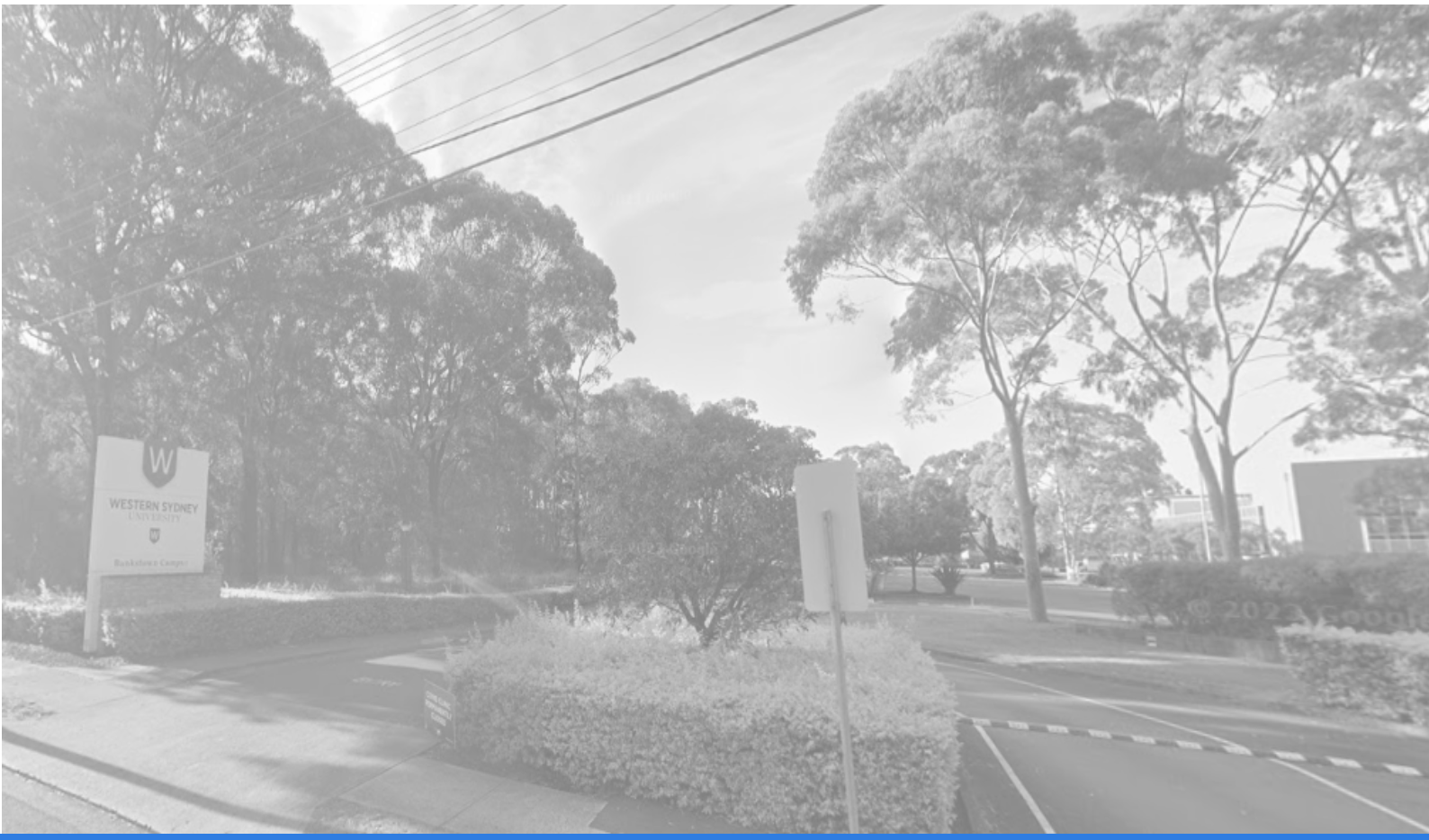


2 and 2A Bullecourt Avenue, Milperra

Preliminary Green Travel Plan

Prepared for:

Mirvac Residential (NSW) Pty Ltd

6 November 2025

The Transport Planning Partnership

2 and 2A Bullecourt Avenue, Milperra

Preliminary Green Travel Plan

Client: Mirvac Residential (NSW) Pty Ltd

Version: V02

Date: 6 November 2025

TTPP Reference: 19334

Quality Record

Version	Date	Prepared by	Reviewed by	Approved by	Signature
V01	27/10/25	Paul Cai	Wayne Johnson	Wayne Johnson	-
V02	06/11/25	Paul Cai	Wayne Johnson	Wayne Johnson	

Table of Contents

Tables

Figures

1 Introduction

1.1 Overview

This preliminary Green Travel Plan (GTP) report is submitted to the Department of Planning, Housing and Infrastructure (the Department) on behalf of Mirvac Residential (NSW) Pty Ltd (the Applicant) in support of a State Significant Development Application (SSDA) for a staged residential development at 2 and 2A Bullecourt Avenue (the site).

