



2014 Travel Survey and Campus Counts

Analysis Summary

Never Stand Still

Introduction

2014 Travel Survey

The annual Travel Survey is a key element of the University's Transport Strategy outlined in the Kensington Campus Development Control Plan. The Survey completed its eighth year in 2014 and has become an essential database for the University's operational activities and forward planning. The Survey is conducted on-line by Facilities Management on a voluntary basis for staff and students that attend the Kensington campus – the main campus of UNSW. The Survey seeks to determine the method of travel to and from the campus, arrival and departure points, where car driver's park, times of arrival and departure, the time taken to travel and the point of travel origin.

The Survey was conducted over a three-week period in April and received a significant number of responses from approximately 2,500 staff and 7,700 students. The responses represented 19.6% of staff and students attending the campus. The sample percentages were then applied to the average daily campus population to derive the actual numbers and to fully understand the travel impacts of staff and students. The margin of error is assumed at 1%. (www.surveymonkey.com/mp/sample-size).

The survey results are analysed each year to assist in implementing measures to reduce car dependence and parking demand at the campus while at the same time improving sustainable transport access, and related public domain improvement works at strategic locations.

Attached to this Analysis Summary are the results from the 2014 Travel Survey. For each question, the results are analysed to determine the staff and student percentages separately and then as a total percentage of all respondents.

It is to be noted that only the key questions from the survey are analysed in this Analysis Summary. The results from questions related to staff and student daily arrival and departure times have been excluded. Instead, the arrival and departure times collected from the Campus Counts have been used as they provided a more detailed set of results and for a longer span of time. See details of Campus Counts on page 2.

2014 Campus Counts

In 2014 simultaneously with the Travel Survey, the University conducted a count of movements at the campus perimeter during a typical semester's week.

The aim was to obtain more specific data of where and how many pedestrians, cars, bicycles, motorbikes and commercial vehicles arrived and departed from, the campus. All arrival and departure movements at strategic points on the campus perimeter were counted in 15 minute intervals over a 24 hours period for 7 days – Friday 4 April to Thursday 11 April. The Campus Counts provided a better data capture than the results of Question 5 and 6 of the Travel Survey and have therefore been used in this Analysis Summary.

For more information regarding the Travel Survey or Campus Counts, please contact Ms. Kuhu Gupta, Planner at UNSW Facilities Management on 93853362 or kuhu.gupta@unsw.edu.au

Glossary

Total campus population – recorded at 52,102 on Tuesday, 24th June 2014 (7,546 staff and 44,560 student headcounts)

Data source: UNSW Business Reporting & Intelligence, & Data Governance unit

Average daily population – is derived from the total campus population and is approximated at 41,800 on the assumption that about of 92% of staff and 78% of students headcounts attend the campus Monday to Friday during a typical University semester, i.e. a typical semester day.

Data source: UNSW 2014 Travel Survey (Median attendance – Monday to Friday)

Method of Travel

Q1 - What is your usual method of travel to and from the Kensington campus?

Figures 1 and 2 demonstrate the changing trends in the method of travel to and from the campus since 2007. The total percentages of respondents (Figure 1) were applied to average daily campus population to derive the actual number of staff and students and how they travelled to and from the campus on a typical semester day (Figure 2).

The results confirm a continuing trend to more sustainable methods of travel with public transport being the most obvious. Staff and students however, continue to drive to the campus. The key reasons for this are:

- Availability of free and unrestricted parking in streets immediately surrounding the campus
- Availability of staff parking at comparatively low commercial rates
- Increased travel times to and from the campus for users of public transport
- Increased number of evening classes finishing at 9pm with limited transport services to suburban routes after 8 pm to support this
- Fragmented bicycle networks of poor quality in the campus environs

UNSW will be slow to achieve targets in sustainable travel modes while the above issues are not acknowledged. Further discussions are required with Randwick City Council and Transport for NSW on these issues.

Figure 1. Travel Trends 2007-2014 (Percentage of Respondents)

