

# Green Travel Plan for Multi-Trades and Digital Technology Hub

PREPARED FOR TAFE NSW MEADOWBANK | July 2022



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# 1 Introduction

## 1.1 Purpose of report

This Travel Plan has been prepared by Stantec Australia on behalf of TAFE NSW (the Applicant), to address the following condition from the Development Consent for Section 4.38 of the Environmental Planning and Assessment Act 1979:

**Table 1-1: Condition D14 of Development Consent**

Condition	Description	Section in report where addressed
<b>D14</b>	<i>Prior to the commencement of operation, a Travel Plan (TP), must be submitted to the satisfaction of the Planning Secretary to promote the use of active and sustainable transport modes. The plan must:</i>	-
	<i>a) be prepared by a suitably qualified traffic consultant in consultation with Council and (Sydney Coordination Office) Transport for NSW</i>	-
	<i>b) be based on the TP submitted with the RtS titled 'Multi-Trades and Digital Technology Hub TAFE NSW Meadowbank Travel Plan (Issue E)' prepared by GTA Consultants and dated 4 May 2020, and include the following measures recommended by TfNSW:</i> <i>(i) installation of next service departure screens for T9 rail services (and bus services if possible) in the lobby to encourage public transport use; and</i> <i>(ii) develop and deliver a robust communications strategy for the TP to users of the site prior to occupation which includes key messages on how to travel including prioritising public and active transport as well as road safety messages;</i>	Section 6.1 & Section 9.2
	<i>c) include objectives and modes share targets (i.e. Site and land use specific, measurable and achievable and timeframes for implementation) to define the direction and purpose of the TP;</i>	Section 5
	<i>d) include specific tools and actions to help achieve the objectives and mode share targets</i>	Section 5.2 and Section 6
	<i>e) 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 TP</i>	Section 6 & Section 7.2
	<i>f) include details regarding the methodology and monitoring/review program to measure the effectiveness of the objectives and mode share targets of the TP, including the frequency of monitoring and the requirement for travel surveys to identify travel behaviours of users of the development; and</i>	Section 7.1, 7.2 & 7.3
	<i>g) include tools, actions and processes to address the scenario where the mode share targets are not achieved, including the approach to providing additional management and mitigation measures and infrastructure (where deemed necessary)</i>	Section 7

Condition	Description	Section in report where addressed
	<i>h) investigate opportunities to reduce reliance on car parking and promote the use of active and sustainable transport modes, considering local transport infrastructure;</i>	Section 6
	<i>i) investigate opportunities to support staff and students to reduce car use (e.g. carpooling program); and</i>	Section 6
	<i>j) include details of bicycle parking and End of Trip (EoT) facilities</i>	Section 1.2

The Travel Plan is a way in which the Meadowbank TAFE is able to manage the transport needs of staff and students, combining the requirements for a Green Travel Plan (assumed to be aimed at students) and Workplace Travel Plan (aimed at staff). The aim of the plan is to reduce the environmental impact of travel to/ from and in association with the Multi-Trades and digital technology Hub and broader Meadowbank TAFE operation. In essence, the plan encourages more efficient use of motor vehicles as well as alternatives to the single occupant motor car.

The plan comprises a list of strategies aimed at encouraging walking, cycling, public transport and car-pooling for travel to and from TAFE and a shift away from the reliance on single occupant vehicle travel.

The remainder of this report is structured as follows:

- **Section 2** provides an overview of the objectives of the Travel Plan.
- **Section 3** presents the existing travel patterns of the surrounding area and proposed car parking provision for the development.
- **Section 4** provides an overview of the mode share targets for the development.
- **Section 5** outlines the criteria required for Green Star Accreditation.
- **Section 6** provides a list of both staff and student targeted actions to reach the mode share targets.
- **Section 7** provides methods of monitoring and reviewing progress with reach the mode share targets.

It is noted that a separate School Travel Plan has been prepared for Meadowbank School (Primary and Secondary students).

## 1.2 Proposed development

The proposal involves the following:

- A two to six-storey building in the north-eastern corner of the Meadowbank TAFE campus. The building will include workshops, workspace and learning spaces and a single level of car parking.
- A new multi-storey car park will also be constructed in place of the existing at-grade staff car park adjacent to Block J. There will be 32 car parking spaces within the multi-trade hub and 245 parking spaces within the multi-story car park.
- Vehicle access will be from an internal laneway/ easement connecting with See Street, while primary pedestrian access will be from See Street.
- Existing north-south pedestrian through site access will also be improved by minor upgrade works (subject to a separate approval process).
- Bicycle end-of-trip facilities are located in the basement car park and accessed via the vehicle entry ramp. There will be a total of seven showers (three for male, three for female and one for shared accessible use) and 39 bicycle spaces within the multi-trades hub.

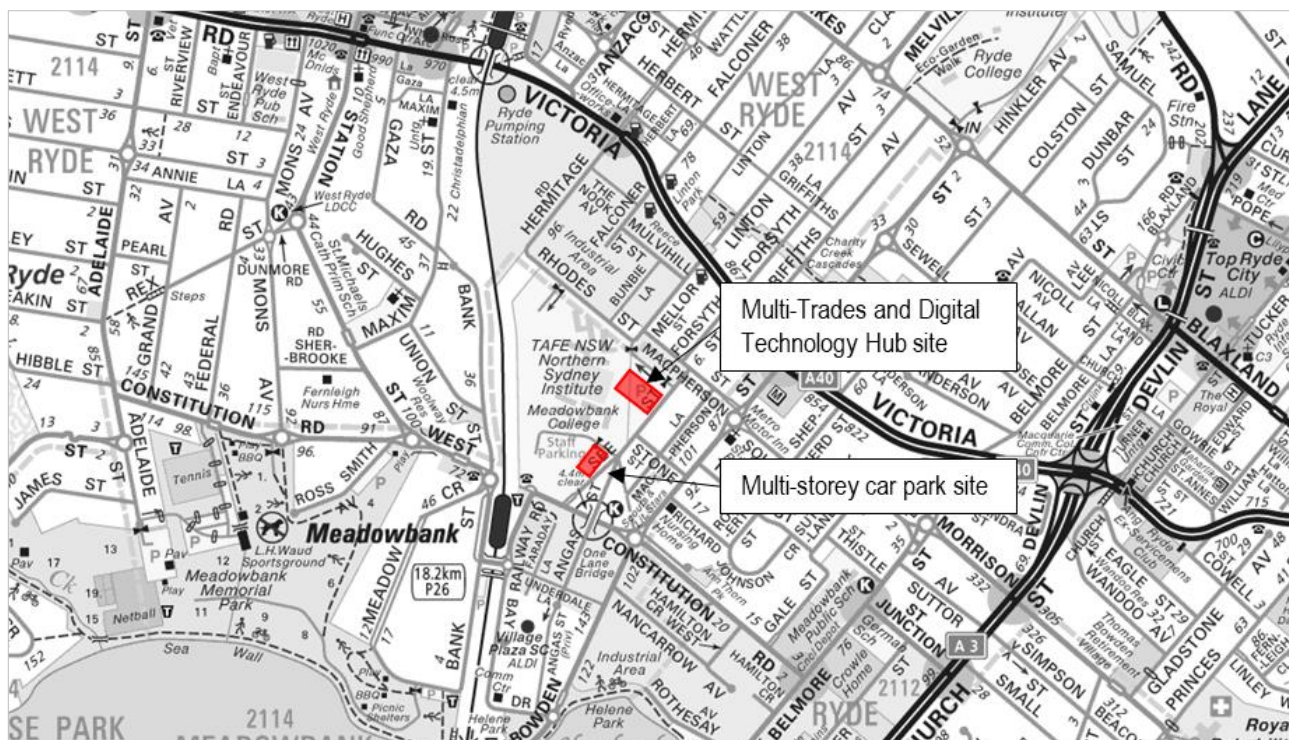


The new facilities will allow for overall enrolments to grow from the existing 13,559 enrolments in 2019 to 15,366 enrolments by 2022 and 16,603 enrolments by 2032. The multi-trades and digital technology hub will tie in with the future master plan of the campus and surrounding Meadowbank Education and Employment Precinct.

