



Former Manly Hospital Site

Transport Assessment

Prepared for:

Developments & Transactions

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PROJECT INFORMATION

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1 Introduction

JMT Consulting was engaged by the Development and Transactions team with Property NSW to prepare a transport assessment to inform the preparation of a Planning Proposal for the former Manly Hospital site.

In late 2018 all services provided at Manly Hospital were transferred to the new Northern Beaches Hospital at Frenchs Forest. The site is currently vacant and a planning is currently being undertaken for it's future use.

The site is known as 150 Darley Road (Lot 2619 in DP 752038, Lot 2727 in DP 752038, and Lot 2774 in DP752038), Manly in the Northern Beaches Local Government Area (LGA) approximately 1km east of the Manly Town Centre, 10km south east of Northern Beaches Hospital in Frenchs Forest and 17km north east of the Sydney Central Business District (CBD). The site is located on the southern side of the Manly peninsula fronting Spring Cove, North Harbour. It interfaces with the historic St Patrick's Estate, North Head Sanctuary and Sydney Harbour National Park.

The site is comprised of 4.66 and is bounded by Darley Road and North Head Scenic Road and is shown in Figure 1 below.



Figure 1 Former Manly Hospital site

2 Existing Conditions

2.1 Site access

Following the closure of Manly Hospital in late 2018 only one vehicle access point into the site is currently operational - that being a driveway on Darley Road. This driveway location is indicated in Figure 2 below and Figure 3 on the following page, and provides access and egress for vehicles travelling in both directions on Darley Road.

A second driveway on Darley Road (immediately west of the existing access point) was previously operational which provided access for hospital staff and visitors to the on-site car parking areas. A third vehicle access into the site also previously existed via a narrow roadway connecting to Collins Beach Road (Figure 4). This access point was not available to the general public and was used infrequently by staff and delivery vehicles accessing the site.

