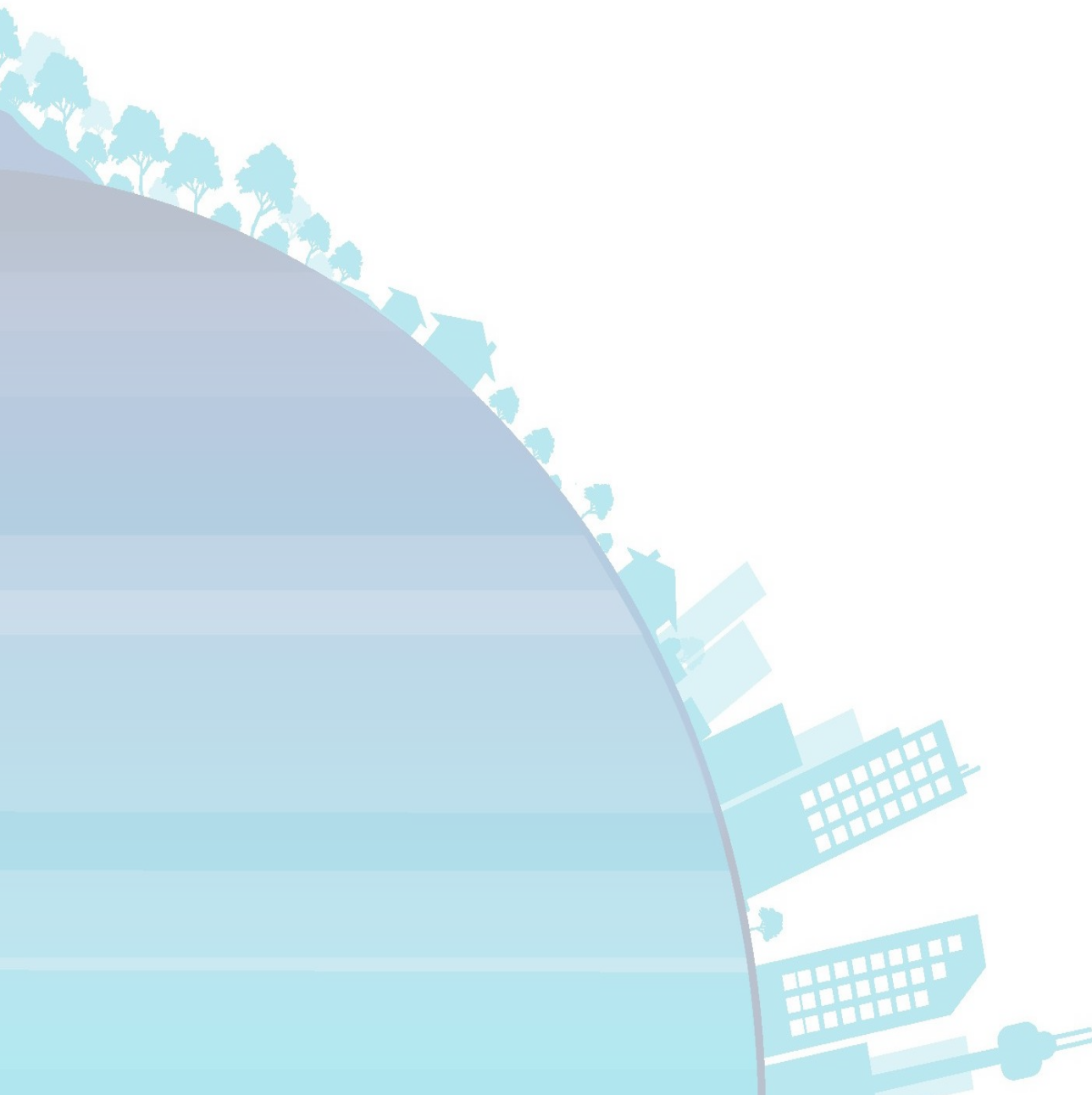


## **Appendix C. UoW Transport Survey 2015 - Survey and Strategy Summary**



# University of Wollongong

## Transport Survey 2015 - Survey and Strategy Summary



## University of Wollongong

### Transport Survey 2015 - Survey and Strategy Summary

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## Executive Summary

### **Background**

The University of Wollongong (UOW) places a strong emphasis on social and environmental sustainability and since 2003, noting the UOW Transport Project commenced in 2008, has conducted biennial transport surveys to monitor progress in these key areas and against Transport Project initiatives.

