Multi-Trades and Digital Technology Hub

TAFE NSW Meadowbank
Travel Plan

GTAConsultants

Multi-Trades and Digital Technology Hub

TAFE NSW Meadowbank

Travel Plan

Client: TAFE NSW

on 4/05/20

Reference: N1172560

Issue #: E

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A	16/09/19	Final	Mackenzie Brinums	Brett Maynard	Brett Maynard	Brett Maynard
B	09/10/19	Final – updated following TOA	Mackenzie Brinums Mansee Sachdeva	Brett Maynard	Brett Maynard	Brett Maynard
C	14/10/19	Final – SSDA consistency updates	Mackenzie Brinums Mansee Sachdeva	Brett Maynard	Brett Maynard	Brett Maynard
D	01/05/20	Final – revised SSDA proposal	Mackenzie Brinums	Brett Maynard	Brett Maynard	Brett Maynard
E	04/05/20	Final – revised SSDA proposal	Mackenzie Brinums	Brett Maynard	Brett Maynard	*B.T. Maynard.*

GTA Report Green Travel Plan

GTAconsultants

Melbourne | Sydney | Brisbane

CONTENTS

Figures

Tables

1. INTRODUCTION

01

1.1. Overview

This Transport Impact Assessment has been prepared by GTA Consultants (GTA) on behalf of TAFE NSW (the Applicant). It accompanies an Environmental Impact Statement (EIS) in support of State Significant Development Application (SSD 10349) for the new multi-trades and digital technology hub on the TAFE NSW Meadowbank campus.

The proposal involves 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.

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. 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.

1.2. Purpose of this Report

This Travel Plan responds to the Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning and Environment (DPE), which requests:

"details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace Travel Plan) and the provision of facilities to increase the non-car mode share for travel to and from the site"

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** provides a list of both staff and student targeted actions to reach the mode share targets.
- **Section 6** provides methods of monitoring and reviewing progress with reach the mode share targets.

2. OBJECTIVES

02

2.1.   Overview

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 Travel Plan 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. Travel Plans 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.

2.3.   Walk Score and 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 2.1.

Table 2.1:   Walk score and transit score

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

Table 2.2 shows the outputs for the suburbs within a two-kilometre radius of the site and Meadowbank itself.

Table 2.2:   Walk score outputs

Type	Location	Walk Score	Transit Score
Suburb	Meadowbank	85	NA
	West Ryde	75	NA
	Melrose Park	51	NA
	Denistone	66	NA
	Putney	65	NA

Based on the Walk score results, Meadowbank is considered very walkable with the proposed development site considered within the walker's paradise range, with good transit.
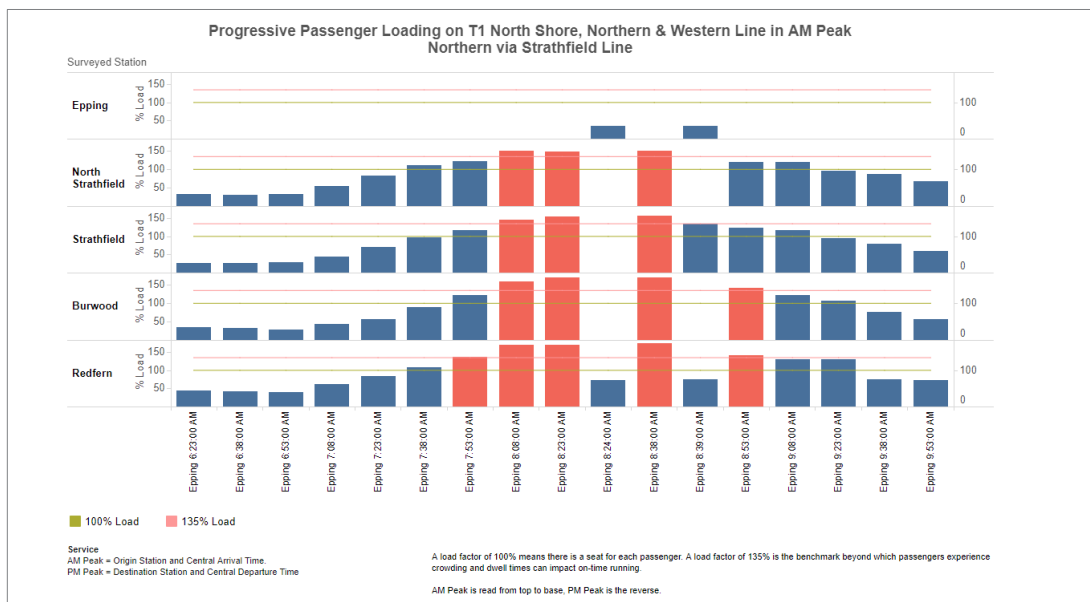
3. BACKGROUND

03

GTAconsultants

3.1. Existing Transport Infrastructure

3.1.1. Train Services

Meadowbank Railway Station and West Ryde Station are located around 350 metres southwest and 830 metres northwest from the proposed multi-trades and digital technology hub building, respectively. Both Meadowbank and West Ryde stations are on the T1 Northern Line, with services running from Epping to Central every 30 minutes.

