Green Travel Plan

Tamworth Mental Health Unit, Tamworth Hospital

Quality solutions. Sustainable future.





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1. Introduction

1.1 Background

This Green Traffic Plan (GTP) has been prepared to support the proposed new Tamworth Mental Health Unit (TMHU) at Tamworth Hospital, located on land described as Lot 1 DP 1181268 within the Tamworth Hospital precinct. The development is to be carried out by NSW Health Infrastructure (HI). The new unit will replace the existing mental health unit (the Banksia Unit) located nearby.



Figure 1.1 Site Locality Plan



Figure 1.2 Site Context



1.2 Purpose

The GTP outlines measures to be implemented to encourage more sustainable travel to and from the new TMHU for all people, including staff, patients and visitors. This is to promote healthy living and reduce the environmental footprint of the development. Specifically, it aims to reduce the reliance on single occupancy private vehicles (SOPV) by staff to get to and from work and for work related travel by:

- Setting measurable mode share targets
- Implementing measures to encourage sustainable travel
- Detailed monitoring protocols

The GTP addresses site specific traffic issues and facilitates active, safe and sustainable travel methods, such as walking, cycling, public transport or car sharing. The GTP aims to correlate with the development's overall aspirations and is intended to be is monitored and reviewed regularly.

A successful GTP will have many benefits for staff and visitors, including:

- Enhancing health and wellbeing
- Enriching social interactions
- Improving safety and amenity by reducing traffic and congestion
- Reducing pollution from vehicle emissions
- Providing leadership opportunities.

1.3 Site Description

The proposed new TMHU is to be constructed within the larger parcel of land at 31-35 Dean Street, North Tamworth, known as Lot 1 DP 1181268. It is approximately 20.62 hectares in area and contains several health services, including the Tamworth Hospital, the existing Banksia Unit, Ronald McDonald House, dental clinic, cancer centre, community health centres, an ambulance workshop, helipad, several car parking areas and other ancillary structures and infrastructure.

Access to the site is via the main entry to the precinct, Dean Street.

The proposed TMHU is to be located within the north of the existing grounds of Tamworth Hospital, surrounded by various health service facility uses and associated infrastructure. The proposed development area comprises the following, all of which will be cleared as part of the proposal:

- Landscaping (trees and other vegetation)
- Informal car parking area accommodating approximately 22 vehicles
- Three buildings:
 - Staff accommodation building (TA34)
 - Rotary Hostel (TA08), and
 - Rotary Lodge (TA09)
- A large portion of Car Park B
 - 94 general use car parking bays, plus
 - 8 accessible parking bays









1.4 Proposed Development

The proposed development is for:

- Demolition of existing car parking areas, buildings and vegetation
- Construction of new TMHU building, including 37 bedrooms, interview rooms, treatment rooms, staff areas, amenities, an atrium garden, plant and equipment.
- Construction of stairs, pathways, landscaping and ancillary infrastructure, including stormwater drainage and services.

The development also includes early works, primarily consisting of addition, expansion and reconfiguration of car parking areas to address the parking demand of the TMHU and cover the loss of parking required to construct the new facility.

Refer to Appendix A for the proposed development site plans prepared by architects, STH.



2. Existing Travel Patterns and Infrastructure

2.1 Current Travel Patterns

The following figures are derived from estimations of travel patterns at the existing Banksia Unit:

- Maximum staff on site at any one time = 30
- Maximum visitors on site at any one time = 10
- 10% of staff live within 5 km of the Tamworth Hospital precinct
- 100% of staff currently drive to work
- 100% of visitors arrive at the site by private vehicle

The estimated data above indicates there is a lot of room for improvement in terms of green travel associated with the existing Banksia Unit. However, with only 10% of staff living within 5 km of the site, opportunities for active transport modes such as walking and cycling might not be as useful as encouraging carpooling and public transport usage.

2.2 Carpooling Opportunities

Carpooling is becoming more popular in all regions as the price of fuel rises and demand for parking outweighs the supply. In addition to private arrangements, companies such as CarpoolWorld, LiftAndGo, CoSeats and Share Your Ride offer free on-line carpooling and rideshare matching service for registered users.

2.3 Rideshare Services

Uber and Ola rideshare services operate in Tamworth for the general population. Additionally, Go-Co and Oxley Community Transport also offer transport services for the elderly and disabled.

