5 hours or more. On-street parking abutting the hospital boundary varies between unrestricted and time-restricted parking. Time-restricted parking periods range between, ¼ P & 2P between the hours of 7 am – 6 pm all week, and no parking from Monday to Friday between 6 am – 10 am and 3 pm – 7 pm. Additional disabled, hospital permit holder and community fleet vehicle permit parking is also present on-site. Figure 3 below shows the extent of on-site and off-site parking surrounding the hospital.



Figure 3: Parking Locations

2.1.3 Public Transport

Sutherland Hospital and its surroundings are serviced by several bus routes operating within the vicinity of the site. There are four major services, these are detailed in Table 2.

Table 2: Bus Services

Service	Route	Frequency
969	Cronulla to Sutherland	60 mins
971	Cronulla to Hurstville	20 – 30 mins
977	Miranda to Lilli Pilli (Loop Service)	20 – 30 mins
978	Miranda to Dolans Bay via Port Hacking (Loop Service)	20 – 60 mins

There are several bus stops located in proximity to Sutherland Hospital. These stops service the routes detailed in Table 2. The services and stops discussed are shown in Figure 4.

For rail services, Caringbah Station and Miranda Station are both located within walking distance of Sutherland Hospital. Caringbah Station is located within a 900-metre walk of Sutherland Hospital, which equates to a walking time of around 12 minutes. Miranda Station is positioned slightly further from Sutherland Hospital at a distance of 1.2 kilometres or a 15-minute walk. Both stations have accessibility for disabled patrons. Both stations are serviced by the T4 line, with frequent services running every 10 – 15 minutes.



Figure 4: Bus Services and Bus Stop Locations

2.1.4 Pedestrian Infrastructure

There is adequate pedestrian infrastructure provided on all streets and roads surrounding the site, this includes Kareena Road, Kingsway, and Hinkler Avenue. Sutherland Hospital is accessible from four locations on the road network, with two points located on both Kareena Road and Kingsway. A variety of pedestrian crossing facilities are located around and within the site. The eastern and western points of Kingsway are accessed by signalised crossing facilities, whilst refuge islands are present along Kareena Road and Hinkler Avenue. Pedestrian crossings are placed frequently throughout the Sutherland Hospital site in addition to supporting the signalised intersections located at either end of Kingsway. Figure 5 below shows the location of crossing facilities by type as well as the pedestrian access points.

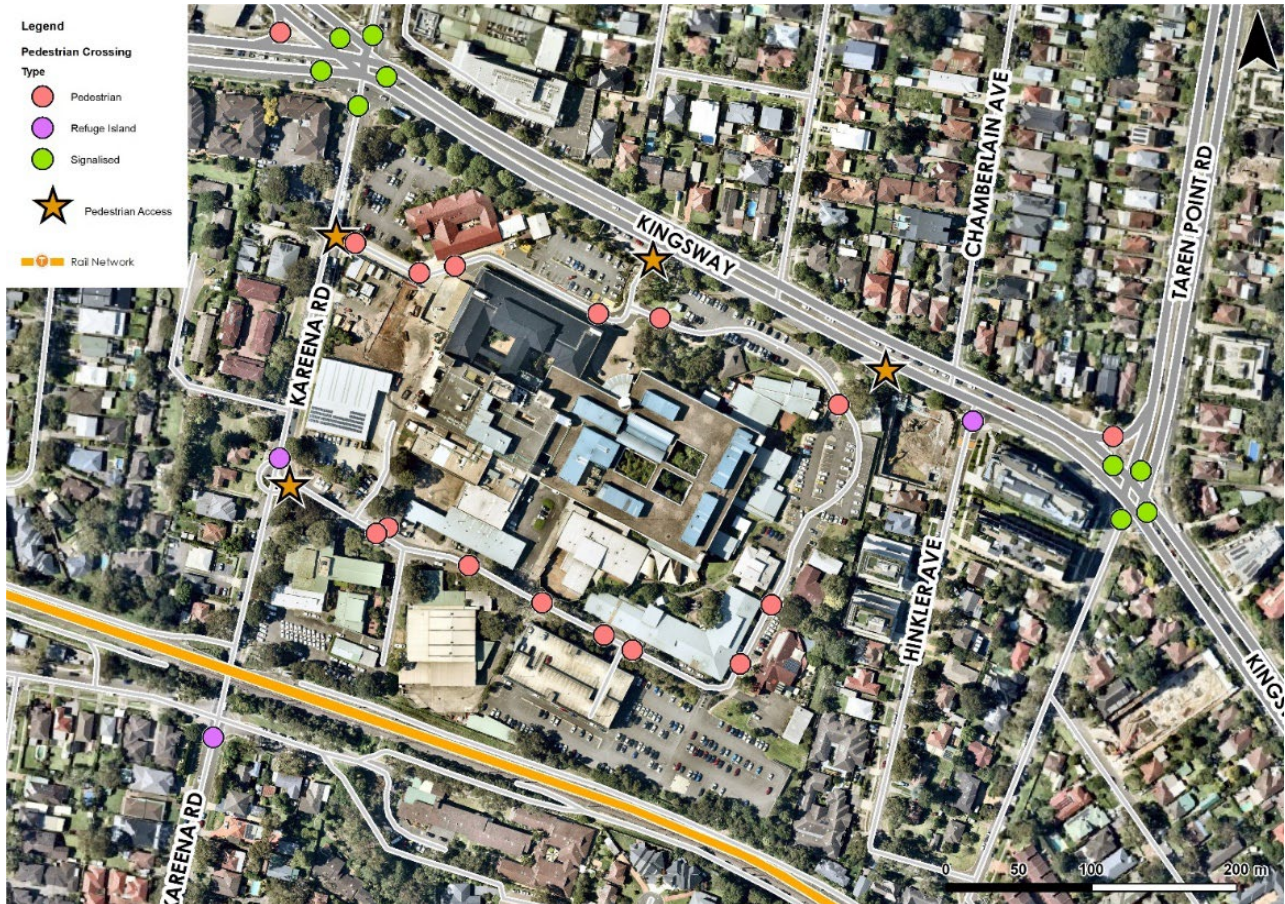


Figure 5: Pedestrian Crossing and Site Access

Figure 6 shows an isochrone map for walking travel times from Sutherland Hospital. It shows that the suburbs of Caringbah and Miranda are located within a 15-minute walk of the hospital. Woollooware, Gymea, Sylvania Waters, Taren Point and Caringbah South are all located within a 30-minute walk.