Transport for NSW has published train load data by line during the AM and PM peak periods from March 2016 surveys. Figure 3.1 illustrates the AM peak period loading, which indicates the trains passing through Meadowbank Station are exceeding capacity between 8:00am and 9:00am.

Figure 3.1: Train Loads Survey for T1 Line

Source: https://www.transport.nsw.gov.au/data-and-research/passenger-travel/train-patronage/train-loads/train-loads-by-line, accessed 29/09/19

3.1.2. Bus Services

Bus route 507 operates near the site with the nearest stop located at Meadowbank Railway Station. Bus routes 520, 524, 534 and M52 operate along Victoria Road. The surrounding bus network services are detailed in Table 3.1 and shown indicatively in Figure 3.2.

Table 3.1: Bus service frequency[1]

Bus route number	Description	AM/ PM peak frequency	Off-peak frequency
507	Macquarie University to City Circular Quay via Putney	30 minutes/ 20 minutes	60 minutes
513	Carlingford to Meadowbank Wharf via West Ryde	30 minutes/ 60 minutes	60 minutes
520	Parramatta to City Circular Quay via West Ryde	30 minutes/ 60 minutes	Infrequent
524	Ryde to Parramatta via West Ryde	30 minutes/ 30 minutes	60 minutes
M52	Parramatta to City Circular Quay (limited stops)	12 minutes/ 10 minutes	15 minutes

1   Valid from 28 July 2019, sourced from https://transportnsw.info/routes/bus, accessed 26/09/19

Figure 3.2: Surrounding bus network

Base image source: https://transportnsw.info/document/4247/state_transit_north_shore_and_west_network_map.pdf, dated 21 April 2020

3.1.3. Pedestrian Facilities

Pedestrian footpaths are generally provided along all the roads surrounding the site. Footpaths are generally concrete paths with a width of 1.2 metres. 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). There is no requirement for pedestrians to cross roads along this route to access the 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.

3.1.4. Cyclist Facilities

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

3.2. 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. The survey results are summarised in Table 3.2.

GTAConsultants

Table 3.2: 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
Total	**100**	**100**

The mode share survey indicates private vehicle is the most common mode of transport to Meadowbank TAFE for both staff and students, followed by train. Vehicle occupancy surveys also completed indicate that average vehicle occupancy for staff and visitors parking on site was around 1.05 people per vehicle.

4. POLICY AND STRATEGIC FRAMEWORK

04

4.1. Overview

Based on the transport network described in Section 3.1, 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 5 of this Travel Plan, to respond to available transport infrastructure and current travel patterns to the TAFE.

4.2. Analysis

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.

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.

Scenario 3: Proactive Initiatives ('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 3.2, 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:

Table 4.1:   Target mode shares

Mode	Staff	Students
Private vehicle	65%	35%
Public transport, walking or cycling	35%	65%

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.

4.3. Target Modes

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, running and cycling to and from TAFE for staff and students:

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

2. Increase public transport use:

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

3. Increase car-pooling:

- o 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:

- o 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 5 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. ACTIONS

05

5.1. Staff Targeted Actions

Walking

Action	Timeframe
Identify employees living near work that may be interested in walking to work	Prior to occupation of Multi-Trades and digital technology Hub and ongoing for new staff
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	Prior to occupation Multi-Trades and digital technology Hub
Provide lockers for keeping a change of clothes	Prior to occupation Multi-Trades and digital technology Hub
Take part in 'National Walk to Work Day'	During operation of Multi-Trades and digital technology Hub
Have some 'TravelSmart Get to Work' days encouraging staff to come by alternative modes of transport	During operation of Multi-Trades and digital technology Hub

Cycling

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

Public transport

Action	Timeframe
Develop a map showing public transport routes to Meadowbank TAFE	Prior to occupation of Multi-Trades and digital technology Hub
Put up a notice board with leaflets and maps showing the main public transport routes to and from work	During operation of Multi-Trades and digital technology Hub

