

Moving Forward: From Travel Plan To Transport Policy?

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EXECUTIVE SUMMARY

The University of Plymouth's Travel Plan dates back to 2005 and was designed to reduce car-based commuting to the main Plymouth campus. It is well regarded externally and this reputation is well deserved: the Plan has consistently met or exceeded targets to increase non-car commuting journeys among staff, indicating its efficient management within the Department of Learning Facilities.

At the same time, it is right periodically to reflect on the scope and ambition of the Travel Plan in order to evaluate its performance against best practice. This is especially important given the University of Plymouth's standing as a leader in sustainability research and practice. In this context we set out in this report:

- To investigate the Travel Plan, its provenance, content, scope, sway and impact on behaviour
- To examine how the Travel Plan compares with its counterparts in other universities in the United Kingdom
- To identify noteworthy and innovative travel plan developments at other UK universities, as well as at other award-winning organisations, that might be helpfully incorporated in the Plymouth Travel Plan
- To explore levels of awareness and perceptions of the Plan among the University's staff and students, and the extent to which it influences their travel behaviour
- To make recommendations for extending the content, scope and sway of the Travel Plan.

We found that while the Plan is performing extremely well in its own terms, it lacks scope and ambition, falling some way short of best practice. There appears to be little in the way of integration, not just in transport terms but also between different functional areas of the university. Awareness of the document appears low among staff, and students are not included in its remit. As such, in redeveloping its Travel Plan to sector-leading standard:

- The University of Plymouth should adopt a wide-ranging Travel Plan and Transport Policy, pertaining to all aspects of the university's travel and transport activities
- The Policy and Plan need to have integration at their heart
- The integrated Policy and Plan should be underpinned by a robust analysis of the current state of play and potential policy options
- The Policy and Plan need to be actively and enthusiastically supported at institutional level to promoting staff and student buy-in.

It is clear that the development of an integrated Transport Policy and Travel Plan offer significant opportunities within the broader context of an enterprise culture.

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1.0 Introduction

Transport brings significant benefits to all in the UK, but current trends are increasingly recognised as unsustainable. The sector is a major contributor to environmental degradation - in 2005 transport accounted for approximately 28% of UK annual carbon dioxide emissions, the second largest contributor after power generation¹ - and also brings economic and social problems such as congestion, accidents, severance of habitats and communities, and exclusion for those without access to a car.

One UK response to the unsustainable nature of transport has been to introduce a range of initiatives to reduce single occupancy car use, a key element being the promotion of travel plans. Soon after coming to power in 1997, the Labour government published *A New Deal for Transport*², outlining 'hard' and 'soft' policy measures for reducing car dependency. 'Hard' measures are those involving regulatory compulsion, pricing and legal restrictions to effect behavioural change whereas 'soft' policy measures are intended to promote voluntary shifts in behaviour³. One 'soft' measure proposed in *A New Deal for Transport* was the design and implementation of travel plans. A travel plan can be broadly defined as a package of measures implemented by individual organisations aimed at promoting greener, cleaner travel choices and reducing reliance on the car⁴.

Travel plans have come to be seen by companies and organisations as a means of meeting the wider sustainability targets of government⁵. Perhaps especially on account of the advocacy of sustainability by the Higher Education Funding Council (HEFCE)⁶, universities and higher education institutions recognise the importance of embedding sustainability in management and planning as well as in teaching, learning and research. Latterly, there has also been specific governmental focus on universities reducing carbon emissions, John Denham, Secretary of State for Innovation, Universities and Skills, calling on universities to

¹ Anable, J & Shaw, J. (2007). Priorities, processes and (time)scales: the delivery of emissions reductions in the UK transport sector. *Area*, 39, 443-457. See also: Baggott, S., Davidson, I, Dore, C., Goodwin, J., Murrels, T., Rose, M., Watterson, J. & B. Underwood. (2003). *UL Greenhouse gas Inventory, 1990-2001: Annual Report for submission under the Framework Convention on Climate Change*. Oxford: AEA Technology.

² DTER. (1998). *A New Deal for Transport: Better for Everyone*. London: Department of the Environment, Transport and Regions/HMSO.

³ Goodwin, P. (2005). *Soft Transport Planning Measures, and how to monitor their effects*. 39th IAPSC Conference, 28.11.2005, Birmingham.

⁴ Travelwise. (2000). *A travel plan resource pack for employers*. Transport Energy Best Practice programme, AEA Technology. www.travelwise.co.uk/dft_travel_plan_resource_pack [Accessed 9 January 2008]

⁵ Roby, H (2009) Forthcoming research to be published in the *Journal of Transport Geography*.

⁶ See, for instance, HEFCE. (2005). *Sustainable Development in Higher Education: Consultation on a support strategy and action plan*. London: HEFCE (January); HEFCE. (2005). *Sustainable Development in Higher Education: Strategic Statement and Action Plan*. London: HEFCE (July).

do more in this regard in his 2008 annual letter to HEFCE⁷. Against this backcloth, many universities have developed travel plans.

The University of Plymouth promotes a Travel Plan. This *Occasional Paper* has a five-fold purpose:

- To investigate the Travel Plan, its provenance, content, scope, and sway
- To examine how the Travel Plan compares with its counterparts in other universities in the United Kingdom
- To identify noteworthy and innovative travel plan developments at other UK universities, as well as at other award-winning organisations, that might be helpfully incorporated in the Plymouth Travel Plan
- To explore the extent to which staff and students of Plymouth University are aware of the Travel Plan and, if aware, to identify their perceptions of the Plan and whether the Plan influences their travel behaviours
- To make recommendations for extending the content, scope and sway of the Travel Plan and, hence, for heightening its impact.

Prior to addressing each purpose in successive sections, there follows a brief overview of relevant literature.

2.0 A Methodological Note

In investigating the context, genesis and working of the University of Plymouth Travel Plan, a search was made of documents on the university intranet or portal, texts being found under the 'Communities' section of the portal. A wider literature search, providing material for the Literature Review (section 3.0), also threw up documents that honed our understanding of why the Travel Plan materialised when it did and with the scope it has. Our search for a formal university Travel Plan proved quixotic. Semi-structured interviews with those responsible for or somehow connected with the operation of the Travel Plan, in particular two interviews with Sarah Haywood, Security Service Manager and Travel Plan Coordinator⁸, were very important in filling in gaps in the documentation and in enlivening understandings. Other than Sarah, interviews or email conversations were conducted with the following University of Plymouth personnel: Brian Barlow, Central Services Manager, University of Plymouth Students Union (UPSU); Roger Creagh-Osborne, Technical Manager, School of Psychology; Steve Gill, Contracts Manager (Procurement Unit), Secretariat; Darren Jones, President, UPSU; Anita Jellings, Dean of Students; Paul Lumley, Energy Efficiency Engineer, Department of Learning Facilities⁹. All those with

⁷ EAUC. (2008). *Transport*. Environmental Association for Universities and Colleges. <http://www.eauc.org.uk/transport> [Accessed 3 March 2008]

⁸ Interviews dated 19 June and 7 October 2008.

⁹ Interviews or email conversations, respectively, dated 29 September, 3 October, 5 September, 17 October, 2 November and 17 October 2008.

whom interviews or conversations took place intimated their willingness to be identified in this paper.

The comparative study of UK university travel plans was based on the list of 132 higher education institutions provided by UniversitiesUK¹⁰. The website of each university was explored to find a travel plan, or similar. If a travel plan was not found, the institution in question was contacted by email and/or telephone to find if they had a plan not accessible online. Department for Transport guidelines regarding aspects that a travel plan might address were used to create a matrix of forty-one possible travel plan features set against sixty-four universities that, as of March 2008, had a locatable and active travel plan.

To identify notable travel plan initiatives at other universities that Plymouth might consider adopting semi-structured interviews (see *Appendix 1*) or email conversations were conducted with the following, all of whom agreed to be named in this paper: James Brown, Transport & Travel Manager, University of Derby; Clair Challen, Travel Plan Coordinator, University of Central Lancashire; Graham Hine, Transport Manager, University of Warwick; Chris Wadey, Transport Manager, University of Sussex; Harriet Waters, Environmental Coordinator, Oxford Brookes University¹¹. All the five universities so represented rank among the best institutions in the performance scale in terms of measures already implemented (as against planned or intended). Full travel plans and supporting documentation were also collected from each of these universities as well as from six other high-ranking universities. Additionally, documentation was collected from three public sector organisations that have received national awards for fleet management and/or green travel within the last three years.

To explore levels of awareness and perceptions of the University of Plymouth Travel Plan, and consequent influences on travel behaviour, a questionnaire was distributed (see *Appendix 2*), data analysis being enriched by the interviews conducted with University of Plymouth personnel (see above). The questionnaire was distributed online to staff and students through the good offices of five of six faculties approached (see pp.30-31) and via the Dean of Students to all students (with an accompanying announcement on the student portal). The questionnaire was distributed on 14 May 2008 and a reminder sent out on 2 June 2008, the cut-off date for responses being 16 June 2008. The response rate to the questionnaire can only be estimated due to the means by which the questionnaire was distributed but was potentially sent to 35,000 people (32,000 students, 3,000 staff). A total of 1,352 responses was obtained indicating a low response rate of between 3.9% and 8%, explainable, perhaps, in that this was the summer examination period and a busy staff marking period, and/or by the

¹⁰ UniversitiesUK. (2008). *UUK member directory*. <http://www.universitiesuk.ac.uk>. [Accessed 9 January 2008.]

¹¹ Interviews or email conversations conducted, respectively, on 17 October, 17 September, 29 August and (last two individuals) 3 September 2008.

tendency for online response rates to be low¹², and/or by lack of interest in the topic of sustainable transport.

To establish the geographical distribution of university staff and students, and to gain a better understanding of likely commuting options, the postcodes of staff and students were plotted on a map of the South West using ArcGIS¹³. Given the limited availability of suitable postcode maps only the sector level (up to the first character of the second part of the postcode, e.g. PL1 9 or PL21 0) of each postcode was used in this analysis. Staff data used were for all staff employed on 1 September 2008 and listed as based at the Plymouth campus (this includes staff that, prior to summer 2008, were based at the Exmouth Campus). Student data are comprised of all Plymouth campus students enrolled on the Plymouth student database (UNIT-e) on 15 September 2008. Total numbers of staff and students plotted were, respectively, 2,897 and 12,803.

Recommendations emerged out of research team immersion in the data and subsequent collective deliberations.

3.0 A Brief Review of the Literature

In the UK total volume of road traffic increased by 82% between 1980 and 2005. Leading the growth was the increase in car traffic from 215 to 397 billion vehicle kilometres, an overall 85% increase since 1980¹⁴. Occupancy rates of cars in the UK have been in decline in recent years, i.e. fewer and fewer travellers per car, with a figure of 1.6 persons per car recorded for 2005 car journeys¹⁵.

Work related car travel has also increased and not least because of dispersal of work locations¹⁶. Employee journeys contribute a significant share of total car use, some 35-50% of all kilometres travelled by car being for commuting and business trips¹⁷. Travel to and from work is therefore an important phenomenon to target in terms of greenhouse gas emissions reductions but also in addressing many other negative impacts of the increased volume of road traffic such as

¹² Hoggart, K., Lees, L. & A. Davies. (2002). *Researching Human Geography*. London: Arnold.

¹³ ArcGIS is an integrated collection of GIS software products, providing a standards-based platform for spatial analysis, data management, and mapping.

¹⁴ Department for Transport. (2006). *Transport Trends: 2006 Edition*. London: Department for Transport/HMSO.

¹⁵ EEA. (2006). *Transport and Environment: facing a dilemma. TERM 2005: indicators tracking transport and environment in the European Union*. Copenhagen: European Environment Agency.

¹⁶ This stands in interesting contrast to the University of Plymouth experience, which is one of consolidation.

¹⁷ Black, W. & P. Nijkamp. (2002). *Social Change and Sustainable Transport*. Indiana: Indiana University Press.

traffic congestion, deterioration of air quality, noise pollution, landscape destruction and wasteful use of finite resources¹⁸.

As climate change has risen to prominence as the most pressing global environmental issue, there has been an increasing focus on the part transport can play in the reduction of greenhouse gas emissions. The absolute and relative share of emissions attributable to transport is expanding in all regions of the world as transport volumes increase¹⁹. In the UK passenger car transport accounts for 11.7% of total CO₂ emissions and is the only economic sector witnessing year on year continually increasing emissions, with levels in 2005 actually higher than the Kyoto baseline of 1990²⁰. Increases in fuel efficiency notwithstanding, the European Community projection is that total road transport emissions will increase within the Community by 10.3% between 2005 and 2015²¹.

In response to current trends and future projections, the concept of sustainable transport has become the focus of much academic and governmental attention. Common themes across definitions²² suggests that the concept is more or less used to describe a transport system that seeks to minimise emissions of CO₂ and pollutants while maintaining and promoting transport-related social inclusion and economic development. It has been suggested that there are three types of policy for reducing energy use and emissions from transport, so contributing to a sustainable transport system: policies promoting technical advances for energy efficiency; policies targeting switches in mode of transport; policies attempting to reduce distances travelled²³.

Current UK policy, it has also been suggested, relies heavily on the promotion of technical advances²⁴. An emerging academic consensus doubts whether this reliance can ever provide the 'silver bullet' for the mitigation of climate change and energy security threats presented by transport²⁵. A complementary approach lies in also encouraging behavioural change, an approach taken up in *A New Deal for Transport* (see p.1) and combining the promotion of mixed and

¹⁸ Kates, R., Parris, T. & A. Leiserowitz. (2005). What is Sustainable Development? Goals, indicators, values and practice. *Environment: Science and Policy for Sustainable Development*, 47(3), 8-21.

¹⁹ Anable, J. & Shaw, J. (2007). Priorities, policies and (time) scales: the delivery of emissions reductions in the UK transport sector. *Area*, 39(4). 443-457.

²⁰ *Ibid.*

²¹ EEA. (2006). *Transport and Environment: facing a dilemma. TERM 2005: indicators tracking transport and environment in the European Union*. Copenhagen: European Environment Agency.

²² Litman, T. (2003). Issues in Sustainable Transport. *International Journal of Global Environmental Issues*, 6(4), 331-47; OECD. (2001).

²³ Anable & Shaw, *op.cit.*

²⁴ *Ibid.*

²⁵ Stradling, S. & Anable, J. (2007). Individual Travel Patterns. In: Knowles, R., Shaw, J., & I. Docherty. Eds. *Transport Geographies: Mobilities, Flows and Spaces*. Oxford: Blackwell. 179-195.

integrated transport alongside measures to reduce reliance on the car. This mixture of 'hard' and 'soft' policy measures is now widely accepted as the best means of achieving a sustainable transport system. Travel plans, as a 'soft' policy approach, form an increasingly important part of the mix.

According to one commentator, a travel plan is 'a strategy for an organisation to reduce its transportation impacts and to influence the travel behaviour of its employees, suppliers, visitors and customers'²⁶. The predominating motivation is to reduce the number and/or the length of single occupancy car journeys by promoting alternative, more sustainable transport modes. As such, travel plans are characterised by a cocktail of incentives and disincentives and need to be tailor made to the unique characteristics and location of the organisation in question²⁷. While there are travel plan guidance documents in abundance, especially from the Department for Transport²⁸, there is no one template for a travel plan²⁹.

Department for Transport guidance points to five areas that a travel plan can address: commuter journeys, business travel, visitors' travel, deliveries and contractor travel, fleet vehicles. 'A well-designed travel plan,' the Department suggests, 'can typically cut 15% of commuter car use and may amount to over a million less (*sic.*) miles for just a single company' while the combined savings from travel plans across the UK could amount to millions of tonnes of carbon dioxide per annum³⁰. Beyond the climate change benefits proponents advocate, claims are made for local environmental and social benefits such as reductions in car parking, increased accessibility and reduced congestion, and health and other benefits allied to reduced stress as well as benefits to corporate image and institutional sense of well-being³¹. Travel plans can cover a variety of aspects from promoting public transport, encouraging walking and cycling, car sharing schemes, parking restrictions and charges³², through to travel minimisation through flexi-time schemes, home working and virtual attendance at meetings and conferences through videoconferencing³³.

²⁶ Rye, T. (2002). Travel plans: do they work? *Transport Policy*, 9, 288.

²⁷ Travelwise, *op.cit.*

²⁸ Department for Transport. (2006). *A Guide on How to Set Up and Run Travel Plan Networks*. London: Department for Transport/HMSO. Department for Transport. (2006). *A Guide on Travel Plans for Developers*. London: Department for Transport/HMSO. Department for Transport. (2007). *The Essential Guide to Travel Planning*. London: Department for Transport/HMSO.