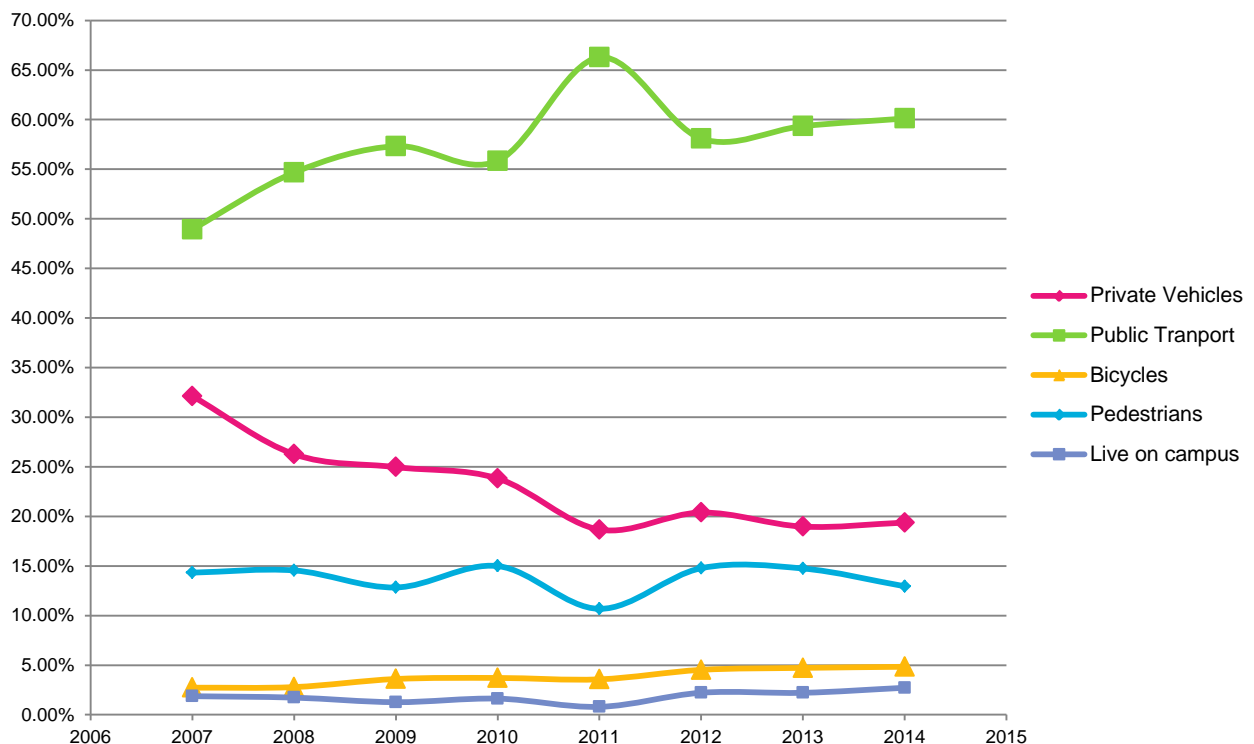
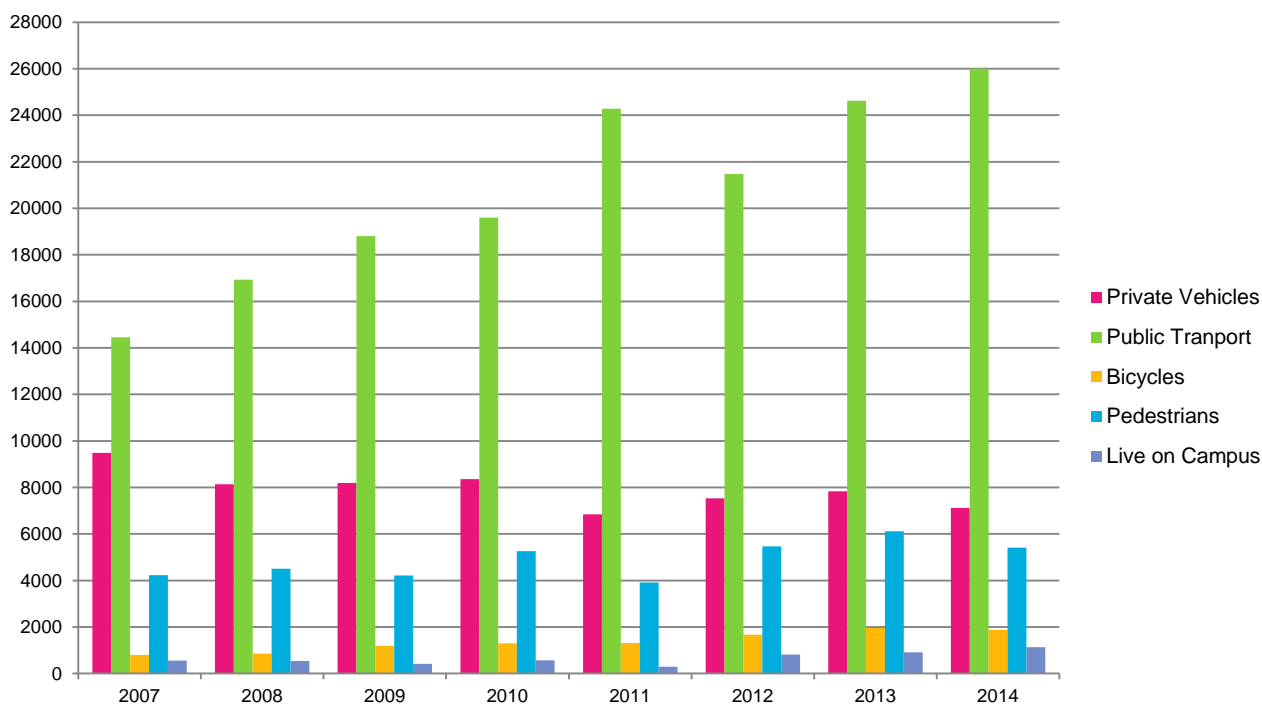


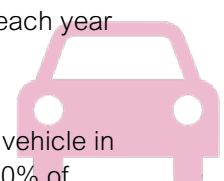
Figure 2. Travel Trends Extrapolated to Campus Population 2007-2014 (Staff and Students on a Typical Semester Day)



Private Vehicles (Car Driver, Car Passenger, Motorbike)

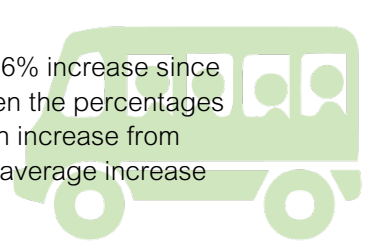
In 2014 19.4% of respondents travelled in private vehicles, a 13% decrease in the overall travel trend for private vehicle usage since 2007. When the percentages were applied to the average daily campus population, the results demonstrated a decrease from 9,500 daily private vehicles users in 2007 to 7,100 in 2014. This equated to an average decrease of 300 private vehicle users each year despite an increase in the total campus population of approximately 14,600 since 2007.

The results also demonstrated that 42.4% of staff and 12% of students travelled by private vehicle in 2014, continuing the decrease in private vehicle users since 2007 when 59% of staff and 30% of students used this method of travel.



Public Transport (Bus, Train, Ferry)

In 2014, a majority of the respondents (60.1%) travelled by public transport, a 10.6% increase since 2007 when this method of travel was used by only 49% of staff and students. When the percentages were applied to the average daily campus population the results demonstrated an increase from 14,450 daily public transport users in 2007 to 26,000 in 2014. This equated to an average increase of 1,445 public transport users each year.