## 1.3 Site Location

The TAFE NSW Meadowbank campus (herein referred to as Meadowbank TAFE) is located approximately 15 kilometres north west of Sydney CBD. The proposed new multi-trades and digital technology hub building will occupy the north eastern corner of the existing Meadowbank TAFE campus, which presently contains an at-grade car parking area. The multi-storey car park will be located in place of the existing at-grade staff car park adjacent to Block J. The Meadowbank TAFE campus is bounded by Macpherson Street and an Ausgrid substation to the north, See Street to the east and the rail corridor to the west. Meadowbank Railway Station is located at the southern boundary of the site.

The site location is illustrated in Figure 1-1 and has a primary frontage to See Street. Surrounding properties largely consist of light industrial, low density residential and educational uses.



**Figure 1-1: Subject site and surrounding environment**

Base image source: Sydney



## 2 Travel Plan

### 2.1 Introduction

Transport is a necessary part of our daily activities, which has effects that can be managed. The transport sector is one of the fastest growing emissions sectors in Australia, and therefore a travel plan provides an opportunity for reducing emissions and reducing traffic congestion. As well as delivering better environmental outcomes, providing a range of travel choices with a focus on walking, cycling and public transport will have major public health benefits and will ensure healthy and prosperous communities.

### 2.2 What is a Travel Plan?

A Travel Plan is a package of measures aimed at promoting and encouraging sustainable travel and reducing reliance on the private car. The purpose of a TP is not to be 'anti-car', but to make apparent, encourage and support broader community expectations for carrying out their daily business in a more sustainable way. The Travel Plan can provide both:

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

Active transport relates to physical activity undertaken as a means of transport. It includes travel by foot, bicycle and other non-motorised vehicles. Use of public transport is also included in the definition as it often involves walking or cycling as an access or egress mode and promotes relatively sustainable options.

The Travel Plan would 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 will choose their most suitable means of transport.

This Travel Plan in this instance is also aided by the high level of public transport services and accessibility available to/ from the site.

## 3 Existing Transport Conditions

### 3.1 Train

Meadowbank Railway Station and West Ryde Station are located around 400 metres southwest (about five-minute walk) and 830 metres northwest from the proposed multi-trades and digital technology hub building, respectively. Both Meadowbank and West Ryde stations are on the T9 Northern Line, with services running from North Shore to Hornsby via City every 30 minutes.

**Table 3-1: Train service frequencies from Meadowbank Train Station**

Route	Destination	Weekday		Weekend
		Peak	Off-peak	
T9 – North	Hornsby via City	3-12 minutes	15 minutes	T9 – North
T9 – South	North Shore via City	7-12 minutes	15 minutes	T9 – South

<sup>1</sup> Sourced from <https://transportnsw.info/routes/train>, accessed 21/01/22

Table 3-1 shows that during peak periods, trains arriving and departing Meadowbank Railway Station in both the northbound and southbound directions are relatively frequent.

### 3.2 Bus

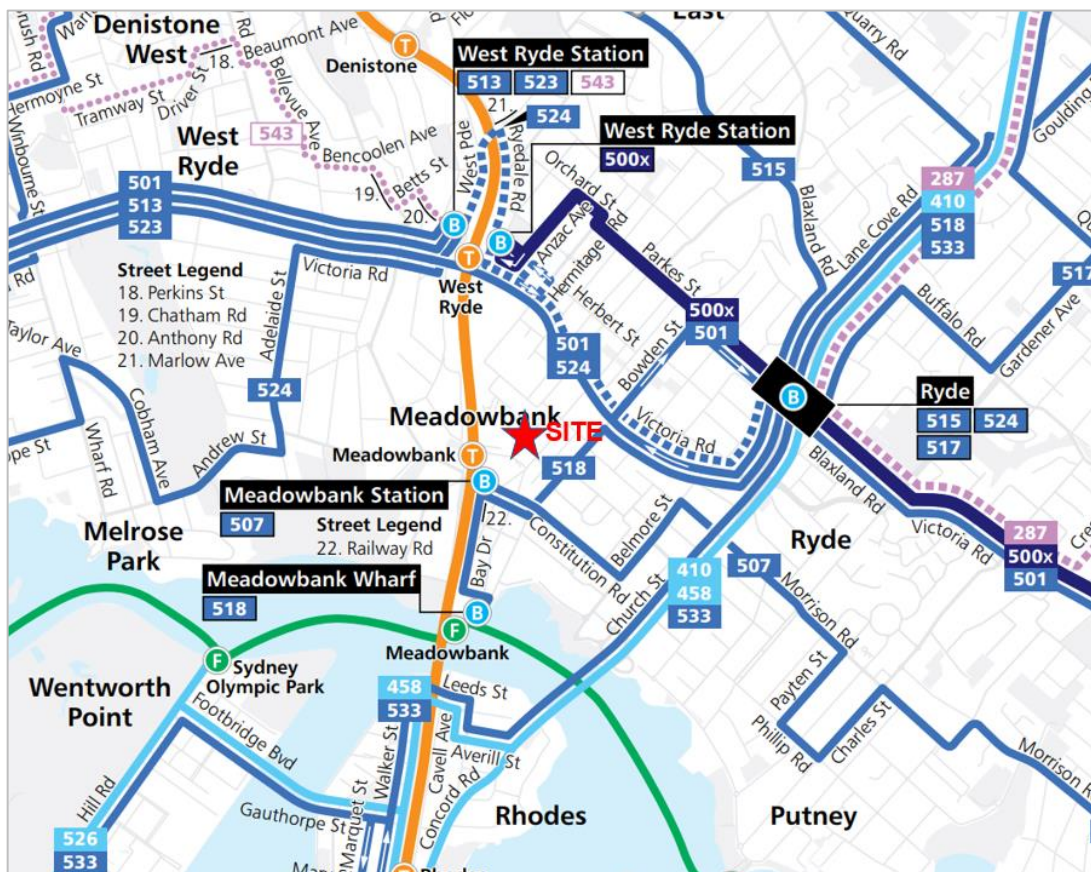
Bus network services surrounding the site are detailed in Table 3-2 and shown indicatively in Figure 3-1. The location of the bus stops surrounding the site are shown in Figure 3-2.

Bus route 507 and N80 operates near the site with the nearest stop located at Meadowbank Railway Station. Bus route 518 operate near the site with the nearest stop located along Bowden Street. Bus routes 500N and 501 operate along Victoria Road. These bus routes are relatively frequent during the peak periods and ferry passengers to / from the surrounding residential suburbs and Places like Meadowbank Station and West Ryde Station.