²⁹ Buckland, H., Brookes, F., Johnston, A., & E. White. (2003). *Travel Planning for Sustainability: Guidance for higher education institutions*. London: Higher Education Partnership for Sustainability/Forum for the Future.

³⁰ Department for Transport. (2007). *The Essential Guide to Travel Planning*. London: Department for Transport/HMSO, 2.

³¹ *Ibid.* Buckland et al., *op.cit.*, Rye, *op.cit.*, Travelwise, *op.cit.*

³² Rye, *op.cit.*

³³ Travelwise, *op.cit.*

The emerging canon of academic literature on travel plans, while generally accepting that they can contribute to modal shifts in transport, is more cautious in several regards. Travel, one study says, is not a core concern for most employees, and instruments currently used, relying upon voluntary uptake, fail to provide sufficient incentive³⁴. Another writes of lack of awareness and understanding of the term 'green commuter plan' among employers and employees and the concomitant failure to engage them in a pooling of views³⁵, a conclusion tallying with a further finding concerning the generally poor marketing of travel plans³⁶. The importance of organically linking university travel plans to the broader suite of sustainability related institutional policies and practices is raised in a US study³⁷.

It appears to be the case with many UK universities that university travel plans preceded a more thoroughgoing commitment on the part of the institution to the sustainability agenda. Travel plans were, by and large, spawned following Department for Transport initiatives and the issuance of Planning Policy Guidance Note PPG13, active from March 2001, and advising local planning authorities to seek travel plans in respect of any development proposal considered as having significant transport implications.³⁸ In other words, new build on campus required a travel plan. While the green agenda is retrospectively applied to travel plan provenance by universities, the motivation to implement a plan was to satisfy planning requirements. Provenance aside, a critical issue concerns whether universities have subsequently integrated their travel plan within their larger sustainability canvas – as in other sectors – or whether the plans remain largely disconnected and disassociated from the larger policy and practice picture.

³⁴ Enoch, M., & Potter, S. (2003). Encouraging the commercial sector to help employees to change their travel behaviour. *Transport Policy*, 10, 51-8.

³⁵ Coleman, C. (2000). Green commuter plans and the small employer: an investigation into attitudes and policy of the small employer towards staff travel and green commuter plans. *Transport Policy*, 7, 139-48.

³⁶ Rye, op.cit.

³⁷ Toor, W., & Havlick, S., (2004). *Transportation and Sustainable Campus Communities: issues, examples and solutions*. Washington (USA): Island Press.

³⁸ Department of Communities and Local Government. (2001). *Planning Policy Guidance 13*. <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155634.pdf>. Highways Agency. (2008). Tackling congestion by influencing travel behaviour: Spatial planning and sustainable transport. <http://www.highways.gov.uk/knowledge/9573.aspx>. [Accessed 24 August 2008.] DTER. (1998). *A New Deal for Transport: Better for Everyone*. London: Department of the Environment, Transport and regions/HMSO. Department for Transport. (2006). *A Guide on Travel Plans for Developers*. London: Department for Transport/HMSO.

4.0 The University of Plymouth Travel Plan

When the University of Plymouth initiated development of a Travel Plan, the decision was, as with many other universities planning new build³⁹, primarily informed by the need to adhere to planning requirements rather than environmental concern. In 2003/4, the university developed planning applications for a new Library and new Nursery. Plymouth City Council, which had incorporated Policy Guidance Note PPG13 into its own statutory planning requirements, stipulated that a travel plan had to be put in place prior to the occupancy of each building.

While elements of a travel plan were already in operation, and encapsulated in a widely available leaflet, anything approximating to a formal travel plan document did not exist prior to early 2005 when the then Deputy Director of Learning Facilities commissioned a local engineering consultancy group, Jubb Consulting Engineers, to prepare a plan. The consultants' plan, dated February 2005, was intended to satisfy travel plan requirements for the two buildings under construction as well as 'any similar planning conditions that may be imposed relating to future development proposals'⁴⁰.

Three years on, the work of those operating the Travel Plan appears to be informed by the Jubb consultancy report, a university Travel Plan survey of 2007 (see below) and pages on the portal. These three documents taken together constitute the working Travel Plan, and are summarized in a short leaflet.

The consultancy document lays down five policy objectives:

TP1 – To reduce car dependency and usage associated with commuting and student travel through the application of demand management measures and the promotion and encouragement of the more sustainable modes of walking, cycling and public transport

TP2 – To manage the travel demands associated with the educational, visitor and servicing activities of the Campus, maximizing sustainability and reducing the need to travel without detriment to operational efficiency

TP3 – To deliver a safe and highly accessible Campus where pedestrians are afforded the highest priority

³⁹ Interview with Sarah Haywood, Security Services Manager, University of Plymouth. Both Harriet Waters, Environmental Coordinator, Oxford Brookes University, and Chris Wadey, Transport Manager, University of Sussex, identified obtaining planning permissions as a key motivation for the introduction of a travel plan in their interviews. As Harriet Waters, puts it: 'The main driver is planning'.

⁴⁰ Jubb Consulting Engineers Ltd. (2005). *University of Plymouth Travel Plan for the Main Campus at Drake Circus Plymouth*. Plymouth: Judd Consulting, 2. A submission to the local planning authority by a consultant acting as agent on behalf of the university is permissible under PPG13, i.e. 'under their implied authority as agent acting on behalf of their principal' (personal email communication, William Walton, Aberdeen University, 24 November 2008).

TP4 – To work with Plymouth City Council, the Public Transport operators and other Partners towards delivering a highly accessible and travel sustainable Campus

TP5 – To monitor, evaluate and review the progress on the development, implementation and delivery of the Travel Plan ⁴¹.

A report, dated January 2007, titled *University Travel Plan*, and available on the university portal⁴² translates the above policy objectives into ‘indicators and targets’ for the Travel Plan. The report, taken together with the information on the portal⁴³, enables the scope of the Plan to be determined. It is essentially about:

- *Parking management and reduction of vehicles entering campus*, the university being ‘committed to discouraging the use of private cars’ while ‘continuing to permit limited car parking on campus for staff’ with at least one year’s continuous service and not living in the city/central zone, the system operating through the issuance of annual permits following a lottery with spaces paid for by salary deduction;
- *Bicycle travel to campus*, i.e. increasing the number of cycle journeys in line with or above Plymouth City Council’s local transport plan targets; the university providing covered and uncovered cycle stands and (limited) shower and locker facilities;
- *Encouraging travel to and from campus by public transport*, the university having an agreement with local bus companies that makes a Green Travel Pass available at an attractive rate through discounts from the bus operators and subsidies from the university and Plymouth City Council, alongside which is a discounted Park & Ride scheme offering subsidised parking and bus tickets.
- *Car sharing*, the university acting as channel for staff wishing to join a private group of car sharers. ⁴⁴

Table 1 sets out the eight indicators laid out in the January 2007 report and for each indicator base levels for usage (2004), targets, target dates, and usage figures as of January 2007 and January 2008, figures being based upon Travel

⁴¹ Jubb Consulting Engineers Ltd. (2005) *University of Plymouth Travel Plan for the Main Campus at Drake Circus Plymouth*. Plymouth: Jubb Consulting, 5.

⁴² University of Plymouth. (2007). *University Travel Plan*. <http://staff.plymouth.ac.uk/greentra/>

⁴³

<https://exchange.plymouth.ac.uk/intranet///greentra/start.htm>;
<https://exchange.plymouth.ac.uk/intranet///greentra/Bus.htm>;
https://exchange.plymouth.ac.uk/intranet///greentra/Park_Ride.htm;
<https://exchange.plymouth.ac.uk/intranet///greentra/bike.htm>;
<https://exchange.plymouth.ac.uk/intranet///greentra/car.htm>;

⁴⁴

<https://exchange.plymouth.ac.uk/intranet///greentra/carshare.htm>.

Plan documents⁴⁵ with updates obtained through interviews with Sarah Haywood, Travel Plan Coordinator⁴⁶.

Table 1: Indicators and targets of University Travel Plan.

Indicator	Base Level (2004)	Target	Target Date	January (2007)	(January 2008)*
University provided parking (Total)	629	470 (25% reduction)	September 2007	439	394
On-Campus car parking spaces	414	290 (30% reduction)	September 2007	301 (includes Hoe Centre)	276
On-Campus car parking spaces allocated to staff	328	150 (55% reduction)	September 2009	238	194
Vehicle movements into Campus (12 hour day)	1370	1100	2009	1093	No data
Cycle trips to Campus	3%	At or above LTP rate of increase	2010*	5%	No data
Staff using public transport for work place journeys	17%	22%	September 2009	25%	No data
University 'green bus travel pass' sales	212	265 25% increase	September 2007	265	272
Discounted Park & Ride Tickets sold (Books)	233	292 25% increase	September 2007	429	1046

Parking management, encompassing three of the eight indicators, is, clearly, a principal focus of the Travel Plan. Within its own terms of reference, it is also an extremely successful focus, with reduction targets for university parking in general and staff parking in particular being met significantly ahead of identified target dates.

⁴⁵ *Ibid.* University of Plymouth. (2008). Travel Plan. University of Plymouth. <http://intranet.plymouth.ac.uk/staffcom/comms/intranet.htm>. [Accessed 4 January 2008.]
University of Plymouth. (2008). Green Travel Plan. University of Plymouth. <http://intranet.plymouth.ac.uk/staffcom/comms/intranet.htm>. [Accessed 2 February 2008.]

⁴⁶ Figures for cycle trips to campus are not available in website documents but were provided by Sarah Haywood.

Parking might also be fairly described as the pivotal focus, given that the entire operation of the Travel Plan is funded or subsidised through university parking space revenue, the Plymouth parking charges being the highest of any university in the UK, demanding an average charge of £55 per month⁴⁷. As Sarah Haywood explains:

The Green Travel scheme is not costing the university anything at all... Basically all the money that we take from staff salaries for car parking and any income for car parking ... all that is ring-fenced so it is used to make improvements ... subsidise the green travel scheme...the green travel subsidies for the bus scheme and the Park and Ride scheme ... (were) funded from that source ... we subsidise the Park and Ride scheme fairly dramatically⁴⁸.

Herein lies a conundrum in that the Travel Plan has a key target of progressively reducing vehicle parking on campus, success in which endeavour will inevitably mean that funding support for other aspects of the Plan will wither on the vine unless alternative funding sources come on stream. This, of course, highlights the irony that travel plans often rely on people driving to work, but no contingency arrangements to address this seem to be on the drawing board.

According to Sarah Haywood:

I think that what will be a challenge in the future is that with the number of spaces on campus reducing, the income is going to be dropping and therefore the amount of money we have to spend on other things is going to be less⁴⁹.

An annual car parking fee is construed by some other universities as an insensitive means of reducing car travel to campus. In 2006 the University of Sussex replaced annual parking charges with a daily parking charge, the idea being that the latter offered an incentive for the car user to think about alternative modes of transport on a day-by-day basis while a staff member committing to annual parking had to wait a year before rethinking⁵⁰. At the University of Derby a car park rebate scheme has been put in place. Those who use the car park for fewer than 100 days in the year are able to apply for a rebate on their annual fee, the scheme working by using an automatic number plate recognition system⁵¹

⁴⁷ <http://www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=400479>

⁴⁸ Interview with Sarah Haywood, Travel Plan Coordinator, University of Plymouth

⁴⁹ *Ibid.*

⁵⁰ Interview with Chris Wadey, Transport Manager, University of Sussex

⁵¹ Interview with James Brown, Travel & Transport Manager, University of Derby

As *Table 1* indicates, targets for reductions in vehicle movements into the Plymouth main campus and increases in cycle journeys to and from campus, staff public transport journeys to work place, sales of 'green bus travel passes' and discounted Park & Ride ticket sale targets were all exceeded by January 2007, most significantly ahead of target date. The initial targets up to 2007 were taken from the Jubb report but, arguably, remain singularly unambitious and, since 2007, seemingly determined on the hoof rather than strategically.

Increases in cycle journeys notwithstanding, there is less than complete satisfaction with what the university has so far provided by way of encouraging cycling to and from campus. Reviewing the university's record in this regard, Roger Creagh-Osborne, a member of BUG, the Bicycle User Group⁵², writes:

The university has the cheek to charge for changing facilities for staff cyclists – and these have been totally inadequate in number and location (it is ridiculous to only provide a central facility). ...The university refused to join a well-established salary sacrifice cycle purchase scheme despite the fact that many other universities in the UK run such a scheme without problem. Despite a continual stream of new buildings over the last few years in none of them has provision been made for cyclists working in the building to have changing facilities (notwithstanding the facilities in Nancy Astor) – cyclists do not want to go to the other end of the campus to change, so staff must change in their offices or toilet⁵³.

Details of the Travel Plan and offers available to staff under the Travel Plan are rather hard to find. Website pages are only available once the surfer has logged onto the university portal and entered the 'communities' section. Should the surfer not know where to look, s/he will have initial difficulties in locating the data. An external enquirer entering the external Plymouth portal will find no mention of the Green Travel Plan. Disconcerted that university News Alerts have so far not been made available for Travel Plan announcements, and that induction materials and the portal pages seem not to be having sufficient marketing impact, Sarah Haywood points to the need to 'speak to marketing and communication about where they feel we are maybe missing the mark with the promotion of it'⁵⁴.

Another research insight concerning the importance of linking travel plans to the wider panoply of sustainability-related institutional policies and practices, casts light on a failure to apply joined-up thinking to the Plymouth Travel Plan. At the

⁵² BUG can be contacted via its organiser, John Abraham, jabraham@plymouth.ac.uk. See also footnote 118.

⁵³ Roger Creagh-Osborne, email communication, 23 September 2008. The cycle purchase scheme and a scheme for refunds on cycle equipment for commuting purposes, says Sarah Haywood, were dismissed by senior management as 'administratively burdensome' and 'prone to abuse.' 'That was a real shame,' she says, 'because I think the thought out there is that we don't do enough for cyclists' (interview).

⁵⁴ Interview with Sarah Haywood, Travel Plan Coordinator, University of Plymouth.

time of writing, the University has committed to having an environmental management system, ISO14001, in place by 1 May 2009. This would seem a propitious opportunity to link the Travel Plan to the wider sustainability picture.

Coordination of the Travel Plan lies with Security and Campus Services, the Travel Plan Coordinator being Security Services Manager. This arrangement arises from the operational and funding core of the Travel Plan being concerned with parking, a security issue involving policing of who is parked. Although Security and Campus Services falls within the Department of Learning Facilities, there is little by way of synergy between the Travel Plan and the campus-related sustainability initiatives of the latter. Widening the argument, the Travel Plan is not specifically mentioned in the university Environmental Policy (2005)⁵⁵ but the Plan has sometimes appeared on the agenda of the (now defunct) Environment Committee⁵⁶. The Plan is touched upon in the university Sustainability Policy (extended version) under its 'Campus' section:

In all its operations, the University takes due regard of the fact that one of its most significant negative impacts on the environment is through the transport generated either directly or indirectly by its activities and needs, and commits to taking all reasonable steps to minimise those impacts. In this regard the main campus Travel Plan (2005) marks the University out as a regional leader among local employers/traffic generators that have well-developed and concrete plans for reducing car dependency and promoting and facilitating walking, cycling, and public transport use, and, whenever appropriate, working from home⁵⁷.

In the context of this paper some of the language may appear to a large degree aspirational. This is underlined by the fact that no infrastructural mechanism is so far in place for linking the Travel Plan to university sustainability initiatives and, clearly, references in the Sustainability Policy to carbon offsetting of travel⁵⁸ find no echo in the Plan. As things stand, no one has particular responsibility for a comprehensive approach travel and transport challenges. According to Roger Creagh-Osborne:

It may be simply that the university is so large that this sort of thing falls between people, there is no one responsible for this. ...They could give someone the role of champion of sustainable transport throughout the university⁵⁹.

⁵⁵ University of Plymouth. (June 2005). *Environmental Policy*.

<https://exchange.plymouth.ac.uk/intranet///enviro/Public/aspects/Environmental%20P>

⁵⁶ <http://staff.plymouth.ac.uk/envcomm/Meetings/intranet.htm> The Environment Committee was abolished in October 2008 following the establishment of a Sustainability Advisory Group to the Office of the Vice-Chancellor, first meeting in December 2008.

⁵⁷ <http://csf.plymouth.ac.uk/files/UPSUSTPOLICY12.pdf> 5.14.

⁵⁸ *Ibid.*, 5.7, 6.8.