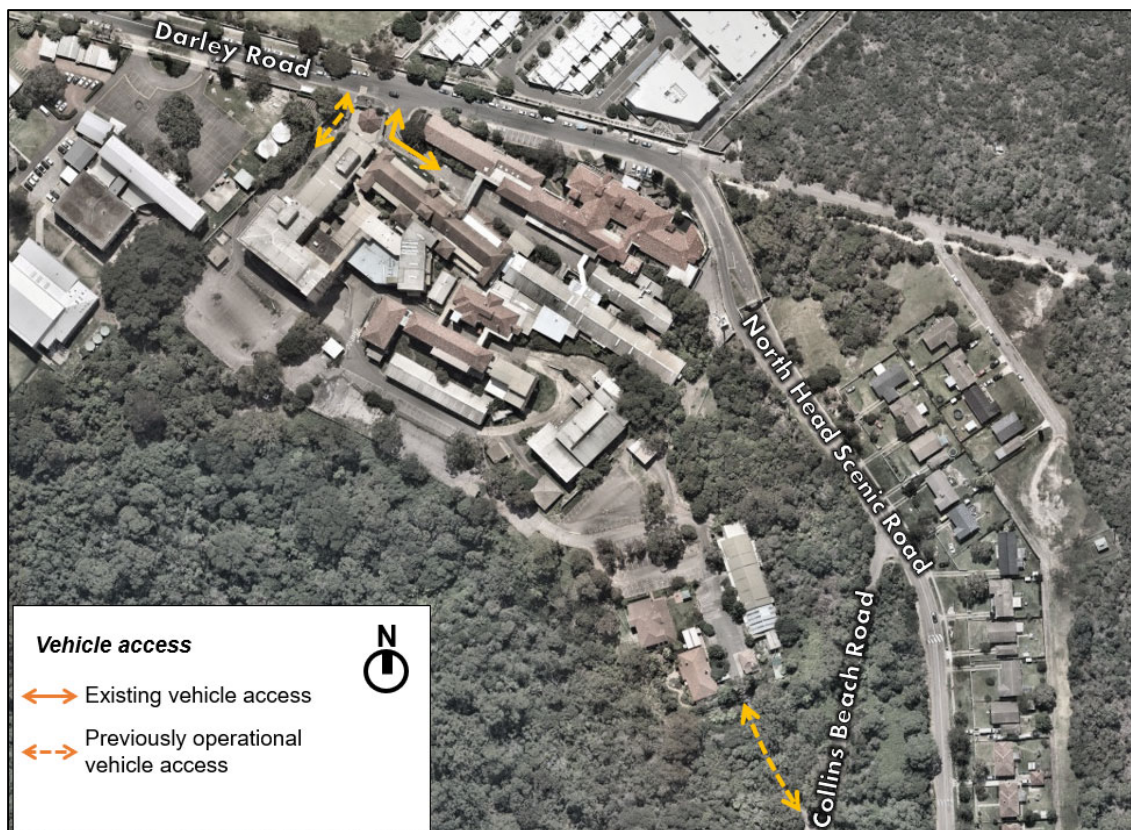


Figure 2 Vehicle site access



Figure 3 Existing Darley Road access point



Figure 4 Collins Beach Road access point

2.2 Travel behaviours

A review of 2016 Journey to Work Census data was undertaken to understand how people travel to the area surrounding the former Manly Hospital site. The area considered as part of the analysis takes in the former hospital as well as surrounding areas up to North Head, as shown in Figure 5.

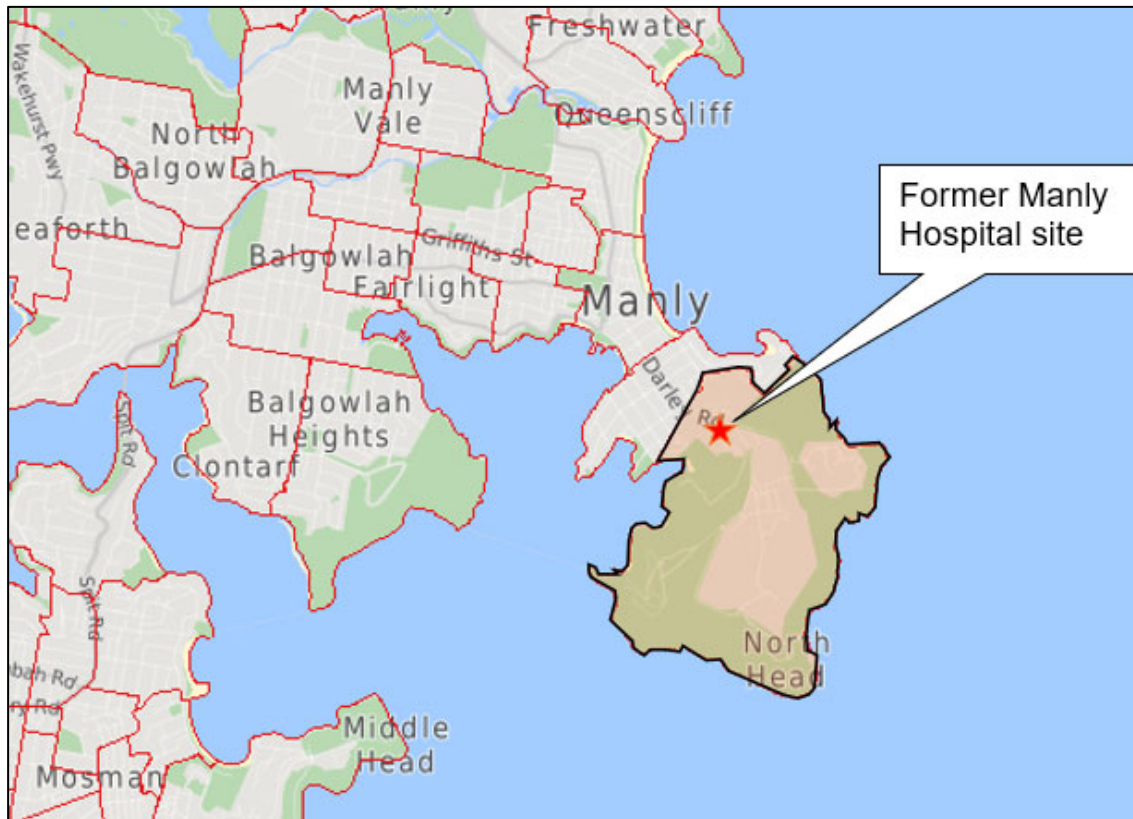


Figure 5 Geographical area considered in travel behaviour analysis

The results of the analysis are illustrated in Figure 6 (modal share) Figure 7 (home location of workers). The modal share analysis indicates the majority of people currently drive to the site due to the availability of on-site parking and the limited nature of public transport services.