The project will be delivered in stages and across two separate SSDA Projects, and comprises the construction of up to 430 dwellings, three (3) public parks, new roads and shared paths, civil infrastructure, a car park, and the management of conservation land.

This preliminary GTP report is prepared to address the Secretary's Environmental Assessment Requirements (SEARs) for the SSDA 1 (this SSDA) and to accompany the Transport Impact Assessment (TIA) which was prepared as a separate report for submission to the SSDA. This preliminary GTP provides a framework for the development of a detailed GTP post approval of the proposed development, to encourage residents and visitors to make use of sustainable modes of transport to/from the development and reduce their dependence on car usage.

The preliminary mode share targets for the site have been established with achievable goals in mind. The targets will be updated when a detailed GTP is prepared and subsequently regularly reviewed to align with any changes to the site, Council and/or State government strategies or plans. This report also summarises key strategy and framework actions that should be considered in the development of a detailed GTP to achieve the mode share targets.

1.2 Purpose of GTP

The purpose of a GTP is to detail a strategy for managing travel demand that embraces the principles of sustainable transport. In its simplest form, GTPs encourage use of transport modes that have low environmental impacts, such as walking, cycling, public transport, and better management of car use.

Active transport presents several interrelated benefits including:

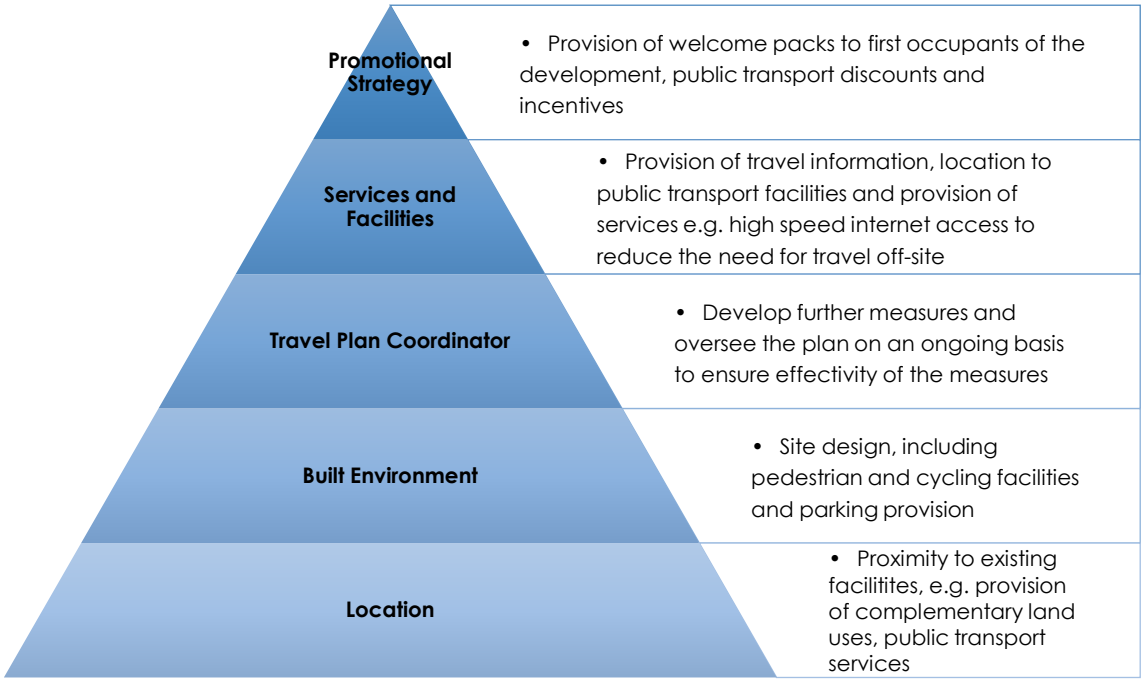
- Improved personal health benefits,
- Reduced traffic congestion, noise and air pollution caused by motor vehicles,
- Greater social connections within communities, and
- Cost savings to the economy and individual.

1.3 Travel Plan Pyramid

All elements in the Travel Plan Pyramid are critical to the success of the GTP, but Figure 1.1 illustrates that the key foundations to ensure the success of a GTP are:

- **Location** – proximity to existing public transport services and proximity to mixed land uses, e.g., shops and services, such that walking or cycling becomes the natural choices, and
- **Built Environment** – provision of high-quality pedestrian and cycling facilities, end-of-trip facilities and reduced car parking provision to encourage sustainable transport choices.

Figure 1.1: Travel Plan Pyramid



1.4 Drivers of the Plan

There are social, environmental and economic drivers for developing and implementing a GTP for developments as detailed below.

1.4.1 Car Parking

Car parks utilise valuable land resources and impact amenity. If the area continues to grow and there is no modal shift towards non-car transport modes, the car parking demand could increase significantly. As such, the provision of car parking must reflect the site's proximity to public transport to influence a modal shift to more sustainable transport modes.