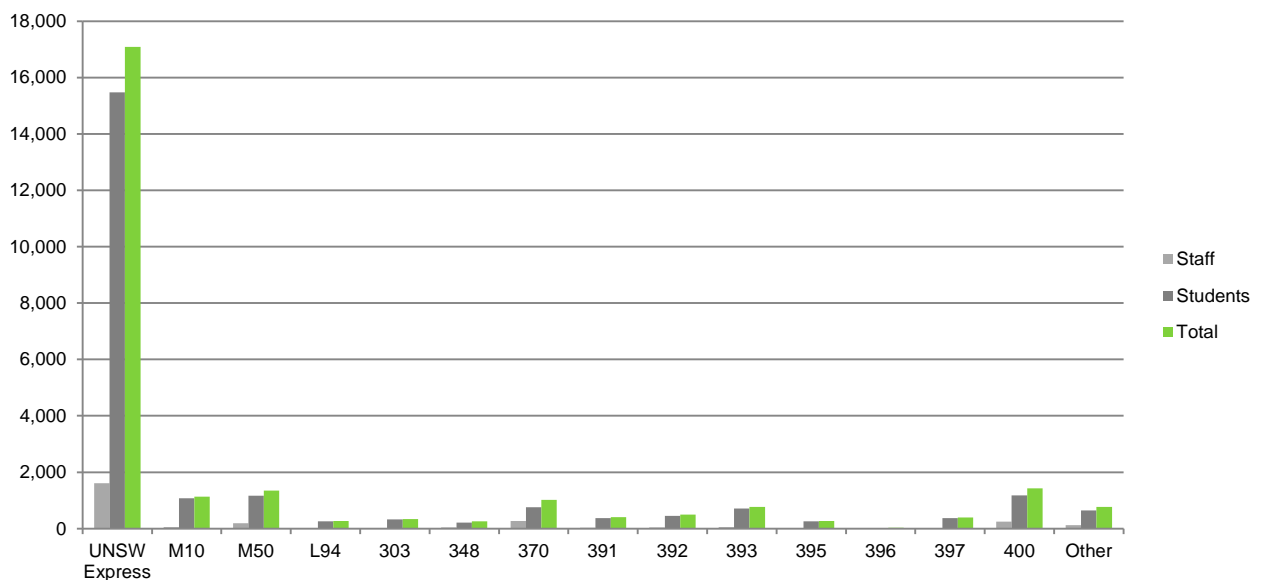


When investigated in more detail, the results demonstrated that 39.4% of staff and 66.8% of students travelled by public transport in 2014, continuing the increase in public transport users since 2007 when 28% of staff and 50% of students used this method of travel.

Question 1a - Which bus service do you usually use to and from the campus?

In 2014, 65.3% of those who use buses to travel to and from the campus used the UNSW express buses services (890, 891, 892 and 895) on a typical semester day. Other bus services that were less used, but still notable (with more than 1,000 daily users) included the 400, 370, M50 and M10 services (Figure 3).

Figure 3. Arrival and Departure by Bus on a Typical Semester Day



Bicycles

Despite being the least popular mode of transportation, bicycle usage continues to gain popularity and demonstrates a positive shift which has more than doubled as a typical mode of transportation since 2007. This gradual positive shift mirrors that recorded for the Sydney CBD, where cycling as a method of travel to work has nearly tripled since 2001.

The percentage of respondents cycling to and from the campus increased from 2.7% in 2007 to 4.8% in 2014. When applied to the average daily campus population, this is a significant increase from 806 daily riders in 2007 to 1,850 daily riders in 2014, becoming more popular amongst staff and post graduate students as a mode of daily commute.



Pedestrians

Walk from surrounding neighbourhoods

Walking to and from the campus has remained steady since 2007 with 13% of all respondents commuting by foot. When applied to the average daily campus population, the results demonstrate that approximately 5,400 staff and students walked to/from the campus in 2014 on a typical semester day.



Live on Campus

The 2014 survey responses show a slight increase (0.9%) in the number of students living on the campus i.e. from 1.9% in 2007 to 2.8% in 2014. However, it is known from other new housing data that the increase in the number of beds on the campus over the last eight years represents a significantly higher figure at 5%. This difference could be due to the lower survey participation rate among students living on the campus as they see no need to participate in a “travel survey”, not having the need to travel to and from the campus each day.

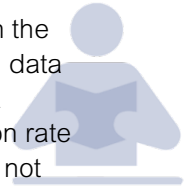


Figure 4 shows the increase in the actual numbers of beds on the campus from 1,335 in 2007 to 3,893 in 2014.

Figure 5 shows the increase in the beds per student ratio in the same period. It demonstrates that despite the significant increase in student enrolments from 32,280 in 2007 to 44,560 in 2014, the number of beds offered per student (i.e. the beds per student ratio) has doubled.

It can therefore be safely assumed that both the increase in the actual numbers of beds available on the campus and the beds per student ratio have contributed to the decrease in use of private vehicles as a method of travel to and from the Kensington campus as demonstrated by the line graph in Figure 1.

Figure 4. Actual Number of Beds 2007 - 2014

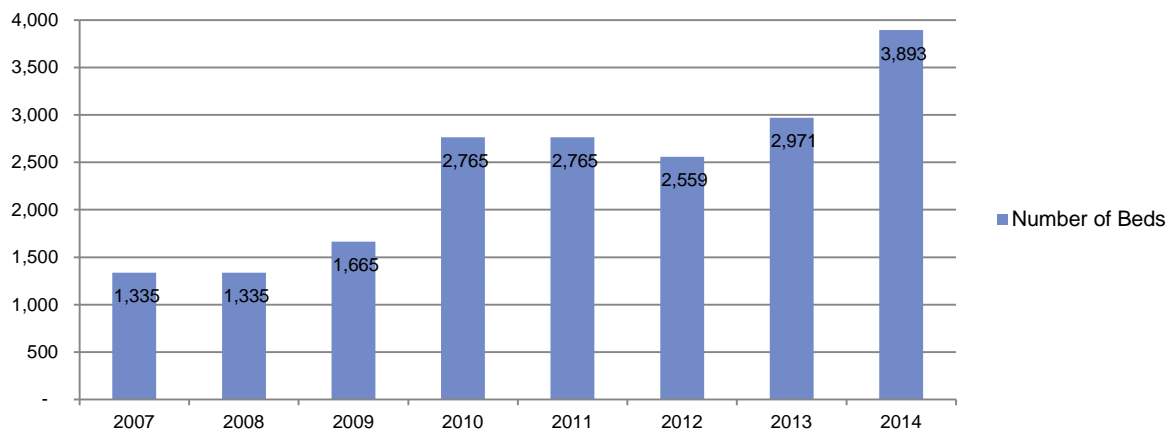
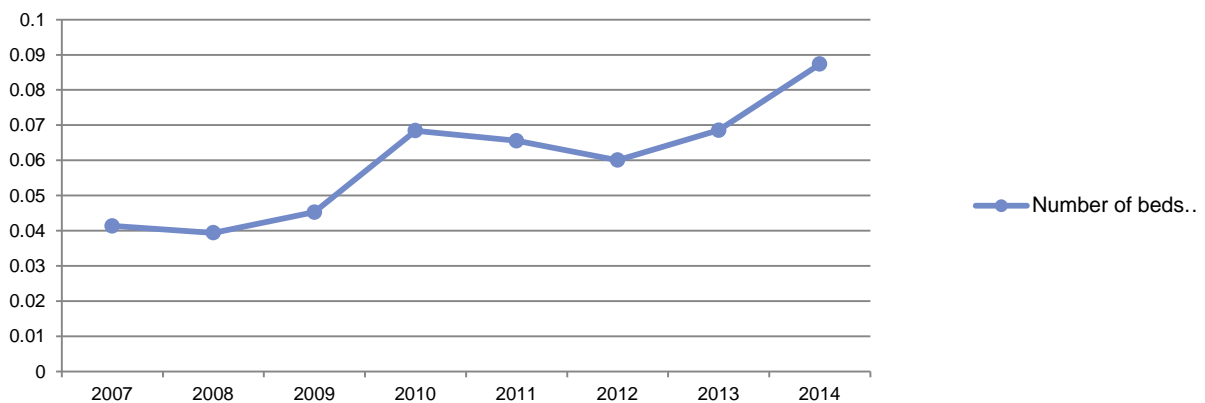