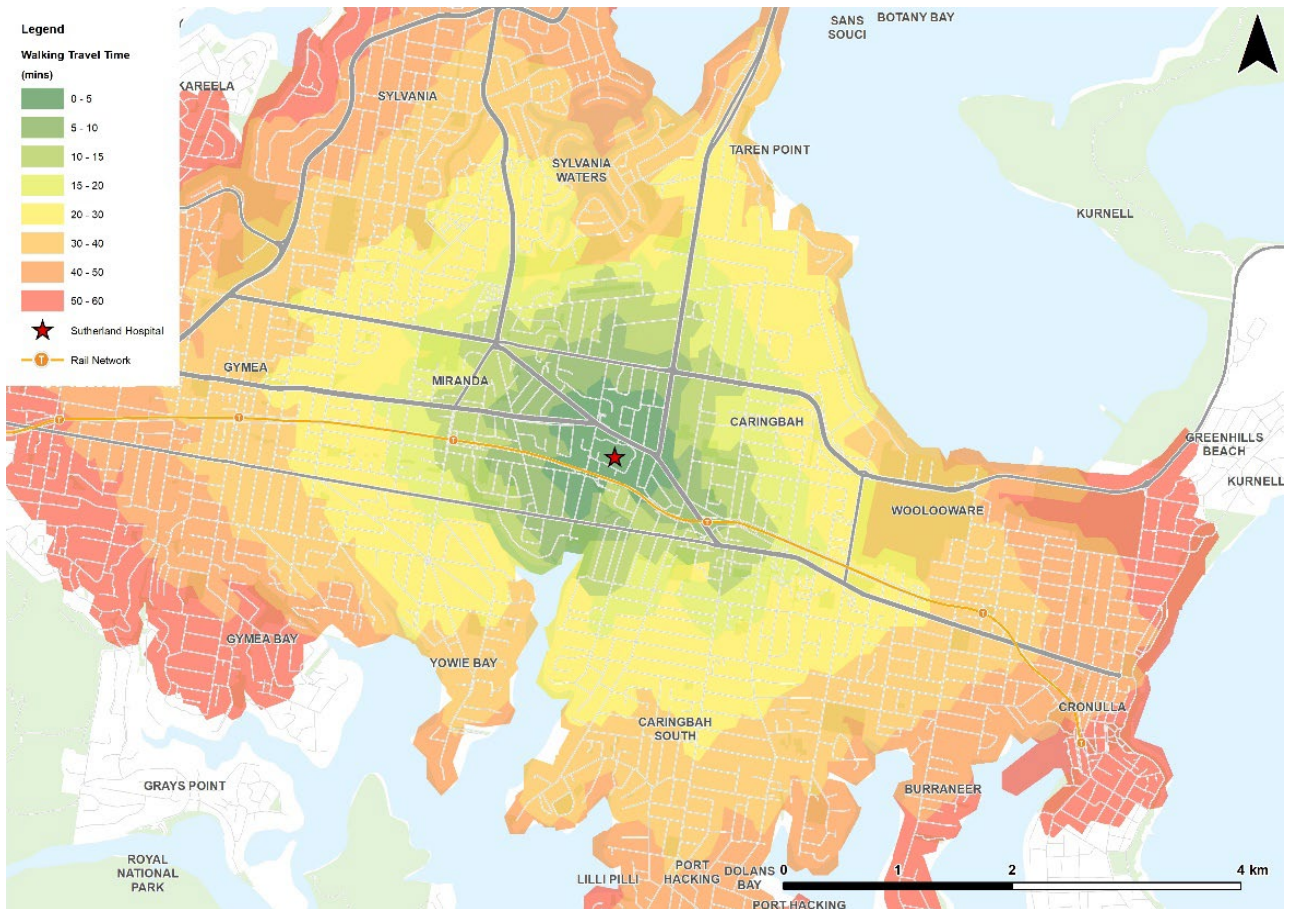


Figure 6: Walking Isochrones from Sutherland Hospital

2.1.5 Cycling Infrastructure

At present, there is no dedicated cycling infrastructure that services the site. Stage 2 of the Sutherland to Cronulla Active Transport Link will change this in the future, with proposals for a shared path running along the northern side of the site along Kingsway. The active transport link will provide a new link between Sutherland and Woolooware, connecting with the existing cycleway infrastructure to Cronulla. The route will provide direct access to Caringbah Station which could encourage users to make the “last-mile” trip from the station to the hospital. Subject to approval, construction is anticipated to commence on Stage 2 in mid-2022 and will take around nine months to complete. The plans for the proposed cycleway are shown in Figure 7 and Figure 8.



Figure 7: Sutherland to Cronulla Active Transport Link



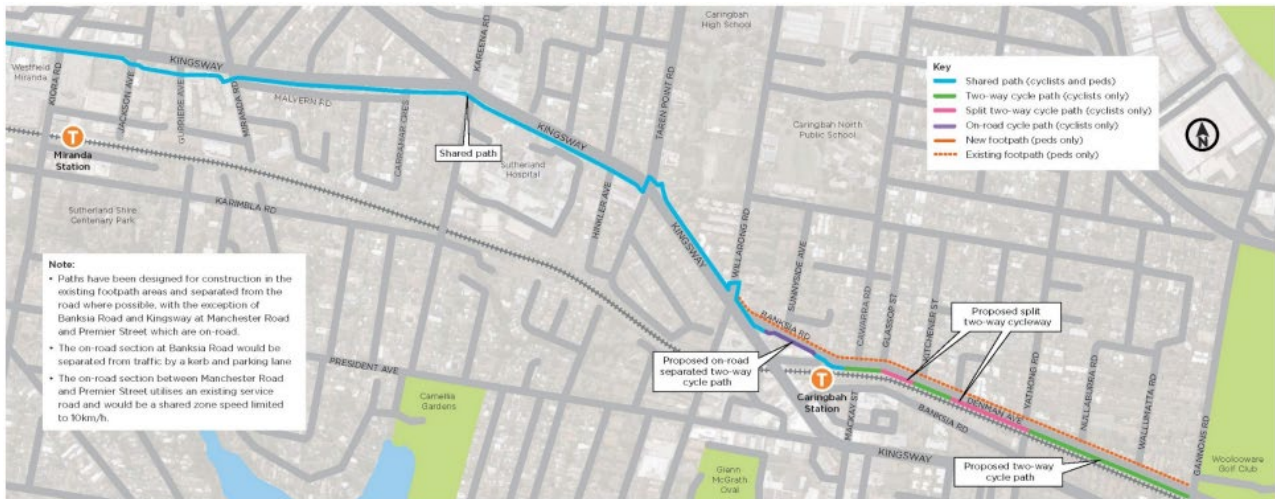


Figure 8: Sutherland to Cronulla Active Transport Link

Figure 9 shows an isochrone map for cycling travel times from Sutherland Hospital. For this travel times were calculated based on a slow rider travelling at 15 km/h. It shows that Caringbah station is located within a five-minute cycle of the hospital site whilst Miranda Station is slightly further away and can be reached in 5-10 minutes. Cronulla and Sutherland are both accessible by bicycle in 30 minutes.

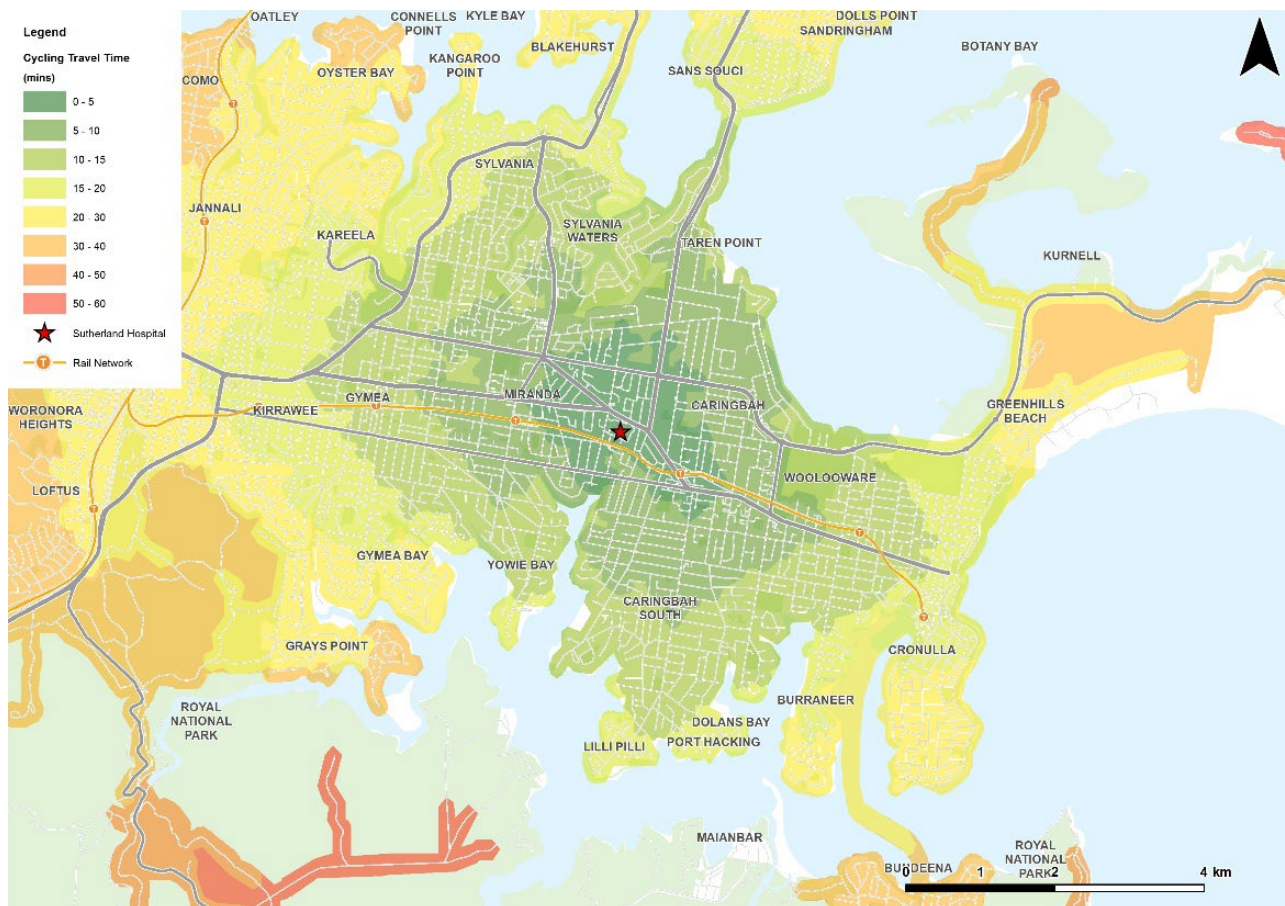


Figure 9: Cycling Isochrones from Sutherland Hospital

2.1.6 Car Share

Car share is a concept by which members join a car ownership club, choose a rate plan, and pay an annual fee. The fees cover fuel, insurance, maintenance, and cleaning. The vehicles are mostly sedans, but also include SUVs and station wagons. Each vehicle has a home location, either in a parking lot or on a street, typically in a highly populated urban neighbourhood. Members reserve a car by app, online or by telephone and use a key card or code to access the vehicle.