1.4.2 Environmental Impacts

The transport sector (road, rail, air and ship) is Australia's third largest source of greenhouse gas emissions (GHG), accounting for 18 per cent of emissions in Australia in 2015 (Climate Council of Australia, 2016). Mitigating this impact is a key driver of the GTP. Within Australia, the transport sector has the highest rate of growth of GHG emissions per year having risen by 51 per cent since 1990 with private vehicles responsible for almost half of transport emissions. In comparison, travel modes such as walking and cycling have the lowest emissions while public transportation has significantly lower impact than private vehicles.

1.4.3 Health Benefits

The use of sustainable transport modes can have wide-ranging health benefits due to a corresponding reduction in greenhouse gas emissions and increase in physical activity from walking and cycling. The shift from private cars to sustainable transport "can yield much greater immediate health "co-benefits" than improving fuel and vehicle efficiencies" (World Health Organisation, 2011). The potential benefits can include reduced respiratory diseases from better air quality, prevention of heart disease, some cancers, Type 2 diabetes and some obesity-related risks.

1.4.4 Social Equity

Transport has a fundamental role in supporting social equity, which is the equitable distribution of services, amenities and opportunities. The provision of sustainable transport modes can provide a more affordable alternative to car use. As such, it offers better mobility for women, children, young people, the aged, persons with disabilities and the poor, who have less access to private vehicles, thereby enhancing social equity.

1.4.5 Site Attraction

Provision of high-quality transport facilities (public transport, cycling and walking infrastructure) has a significant impact on the accessibility and enhance the attractiveness of a site. Negative experiences and costs associated with travel can reduce the competitiveness of a site.

The proposed design shall integrate with existing and future facilities to provide a permeable network for all road users.

1.5 Transport Objectives

The following objectives have been identified to achieve the vision of the GTP:

Objective 1: Facilitate a modal shift towards more sustainable transport modes

- Improve access, safety, amenity and convenience of sustainable transport modes for travel to / from the site.
- Incentivise sustainable transport modes and establish a culture of active and public transport use.
- Improve awareness and knowledge of public and active transport options available within the area.

Objective 2: Reduce car ownership and promote car share use

- Improve awareness and access to car share facilities available within the area.
- Incentivise car share use as an alternative to owning a car.
- Manage car parking on-site to disincentivise car use.

Objective 3: Reduce the need to travel off-site

- Provide amenities on-site to reduce travel requirements for residents and visitors.
- Encourage social interactions amongst residents within the site to create a vibrant community on-site.

2 Existing Transport Policy Context

A summary of the existing policy framework documents relevant to the development site and its surroundings is provided in Table 2.1.

Table 2.1: Summary of Policy Framework

Policy/Strategy	Key Aims/Objectives/Goals
Canterbury-Bankstown Council	
Canterbury-Bankstown Council CB2036 Community Strategic Plan	The CB2036 Community Strategic Plan is a plan to guide Canterbury-Bankstown on its journey to be a thriving and dynamic city and set out its vision for the community. The plan outlines the following relevant visions: • Reduce carbon footprint • Invest in active transport by providing road users, cyclists and pedestrians with well-maintained, safe, accessible and integrated networks and supporting infrastructure • Advocate for an effective and efficient public transport network • Promote walking and cycling for short journeys, and car pool or car share • Provide accessible, equitable, diverse, shaded and sustainable parks, open spaces and play experiences to meet current and future community needs
NSW State Government	
Future Transport Strategy 2056	The Strategy aims to increase the mode share of public transport services and reduce the use of single occupant vehicles. The proposed development will look to reduce private vehicle travel, aligning with the objectives of the Strategy.

New South Wales Long Term Transport Masterplan (NSW State Government, 2012)	The Long Term Transport Master Plan provides measures that go beyond addressing the visible incidence of congestion and extend to the management of the States' transport systems as a whole, by:
	• Accommodating land use, growth and urban renewal and ensuring land use policies make a positive impact on congestion
	• Managing demand through priority measures, demand-responsive technology, better customer information and pricing
	• Managing congestion on roads by encouraging the use of public transport by:
	  ○ Developing an integrated, fast, and reliable bus network
	  ○ Improving public transport interchanges
	• Employing a coherent, whole-of-network planning strategy through the Strategic Transit Network

