

In the short term, the Bicycle Network Masterplan proposes the following bicycle routes:

- Balaclava Road/University Avenue/Waterloo Road;
- Gymnasium Road/Western Road;
- Macquarie Drive;
- Science Road/Eastern Road;
- East-west route north of building C10A (SAM); and
- North-south internal route between Macquarie Drive and Wally's Walk.

These routes are proposed to provide internal bicycle connectivity through the site as well as link into existing and future external cycle routes. These external routes include Waterloo Road, Talavera Road, Culloden Road and the M2 Motorway (this route is now closed in the west bound direction). In addition, the internal routes will provide a connection to the majority of buildings that provide showering facilities. See Figure 3.13.

In the long term, the same bicycle routes are proposed as above, with the addition of a route along Research Park Road - see Figure 3.14. The long term lockable bicycle parking facilities proposed include the following:

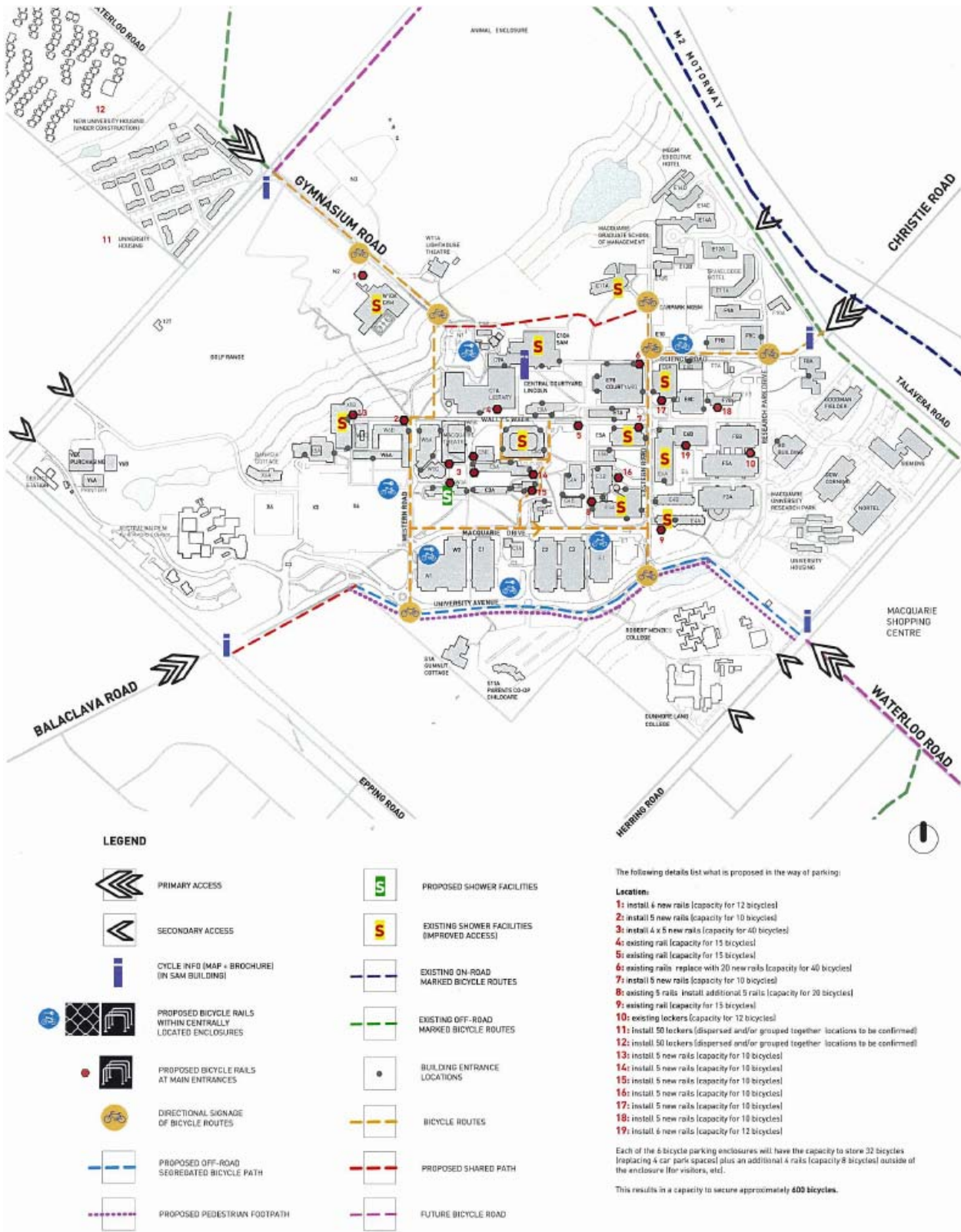
- off Science Road in the at-grade car park;
- off Research Park Road in the at-grade car park opposite the BD building;
- off University Avenue in the car park between buildings C1 and C2;
- off Western Road in the at-grade car park south of building W6A; and
- off Gymnasium Road in the at-grade car park north of the gym (building W10A).