GoGet currently operates a GoGet pod on Curtis Street to the south-east of the site. The pod is located one kilometre from Sutherland Hospital, which equates to a 13-minute walk. Car Next Door is a peer-to-peer car-sharing service which offers a more flexible structure to GoGet. No monthly fee is required to use the service, whilst vehicles can be picked up and dropped off within a distance of a location that is specific to each vehicle.

2.1.7 Fleet Vehicles

There is the opportunity for additional shared vehicle use at the hospital using fleet vehicles. There are around 90 vehicles located at the hospital, which staff can book through the intranet. Two of the available vehicles are for general staff use, whilst the remainder is managed by the SouthCare Team, and community-based services associated with the hospital.

Fleet vehicles can be booked through the online portal of Booking Intelligence which is located on the hospital's SESLHD intranet page. For additional information on the procedures required to use the fleet vehicles, staff can refer to the policy document SESLHDPD/285.

3 Green Travel Survey Results

To satisfy the requirement of the Green Travel Plan a staff survey was conducted to identify and understand travel patterns for staff commuting to and from the hospital, and the reasons why they choose to do so. The survey also asked questions that focussed on understanding the barriers and constraints to staff, as to why they do not utilise more sustainable modes of transport. The survey was undertaken online using Survey Monkey and ran from Monday 14th February to Friday 4th March. In total there were 253 responses to the survey, with an overall completion rate of 69%. This chapter details the responses to the questions posed and evaluates the answers given. Respondents took on average three minutes to complete the survey. The top responses to each question have been highlighted in orange.

Question 1 and 2: How do you usually travel to and from Sutherland Hospital?

Questions 1 and 2 asked staff what their primary mode choice was for travel to and from Sutherland Hospital. Of the combined mode share, travel by private vehicle was the most dominant form of transport, with walking coming second and other in third. In total nine in every ten staff trips are made by private vehicle. Trips by bus and train had an equal modal split at 1.8% each, with an additional 0.2% taking both forms together. Travel via motorcycle was the least favourable individual mode choice with an overall share of 0.2%. Only 1.0% of trips to and from the hospital are made by cycling. Respondents also stated that the weather and shift start time influenced their mode of choice.

Table 3: Questions 1 & 2 Responses

Mode Choice	Mode Share			
	Travel To	Travel From	Combined Responses	Combined Proportion of Responses
Private Vehicle	90.5%	90.5%	458	90.5%
Motorcycle	0.4%	0.0%	1	0.2%
Bus	1.2%	2.4%	9	1.8%
Train	2.0%	1.6%	9	1.8%
Train then bus	0.4%	0.0%	1	0.2%
Walk	2.0%	2.0%	10	2.0%
Cycle	1.2%	0.8%	5	1.0%
Other (please specify)	2.4%	2.8%	13	2.6%

Question 3: How long does it usually take for you to get to/from Sutherland Hospital?

Question 3 asked staff how long their usual commute takes to travel to and from the hospital. Most respondents take between 11-20 minutes per trip to travel between the hospital and their place of residence. Respondents whose journeys took between 1-10 minutes and 21-30 minutes had a joint share of 19.4% each. 28.1% of trips taken were greater than 30 minutes.

Table 4: Question 3 Responses

Answer	Responses	Proportion of Responses
1-10 minutes	49	19.4%
11-20 minutes	84	33.2%
21-30 minutes	49	19.4%
31-40 minutes	28	11.1%
41-50 minutes	18	7.1%
51-60 minutes	12	4.7%
61+ minutes	13	5.1%

Question 4: What time do you typically arrive at Sutherland Hospital?

Question 4 asked staff what their typical time of arrival at work was. Most respondents tend to arrive at work between 7:30 am and 7:59 am, with a share of 36.8%. The travel times on either side of this peak period were the next most



popular overall. In total, the overall peak hour for staff arriving at work was 7:00 am to 7:59 am, with a share of 54.9% of respondents.

Table 5: Question 4 Responses

Answer	Responses	Proportion of Responses
Before 6:30 am	6	2.4%
6:30 am to 6:59 am	28	11.1%
7:00 am to 7:29 am	46	18.2%
7:30 am to 7:59 am	93	36.8%
8:00 am to 8:29 am	44	17.4%
8:30 am to 8:59 am	16	6.3%
9:00 am to 9:29 am	5	2.0%
9:30 am or later	15	5.9%

Question 5: What time do you typically leave Sutherland Hospital?

Question 5 asked staff what time they typically left work. Most respondents left work between 4:30 pm and 4:59 pm. The overall peak hour for respondents leaving work was between 4: 30 pm and 5:29 pm, with a total share of 50.2%.

Table 6: Question 5 Responses

Answer	Responses	Proportion of Responses
Before 3:30 pm	12	4.7%
3:30 pm to 3:59 pm	25	9.9%
4:00 pm to 4:29 pm	36	14.2%
4:30 pm to 4:59 pm	84	33.2%
5:00 pm to 5:29 pm	43	17.0%
5:30 pm to 5:59 pm	17	6.7%
6:00 pm to 6:29 pm	9	3.6%
6:30 pm or later	27	10.7%

Question 6: If you travel by car, where do you usually park?

Question 6 asked staff where they park if they choose to travel by car. Car Park 5 was the most popular choice with an overall share of 48.8% of respondents. Car park 5 is the largest car park on-site, with a multi-storey car park and at-grade car park. On-street parking was the second most popular choice for respondents, with a share of 34.7%. The car park layout used in the survey is shown below in Figure 10. Car Park 3 is now closed because of the redevelopment taking place on-site, whilst Car Park 4 was demolished as part of a previous redevelopment.

Table 7: Question 6 Responses

Answer	Responses	Proportion of Responses
Car Park 1	3	1.2%
Car Park 2	4	1.6%
Car Park 3	-	-
Car Park 4	-	-
Car Park 5	121	48.8%
Car Park 6	13	5.2%



Answer	Responses	Proportion of Responses
Any available Sutherland Hospital parking	2	0.8%
On-street parking	86	34.7%
N/A (do not drive)	13	5.2%
Other (please specify)	6	2.4%



Figure 10: Sutherland Hospital Car Park Plan (2015)

Question 7: If you travel by car, how many people are typically in the car (including the driver)?

Question 7 asked hospital staff if they typically travel by car, and how many people share the vehicle. An overwhelming majority of respondents travel to work by car alone. This highlights a key opportunity for promoting the use of carpooling to work between staff members. This can be supported through incentives such as reduced parking rates or dedicated parking facilities for staff vehicles with two or more patrons.

Table 8: Question 7 Responses

Answer	Responses	Proportion of Responses
Driver alone	231	92.0%
2 people	6	2.4%
3 people	1	0.4%
More than 3 people	0	0.0%
N/A (do not drive)	13	5.2%

Question 8: If you travel by car, what is your main reason for doing so? Select all that apply



Question 8 asked respondents if their main mode of travel was by car, what was their reason for doing so. Over half of respondents choose to travel by car as a matter of convenience. A significant proportion of respondents choose to travel by car as the result of a lack of alternatives. This would suggest that staff members are not aware of safe walking and cycling routes or how to access work by means of public transport. The education of staff through measures presented in the actions list can help mediate this and promote alternatives to and from Sutherland Hospital.

Table 9: Question 8 Responses

Answer	Responses	Proportion of Responses
Car required before/after work	100	26.7%
Health reasons	8	2.1%
Convenience	136	36.4%
Lack of other alternatives	87	23.3%
Lack of wheelchair accessibility to public transport	0	0.0%
N/A (do not drive)	13	3.5%
Other (please specify)	30	8.0%

As part of Question 8, respondents were asked to provide additional information as to why they chose to travel by car. The following summarises key points made by staff in response to the question:

Public transport is too slow.