Figure 7 shows that the majority of work related trips to the site originate from the Northern Beaches area, with only a small proportion originating from outside the LGA. This localised trip catchment indicates there may be a potential to increase public transport, walking and cycling usage to the site in future years.

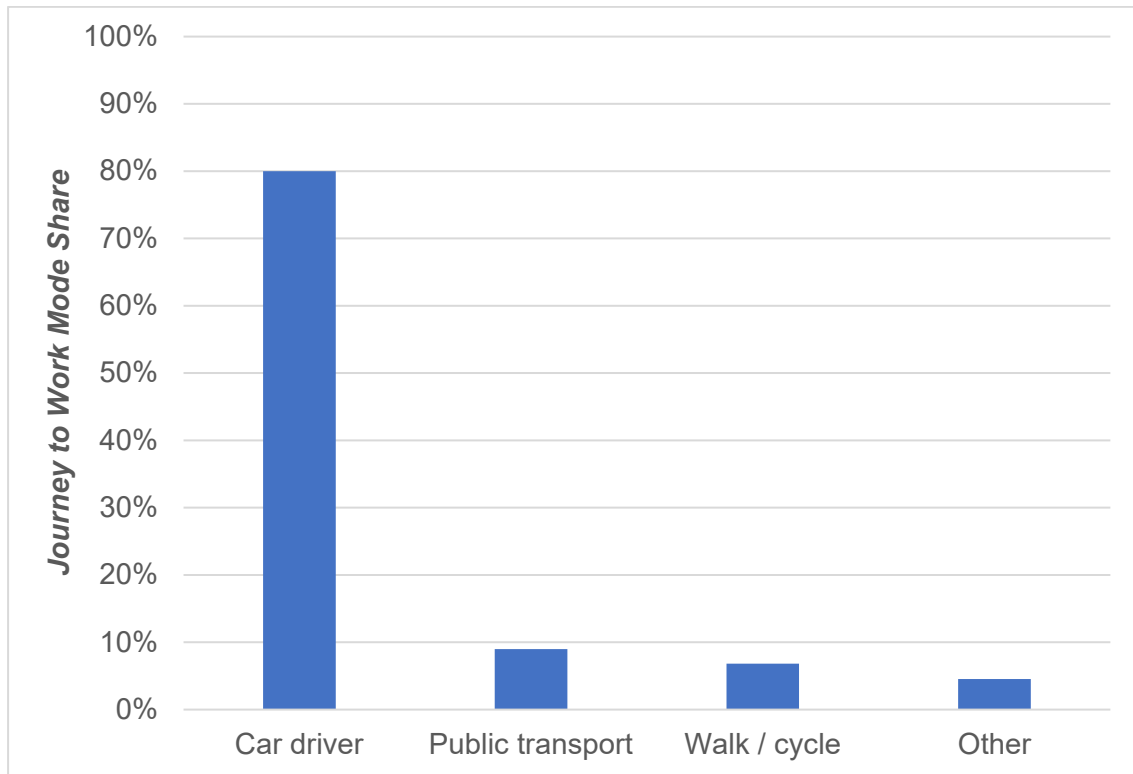


Figure 6 Existing mode share for workers travelling to former Manly Hospital

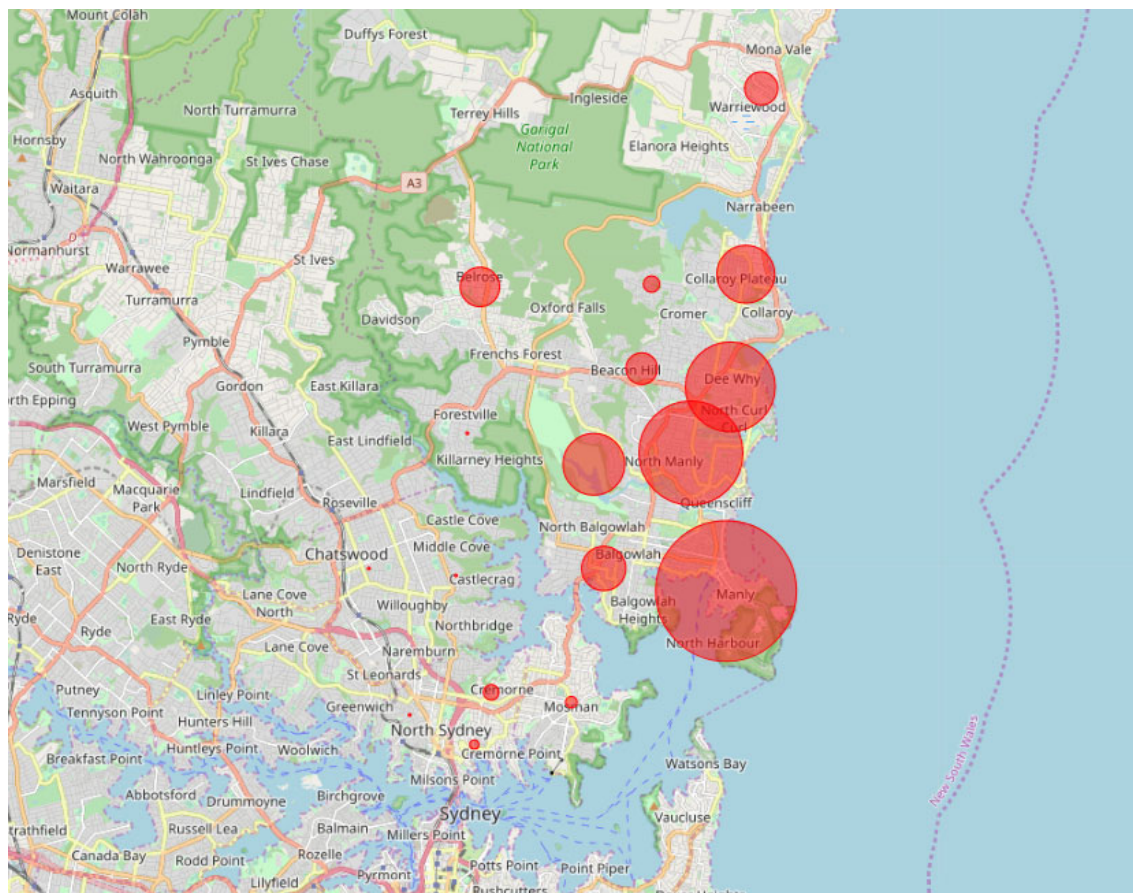


Figure 7 Home location of workers travelling to former Manly Hospital

2.3 Traffic volumes

Traffic counts were undertaken in December 2019 to understand the level of traffic currently utilising Darley Road adjacent to the site. The counts recorded traffic movements in both directions every hour for a one week period, commencing Tuesday 10 December 2019. The traffic count was undertaken during school term, with data collected on Darley Road immediately east of Marshall Street.

The survey results are presented in Figure 8 below which indicate the traffic flows on Darley Road for the busiest day of the week. This shows traffic volumes never exceeded 300 vehicles per hour in one direction across the day. The typical capacity of a traffic lane is up to 900 vehicles per hour, indicating there is spare capacity along Darley Road to accommodate future site uses.

