NUI Galway Travel Plan 2017-2020
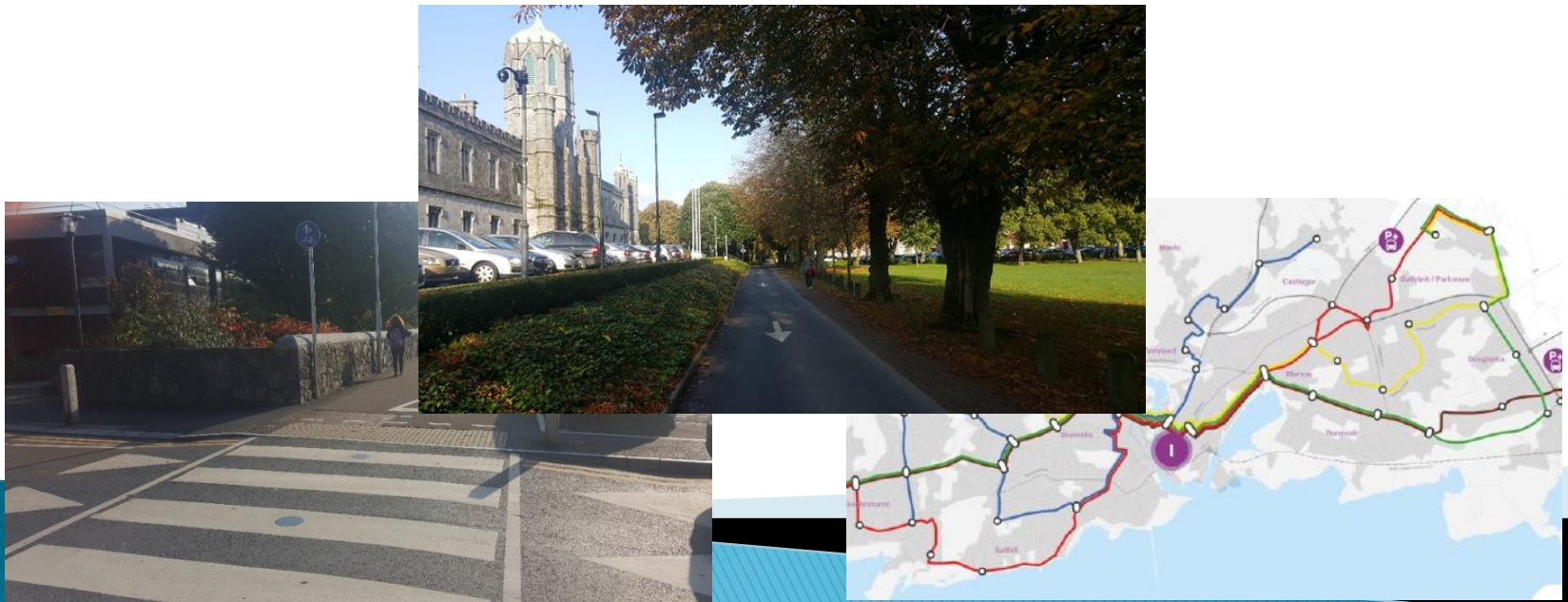
Final Plan | 20 December 2016

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Introduction

>> What is a Travel Plan?

Why update it?

Update process

What is a Travel Plan?

▶ *"…… a package of measures aimed at supporting sustainable travel for work-related journeys.*

It comprises actions to promote walking, cycling, public transport, car sharing, the use of technology instead of travel, and flexible working practices."

(Workplace Travel Plans, A Guide For Implementers – National Transport Authority, 2012)

Workplace Travel Plans

A Guide for Implementers

Why update the Travel Plan?

- Existing Travel Plan was developed in 2011, and is underpinned by 2010 surveys
- Existing Plan predated publication of contemporary national travel planning guidance

- A new Plan, that better reflects current staff and student travel behaviours *and* aspirations, is now needed
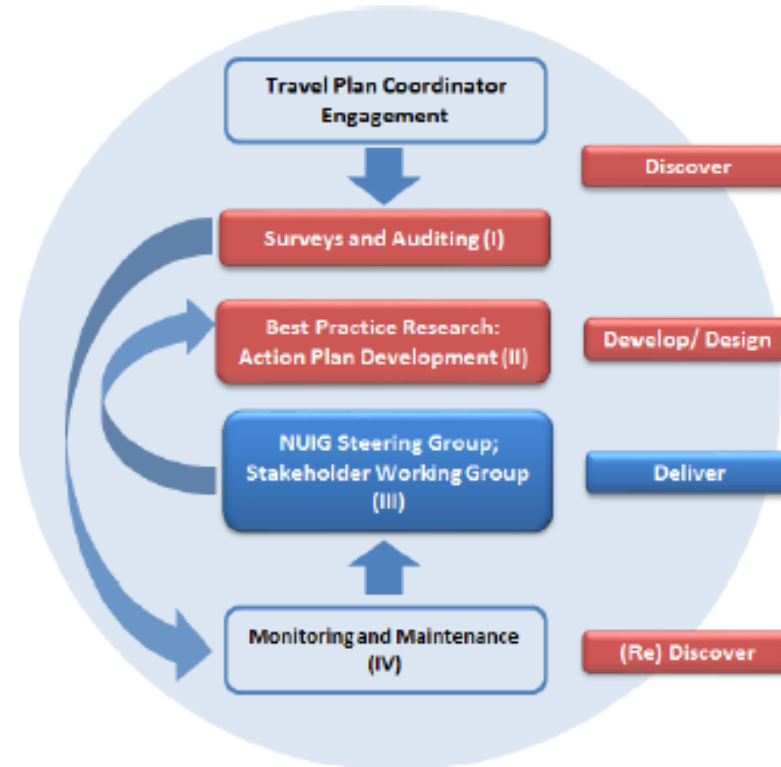
Update process

- Travel plan development is a process, with four key stages:
  - surveys and auditing
  - best practice research
  - Action Plan development
  - monitoring and maintenance
- Action Plan intended to be a 'living' document, updated on an ongoing basis to meet evolving staff and student needs

Aims of Travel Plan

>> *"to cater for the travel needs of University staff and students, and to encourage sustainable modes of transport."*

Aims of the Travel Plan?

- Reduce single car occupancy car use:
  - increase availability of car parking
  - limit traffic congestion
  - support future growth of the University
  - support Green Flag aspirations
- Encourage sustainable travel:
  - increase travel choices for all staff, students and visitors of the University
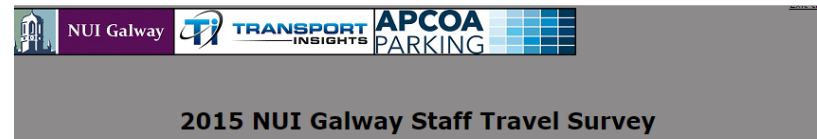 - lessen environmental impact of car use
  - promote healthier lifestyles

How do we Travel?

>> Walking, cycling, public transport and car...

Establishing baseline travel patterns

▶ Comprehensive survey data collection in November 2015, and analysis:

- online staff and student travel questionnaires

- results compared with previous surveys (2005 onwards)

- high response rate from 2,293 staff and 17,153 students

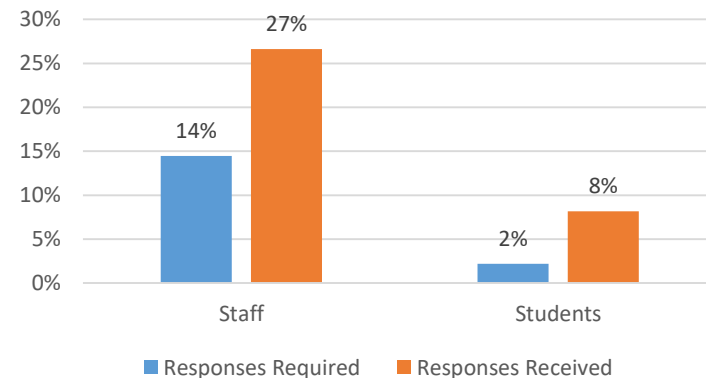- supplemental traffic and parking surveys

Normal means of travel

Staff
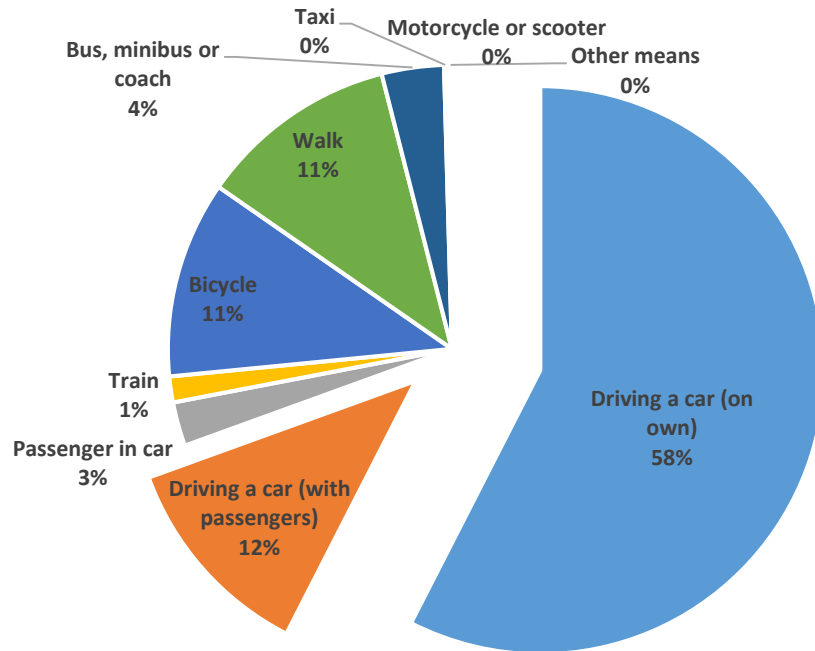
Students
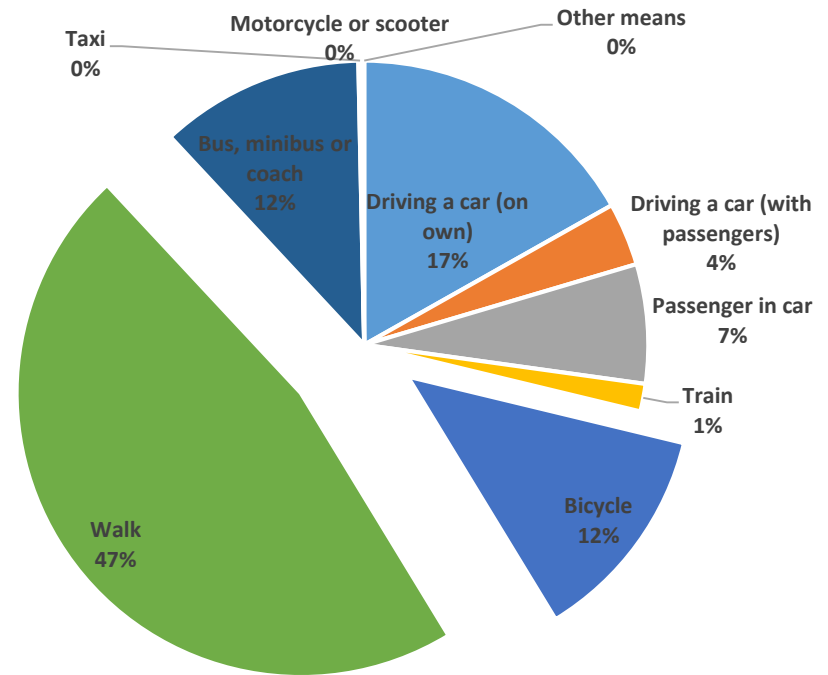
- ▸ High level of staff car use – 72%
- ▸ 59% of students actively commuting