3 Existing Transport Context

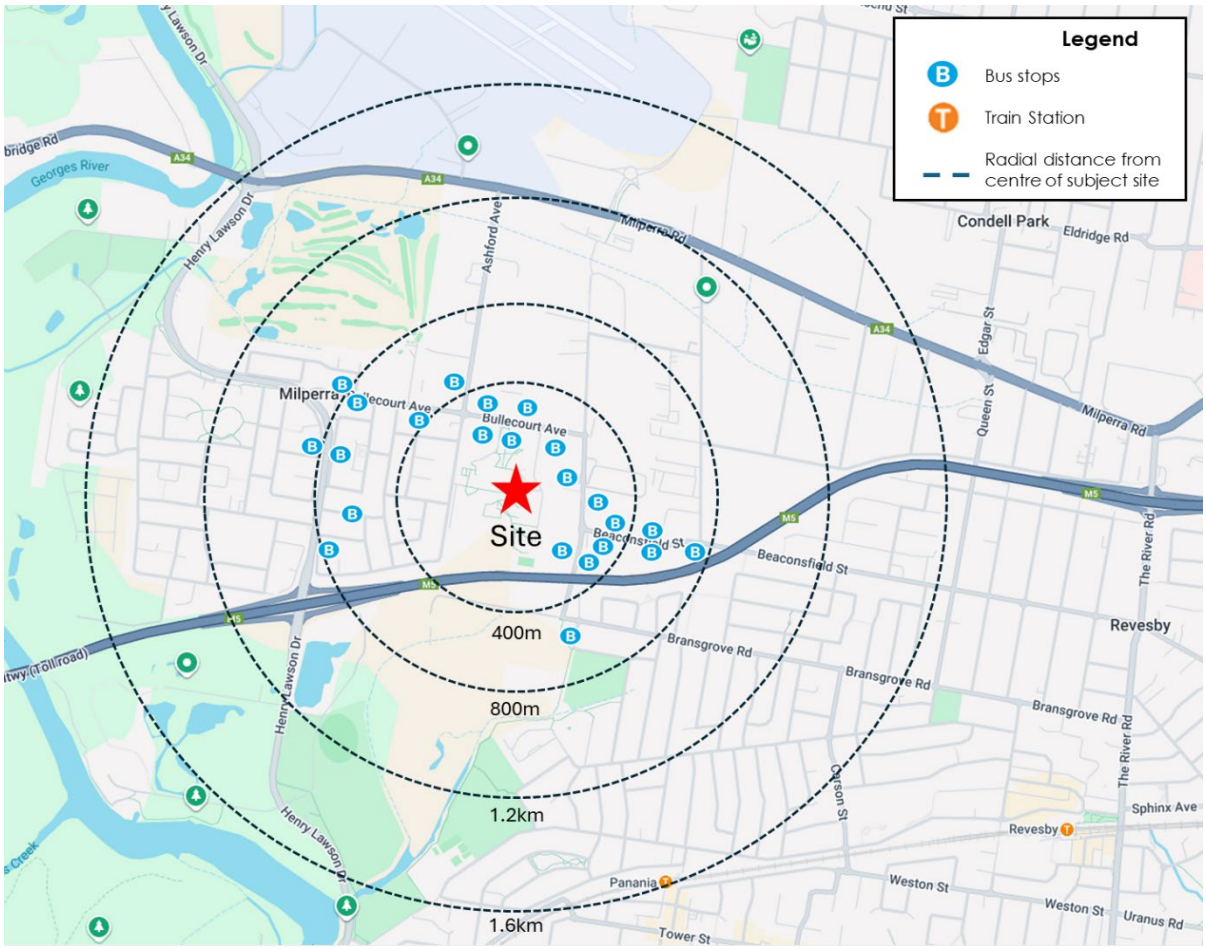
3.1 Existing Transport Infrastructure

The site is accessible by public transport, with a number of bus services operating within a 400m catchment radius of the centre of the site.

The site's proximity to nearby public transport facilities is shown in Figure 3.1.

The nearest train line is the T8, accessible via East Hills, Panania and Revesby Stations, the T6 line at Bankstown Station can also be reached via bus services operating near the site (as shown in Figure 3.2.).