2.4 Pedestrians and Bicycle Networks

There are several pedestrian footpaths and pedestrian-safe crossing points to facilitate access to the site from the Tamworth city centre and surrounds on foot. However, the journey will take a little over 30 minutes and includes a 3-5% incline heading north along Dean Street. Although it is possible some staff living in the surrounding residential areas may walk to the site, it is considered unlikely that visitors or patients will access the site on foot.

The following two figures show the areas of Tamworth that are accessible from the proposed TMHU site within 15 and 30 minutes on foot and by bike. Note these are indicative only, based on information obtained from Google Maps.





Figure 2.1 TMHU 15- and 30-minute walking isochrones



Figure 2.2 TMHU 15- and 30-minute cycling isochrones







Figure 2.3 Existing and Future Cycle Network

Tamworth Regional Council's plans for existing and future cycle networks show a future cycleway connection (YELLOW) along Johnston Street at the southern boundary of the Hospital precinct to the existing cycle network (**BLACK**) extending into the CBD and other areas to the west, north and south.

Although the location and topography of the site is not necessarily conducive to facilitate walking and/or cycling to the site and the majority of people access the TMHU will live greater than 5 km away, these active transport modes may be able to form part of the trip for staff and visitors.

To encourage walking and cycling, the proposed development includes the following facilities:

- Access to existing bike racks providing secure parking at the adjacent Acute Services Building (ASB), linked to the new TMHU via an internal pedestrian link bridge.
- Lockers (or locked drawers) for all staff for storage of walking shoes, bike helmet etc.
- 1 x accessible shower and change room dedicated for staff usage.

Staff and visitors are to be surveyed at least annually to determine what (if any) barriers they are experiencing which prevent them from walking or cycling all or some of their journey to and from the TMHU. The details of this survey are discussed further in the following sections.

In the event that a lack of facilities is identified as an obstacle for walking or cycling to the site, then it may be possible to augment or improve the above facilities with the aim of increasing the use of 'green travel' options. Upgrades and additions may include:

- More/better bike racks/storage facilities
- More/larger lockers for staff
- More showers and/or upgraded amenities in the change rooms.





2.5 Public Transport Accessibility

Public transport options are relatively abundant in Tamworth for a regional city, and there are four bus stops within or immediately adjacent to the Tamworth Hospital precinct, as shown in **Figure 1.3**:

- South on Johnston Street (8 mins / 600 m to site, max. gradient 5%)
- Southwest on Dean Street, outside the Tamworth Correctional Centre and opposite 'Dean House' (5 mins / 350 m to site, max. gradient 5%)
- North on Dean Street, outside the existing Banksia Unit and opposite the Ronald McDonald House (2 mins / 150 m to site, max. gradient 5%)
- Central at the entrance to the main hospital building (2 mins / 150 m to site, max. gradient 2%)

There is also a taxi rank at the latter bus stop location at the hospital main entrance drop-off area. The taxi rank and bus stops are connected to the new TMHU site by a suitable network of concrete footpaths with kerb ramps at all road crossings and zebra crossings at appropriate locations.

Buses servicing the two stops nearest the proposed TMHU include Tamworth Buslines services 430 and 431 (refer to **Figure 2.4** and **Figure 2.5**). These services operate regularly on weekdays with reduced services on Saturdays and no service on Sundays.

Bus Route	Day	Time	Average Service Frequency
420	Monday – Friday	9:00 am – 6:10 pm	Every 45 minutes
430	Saturday	8:30 am – 5:40 pm	Every 2 hours
424	Monday – Friday	6:50 am – 5:15 pm	Every 1 hour 30 minutes
431	Saturday	9:15 am – 1:50 pm	Every 2 hours 15 minutes

Table 2.1 Bus Route Service Frequency

As well as the local bus services, Tamworth is well-connected to regional bus routes and a train line.

Taxis in Tamworth are relatively easy to come by, with several taxi companies servicing the area (Tamworth Taxis, EcoVIP Taxis and Manilla Taxi Service).