Trends in staff travel patterns

Main travel mode to Campus - Staff
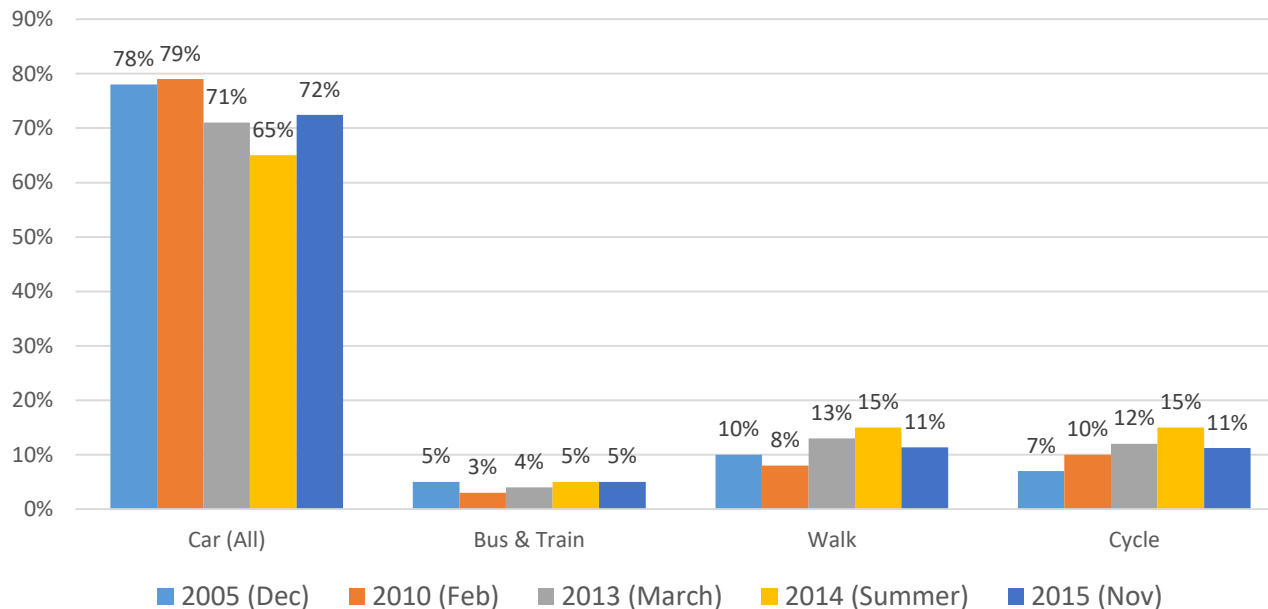
▸ Due to seasonality effects, direct comparisons between different years cannot be made, however:

- car use appears to have increased since 2013

  - walking and cycling appear less popular

Trends in student travel patterns

Main travel mode to Campus - Students

Legend: 2005 (Dec), 2010 (Feb), 2013 (March), 2014 (Summer), 2015 (Nov)

| Mode	2005 (Dec)	2010 (Feb)	2013 (March)	2014 (Summer)	2015 (Nov)
Car (All)	24%	31%	31%	26%	27%
Bus & Train	8%	8%	10%	12%	13%
Walk	56%	46%	42%	47%	47%
Cycle	12%	15%	17%	14%	13%
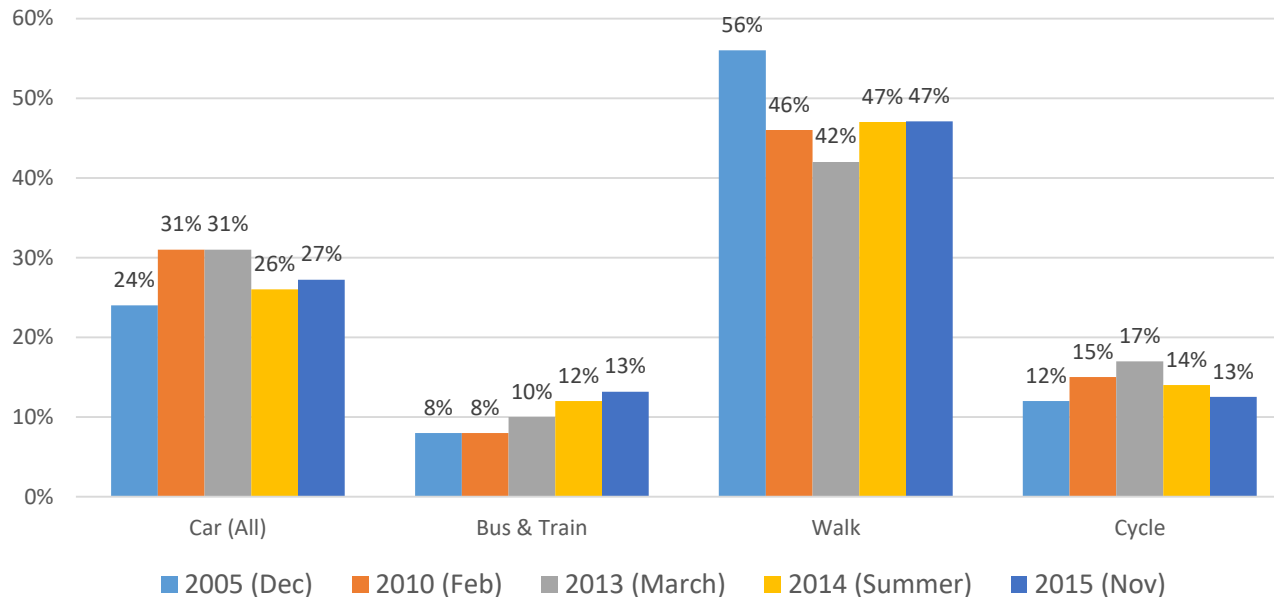
▸ Although direct comparisons between years cannot be made:

- public transport use appears to have significantly increased
- the trend of increased cycle use up to 2013 appears to have recently reversed

Distance travelled

Staff

- Less than 1km — 5%
- Between 1km and 3km — 19%
- Between 3km and 5km — 17%
- Between 5km and 10km — 16%
- Between 10km and 20km — 19%
- More than 20km — 24%

Students

- Less than 1km — 21%
- Between 1km and 3km — 37%
- Between 3km and 5km — 14%
- Between 5km and 10km — 8%
- Between 10km and 20km — 7%
- More than 20km — 13%
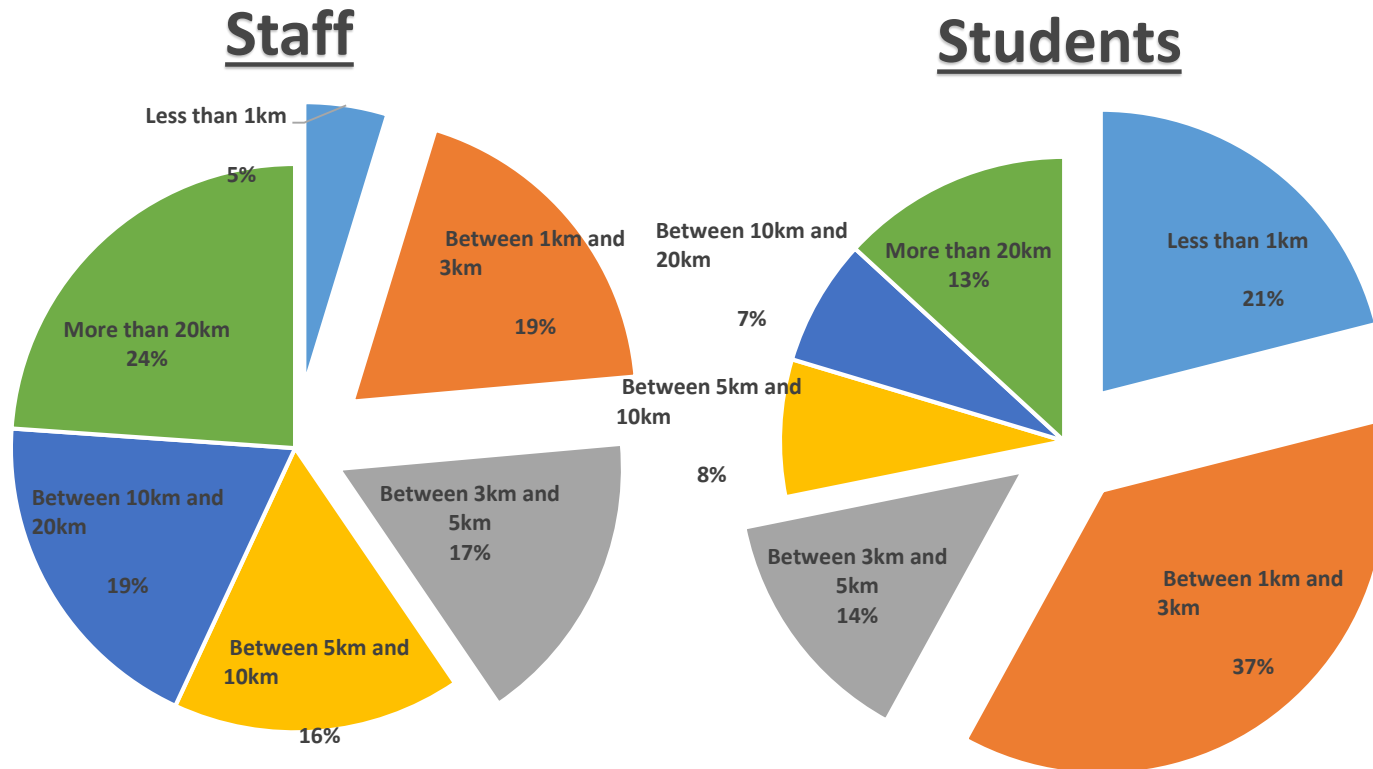
- ▸ 43% of staff live more than 10km from Campus
- ▸ 72% of students live less than 5km from Campus

Means of travel by distance

▸ How does distance travelled influence travel behaviours?