Figure 3.1: Site Proximity to Nearby Public Transport Facilities



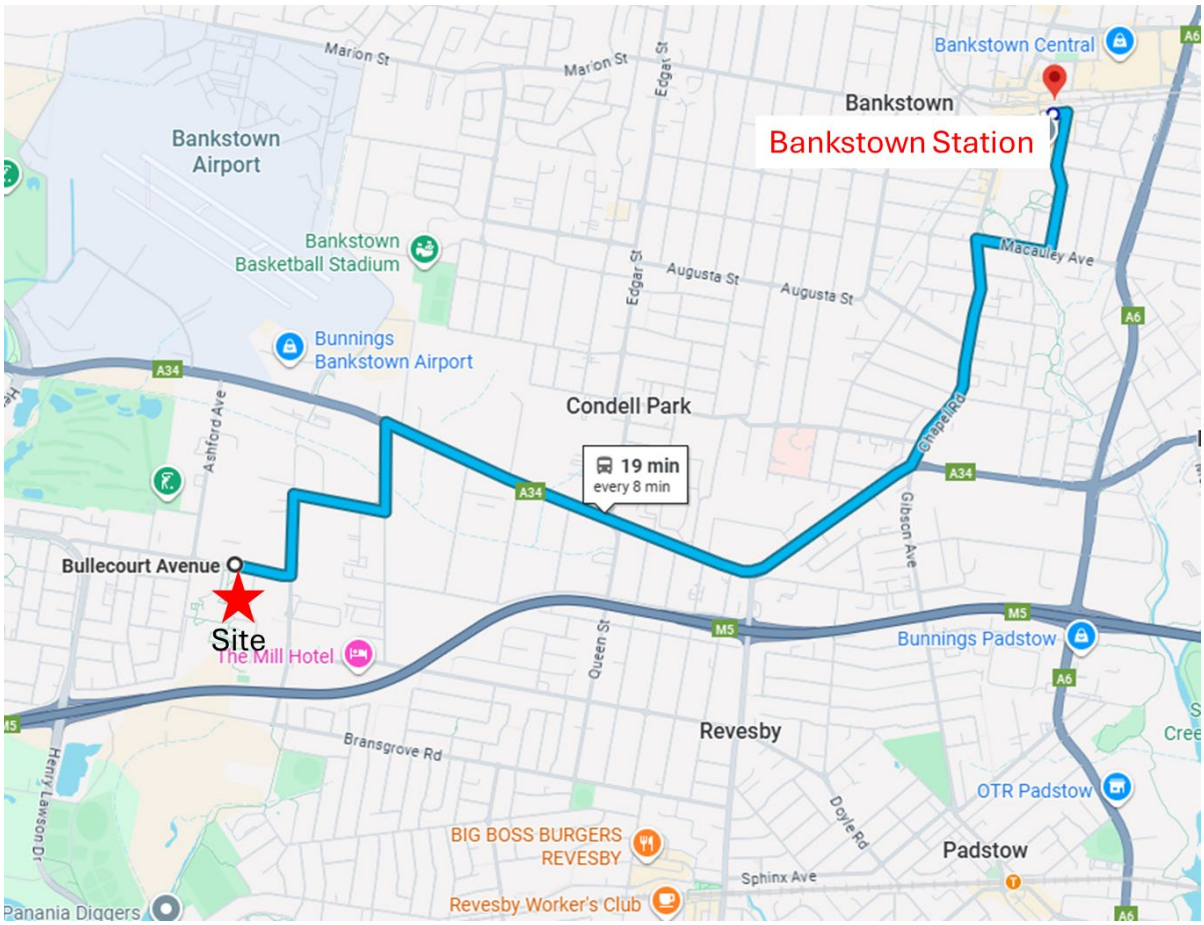
Base Map Source: Google Maps Australia

A summary of the existing bus services within a 400m radius catchment of the centre of the site, as well as their associated frequencies, is provided in Table 3.1.

Table 3.1: Bus Service Summary

Service No.	Route Description	Approximate Frequency (Each Direction)	
		Peak	Off-Peak
922	Between East Hills and Bankstown	Every 30 mins	
962	Between East Hills and Miranda	Every 15-20 mins	Every 30 mins
M90	Between Burwood and Liverpool	Every 10 mins	Every 15 mins
S5	Between Milperra and Padstow	Five services per day	

Figure 3.2: Site Proximity to Bankstown Train Station



3.2 Pedestrian and Cyclist Infrastructure

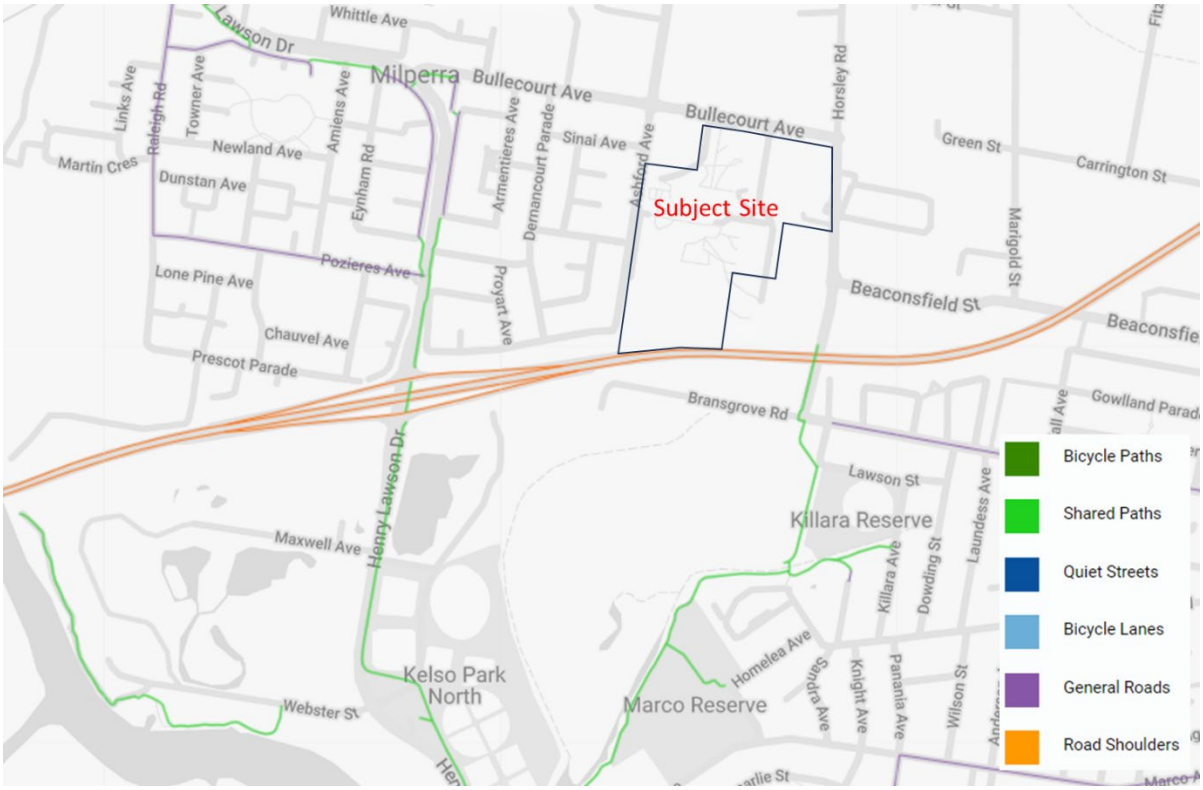
Paved pedestrian footpaths are generally provided on both sides of Bullecourt Avenue and Horsley Road, which provides good access to the surrounding areas and public transport facilities. In addition to this, formal pedestrian footpaths are provided on some sections of Ashford Avenue, near the retail shop frontages at the corner of Ashford Avenue and Bullecourt Avenue.

