Introduction

2013 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 seventh year in 2013 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 the highest ever response from more than 2,100 staff and 8,200 students. The response represented 23% of staff and 19.1% of 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 was assumed at 1%. (www.surveymonkey.com/mp/sample-size).

The key 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 public transport access and related public domain improvement works at strategic locations. The 2013 Survey proved especially valuable in supporting the University’s planning for light rail in conjunction with Transport for NSW and other key stakeholders.

Attached to this Analysis Summary are the 2013 Travel Survey results. For each question the results are tabulated; firstly to show the percentages of total staff and students that responded to the question; and secondly to show the actual numbers and percentages of respondents between staff and students. The percentages of total respondents for each question are represented by a chart to more clearly convey the results.

The results from Questions 5 and 6, related to staff and student daily arrival and departure times have been excluded from this analysis summary. Instead, the arrival and departure times collected from the Campus Counts have been used. The Counts provided a more detailed set of results and for a longer span of time. See details of Campus Counts below.
2013 Campus Counts
In 2013 simultaneously with the Travel Survey, the University conducted a count of movements at the campus perimeter during a typical semester’s day.

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 two half days – Monday 8 April from 2.30pm to 9pm and Tuesday 9 April from 7am to 2.30pm.

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 in this summary to analyse arrival and departure times.

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

Glossary

Total campus population – recorded at 51,476 on Monday, 29th April. (9,199 staff and 42,277 student headcounts)
Data source: UNSW Institutional Analysis and Reporting Office

Average daily population – approximated at 41,200 on the assumption that around 80% of the total campus population attend the campus Monday to Thursday during University semesters i.e. a typical semester day.
Data source: UNSW 2013 Travel Survey
Method of Travel (2013 Travel Survey)

Figures 1 and 2 demonstrate the changing trends in the method of travel to and from the campus since 2007. The percentage of respondents in Figure 1 are then applied in Figure 2 to the average daily population to derive the actual numbers of staff and students that travelled to and from the campus on a typical semester day.

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. There are perhaps three main reasons for this:

- The availability of free and unrestricted parking in streets immediately surrounding the campus;
- Increased travel times to and from the campus for users of public transport;
- The availability of staff parking at comparatively low commercial rates; and
- Minimal or no public transport services to suburban routes after 8 pm.

The opportunity for free parking in streets around the campus encourages the use of private cars and creates less of a need to use public transport. UNSW will be unable to achieve targets in sustainable travel modes while substantial parking remains available in local streets. Further discussions are required with Randwick City Council on this issue.

In 2013, the university teaching hours increased significantly with several postgraduate courses finishing after 8 pm. With several bus services also finishing after 8pm, staff and students must then consider whether to use private vehicles or taxis to travel to home.

Figure 1. Travel Trends 2007-2013 (Percentage of Respondents)
In 2013 19% 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 population, the results demonstrated a decrease from 9,500 daily private vehicles users in 2007 to 7,850 in 2013. This equated to an average decrease of 235 private vehicle users each year despite an increase in the total campus population of approximately 14,000 since 2007.

The results also demonstrated that 43.8% of staff and 12.6% of students travelled by private vehicle in 2013, continuing the decrease in private vehicle users since 2007 when 59% of staff and 30% of students used this method of travel.

In 2013 the majority of respondents (59.4%) travelled by public transport, a 10.4% 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 24,616 in 2013. This equated to an average increase of 1,450 public transport users each year.

The results also demonstrated that 36.9% of staff and 65.1% of students travelled by public transport in 2013, continuing the increase in public transport users since 2007 when 28% of staff and 50% of students used this method of travel.
**Buses only**

A new question was introduced to the 2013 Travel Survey that asked those that travelled to and from the campus by public transport, which bus service were they used. A large majority (64.4%) responded that they used the UNSW express buses services (890, 891, 892 and 895). Other bus services that were less used, but still notable (3-6%) included the 400, 370, M50 and M10.

![Figure 3. Arrival and Departure by Bus (Percentage of Respondents)](image)

**Bicycles**

The percentage of respondents cycling to and from the campus increased from 2.7% in 2007 to 4.7% in 2013, demonstrating a continuing upward trend despite coming from a low base.