Staff

Students
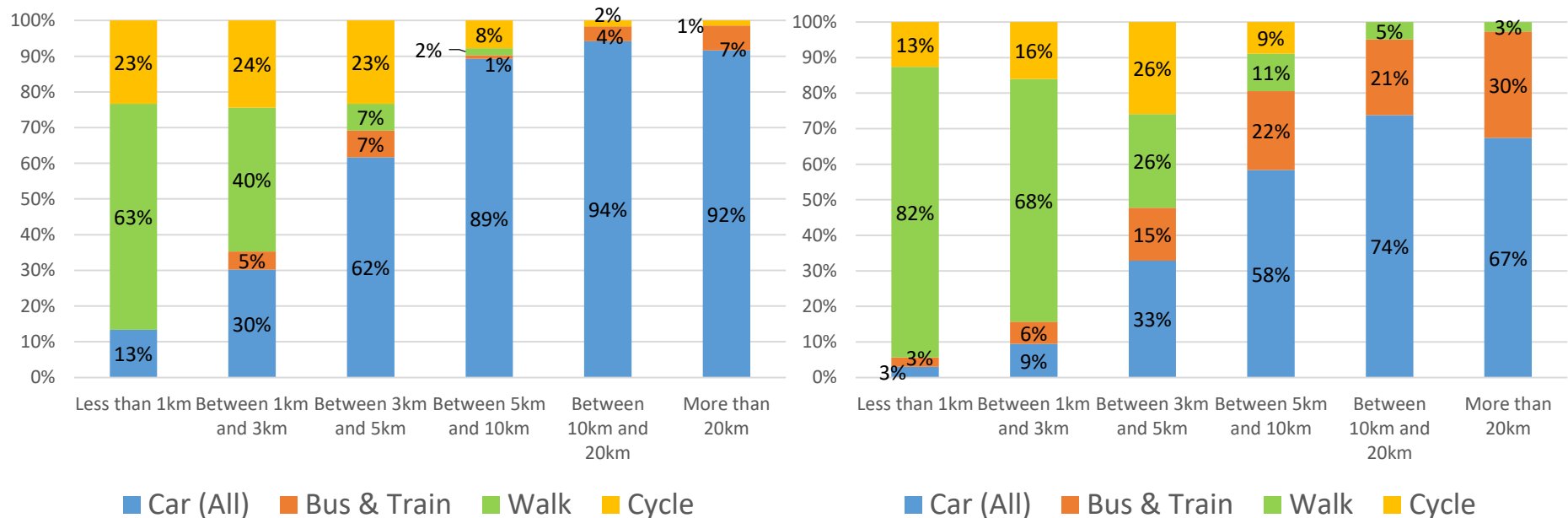
▸ Active travel modes falls steeply with distance

▸ Car use increases, particularly for staff

Usual arrival time to the campus

Chart: Usual arrival time to the campus (Students vs Staff)
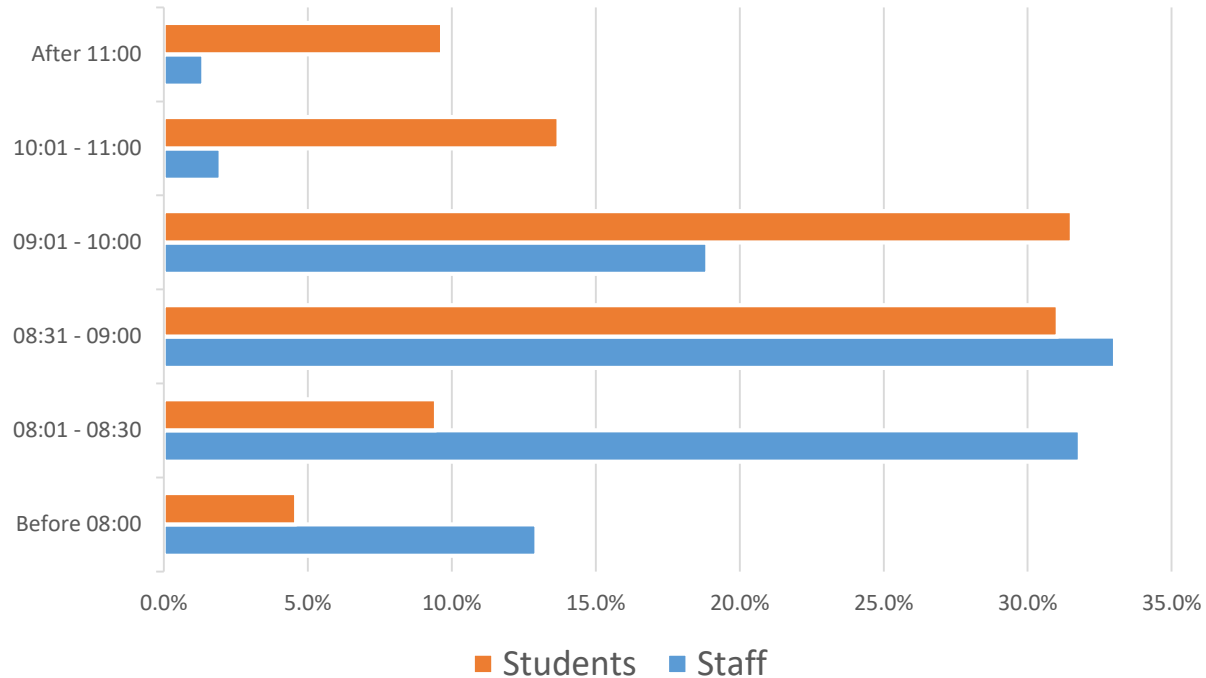
- 78% of staff, and 45% of students, arrive before 9am
- > 30% arrive between 8:30 and 9am – experience <u>and</u> contribute to traffic congestion

Journey time
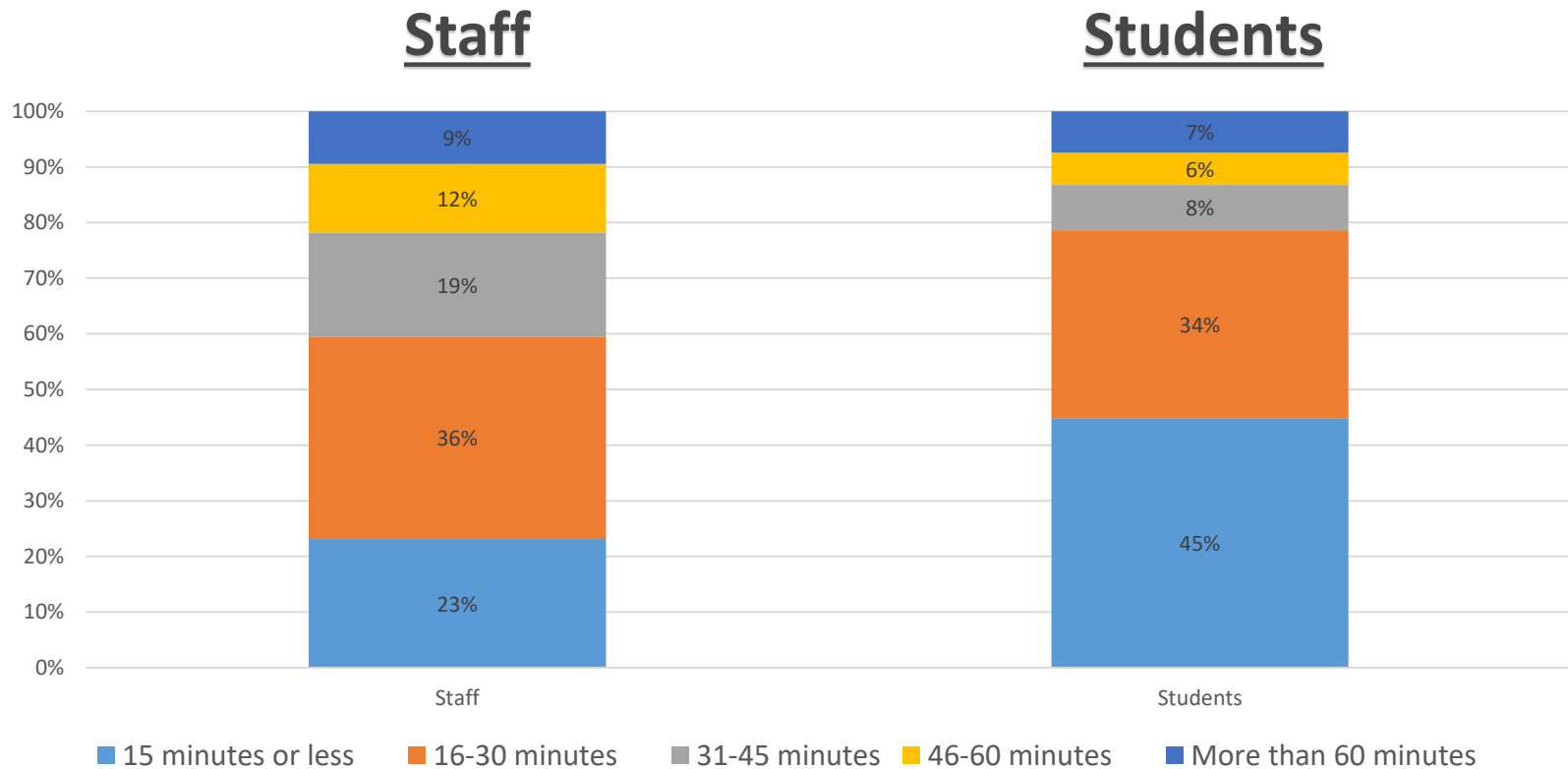
Staff

Students

- ▶ 23% of staff and 45% of students <15 mins travel time
- ▶ Majority (59% staff, 79% students) <30 mins travel time

On-campus traffic surveys

▸ 3 hour (8am – 11am) multi-modal survey (cars, cyclists and pedestrians) accessing/ egressing the Campus