**Table 3-2: Bus service frequency**

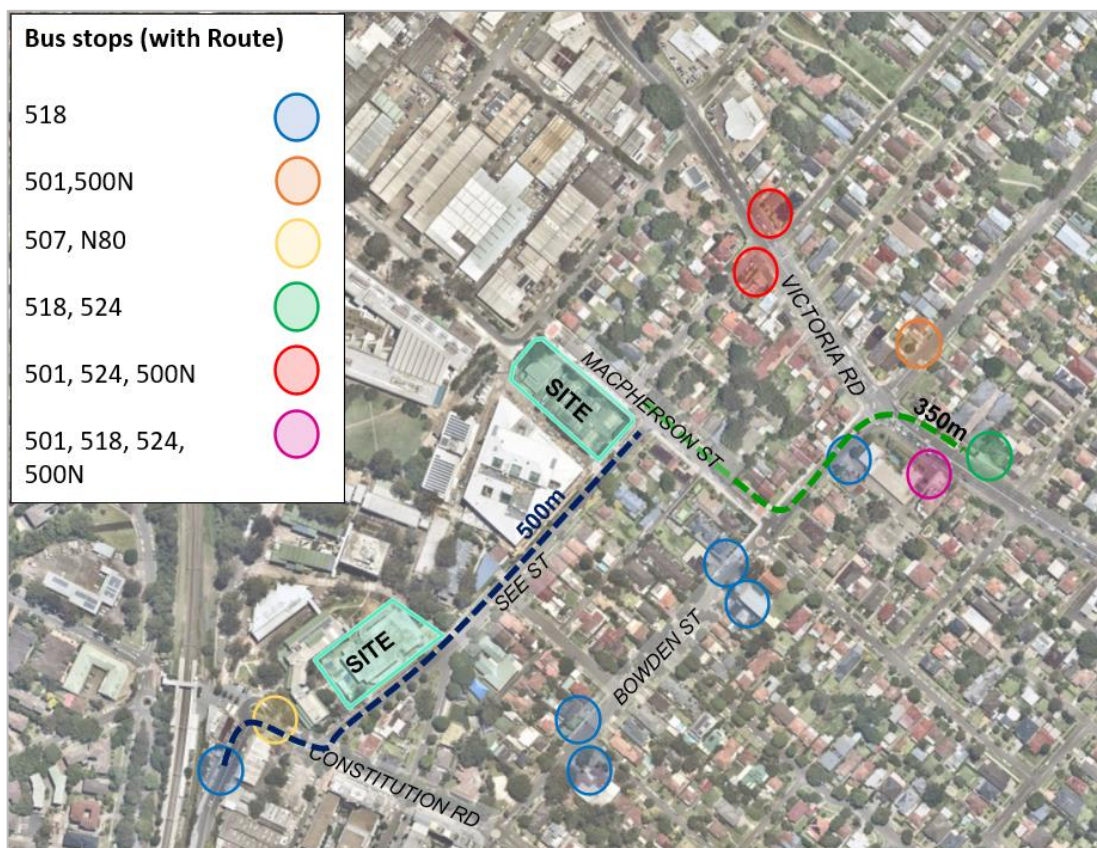
Bus route number	Description	AM/ PM peak frequency	Off-peak frequency
500N	Parramatta to City Hyde Park via Victoria Road (Night Service)	-	30 minutes
501	Parramatta to Central Pitt St via Victoria Rd	9 minutes / 7 minutes	30 minutes
507	Macquarie University to City Circular Quay via Putney	30 minutes/ 20 minutes	60 minutes
518	Meadowbank Wharf to Macquarie University	15 minutes / 15 minutes	30 minutes
524	Ryde to Parramatta via West Ryde	30 minutes	60 minutes
N80	Hornsby to City Town Hall via Strathfield (Night Service)	-	60 minutes

<sup>1</sup> Valid from 28 January 2022, sourced from <https://transportnsw.info/routes/bus>, accessed 21/01/22



**Figure 3-1: Surrounding bus network**

Base image source: [region-7-map-january-2021-v2.pdf \(transportnsw.info\)](https://www.transportnsw.info/region-7-map-january-2021-v2.pdf), dated 21 January 2021



**Figure 3-2: Location of bus stops**

Base image source: Nearmap <https://www.nearmap.com/>, dated 21 January 2021



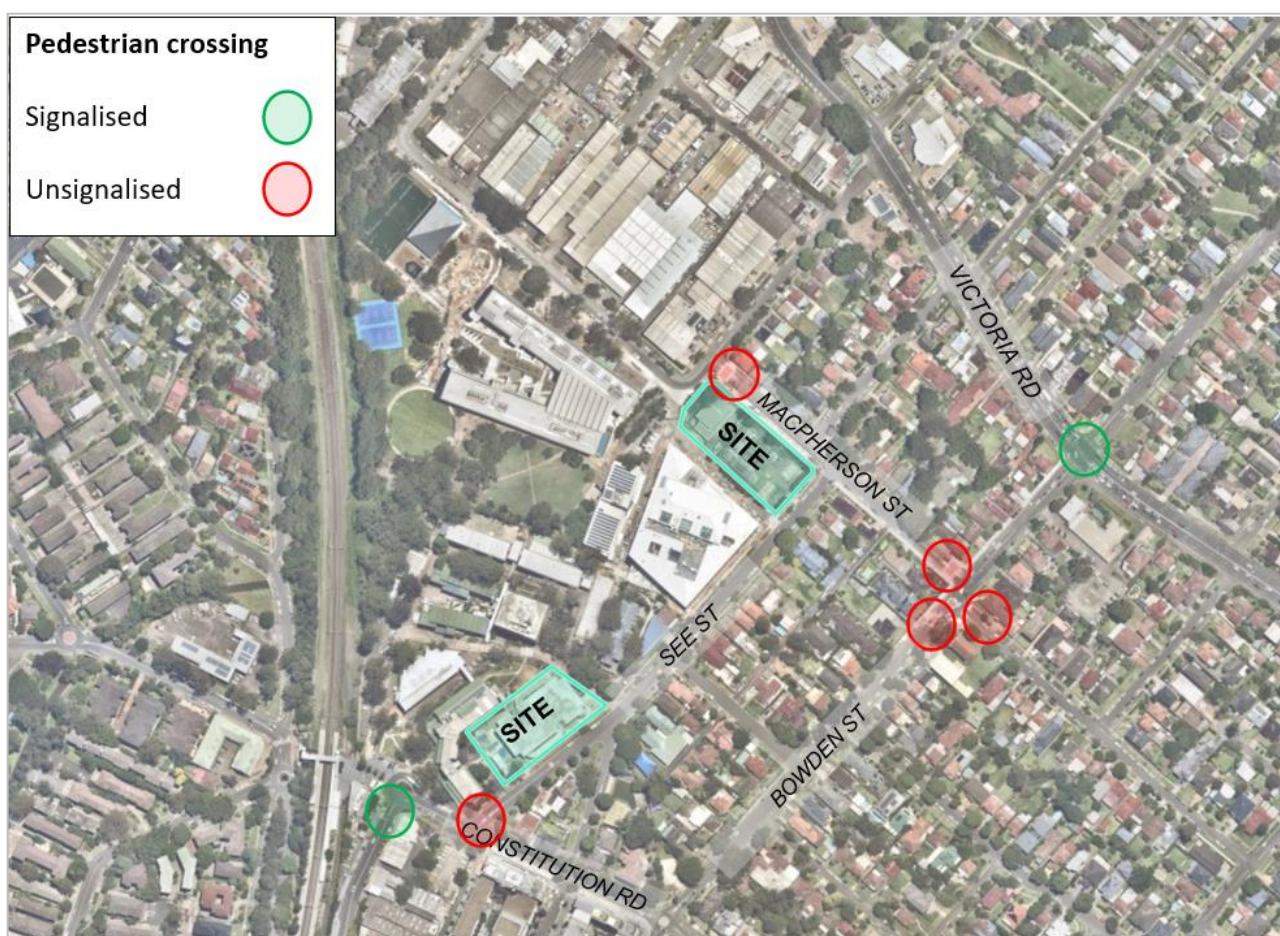
### 3.3 Pedestrian Infrastructure

Pedestrian access to the multi-trades and digital technology hub is proposed via See Street on the eastern side of the site, as well as along the western side of the building from the walkway between Block P and the new building. Existing north-south pedestrian through site access will also be improved by minor upgrade works (subject to a separate approval process).

Pedestrian footpaths are generally provided along all the roads surrounding the site (See Street, Macpherson Street, Rhodes Street). Footpaths are generally concrete paths with a width of 1.2 metres.

Along Macpherson Street and See Street, there is a formal pedestrian footpath that provides a continuous linkage for users of the site to/from Meadowbank Station. Pedestrian footpaths are also provided on both sides of Forsyth Street, Bowden Street and Macpherson Street (between these two streets), providing safe connection to the bus stops on Victoria Avenue.