To facilitate the required ongoing data collection UOW have commissioned the 2015 Transport Survey (Transport Access Survey (TAS) and Transport Questionnaire Survey (TQS)). The TAS is a headcount survey which aims to capture individuals accessing / egressing UOW's Wollongong Campus within the specified survey period. The Transport Questionnaire Survey (TQS) is an online survey conducted based on student and staff travel patterns. The TQS survey was distributed to all students and staff at UOW's Australian campuses. The aim of the TQS was to assess previous transport related initiatives and identify barriers to sustainable transport utilisation.

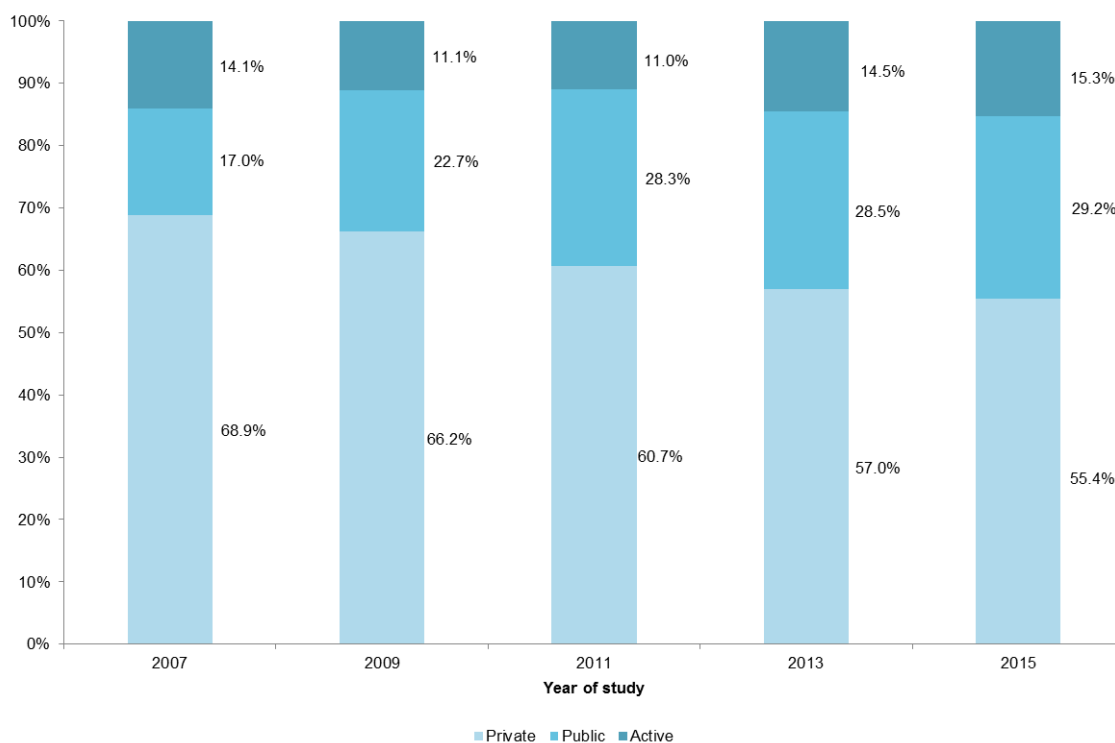
### **Overall 2015 Transport Survey Mode Share Result**

The University of Wollongong has a target goal of achieving a travel mode share of 55 per cent or less for private vehicles by 2015. The 2015 overall mode share was calculated from the abovementioned three day survey period and indicated the following proportions as a whole of campus result:

- Private vehicle – 55.4 per cent
- Public transport – 29.2 per cent
- Active transport – 15.3 per cent

This represents an increase in both public and active transport mode share over 2013 levels which recorded percentages of 28.5 per cent and 14.5 per cent, respectively. These increases correspond with a decrease in private vehicle mode share from 57.0 per cent in 2013 to 55.4 per cent in 2015. The decrease in private vehicle mode share highlights several successful outcomes that have been achieved in the past two years as a result of sustainable transport strategies implemented by UOW. 2015's target goal of 55 per cent private vehicle mode share has nearly been reached however the trend line for public and active transport modes is continuing to grow. **Figure ES1** highlights the mode share trend between 2007 and 2015.