Paved pedestrian footpaths will be provided along the site frontage on Ashford Avenue as part of the proposed development. This will provide a pedestrian access path between the site and the sports field and commercial/retail shops at the corners of Bullecourt/Ashford Avenue intersection.

There is a good provision of cycle infrastructure in the local area. To the west of the site, a shared path is provided along Henry Lawson Drive, providing connectivity in a generally north-south direction between Lansdowne and East Hills. In addition to this, there is a cycleway provided to the south of the site traversing the sports fields which provides good connectivity to/from Panania.

A map showing existing cycling facilities within the site vicinity is shown in Figure 3.3.

Figure 3.3: Cycleway Map



Source: Transport for NSW Cycleway Finder

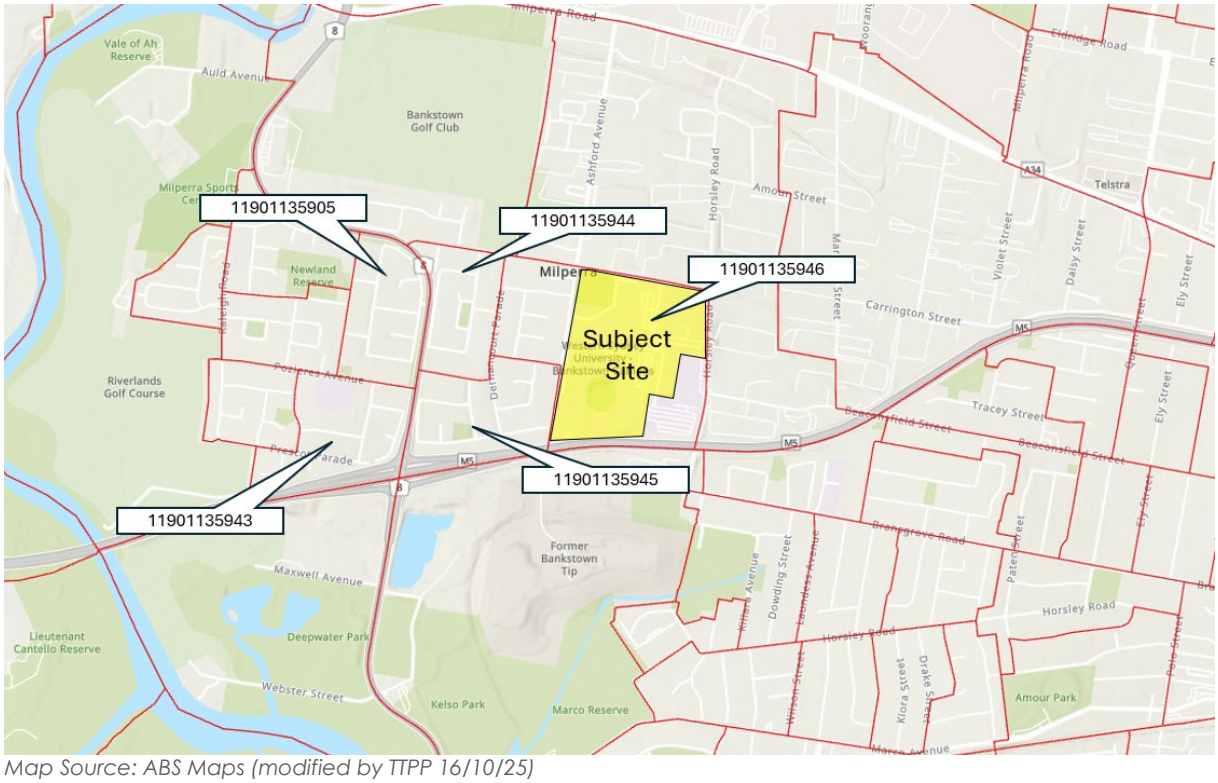
3.3 Existing Modal Share

A review of the existing 2021 and 2016 Census data has been undertaken to understand the existing travel modes of residents within the Milperra area near the Site. It is envisioned that this data can be used to inform future modal share targets for the site.