Safe crossing points are provided on the north-eastern, south-eastern and south-western legs of the Victoria Road/Bowden Street intersection.



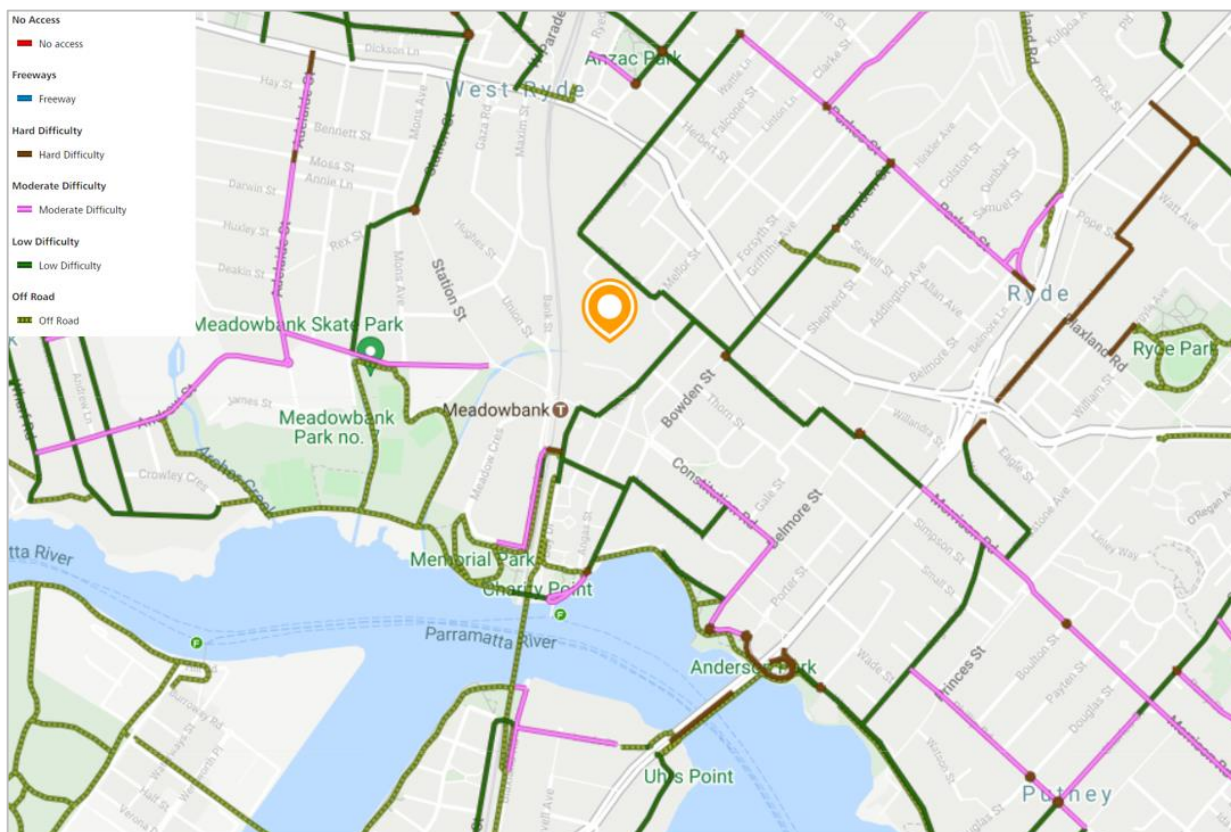
**Figure 3-3: Pedestrian Crossing facilities near the site**

Base image source: Nearmap <https://www.nearmap.com/>, dated 21 January 2021

### 3.4 Bicycle Infrastructure

There are limited cyclist facilities located within the transport network surrounding the site. Bicycle end-of-trip facilities are located in the basement car park and accessed via the vehicle entry ramp.

Although there are no formal cycleways in the immediate vicinity of the subject site, a number of on-road bicycle routes exist to facilitate cycling to and from the area. These include the use of See Street, MacPherson Street and Bowden Street to connect to Meadowbank Station, Meadowbank Ferry Wharf and surrounding residential suburbs. As shown in Figure 3-4, the on-road cycling environments in the immediate vicinity of the subject site are indicated to be of low difficulty by the *Service NSW Cycleway Finder* (previously known as the *RMS Cycleway Finder*).



**Figure 3-4: Cycling infrastructure surrounding subject site with difficulty**

Source: Service NSW Cycleway Finder [https://roads-waterways.transport.nsw.gov.au/maps/cycleway\\_finder](https://roads-waterways.transport.nsw.gov.au/maps/cycleway_finder) (accessed 21/01/22)

## 3.5 Walk Score & Transit Score

A walk score and transit score provide an assessment of how accessible a development is to public transport, parks, restaurants, entertainment centres and schools, that is, in terms of walking distance. A higher walk score and transit score correlates to a reduced need for a car.

The walk score and transit score are provided by walkscore.com (<https://www.walkscore.com/>). Whilst there is no official recognition of the walk score, transit score or bike score by any transportation authority, the score provides a broad indicative insight into how accessible an area is for people travelling without a car. The score lies on a scale between 0 and 100. A description of each of the scores is provided in Table 3-3.

**Table 3-3: Walk score and transit score**

Score	Walk score meaning	Transit score meaning
90 – 100	<b>Walker's Paradise</b> Daily errands do not require a car	<b>Rider's Paradise</b> World-class public transportation
70 – 89	<b>Very Walkable</b> Most errands can be accomplished on foot	<b>Excellent Transit</b> Transport is convenient for most trips
50 – 69	<b>Somewhat Walkable</b> Some errands can be accomplished on foot	<b>Good Transit</b> Many nearby public transportation options
25 – 49	<b>Car-Dependent</b> Most errands require a car	<b>Some Transit</b> A few nearby public transportation options
0 – 24	<b>Car-Dependent</b> Almost all errands require a car	<b>Minimal Transit</b> It is possible to get on a bus

Table 3-4 shows the outputs for the next suburb (West Ryde) and Meadowbank itself.

**Table 3-4: Walk score outputs**

Type	Location	Walk Score	Transit Score
Suburb	Meadowbank	85	NA
	West Ryde	75	NA

Based on the Walk score results, Meadowbank is considered very walkable with the proposed development site considered within the walker's paradise range. This is supported by the analysis undertaken in Section 3.3. At this point of writing, transit scores are not available for the two suburbs.

## 3.6 Travel Mode Survey Results

Mode share surveys were completed at Meadowbank TAFE in October and November 2018 to understand how the existing staff and students travel to the site. A total of 728 responses were received for this survey. The survey results are summarised in Table 3-5.

**Table 3-5: Existing Meadowbank TAFE mode share**

Mode	Staff mode share (per cent)	Student mode share (per cent)
Car	74	42
Dropped off	0	3
Bus	1	4
Train	19	41
Ferry	0	1
Motorcycle	2	1
Cycle	1	0
Walk	3	8
<b>Total</b>	<b>100</b>	<b>100</b>

The mode share survey indicates the following:

- Private vehicle is the most common mode of transport to Meadowbank TAFE for both staff (74%) and students (42%).
- For students taking the train, this is closely followed at 41%. About 19% of the staff travel to the site by train.
- For bus mode share, about 1% of the staff and 4% of the students take the bus to the site.
- For walking mode share, about 3% of the staff and 8% of the students walk to the site.

Vehicle occupancy surveys also completed indicate that average vehicle occupancy for staff and visitors parking on site was around 1.05 people per vehicle.

## 3.7 Opportunities

Based on the existing transportation infrastructure and services available, as well as the results from the travel mode survey, there are potentially opportunities for the following:

- **Improving bus mode share** with the addition of bus services and new bus network.
- **Improving train mode share**, in particular for Staff, through proposed actions detailed in Section 6.1 and 6.2.1
- **Improving walking share** for staff and students who lives near site, through proposed actions detailed in Section 6.2.1 and Section 6.3.15.