**Figure ES1 Mode share summary (2007-2015)**



Source: AECOM; 2015, reformatted from Skyhigh; 2015 and UOW; 2013

## Key Characteristics and Findings

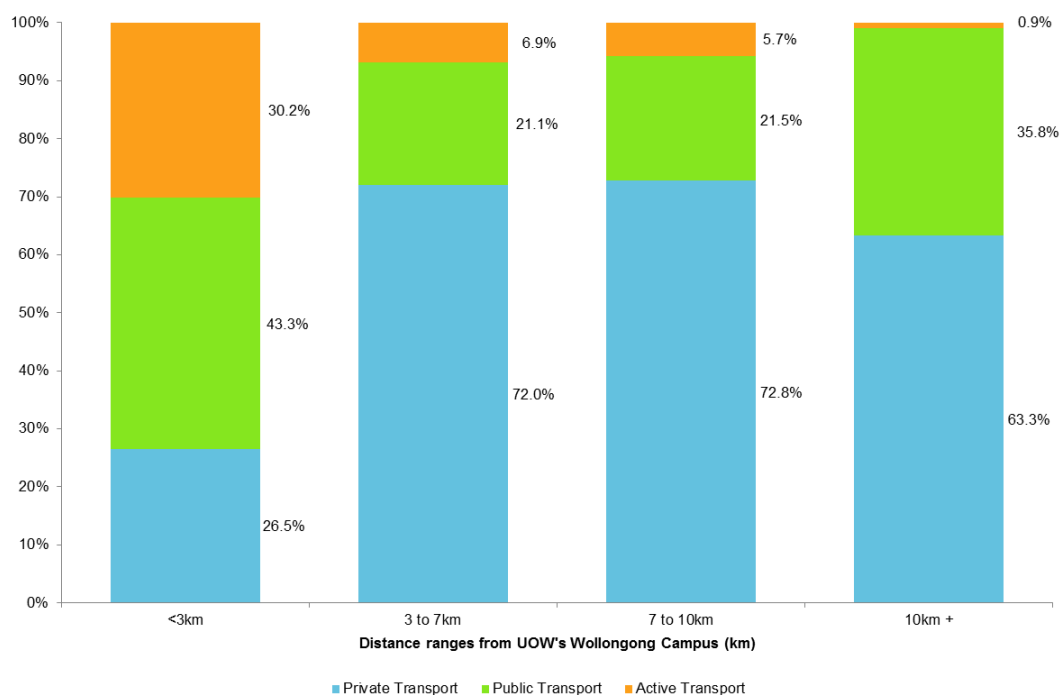
### Distance and Staff / Student Composition

Of the total respondents to the 2015 TQS, 44 per cent live within a three kilometre radius of UOW's Wollongong Campus. The successes of UOW's sustainable measures become evident when observing key trends across a distance based analysis spectrum. **Figure ES2** summarises the TQS results of mode split by distance to campus. UOW's sustainable transport measures have had a clear impact for respondents within a three kilometre radius to UOW's Wollongong Campus with a mode share mix as follows:

- Private transport – 26.5 per cent
- Public Transport – 43.3 per cent
- Active transport – 30.2 per cent

Mode share distribution between the three and seven kilometre radius surrounding UOW's Wollongong Campus changes markedly from that noted above. Beyond the three kilometre distance boundary private vehicles as a mode share proportion increase by 45.5 per cent whilst public and active transport decrease by 22.2 per cent and 23.3 per cent, respectively. Through effective sustainable transport initiatives targeted at active and public transport, the mode share within this distance range has great potential to be altered with respect to private vehicle mode share.