⁵⁹ Interview with Roger Creagh-Osborne, Technical Manager, School of Psychology.

Unlike at many universities with more comprehensive travel plans, the Plymouth Travel Plan is not linked to the management of the fleet of twenty-three vans and two cars used to maintain the campus. In summer 2005 the university moved from capital purchase of vehicles to contract hire, a decision that did not involve a discussion between those responsible for the Travel Plan and those responsible for procurement⁶⁰. [Steve Gill, Contracts Manager, affirms that 'there hasn't been and there probably should be' a dialogue between Travel Plan and procurement staff.⁶¹] The contract vehicles the university hires are not employed in an integrated fashion. As Steve Gill puts it:

There is less shared use than I would like to see. Estates have got a fleet of vans which get used predominantly out of hours. The postmen have got a fleet of vans which only ever get used in working hours. So I think we can reduce numbers. There is no cross-pollination because they are all separate budget areas in Learning Facilities⁶².

The university Procurement Unit also supervises contracts for car hire with car hire agencies involving 'an awful lot of car days'. Initial enquiries have been made to the hire firms about incorporating CO₂ figures into hiring statistics but there has been no concrete response so far. Again, this procurement initiative – and the general area of car hire – is de-linked from the university Travel Plan⁶³.

Another massive contribution to University of Plymouth transport-based CO₂ emissions comes from the activities of the University of Plymouth Student Union (UPSU), primarily in the form of transport to sporting and cultural events. Cars and coaches are hired out from a pool or hired in to meet travel demands. Brian Barlow, UPSU Central Services Manager, is very aware of the importance of cutting down vehicle miles driven in the name of sporting competition, recognising, for instance, that there could be significant savings in money and emissions if all sports teams went to play at the same institution for away fixtures on Wednesday afternoons as much as was feasible. Brian Barlow says that UPSU 'haven't been asked' and 'should have been consulted a bit more' about helping advance the university Travel Plan⁶⁴.

Beyond periodic surveys to measure success in achieving established targets, the fifth policy objective of the Travel Plan – concerning monitoring, evaluating and reviewing progress in development, implementation and delivery (see p.9) – has not been activated in any comprehensive way. No steering group or working or monitoring group with stakeholder representation is in place, no link is

⁶⁰ Interview with Steve Gill, Contract Manager, Secretariat, University of Plymouth

⁶¹ *Ibid.*

⁶² *Ibid.*

⁶³ *Ibid.*

⁶⁴ Interview with Brian Barlow, Central Services Manager, University of Plymouth Student Union

made to a wider environmental management system⁶⁵ and no mechanism exists to connect the workings of the Plan to wider university sustainability initiatives.

It needs to be added that, unlike more comprehensive university travel plans in the UK, the Plymouth Travel Plan and its benefits are for staff alone. Student travel to and from university and on business, and field trips and placements is not covered under the Plan. Funded from revenue raised from staff parking charges, the Plan as it stands has insufficient largesse to bear the costs of supporting green travel initiatives for students. 'No, we don't get involved with students at all,' says Sarah Haywood⁶⁶.

Travel/ transport issues have implications for student well-being, quality of learning, recruitment, retention and attrition, and equal opportunities. While these issues affect all University of Plymouth students, they have particular relevance to those who are mature and locally based. For instance, the School of Nursing and Community Studies (SNACS) has a significant proportion of mature students who reside in the South West but away from Plymouth, necessitating considerable travel between home and campus. (Historically there were five nursing schools in the South West but all were amalgamated into the University of Plymouth). In addition, considerable travel may be required for students to attend practice placements that comprise 50% of the course. There is anecdotal evidence that many students have suffered from the stress arising from course-related travel. In some cases, prospective students decided not to apply to and signed-up students decided to discontinue their studies because of travel related issues⁶⁷.

While having no direct responsibility for student travel and transport, Anita Jellings, Dean of Students, affirms by email conversation that 'travel and transport can impact in the student experience, and is periodically raised as an issue'⁶⁸. In a subsequent informal meeting, she touched upon travel related issues particularly for locally based mature students. Her view is that it is important for the university to address this issue more strongly so as to recruit and retain the mature student⁶⁹.

Starting from the premise that 'transport/ travel issues are linked to sustainability, well-being, equal opportunities, quality of student learning, financial saving, student attrition, and student empowerment,' a group of academics within the

⁶⁵ Oxford Brookes University has a Sustainable Transport Working Group, chaired by a Deputy Vice Chancellor, and there are imminent plans to link transport to an environmental management system with the DVC having an overseeing function. Interview with Harriet Waters, Environmental Coordinator, Oxford Brookes University.

⁶⁶ Interview with Sarah Haywood, Security Services Manager, University of Plymouth

⁶⁷ Meeting with Margaret Wade, Programme Lead Specialist Community Public Health Nursing, and Gill Green, Programme Lead BSc Adult Nursing, 26 September 2008

⁶⁸ Email conversation with Anita Jellings, Dean of Students, University of Plymouth

⁶⁹ Anita Jellings, informal conversation, 3 November 2008.

School of Nursing and Community studies are researching the Plymouth student travel experience and its ramifications for the quality of the wider student experience⁷⁰.

5.0 University Travel Plans in the UK: A Comparison Study

In *Upfront*, the University of Plymouth magazine, Spring 2008, an article, 'Going Greener,' applauded the Green Travel Plan as 'one of the most successful' environmental initiatives at the university⁷¹. In this section, we explore how the Plan compares with the scope and sway of other university travel plans in the UK.

Using Department for Transport guidelines intimating five broad areas that a travel plan can address, as well as elements falling within each area⁷², we arrive at a total of forty-one best practice elements that fall within the scope of a travel plan (see *Table 2*).

Table 2: Best practice elements of a Travel Plan.

Area : <i>Commuter Journeys</i>	
1	Car sharing database
2	Car sharing: cost sharing/saving (e.g. payment to driver according to a rate calculated to cover petrol; creating a table of passenger rates for car sharers)
3	Car sharing: preferential parking for car sharers
4	Car sharing: rewards (i.e. cash return or prize scheme for car sharers)
5	Car sharing: guaranteed ride home (i.e. back-up arrangements to get home by taxi in case car sharers cannot travel together because of emergencies or unexpected demands)
6	Public transport: discounted tickets
7	Public transport: information and marketing (e.g. including full details of public transport availability in staff and student induction packs; free bus pass for first week at university for new students and staff)
8	Public transport: enhanced service (i.e. negotiating rescheduling and new connections)
9	Public transport: guaranteed ride home (i.e. safety net to ensure public transport users are taken home)
10	Public transport: loans and money incentives (e.g. interest-free loans for purchasing season tickets, discounted bulk purchased tickets)
11	Walking and cycling: information and marketing
12	Walking and cycling: safety measures (i.e. designing pedestrian and cycling routes segregated from traffic; installing good lighting and clear signs on the routes, ensuring good visibility on the routes)
13	Walking and cycling: storage improvements

⁷⁰ Research outline: Sustainability, travel and student experience
<http://csf.plymouth.ac.uk/?q=node/671>

⁷¹ Going Greener. (Spring, 2008). *Upfront*, 55, 4. <http://staff.plymouth.ac.uk/>

⁷² Department for Transport. (2007). *The essential guide to travel planning*. London: Department for Transport/HMSO.

14	Walking and cycling: pedestrian and cycle routes/paths improved
15	Walking and cycling: deals and tax incentives (i.e. offering payments or raffle tickets for walking; walkers' breakfasts; 'cash out' payment for each day cycled; offering employees tax-free cycling equipment; 'salary sacrifice arrangements to provide bicycle and equipment free of VAT; tax and national insurance contributions)
16	Walking and cycling: shower and changing facilities
17	Car parking disincentives: restricted parking spaces/permits
18	Car parking disincentives: parking charges
19	Car parking disincentives: other incentives not to drive (e.g. no parking except for car sharers)
Area 2: Business Travel	
20	Removing incentives (e.g. mileage allowance)
21	Pool of energy efficient cars for business trips
22	Club and hire cars
23	Public transport for business trips
24	Alternatives: video conferencing
25	Alternatives: flexi-time
26	Alternatives: home working
27	Shuttle bus (i.e. between campuses/workplaces)
28	Pool of bikes (i.e. store of bikes held in secure accommodation for business travel)
29	Onsite services (i.e. facilities on campus that help avoid travel off-campus)
30	Travel advice (i.e. dedicated team or office to advise on most sustainable, lowest carbon, means of travelling to and between destinations)
Area 3: Visitors	
31	Directions to site by public transport (information for visitors)
32	Car parking charges
33	Limited car parking spaces
34	Links and travel advice (i.e. providing maps and tailored advice for visitors)
Area 4: Deliveries/Contractors	
35	Frequency (i.e. how often deliveries are made)
36	Distance (i.e. how far deliveries are sourced from and transported)
37	Timing (i.e. so as to avoid traffic congestion)
Area 5: Fleet Vehicles	
38	Fleet reduction
39	Departments sharing vehicles
40	Fuel efficiency improvements/cleaner vehicles
41	Vehicle pools (i.e. pool of energy efficient vans for campus business)

As of March 2008, 64 universities of the 132 reviewed (48.48%)⁷³ had a locatable and active travel plan - we discount here the 10 universities reporting that they were currently actively developing a plan, the 2 reporting that they were in process of implementing a plan not yet active, and the 4 universities reporting that they were re-developing a plan, having withdrawn an earlier plan. A total of 52 universities either had no plan or had no locatable plan.

⁷³ See pp.2-3.

Table 3 summarises the range of activities being undertaken at the 64 universities with locatable and active travel plans.

Table 3: Uptake scores for travel plan measures in UK higher education institutions with a travel plan.

Travel plan measures	Number of institutions implementing measure		
	Currently in place	Planning to put in place	Current and future combined
COMMUTER JOURNEYS	63	1	64
• car sharing	(88)	(48)	(136)
car sharing database	33	19	52
cost sharing/ saving	17	4	21
preferential parking	20	15	35
rewards	9	3	12
guaranteed ride home	9	7	16
• bus and rail/public transport	(151)	(23)	(126)
discount tickets	38	10	48
information and marketing	52	0	52
enhanced service	31	9	40
guaranteed ride home	3	1	4
loans and money incentive	27	3	30
• walking and cycling	(277)	(37)	(296)
marketing and info	51	0	51
safety measures	46	5	51
storage improvements	51	6	57
cycle routes/paths improved	39	6	45
deals and tax incentives	25	13	38
shower and changing facilities	47	7	54
• car parking disincentives	(89)	(15)	(104)
rest. parking spaces/permits	49	1	50
charges	36	8	44
incentives not to drive	4	6	10
• BUSINESS TRAVEL	41	1	42
• removing incentives - e.g. mileage allowance	4	4	8
• pool cars	2	7	9
• club and hire cars	7	7	14
• public transport for business trips	12	6	18
• alternatives			
video conferencing	14	12	26
flexi time	21	11	32
home working	21	10	31
• shuttle bus	16	9	25
• pool bikes	8	7	15
• onsite services	4	0	4
• travel advice	9	1	10

• VISITORS	34	1	35
• directions to site via public transport	17	1	18
• car parking charges	9	2	11
• limited spaces	11	0	11
• links and travel advice	11	1	12
• DELIVERIES/CONTRACTORS	14	2	16
• frequency	6	0	6
• distance	3	2	5
• timing	3	1	4
• FLEET VEHICLES	26	1	27
• fleet reduction	7	1	8
• departments sharing vehicles	2	0	2
• fuel efficiency improvements, cleaner vehicles	18	3	21
• vehicle pools	2	1	3

Allocating one point for each of the forty-one elements addressed, the top scoring ten institutions are listed in *Table 4* alongside their total score and scores within each area. The *Table* reveals Bournemouth as implementing the greatest number of travel plan measures but covering only four of the five areas (the deliveries and contractors heading not being addressed). Of the remaining nine universities, only two universities (Bradford and Edinburgh) score in each area, three others (Derby, Leeds Metropolitan, Warwick) score in four areas, while four (Central Lancashire, Sheffield, Southampton, Sussex) score in three areas.

Using the same point-per-mode assessment mechanism, Plymouth figures in the bottom third of universities in a national travel plan league table (see *Appendix 3*). The University scores eight of its nine points under the Commuter Journey sector (for having a link to an external car sharing database, a car sharing cost sharing/saving scheme, discounted public transport tickets, public transport information and marketing, public transport loans and money incentives, walking and cycling information and marketing, shower and changing facilities, and restricted car parking spaces/permits). It scores a further point under the Business Travel sector (for a shuttle bus to the Peninsula Medical School).

Our search of universities was to find travel plan documentation on the externally available university website, and in this sense, Plymouth may have been rather favourably treated. Had we been researchers at another university undertaking this comparative survey, Plymouth, in the absence of a proper and accessible Travel Plan website document available externally, would have scored zero or been excluded from the study if direct contact with an appropriate person in Estates had not been made).

Table 4: Top ranking universities according to the 41 best practice Travel Plan elements.

Rank	Name of institution	Commuter journeys																		Business travel										Visitors				Deliveries			Fleet vehicle				Total score										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39		40	41								
1	Bournemouth University	√		√		√	√	√	√	√	√	√	√	√	√	√	√	√	√				√	√	√	√				√	√	√	√				√	√	√	√								25			
2	Leeds Metropolitan University					√	√	√			√	√	√	√		√	√	√	√	√		√	√	√	√	√	√			√	√		√	√	√	√	√	√	√	√	√	√	√								23
2	University of Warwick		√	√	√		√	√	√		√	√	√	√		√	√	√	√	√	√	√			√	√							√	√	√	√				√	√	√	√								23
4	University of Derby					√	√	√			√	√	√	√		√	√	√	√		√	√	√	√	√	√	√			√	√					√	√	√	√								21				
4	University of Sheffield	√	√	√	√		√	√	√		√	√	√	√	√	√	√	√	√											√	√	√	√				√	√	√	√								21			
6	University of Bradford	√				√	√	√			√	√	√	√		√	√	√	√			√		√	√					√				√	√	√	√								20						
6	University of Central Lancashire	√		√		√	√	√			√	√	√	√	√	√	√	√	√			√	√		√	√				√					√	√	√	√								20					
6	University of Southampton	√	√	√			√	√	√		√	√	√	√	√	√	√	√	√											√	√	√	√	√				√	√	√	√								20		
6	University of Edinburgh	√		√			√	√			√	√	√	√	√	√	√	√	√					√	√	√	√			√					√	√	√	√								20					
10	University of Sussex	√		√		√	√	√			√	√	√	√	√	√	√	√	√						√	√				√	√				√	√	√	√								19					

A point per element quantitative analysis does need to be treated with considerable circumspection, in that it allows for no weighting in the light of the impact or importance of the criteria used. All criteria are accorded equal value. Hence, it might be the case that a university comes out low in the league table in that its travel plan addresses very few potential areas but the few are ones of relatively high significance while another university covers many more areas but ones of relatively low significance. That said, it is clear that the Plymouth Travel Plan primarily addresses only one of the five potential areas flagged by the Department for Transport and, compared to high scoring travel plans, is minimalist in its scope and ambition. Making up some of the shortfall would clearly involve significant development and innovation. Incorporating other elements would be more a matter of bringing university initiatives presently outside the compass of the Travel Plan, such as campus vehicle fleet decisions (see p.44), within the sway of a new and extended Travel Plan or, as we shall recommend, Transport Policy.

For the full matrix of scores for the 64 universities, go to *Appendix 3*.

The self-congratulatory tone revealed in the *Upfront* article described at the beginning of this section merits moderation. The article connects the excellence of the Travel Plan with Plymouth's success in coming second in the People and Planet 2007 league table ranking universities according to environmental performance⁷⁴. It is worth noting, however, that the People & Planet survey in this regard is exceedingly cursory and, thus, superficial, merely requiring a box to be ticked if a university has a travel plan.

The Department for Transport guidelines of 2007 on which the five areas and 41 travel plan elements are based is not, of course, the final say as to what makes for a travel plan that is comprehensively responsive to the threats of climate change and economic and social degradation. In the next section, we identify and briefly describe noteworthy and innovative travel plan developments at other UK universities that might find a place within a reworked and more comprehensive Plymouth Travel Plan (or, we will be recommending, Sustainable Transport Policy).