## 4 Green Star Accreditation

### 4.1 Introduction

TAFE NSW Meadowbank is seeking accreditation under the Performance Pathway for Design & As Built and Interiors. A transport plan is required to respond to the following four criteria as set out in the Sustainable Transport Calculator Guide.

#### 4.1.1 Emissions Reduction

- Review the emissions related directly to commuting trips to and from the site.
- Consider ways to reduce the commuting trips by encouraging mode share, reducing average trip lengths and overall trips (i.e. working from home).

#### 4.1.2 Active Mode Encouragement

- Review the mode share of walking and cycling in commuter trips.
- Consider ways to increase the walking and cycling trips throughout the site.

#### 4.1.3 Vehicle Kilometres Travelled Reduction

- Review the total vehicle kilometres travelled for commuting trips.
- Consider ways to reduce the average trip length or reduce the mode share of car trips.

#### 4.1.4 Walkable Location

- Review the mode share of walking in non-commuter trips, such as lunch time runs.
- Consider ways to increase the number of walking trips not associated with commuting, such as increasing access to local shops or parks.

### 4.2 Reference Case

The reference case, or 'base case', is what the design case is referenced against to determine the improvement in the criteria set out previously. The reference case depends on the site location only, and the on-line tool calculates the results to the above indicators based on the location and type of building.

Appendix A details the output of the reference case for the Design & As Built and Interiors Calculators.

### 4.3 Design Case

The target score for the development at See Street, Meadowbank is a score of 4.5 out of 10 points for the traffic and transport section of the *Design and As Built* Green Star rating. It is noted that target mode share for students have been used for this design case. Details of the targets are provided in section 5.1

Based on the targets, 3 out of 5 points have been provided for emissions reduction with one (1) point provided for vehicle kilometre travelled reduction. A lower mode share for walking and cycling is expected given the attractiveness of public transport availability. No points have been achieved for this component of the green star rating.

To achieve a greater Green Star rating, a strategy of reducing overall vehicle emissions for commuting has been considered. This includes reducing overall private vehicle trip numbers and encouraging sustainable modes of travel. This would also result in a reduction of vehicle kilometres travelled.

In addition to the above, private vehicle emissions could be further reduced by allocating a number of bays to electric vehicles, which in themselves do not produce emissions. When paired with solar and home battery charging systems, such as Tesla's Powerwall system, vehicle travel for electric vehicles produce zero emissions. However, this needs to be taken into the context of overall power supply.

## 5 Policy and Strategic Framework

Based on the transport network described in Section 3, this section identifies the potential travel patterns to and from the new the new Multi-Trades and Digital Technology Hub and broader Meadowbank TAFE. It builds on the walking and public transport networks already available around the premises, identifying transport modes which may be best suited to meet the travel demand for the site. This guides the actions specified in Section 6 of this Travel Plan, to respond to available transport infrastructure and current travel patterns to the TAFE.

### 5.1 Scenario Analysis

#### 5.1.1 Scenario 1: Business as usual

If no further green travel actions are taken, it is likely that staff and students will adopt the travel patterns they currently exercise travelling to and from the TAFE. If the rates are applied outright to the forecast staff and student numbers following opening of the Multi-Trades and digital technology Hub, the potential future travel demand for different modes of travel can be estimated

#### 5.1.2 Scenario 2: Wayfinding and staff / student travel information

By targeting staff and student travel behaviour with quality information about transport options, Meadowbank TAFE can achieve more walking, cycling and public transport use. Providing wayfinding and public transport information to new staff and students is an opportunity to demonstrate good transport practice.

#### 5.1.3 Scenario 3: Proactive initiative ('reach' target)

Meadowbank TAFE could proactively pursue initiatives to accommodate pedestrians, cyclists and public transport users.

Based on existing staff and student travel patterns shown in Table 3-5, along with the frequency of public transport modes available in the vicinity of Meadowbank TAFE, it is recommended that the following realistic reach targets be adopted for change in travel behaviour and to be achieved within a one-year timeframe. These targets are expected to be reviewed on an annual basis, in conjunction with the results from the annual travel mode survey.

**Table 5-1: Target mode shares for Scenario 3**

Mode	Staff	Students
Private vehicle	65% (from 74%)	35% (from 42%)
Public transport, walking, cycling or others	35% (from 26%)	65% (from 58%)

A regular travel survey would provide a base case for these assumptions and allow Meadowbank TAFE to refine these assumptions and inform programs as part of this Travel Plan.

### 5.2 Target Modes and Actions

For the Meadowbank TAFE to reduce car parking demand and site generated traffic, the most achievable target modes should be addressed first. These will be transport aspects that the TAFE NSW has the most influence to change.

**1. Increase walking and cycling to and from TAFE for staff and students:**

- Promote local bicycle facilities to staff and students to encourage and facilitate an increase in cycling.

**2. Increase public transport use:**

- The site is within easy walking distance to frequent bus services, and located adjacent to Meadowbank Railway Station.
- Identify initiatives to support the use of public transport by staff and students.

**3. Increase car-pooling:**

- Combined with other nearby activity and employment generators such as the schools to set up a car-pooling system for staff.

**4. Increase information available to staff and visitors:**

- An active system that encourages and facilitates walking, cycling and public transport travel would be beneficial. Sharing available information is a viable option to encourage.

Based on these targets, Section 7 identifies programs to achieve travel behaviour through this plan. These targets are measurable through staff and student travel surveys. Using these metrics, Meadowbank TAFE can track performance against the Travel Plan objectives; to recognise what programs are working and link program funding to results.

## 5.3 Information and Communication

Several opportunities exist to provide students and staff with information about nearby transport options. Connecting them with information would help to facilitate journey planning and increase their awareness of convenient and inexpensive transport options which support change in travel behaviour.

### **Transport NSW info (For Buses, Trains and Ferries)**

- Bus, train and ferry routes, timetables and journey planning are provided by Transport for New South Wales through their Transport Info website: <http://www.transportnsw.info/>

### **City of Ryde Cycleways**

- City of Ryde provides a number of services and a range of information to encourage people of all levels of experience to travel by bicycle. <https://www.ryde.nsw.gov.au/Recreation/Cycling>.
- City of Ryde also provides a cycle map outlining Shared off-Road Bike Path, On-Road Bike Lane, Informal On-Road Bike Route, Off-Road Mountain Bike Route, Children's Cycling Tracks. This allows users to plan their cycling routes to get to various places within City of Ryde. <https://www.ryde.nsw.gov.au/files/assets/public/maps/city-of-ryde-bike-map.pdf>

## 6 Actions

This section provides actions and suggested timeframes for implementation. The programs and actions are suggestions based on other successful TPs in similar environments.

The appointment of a Travel Plan Coordinator (TPC) is paramount for the implementation of TP initiatives and should be completed prior to the opening of the development. The timeframe for actions would be further confirmed by the Travel Plan Coordinator.