- Travelling by bicycle is too dangerous
- It would take longer to walk to and from rail stations with travel in between than drive.
- Childcare and after work arrangements influence mode choice.
- There is not enough secure bicycle parking on-site.
- End of trip facilities are poor and non-existent.
- There is a lack of cycleway infrastructure.

Question 9: If you do not travel by Public Transport, what is your reason for this? Select all that apply.

Question 9 asked respondents if they do not travel by public transport, what was their reason for making this choice. Travel time is too long, was the most favourable response with a share of 30%. This is further supported by the comments made in response to Question 8. Public transport is too inconvenient was the second most popular response, with 23% of respondents choosing this as their main barrier.

Table 10: Question 9 Responses

Answer	Responses	Proportion of Responses
There are no public transport connections/ services available to me	35	7.4%
There are no suitable public transport services at the time of travel	56	11.8%
Travel time is too long	143	30.1%
Public transport is inconvenient	109	22.9%
Public transport is too expensive	22	4.6%
Public transport services are often overcrowded	26	5.5%
I do not feel safe travelling via public transport	30	6.3%
N/A (travel by public transport)	18	3.8%
Other (please specify)	36	7.6%

As part of Question 9, respondents were asked to provide additional information as to why they chose to not travel by public transport. The following summarises key points made by staff in response to the question:

- The rail station is located too far away from the hospital.
- There are no direct services to the hospital from the place of residence and would require multiple changeovers.
- Childcare commitments are inconvenient by public transport.



- The time it takes to walk between Caringbah and Miranda station impacts family time and a work-life balance.
- There are concerns regarding COVID and a lack of social distancing.

Question 10: If you do not travel by Active Transport, what is your reason for this?

Question 10 asked staff if they do not travel by active transport, what was their reason for this. Most respondents stated that walking or cycling would take too long, this equated to a proportion of 27% of respondents. Dangerous roads and a lack of suitable cycling infrastructure were the next most popular barriers to travelling by bicycle.

Table 11: Question 10 Responses

Answer	Responses	Proportion of Responses
There is a lack of suitable infrastructure to cycle on	62	14.0%
The roads are too dangerous	79	17.9%
The initial cost is too expensive	4	0.9%
I do not feel safe when walking or cycling alone	33	7.5%
Lighting along the route is inadequate for the time of the day I wish to travel	15	3.4%
Walking or cycling would take too long	118	26.7%
The weather is a significant factor in my decision making	50	11.3%
N/A (travel by active transport)	35	7.9%
Other (please specify)	46	10.4%

As part of Question 10, respondents were asked to provide additional information as to why they chose to not travel by active transport. The following summarises key points made by staff in response to the question:

- There is no safe area to store bicycles at work.
- There are no sheltered and secure/ lockable bicycle parking facilities.
- The end of trip facilities available to staff are non-existent (e.g., shower facilities, changing rooms)
- Carrying heavy baggage is inconvenient.
- There are security issues with bikes having been stolen.
- Staff are intimidated by members of the public hanging around current parking facilities.
- Exercise is done before or after work.
- Travel distance is a barrier to cycling to work.
- Additional time to sleep is preferred over cycling.
- Bicycles are no longer allowed to be kept within the facility for safe storage.
- Current building works impact accessibility.

Of the comments made, there was a significant number of responses stating that secure biking facilities were required. Concerns were raised by staff that bikes have been vandalised or stolen in the past and that members of the public on site can be intimidating. Another major concern is the lack of suitable end of trip facilities for staff use, with no showers or suitable changing facilities available. A large proportion of respondents to this question stated that if these issues were to be addressed, they would be keen to cycle into work regularly.

Question 11: What is your postcode?

Question 11 asked staff to provide the postcode for their place of residence to understand where staff are travelling from. Most respondents travel from postcode 2230, which covers the suburbs of Cronulla and Woolooware. The responses from staff whose postcode shared a proportion of 2% or more are shown in Table 12.

Table 12: Top ranking suburbs of residence for staff respondents

Postcode	Responses	Proportion of Responses	Suburbs
2230	31	12.5%	Maianbar, Greenhills Beach, Bundeena, Cronulla, Burraneer, Woolooware
2232	28	11.3%	Grays Point, Loftus, Royal National Park, Woronora, Sutherland, Kareela
2233	24	9.7%	Engadine, Woronora Heights, Yarrawarrah, Waterfall, Heathcote
2229	21	8.5%	Taren Point, Lilli Pilli, Dolans Bay, Caringbah, Port Hacking, Caringbah South
2227	14	5.6%	Gymea Bay, Gymea



Postcode	Responses	Proportion of Responses	Suburbs
2228	13	5.2%	Yowie Bay, Miranda
2234	13	5.2%	Illawong, Alfords Point, Menai, Lucas Heights, Barden Ridge, Bangor
2226	8	3.2%	Bonnet Bay, Como, Jannali
2508	8	3.2%	Coalcliff, Stanwell Park, Otford, Darkes Forest, Stanwell Tops, Woronora Dam, Maddens Plains, Helensburgh, Lilyvale
2207	5	2.0%	Bardwell Park, Bardwell Valley, Bexley, Bexley North
2216	5	2.0%	Banksia, Brighton-Le-Sands, Kyeemagh, Rockdale
2218	5	2.0%	Carlton, Allawah
2500	5	2.0%	Mount Saint Thomas, Spring Hill, Coniston, West Wollongong, Keiraville, Mount Keira, Wollongong, Mangerton, Gwynneville, North Wollongong

The distribution of all survey respondents is shown below in Figure 11.