6.0 Travel Plan Innovation at UK Universities: Snapshots

Central Lancashire, Derby, Sussex and Warwick all figure in the top ten universities in the travel plan league table. An officer with responsibility for the travel plan at each of these universities agreed to participate in a semi-structured interview or email conversation. Travel plan documentation in the public domain was also collected from each university. Additionally, documentation was collected from other universities occupying a high ranking place: Bournemouth University, Bradford University, Edinburgh University, Leeds Metropolitan

⁷⁴ <http://peopleandplanet.org/gogreen/greenleague2007/table>

University, Oxford Brookes University, Sheffield University, Southampton University. What follows are snapshots of some of the most noteworthy and innovative developments at the eleven universities, together with an additional snapshot from Buckinghamshire New University. First, there are snapshots falling under the headings of marketing, commuter journeys and business travel, then snapshots of a general nature.

Marketing

- Marketing and Promotion related work is the first measure identified to meet the objectives of the Integrated Travel Policy, 2000, at Edinburgh University. This work includes involvement in events such as *National Bike Week* and *European Mobility Week*⁷⁵.
- At the University of Central Lancashire the importance of marketing all aspects of the Travel Plan is highlighted. Upgrading the website, intranet use, newsletters production, use of the email system, and other available technology [e.g. plasma screens] so as to communicate the Travel Plan to full effect have been identified as marketing vehicles, not least to get information to harder to reach groups⁷⁶.

Commuter Journeys

- At Leeds Metropolitan University there is a Taxi Strategy. This involves a guaranteed lift home for those let down in terms of obtaining a lift under the car-sharing scheme. There is a dedicated taxi service enabling students to leave their student card with the taxi driver and pay later⁷⁷.
- At the University of Central Lancashire support for cycling is a major element of the Travel Plan. *Tax Free Bikes from Work* was launched in July 2008 and apart from the more often seen improvement in facilities there have also been guided cycle rides. The idea of a Bike Trail to provide an opportunity for people to test out using a bike before buying one is an identified task within the Travel Plan⁷⁸.
- At the University of Edinburgh staff transport loans are provided for purchasing season tickets, cycles, motorcycles and associated safety equipment up to the value of £500⁷⁹.
- An element of the University of Edinburgh Travel Plan concerns continuing to lobby the City of Edinburgh Council to extend, improve and properly maintain cycle routes⁸⁰.

⁷⁵ University of Edinburgh, *Central Area Travel Plan 2005-10*

⁷⁶ University of Central Lancashire, *City Campus Preston Travel Plan*, (revised January 2007)

⁷⁷ Leeds Metropolitan University, *Transport Strategy, 2002-12, Project Report* (updated June 2006)

⁷⁸ University of Central Lancashire, *City Campus Preston Travel Plan*, (revised January 2007)

⁷⁹ University of Edinburgh, *Central Area Travel Plan 2005-10*

- University of Derby students, on first arriving at university, receive 25 bus trips included in their hall fees. Students can thereafter buy 10 trip bus tickets for less than 50% of the cost of a single trip⁸¹.
- The database used for the car share scheme at Warwick University can also calculate how much fuel members save and what this means in terms of money and CO₂ emissions savings⁸².
- At Leeds Metropolitan University there is a Motorcycle Strategy. Showers, storage, dedicated parking space, safety equipment and training are specific items addressed by the Strategy to support this alternative to single occupancy car use⁸³.
- At Oxford Brookes University, staff can obtain a third reduction on the purchase cost of a bike and a 'bike doctor' is available on campus to maintain the bikes of staff and students, the owner paying for parts but not labour. As at Plymouth, there is a 20p per mile mileage rate for staff using cycles for conducting university business⁸⁴.
- At the University of Bournemouth there are vending machines throughout the University where 10-Trip cards can be purchased for use on the *UniLinx* bus service. This service runs between campuses and student residences⁸⁵.
- At Warwick University, a car share scheme *Warwickshare* was introduced in May 2003. It has been declared a great success with over 350 signing up to the scheme in the first six months. Examples from other institutions and the local commercial sector were used in its development. Communication and promotion of the scheme has been cited as a very important factor in its success. Encouragement to join the scheme was offered in the form of entry into a small prize draw⁸⁶.
- At the University of Edinburgh a personalised travel planning service provides detailed information for new staff and students on the travel options available to them⁸⁷.
- At Edinburgh, too, materials to raise awareness of the Travel Plan are used in staff induction, new student advisory packs and presentations, and by advisory notes and emails⁸⁸.

⁸⁰ *Ibid.* Plymouth University communicates with Plymouth City Council over travel matters but the communication/consultation is not written into the Travel Plan (Personal communication, Sarah Haywood, 11 December 2007).

⁸¹ Interview with James Brown, Transport & Travel Manager, The University of Derby

⁸² Interview with Graham Hine, Transport Manager, University of Warwick

⁸³ Leeds Metropolitan University *Transport Strategy, 2002-12, Project Report* (updated June 2006)

⁸⁴ Interview with Harriet Waters, Environmental Coordinator, Oxford Brookes University.

⁸⁵ Bournemouth University, *Travel Plan*, August 2003

⁸⁶ Interview with Graham Hine, Transport Manager, University of Warwick; University of Warwick, *Travel Plan June 2007*

⁸⁷ University of Edinburgh, *Central Area Travel Plan 2005-10*

⁸⁸ *Ibid.* Travel Plan materials are available in University of Plymouth staff induction packs but the communication effort seems to lack the reinforcement achieved at Edinburgh.

- Edinburgh also has a Bike Buddies scheme and a social rides programme to encourage cycle use, the university promoting half price refresher cycle training at 50 sessions per year⁸⁹.

Business Travel

- Buckinghamshire New University, working in partnership with not-for-profit charity, *Commonwheels*, has opened an environmentally concerned on-campus car club. It has purchased two low carbon emission cars for business use by university employees Monday through Friday, 8am-6pm, while outside these hours students over 18 years (with a driving license held for at least one year) and also staff can rent the vehicles by the hour⁹⁰.
- At Oxford Brookes University a proposed addition to the Travel Plan involves making compulsory contributions to a carbon sequestration fund when international travel is unavoidable⁹¹
- The University of Edinburgh has a bike pool available to staff for local business journeys⁹².

General

- At Oxford Brookes University, the Travel Plan is introduced in a statement from the Vice-Chancellor, his support also being captured by means of an accompanying photograph of him on a bike⁹³.
- At the University of Southampton there is a Transport Strategy Steering Group to overview the implementation of the Travel Plan⁹⁴.
- Sustainable travel and transport is promoted at the University of Central Lancashire's *Energy Awareness Week*⁹⁵.
- The University of Central Lancashire is supporting change towards sustainable transport across the city by exploring partnerships with other large businesses in Preston to form a Preston travel plan network⁹⁶.
- At the University of Sheffield the HUMUS Partnership was formed to develop sustainable transport solutions to the congestion and parking problems on the campus and adjacent hospital and museum sites. The partnership initiative was highly commended in the 2004 national Green

⁸⁹ *Ibid.*

⁹⁰ Press release, 28 October 2008, Buckingham New University

⁹¹ Oxford Brookes University, *Sustainable Travel Plan 2006-10*

⁹² University of Edinburgh, *Central Area Travel Plan 2005-10*

⁹³ Oxford Brookes University, *Sustainable Travel Plan 2006-2010*

⁹⁴ University of Southampton, *Travel Plan* (revised January 2005)

⁹⁵ University of Central Lancashire, *City Campus Preston Travel Plan* (revised January 2007)

⁹⁶ *Ibid.*

- Gown Awards. Bikers Breakfasts and Dr Bike Clinics have been organised to raise awareness of the Partnership⁹⁷.
- At the University of Sussex the need to work alongside the Student Union Environmental Group in taking the Travel Plan forward is recognised⁹⁸.
 - One of the eight objectives of the Travel Plan at Oxford Brookes University is to improve the health and well-being of staff and students through the promotion of walking and cycling⁹⁹.
 - Health benefits also feature much more prominently in the updated version of the University of Sussex Travel Plan¹⁰⁰.
 - At the University of Central Lancashire the university's Travel Plan Coordinator is an integral member of the university Carbon Management Steering Group¹⁰¹.
 - In the University of Central Lancashire's Travel Plan the intention to draw upon in-house expertise from the university's Institute of Travel and Tourism is identified¹⁰².
 - At Bradford University a leaflet is being produced with tips in to encourage greener car driving. This is referred to under the objective to Manage Motor Vehicle Use in the Travel Plan¹⁰³.
 - At Leeds Metropolitan University new student residences have been planned with no parking available. To support this move, wider pavements, provision of portering staff and maps to show safe routes into the city are being implemented¹⁰⁴.
 - The University of Southampton Travel Plan notes that it should result in an environment in which the impact of all forms of transport contributes to rather than damages the quality of life for the university community as well as the neighbourhood¹⁰⁵.
 - The Southampton Plan notes, too, that its operation should result in improved accessibility for those who are mobility impaired¹⁰⁶.
 - At the University of Derby the Travel Plan is connected to its Eco-Campus concept¹⁰⁷.

The paucity of interesting innovation under the above 'Business Travel' heading speaks to the failure of most universities to respond imaginatively to combating global warming. Only the penultimate bullet point under the heading raises the

⁹⁷ Green Gowns Awards 2004

http://www.heepi.org.uk/documents/gg_brochure%20march%202025.pdf

⁹⁸ Interview with Chris Wadey, Transport Manager, University of Sussex

⁹⁹ *Sustainable Travel Plan 2006-2010*, Oxford Brookes University

¹⁰⁰ Interview with Chris Wadey, Transport Manager, University of Sussex

¹⁰¹ University of Central Lancashire, *City Campus Preston Travel Plan* (revised January 2007)

¹⁰² *Ibid.*

¹⁰³ University of Bradford *Travel Plan, 2004-9*

¹⁰⁴ Leeds Metropolitan University *Transport Strategy, 2002-12*

¹⁰⁵ University of Southampton, *Travel Plan* (revised January 2005)

¹⁰⁶ *Ibid.*

¹⁰⁷ Interview with James Brown, Transport & Travel Manager, University of Derby.

fundamental but complex and thorny issue of universities responding to the climate change threat by establishing a carbon reduction and/ or offsetting programme for essential national and international business travel – especially that by air – including conference attendance. Such a programme might well involve developing a culture of virtual meetings and conference contributions using interactive video-linking technology. Many of the university travel plans reviewed here make commuter journeys their primary concern, with business travel very much secondary.¹⁰⁸ For Chris Wadey at the University of Sussex, business travel is a procurement not travel or transport plan matter. ‘Our travel plan was initially a commuter travel plan,’ says Harriet Waters, Oxford Brookes University, ‘and it remains focused on commuting travel, but we do acknowledge that we need to do more work on business travel’. Within the business travel sections of travel plans, carbon offsetting seldom figures (as it fails to do among the forty-one Department for Transport criteria upon which our comparative study is based). The Carbon Trust operates a Higher Education Carbon Management Programme in partnership with a number of UK universities, not including Plymouth¹⁰⁹. While the use of biofuel and electric cars figure in the Programme carbon offsetting of business travel is not addressed.

In the next section, three case studies of prize-winning institutional travel plans are offered.

7.0 Case Studies

The three case studies offered below are of public organisations that have received national fleet management and/or green travel awards in the 2006-8 period. The intention is to intimate further ways in which the Plymouth Travel Plan scope and performance might be enhanced.

7.1 *The Arts Institute at Bournemouth*

The Arts Institute of Bournemouth (AIB) was the winner of the 2007 ACT Award, winning under the Commuter Initiative category¹¹⁰. As a case study it offers a fertile source of ideas for a university travel plan primarily focused on commuter journeys.

¹⁰⁸ See Upham, P. & Jakubowicz, T (2008) Aircraft dominance in the transport-related carbon emissions of business school students. *Journal of Transport Geography* 16, 73-76, for a discussion of long distance student travel between their university and their place of residence. This is an interesting but increasingly prevalent concern as universities internationalise.

¹⁰⁹ http://www.carbontrust.co.uk/news/presscentre/2006/060503_universities.htm There were 18 universities in the 2005 pilot and 16 in the 2006 programme.

¹¹⁰ ACT Awards. (2007), <http://www.acttravelwise.org/about-us/awards/ACT-Awards>

Located two miles outside of Bournemouth, AIB has 170 staff and some 1,500 full-time and 1,000 part-time students. The impetus behind its Travel Plan was to support a planning application. From the outset the scope of the Plan included students as well as staff, its management and monitoring being the remit of the Travel and Transport Steering Group (representing a wide range of stakeholders including students and the local council) that meets every three months and reports to the AIB Director's Team Meeting. The aims and objectives of the Plan are to:

- Raise employee and student awareness of travel to work impacts
- Improve accessibility to all Institute users, including, staff, Students and visitors
- Reduce single occupancy vehicle trips to AIB
- Promote sustainable development and transport sustainability
- Promote benefits to the health of employees, students and visitors
- Ensure continued economic vitality of AIB
- Improve air quality and the physical environment
- Promote a less car reliant culture
- Minimise the impact of organisation related activities (congestion, noise, pollution) upon local residents

Notable incentives in the scheme include:

- Business mileage rate of 10p per mile for bicycle use
- Uni Linx bus contribution so taking the bus costs 30p per journey
- Free Uni Linx bus passes to those giving up parking permits
- Differential car parking charges with those living close paying more
- New staff living within 1.5 miles excluded from having a parking permit
- No mileage allowance for staff using their car for business if institutional fleet vehicle available

A key element of the AIB Travel Plan is marketing:

- Leaflets are distributed to new staff and students at recruitment and induction
- An annual report on the Travel Plan is distributed to all staff
- The Plan is re-launched every autumn using an 'alternative travel to work day'

The Travel Plan is integrated into the broader AIB Environmental Policy within which it is seen as 'fundamental'.¹¹¹

¹¹¹ The Arts Institute at Bournemouth, *Institute Travel Plan (2003)*, <http://www.aib.ac.uk/pdf/travel-plan.pdf>. The Arts Institute at Bournemouth, *Travel Plan Booklet (2007)*, <http://www.aib.ac.uk/docs/Travel%20Plan%20booklet%202007.doc>.

7.2 London Borough of Islington

The London Borough of Islington won a number of green and public sector fleet awards in both 2007¹¹².

Its Travel Plan applies to all council sites and staff as well as visitors to council premises and is propelled by an understanding that half-hearted and delayed implementation is costly for the environment, in terms of money, and in terms of lost reputation. The implementation of the Plan is managed by the council's full-time Green Travel Officer. The aims of the Plan are:

- To promote alternatives to the car for council staff making trips to, from and during work
- To promote greener vehicles for council service delivery
- To promote alternatives to the car for visitors travelling to council premises

Some distinctive measures taken under the Plan include:

- Displayed green travel maps and green travel information at all reception points
- Free Travelcards as a bonus for staff taking hard-to-recruit posts
- A network of voluntary 'Bike Buddies' to assist new cyclists
- Seeking external and internal funding for clean-fuel vehicle purchase in seeking to green the council vehicle fleet
- Reallocation of car parking areas for car club parking and secure bicycle parking
- Council guidelines for business travel that include justifying the use of a car
- Being the lead partner in the travel plan for Islington Borough aimed at ensuring that all businesses have an individual travel plan (officers in Recycling, Climate Change, Business Partnerships and Transport work with businesses to this end).

Building awareness of the Travel Plan through marketing is identified in the Plan as one of its nine green travel themes¹¹³.

¹¹² Energy Savings Trust Fleet Hero Awards. (2007).
<http://www.energysavingtrust.org.uk/business/Business/Transport-in-business/Fleet-Hero-Awards/Fleet-Hero-Awards-2007>.
Transport Times National Transport Awards. (2007).
<http://www.mackayhannah.com/eManage/uploads/2007%20Finalists.doc>
Green Fleet Awards (2007) <http://www.greenfleetawards.co.uk/awards/public-sector-fleet-of-the-year.aspx>.

¹¹³ Islington Council, Green Travel Plan 2006 – 2008,
<http://www.islington.gov.uk/Transport/GreenTravel/1205.asp>.

7.3 South West of England Regional Development Agency

The South West of England Regional Development Agency won the Energy Savings Trust Fleet Hero award in 2006 for public sector car fleets (50-249 vehicles)¹¹⁴. It forms part of this study given its regional significance.

Employing some 400 people, the Agency covers the largest land area of England's nine regional Development Agencies (RDAs). A prime motivation behind its Green Travel Plan is to help ensure that 'our unique environment is preserved for future generations'. The scope of the Plan covers staff trips to, from and during work as well as Agency service delivery. The Plan forms part of the Agency's Environmental Management System. Its objectives are to:

- To reduce business mileage and promote alternatives to car use
- To encourage walking, cycling, public transport and car sharing to work.