### 6.1 General

	Action	Likely Financial / Human Resource Commitment	Timeframe
a	Identify a staff member to complete travel coordinator duties involved in this plan for up to a year.	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub and ongoing for new staff
b	Provide a welcome pack for each new staff / employee. This includes a Travel Access Guide (Refer to section 7) and information regarding how to use Liftango and become involved in car-pooling. The Travel Access Guide should also be made available to every user of the site.	Responsibility of Travel Plan Coordinator and Committee	Prior to occupation of Multi-Trades and digital technology Hub and ongoing for new staff
c	Installation of next service departure screens for T9 rail services (and bus services if possible) in the lobby to encourage public transport use.	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
d	Develop and deliver a robust communications strategy for the TP to users of the site prior to occupation which includes key messages on how to travel including prioritising public and active transport as well as road safety messages.	Responsibility of Travel Plan Coordinator and Committee	Prior to occupation of Multi-Trades and digital technology Hub and ongoing for new staff

### 6.2 Staff Targeted Action

#### 6.2.1 Walking

	Action	Likely Financial / Human Resource Commitment	Timeframe
a	Identify employees living near work that may be interested in walking to work	Responsibility of Travel Plan Coordinator and Committee, to work closely with staff group	Prior to occupation of Multi-Trades and digital technology Hub and ongoing for new staff
b	Produce a map showing safe walking routes to and from your site with times, not distances, to local facilities, such as shops and public transport stops	Responsibility of Travel Plan Coordinator and Committee	Prior to occupation of Multi-Trades and digital technology Hub
c	Provide lockers for keeping a change of clothes	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
d	Take part in 'National Walk to Work Day'	Responsibility of Travel Plan Coordinator and Committee, to work closely with staff group and students	During operation of Multi-Trades and digital technology Hub

e	Have some 'TravelSmart Get to Work' days encouraging staff to come by alternative modes of transport	Responsibility of Travel Plan Coordinator and Committee	During operation of Multi-Trades and digital technology Hub
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## 6.2.2 Cycling

	Action	Likely Financial / Human Resource Commitment	Timeframe
a	Establish an internal Bicycle Users Group (BUG) that includes students and staff. BUGs are formed by people who want to work together to improve facilities for cyclists and encourage cycling	Responsibility of Travel Plan Coordinator and Committee, to work closely with staff group	Prior to occupation of Multi-Trades and digital technology Hub
b	Provide sufficient bicycle/ scooter parking to meet peak needs	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
c	Have good, secure bicycle parking in an easily accessible location	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
d	Ensure bicycle parking is clearly visible or provide signage to direct people to cycle bays	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
e	Provide lockers for a change of clothes	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
f	Supply a workplace toolkit consisting of puncture repair equipment, a bike pump, a spare lock and lights	Responsibility of TAFE NSW	During operation of Multi-Trades and digital technology Hub
g	Come to an arrangement with a local bicycle retailer for cheap servicing of staff/ student bikes and other incentives	Responsibility of TAFE NSW	During operation of Multi-Trades and digital technology Hub
h	Produce a map showing more leisurely bicycle routes to Meadowbank TAFE	Responsibility of Travel Plan Coordinator and Committee	Prior to occupation of Multi-Trades and digital technology Hub
i	Participate in annual events such as 'Ride to Work Day'	Responsibility of Travel Plan Coordinator and Committee, to work closely with staff group	During operation of Multi-Trades and digital technology Hub

## 6.2.3 Public Transport

	Action	Likely Financial / Human Resource Commitment	Timeframe
a	Develop a map showing public transport routes to Meadowbank TAFE	Responsibility of Travel Plan Coordinator and Committee	Prior to occupation of Multi-Trades and digital technology Hub
b	Put up a notice board with leaflets and maps showing the main public transport routes to and from work	Responsibility of Travel Plan Coordinator and Committee	During operation of Multi-Trades and digital technology Hub

	Action	Likely Financial / Human Resource Commitment	Timeframe
c	Place information on the work intranet with links to appropriate external websites e.g. <a href="https://transportnsw.info/">https://transportnsw.info/</a>	Responsibility of Travel Plan Coordinator and Committee	During operation of Multi-Trades and digital technology Hub
d	Provide leaflets or timetables with payslips	Responsibility of TAFE NSW	During operation of Multi-Trades and digital technology Hub

## 6.2.4 Car-pooling and Parking

	Action for car-pooling	Likely Financial / Human Resource Commitment	Timeframe
a	Set up staff with the Liftango car-pool app	Responsibility of TAFE NSW	During operation of Multi-Trades and digital technology Hub
b	Allocate priority parking spaces for car-poolers	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub

	Action for car parking	Likely Financial / Human Resource Commitment	Timeframe
a	Identify priority users of car park e.g. people with disabilities, car-poolers, contractual requirements	Responsibility of Travel Plan Coordinator and Committee, to work closely with TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
b	Prepare a carpark management plan to address car park access and the allocation of parking spaces	Responsibility of Travel Plan Coordinator and Committee, to work closely with TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
c	Provision of onsite electric vehicle charging points to promote sustainable transportation options for site users	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
d	Re-allocate car parking spaces for bicycle parking	Responsibility of TAFE NSW	During operation of Multi-Trades and digital technology Hub



## 6.3 Student Targeted Actions

### 6.3.1 Walking

	Action	Likely Financial / Human Resource Commitment	Timeframe
a	Produce a map showing safe walking routes to and from your site with times, not distances, to local facilities, such as shops and public transport stops and provide in the student newsletter or TAFE intranet	Responsibility of Travel Plan Coordinator and Committee	Prior to occupation of Multi-Trades and digital technology Hub
b	Provide lockers for keeping a change of clothes	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub

### 6.3.2 Cycling

	Action	Likely Financial / Human Resource Commitment	Timeframe
a	Establish an internal BUG. BUGs are formed by people who want to work together to improve facilities for cyclists and encourage cycling	Responsibility of Travel Plan Coordinator and Committee	During operation of Multi-Trades and digital technology Hub
b	Provide sufficient bicycle/ scooter parking to meet peak needs	Responsibility of Travel Plan Coordinator and Committee	Prior to occupation of Multi-Trades and digital technology Hub
c	Have good, secure bicycle parking in an easily accessible location	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
d	Ensure bicycle parking is clearly visible or provide signage to direct people to cycle bays	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
e	Provide lockers for a change of clothes	Responsibility of TAFE NSW	Prior to occupation of Multi-Trades and digital technology Hub
f	Produce a map showing more leisurely bicycle routes to TAFE	Responsibility of Travel Plan Coordinator and Committee	Prior to occupation of Multi-Trades and digital technology Hub

### 6.3.3 Public Transport

	Action	Likely Financial / Human Resource Commitment	Timeframe
a	Develop a map showing public transport routes to TAFE	Responsibility of Travel Plan Coordinator and Committee	Prior to occupation of Multi-Trades and digital technology Hub
b	Provide leaflets and maps on the TAFE intranet or on noticeboards around the TAFE showing the main public transport routes to and from the campus	Responsibility of Travel Plan Coordinator and Committee	During operation of Multi-Trades and digital technology Hub

	Action	Likely Financial / Human Resource Commitment	Timeframe
c	Place information on the TAFE intranet with links to appropriate external websites e.g. <a href="https://transportnsw.info/">https://transportnsw.info/</a>	Responsibility of Travel Plan Coordinator and Committee, to work closely with TAFE NSW	During operation of Multi-Trades and digital technology Hub

#### 6.3.4 Car-pooling

	Action	Likely Financial / Human Resource Commitment	Timeframe
a	Encourage students to car pool in a single car (e.g. where they live in close proximity to each other).	Responsibility of Travel Plan Coordinator and Committee, to work closely with students	During operation of Multi-Trades and digital technology Hub

# 7 Monitoring and Review

## 7.1 Review Framework

For the Travel Plan to be effective, it must be reviewed on a regular basis. It is important to ensure that the Travel Plan is meeting its objectives and having the intended impact on car use and transport choices for Meadowbank TAFE staff and students.

A review of the Final Travel Plan for the development shall be conducted annually and submitted to Council for a minimum of five (5) years after the issue of an occupation certificate. The Travel Plan review shall demonstrate progress towards Travel Plan targets and objectives and include the following information:

- Basic information about the site, including the number of employees and students;
- Details of mode-splits and progress towards targets (obtained from an annual survey);
- Details of the initiatives implemented since the last review;
- An assessment of whether initiatives have been successful in terms of meeting Travel Plan objectives and targets; and
- Details of future initiatives to be undertaken or other changes required to meet targets and objectives

The travel plan committee should evaluate if the travel mode share targets are being met or are on track to being met. Recommendations on how the travel plan be improved to assist with reaching the targets and aspirational targets should be provided, as a result of the travel mode surveys and data analysis. If the targets are on track to be met, consideration might be given to increasing the active mode share target. The travel plan may be subsequently re-shaped based on parent and staff interviews and feedback.