In addition to the above lockable bicycle parking facilities, the Masterplan proposes that a Cycle Centre be provided on the campus. The Cycle Centre is envisioned to include bicycle parking, bicycle and accessories sales, bicycle hire, bicycle servicing and repair as well as a café. Three potential locations for this Cycle Centre were identified: the gym, the SAM building, and the Railway Station off Herring Road. The Railway Station location was identified as potentially the preferred location from a commercial perspective.

Directional signage was also recommended on key bicycle routes to assist bicycle movement and legibility within the campus.

There is currently minimal directional cycle signage on the external bicycle routes travelling towards Macquarie University, with no cycle signage for bicycles travelling within the University. There is also no signage associated with the existing bicycle parking facilities. It is clear that some directional signage needs to be implemented on campus to increase the awareness of current bicycle routes and parking facilities. It is suggested that any directional signage include both a destination and the associated distance.

Figure 3.13 Short Term Bicycle Routes and Facilities





The following comments were provided on the Macquarie University Bicycle Network Masterplan long term option in the MUCP TMAP (Cardno 2008):

- Secure bicycle parking facilities should be provided in more convenient locations for staff and students. Generally, this would be in closer proximity to central buildings. For staff enclosures, it may be more appropriate to provide parking within the buildings in close proximity to showering facilities;
- Bicycle directional signage should also direct cyclists towards key destinations, not just routes (e.g. library, cycle centre);
- Wally's Walk is a strong central axis and should be recognised as a shared path;
- Should a Cycle Centre be developed on the campus, it should provide bicycle shower and change facilities and a laundering service. Locating the Cycle Centre at the future Railway Station will increase the potential market for this type of facility and is central to the University and shopping centre. Although there is some distance between the station and the University, this facility would cater for longer stay cyclists and, as such, the distance would not be considered a barrier. For shorter trips, such as those by students, casual bike parking facilities as proposed near main building entrances will cater for these needs;
- The long term option does not identify casual bike parking facilities outside of main building entrances. These bicycle parking facilities should continue to be provided in the long term; and
- Cycling facilities should be provided along Herring Road.

The Ryde Bicycle Strategy and Masterplan, 2007, is a comprehensive plan for improving the environment for cyclists or potential cyclists throughout the LGA. As a major attractor within the LGA, the Strategy recognises the need for good cycle connections, infrastructure and facilities. Some specific suggestions for improvements have been made in the Strategy to improve linkages and facilities for staff, students and visitors of the University. It is important that Macquarie University work in partnership with Council to implement these projects and to ensure that there is no duplication of valuable resources and that the best possible outcomes are achieved.