It is however, noted that the 2021 Census Study was undertaken during the COVID-19 lockdown period on August 10, 2021, and is therefore not representative of typical behaviour during this time. This is due to employees working from home due to restrictions preventing all but essential travel. On this basis, TTPP has included the 2016 Census data for comparative purposes as part of this assessment.

The selected Census study areas for the year 2016 and 2021 (the selected places of residence for modal share analysis) are shown in Figure 3.4 and Figure 3.5 respectively.

Figure 3.4: Selected Residence Zones – 2016 Census



Map Source: ABS Maps (modified by TTPP 16/10/25)

Figure 3.5: Selected Residence Zones – 2021 Census

Map Source: ABS Maps (Modified by TTPP 16/10/25)

A summary of the travel mode share for residents in the area surrounding the site is provided in Table 3.2 below. A comparison has been made between the 2021 modal share (Pandemic) and the 2016 modal share (Pre-Pandemic) for reference. It should be noted that the results exclude data of people who did not go to work or did not state their journey to work.

Table 3.2: Existing Mode Share of Residents Living in Milperra

Method of Travel	Resident Mode Share (Census 2016)	Resident Mode Share (Census 2021)
Train	10%	2%
Bus	1%	0%
Taxi/Ride Share	0%	0%
Car Driver	77%	49%
Car Passenger	4%	5%
Truck	2%	1%
Motorbike/Scooter	0%	0%
Bicycle	1%	0%
Walk	1%	1%
Worked at Home	4%	42%
Total	100%	100%

Reference: ABS Table Builder (reviewed on 16/10/25)

The 2021 Census data show approximately 55% of trips for residents travelling to work are in the form of private vehicle travel, either by car/truck as driver or as a car passenger. Public transport (train and bus) accounts for approximately 2% of the mode share, with 1% of residents walked to their workplaces. Working from home accounted for 42% of the total mode share during the Covid-19 pandemic.

The 2016 Census data also shows that the primary mode of travel for commuting was by private vehicle, where 77% of residents travelled to work by car/truck, either as a driver or as a passenger. Public transport use in this period only accounted for 11% of the mode share, which is noted to be higher than in 2021. Walking to work accounted for 1% and working from home accounted for only 4%. This data suggests that prior to the Covid-19 Pandemic, travel was predominately car dependant, while active and public transport saw higher usage prior to the pandemic than during the pandemic.

4 Mode Share Target

The aim of the GTP is to encourage a modal shift away from private vehicles by implementing measures that influence the travel patterns of employees of the proposed development. The implementation of the GTP would be regularly monitored to ensure that it is creating the desired effect. The success of the GTP is measured by setting modal share targets and identifying the measures and actions that have the greatest impact.

Table 4.1 presents the proposed mode share for the proposal with achievable goals in mind. It is noted that the benchmark existing mode share is based on the 2016 pre-Covid 19 pandemic travel behaviours noting that work from home would not represent such a large proportion following the pandemic.

Based on current and pre-pandemic travel behaviours of residents in the surrounding areas, private vehicle is expected to remain the dominant mode of travel to/from the site. Notwithstanding that, a mode shift of 5% is proposed. The targets will be updated when the GTP is reviewed to align with any changes to the site and/or Council strategies or plans.

Table 4.1: Mode Share Targets (Residents)

Method of Travel	Existing % (based on 2016 Census)	Target %
Train	10%	11% (+1%)
Bus	1%	2% (+1%)
Taxi/Car Share/Car Pool	0%	1% (+1%)
Car/truck driver	79%	74% (-5%)
Car Passenger	4%	4%
Motorbike	0%	0%
Bicycle	1%	2% (+1%)
Walk	1%	1%
Worked at Home	4%	5% (+1%)
Total	**100%**	**100%**

5 Methods of Encouraging Sustainable Transport

To achieve the objectives of the GTP, measures will be put in place to influence the travel patterns to/from the site, with a view to encourage more sustainable travel modes.

5.1 Site Specific Measures

5.1.1 Walking and Cycling

The site will be well serviced by adequate pedestrian infrastructure that connects the residential dwellings to parks within and near the site, surrounding sports fields, childcare centre within the site and nearby school, and retail shops. A walking map showing essential amenities in the vicinity of the site is to be provided as a welcome package to residents and in newsletters and social media to inform residents that they need not travel far to access retail shops, sports facilities, parks, childcare, etc.

Bicycle parking can be provided at the public parks within the site to encourage residents to cycle around their neighbourhood.

Further to this, the Proponent should consider establishing a walking and cycling group, where all residents would be invited to walk and/or cycle together around the neighbourhood, followed by recreational activities/special events within the site.

5.1.2 Public Transport

Public transport maps and information will be provided as part of the welcome package and in newsletters and social media to make residents more aware of the alternative transport options available in the area. The format of the map can be based upon the travel access guide.

5.1.3 Car Sharing

A review of GoGet website suggests that the area surrounding the subject site has limited car share facilities.

Opportunities for the provision of car share scheme is recommended to assist in the reduction of car ownership and allow residents access to a vehicle or 'second vehicle' in the occasional instances when one is required.