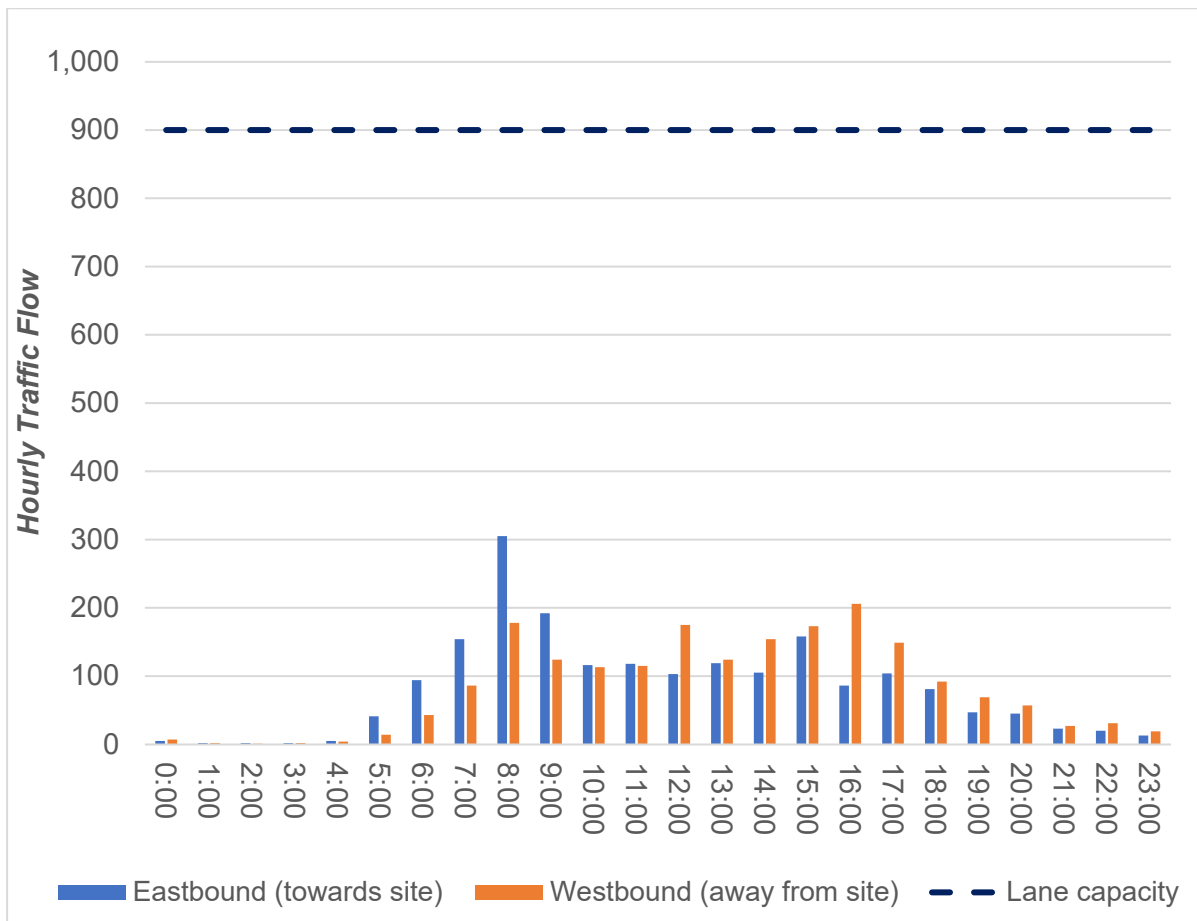


Figure 8 Existing Darley Road traffic volumes

2.4 Public transport

The site is located immediately adjacent to a pair of bus stops on Darley Road which services the 135 bus route, as shown in Figure 9. The Manly Ferry Wharf is located approximately 1.2km away from the site entry, equivalent to approximately 20 minute walk. The 135 bus route servicing the site also provides a connection to the ferry wharf.



Figure 9 Existing public transport services

Although the 135 bus routes provides good connectivity into Manly and Warringah Mall it's infrequent nature results in relatively low levels of usage by residents and workers of the area. Typically services run every 30 minutes during peak weekday periods, which reduces to every hour during off-peak and on weekends.

Transport for NSW recently trialed an on-demand bus service (known as 'Ride Plus') which serviced the Manly area – including the former hospital site. This on-demand service ceased operating in May 2019.

3 Overview of Proposal

The Planning Proposal intends to amend the Manly Local Environmental Plan 2013 (MLEP 2013) to allow for additional permitted uses at the site. This will be achieved by permitting additional uses under Schedule 1 pursuant to clause 2.5 of the MLEP 2013.

The LEP amendment proposed will enable the making of a site-specific DCP which will inform the sites redevelopment in the future, reflective of extensive market sounding, needs-based analysis and community and stakeholder engagement undertaken to date by the relevant NSW Government Departments.