Figure 2.5 Existing Bus Route 431 Map



3. Action Plan

3.1 Staff Inductions

3.1.1 Description of Measure

All new staff at the TMHU are to be made aware of the Green Travel Plan and its objective to reduce the reliance on single occupancy private vehicle (SOPV) travel. A portion of the induction is to be dedicated to the GTP, including the following:

- A brief introduction to the GTP and its objectives
- A map of the Tamworth Hospital Precinct showing the nearest bus stops, foot and cycle paths etc.
- Relevant, current bus timetables
- Details of ride-share and/or carpooling options available
- A map of the TMHU showing bicycle parking and end-of-trip facilities, lockers, staff showers and amenities.

The above information is to be included on the TMHU website and/or internal staff intranet, as appropriate. It is to be kept up to date with current maps, timetables and other pertinent information.

3.1.2 Monitoring Mechanisms

- Records of staff inductions are to include evidence that the GTP has been discussed and understood by new employees.
- The annual travel survey for staff and visitors is to include a question asking whether the respondent is aware of the GTP and understands its objectives.
- Information contained on site (e.g. on noticeboards visible to staff and/or visitors) and digitally on the internet (including the public website and internal staff intranet) is to be checked annually for relevancy and updated as required.

3.2 Walking

3.2.1 Description of Measure

The majority of TMHU staff and visitors to the unit will likely live greater than 5 km from the Tamworth Hospital precinct. As such, the opportunity to increase the proportion of people walking to the site is limited. However, walking could form a part of the journey which may otherwise have been undertaken via SOPV.

The following measures are to be undertaken to encourage as many staff and visitors as practicable to walk to/from the site:

- Maps showing the existing footpath networks in the Tamworth area are to be displayed at the site and on the website (e.g. under a dedicated 'getting here' page).
- Lighting, signage and wayfinding close to the site shall be maintained in good working order.
- End-of-trip facilities shall be provided, including lockers, staff showers and change rooms. These
 facilities are to be maintained, kept clean and tidy, and monitored for any needed upgrades or
 expansion.
- Liaison with relevant Tamworth Hospital and Council representatives to relay the needs of the staff and visitors with respect to active transport and advocate for upgraded facilities such as footpaths, lighting, safe crossing points and the like.



3.2.2 Monitoring Mechanisms

- The annual travel survey for staff and visitors is to include questions regarding travel to the site on foot and specifically ask for respondents to identify why they do or do not walk to the site.
- The data gathered is to be used to generate a percentage of staff (and visitors) walking to the TMHU and assess opportunities to improve facilities with the aim to increase the percentage, if possible.

3.3 Cycling

3.3.1 Description of Measure

Some of the known barriers to cycling to work include:

- Lack of end-of-trip facilities (secure bike parking, showers, lockers etc.)
- Lack of infrastructure (cycle lanes, paths etc.)
- Inclement weather (too hot, too wet etc.)

Although the third point on the list is uncontrollable, addressing the first point may mitigate the challenge. For example, if showers and change rooms are provided, then arriving to work sweaty or wet isn't as much of an issue.

The second point may also seem beyond the scope of this GTP. However, it is intended that the GTP Steering Committee (refer to **Section 4.1**) maintain regular contact with the relevant hospital and Council representatives, advocating for new and improved infrastructure as required to boost the uptake of active transport.

The following measures are to be undertaken to encourage as many staff and visitors as practicable to cycle to/from the site:

- Maps showing the existing cycle networks in the Tamworth area are to be displayed at the site and on the website (e.g. under a dedicated 'getting here' page).
- Bike racks, signage and wayfinding shall be maintained in good working order.
- End-of-trip facilities shall be provided, including secure bike storage, lockers, and a staff shower/change room. These facilities are to be maintained, kept clean and tidy, and monitored for any needed upgrades or expansion.
- Participation in events such as NSW Bike Week or National Ride2Work Day.
- Implement a bicycle buddy program, pairing experienced riders with less-confident riders to help familiarise them with cycle routes.
- Liaison with relevant Tamworth Hospital and Council representatives to relay the needs of the staff and visitors with respect to active transport and advocate for upgraded facilities such as cycle paths, cycle lanes and the like.

3.3.2 Monitoring Mechanisms

- The annual travel survey for staff and visitors is to include questions regarding cycling to and from the site and specifically ask for respondents to identify why they do or do not cycle to the site.
- The data gathered is to be used to generate a percentage of staff (and visitors) cycling to the TMHU and assess opportunities to improve facilities with the aim to increase the percentage, if possible. This may include:
 - Additional or upgraded bike storage facilities
 - Bike repair station with pump and tools
 - Drinking water fountains



- Additional staff showers
- Online booking to reserve bike parking
- Bike / electric bike share or rentals system.