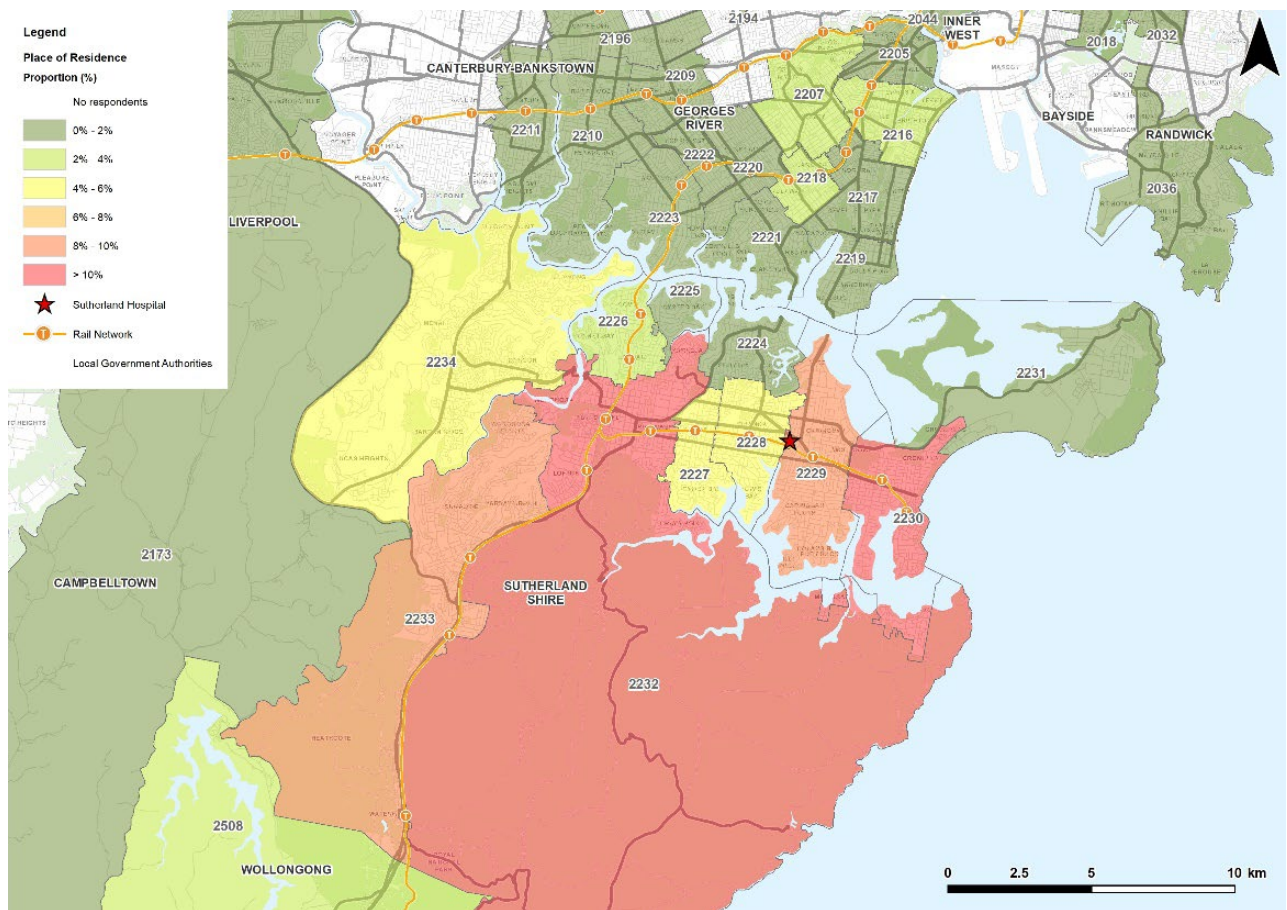


Figure 11: Survey Respondent's Place of Residence

4 Objectives and Targets

On review of the current transport network servicing Sutherland Hospital and the responses are taken from the staff travel survey, this section identifies scenarios to change travel patterns to and from the hospital. This section identifies approaches to implementing the Green Travel Plan and provides reasonable predictions of the outcomes of each approach.

4.1 Implementation Scenarios

Scenario 1: No Action

If no green travel actions are taken, employees would likely adopt travel patterns like those currently identified in the staff travel survey. This scenario is a suitable proxy for recognising current travel patterns and identifying future travel patterns if no actions are applied.

Scenario 2: Passive Approach

By targeting employee behaviour with quality information about safe walking routes and transport options, the site can achieve more walking, cycling and public transport use. Providing wayfinding and public transport information to employees is an opportunity to demonstrate good transport practice and encourage employees to adopt these travel modes from the day they begin work. Sutherland Hospital can utilise the construction of the Sutherland to Cronulla Active Transport link to promote this.

Scenario 3: Active Approach

The active approach would build upon the passive approach by providing safe and secure bicycle parking and suitable end-of-trip facilities. This scenario proactively pursues initiatives to encourage employees to walk, cycle and use public transport and encourages staff to reduce their dependency on private vehicles.

As a high proportion of staff that responded to the travel survey live within proximity to the hospital, the primary sustainable travel mode of employees travelling to work would be by walking. The hospital's objectives would lie in ensuring a greater percentage of employees choose to use public and active transport to reduce private vehicle trips.

Where it may not be appropriate for staff to travel by means other than a private vehicle, incentives to promote carpooling should be implemented.

The travel survey undertaken for this Green Travel Plan provides a base case for these assumptions and allows Sutherland Hospital to refine these assumptions and inform programs regularly.

4.2 Target Modes and Actions

The target modes and actions as discussed within this section have a combined aim of trying to encourage mode shift away from private vehicle use. The location of Sutherland Hospital, in relation to regional cycle links, public transport accessibility and safe walking routes is a key attribute in the development of the Green Travel Plan. To reduce existing private vehicle use, the most straightforward and achievable target modes should be addressed first.

The following is a list of suggested actions that could be implemented to achieve the target mode shares, however, it does not mean all of the actions need to be implemented.

1) Implementation of the Green Travel Plan

- Appoint a Travel Plan Coordinator to ensure the successful implementation and monitoring of the Green Travel Plan. This should be coordinated in an integrated format for the entire hospital. The Travel Plan Coordinator would manage and review the Green Travel Plan on an ongoing basis. The role of a Travel Plan Coordinator is usually undertaken by an employed member of staff.
- Conduct annual and biennial travel surveys to identify changing travel patterns in the area and assess the success of the Green Travel Plan. This is to be managed by the appointed Travel Plan Coordinator. The surveys should incorporate the opportunity for staff to provide suggestions on improving green travel arrangements.

2) Increase walking and cycling to work by employees

- Ensure that bicycle end-of-trip facilities are provided for staff. This includes the provision of secure and sheltered bicycle parking, private shower facilities and locker spaces.
- Promote local bicycle facilities and learn-to-ride or bike maintenance courses available through local cycling groups.
- Promote the benefits of walking and cycling to work by partaking in annual Ride2Work and Walk to Work days.



3) Increase public transport use

- Sutherland Hospital can provide the opportunity for employees to undertake salary sacrifices to gain tax benefits on their Opal card expenditure for commuting purposes. This will encourage employees to make public transport a preferred option for commuting by reducing travel costs. This initiative can be promoted via the intranet or leaflets for staff.

4) Increase awareness and knowledge of available transport options by employees

- Attached to Appendix A is Transport Access Guide concerning Sutherland Hospital. The document is based upon facilities currently available in the vicinity of the hospital and should be updated regularly to reflect changes in public transport services, active transport facilities and any other relevant pieces of information. The TAG includes stop/station locations and walking time/ distances. The TAG can be updated annually to reflect employee travel patterns.

5) Introduce and focus on carpooling

- Through the Sutherland Hospital intranet, a dedicated carpooling forum can be created to provide a discussion space that allows users living close to each other to carpool, instead of taking individual private vehicles. This would allow hospital staff to communicate with colleagues that reside in their local area that they may be unaware of.
- Encourage employees who cannot practically use public transport to participate in car-pooling. This may be coordinated by a 'transport champion', an appointed employee, senior management, or a formally appointed Travel Plan Coordinator.
- In liaison with Wilson Parking, allocate some of the parking on-site for carpooling employees. The focus on carpooling can be achieved by allocating priority spaces for staff carpooling.

Based on these targets, Section 5 identifies a program checklist to encourage changes to travel behaviour through this plan. These targets are measurable, through car parking occupancy surveys or additional employee travel surveys. Using these metrics, the Travel Plan Coordinator can quickly track performance against the travel plan objectives to recognise what programs are working and those that are not. Target mode shares have been provided in Table 13 and have been developed with a focus on the short-term (one year after opening) and longer-term (three years after opening).

Table 13: Mode Share Targets

Mode of Travel	Current	Short-term		Long-term	
	Existing Mode Share	Target Mode Share	Change	Target Mode Share	Change
Private Vehicle	90.5%	85.5%	-5.0%	75.0%	-15.5%
Motorcycle	0.2%	0.2%	0.0%	0.2%	0.0%
Bus	1.8%	2.5%	0.7%	6.0%	4.2%
Train	1.8%	2.0%	0.2%	2.5%	0.7%
Train then bus	0.2%	0.5%	0.3%	2.0%	1.8%
Walk	2.0%	6.0%	4.0%	9.0%	7.0%
Cycle	1.0%	2.0%	1.0%	4.0%	3.0%
Other	2.5%	1.3%	-1.2%	1.3%	-1.2%

4.3 Opportunities for Mode Shift

Opportunities for mode shift for the site lie within being able to push for higher public transport and active travel. Taking into consideration the results from the travel to work survey it is suggested that Sutherland Hospital should aim to reduce the number of individual private vehicle trips and increase the number of staff who choose to walk and cycle.

It is understood that walking and cycling to work is considered circumstantial. Generally, it is required for employees to live within 800 to 1,000 metres of the site, however, given the location and high-quality pedestrian facilities present, larger distances should be encouraged. Overall, and taking these opportunities into account, the car mode share for the site could see a reduction of 5.5%.

This mode shift is not intended to significantly reduce the overall number of private vehicle mode share but reduce the number of individual trips made by private vehicles. This can be achieved through carpooling, allowing staff who may only be able to travel by private vehicle can continue to do so but in a much more sustainable manner. Survey results show that this is achievable, as a considerable number of staff start and finish work around the same time. This should become a key initiative for the hospital to make private vehicle trips more sustainable.



For staff residing locally, walking and cycling should be encouraged. This can be supported by the creation of facilities such as secure bicycle parking, showers and changing rooms. This should be of particular focus upon the completion of the Sutherland to Cronulla Active Transport Link.

5 Action Plan and Opportunities for Implementation

This section provides a range of possible actions and a checklist for the implementation of the Green Travel Plan. The programs and actions are suggestions based on the data collected and other successful Green Travel Plans that operate in similar environments. The suggested actions are recommendations that would help with the mode share targets but are not conditions for the Development Consent. All suggested timeframes for implementing these actions have also been identified.