  ▪ 11 dry weather survey locations

  ▪ 2 wet weather survey locations
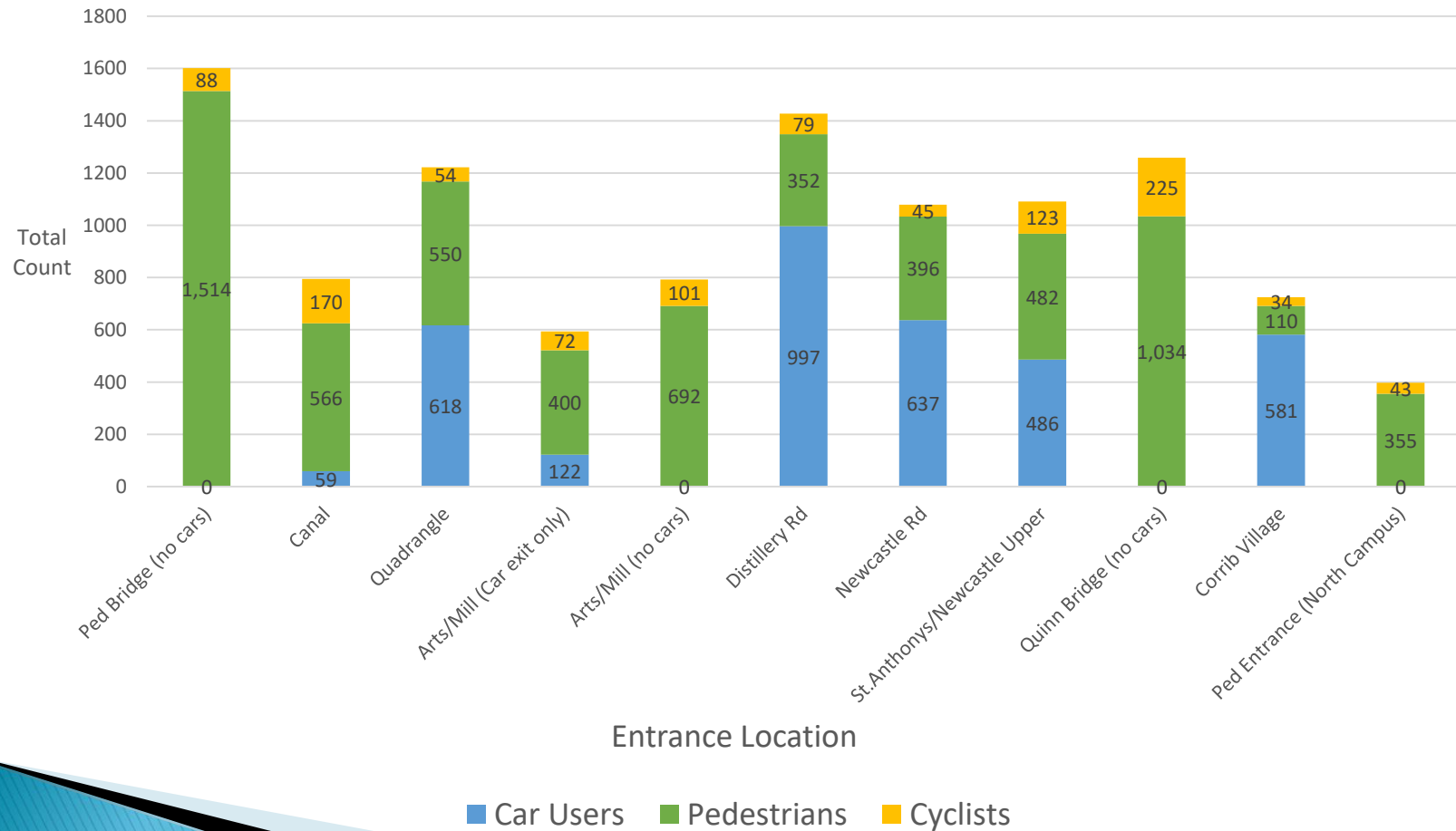
Wet weather behavioural implications?

- Quadrangle and Distillery Road accesses surveyed in wet and dry weather conditions
- Pedestrian activity down 3%, and cycle down 1%; with a corresponding 4% increase in car use

On- and off-campus car parking demand

▸ On-Campus parking surveys (October 2015) indicate occupancy levels of ~100% in staff and student car parks on the southern campus

▸ Observed 79% occupancy in park & ride car park

▸ Over-spill car parking on surrounding residential streets to the west of the University - occupancies of 78% and 100% in zones 1 and 2 respectively adjacent to the southern campus
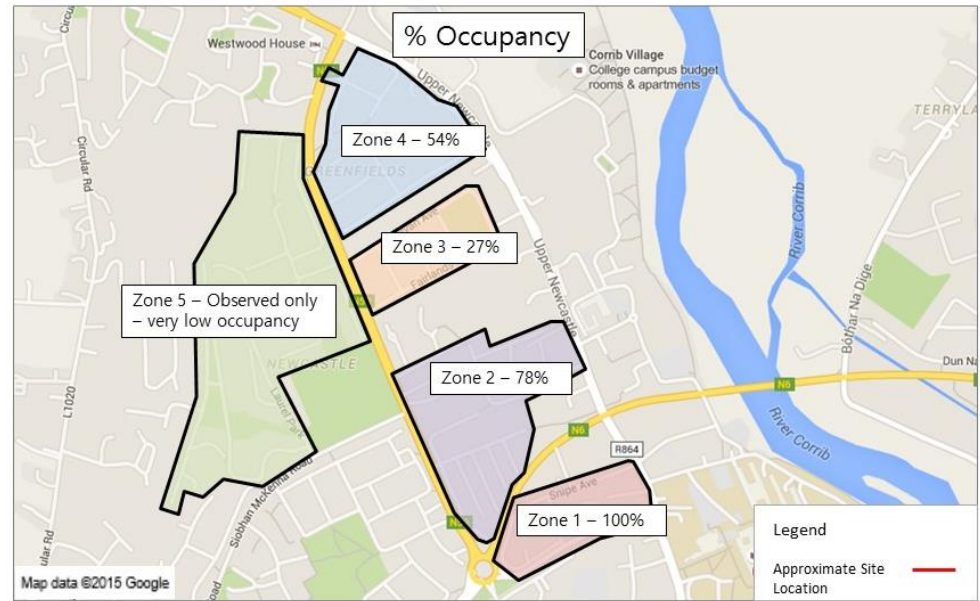
Understanding Travel Behaviours

>> What factors determine travel choices?

What factors might enable change?

Determinants - staff

▸ What are the main reasons for our current travel habits?

All staff

- Other 6%
- Reliability 1%
- Other commitments 14%
- Cheapest 5%
- Habit 3%
- Environmentally friendly 4%
- Less stressful 7%
- Lack of alternative 37%
- Personal safety 1%
- Quickest 19%

Car drivers only

- Other, 3%
- Reliability, 4%
- Cheapest, 3%
- Habit, 3%
- Other commitments, 21%
- Environmentally friendly, 0%
- Less Stressful, 2%
- Personal safety, 1%
- Lack of alternative, 48%
- Quickest, 15%
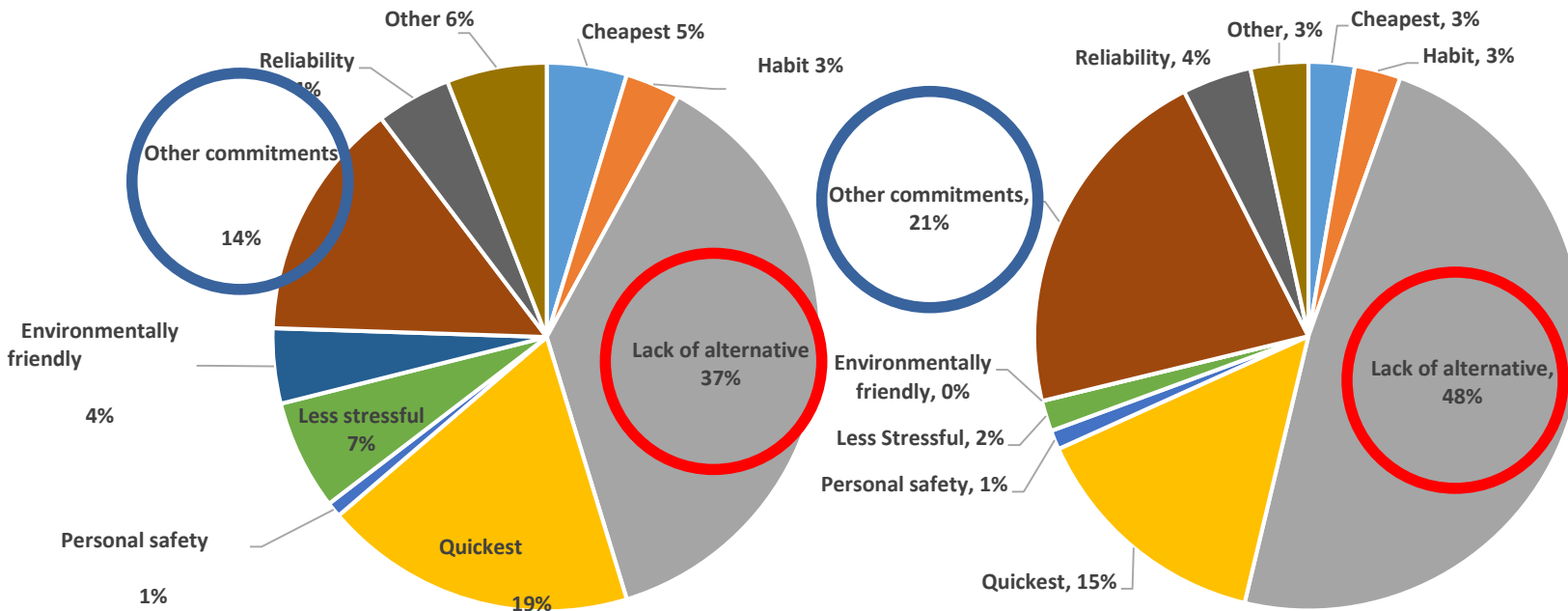
▸ For staff that drive, lack of alternative and other commitments are the most significant determinants (69%)

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Determinants – students

▸ What are the main reasons for our travel habits?

All students

Reliability 5%
Other commitments 2%
Environmentally friendly 3%
Less stressful 4%
Personal safety 1%
Other 4%
Cheapest 20%
Habit 5%
Quickest 27%
Lack of alternative 29%

Car drivers only

Other 6%
Cheapest 6%
Habit 3%
Reliability 11%
Other commitments 7%
Environmentally friendly 0%
Less Stressful 4%
Personal safety 1%
Lack of alternative 35%
Quickest 27%
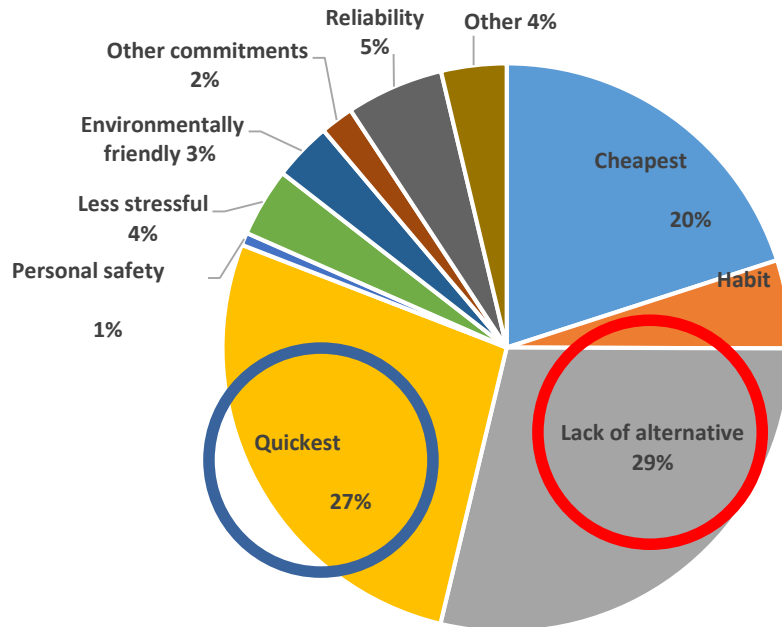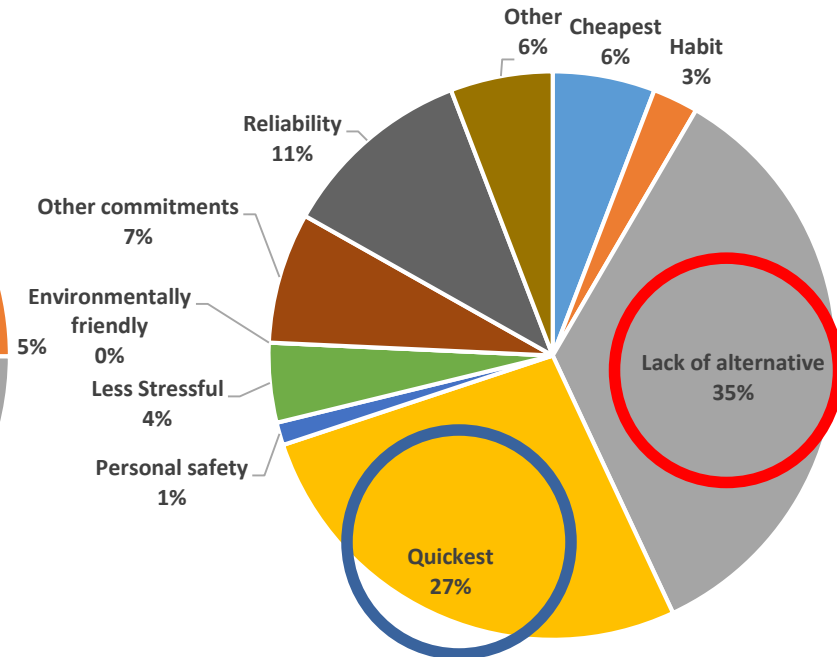
▸ For students that drive, lack of alternative and quickest are cited as the greatest determinants (62%)

Openness to change?