Figure 5. Beds Per Student Ratio, 2007 - 2014



Points of Arrival and Departure on Campus

Q2- Typically, which gate/entrance do you use to arrive/depart the campus?

Understanding the number of staff and students movements at the points of arrival and departure of the campus is quite valuable for campus planning. Since the introduction of the questions in 2013, the results have been used to inform the enhancement of existing retail outlets, the location of new retail outlets, public domain improvements and most significantly to inform the design and location of the future UNSW light rail stops at Anzac Parade and High Street.

Arrival

The University Mall entrance on Anzac Parade and Gates 2, 8 and 9 on High Street continue to be the major arrival points on a typical semester day in 2014. This is a consequence of the drop off locations for the express buses servicing the Kensington campus. Gates 11 and 14 continue to be the major arrival points for those driving to and parking on campus as they facilitate a direct route into the two multi-storey (and largest) car parks on campus.

Figure 6. Point of Arrival and Method of Travel to the Point of Arrival



Departure

University Mall/Anzac parade is the most popular departure point with over 19,400 staff and students departing from this location on a typical semester's day. Gate 9 on High Street is the second most popular departure point with over 7,500 staff and students departing from this location. This is a consequence of the pick-up locations of express buses connecting the campus to central station. It is to be noted that these pickup locations are different to the morning drop of location (Gates 2, 8 and 9).

Figure 7. Point of Departure and Method of Travel from Point of Departure



Parking

Q1d - In which street do you usually find parking?

In 2014, of the respondents that were car drivers, 55.6% parked on the campus while 44.4% parked in local streets. A further breakdown of the results demonstrate that 81% of the staff that drove parked on campus while 75.5% of students who drove parked on the surrounding streets on a typical semester day. These results are comparable with previous years and are a consequence of on-campus parking being largely restricted to staff (at a low parking fee), and the availability of free parking in surrounding streets.