Measures implemented under the Green Travel Plan include:

- Provision of videoconferencing facilities to reduce inter-office travel
- Limiting car parking spaces at offices
- Provision of equipment to enable home-working (e.g. remote access hardware and software)
- Occasional discount bike-buying schemes
- Structuring car allowance rates to reward those driving the cleanest vehicle
- An annual top-up to salary, paid on a monthly basis, for those not bringing their car into the city centre

A Cross-Directorate Environment Group meets every two months to monitor progress under EMS including the Green Travel Plan¹¹⁵.

¹¹⁴ Energy Savings Trust Fleet Hero Awards (2006)
<http://www.energysavingtrust.org.uk/business/Business/Transport-in-business/Fleet-Hero-Awards>.

¹¹⁵ The South West of England Regional Development Agency, *Green Travel Plan*, <http://www.southwestrda.org.uk/what-we-do/policy/green-travel-plan.shtm>.
The South West of England Regional Development Agency. (2008) *Travel Plan Update 2008*.
Email correspondence with Chris Camden, Planning & Transport team coordinator, South West of England Regional Development Agency.

8.0 Perceptions and Awareness of the University of Plymouth Travel Plan and its Influence on Travel Behaviour

8.1 Respondents

There were 1,352 responses to the questionnaire on awareness, perceptions and behaviours concerning the University of Plymouth Travel Plan, as described earlier (p.3) and as set out in *Appendix 2*, a staff response rate of 13% and student response rate of between 3% and 7% (the precise range of electronic distribution to students being difficult to ascertain). The majority of respondents (88%) were either working or studying full time at the university. Among staff respondents, 51% were members of academic staff (including academic managers and researchers) and 44% professional staff (administrative, clerical, technical). Undergraduate student responses were evenly spread across the first three levels. *Figure 1* indicates percentage of student responses at different levels of study and *Figure 2* percentage of staff responding within different employment categories.

Figure 1. Student year of study

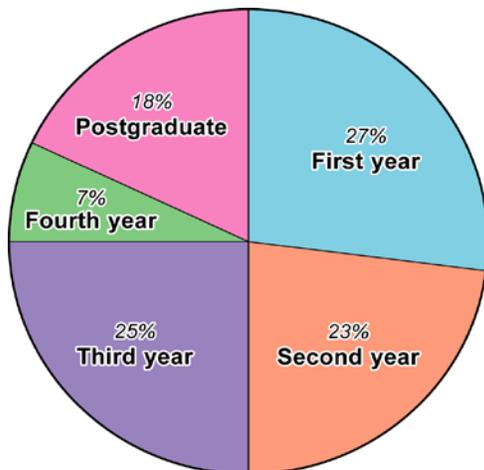
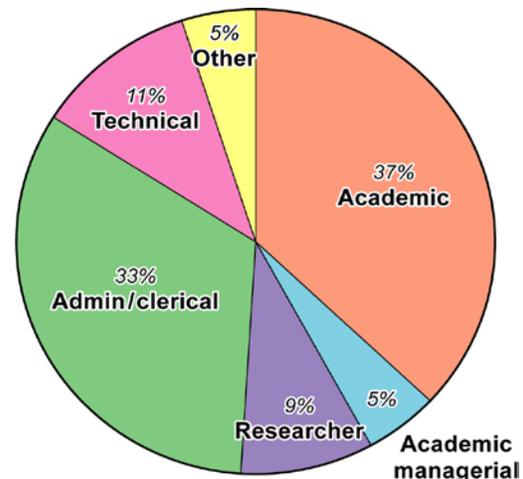


Figure 2. Staff employment category



Just over half of all respondents were female (53.9%) with 64.1% of staff responses being from females. Student responses according to gender were more or less equal in number (females 49.9%; males 50.1%).

The faculty with the greatest overall response as well as differentiated staff and student response was the Faculty of Social Science and Business, perhaps because sustainability figures more highly in the academic interest of those in the faculty. The thinnest overall response from faculties approached, as well as

differentiated staff and student responses, came from the Faculty of Education¹¹⁶ (See *Table 5*).

Table 5: Responses categorised by faculty.

Faculty	All responses	Staff	Student
Arts	25.0%	16.2%	28.1%
Education*	1.6%	1.8%	1.6%
Health and Social Work	9.8%	28.8%	3.2%
Science	10.8%	10.5%	10.9%
Social Science and Business	30.6%	31.2%	30.6%
Technology	20.0%	6.3%	24.8%
Other*	1.9%	5.1%	0.8%
Total	100%	100%	100%

* Areas not approached to participate but staff and students attracted to respond via the portal.

8.2 Travel Behaviour

When respondents were asked how far from campus they lived, 56.3% said they lived within two miles of the university (67.5% of students; 27.6% of staff) and 70.1% within a five-mile radius. 20.3% of staff reported that they lived between three and five miles from the university while 17.1% of staff lived more than thirty miles away (*Table 6*).

Table 6: Distance from the University of Plymouth Campus

Distance	All responses	Staff	Students
<2 miles	(56.3%)	(27.6%)	(67.5%)
3-5 miles	(13.8%)	(20.3%)	(11.3%)
6-10 miles	(7.0%)	(12.9%)	(4.7%)
11-15 miles	(4.2%)	(7.9%)	(2.8%)
16-20 miles	(3.1%)	(6.8%)	(1.6%)
20-30 miles	(4.1%)	(7.4%)	(2.8%)
31+ miles	(11.5%)	(17.1%)	(9.3%)
Total	100%	100%	100%

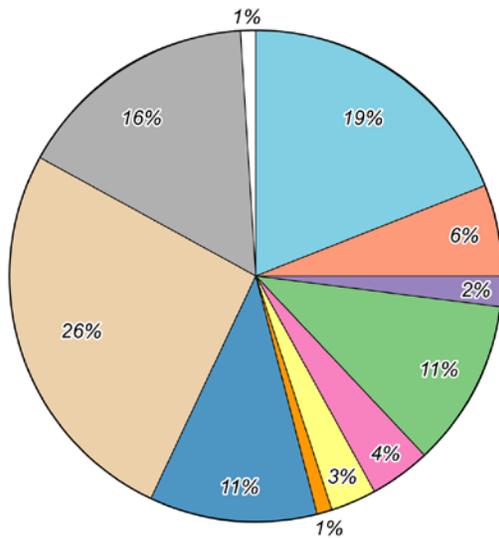
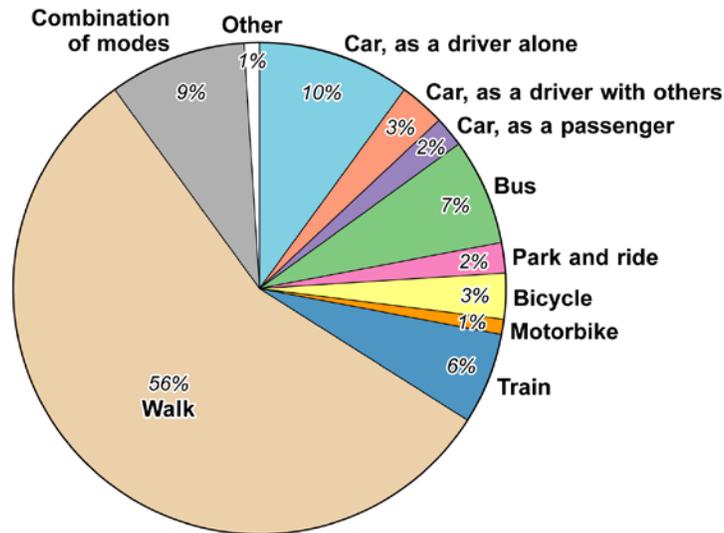
Walking is the most common method of getting to the university, with over half the respondents (56%) travelling this way. As one might expect, more students walk to campus than do staff (students 67%; staff 26%) given that the preponderance of students (67.5%) live in close proximity to campus. Up to 47% of staff use car journey arrangements of one kind or another, either driving

¹¹⁶ At the time of the survey, the Faculty of Education was still situated at Exmouth. In summer 2008 it relocated to the Plymouth main campus. Given that the Faculty was moving during the time of the survey, its leadership felt it would not be opportune to distribute the questionnaire.

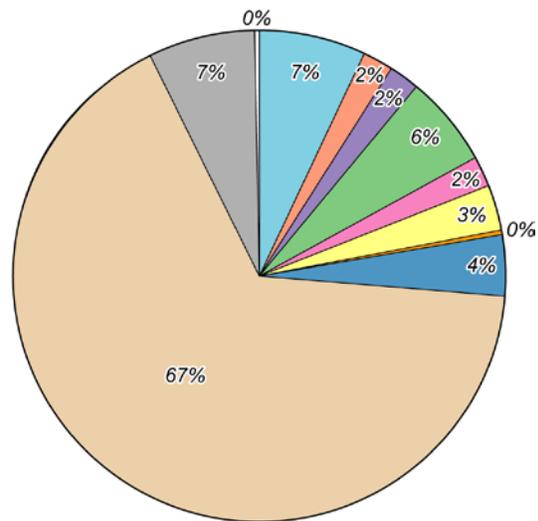
alone, with others, as a passenger, or using a combination of modes (e.g. Park & Ride), as against 20% of students (see *Figure 3*).

Figure 3: Typical mode of travel to campus.

a) All responses



b) Staff responses



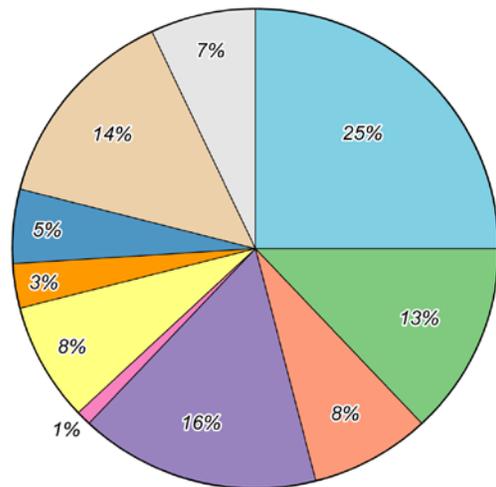
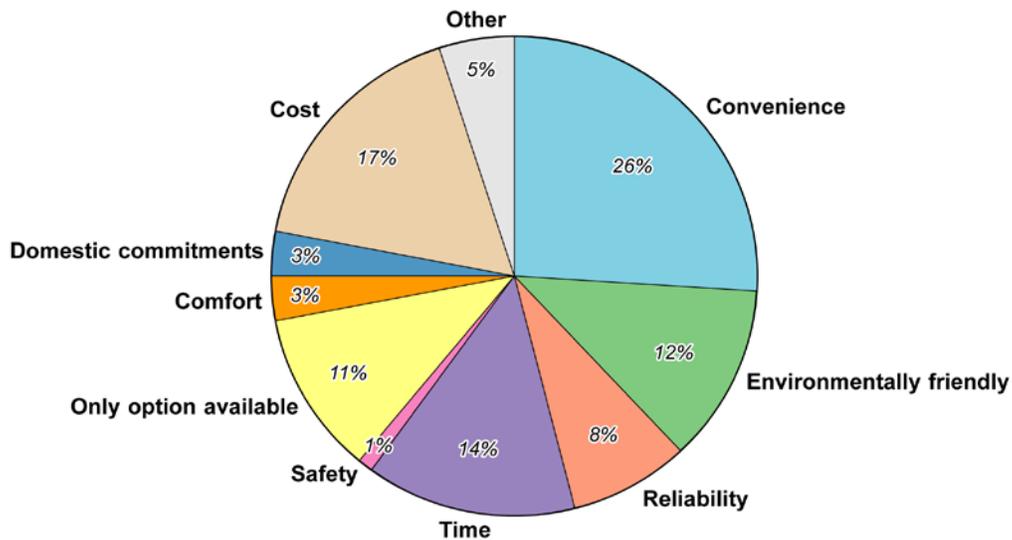
c) Student responses

Of staff and students driving to campus by car, more women drive to campus alone by car (female 65%; male 35%), possibly due to safety concerns or domestic or childcare commitments. More women use public transport to travel to the university (women making up 57.3% of declared bus users, 81.8% of declared Park & Ride users and 59.75% of declared train users). Female members of staff are more likely to travel to campus alone by car (71%) and use Park & Ride (80%). Men, on the other hand, account for 80% of cycle journeys.

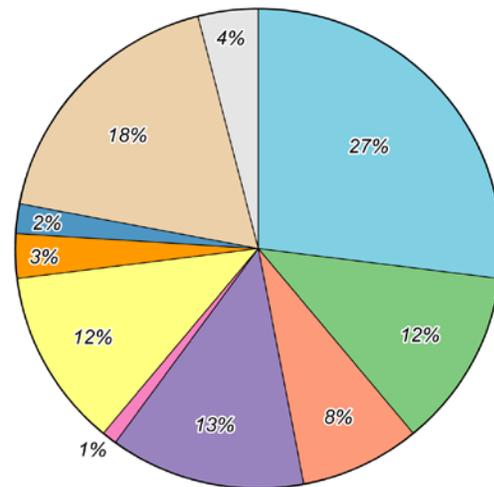
16% of staff reported their use of a combination of modes of travel to campus (e.g. car and train, train and walk; car and bus; car and cycle; car and walk). When asked about how many days a week they travel to campus, 55.5% of staff and 44.3% of students reported that they travelled every day. Principal reasons chosen for using their chosen main mode of transport, including walking, were, in descending order, convenience, time and cost (see *Figure 4*). There was little difference in student and staff responses.

Figure 4: Reasons for using predominant transport mode.

a) All responses



b) Staff responses



c) Student responses

When asked what were the main barriers to using alternative modes of transport, the most frequently recurring answers among staff were time (17%), convenience (15.5%) and 'too far to travel' (12.8%). Amongst students, the main barriers

were identified as money (27.6%) followed by convenience (19.0%) and time (16%). [See *Table 7*.]

Table 7: Barriers to using alternative sustainable modes of transport.

Barrier	All responses	Staff	Student
Money	23%	11.5%	27.6%
Convenience	18.0%	15.5%	19.0%
Safety	3.6%	5.0%	3%
Time	16.3%	17.0%	16%
Too far to travel	8.8%	12.8%	7.1%
Weather considerations	7%	7.1%	7%
Unreliable services	12.1%	12.2%	12.1%
Domestic commitments	4%	8.1%	2.3%
Other (specify)	7.4%	10.8%	6.0%

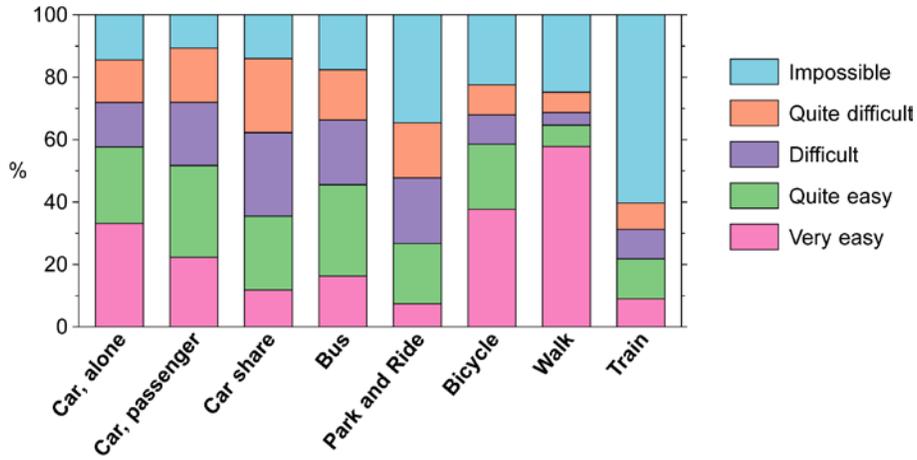
Asked about the ease they associated with different modes of transport, walking scored highly as a 'very easy' mode as did travelling alone by car for staff. Train journeys scored highly under the 'impossible' criterion probably because of the location of stations, inappropriate timetabling and, to some extent, cost. [See *Figure 5*.]