Staff

Students
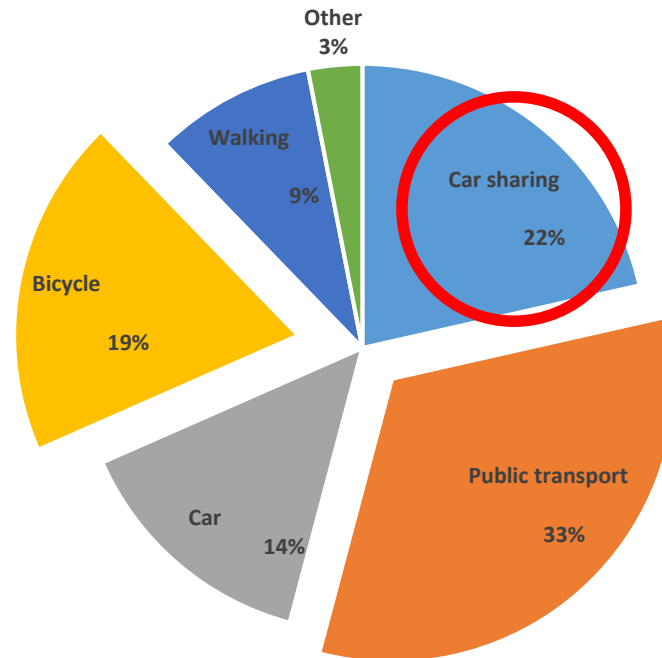
- ▸ >50% open to public transport or cycling
- ▸ Car sharing also of interest, particularly for students

Does distance travelled influence propensity to change mode?

Staff openness by distance band

	% Travelling that distance	Car sharing	Public transport	Car	Bicycle	Walking	Other
Less than 1km	5%	3%	16%	14%	43%	16%	8%
Between 1km and 3km	19%	13%	35%	10%	18%	18%	6%
Between 3km and 5km	17%	8%	39%	8%	21%	20%	5%
Between 5km and 10km	16%	16%	52%	7%	19%	3%	2%
Between 10km and 20km	19%	20%	47%	7%	19%	3%	3%
More than 20km	24%	28%	52%	7%	8%	2%	4%

Students openness by distance band

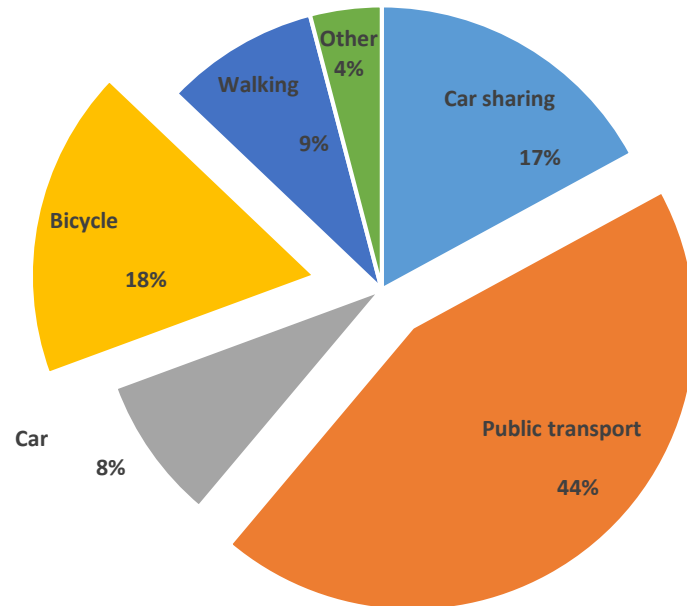|	% Travelling that distance	Car sharing	Public transport	Car	Bicycle	Walking	Other
Less than 1km	21%	18%	31%	14%	25%	8%	3%
Between 1km and 3km	37%	20%	33%	15%	22%	8%	3%
Between 3km and 5km	14%	19%	28%	13%	21%	16%	3%
Between 5km and 10km	8%	19%	32%	14%	20%	13%	1%
Between 10km and 20km	7%	28%	38%	9%	16%	7%	3%
More than 20km	13%	31%	38%	15%	5%	6%	5%

Actions to incentivise public transport use

Staff

- More frequent service 36%
- Better quality bus stops 13%
- Improved timetable information 15%
- Improved reliability 19%
- None 17%

Students

- More frequent service 31%
- Better quality bus stops 14%
- Improved timetable information 24%
- Improved reliability 22%
- None 9%
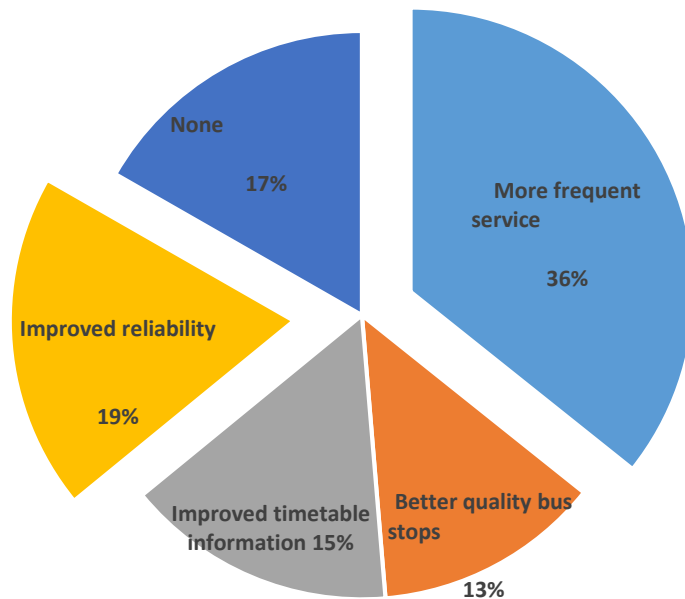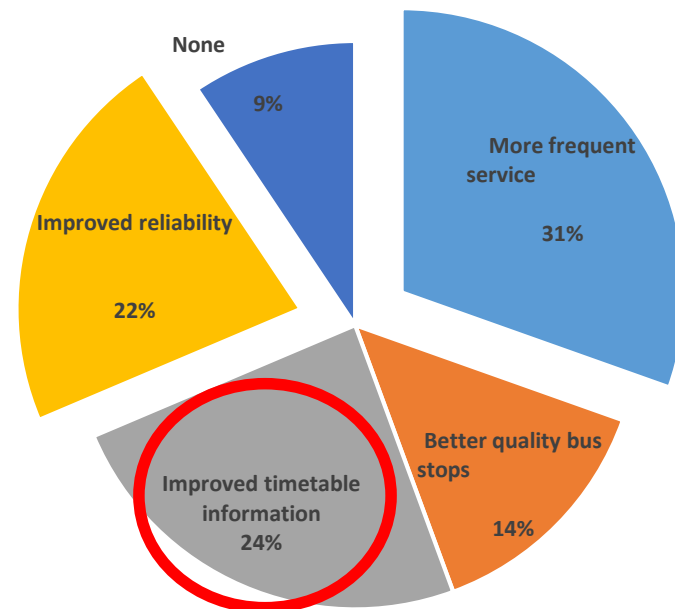
▸ Improved frequency and reliability cited by majority
  ▸ Timetable information cited by 24% of students

Actions to incentivise public transport by distance

Staff PT interventions by distance

	% Travelling that distance	More frequent service	Better quality bus stops	Improved timetable information	Improved reliability	None
Less than 1km	5%	28%	5%	12%	19%	37%
Between 1km and 3km	19%	30%	13%	19%	22%	16%
Between 3km and 5km	17%	34%	13%	19%	20%	15%
Between 5km and 10km	16%	32%	19%	17%	20%	11%
Between 10km and 20km	19%	42%	11%	10%	18%	20%
More than 20km	24%	43%	11%	13%	17%	18%

Students PT interventions by distance

	% Travelling that distance	More frequent service	Better quality bus stops	Improved timetable information	Improved reliability	None
Less than 1km	21%	28%	12%	30%	20%	12%
Between 1km and 3km	37%	28%	14%	27%	23%	8%
Between 3km and 5km	14%	32%	15%	22%	23%	8%
Between 5km and 10km	8%	35%	16%	18%	26%	5%
Between 10km and 20km	7%	37%	14%	17%	25%	7%
More than 20km	13%	35%	14%	14%	18%	20%