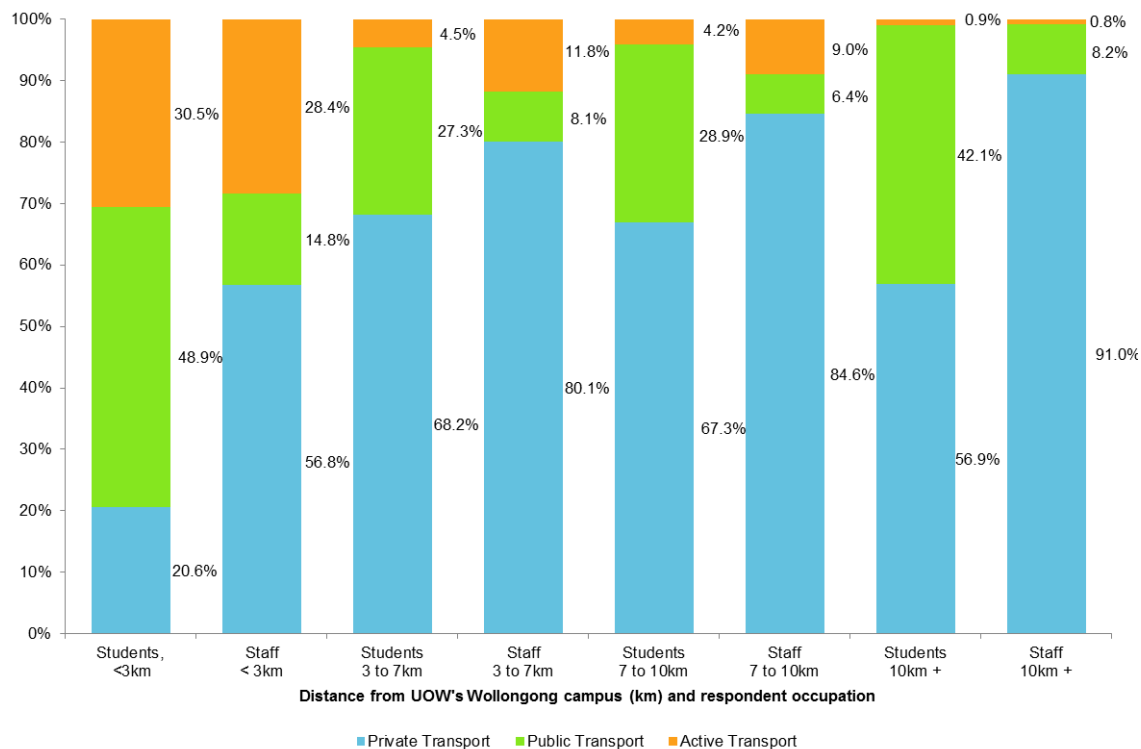
**Figure ES2 2015 Mode split by distance to UOW campus (TQS)**



Source: AECOM; 2015, reformatted from UOW; 2015

The success of UOW's sustainable transport strategies and identification of further areas for investigation become evident when breaking down the distance based mode share assessment, into students and staff, as shown in **Figure ES3**. There are over 2,200 full time equivalent staff members at UOW's Wollongong Campus. Of staff living within three kilometres of their workplace approximately 1,270 use a private vehicle as their primary mode of travel, increasing to approximately 1,760 for those residing between three and seven kilometres from UOW's Wollongong Campus. Students living within three kilometres have a private vehicle mode share of only 20.6 per cent with public and active transport modes accounting for 48.9 and 30.5 per cent, respectively. Staff mode share proportions for public and active transport within the same distance banding are 14.8 per cent and 28.4 per cent.

Across all distance ranges the percentage of staff driving is greater than the percentage of students driving. However, for distance ranges greater than three and less than 10 kilometres the percentage of staff who used active forms of transport was higher than that of students indicating staff have a reluctance to use public transport with the same inferred for students regarding active transport.

**Figure ES3 2015 Mode split for students and staff by distance to UOW campus (TQS)**

Source: AECOM; 2015, reformatted from UOW; 2015

### **Private Vehicles**

Commuters use of UOW's sustainable transport carpooling initiative known as '3 for free' remained consistent with 2013 levels, increasing from 4.8 per cent of all vehicle trips to 5.4 per cent. However, carpooling or 'ride-sharing' for two person occupancy vehicles increased by four per cent, which corresponded to a four per cent decline in single vehicle occupancy.

Total vehicle entries by private vehicle to UOW's Wollongong Campus increased by 3.1 per cent between 2013 and 2015. This increase was concentrated at the Western Entrance which experienced growth of 168 vehicles per day. The potential impact of the construction works to upgrade the Northfields Avenue Bus Interchange on students travel patterns, should also be considered. In addition, train timetable alterations effective from October 2013 may have altered the trip patterns of individuals accessing the UOW Wollongong Campus.