4 Preliminary Transport Assessment

4.1 Site access and circulation

Planning for the site provides an opportunity to rationalise the existing vehicle access arrangements and provide for improved legibility and pedestrian connectivity. Figure 10 provides a summary of the future vehicle circulation within the site. The proposed arrangements provide for an improved transport outcome by reducing vehicle conflicts at entry/exit points and providing for a more legible environment for visitors to the site. The proposed arrangements include:

- Consolidating the two existing driveway crossovers into a single vehicle site access point via Darley Road
- A two-way circulation road to provide primary vehicle access to the on-site car parking areas
- A secondary one-way road that will act as low speed shared zone to facilitate drop off / pick up movements to the various facilities on the site

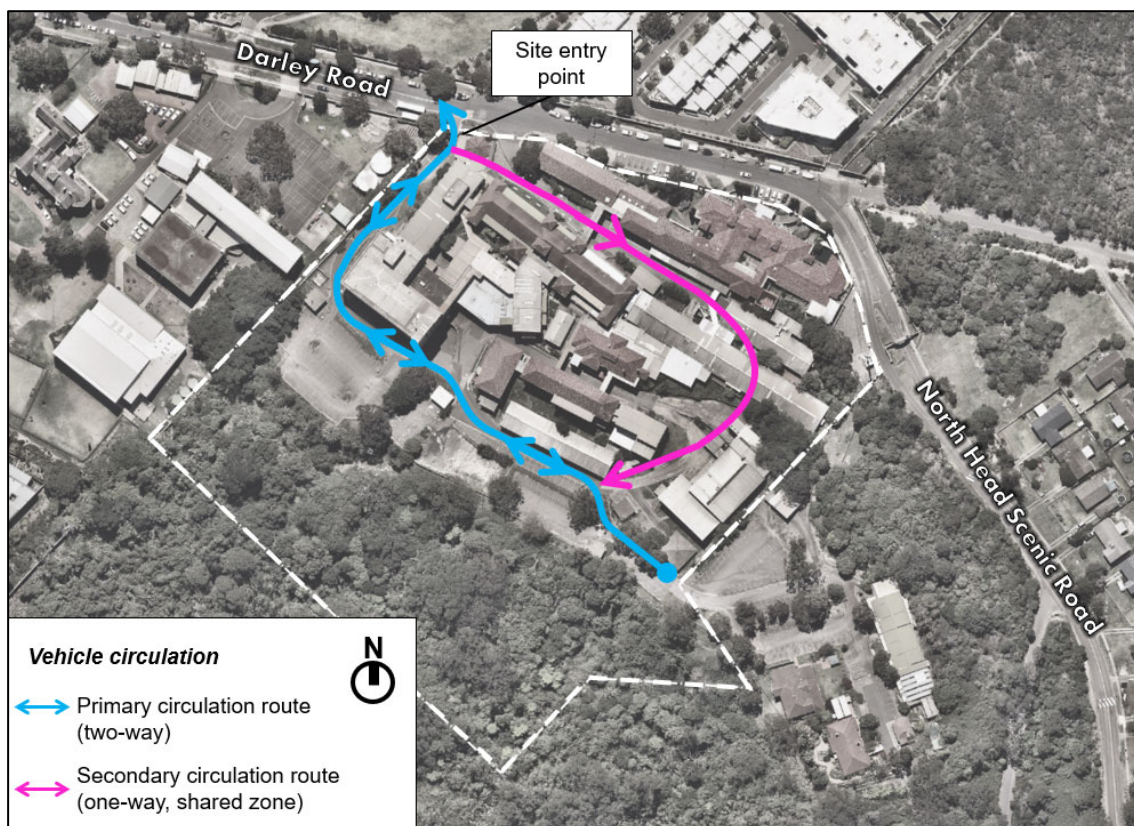


Figure 10 Potential vehicle circulation

4.2 Car parking

As a number of different land uses would be permissible under the Planning Proposal for the site, the exact number of parking spaces to be provided can not be determined at this preliminary stage. The future parking provision will be detailed as part of future Development Applications made for the site.

Generally on-site parking is to be provided in accordance with the rates outlined in the Manly Development Control Plan (DCP) 2013 or those contained in the Seniors Housing SEPP.