8.3 Incentives to Change to More Sustainable Travel Modes

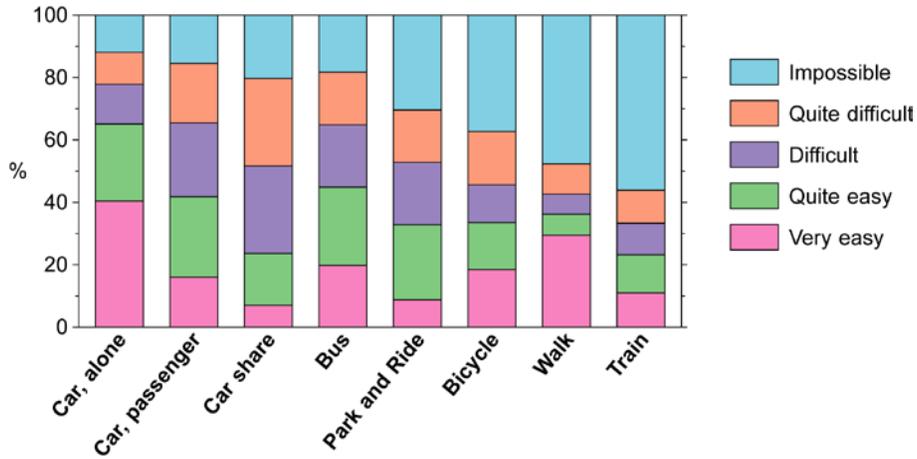
Asked to choose up to three incentives from a list of ten that would encourage them to shift to walking or cycling to work, the most common response from staff and students taken together was more secure bicycle parking (16.7%). The second most frequent combined response (15.8%) was that 'nothing' would make them shift, the figure for staff (21%) being significantly higher than for students (14%). Reasons for a 'nothing' return are likely to include distance involved, safety and pollution issues in urban areas and domestic commitments, not forgetting that 59% already walk or cycle to campus. Those intimating that they might be encouraged to shift to walking or cycling state that improved shower and changing facilities (13%), offers to help purchase cycling equipment (11%) and improved routes (12%) might be influencing factors. [See *Figure 6*.]

Figure 5: Ease of using various modes of transport to travel to campus.

a) All responses



b) Staff responses



c) Student responses

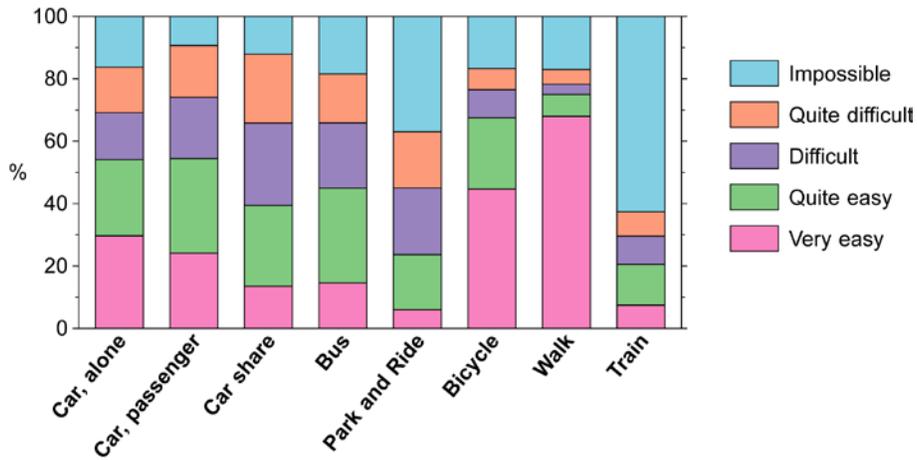
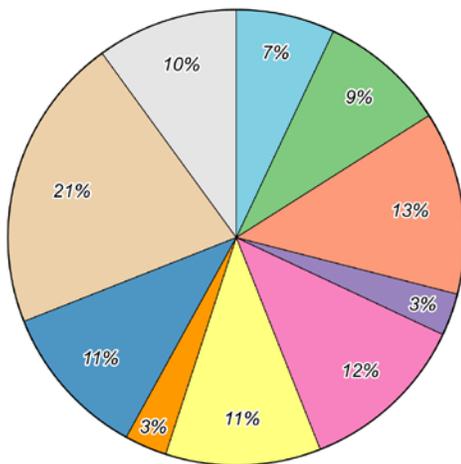
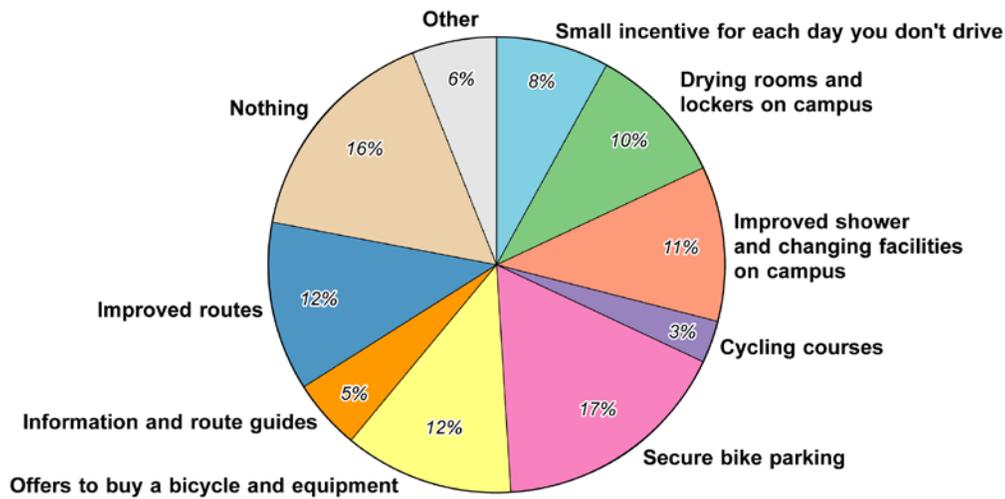
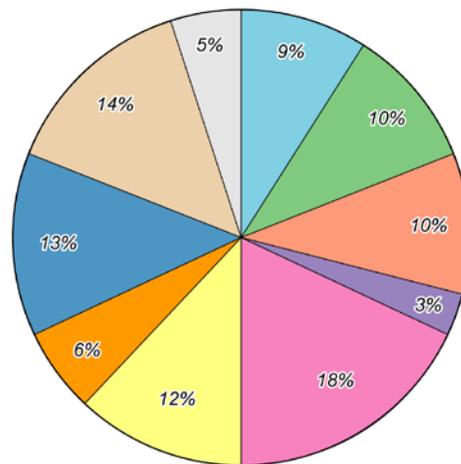


Figure 6: Actions that would encourage walking or cycling.

a) All responses



b) Staff responses



c) Student responses

Given that, for some, walking and cycling are not options for practical reasons such as distance, state of health and domestic commitments in many cases, respondents were also asked what would encourage them to make use of public transport. The availability of reduced-cost passes on public transport was the most common response from both students and staff. 'Readily available and up to date bus and train timetables linked to university stops' and 'retimed existing public transport that fits university hours' came next in priority for both staff and students but in different order of preference. [See *Table 8.*]

8.4 Student Home Travel and Cars

Asked about journeys back to their home place, 27% of student respondents reported that they travelled home once per term whilst 21% travelled home less

frequently. Of those travelling home, most (34.5%) travelled by train, 25.9% drove a car, 2% travelled by coach and 5.8% by bus. 22% gave Plymouth as their home place.

Table 8: Actions to encourage use of public transport

Actions	All responses	Staff	Students
Small incentive for each day you avoid driving	6.3%	8.2%	5.6%
Better quality bus waiting-facilities	9.1%	7.4%	9.7%
Readily available, up-to-date and easy-to-use bus and train timetables linked to university stops	18.6% (2)	15.4% (3)	19.7% (2)
Reduced-cost passes on public transport for staff and students	26.9% (1)	23.8% (1)	28.0% (1)
Re-timed existing public transport that coincides with university hours	11.6% (3)	16.0% (2)	10.0% (3)
Additional bus routes	6.5%	8.2%	6.0%
Loans to buy annual bus/rail pass	6.9%	4.0%	7.9%
Nothing	8.9%	8.0%	9.2%
Other	5.2%	9.1%	3.9%

Around a quarter of students may, therefore, be bringing a car to Plymouth. Brian Barlow, Central Services Manager, UPSU, bemoans the glut of cars this causes:

If you go down side streets here now, there are loads and loads of student cars. When the term finishes, the streets are empty. So they are all bringing cars down here. ...They sit on the streets for weeks on end. I have noticed that more and more over the last three or four years. And they don't need them, that is the thing. They just sit on the street and wait till they go home at weekends or whatever.

It may well be that having access to the environmental attractions of the South West – the beaches, coastal walks, the moorland and the outdoors generally – accounts for the large number of student vehicles.

8.5 Staff Business Travel

Staff were asked about their business related travel. A majority (64.7%) were required to travel on business. Amongst academic staff respondents, those from the Faculty of Health and Social Work (34.1%) and Faculty of Social Science and Business (30.2%) were more likely to report travelling on business. The most common modes of business travel were 'own car' (34.2%) followed by train (30.9%). Flying accounted for 7.5% of staff business travel and car hire for

8.1%. Sustainable modes of business travel such as car sharing (5%), bus (5.7%), cycling (0.6%) and walking (3.6%) are used less.

8.6 Awareness and Perceptions of the Green Travel Plan

Nearly 70% of all respondents had never heard the term 'travel plan'. About half of staff respondents had heard the term, but some 75.7% of students were not acquainted with the term. Amongst the 30% of all respondents who had heard about travel plans, only 23% knew their purpose and intent. Only 39.9% of staff knew the purpose of a plan.

More than 80% of all respondents were unaware of the Plymouth Travel Plan (60% of staff, over 90% of students). In faculty terms, respondents from the Faculty of Social Science and Business (41.7%) said they were aware of the Plan compared with 8.6% of academics from the Faculty of Technology and 0% from the Faculty of Education¹¹⁷. 58.4% of all respondents confirming they knew of the Plan, attested to having read the Plan (by which they mean the pamphlets or web-based describing the benefits of the Plan). Only 23% of all respondents who were aware of the Plan had been able to track down details on the Portal.

Respondents were also asked which Travel Plan measures they already used or were willing to use (see *Figure 7*). When taken together, these figures can be interpreted as a best-case scenario under the current Travel Plan. Discounted bus travel is the measure that staff and student respondents, taken together, would be most 'willing to use occasionally' or 'would seriously consider using'. The Bicycle User Group¹¹⁸ is the least popular initiative with 51.1% of all respondents saying they would be disinclined to become involved. The initiatives staff would seriously consider using were car sharing (11.3%), discounted Park & Ride (15.6%) and discounted bus passes (20.4%). The overriding perception of respondents (96.6% of all responses) was that the Travel Plan had had no behavioural impact.

Table 9 lays out the most commonly suggested improvements to the Travel Plan voiced by respondents. The most frequently made recommendation was for the university to work with local bus operators to negotiate a more flexible bus discount scheme than that currently offered and also to broaden the scope of discounts to incorporate students as well as staff. At present the discounted bus pass only allows for a monthly purchase and is not a viable proposition for more occasional travellers. Other improvements recommended indicate a lack of general awareness of existing bus services. For example, respondents suggested adding to the routes stopping at the university and making timetable changes so that bus schedules correspond more to the rhythm of the university

¹¹⁷ See footnote 116.

¹¹⁸ The group (see footnote 52) aims to support and promote cycling as a means of daily transport and to help improve campus facilities and safe routes by working with the University. <http://intranet.plymouth.ac.uk/bug/intranet.htm>

day. In reality, of course, all bus routes come to the city centre, which is close to the university, and on many bus routes there is already a frequent service throughout the day.

Figure 7: Willingness to use travel plan measures.

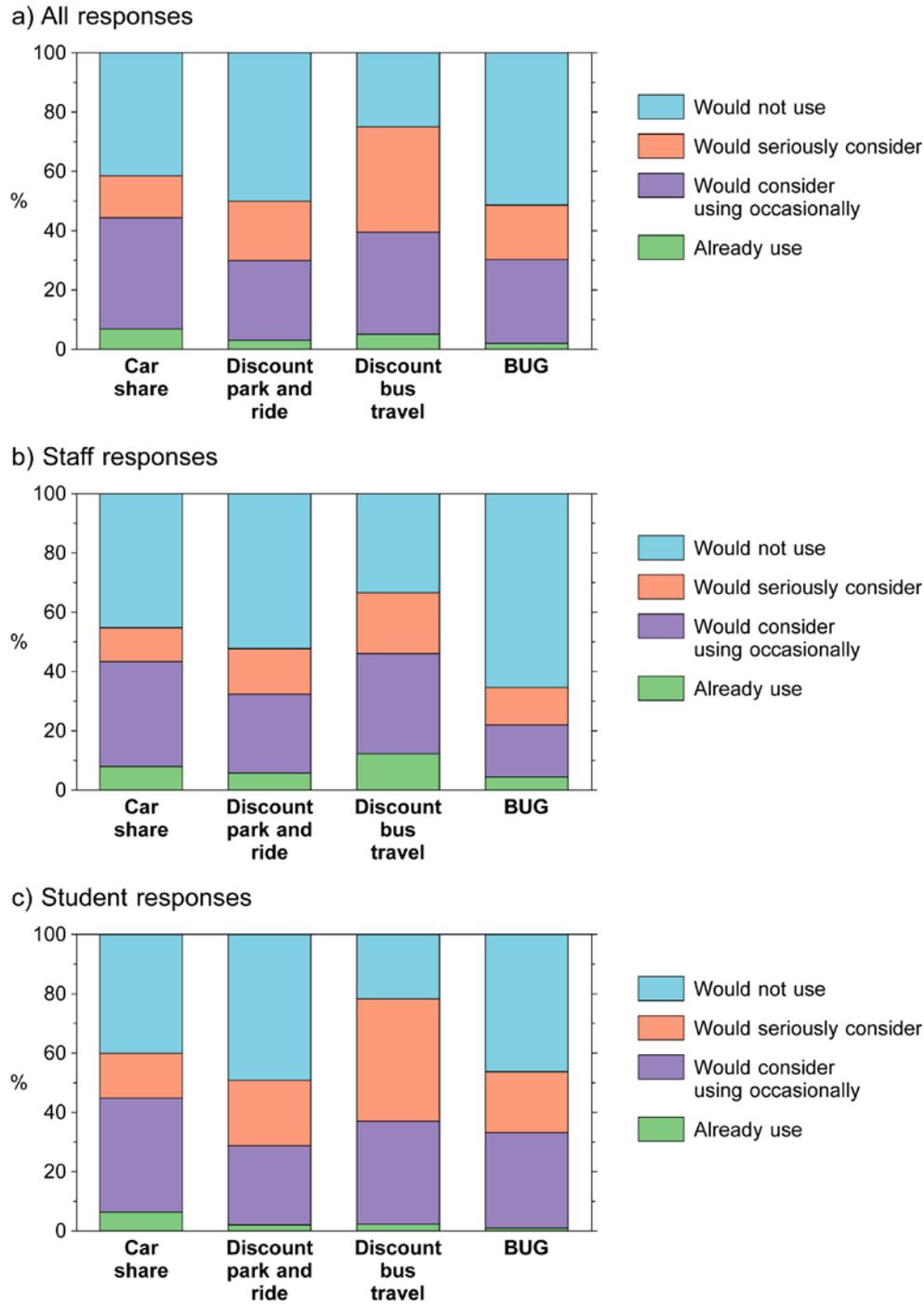


Table 9: Categories on improvements from open ended questions.

Mode	Categorised Recommended improvements	Frequency
Bus	(flexible) discounts	182
	information and marketing	19
	enhanced service and routes	59
	park and ride service	19
	loans and money	14
	timetabling	26
	own park and ride or shuttle service	31
Train	sensible (flexible) discounts	84
	information and marketing	6
	reliable routes/ increased frequency	35
	loans and money	5
	timetabling	28
Cycling and walking	signposts	7
	classes/groups	7
	safety measures	24
	rental and hire of bikes and equipment	10
	storage (more, better, safer, undercover)	80
	improved routes and paths (city and university)	46
	loans and incentives and tax deals	18
	drying/ shower and changing improvements	57
	business mileage	1
	cycle to work scheme	4
Car disincentives	charges	9
	restrict spaces	16
	incentives not to drive	19
Car sharing	marketing	11
	preferential spaces	8
	car sharing database (staff/student)	17
The university	marketing the plan	99
	leading by example	18
	campus location	4
	reduce need to travel- home working, distance learning, video conferencing	14
	cultural shift/improve plan/ show real commitment	21
	flexible working	16
	expand plan to part time workers	27
	expand plan to students	50
	university timetabling	8
car hire system	1	
Nothing	it's a personal choice	8

Amongst respondents there was also a frequently heard call for better marketing of the Travel Plan with a more accessible intranet presence allied to more insistent marketing through regular notices, circulated updates and introductions to the Plan at each staff and student induction. 'There needs to be more aggressive marketing of the Plan,' wrote one staff respondent, while another urged: 'Make everyone aware of the plan ... I don't know anyone at the university who is aware of it ...advertise this plan a bit more, as I have not heard of it'.