As with previous survey years on-street parking utilisation continues to be greater during session than out of session. It was noted however that there has been a downward trend in on-street parking utilisation from 2014 to 2015, with Week 2 of Session and Mid-session utilisation each falling seven per cent. Overall on-street parking spaces have undergone an average annual reduction of two per cent.

Lastly, the increase in private vehicles as a proportion of total mode share should be viewed in the context of commuter numbers. Based on UOW population data staff numbers have remained virtually constant between 2013 and 2015 however total student numbers have increased from 20,008 to 20,584. As noted above, students are more likely than staff members to use public transport with staff more likely to utilise active transport.

### **Public Transport**

Prior to the 2013 TAS and TQS survey period UOW sponsored an initiative to increase the frequency and reliability of Route 887 bus services from Campbelltown to UOW. Ridership of this service has grown by 74 per cent since 2013. 2015 also saw the commencement of a new service from Dapto to UOW's Wollongong Campus (Route 41). Patronage figures for this service are low with 23 daily users recorded across the survey period however the service is still in its infancy.

In addition to the above the following 2015 alterations have been incorporated by UOW into its free shuttle bus offering for students:

- Alteration to the Gwynneville – Keiraville shuttle to include access to Marketview student accommodation, Wollongong Station and Wollongong CBD (Commenced February 2015)
  - o The overall market share of bus trips for the Gwynneville – Keiraville shuttle has increased slightly from 7 per cent in 2013 to 8 per cent in 2015.
- An additional shuttle service, the iC Shuttle, was initiated in February 2015 to provide increased linkages between the UOW Wollongong Campus, Innovation Campus and student accommodation sites.
  - o Whilst still in its infancy the service is not currently attracting a high ridership base with a surveyed daily patronage of 36 users. The lack of service frequency in addition to low user requirements may be contributing to this low patronage figure.

### **Active Transport**

The number of pedestrians accessing the UOW's Wollongong Campus has increased over the past two years. The upgrade of the shared path connecting Madoline Street to Northfields Avenue by UOW in 2014 has provided an increase in patronage of 10.5 per cent at this location compared to 2013 levels. Further, accessibility to this path was increased by shared paths along Paulsgrove Street and through Nyrang Park to the south which were funded by Wollongong City Council. This increase is particularly notable given the decrease in parking occupancy on the surrounding street network.

The geographic barrier of the M1 was identified as providing a constraint to walking trips from north of Wollongong Campus. 65 per cent of all people arriving on campus stated in the TQS that they are arriving from locations south of the campus however 82 per cent of people walking to the campus do so from suburbs from the south. This statistic provides strong evidence to support any future interchange works at the intersection Mount Ousley Road / Princes Motorway including pedestrian linkages.

According to TAS data the number of cyclists remains consistent with 2013 surveys at approximately two per cent of total campus entries, increasing to five per cent when considering the TQS data. Despite various initiatives to increase cycling mode share such as the provision of bike maintenance stations (July 2014) and new bike facilities in Building 21 (April 2015) and Building 43 (May 2015), the surrounding cycling network does not provide sufficient connectivity to cater for the potential cycling demand which would increase the use of on-campus cycling initiatives and associated mode share.

### **Transport Survey and Strategy Review 2013: Review and Recommendations**

At the completion of the *Transport Survey and Strategy Review 2013* a list of sustainable transport strategies, developed in 2008, were reviewed and updated to assist UOW's sustainable transport practices and achieve a lower proportion of private vehicle mode share. **Table ES1** provides an evaluation of these strategies based on results from the 2015 Transport Survey and offers recommendations regarding potential ways to enhance the effectiveness of the proposed strategy or consider re-evaluating the strategy based on its performance and fit within UOW objectives.

A detailed evaluation of each strategy including an evidence based assessment can be found within the document '*University of Wollongong – Transport Survey 2015*' (2015).