Table 1 Potential car parking requirement

| Use | GFA (m ²) | Reference |
|--|--|----------------------|
| Seniors Living (ILU) | 0.5 spaces / dwelling | Seniors Housing SEPP |
| Seniors Living (RAC) | 0.1 spaces / bed; and 0.5 spaces / staff member | Seniors Housing SEPP |
| Restaurants / Cafes & take away food and drink | 1 space / 40m ² GFA of serviced area | Manly DCP 2013 |
| Retail and commercial | 1 space / 40m ² GFA | Manly DCP 2013 |

Where it can be demonstrated that parking requirements for different uses may be complementary to one another (generating peak demands at different times of the day) then consideration could be given to modifying the above rates.

4.3 Future mode share

Future planning for the former Manly Hospital site should seek to achieve a modal shift away from private vehicle towards public transport in order to provide for an improved pedestrian environment within the site. To obtain a strong modal shift a number of measures will be required to be implemented as the site is developed, potentially including:

- Development of green travel plan for the site to promote non-car modes of transport
- Facilitating car pooling by staff to reduce the instances of single occupant vehicle trips
- Improvement in public transport frequencies (which will require discussions with Transport for NSW)
- Provision of suitable bicycle parking and end of trip facilities to encourage travel by walking and cycling

The potential future mode share is summarised in Figure 11 below.

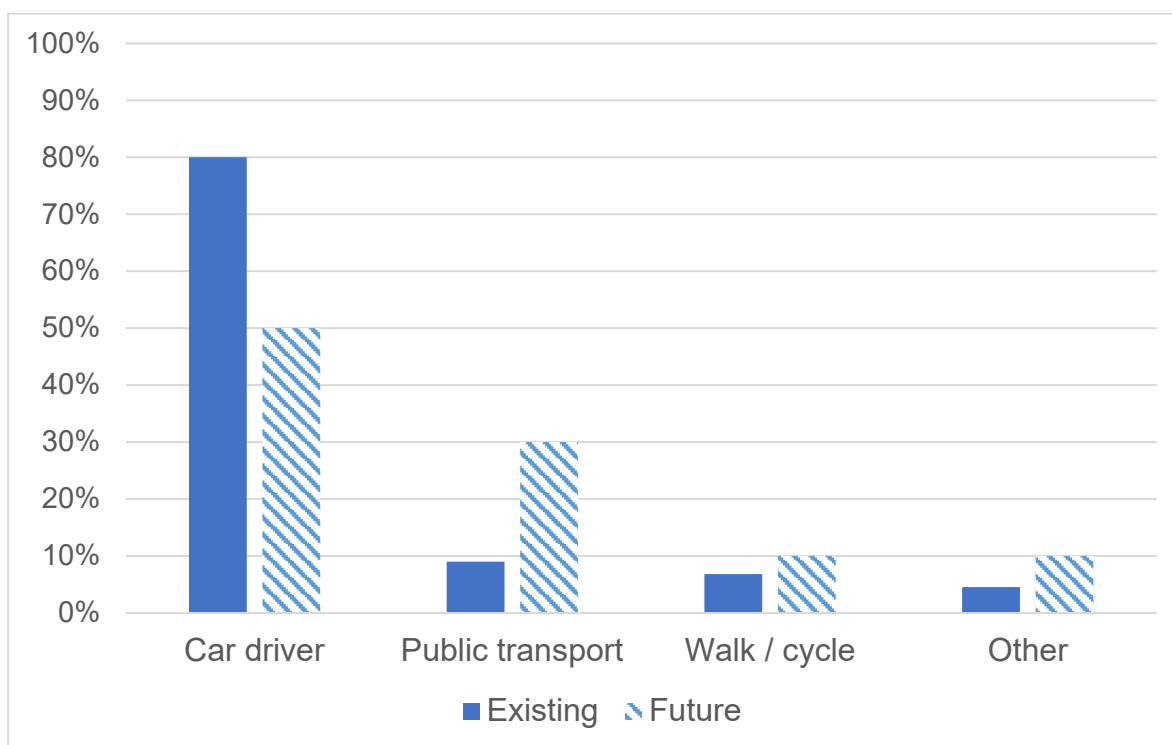


Figure 11 Future modal share

The future modal share and proposed measures to be implemented will be confirmed at subsequent stages of the planning process following refinement of future site uses.