## 7.2 Roles and Responsibilities

The following table identifies the roles and responsibilities in the delivery of this TP.

**Table 7-1: Roles and responsibilities**

Role	Person Responsible	Contact Details	Responsibilities
<b>Travel Plan Coordinator</b>	TBC by the TAFE NSW	TBC by the TAFE NSW	Regularly review and update the Travel Plan to reflect changes to school operations and transportation network.  Identify any issues related to the transport management strategies and determine if alternative measures are necessary.  Collect and collate <b>annual</b> travel mode information of students and staff.  Provide <b>annual</b> reporting to the Travel Plan Committee.
<b>Travel Plan Committee</b>	TBC by the TAFE NSW	TBC by the TAFE NSW	Monitoring and review of the Travel Plan.  Working with the Travel Plan Coordinator to determine what alternative measures are required if transport management strategies are unsuccessful.

Role	Person Responsible	Contact Details	Responsibilities
			Providing governance and financial support.

## 7.3 Review In-house Programs

The annual staff and student travel survey would assist in the review of the Travel Plan. If required, the plan should be updated to track progress towards targeted goals.

Any feedback received from staff and students should be used to update programs as well. Sample feedback could include email responses to programs, monitoring the bicycle/ car parking spaces used, hits on a website, transport complaints and participants at events.

People in any organisation like to be a part of a successful plan. Staff and students should be kept informed of green travel achievements. This could be done by sending out email bulletins and making announcements during meetings/ classes or having a dedicated column within an internal newsletter.

## 7.4 Gaps

After the implementation of the Travel Plan, it may be that transport deficiencies are identified. Some examples may include:

- Additional bicycle parking may be required as demand grows.
- Additional showers and lockers may be required as more staff walk, run or cycle to work.
- Additional dedicated bicycle parking may be required at the building entries to ensure security for visitor bicycles.

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

## 7.5 Travel Survey

To monitor the Travel Plan, a travel questionnaire should be conducted of all staff and students. An updated survey should be completed to provide the baseline for travel planning programs prior to occupation of the new Multi-Trades and digital technology hub. Subsequent survey results is expected to be reported annually by TAFE and used to inform funding allocation for successful programs/ removal of unsuccessful programs. Based on the review, the Travel Plan should then be updated as noted previously.

An example format for the survey is provided as follows:

Q1: What is your home post code?

Q2: Are you a staff member or student?

- Staff
- Student

Q3: Are you a full-time or part-time staff member/ student?

- full-time (more than 20 hours class time per week)
- part-time (less than 20 hours class time per week).

Q4: How do you usually travel to the TAFE? (Select one)

- Car (as driver)
- Car (as passenger)
- Dropped off (driver does not stay)
- Bus
- Train

- Ferry
- Bus then train
- Train then bus
- Motorcycle
- Cycle
- Walk
- Other (explain)\_\_\_\_\_.

Q5: What time do you usually arrive and leave Meadowbank TAFE?

Q6: If you drive to Meadowbank TAFE, where do you usually park?

Q7: To facilitate transport programs, may we share your contact details with a colleague that lives near you?

- Yes – I walk
  - If 'yes' please provide your email here: \_\_\_\_\_
- Yes – I'm a cyclist
  - If 'yes' please provide your email here: \_\_\_\_\_
- Yes – I'm a public transport passenger
  - If 'yes' please provide your email here: \_\_\_\_\_
- No.

## 8 Transport Access Guide

A Transport Access Guide (TAG) provides information to students, staff and visitors on how to travel to the site using sustainable transport modes such as walking and public transport. The information is presented visually in the format of a map (or app) showing the site location and nearby transport modes highlighting available pedestrian and cycle routes. The information is usually presented as a brochure (or app) to be included in a welcome pack or on the back of company stationery and business cards.





## TRAVEL ACCESS GUIDE

### Meadowbank Campus

See Street, Meadowbank NSW 2114



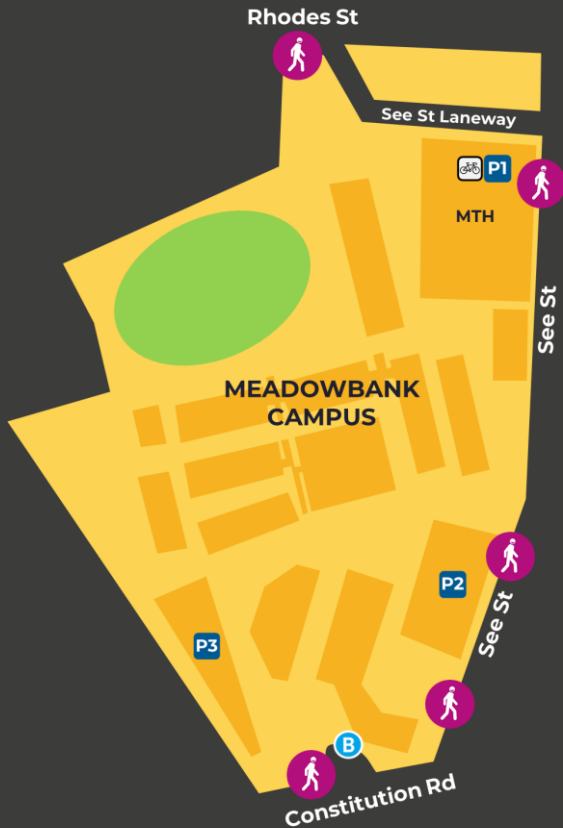
**TAFE**<sup>NSW</sup>



This Travel Access Guide (TAG) provides information on the different travel choices available for you to travel to and from the TAFE Meadowbank Campus.

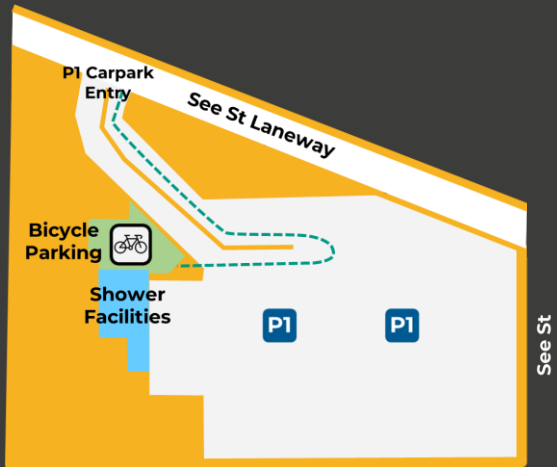
TAFE Meadowbank Campus is well serviced by many public transport services nearby as well as accessible walking and cycling routes.

**Pedestrian Access**



**Cycling Access and Bicycle End-of-Trip Facilities**

Bicycle end-of-trip facilities are available at the basement carpark of the Multi-Trades and Digital Technology Hub building accessible via carpark entry from See St Laneway.



**Getting to TAFE Meadowbank Campus**

**Walking**

The Meadowbank Campus is a 2-minute walk from Meadowbank Station and up to a 15-minute walk from Meadowbank Ferry Wharf and nearby bus stops.

**Cycling**

Accessible bicycle routes via See St, Macpherson St and Railway Rd which connect to Meadowbank Station, Meadowbank Ferry Wharf and surrounding residential suburbs. For all on-road and off-road cycle paths, visit the City of Ryde Bike Map [www.ryde.nsw.gov.au](http://www.ryde.nsw.gov.au).

**T Train**

**Meadowbank Station** is a 2-minute walk to the campus via pedestrian entries on Constitution St. **West Ryde Station** is a 12-minute walk to the campus via pedestrian entries on Rhodes St and See St. Both stations are on T9 Northern Line (Hornsby-North Shore via City).

**F Ferry**

**Meadowbank Ferry Wharf** is a 10-minute walk to the campus via Bay Dr or Angas St, and a 3-minute ride to the campus via Bus Route 507. The wharf is on F3 Parramatta River Ferry Route (Circular Quay-Sydney Olympic Park).