Figure 8. Surrounding Streets on which Drivers Parked



Arrival and Departure Times

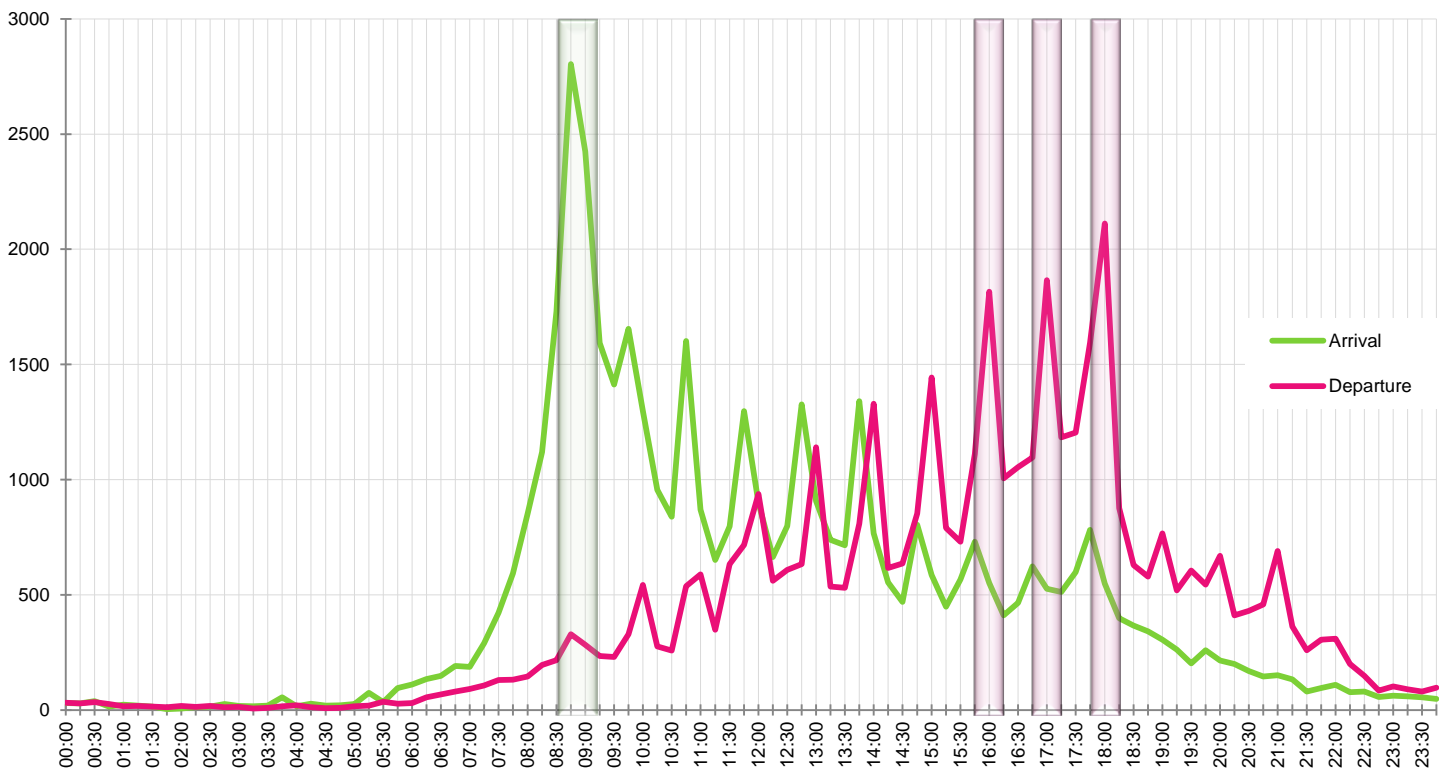
From 2014 Campus Counts

The peak arrival period in 2014 occurred between 8.30 and 9.15am with 15% (6,800) of all staff and students arriving at the campus within these 45 minutes. This is similar to the results of the 2013 Campus Counts where the arrival peak occurred between 8.45 and 9.15am on a typical semester day.

The peak departure is less concentrated and occurs in three half hour periods between 3.45 - 4.15pm, 4.45-5.15pm and 5.45 - 6.15pm. Approximately 22% (9,600) of all staff and students depart the campus between these times on a typical semester day. These results are again largely comparable with the results of the 2013 Campus Counts, but with a new early afternoon peak between 3.45pm 4.15 pm in 2014.

The results also demonstrate the significant numbers of staff and students entering (approx. 1,700) and departing (approx. 4,700) the campus between 8pm and 12am. This can be mainly attributed to timetabling changes in 2014 which increased the number of evening classes, and introduction of late night retail opportunities to complement the existing after hour University gym and library facilities.

Figure 9. Arrival and Departure Times (Staff and Students on a Typical Semester Day)

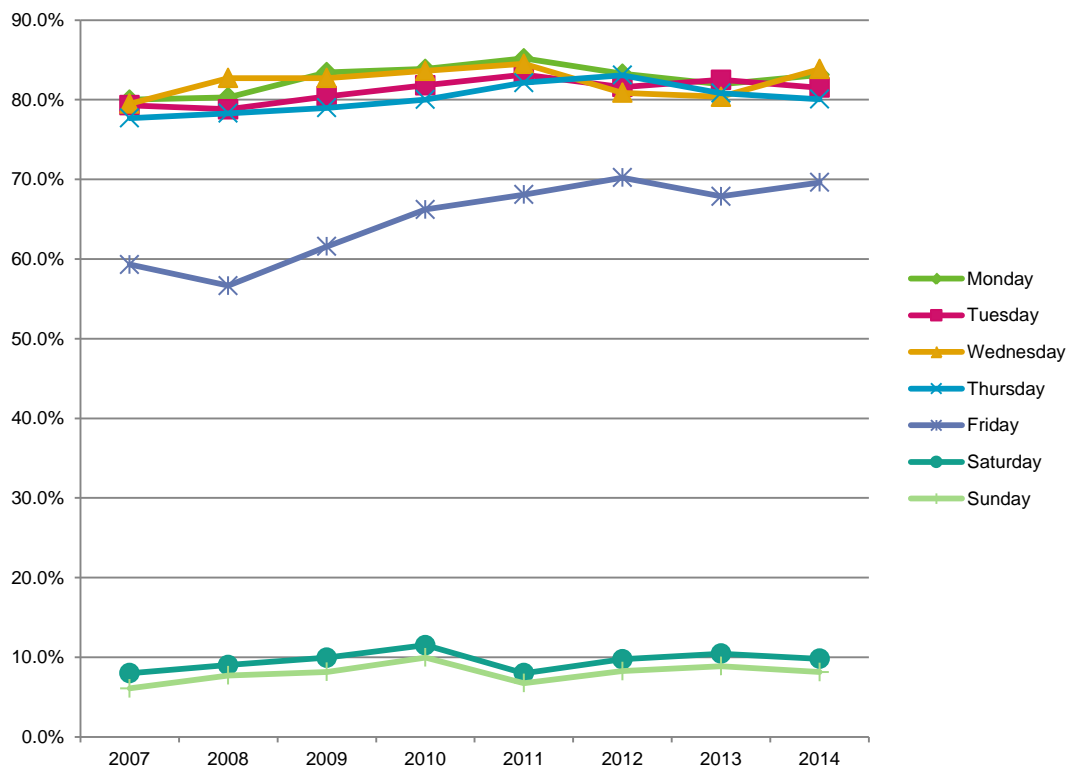


Weekly Campus Attendance

Approximately 82% of all respondents attended the campus each day Monday to Thursday, during a typical semester week. Consistent with previous years, attendance on Friday was significantly lower compared to the rest of the week with only 69.7% of respondents attending the campus. However, a gradual increase in the percentage of people attending the campus on Fridays can be noted when compared with previous years, with less than 60% attendance in 2007. It can be assumed that this is a direct result of the timetabling changes, with more classes being scheduled on Fridays when compared with previous years.

Saturdays and Sundays were consistent previous years, with only 8-10% of respondents attending the campus on these days. However, it should be noted that students are “living” on the campus on Saturdays and Sundays however, they are not “attending classes” which may account for the consistency of the 2014 response with previous years, despite a significant increase in students living on the campus since 2007.

Figure 10. Weekly Campus Attendance (Percentage of Respondents)



Q7 What is the postcode of where you live?

The postcodes of where respondents lived identified how far staff and students travelled to and from the campus. The results showed that approximately 40% of staff and students lived within a 10 km radius of the campus.

However, significant numbers of staff and students travel from suburbs throughout the Sydney metropolitan area, including 2.6% of respondents from the Blue Mountains.

Figures 11 to 15 show where staff and students are travelling from and their method of travel. Figure 16 shows where the international students attending the Kensington campus lived in 2014.