4.4 Traffic impacts

It is important to recognise that the former Manly Hospital contained approximately 160 beds and 300 car parking spaces, which would have generated upwards of 200 vehicle movements per hour. The future site uses, those being focused around seniors housing and health and wellbeing, are typically of lower traffic intensity when compared with a public hospital.

The *RMS Guide to Traffic Generating Developments* document provides guidance in relation to rates of peak hour traffic generation for the potential site uses, those being:

- Health and wellbeing uses: 0.5 traffic movements / parking space
- Seniors housing: 0.1 traffic movements / dwelling

Based on preliminary planning for the site undertaken to support the Planning Proposal and adopting the above rates there is likely to be less than 100 vehicle movements generated by the site during the peak hour of the day. This is significantly less traffic movements compared to what would have been generated when the Manly Hospital was in operation.

Further, the traffic count undertaken on Darley Road in December 2019 indicated there was spare capacity to accommodate additional traffic movements from the site which is well in excess of that forecast to be generated by the future health and wellbeing focused uses.

The final traffic generation forecasts will be confirmed at subsequent stages of the planning process following refinement of future site uses.

4.5 Pedestrians and cyclists

The development of the site provides the opportunity to significantly enhance access for pedestrians and cyclists. Initial planning undertaken as part of this Planning Proposal has considered the following measures in response to this objective:

- Consolidation of vehicle entry points into the site to reduce conflicts between vehicles and pedestrians on Darley Road
- Introduction of a shared zone within the site which facilitates low vehicle speeds (maximum 10km/h) and good quality pedestrian links
- Improved network of pedestrian paths within the site to provide connections in both a north-south and east-west direction
- Provision of publicly accessible through-site links to improve pedestrian accessibility within the site
- Potential for new pedestrian paths adjacent to the National Park to provide connections to external destinations such as Collins Beach
- Provision of bicycle parking for staff and visitors as part of future development applications, to be provided consistent with the rates outlined in the Manly DCP 2013.

4.6 Public transport

As previously noted the site is located immediately adjacent to a pair of bus stops on Darley Road which services the 135 bus route. Planning for the site will consider how to maximise the benefit of these bus stops by providing for high quality pedestrian connections from within the site to the external street network. To improve the attractiveness of bus travel to the site, discussions will be held with Transport for NSW to identify the potential for increasing the frequency of the 135 bus route. These discussions will occur closer to the time of initial occupation of the site once the likely number of site users (and associated public transport demand) is better understood.

Given the anticipated nature and scale of uses it is not anticipated any upgrades to the public transport network will be required to support the site development. This will be confirmed as part of future Development Applications made for the site.

5 Summary

JMT Consulting was engaged by the Development and Transactions team within Property NSW to undertake a transport assessment to support a Planning Proposal for the former Manly Hospital site. Key findings of the assessment to date are as follows:

- Traffic counts undertaken in December 2019 on Darley Road demonstrated that traffic volumes never exceeded 300 vehicles per hour in one direction – indicating there is spare capacity to accommodate future site uses.
- The master planning for the site provides an opportunity to rationalise the existing vehicle access arrangements and provide for improved legibility and permeability.
- The proposed circulation arrangements provide for an improved transport outcome by reducing vehicle conflicts at entry/exit points through consolidating the two existing driveway crossovers into a single vehicle site access point via Darley Road
- The number of parking spaces will be detailed as part of future Development Applications made for the site however generally on-site parking is to be provided in accordance with the rates outlined in the Manly Development Control Plan (DCP) 2013 or those contained in the Seniors Housing SEPP.
- Preliminary analysis indicates that there is likely to be less than 100 vehicle movements generated by the site during the peak hour of the day, which is significantly less than what would have been generated when the Manly Hospital was in operation.
- The development of the site provides the opportunity to significantly enhance access for pedestrians and cyclists, including the introduction of new pedestrian pathways to provide for improved internal and external connections.
- Given the anticipated nature and scale of uses it is not anticipated any upgrades to the public transport network will be required to support the site development.

In the above context, the transport assessment has concluded that the proposed Planning Proposal for the former Manly Hospital site, with a focus on health and wellbeing uses, will result in an acceptable transport outcome. Further transport analysis will be undertaken at subsequent stages of the planning process following refinement of future site uses.