3.4 Public Transport

3.4.1 Description of Measure

Given the topography and location of the site coupled with the high percentage of staff and visitors estimated to live outside reasonable walking or cycling isochrones, public transport is considered to be a more feasible sustainable transport option. To encourage uptake of public transport for all or part of the trip to and from the TMHU, the following actions are to be taken, where appropriate:

- Provision of Tamworth Hospital Precinct map showing the nearest bus stops and current relevant bus timetables, to be displayed in a location visible to staff and visitors on site and on the TMHU website (e.g. under a dedicated 'getting here' page).
- Offering free or subsidised bus passes to encourage staff and visitors to choose public transport over SOPV.
- Holding 'take the bus to work' days.

3.4.2 Monitoring Mechanism

- The annual travel survey for staff and visitors is to include questions regarding travel to the site by
 public transport and specifically ask for respondents to identify why they do or do not use public
 transport to travel to the site.
- The data gathered is to be used to generate a percentage of staff (and visitors) using public transport to get to the TMHU and assess opportunities to improve facilities with the aim to increase the percentage, if possible.

3.5 Carpooling and Carshare

Similar to public transport, carpooling and carshare are excellent viable options for sustainable transport for those who live too far from the site to feasibly walk or cycle.

To encourage carpooling and/or carsharing, the following actions are to be taken, where appropriate:

- Provide information to staff regarding carpooling and carsharing options within the Tamworth area.
- Work with the Tamworth Hospital and other adjacent clinics and services to set up an internal online system or app to connect people wanting to carpool to the Tamworth Hospital Precinct.
- Restrict some visitor parking to carpoolers only.

3.5.1 Monitoring Mechanism

- The annual travel survey for staff and visitors is to include questions regarding carpooling to the site and specifically ask for respondents to identify why they do or do not carpool.
- The data gathered is to be used to generate a percentage of staff (and visitors) who carpool to get to the TMHU and assess opportunities to improve facilities with the aim to increase the percentage, if possible.



4. Implementation

4.1 Steering Committee

The GTP is not intended as a one-off document. To successfully achieve the aim of reducing reliance on SOPVs, the plan will require ongoing implementation, review and improvement. Measures and targets presented in this report are to be reviewed at least annually and adjusted to suit changing conditions such as new/altered bus routes, additional pedestrian and cyclist facilities and new technologies.

A GTP Steering Committee (or similar) is to be formed once the new TMHU is operational. Although the committee does not need to be large, it should include a diverse range of stakeholders, including staff who work on site at the TMHU. The role of the committee will be to ensure the GTP is implemented, and the appropriate monitoring and adjustments made. The responsibilities of the committee will include:

- Holding quarterly meetings to review the GTP actions and undertake tasks as necessary to implement the GTP.
- Regularly checking bus timetables, pedestrian and cycle path networks and facilities, and updating information provided on noticeboards and websites.
- Monitor demand for bicycle parking, staff showers etc. noting and actioning as required where additional or upgraded facilities are needed.
- Ensuring all facilities provided by the TMHU that encourage sustainable transport are maintained and in good condition.
- Be aware of local, state, and national events and initiatives such as 'National Ride2Work Day' or the NSW 'Get Healthy at Work' campaign and encourage staff participation.
- Regularly update staff with information that may encourage sustainable travel, such as new cycle facilities, changed bus timetables etc.
- Undertaking annual travel surveys for staff and visitors (refer Section 4.2), collecting, collating, interpreting, and recording survey data.
- Engaging with staff and visitors to assess any needs or issues they may have with respect to sustainable travel.
- Brainstorming innovative initiatives to encourage sustainable travel, such as provision of electric vehicle (EV charging stations), coordinating a hospital precinct shuttle bus service linking to a nearby parking area, providing shared electric fleet vehicles etc.
- Communicating with relevant staff at the Tamworth Hospital and the Tamworth Regional Council to pass travel-related information between the TMHU and the wider community.
- Advocating for any identified additions or upgrades to infrastructure within the hospital precinct and the surrounding area that may improve the percentage of staff and visitors choosing sustainable modes of transport.
- Updating the GTP actions and targets as required.