Actions to incentivise cycle use

Staff
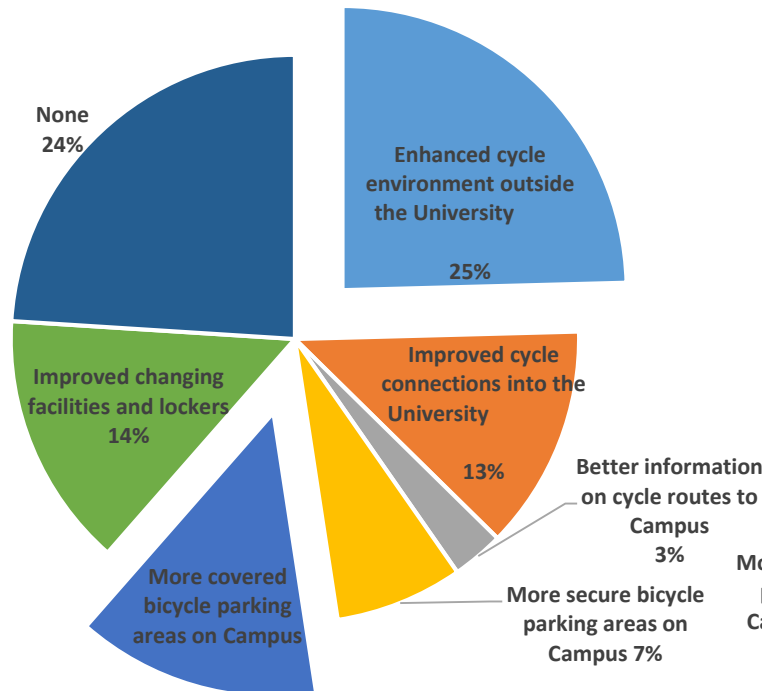
Students

Wide range of interventions cited, both external <u>and</u> internal to campus

Actions to incentivise cycling by distance

Staff cycle interventions by distance

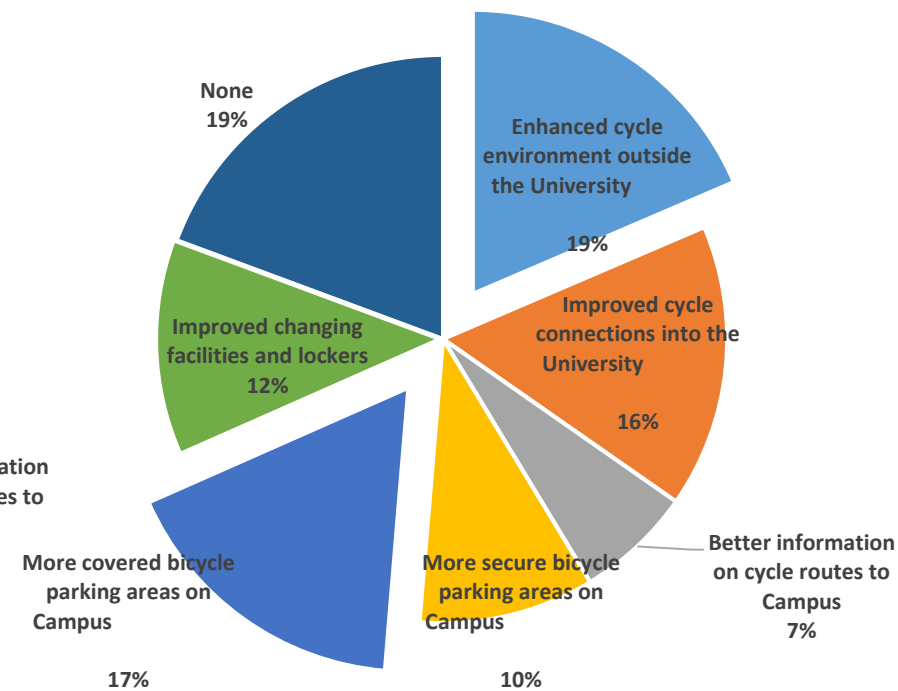|	% Travelling that distance	Enhanced cycle environment outside the University	Improved cycle connections into the University	Better information on cycle routes to Campus	More secure bicycle parking areas on Campus	More covered bicycle parking areas on Campus	Improved changing facilities and lockers	None
Less than 1km	5%	31%	16%	5%	5%	18%	15%	9%
Between 1km and 3km	19%	27%	12%	4%	7%	22%	13%	15%
Between 3km and 5km	17%	27%	15%	4%	10%	16%	18%	11%
Between 5km and 10km	16%	27%	12%	2%	9%	13%	17%	20%
Between 10km and 20km	19%	29%	17%	1%	4%	5%	13%	28%
More than 20km	24%	13%	9%	2%	8%	10%	12%	46%

Students cycle interventions by distance

	% Travelling that distance	Enhanced cycle environment outside the University	Improved cycle connections into the University	Better information on cycle routes to Campus	More secure bicycle parking areas on Campus	More covered bicycle parking areas on Campus	Improved changing facilities and lockers	None
Less than 1km	21%	18%	18%	6%	11%	20%	10%	17%
Between 1km and 3km	37%	20%	17%	7%	10%	19%	12%	14%
Between 3km and 5km	14%	20%	18%	7%	10%	18%	17%	10%
Between 5km and 10km	8%	19%	19%	7%	10%	16%	14%	17%
Between 10km and 20km	7%	18%	11%	5%	9%	13%	16%	28%
More than 20km	13%	16%	8%	6%	8%	8%	8%	52%

Further actions to incentivise cycling

Staff
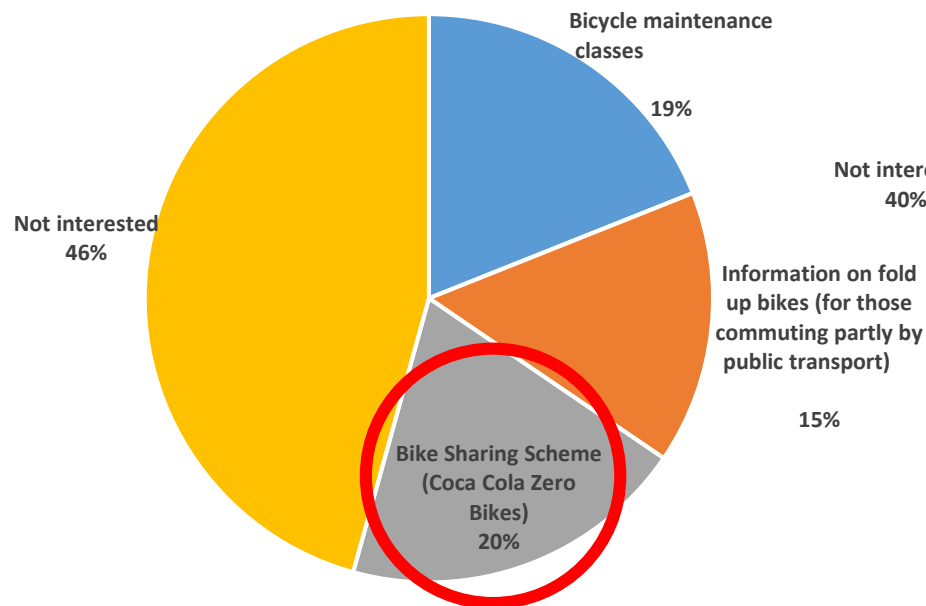
Students

Bicycle maintenance classes

19%

Not interested
46%

Information on fold up bikes (for those commuting partly by public transport)

15%

Bike Sharing Scheme (Coca Cola Zero Bikes)
20%

Bicycle maintenance classes

21%

Not interested
40%

Information on fold up bikes (for those commuting partly by public transport)

12%

Bike Sharing Scheme (Coca Cola Zero Bikes)
27%
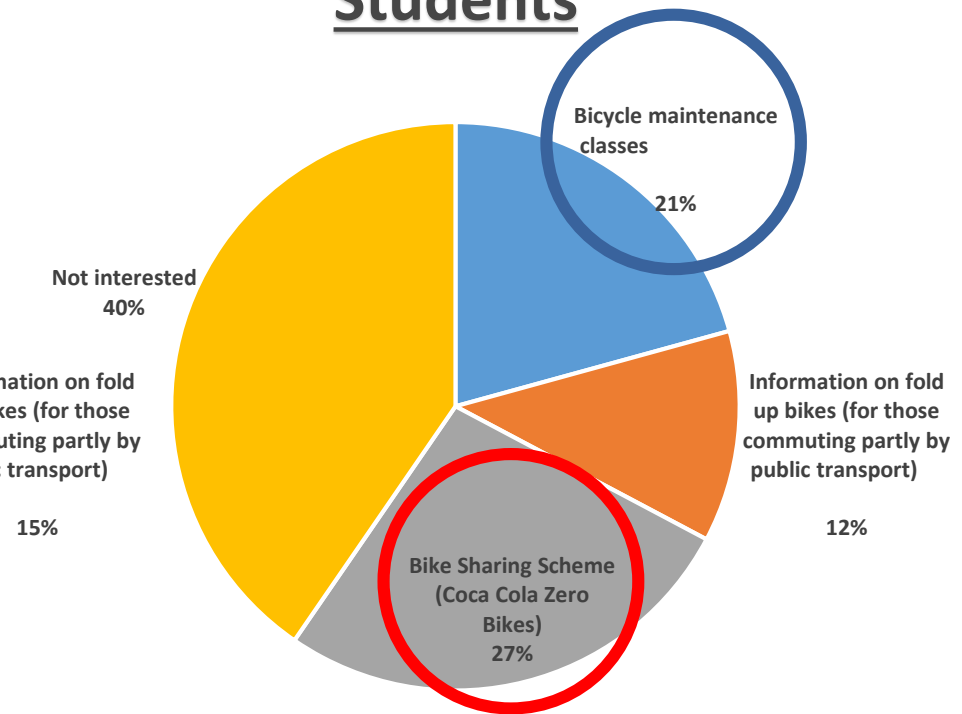
▸ Bicycle maintenance classes highlighted
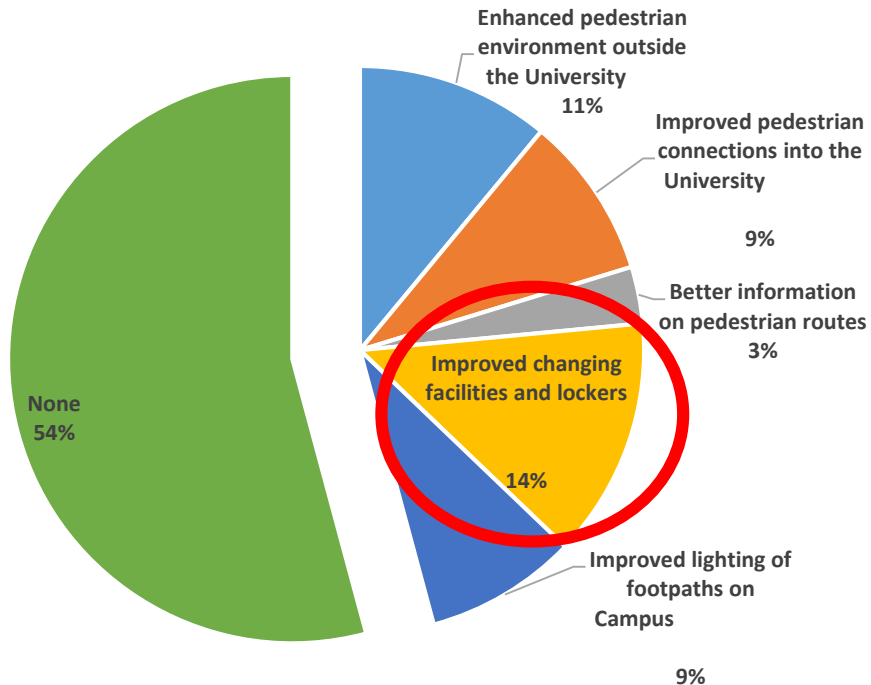
▸ High interest in bike sharing scheme