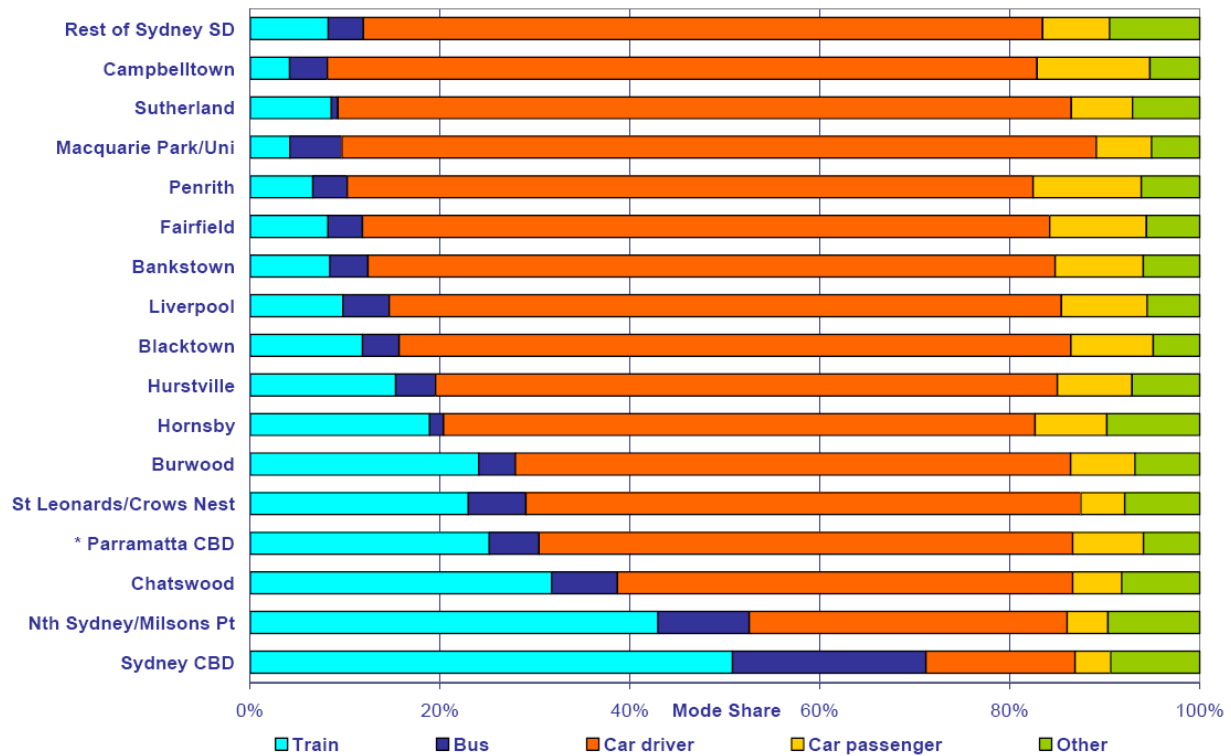
The Ryde Bicycle Strategy and Masterplan, 2007 proposes a substantial upgrade of existing bicycle facilities to meet the future needs of the community and to make the best of existing opportunities to overcome barriers to movement while working with the unique character of the Ryde local street system.

### 3.10 TRAVEL BEHAVIOUR

This section shows the journey to work travel patterns of people working in Macquarie Park. Figure 3.15 highlights the journey to work travel patterns of people working in Macquarie Park compared to the rest of Sydney. The data is drawn from the 2001 Australian Bureau of Statistics (ABS) Census journey to work (JTW) dataset (2006 JTW has not been released).

As a key regional employment location, businesses located in Macquarie Park draw their employees from a very wide range of areas. While people travel from almost every local government area in the Sydney region, the vast majority are drawn from a selected number of nearby or conveniently accessible areas.

Figure 3.15 2001 Journey to Work Mode Share to Selected Commercial Centres



### 3.10.1 2001 Trips to Work

2001 Journey to Work data from the Transport Data Centre was evaluated to determine the employment levels in, and number of work trips to, the Macquarie Park Area. JTW data is generally available at travel zone level (TZ) within each Local Government Area (LGA).