The Department of Learning Facilities has repeatedly attempted to bring rail travel elements into the Travel Plan but without success. Many staff and students called for the incorporation of rail travel within the Travel Plan, great dissatisfaction being expressed with the current train service and what they perceived as university inaction. 'This university,' wrote one student, 'could make more of a commitment to green travel. All I see at the moment is a deteriorating and expensive train service. Some students cannot use young person's rail cards at sensible times, and the morning service into Plymouth is poor. If the university were serious about green travel it would do something about this.' A member of staff wrote: 'Surely a large regional employer such as UoP has potentially a significant impact on First Great Western given the number of potential customers'. In reality First Great Western are seriously constrained in terms of the number of trains they can run because of rolling stock shortages throughout the rail industry. The company may be more amenable in terms of discounted fares.

Echoing Roger Creagh-Osborne (p.12), a significant body of respondents expressed dissatisfaction with the paucity of cycle storage, changing, showering and locker facilities on campus.

There were repeated calls from among student respondents for the Travel Plan to be extended to cover their travel.

It needs to be added that our survey findings in terms of staff attitudes and perceptions seem to differ markedly from the Plymouth Staff Survey of 2007 that reports that 80% of respondents (n=1711) were 'aware of aims of the Green Travel Scheme'. Our question was somewhat different as we asked about awareness of the plan itself rather than its aims. The Staff Survey also reports that 34% of respondents (n=1596) had 'comments or suggestions for the improvement of the scheme'.¹¹⁹

¹¹⁹ University of Plymouth. (October 2007). *Staff Survey 2007: Summary Report*. Plymouth: The University. 18.

9.0 Postcode Survey

Postcode data are already held in databases at the University and have been used to map the distribution of staff and students respectively. In our research, postcode mapping has been used to show general staff and student (term-time) residential distribution and therefore an indication of commuter distances. It can be used to infer the likely travel modes to the main Plymouth campus for work or study. These data offer a guide to the most densely populated areas of Somerset, Devon and Cornwall in terms of staff and students.

By referring to the map showing the distribution of student postcodes (see *Appendix 4a*), it is clear that the most significant concentration of students is within the City boundary (725–1393 per post code at sector level¹²⁰). Given the relatively short journey distances of students commuting from within the City boundary there is a greater likelihood of this group either walking or cycling. This would suggest the need for better provision for cyclists and pedestrians. Outside the City boundary there is a dispersed distribution of students. Other notable concentrations of student population (59-314 students per post code at sector level) are indicated by the light orange areas on the student map. The commuter distances involved are such that some form of motorised transport would need to be used, possibly in combination with walking or cycling.

In terms of staff travel to the Plymouth main campus from Devon and Cornwall, there is a concentration of staff in a 20 mile radius of the university as indicated by the mapped data (*Appendix 4b*). There are, however, notable pockets outside this 20-mile radius where there are significant numbers of staff (22-41 per post code at sector level), these being around Newton Abbot and Exmouth.

Higher resolution mapping of complete postcodes could assist in identifying clusters of staff within these general areas and their proximity to services. It could also help to inform where car sharing initiatives could be targeted or where a sole purpose taxi service might have potential as a viable alternative to single occupancy commuter journeys. A higher level of postcode data mapping could be useful in the areas of the two counties where fewer staff travel from but where the staff in question may actually live relatively closely to one another. At Warwick University the car sharing initiative has been very successful, a database of postcode data helping to identify potential lift sharers¹²¹. According to the combined Travel Plan of Dudley South NHS Primary Care Trust and Dudley Beacon and Castle Primary Care Trust, postcode coffee mornings are organised to help support car sharing¹²². In this way targeted marketing and promotion efforts facilitate the best use of resources to support the initiative.

¹²⁰ See explanation in Section 2.0.

¹²¹ http://www2.warwick.ac.uk/insite/newsandevents/intnews2/car_share_with (to access the fully secure site a staff login is needed)

¹²² <http://www.dudley.nhs.uk/sites/documents/cms/425-2006-11-10-3673202.pdf>

Postcode mapping and analysis can be a useful tool to support the development and improvement of a Transport Policy and its associated Travel Plan. At Plymouth University postcode data could be mapped at street level (using the whole postcode rather than just the first part, as is the case in our survey). Where staff and students live could then be mapped alongside commuting modes such as bus and rail services, cycle tracks and safe walking routes. This can then inform a better appreciation of the most viable alternatives to single occupancy car use.

Postcode mapping and analysis could be used to better identify future Transport Policy and Travel Plan priorities and contribute towards the setting of considered and achievable targets. The analysis also has the potential to be used to influence the operating decisions of transport providers to and from the university. Exploring the potential for this tool could be done at Plymouth using data already gathered in this research as a starting point.

10.0 Recommendations

The University of Plymouth Travel Plan has, as its working documentation, a consultancy report from 2005, containing a survey of staff travel habits and a series of recommendations, a document with the title 'University Travel Plan' from 2007 which contains a follow-up survey while identifying a series of indicators and performance measures, and a number of intranet pages which make reference to certain additional measures not identified in the 2007 document. These are summarised in a short leaflet.

The Plan in its day to day operation functions exceedingly well. As we have shown, it has more than met its targets, in most cases well ahead of the stipulated target date.

But the Plan and its constituent targets lack scope and ambition, and it is often difficult to discern exactly what the Plan is seeking to achieve, at least in terms of meaningful outcomes. The lack of scope and ambition is evident from the comparative survey of universities we have undertaken and the snapshots of noteworthy practice culled from the best-performing universities.

There appears to be little in the way of integration, not just in transport terms but also between different functional areas of the university. There is no mechanism linking the Plan to campus-related sustainability developments, including procurement, and to university sustainability initiatives more widely. There is little to no capitalisation on the teaching and learning potential of the Plan and its operations.

While there are laudable components to the Plan, most obviously with regard to its approach to influencing commuter behaviour, awareness of the document is

low among staff¹²³ and almost non-existent among students, who surprisingly are not included in its remit. The internal and external marketing of the Plan leaves much to be desired. In its failure to market effectively and to include the wider university community, the Plan stands in stark contrast to UK university best practice.

An aim of the Plan is to progressively reduce parking on campus. Incremental success in achieving this aim will mean that earnings ring-fenced from parking charges for subsidizing other aspects of the Plan, e.g. the Green Travel Pass, will wither on the vine. There seems to be no contingency plan to address this eventuality.

Against this backcloth, we offer a short series of key recommendations. We have kept these at the strategic level, since there is clearly a lot of detailed work that needs to be undertaken before an effective, redeveloped Travel Plan, informed by an overarching Transport Policy, can emerge.

- The University of Plymouth should adopt a wide-ranging Travel Plan and Transport Policy, pertaining to all aspects of the university's travel and transport activities. At the moment it is not clear what constitutes the Travel Plan and whether or not the Plan has even been formally adopted. The proposed new Travel Plan and Transport Policy should both be underpinned by meaningful and outcome-driven targets arrived at following a thorough research process and a wide and deep consultation process.
- The Transport Policy and Travel Plan need to have integration at their heart: it is not sufficient to arrive at a series of individual transport-related statements relating only to commuter activity. Instead a thoroughgoing review of all travel and transport activity needs to be undertaken to inform the content and development of the plan. This implies that the Policy and Plan need to be integrated in terms of:
 - ✓ Transport measures: the Department for Transport's five 'umbrella' measures referred to in this document provide a good starting point. These include not only commuting to and from the university, but also business and visitor travel and the procurement issues of deliveries and fleet vehicles.
 - ✓ Institutional structures and functioning: for a travel plan to be effective, it needs to permeate through all levels of the university's structure both vertically and horizontally. This in turn implies the need for a Transport Policy and Travel Plan Officer (an appointment that could be associated with the proposed Sustainability Officer) who reports to the

¹²³ To repeat, our survey differs in its findings about staff awareness of the Travel Plan from the Plymouth Staff Survey of 2007 (see p.41).

- OVC. The current arrangements militate against someone taking an effective 'overview' role to break down existing silo mentality thinking.
- ✓ Being inclusive, i.e. applying to the whole university community and so bringing students in to transport and travel schemes
 - ✓ Linkages to other policy documents and action plans, and to the university Corporate Plan, as well as a monitoring of the Transport Policy and Travel Plan by the Sustainability Advisory Group to the Office of the Vice Chancellor (OVC).
 - ✓ Wider stakeholders: the production of a new Transport Policy and Travel Plan allows for reinvigorated involvement with local and regional stakeholders, including not only local authorities and the regional development agency, but also the local bus, rail, taxi¹²⁴ and air companies. Suppliers of goods to the university, who make deliveries, and freight transporters should also be actively engaged. The idea of establishing a consortium of universities in the South West of England to negotiate discounted rail fares for staff and students should be given active consideration.
- The integrated Transport Policy and Travel Plan should be underpinned by a robust analysis of the current state of play and potential policy options. This should be informed by appropriate consultation and background policy research, including best practice identified at other institutions and by existing Department for Transport (and other) guidelines. In relation specifically to the University of Plymouth, data already exist with regard to travel activity and policy options – see the Jubb consultancy report and subsequent surveys, including that contained within this document – but data and policy options referring to categories other than commuting are lacking. There is also work to be undertaken regarding postcode analysis of where staff live and the nature and extent of public transport, car sharing and other opportunities currently available. [In combination the various opportunities allow people to be matched with alternatives to single-occupancy car travel and thus provides for an element of individualised journey planning which has proven effective in promoting modal shift.] Such an analysis, informed additionally by the wide and deep consultation we propose, should result in:

¹²⁴ The university has arrangements with taxi companies mainly for trips in and around Plymouth but sometimes for longer journeys. In the latter regard in particular, some university faculties prefer to use the Green Taxi Company as do Plymouth Medical School and local NHS Trusts. The Green Taxi Company (www.thegreentaxicompany.com) uses hybrid cars or cars running on locally-produced bio-diesel. The Company is exploring the idea of making return trips available to students and staff at reduced costs as long as they do not return empty on long trips (discussions are in train with UPSU). This will clearly involve a website for coordination purposes. It is an idea that the university as a whole might usefully examine for both cost and sustainability reasons.

- ✓ A full list of detailed travel and transport policy options, including an analysis, crucially, of how they are integrated and operable, and their chances of being effective.
 - ✓ A full list of associated and meaningful outcome-based targets against which performance can be measured.
 - ✓ The adoption, from the above, of an approved list of measures and targets.
- The Transport Policy and Travel Plan need to be actively and enthusiastically supported at institutional level. This will involve:
 - ✓ Promoting staff and student buy-in. Senior management need to be (and need to be seen to be) in active support of the plan, and there may need to be dedicated staff training, especially where there are complex issues such as procurement at stake. A key function of the Policy and Plan will be to make available key contacts both vertically and horizontally throughout the institution to promote effective knowledge sharing and learning, and integrated travel and transport planning. The Policy and Plan as both documents and in their operation can also function as a student learning and action research resource.
 - ✓ A vigorous marketing campaign. As the first CSF Occasional Paper demonstrated, there needs to be effective internal and external marketing of sustainability by higher education institutions¹²⁵. The Transport Policy and Travel Plan as well as supporting implementation and promotional documentation will need to be readily identifiable and available, for external as well as internal consumption. This means it needs a prominent web presence. A shortened version outlining the main points and how staff can benefit also needs to be available, including at staff and student events (and, as at present, in induction packs).
 - ✓ Investigating with a view to implementing a carbon reduction and/or offset scheme for university business travel as a result of a cross university consultation steered by the OVC Advisory Group on Sustainability.

11.0 The Transport Policy, Travel Plan and the Enterprise Culture

All of the above recommendations point to the need for an appropriate level of resource to be made available if the Policy and Plan are to be as effective as possible. There is already an existing income stream in the form of car parking charges, and it will be necessary to ensure that this revenue stream continues or if, as is likely with fewer and fewer parking spaces being available, is augmented

¹²⁵ Selby, D., Jones, P & F. Kagawa. (2008). *A Big Hairy Audacious Goal: Marketing university sustainability credentials*. Plymouth: Centre for Sustainable Futures.

by an alternative funding source. A steep rise in revenue support, ensuring a broader financial base, will be required if the Plan is to achieve genuinely meaningful outcomes. A Transport Policy and Travel Plan Officer implementing and monitoring a widening range of active policy measures, such as further subsidising of public transport or providing hundreds of new secure bike parking stands and shower/changing rooms, represent significant expenditure. A key role of the Officer, in consultation with other relevant parties, will be to act in an enterprising and innovative manner to identify new streams of income to support Transport Policy and Travel Plan measures.

Income streams in addition to parking charges have already been identified at other UK universities. Oxford Brookes, for example, secures a contribution from the 'Brookes Bus' budget. At the University of Warwick, the Travel Plan initially relied upon monies from the Carbon Programme Budget and a small grant from the local Travel Wise programme. A proposal to integrate the role of Travel Plan Coordinator into a new central and self-funding Transport Department is being reviewed. Cost savings would be achieved by centralising and reviewing transport operations across all departments.

Further streams of revenue at the University of Plymouth could be diverse and include, but are by no means limited to:

- Upgrading the university's videoconferencing equipment to provide a facility for both this institution and other businesses in the city and beyond seeking such facilities. In other words this could become a lucrative business venture in its own right, and analysis has already shown our existing facilities to save the university considerable sums in terms of avoided travel.
- Identifying other ways of promoting flexible working that are capable of saving the university money on its travel and other budgets (e.g. heating, accommodation).
- Renegotiating supply/vehicle fleet contracts to reduce vehicle miles, fleet size, carbon output and, potentially, cost.
- Working with local transport providers to develop strategic public transport links currently unavailable. Successful examples include the Robert Gordon University and the University of Southampton.
- Selling the university's expertise as consultants in travel and transport planning.

In short, it is possible to dovetail sustainable transport and travel with the enterprise agenda through innovative and lateral thinking.

About the Authors

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Laura Roberts has recently completed an MSc in Sustainable Environmental Management at the University of Plymouth, where she also completed her undergraduate degree in Geography. During her MSc she carried out a work placement at the Centre for Sustainable Transport where she conducted research looking at the implementation of travel plans in universities in the UK. It was during this work placement that she realised she wanted to pursue this area of research further and therefore decided to develop this area of study for her MSc dissertation. Laura is now hoping to pursue a career in the environmental sector.

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areas of the organisation to minimise the environmental impact of the Agency's transport related activities. During her time as the Centre for Sustainable Transport she was involved in a variety of projects including Transport, Travel and Respect across the Generations and The Tamar Valley Line: Passenger Behaviour, Attitudes and Aspirations. She studied Geography at the University of Plymouth and is an IEMA accredited environmental auditor.

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Appendix 1: Semi-Structured Interview Questions

1. Please could you explain your role with regard to the University's Travel Plan? How long has your post been in position? [link with Transport Policy/or other Policies at the University]
2. Why or what prompted the University to initially develop a Travel Plan?
3. What was the main driving force for the continued development of the Travel Plan?
4. In terms of the scope of the Travel Plan, has it been the intention to focus more on one, or a few, particular areas or have all areas relating to University Travel received equal attention? Please explain your answer.
5. What are the unique features of your Travel Plan?
6. Are there management structures and/or other policies in place at the University which support the Travel Plan initiative? If so, please explain.
7. What initiatives have been adopted to encourage staff and student uptake of the schemes [facilities/opportunities] developed in the Travel Plan? And how successful have these been judged to be?
8. What have been the milestones, and challenges, in the development and implementation the Travel Plan?
9. What have been the challenges and successes in terms of the monitoring and evaluation processes associated with the Travel Plan?
10. What have been the overall financial implications of the Travel Plan initiative?
11. In connection with the Travel Plan have there been any indirect effects? If so, please explain.
12. What particular areas of the Travel Plan does your University intend to concentrate in the future? Please elaborate your answer.
13. What advice would you offer to a university embarking on developing or improving their existing Travel Plan?

Appendix 2: Questionnaire

Travel Plan Questionnaire

About you....

1. Are you a member of staff or a student?

staff student staff and student

2. Are you full or part time?

full time part time

3. If you are a student, what year of study are you in?

first second third fourth postgraduate

4. If you are a member of staff, which employment category do you fit in?

academic managerial (Deans, Head of School, Department)
academic (lecturer and teaching)
researcher
admin/clerical
technical
other (please state)

5. Which faculty do you belong to?

arts
health and social work
social science and business
education
science
technology
other
Please specify:

6. Are you male or female?

male female

7. Which age group do you fit in?

18-20 21-25 26-30 31-35
36-40 41-50 51-60 60+

Your travel behaviour....