Interventions to incentivise walking

Staff

Enhanced pedestrian environment outside the University **11%**

Improved pedestrian connections into the University **9%**

Better information on pedestrian routes **3%**

Improved changing facilities and lockers **14%**

Improved lighting of footpaths on Campus **9%**

None **54%**

Students

Enhanced pedestrian environment outside the University **15%**

Improved pedestrian connections into the University **16%**

Better information on pedestrian routes **6%**

Improved changing facilities and lockers **19%**

Improved lighting of footpaths on Campus **19%**

None **25%**

▸ Built environment cited by 50% of students

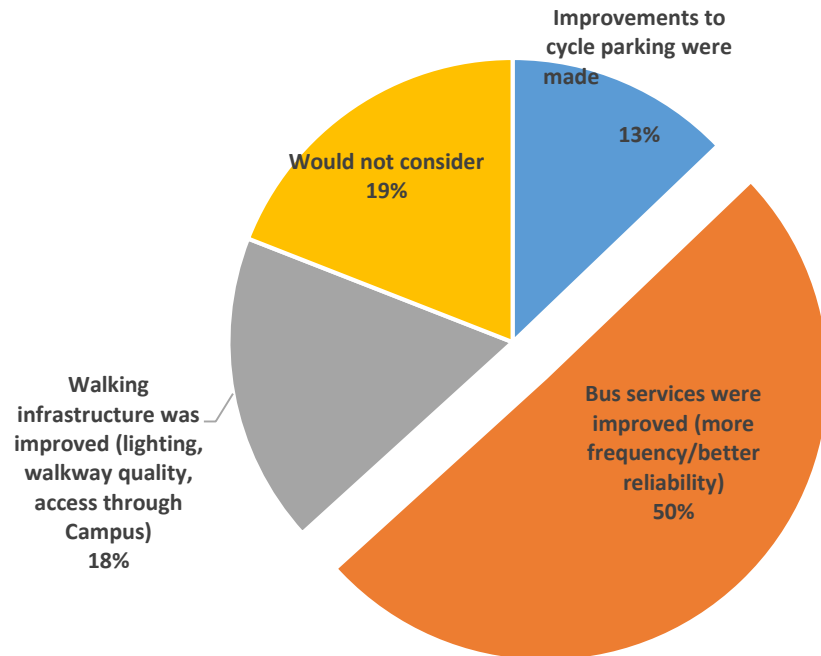▸ Changing facilities would incentivise walking <u>and</u> cycling

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Actions to incentivise modal shift from car

Staff
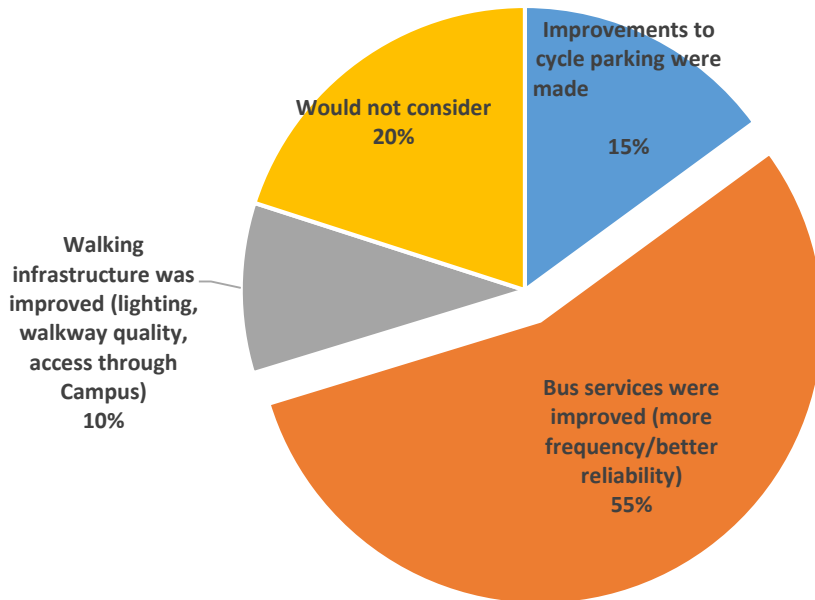
Students

- ~80% of car users indicated potential to change
- Car users cited greatest interest in switching to bus

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The University Master Plan and its Implications

>> Ensuring the link between sustainable travel and the overall Campus Master Plan

Master Plan development

- Continued growth of the campus envisaged through the updated University Master Plan

- Future development could:
  - increase travel demand to the University; and/ or
  - reduce parking capacity in the southern campus

- Increasing commuter car parking capacity is not sustainable or acceptable to Galway City Council

- Master Plan update represents a opportunity to plan for sustainable travel – walking, cycling and bus!

Galway City Sustainable Transport Policies and Initiatives

>> How can NUI Galway and GCC work together?

Galway City Development Plan

- Galway City Council Development Plan (2017 - 2023):

  - *"The Council in conjunction with the NTA are active in this regard in particular in targeting walking, cycling, use of public transport and car sharing."*

  - *"The GTS sees this continued promotion of use of sustainable transport options in conjunction with travel planning in particular with large employers/ institutions as a critical element of the plan"*

2017-2023

Galway City Council
Development Plan

Figure 3.2 City Centre Access Network (source: Galway Transport Strategy 2016)

Galway City Transport Strategy

- Galway Transport Strategy (2016) – jointly developed by NTA and Galway City Council:
  - Focus on increasing public transport, cycle and pedestrian use
  - Significant revisions to bus services through *"implementation of a local city bus network which will include for a high frequency cross-city network"*
  - Greater priority afforded to bus through city centre
  - Road and street network and accessibility improvements

Figure 3.3 GTS –Proposed Core Bus Routes (source: Galway Transport Strategy 2016)

Galway City Transport Strategy

▸ Development of a city cycle network,*" a critical element of the GTS is to develop a high quality, dedicated cycling network which includes measures that gives priority to cyclists. The objective would be that this would encourage the uptake in cycling both for commuting and as a leisure activity."*
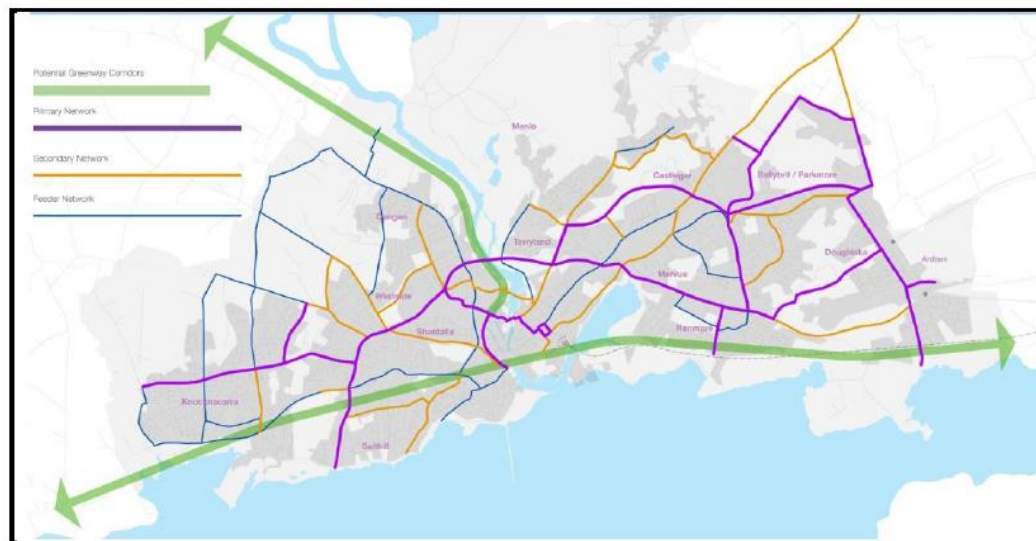

Figure 3.5 GTS Proposed Cycle Network (source: Galway Transport Strategy 2016)

Travel Plan Objectives and Targets

>> What are our priorities?

What impact can we expect?

Objective 1 - cycling

▸ **Objective 1** - *"Increase staff and student cycle use through enhancing on-site cycle facilities, and working in partnership with Galway City Council/ National Transport Authority to address deficiencies in Galway City's cycle network."* Rationale:

- current 11% of staff and 12% of students cycle

- 40% of staff and 72% students live < 5km of the Campus, and *"cycling by its nature is local and most cycling is of 6km or less."* National Cycle Manual (NTA)

- of staff and students travelling 1-5km, approximately 20% expressed an openness to consider cycling as a means of travel

- NTA/ Galway City Council plan to enhance Galway City's cycle network, further enhancing the attractiveness of cycling

- ~40% of staff and students not already cycling cited *"enhanced cycle environment outside the University"* and *"improved cycle connections into the University"* as factors influencing mode choice

# Objective 1 – cycling target

Existing and Target 2020 Cycle Use
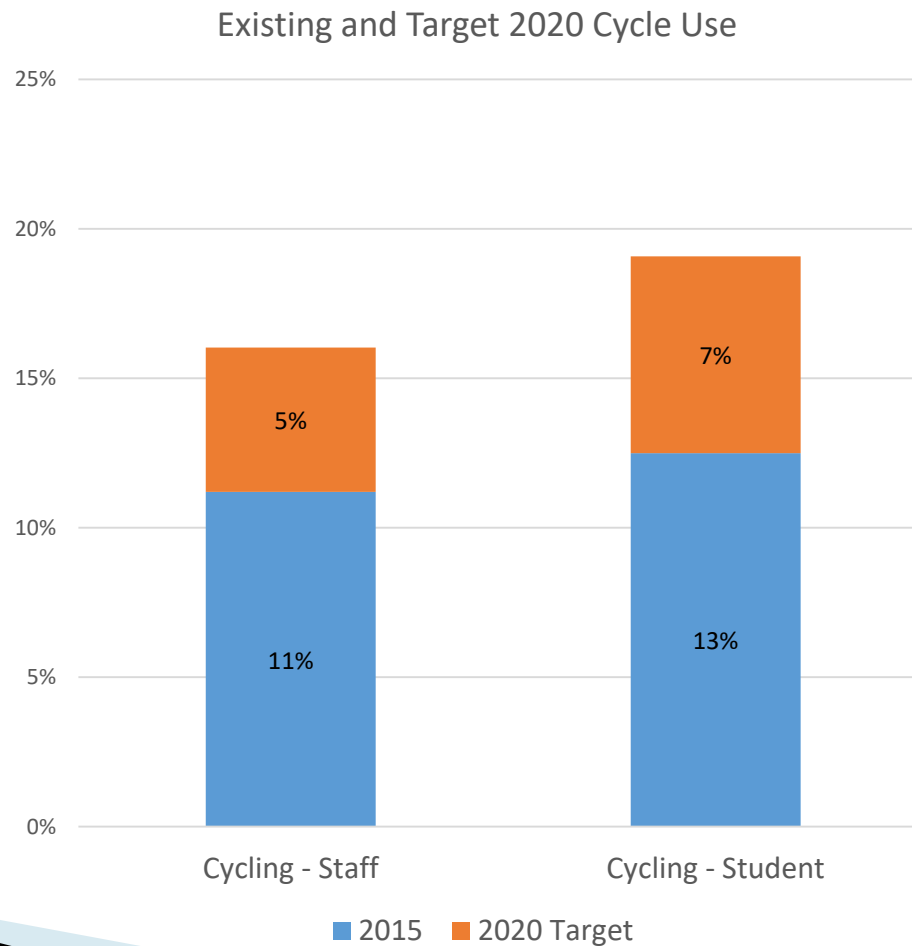
Objective 2 – public transport

▶ **Objective 2** - *"Increase staff and student public transport use through working in partnership with Galway City Council/ National Transport Authority, to enhance bus service provision, access to bus services and bus service/ timetable information."* Rationale:

  ▪ Current staff and student public transport mode share of 5% and 13% respectively

  ▪ Greater potential to grow public transport use for journeys between 3 and 10km, with strong interest in switching to public transport among staff and students