4.2 Baseline and Ongoing Travel Surveys

Within the first 3 months of commencing normal operations, staff and visitor travel surveys are to be undertaken to determine the baseline percentages of people travelling to the site via various modes of transport. An example survey collection form is provided at **Appendix A**. This information is to be maintained on record as the baseline travel data.

The same information is to be collected annually during a seven-day period of 'normal operations' (e.g. outside school holidays).

The collected data is to be collated to determine the following information:

- Total no. staff at the TMHU during 7-day period
- No. / Percentage of staff living within 5 km
- No. / Percentage of staff travelling to work by:
 - Private vehicle (as driver without passengers i.e. SOPV)
 - Private vehicle (as passenger)
 - Public transport
 - Walking
 - Cycling
 - Motorcycle / moped etc.
 - Taxi / rideshare
 - Other
- Total no. visitors at the TMHU during 7-day period
- No. / Percentage of visitors travelling to work by:
 - Private vehicle (as driver without passengers i.e. SOPV)
 - Private vehicle (as passenger)
 - Public transport
 - Walking
 - Cycling
 - Motorcycle / moped etc.
 - Taxi / rideshare
 - Other
- Barriers and obstacles preventing or limiting staff / visitors from travelling to the TMHU via:
 - Walking
 - Cycling
 - Public transport
 - Carpooling
- Suggestions for improvements identified by staff and visitors



4.3 Targets

The existing Banksia Unit estimates that 100% of their staff and visitors drive to work via private vehicle. It has been assumed that the new TMHU will commence operations with a similarly high percentage of staff and visitors relying on private vehicles to arrive at the site.

Thus, rather than specify individual targets for each alternative mode of transport, a single target of 20% has been set for all transport modes other than SOPVs. This target is to be assessed after one year for relevance, noting that the target should be challenging but achievable.

Table 4.1 Mode Share Target for Year One

Mode	Existing	Target	Difference
SOPV (single occupancy private vehicle)	100%	80%	-20%
All other modes, including public transport, cycling, walking, carpooling etc.	0%	20%	+20%

After one year, it is also recommended that the target be split into individual targets for different transport modes, using the table provided below as a guide.

Table 4.2 Mode Share Targets – Example for Future Years

Mode	Existing	Target	Difference
SOPV			
Public Transportation			
Cycling			
Walking			
Carpooling			
Other (carshare etc.)			

4.4 Monitoring

As detailed in the **Sections 4.1** and **4.2**, the GTP Steering Committee will be responsible for undertaking annual travel surveys in addition to regular tasks associated with implementing and monitoring the GTP.

With respect to updating targets and amending the GTP, the following questions should be asked at the annual GTP Steeping Committee meeting:

- Are the targets still realistic? Are they still ambitious? Should they be updated?
- Are there difficulties in achieving particular targets? What are the likely reasons for this and what can be done (if anything) to eliminate or mitigate obstacles?
- Are there any gaps regarding actions?
- Which actions have been particularly successful?
- What is preventing further improvement on mode share and how can this be addressed?



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Appendix A

Travel Survey – Example Data Collection Form



TAMWORTH MENTAL HEALTH UNIT, TAMWORTH HOSPITAL

Travel Survey - Data Collection Form

Seven-day assessment period: Start date _____ End date _____

Please complete the following as best you can.

- Are you a staff member or visitor to the Tamworth Mental Health Unit (TMHU)? (circle as appropriate)
- How far, to the nearest kilometre do you live from the TMHU? _____ km
- Are you aware of the TMHU's Green Travel Plan? Yes / No (circle as appropriate)
- If yes, briefly outline your understanding of its objective(s) _____

During the seven-day travel assessment period noted above:

- How many trips did you make to/from the TMHU?
 (e.g. if you worked 5 days this week, your answer will likely be '5')
- How many of these trips did you personally **drive** yourself to the TMHU without anyone else in the vehicle?
- If you travelled to the TMHU using any other mode of transport, such as walking, cycling, public transportation, or carpooling, please note the number of trips you made using each mode.

Please state any reasons why you do/don't travel to the TMHUt via these modes of transport.

- Walking ______
- Cycling ______
- Public transport
- Carpooling _____

Please provide any other comments or suggestions you may have to improve the Green Travel Plan.