8. How far away from the University of Plymouth campus do you live?

1-2 miles 3-5 miles 6-10 miles 11-15 miles
16-20 miles 20-30 miles 31+ miles (please state)

9. Typically, how many days a week do you travel into the University of Plymouth campus?

once a week twice a week
three times a week four times a week
every day

10. What is your main mode of travel on a typical journey to campus?

- | | |
|------------------------|------------------------------|
| car, as a driver alone | car, as a driver with others |
| car, as a passenger | bus |
| park and ride | bicycle |
| walk | motorbike |
| train | combination (please state) |
| other (please state) | |

11. On a non-average day, how would you travel to campus?

- | | |
|------------------------|------------------------------|
| car, as a driver alone | car, as a driver with others |
| car, as a passenger | bus |
| park and ride | bicycle |
| walk | motorbike |
| train | combination (please state) |
| other (please state) | |

12. What are the reasons for using your main mode of transport (pick up to 3)

- | | |
|--------------------------|------------------------|
| convenience | comfort |
| time | cost |
| reliability | safety |
| environmentally friendly | domestic commitments |
| only option available | other (please specify) |

13. For your journey from home to the campus, how easy or difficult do you think it is to travel by the following options?

very easy quite easy difficult quite difficult impossible

-
- car, alone
 - car, passenger
 - car share
 - bus
 - park and ride
 - bicycle
 - walk
 - train
-

14. Which of the following changes would most encourage you to walk or cycle? (pick top 3)

- small incentive for each day you don't drive
- drying rooms and lockers on campus
- improved shower and changing facilities on campus
- secure bike parking
- courses to practice cycling and gain confidence
- incentives and offers to buy a bicycle and equipment
- information and route guides
- improved routes
- nothing
- other, please specify

15. Which of the following would most encourage you to use public transport to or from the campus?(pick top 3)

- small incentive for each day you don't drive
- better quality bus waiting facilities
- readily available up-to-date, easy-to-use, bus and train timetables linked to university stops
- reduced-cost passes on public transport for staff and students
- existing public transport services that are re-timed to better fit university hours
- additional bus routes
- loans to buy annual bus/rail pass
- nothing
- other (please specify)

16. Are there any barriers stopping you from using modes of transport other than the one you usually use? (pick up to 3)

- money
- convenience
- safety
- time
- other (please specify)
- too far to travel
- weather considerations
- unreliable services
- domestic commitments

17. What do you think of the local public transport provisions? (pick up to 3)

- expensive
- good value
- clean
- other (please specify)
- dirty
- reliable
- unreliable

STUDENTS ONLY- ANSWER QUESTIONS 18-22, THEN GO ON TO ANSWER QUESTION 26 ONWARDS

STAFF ONLY-ANSWER QUESTIONS 23-25, THEN CARRY ON TO QUESTION 26

STUDENTS ONLY (questions 18-22)

18. Students, does your course require you to travel for fieldwork?

- yes
- no

19. If yes, what modes of transport have been used?

- car
- coach
- train
- minibus
- plane

20. What is the name of your home town?

name of town/city

21. How often do you go back to visit?

- less than once a term
- once a term
- 2-3 times a term
- 4-6 times a term
- more than 6 times a term
- n/a Plymouth is my home town

22. What mode of transport do you usually use?

- car (as a driver)
- car (passenger)
- bus
- other (specify)
- coach
- train
- plane

STAFF ONLY-QUESTIONS 23-25

23. Do you have to travel for work related business?

yes no

24. If yes, on average how often?

2 or more times a week once a month
every week other (please specify)
once a fortnight
n/a

25. What mode of transport do you usually use?

own car train
hire car plane
car share cycle
fleet vehicle walk
bus other (please specify)

Travel Plans....

(staff and students to answer the remaining questions)

26. Have you heard of the term "travel plan"?

yes no

27. Do you know what a travel plan is intended to do?

yes no

28. Were you aware that the University of Plymouth has a Travel Plan?

yes no

29. Have you read the University of Plymouth's Travel Plan?

yes no

30. Where did you hear about the University's Travel Plan?

have not seen it email
university portal newsletter
notice board advertising leaflet at induction
other (please specify)

31. Have you been able to find the plan on the University Portal?

yes no n/a

32. Which of the following measures which the university currently uses would you be willing to use, or already use?

already use would not use would consider using occasionally would seriously consider

car share
discounted park and ride tickets
discounted bus travel
bicycle user group (BUG)

33. Has the travel plan had an impact on your travel behaviour?

yes no

34. If yes, how? (e.g. use public transport for commute, don't drive every day etc)

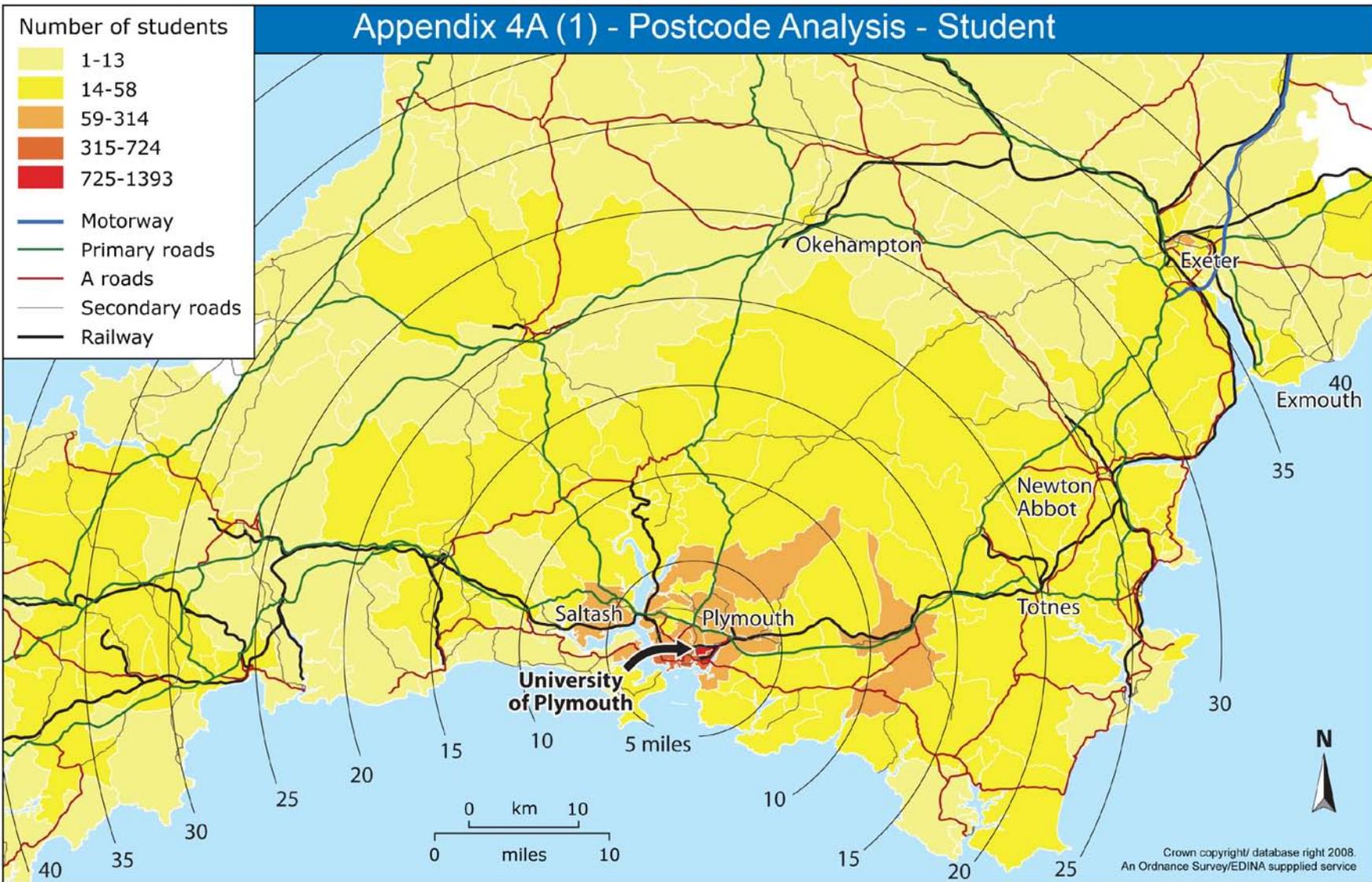
35. How do you think the university could improve travel for staff and students?

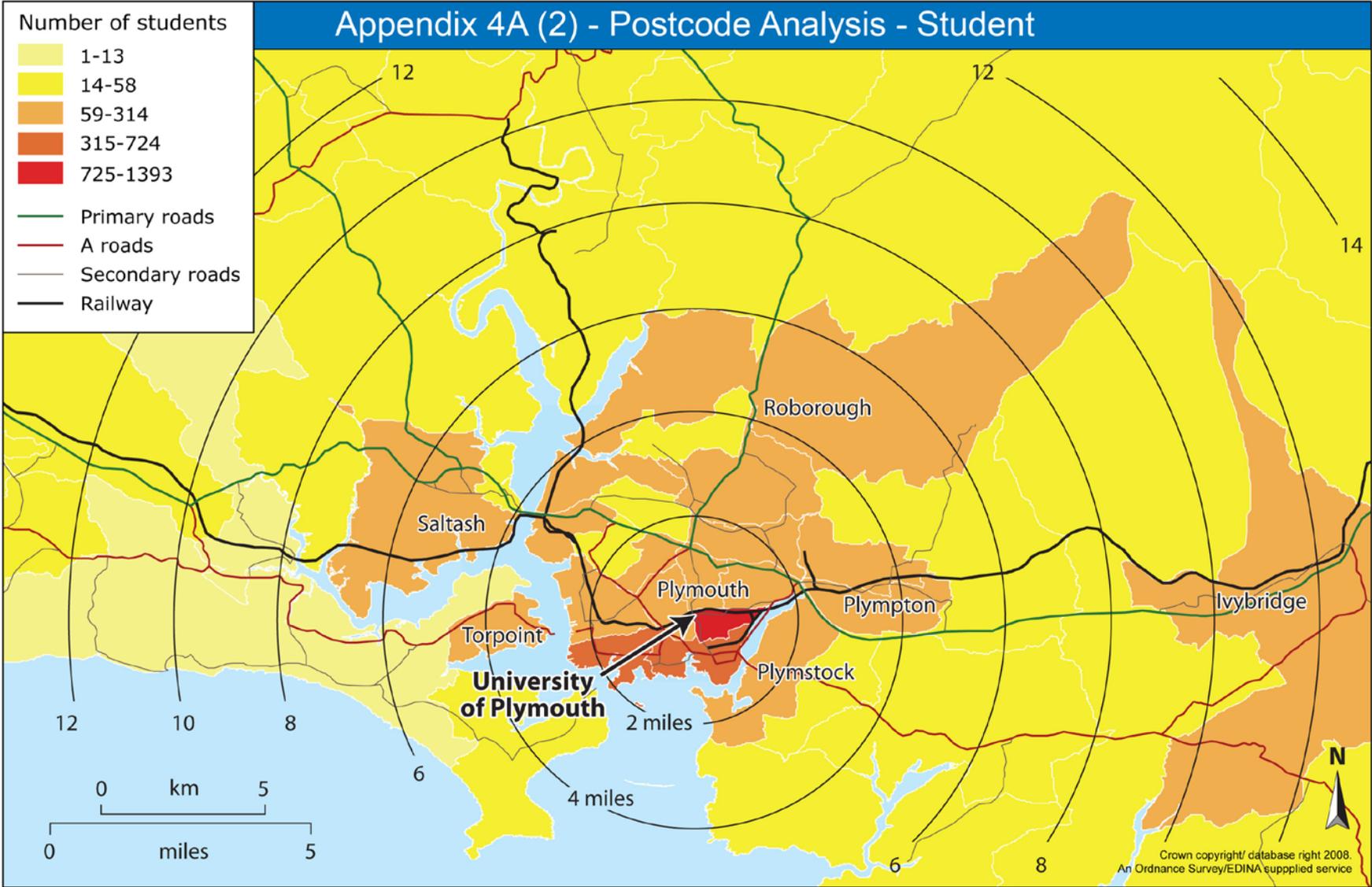
To be entered into the prize draw to win 1 of 2 £20 Amazon vouchers please enter your email address in the box below. Your details will not be passed on, and will only be used in the draw. These details will not be used in any way in the collation and analysis of results.

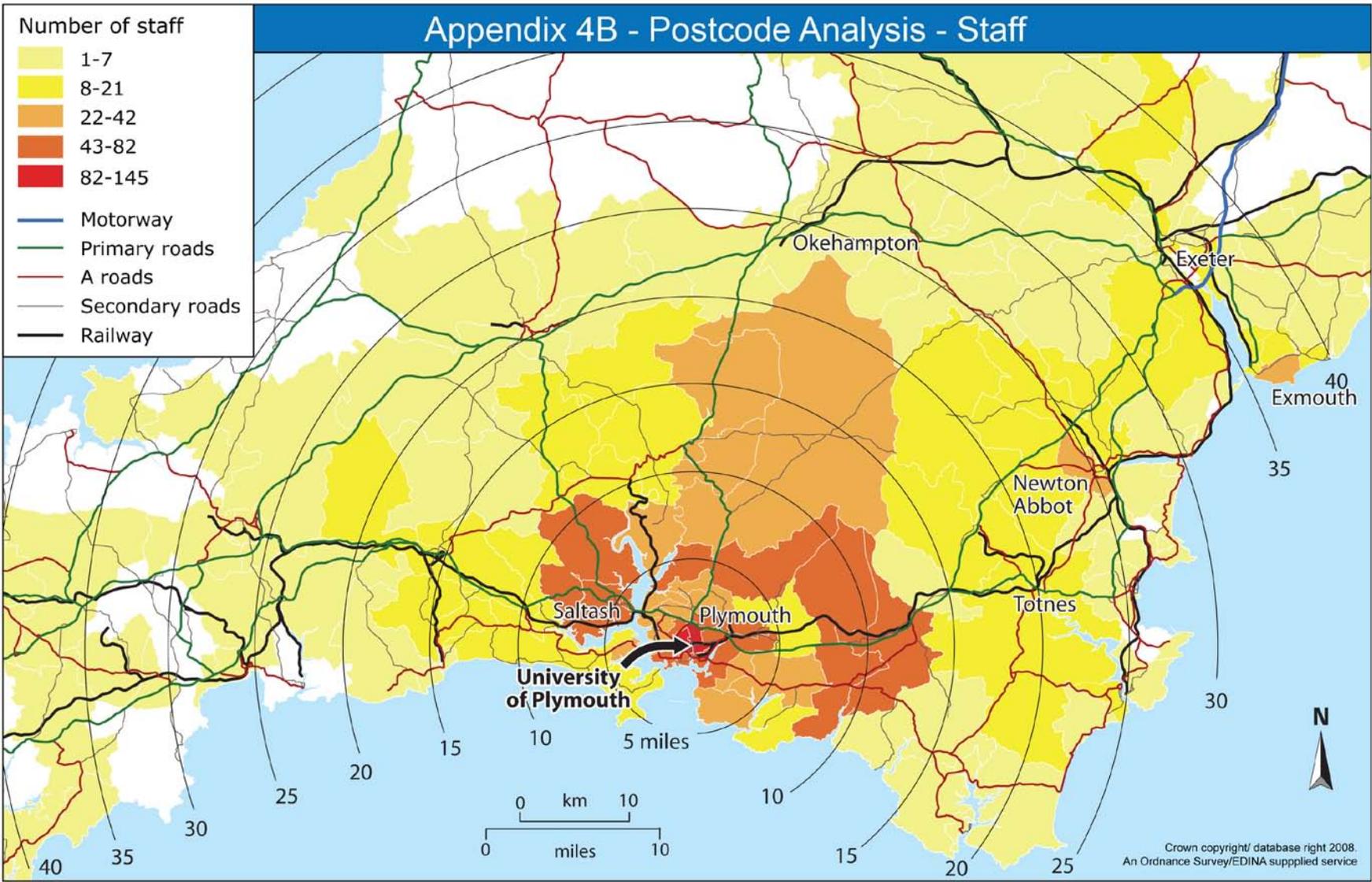
36. Email address for prize draw

Thank you very much for taking the trouble to answer this questionnaire. Now please click the 'SUBMIT SURVEY' button below to return your responses. If you have any further comments on this questionnaire, or on my research project then please do not hesitate to email me on laura.roberts100@postgrad.plymouth.ac.uk

Appendix 4A (1) - Postcode Analysis - Student









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