Table ES1 UOW Transport Project strategy Review

Strategy	Progress			Recommendation		
	Not Commenced	Partially Completed / In progress	Completed	No further action required	Continue to monitor / investigate	Additional Action Required
<b>Private Transport</b>						
Undertake comprehensive parking strategy.		✓				✓
Work in partnership with a car share company such as, GoGet, Charter Drive or Flexicar to trial a car share service on campus and at university accommodation.		✓				✓
Investigate options for charging spaces for privately owned electric vehicles.	✓					✓
Provide additional 90 spaces in Northern Car Park.			✓	✓		
Build additional 270 parking spaces on land to the north of the campus if other strategies not effective in reducing car dependency.	✓				✓	
Build 660 space multi-storey car park in place of 200 spaces of the Western Car Park if other strategies not effective in reducing car dependency.	✓				✓	
Encourage purchasers of new University fleet vehicles to consider vehicles with good fuel efficiency and green credentials. Electric vehicles should be considered.	✓					✓
Liaise with Council and Roads and Maritime Services to establish pickup/drop-off zones and park-and-ride options on the main road network.	✓				✓	



Strategy	Progress			Recommendation		
	Not Commenced	Partially Completed / In progress	Completed	No further action required	Continue to monitor / investigate	Additional Action Required
<b>Public Transport</b>						
Extend the GK Shuttle route - introduce clockwise trips and stop at Marketview.			✓		✓	
Investigate expanding the GK Shuttle service, and consider feasibility for running service in session breaks.		✓			✓	
Further investigate introducing a southern shuttle bus servicing Figtree and Mangerton/West Wollongong.	✓ (Deferred due to introduction of Route 41)					✓
Lobby for improvements and expansion of bus services from the south.			✓		✓	
Expand the Northfields Ave bus station to increase pedestrian space and include provision for a bike path.			✓	✓		
Work in partnership with bus operators, TfNSW to devise an integrated transport ticket for staff and students - subsidised by UOW given that UOW heavily subsidises parking;	✓					✓
Re-develop shuttle bus app to make available to all smart phone users, and move to ITS support to ensure longer term maintenance.		✓			✓	
Continue to seek an increased frequency of Gong Shuttle at peak times, start of session.		✓				✓
Consider upgrading all bus stops on campus to include shelter, seating, lighting, UOW branding, fare and route information.		✓				✓

Encourage WCC/TfNSW to upgrade all major bus stops en-route to the Wollongong Campus to include the University logo, shelter, seating, timetable, fare and route information.	✓					✓
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Strategy	Progress			Recommendation		
	Not Commenced	Partially Completed / In progress	Completed	No further action required	Continue to monitor / investigate	Additional Action Required
<b>Active Transport</b>						
Develop a prominent cycle 'end of trip' facility including hire facilities and maintenance workshop on the Wollongong Campus for use by staff and students. This should be partially overseen by UOW Transport to ensure continuity.	✓					✓
Lobby Council to construct the proposed network of regional and local cycle ways starting with completion of UOW to CBD and UOW to iC routes.		✓				✓
Extend the footbridge over the freeway to bring pedestrians and cyclists right over the Eastern Entrance.	✓					✓
Work with Council and RMS to develop a better active transport link between UOW and iC (ideally via Lysaght St, Old Mount Ousley Rdd, with bridges over Flinders St/Memorial Dr and the rail line, connecting to Montague St, around Puckey Ave.)	✓				✓	
Construct a shared path bridge across Northfields Ave connecting the campus to pedestrians and cyclists from the south as well as new student accommodation.		✓				✓
Develop cycle hire/loan options on both UOW and iC campuses and at student accommodation facilities.	✓					✓

Strategy	Progress			Recommendation		
	Not Commenced	Partially Completed / In progress	Completed	No further action required	Continue to monitor / investigate	Additional Action Required
Encourage Transport for NSW and Council to provide a range of secure cycle parking options for passengers at North Wollongong and Fairy Meadow stations.	✓					✓

In addition to the recommendations outlined above the following strategies are recommended for consideration and implementation prior to the commencement of the 2017 Transport Survey:

#### **Private Vehicles**

- Promote and incentivise UOW's carpooling scheme for staff.
- Increase the number of general parking spaces by reducing the allocation of staff parking.
- Further expand the '3-for-free' initiative to provide carpooling benefits for two people occupancy vehicles.
- Increase car park pricing structure.

#### **Public Transport**

- Continued research regarding the introduction of new shuttle services and/or expansion of public bus routes to connect areas within 10 kilometres of UOW's Wollongong Campus.
- Continued research to understand the daily schedule of UOW commuters to enable coordination of existing bus frequencies to match commuter needs.

#### **Active Transport**

- Strengthen lobbying for improvements in accessibility for active transport within seven kilometres of UOW's Wollongong Campus.