Please note that if necessary, a higher resolution of the maps can be viewed/downloaded from the following link: <https://www.dropbox.com/sh/3jk8ralwgchkeyc/AABPbPeRrpsaUtAU2RgG0so0a?dl=0>

Figure 11. Staff and Students Postcode of Origin in the Sydney Metropolitan Area

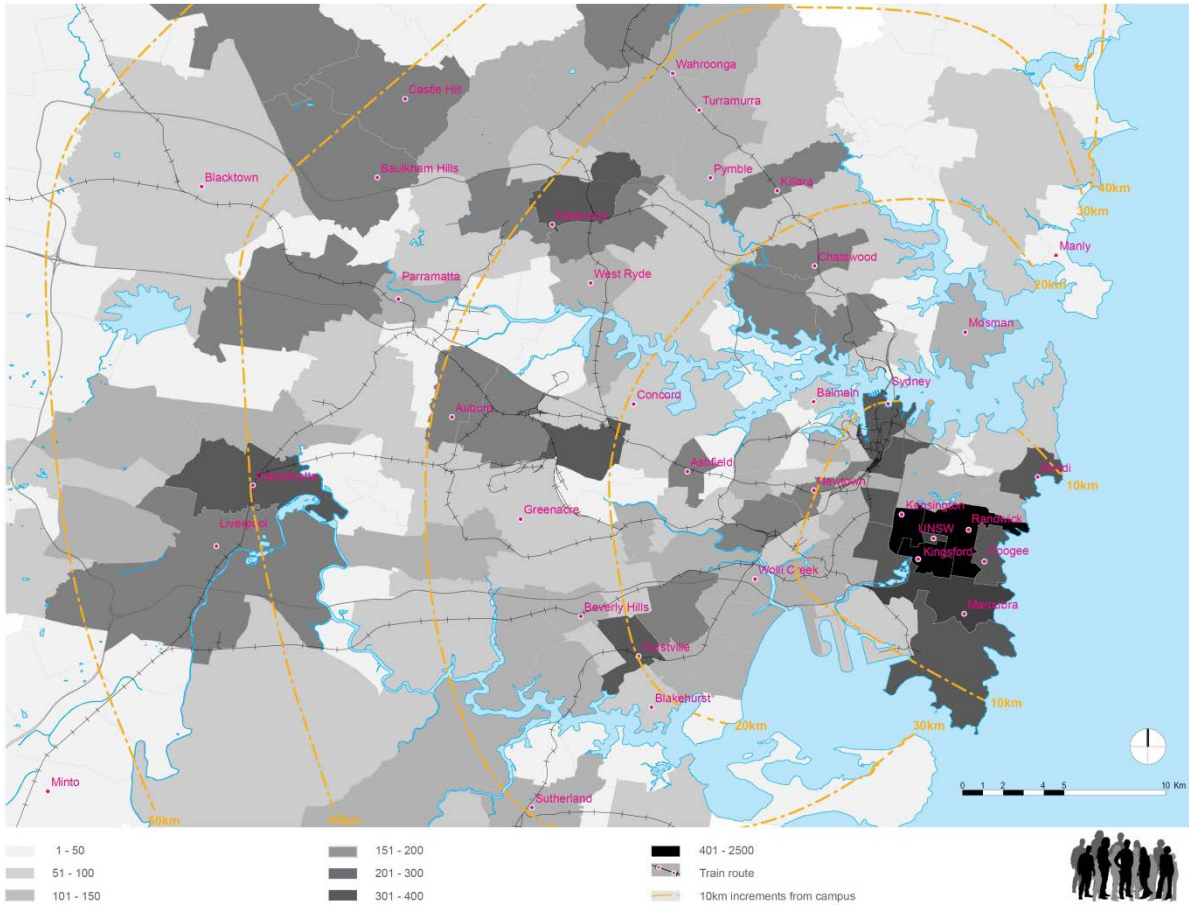


Figure 12. Postcode of Origin of Staff and Students Using Public Transport

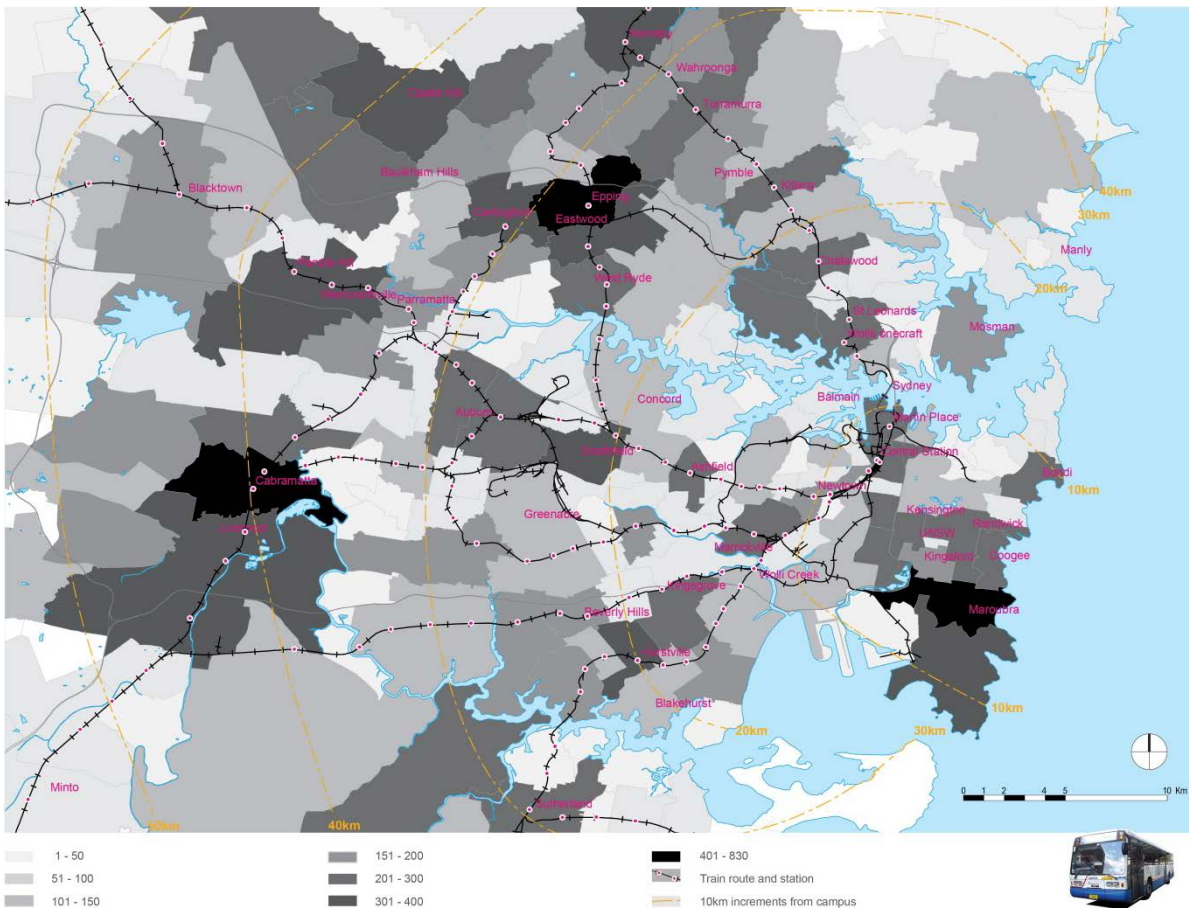


Figure 13. Postcode of Origin of Staff and Students Using Private Vehicles

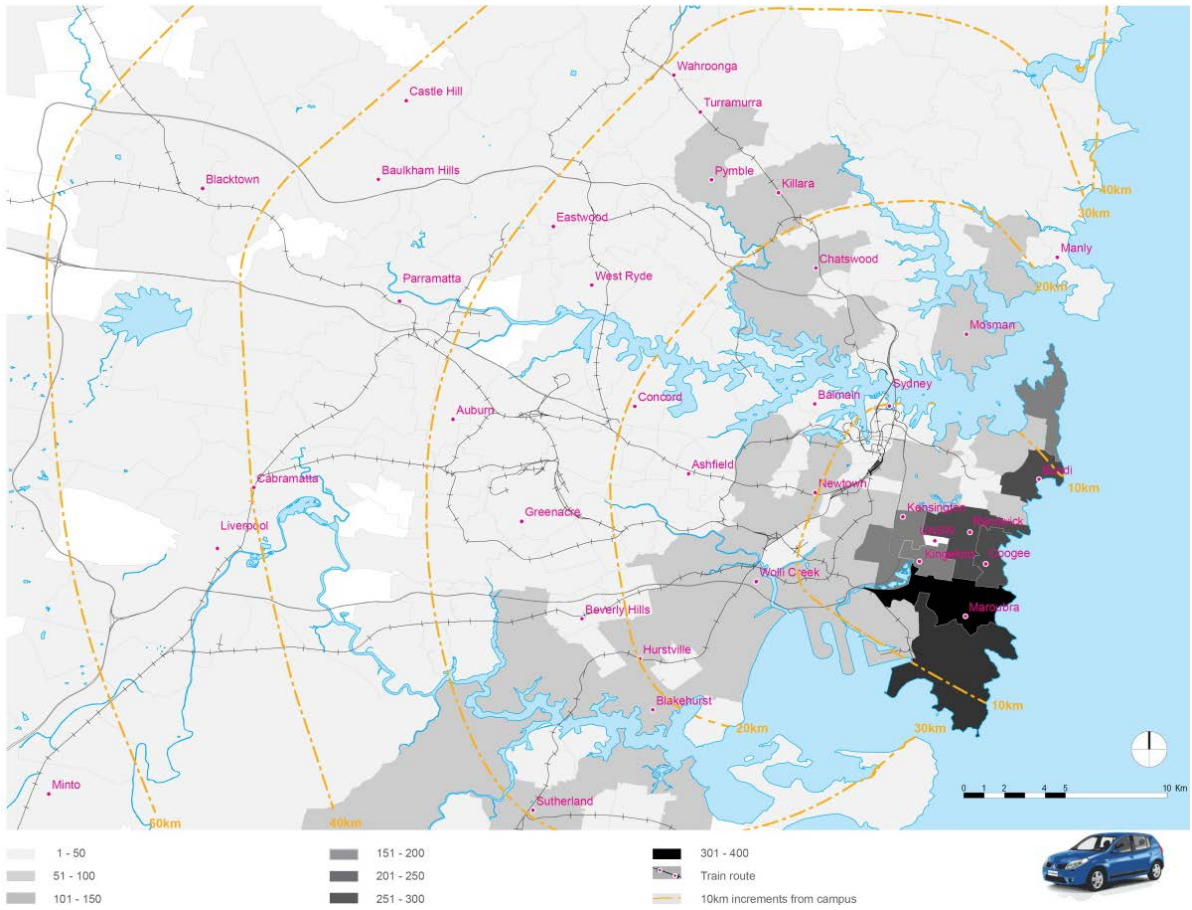