**B Bus**

**Via Meadowbank Station**

Route 507 – Gladesville & City Hyde Park to Meadowbank  
Route 518 – Macquarie University to Meadowbank Wharf  
Route N80 – Hornsby to City Town Hall via Strathfield

**Along Bowden St opp TAFE Meadowbank**

Route 501 – Parramatta to Central Pitt St  
Route 518 – Macquarie University to Meadowbank Wharf

**Along Victoria Rd opp TAFE Meadowbank**

Route 500N – Parramatta to City Hyde Park  
Route 501 – Parramatta to Central Pitt St  
Route 524 – Parramatta to Ryde via West Ryde

**Along Church St opp TAFE Meadowbank**

Route 410 – Macquarie Park to Hurstville  
Route 533 – Chatswood to Sydney Olympic Park via Rhodes & North Ryde

**Via West Ryde Station**

Route 500N – Parramatta to City Hyde Park  
Route 500X – City Hyde Park to West Ryde  
Route 513 – Carlingford to West Ryde  
Route 523 – Parramatta to West Ryde  
Route 524 – Parramatta to Ryde via West Ryde  
Route 543 – Eastwood to West Ryde

Express Bus Service --X  
Night Bus Service N--/---N

**P Car Parking**

On-campus parking are available at P1, P2 and P3 carparks accessible via See St. The carparks are labelled on the area map opposite.

**Planning your Trip**

To plan your trip from start to finish with train, bus and ferry service information, plus stop locations and platform numbers, visit Transport for NSW Trip Planner <https://transportnsw.info/trip#/>.



## 9 Conclusion

### 9.1 Overview

This report sets out a Travel Plan for staff and students at the proposed new Multi-Trades and digital technology hub and broader Meadowbank TAFE to help mitigate transport-related impacts. The Travel Plan provides strategies that could be implemented to maximise the use of surrounding facilities or to further improve these facilities. It is a flexible document that allows for continual monitoring and review to remain effective and reflective of the changing transport needs of the site.

### 9.2 Recommended Internal TAFE

In conjunction with the existing travel information in Section 3 and recommended programs in Section 5, Stantec recommends that Meadowbank TAFE adopt the preliminary mode share targets shown in Table 9-1.

**Table 9-1: Target mode shares**

Mode	Staff	Students
Private vehicle	65% (from 74%)	35% (from 42%)
Public transport, walking, cycling or others	35% (from 26%)	65% (from 58%)

Conducting a new travel survey would provide an accurate base case for these assumptions (i.e. rather than relying on the survey data from 2018) as long as a good response rate can be achieved. Regular (annual) follow up surveys would allow Meadowbank TAFE to further refine these assumptions and inform programs as the Travel Plan progresses.

Meadowbank TAFE should support the abovementioned targets through a clear transport policy to minimise car parking demand and traffic generation.

Following the preparation of this travel policy, it is recommended that the Travel Plan:

- Identify a staff member to complete travel coordinator duties involved in this plan.
- Conduct an initial survey to understand current travel patterns of staff and students and to identify those that may be interested in walking, cycling or using public transport/ car-pooling to work.
- Prepare a new staff and student starter kit including maps showing public transport routes near the TAFE and safe walking routes with travel time, to local facilities, such as shops, bus stops and stations.
- Provide maps, travel options, links to the <https://transportnsw.info/> website and timetables on the staff and student intranet and notice boards.
- Based on staff interest (from the survey):
  - match staff interested in walk-to-work and ride-to-work with buddies
- Installation of next service departure screens for T9 rail services (and bus services if possible) in the lobby to encourage public transport use
- Set up a car-pooling database to match rides and passengers or promote any reliable phone apps that arise.

### 9.3 Recommended External Steps

Provide this updated Travel Plan to TAFE NSW. Subsequent steps would include:

- Selection of an in-house travel coordinator
- Adoption of the transport policies
- Conducting a new staff and student travel survey
- Provision of initial funding for the transport programs
- Provide the adopted Travel Plan and associated policies and programs to Transport for NSW for consideration
- Adopt any recommendations by Transport for NSW

- Prepare the starter kit including transport access maps.
- Launch the program and run the first questionnaire
- Conduct a follow up questionnaire approximately six months after the initial survey.

The travel survey is expected to be conducted annually, to track performance on the transport mode share. Sample programs which might help reach the travel target include:

- special/ subsidised bicycle purchase deals for staff at a local shop
- additional secure, weather protected bicycle parking.

# Appendix

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We design with community in mind

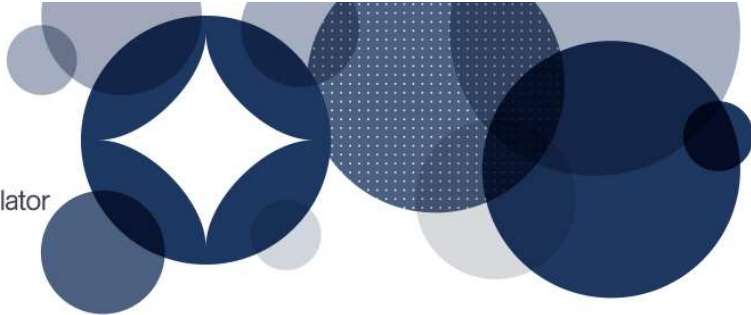


## **Appendix A** Green Star Reference Case



# Green Star Design & As Built

Sustainable Transport, Performance Pathway Calculator



	Reference	Adjusted	Proposed	
Train	8.7%	48.0%	48.0%	
Bus	2.6%	8.0%	8.0%	
Ferry	0.0%	0.0%	0.0%	
Tram	0.0%	0.0%	0.0%	
Car Driver	77.1%	32.0%	32.0%	
Car Passenger	5.4%	2.5%	2.5%	
Motorbike	0.5%	0.5%	0.5%	
Bicycle	0.5%	1.0%	1.0%	
Walk	5.2%	8.0%	8.0%	
Total Mode Share	100.0%	100.0%	100.0%	
Avoided trips	2.0%	2.0%	2.0%	%
Ave Trip Length	14.3	14.3	14.3	km
Work weeks	40	40	40	weeks / annum
trips per annum	392		392	trips / annum
Emissions per trip	3070		2301	g CO <sub>2-e</sub> / trip
Total emissions	1.20		0.90	tonnes / person / annum
Total vkt	4320		1794	vkt / person / annum
Active modes	5.7%		9.0%	Mode Share % for Active Modes

Building Address See Street, Meadowbank NSW 2114

Building Type Education

SA2 West Ryde - Meadowbank

State New South Wales

25.0% reduction in carbon emissions	Criterion 1
3 / 5 points for emissions reduction	
57.0% increase in active mode use	Criterion 2
0.5 / 1 point for active mode encouragement	
58.5% reduction in vehicle kilometres travelled	Criterion 3
1 / 1 point for vkt reduction	
9 WalkScore ®	Criterion 4
0 / 3 points for walkable location	
4.5 / 10 points achieved	

Emissions Intensity	Reference	Current	Unit
Train	141	141	g CO <sub>2-e</sub> / passenger km
Bus	131	131	g CO <sub>2-e</sub> / passenger km
Ferry	131	131	g CO <sub>2-e</sub> / passenger km
Tram	152	152	g CO <sub>2-e</sub> / passenger km
Car Driver	258	258	g CO <sub>2-e</sub> / vehicle km
Car Passenger	0	0	g CO <sub>2-e</sub> / passenger km
Motorbike	104	104	g CO <sub>2-e</sub> / passenger km
Bicycle	0	0	g CO <sub>2-e</sub> / passenger km
Walk	0	0	g CO <sub>2-e</sub> / passenger km
Total	215	161	g CO <sub>2-e</sub> / passenger km

# CREATING COMMUNITIES

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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**.

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