Action	Timeframe
Place information on the work intranet with links to appropriate external websites e.g. https://transportnsw.info/	During operation of Multi-Trades and digital technology Hub
Provide leaflets or timetables with payslips	During operation of Multi-Trades and digital technology Hub
Staff access to the Opal SSTS for up to two public transport trips per weekday	During operation of Multi-Trades and digital technology Hub

Car-pooling

Action	Timeframe
Set up staff with the Liftango car-pool app	During operation of Multi-Trades and digital technology Hub
Allocate priority parking spaces for car-poolers	Prior to occupation of Multi-Trades and digital technology Hub

Car parking

Action	Timeframe
Identify priority users of car park e.g. people with disabilities, car-poolers, contractual requirements	Prior to occupation of Multi-Trades and digital technology Hub
Prepare a carpark management plan to address car park access and the allocation of parking spaces	Prior to occupation of Multi-Trades and digital technology Hub
Re-allocate car parking spaces for bicycle parking	During operation of Multi-Trades and digital technology Hub

5.2. Student Targeted Actions

Walking

Action	Timeframe
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	Prior to occupation of Multi-Trades and digital technology Hub
Provide lockers for keeping a change of clothes	Prior to occupation of Multi-Trades and digital technology Hub

Cycling

Action	Timeframe
Establish an internal BUG. BUGs are formed by people who want to work together to improve facilities for cyclists and encourage cycling	During operation of Multi-Trades and digital technology Hub
Provide sufficient bicycle/ scooter parking to meet peak needs	Prior to occupation of Multi-Trades and digital technology Hub

GTAConsultants

Action	Timeframe
Have good, secure bicycle parking in an easily accessible location	Prior to occupation of Multi-Trades and digital technology Hub
Ensure bicycle parking is clearly visible or provide signage to direct people to cycle bays	Prior to occupation of Multi-Trades and digital technology Hub
Provide lockers for a change of clothes	Prior to occupation of Multi-Trades and digital technology Hub
Produce a map showing more leisurely bicycle routes to TAFE	Prior to occupation of Multi-Trades and digital technology Hub

Public transport

Action	Timeframe
Develop a map showing public transport routes to TAFE	Prior to occupation of Multi-Trades and digital technology Hub
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	During operation of Multi-Trades and digital technology Hub
Place information on the TAFE intranet with links to appropriate external websites e.g. https://transportnsw.info/	During operation of Multi-Trades and digital technology Hub

Car-pooling

Action	Timeframe
Encourage students to car pool in a single car (e.g. where they live in close proximity to each other).	During operation of Multi-Trades and digital technology Hub

5.3. State and Local Government Partnership Actions

State and local government partnerships are required to resolve barriers including the fragmented footpath and bicycle networks, busy roads with limited road crossing opportunities and high volumes of construction traffic and parking with unpredictable footpath and road occupancy during peak travel periods. The following sets out the required external supporting infrastructure for Meadowbank Education Precinct that need to be implemented by State and Local Government agencies. These actions do not form part of the proposal.

Action
Provide a new footpath along the west side of Hermitage Road
Provide a shared path to West Ryde Station (RR01, Ryde Bicycle Plan)
Provide a new footpath along the south side of Victoria Road
Provide a pedestrian crossing on Bay Drive

6. MONITORING AND REVIEW

06

GTAconsultants

6.1. 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. The Travel Plan should be reviewed on an annual basis with staff and student travel surveys. The Travel Plan should be updated and changed to reflect changing circumstances and local context/ facilities.

6.2. 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 should be reported annually by the 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

Q2: 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).

Q3: 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)_____.

Q4: What time do you usually arrive and leave Meadowbank TAFE?

Q5: If you drive to Meadowbank TAFE, where do you usually park?

Q6: 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.

6.3.   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.

6.4.   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.

These issues may need to be revisited if identified as an issue during monitoring.

7. CONCLUSION

07

7.1. 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.

7.2. Recommended Internal TAFE Activities

In conjunction with the existing travel information in Section 3 and recommended programs in Section 5, GTA recommends that Meadowbank TAFE adopt the preliminary mode share targets shown in Table 7.1.

Table 7.1:   Target mode shares

Mode	Staff	Students
Private vehicle	65%	35%
Public transport, walking or cycling	35%	65%

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
  - set up a car-pooling database to match rides and passengers or promote any reliable phone apps that arise.

7.3. Recommended External Steps

Provide this Travel Plan to TAFE NSW for acceptance. Acceptance would be noted through the:

- 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 should 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.