The appointment of a Travel Plan Coordinator is beneficial for the implementation of Green Travel Plan initiatives and is recommended to be undertaken following the approval of this Green Travel Plan.

5.1 General

Action	Potential Timeframe	Responsibility
Identify a staff member or employee to complete travel coordinator duties involved in this plan for up to a year.	On occupation of the building	Hospital Management
Issue the attached Travel Access Guide to all staff employed by Sutherland Hospital.	On occupation of the building	Hospital management/ TPC (if applicable)
Undertake a staff travel survey to monitor the impact of the Green Travel Plan. Surveys can be conducted internally or with the assistance of an external party. The survey undertaken as part of this GTP study can be used as base data to assess initial performance.	Every 12 months	Hospital management/ TPC (if applicable)

5.2 Walking

Action	Potential Timeframe	Responsibility
Identify employees living near the site that may be interested in walking to work that can be targeted with sustainable travel information.	On occupation of the building	Hospital management/ TPC (if applicable)
Use the Travel Access Guide to show safe walking routes from rail stations to and from the hospital.	On occupation of the building	Hospital management
Promote the participation of staff in 'National Walk to Work Day'	Annually	Hospital management
Hold TravelSmart (travelsmart.gov.au) Get to Work days encouraging employees to come by alternative modes of transport	Every 12 months	Hospital management



5.3 Cycling

Action	Potential Timeframe	Responsibility
Investigate establishing an internal Bicycle Users Group (BUG). BUGs are formed by people who want to work together to improve facilities for cyclists and encourage cycling.	On occupation of the building	Hospital management/ TPC (if applicable)
Get in contact with local commuter bicycle groups to gain insight into commuting routes in the area to share with staff and visitors.	On occupation of the building	Hospital management/ TPC (if applicable)
Develop a 'bike buddy' scheme for inexperienced cyclists	On occupation of the building	Hospital management/ TPC (if applicable)
Investigate opportunities for a cyclist's breakfast. An ideal location would be at any of the existing cafes local to Sutherland Hospital. Doing so would establish a strong relationship with the local businesses and help encourage cycling social groups.	Every 6 to 12 months	Hospital management/ TPC (if applicable)
Investigate options an after-work ride. It does not have to be long or strenuous and could end somewhere for dinner. The idea is to encourage people who might be reluctant to cycle to give it a go. Similar to the above, choosing a venue within the local area would build a relationship with local restaurants and cafes.	Every 6 to 12 months	Hospital management/ TPC (if applicable)
Investigate options to provide sufficient bicycle parking to meet peak needs that are located in a safe and secure environment.	On occupation of the building	Hospital management
Ensure bicycle parking is visible or, provide signage to direct people to cycle bays.	On occupation of the building	Hospital management/ HINSW
Investigate options to provide secure staff lockers.	On occupation of the building and review annually for demand	Hospital management
Investigate options to provide an on-site bicycle maintenance service (either as a special one-day event or regularly)	On occupation of the building	Hospital management
Promote the participation of staff in annual events such as 'Ride to Work Day'	Annually	Hospital management/ TPC (if applicable)

5.4 Public Transport

Action	Potential Timeframe	Responsibility
Provide a notice board with maps showing the main public transport routes to and from work as well as departure times and estimated walking times to Caringbah Station and Miranda Station, as well as nearby bus stops.	On occupation of the building	Hospital management/ TPC (if applicable)



Action	Potential Timeframe	Responsibility
Place information on the work intranet with links to appropriate external websites e.g., TfNSW Trip Planner	On occupation of the building	Hospital management/ TPC (if applicable)
Provide leaflets or timetables with payslips	On occupation of the building	Hospital management/ TPC (if applicable)
Provide opportunities for staff to undertake salary sacrifices to achieve tax benefits on Opal card top-ups for work-related travel.	On occupation of the building	Hospital management

5.5 Carpooling and Parking

Action	Potential Timeframe	Responsibility
Monitor spaces being used for carpooling to ensure there is sufficient provision.	Every 6 months following the occupation of the building	Hospital management/ TPC (if applicable)

6 Conclusion

For a Green Travel Plan to be effective it must be reviewed regularly. It is important to ensure that the Green Travel Plan is meeting its objectives and having the intended impact on car use and transport choices for staff.

The Plan is to be reviewed by a designated Travel Plan Coordinator. The Plan should be updated and modified to reflect changing circumstances.

Other feedback provided to the travel coordinator should be used to update programs as well. Sample feedback could include email responses to programs, monitoring the bike/ car parking spaces used and transport complaints.

People in any organisation like to be part of a successful plan. Staff should be kept informed of green travel achievements, e.g., send out email bulletins, or have a dedicated column within internal/ external publications. Advertise success to employees as part of a sustainability and green campaign for the hospital. Similarly, these communications should also be extended to visitors.

As a result of the successful implementation of the Green Travel Plan, additional transport deficiencies may be identified. Some examples may include:

- provision of car-pool priority spaces may be required as demand grows
- bicycle spaces and lockers for employees and visitors as demand grows

Transport deficiencies would be tracked by the travel coordinator, with these issues potentially needing to be revisited if identified as an issue during monitoring.

Appendices

We design with community in mind



Appendix A Travel Access Guide

Sutherland Hospital

Transport Access Guide

Your guide to accessing Sutherland Hospital by active and public transport



Welcome

We encourage Sutherland Hospital staff and visitors to use active and public transport options to visit our hospital.

Many options are convenient, safe and stress-free, it also helps you get your daily physical activity.

Use this guide to plan your next visit to Sutherland Hospital

Trip Planning

Visit transportnsw.info or call **131500** to plan your trip and access up-to-date timetables and maps

Tickets and Passes



Opal cards make travelling on public transport easy. Keep it loaded and just tap on and off as you travel.

Visit opal.com.au for more information

Healthy Eating Active Living

Visit healthyliving.nsw.gov.au for more information on implementing small lifestyle changes to lead a healthy and active lifestyle

Contact

Sutherland Hospital
Kareena Road, Caringbah NSW 2229
Ph: 02 9540 7111
<https://www.seslhd.health.nsw.gov.au/sutherland-hospital>

Ways to Travel

Buses



Buses run to Sutherland, Cronulla and beyond. Bus stops are located at the hospital entrance on Kingsway and Kareen Road.

Trains



Sutherland Hospital can be access from Caringbah and Miranda Stations (T4-Eastern Suburbs & Illawarra Line). Trains runs frequently every 10-15 minutes until 10 pm. Caringbah station is located the shortest walking distance away from the hospital.

Walking



Include walking in your trip to Sutherland Hospital and contribute to your daily physical activity. Walk from home, the office, bus stop or train station: The 900m walk from Caringbah train station is nice and flat. while the walk from Miranda station is 300m further.