**Pedestrians (Walk to or Live on Campus)**

The percentage of respondents walking to and from, or living on the campus has remained steady over the last six years at around 17%. When this percentage was applied to the average daily campus population it demonstrated that there were approximately 7,000 staff and students that either walked to, or lived on, the campus on a typical semester day in 2013. Although this equated to an average increase of 320 staff and students walking to campus each year, the largest increases have taken place over the last five years with the opening on the campus of New College Village in 2009 (315 beds), UNSW Village in 2010 (1,100 beds) and University Terraces in 2013 (412 beds).

The number of students walking to, or living on the campus is expected to increase in the next few years with completion of the Kensington Colleges redevelopment, together with a steady increase in the provision of private sector student housing and other high density dwellings within the nearby suburbs of Randwick, Kensington and Kingsford.
Arrival and Departure Points on Campus (2013 Travel Survey)

Two new questions were introduced to the 2013 Travel Survey to determine which gate or entrance staff and students arrived to and departed from, the campus. These were to assist in understanding pedestrian movements for the planning of campus light rail stops and for campus planning generally.

Arrival

The University Mall/Anzac Parade, Gates 2, 8, 9, 11 and 14 continue to be the major arrival points in 2013 with 36,000 staff and students arriving at these locations on a typical semester day.

Gate 2, High street is the most popular arrival point with close to 9,000 staff and students arriving at this gate.

Figure 4. Arrival Points
Departure
The University Mall/Anzac Parade, Gates 9, 11 and 14 continue to be the major departure points in 2013 with close to 33,000 staff and students departing at these locations on a typical semester day.

University Mall/Anzac parade is the most popular departure point with over 17,000 staff and students departing from this location on a typical semester day. Gate 9, High Street, is the second most popular departure point with just over 8,000 staff and students departing from this gate on a typical semester day.

Figure 5. Departure Points
Parking (2013 Travel Survey)
In 2013, of the respondents that were car drivers 54.7% parked on the campus while 45.3% parked in local streets. For the actual numbers of staff and students, the results showed that most staff parked on the campus (86.5%) while most students parked in local streets (76.1%) on a typical semester day. These results are comparable with previous years and are a consequence of on-campus parking being restricted to staff or with a parking fee, and the availability of free parking in surrounding streets.

Figure 6. Surrounding streets on which drivers parked
**Arrival and Departure Times** (2013 Campus Counts)

The peak arrival period in 2013 occurred between 8.45 am and 9.15 am with 15% (6,200) of all staff and students arriving at the campus within these 30 minutes. This is consistent with the Travel Survey results from previous years where the arrival peak occurred between 8 am and 9 am on a typical semester day.

The peak departure is less concentrated and occurs in two periods between 4.45 and 5.30 pm and between 6.00 and 6.30 pm. Approximately 19% (7,900) of all staff and students depart the campus at these times on a typical semester day. These results are again largely comparable with the Travel Survey results of previous years, but with a slight increase in people departing between 6pm and 7 pm in 2013.

The results also demonstrate the significant numbers of staff and students departing the campus after 8 pm. This can be mainly attributed to timetabling changes in 2013 that increased the number of evening classes.

**Figure 7. Arrival and Departure Times (Staff and Students on a Typical Semester Day)**
Weekly Campus Attendance (2013 Travel Survey)

81% of respondents attended the campus on a typical semester day. 68% of respondents attended on Fridays, consistent with previous years. The lower attendance on Fridays is mainly due to less classes being timetabled.

Saturdays and Sundays were consistent previous years with only 8-10% of respondents attending the campus on these days.

![Weekly Campus Attendance](image)

Postcode of Origin (2013 Travel Survey)

The postcodes of where respondents lived identified how far staff and students travelled to and from the campus. The results showed that approximately 49% of staff and students live 10 km or less from the campus.

Significant numbers of staff and students travel from suburbs throughout the Sydney metropolitan area, including 2.5% of respondents from suburbs in the Blue Mountains.
Figure 9. Staff and Students Postcode of Origin in the Sydney Metropolitan Area

Figure 10. Postcode of Origin of Staff and Students Using Public Transport
Figure 11. Postcode of Origin of Staff and Students Using Private Vehicles