Figure 14. Postcode of Origin of Staff and Students Using Bicycles

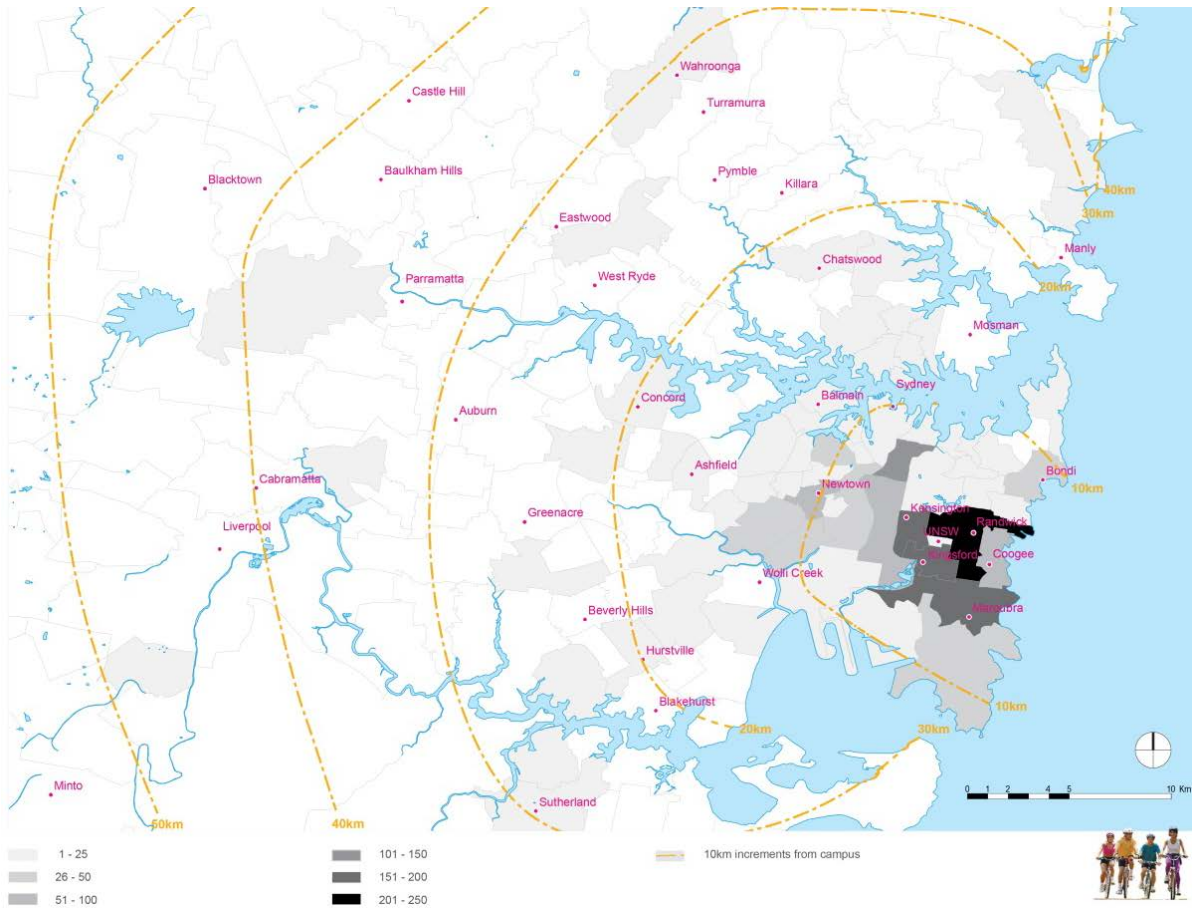


Figure 15. Postcode of Origin of Staff and Students Walking

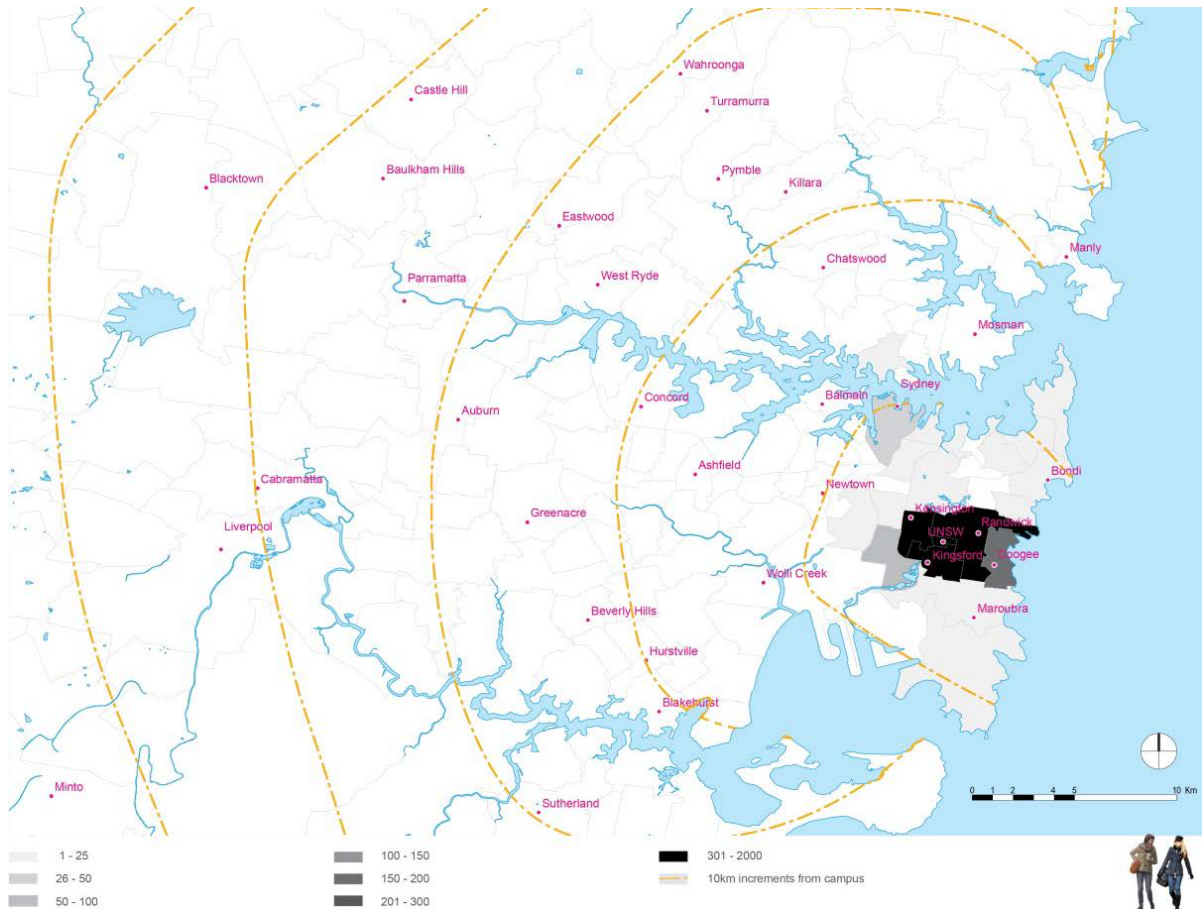


Figure 16. Postcode of where International Students Travel from to Campus