Cycling

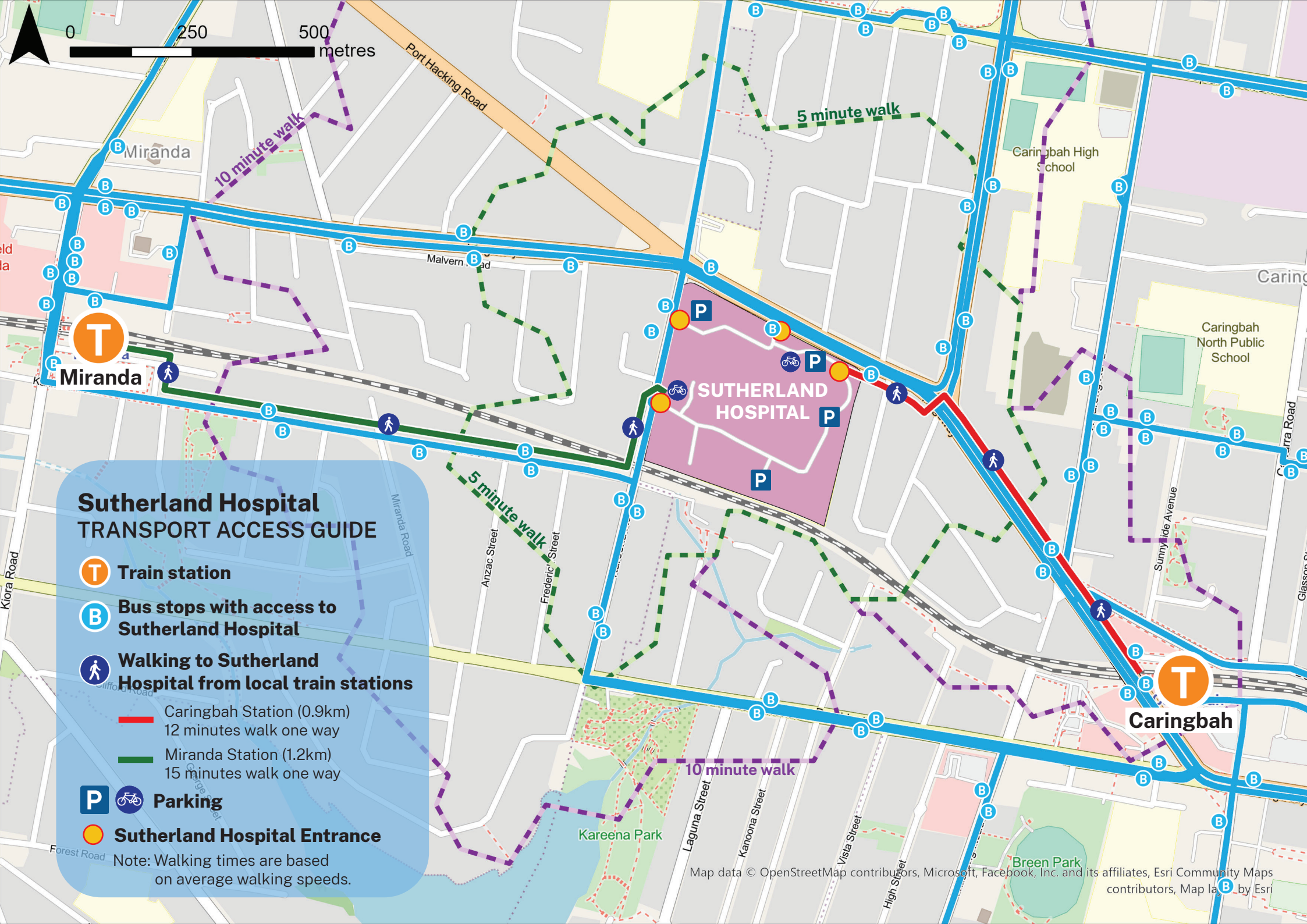


Cycling is an inexpensive, quick and healthy way to travel. If you live within 5-10 kilometres of the hospital this can save time and the stress of trying to find parking. Bicycle parking spaces are available at the hospital's main entrance.

Carpooling



Talk to your designated travel coordinator to learn more about carpooling. Carpooling is a great way to save costs on parking and fuel costs and, reduces the need to travel individually. Carpooling helps the environment by reducing the number of cars on the road network.



Sutherland Hospital TRANSPORT ACCESS GUIDE

T Train station

B Bus stops with access to Sutherland Hospital

Walking to Sutherland Hospital from local train stations

12 minutes walk one way
Caringbah Station (0.9km)

15 minutes walk one way
Miranda Station (1.2km)

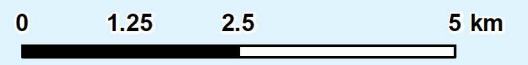
P Parking

Orange circle icon Sutherland Hospital Entrance

Note: Walking times are based on average walking speeds.

Appendix B High-Resolution Maps

- Legend**
-  Sutherland Hospital
 -  Rail Network
 -  Local Government Authorities



Legend

-  Sutherland Hospital Site Boundary
-  Rail Network



KINGSWAY

PORT HACKING RD

MIRANDA

KAREENA RD

KINGSWAY

CHAMBERLAIN AVE

TAREN POINT RD

CARINGBAH

HINKLER AVE

KINGSWAY

KAREENA RD

0 100 200 400 m

Legend

Parking

- No Parking/Stopping
- Time Restricted Parking
- Unrestricted Parking
- Public Parking
- Rail Network