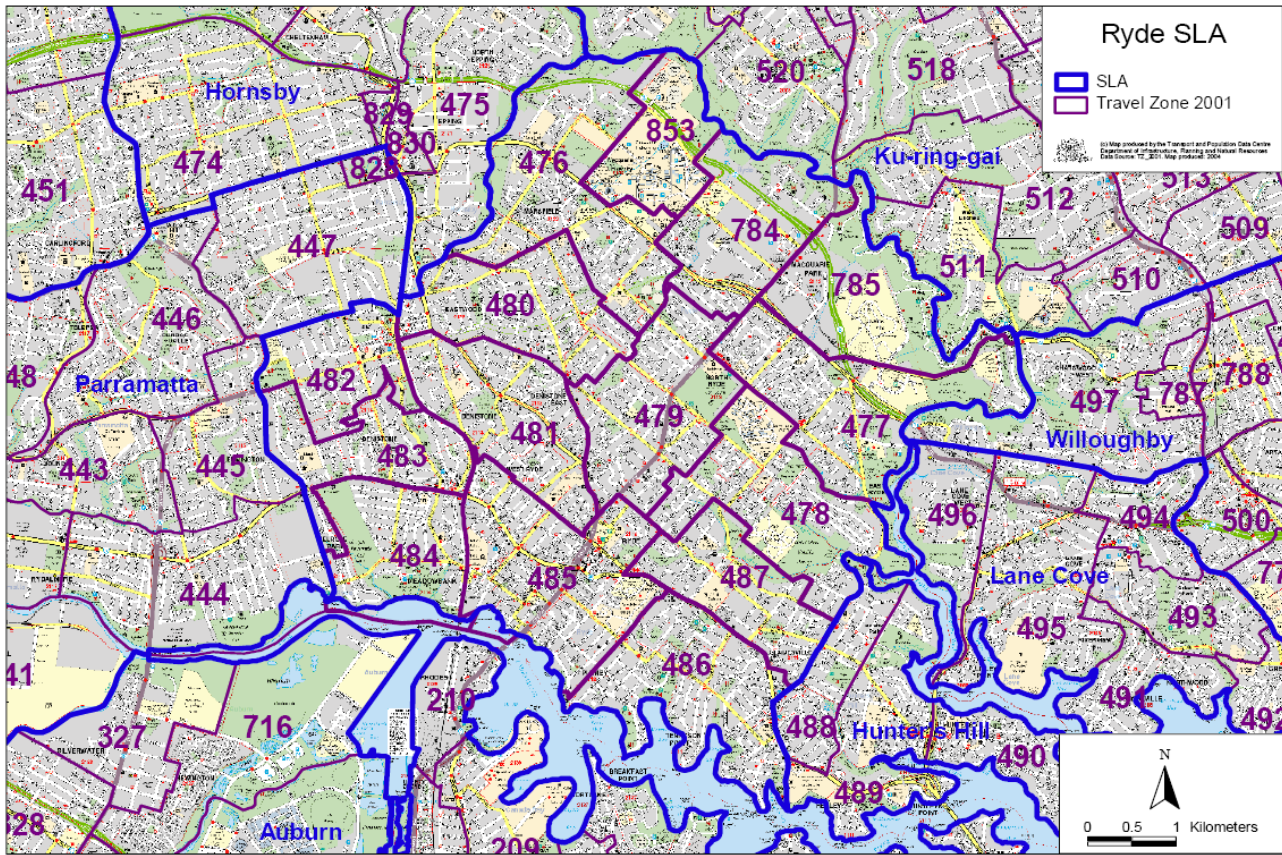
The City of Ryde is broken down into 15 travel zones as shown in Figure 3.16. Macquarie Park is considered to be equivalent to travel zones 784, 785 and 853. All analysis of the Journey to Work trips to Macquarie Park in this report refers to the sum of these travel zones.

The distribution of 2001 JTW trips by origin Statistical Sub-Division (SSD) or by origin Statistical Local Area (SLA) to the Ryde LGA is shown in Figure 3.17 and Figure 3.18 respectively. From this we can see that a high proportion of trips come from within the Ryde LGA, Hornsby, Ku-ring-gai, Baulkham Hills and Parramatta.

In 2001 there were over 52,000 jobs in the Ryde LGA generating over 45,000 journey to work trips a day. Almost 10,000 of these trips came from within the Ryde LGA, 700 of these trips were bus trips (7.2%). Hence around 35,000 trips per day come from outside the LGA, 1300 of which were bus trips (3.8%).

In 2001 there were 22,454 jobs within the Macquarie Park travel zones, as shown in Table 3.7. Just over 780 trips were generated within the Macquarie Park Corridor, 3.3% were by bus. A considerably higher number, 3057, originated in other parts of the Ryde LGA, with 10.7% arriving by bus. Only 4.7% of the 18,616 trips originating outside the LGA arrived by bus.

Figure 3.16 Ryde LGA Travel Zones



Source: Ministry of Transport, Transport Data Centre

Table 3.7 2001 JTW Trips to Macquarie Park Travel Zones

Description	Origin			
	MPC	RYDE LGA	OUTSIDE LGA	ALL
Employment	781	3,057	18,616	22,454
JTW Trips	608	1,822	16,906	20,158
Bus Trips	20	2,644	799	1,103
Proportion of Bus trips	3.3%	10.7%	4.7%	5.5%
Rail Trips	3	58	781	842
Proportion of Rail trips	0.5%	2.2%	4.6%	4.2%
Public Transport Trips	23	342	1,580	1945
Proportion of PT trips	3.8%	12.9%	9.3%	9.6%