It is recommended that the proponent consult with car share companies and Council to explore the opportunities of providing car share facilities for the site and neighbouring

community. Car share facilities/parking spot (e.g. GoGet) can be provided on-street within the site, subject to agreement with car share company and Council's approval

5.2 Transport Access Guide

A Travel Access Guide (TAG) will be developed specifically for the site prior to occupation of the development providing customised sustainable transport information, when the majority of the planned public transport/cycling/pedestrian infrastructure are developed. The TAG would be included in the welcome pack provided to residents and visitors via email.

The TAG provides tailored travel information for people travelling to and from a particular site using sustainable forms of transport including walking, cycling and public transport. It provides a simple visual overview of a location, making it easy to see the proximity of the site to train stations, bus stops, and walking and cycling routes.

TAGs encourage the use of non-vehicle transport modes which can reduce associated greenhouse gas emissions and traffic congestion while improving health outcomes through active transport choices.

5.3 Information and Communication

Transport NSW Info

Bus, train and metro routes, timetables and journey planning are provided by Sydney Metro and Transport for New South Wales through their respective transport information website:

- http://www.transportnsw.info/
- https://www.sydneymetro.info/.

Similarly, phone apps such as TripView display Sydney public transport timetable data and shows a summary view showing current and subsequent services, as well as a full timetable viewer. This timetable data is stored on the phone, so it can be used offline.

Cycleway Finder

- Transport for NSW provides a map with detailed cycling route information to encourage people of all levels of experience to travel by bicycle:

  https://maps.transport.nsw.gov.au/egeomaps/cycleway-finder/index.html

Connecting residents via social media may provide a platform to informally pilot new programs or create travel-buddy networks and communication.

5.4 Actions

A summary of the key strategy and framework action table is shown in Table 5.1. It should be noted that this framework action table will be updated as required. However, it is stressed that the availability of the suggested strategies upon occupation is a key factor in influencing travel patterns.

Table 5.1: Framework Action Table

Action	Responsibility	Timeline
1. Provide secure bicycle parking within the childcare/community centre and parks	Proponent	Prior to Occupation
2. Provide public transport information as part of the welcome package and in newsletters and social media to make residents more aware of the alternative transport options available in the area.	Proponent	Prior to Occupation
3. Provide well-connected pedestrian and cycling infrastructure within the site.	Proponent	Prior to Occupation
4. Provide residents with the Sustainable Travel and Access Plan to encourage active travel	Travel Plan Coordinator	Upon Occupation
5. Consult with car share companies and Council to explore opportunities of providing car share facilities for the precinct.	Proponent	Prior to Occupation
6. Review the GTP to introduce additional measures or modify current measures as required	Travel Plan Coordinator	Ongoing

6 Management and Monitoring of the Plan

6.1 Management

Any future detailed GTP(s) will be monitored and encouraged to be reported to Council yearly for the first five years, to ensure that it is achieving the desired benefits. The mode share targets set out in sections above are used in this regard to ensure there is an overall goal in the management of the GTP.

The monitoring of any future detailed GTP(s) would require travel surveys to be undertaken with a focus to establish travel patterns including mode share of trips to and from the Site and identify any progress toward the mode share targets and objectives. It is recommended that the first set of surveys should be undertaken within six months post 25% occupation to obtain the baseline mode share of the site.

The implementation of the GTP will be the responsibility of a Travel Plan Coordinator (TPC) who will be assigned for the precinct. The TPC will provide feedback to residents to ensure that they can recognise the benefits of sustainable transport.

The key components to development and implementation of a successful GTP are:

- **Communication** – It will be necessary to explain the reasons for adopting the plan to promote the benefits of sustainable transport options.
- **Commitment** – GTPs involve changing established habits or providing the impetus for people in new developments to choose an alternative sustainable travel mode other than car use. To achieve cooperation, it is essential to promote the wider objectives and benefits of the plan. This commitment includes the provision of the necessary resources to implement the plan, beginning with the TPC.

Once the plan has been implemented, it is important to maintain interest in the scheme. Each new initiative in the plan will need to be publicised and marketing of the plan as a whole will be undertaken.

6.2 Remedial Actions

The regular annual review will take place to identify if any remedial actions, which are possible to be adopted, should the modal share targets not be achieved.

The TPC could coordinate with other organisations such as TfNSW and Council to canvass any other initiatives that can be practically adopted that are aligned with their strategic planning for active travel.

6.3 Consultation

The results of the GTP will be communicated with residents via the noticeboard and email.

As such, it is recommended that a summary letter is produced presenting the results of the survey within one month of undertaking travel surveys. The travel survey can be undertaken by the TPC. The letter/report may be also appended to the GTP.

Communication to residents may be carried out in a similar form by public display of the GTP on noticeboards or via email/letterbox. Travel provisions can also be outlined in a travel access guide (TAG) to new residents.

The Transport Planning Partnership
Suite 402 Level 4, 22 Atchison Street
St Leonards NSW 2065

P.O. Box 237
St Leonards NSW 1590

02 8437 7800

info@ttpp.net.au

www.ttpp.net.au