Legend

Bus Routes

Service

- 969
- 971
- 977
- 978

Rail Network

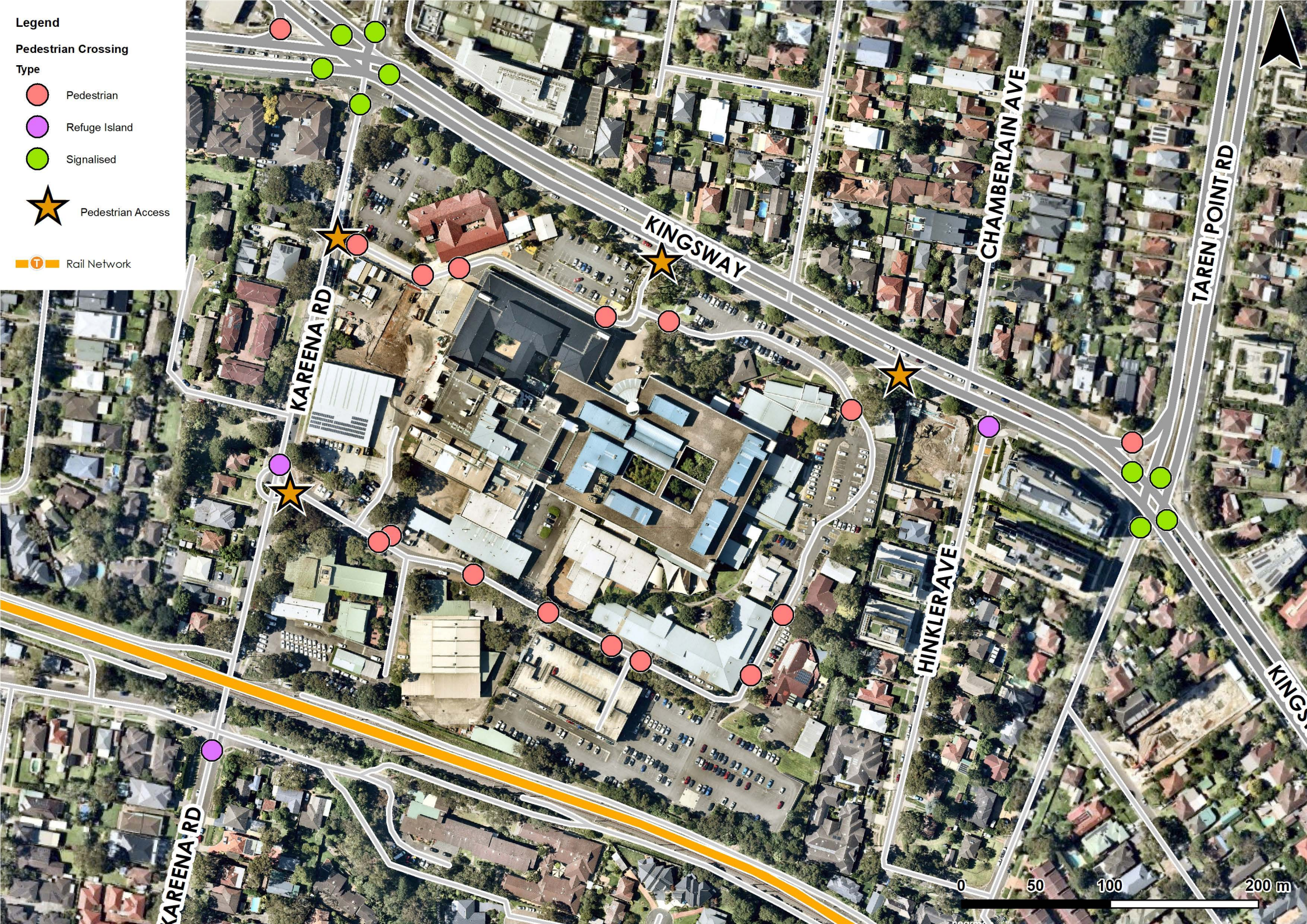


Legend

Pedestrian Crossing

Type

- Pedestrian
- Refuge Island
- Signalised
- ★ Pedestrian Access
- Rail Network



KAREENA RD

KAREENA RD

KINGSWAY

CHAMBERLAIN AVE

TAREN POINT RD


HINKLER AVE


KINGSWAY

0 50 100 200 m



Legend

 Car Park

 Rail Network

CP2

CP1

CP3

CP6

CP5

KAREENA RD

KINGSWAY

CHAMBERLAIN

HINKLER AVE

IA RD

0 50 100 200 m



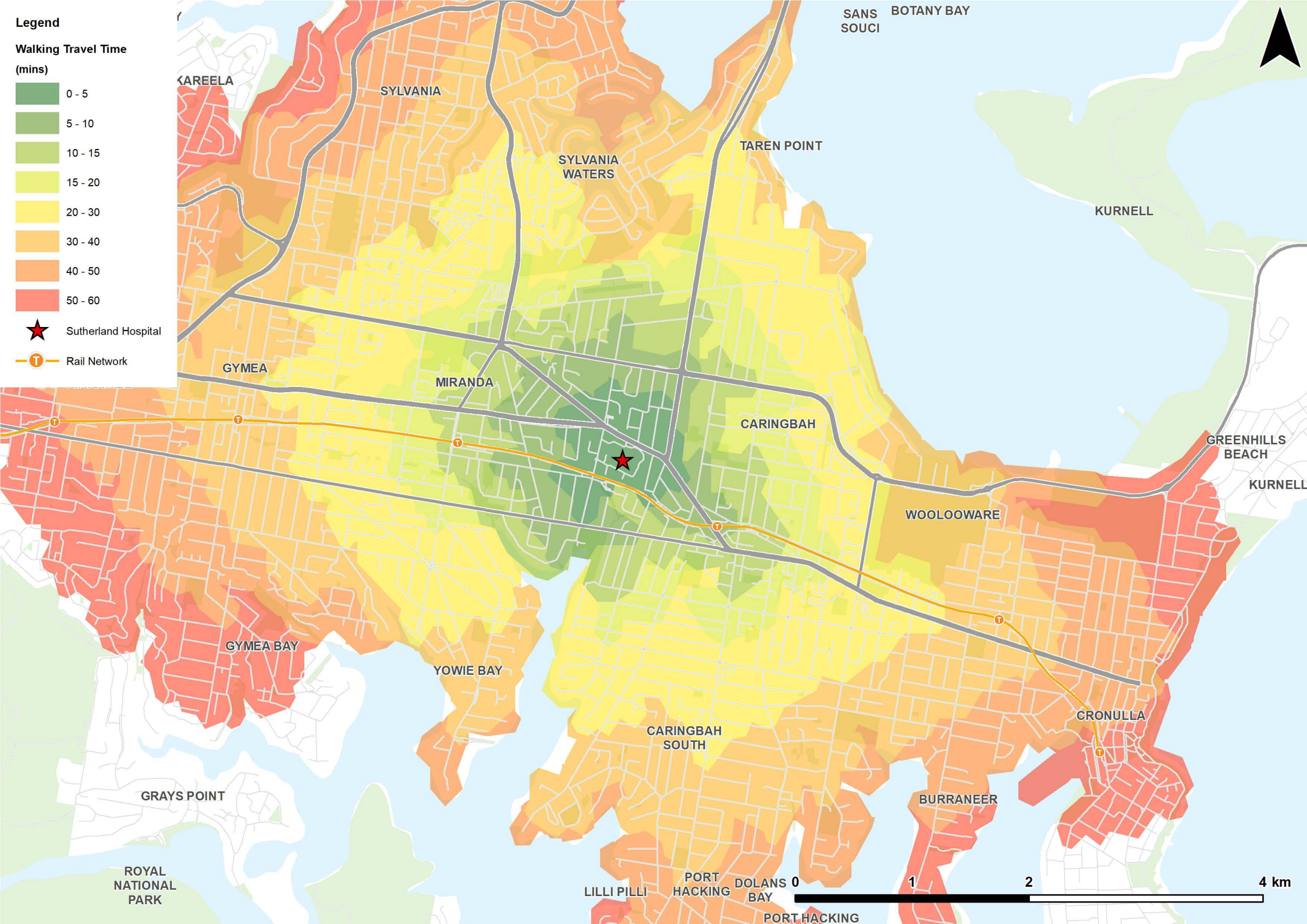
Legend

Walking Travel Time

(mins)



- Sutherland Hospital
- Rail Network



Legend

Cycling Travel Time (mins)

- 0 - 5
- 5 - 10
- 10 - 15
- 15 - 20
- 20 - 30
- 30 - 40
- 40 - 50
- 50 - 60

★ Sutherland Hospital

T Rail Network



4 km

Legend

Place of Residence

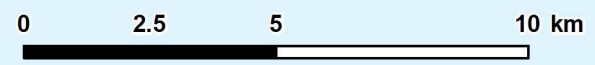
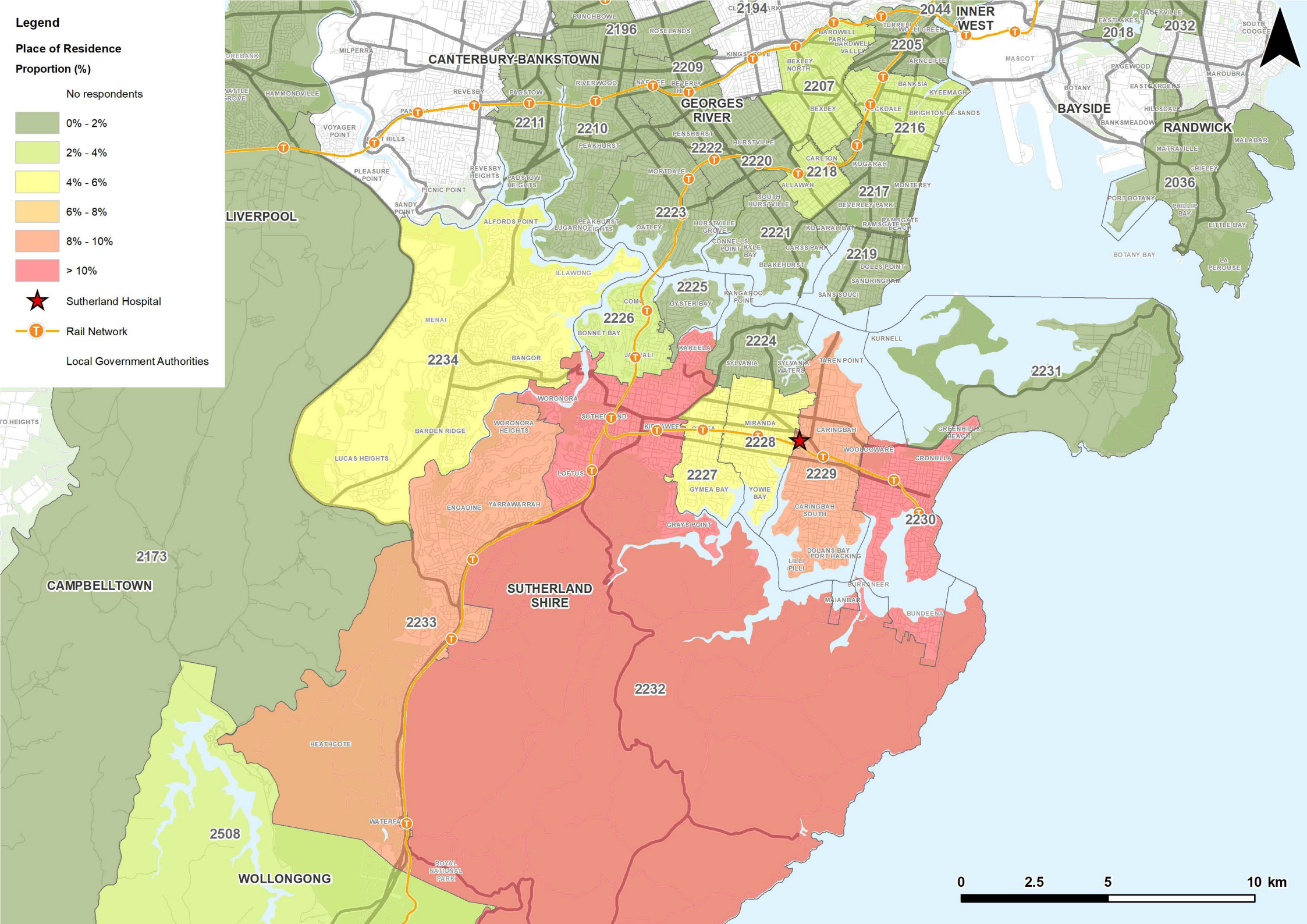
Proportion (%)

- No respondents
- 0% - 2%
- 2% - 4%
- 4% - 6%
- 6% - 8%
- 8% - 10%
- > 10%

★ Sutherland Hospital

—T— Rail Network

Local Government Authorities



CREATING COMMUNITIES

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of belonging. That's why at Stantec, we always **design with community in mind**.

We care about the communities we serve—because they're our communities too. We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.

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