  ▪ NTA plans to enhance bus services in the short term (starting spring 2016), further enhancing attractiveness of bus use throughout the lifetime of the Travel Plan

  ▪ Bus use will be further incentivised through joint NTA/ Galway City Council plans to significantly enhance bus infrastructure and services in the medium term

  ▪ >50% of staff and students cited "*more frequent services*" and *"improved reliability"* as factors that would encourage public transport use

  ▪ Quality and directness of links to bus services will also incentivise bus use

Objective 2 – public transport target

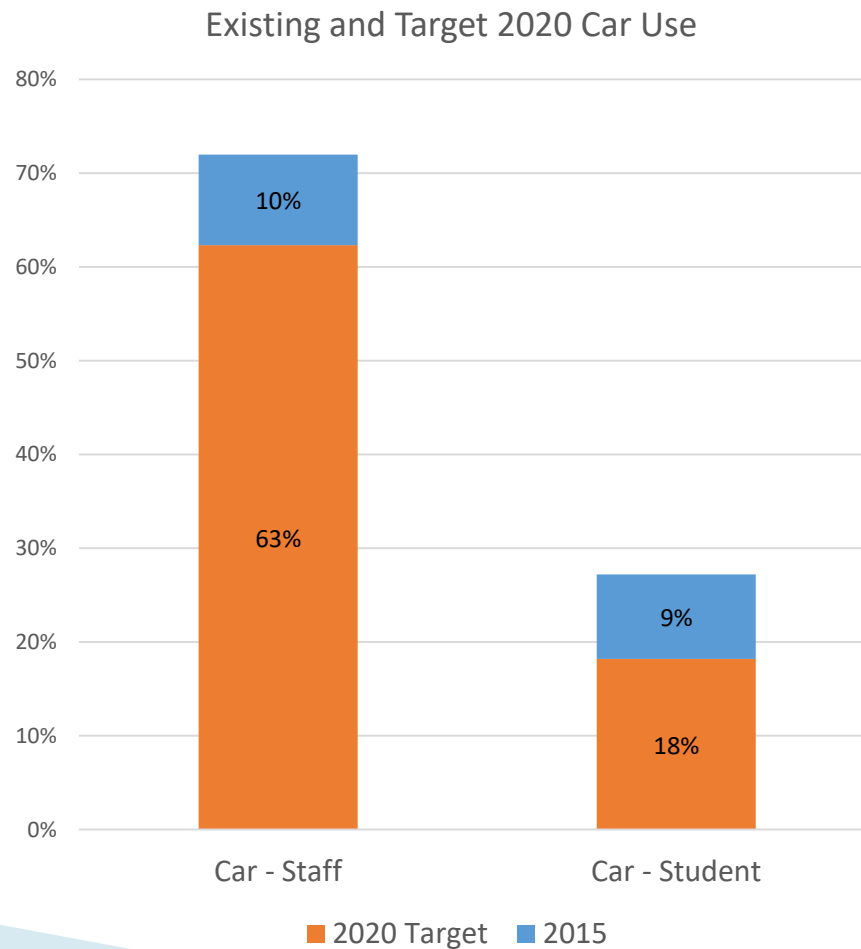Existing and Target 2020 Public Transport Use
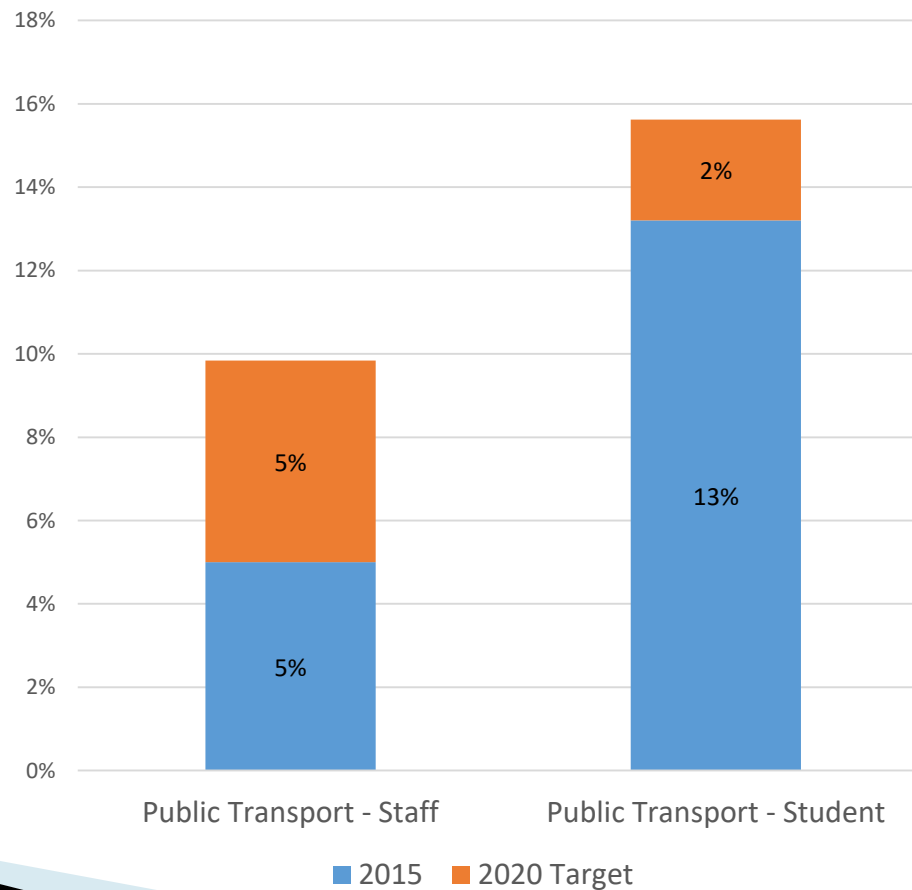
Objective 3 – travel promotion

▶ **Objective 3 -** *"Facilitate future growth of the University and increased travel demand by reducing staff and student single car occupancy journeys to the University, and in particular to the southern Campus, through promotion of more sustainable staff and student travel choices."* Rationale:

- Current single occupancy staff and student car mode share of 58% and 17% respectively (72% and 27% for all car use)
- University one of the largest generators of traffic in Galway City - contributes to traffic congestion on the City's road network
- Very high occupancy in staff and student car parks on southern Campus
- Continued growth of the campus could increase travel demand, and/ or reduce parking capacity in the southern Campus
- Behavioural change programmes elsewhere in Ireland (University of Limerick, IT Blanchardstown) have achieved substantial modal shift impacts

Objective 3 – travel promotion target

Existing and Target 2020 Car Use

- Car - Staff: 63% (2020 Target), 10% (2015)
- Car - Student: 18% (2020 Target), 9% (2015)

Legend: 2020 Target, 2015

Staff mode share - overview

Main travel mode - previous, existing & forecasted - Staff

Legend: 2005 | 2010 | 2013 | 2014 | 2015 | 2020 Target

Car (All): 78%, 79%, 71%, 65%, 72%, 63%
Bus & Train: 5%, 3%, 4%, 5%, 5%, 10%
Walk: 10%, 8%, 13%, 15%, 11%, 11%
Cycle: 7%, 10%, 12%, 15%, 11%, 16%
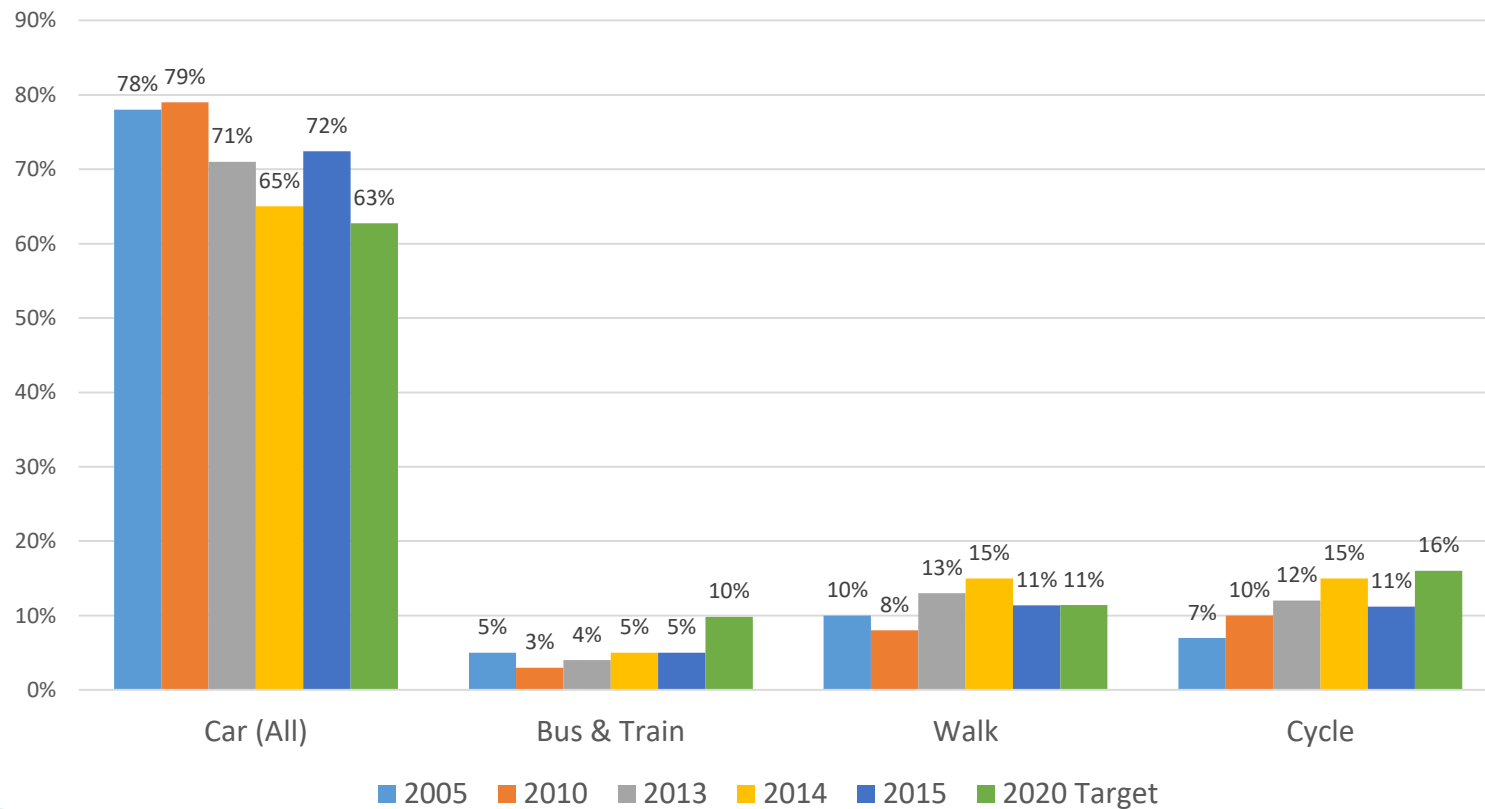
Student mode share - overview

Main travel mode - previous, existing & forecasted - Students
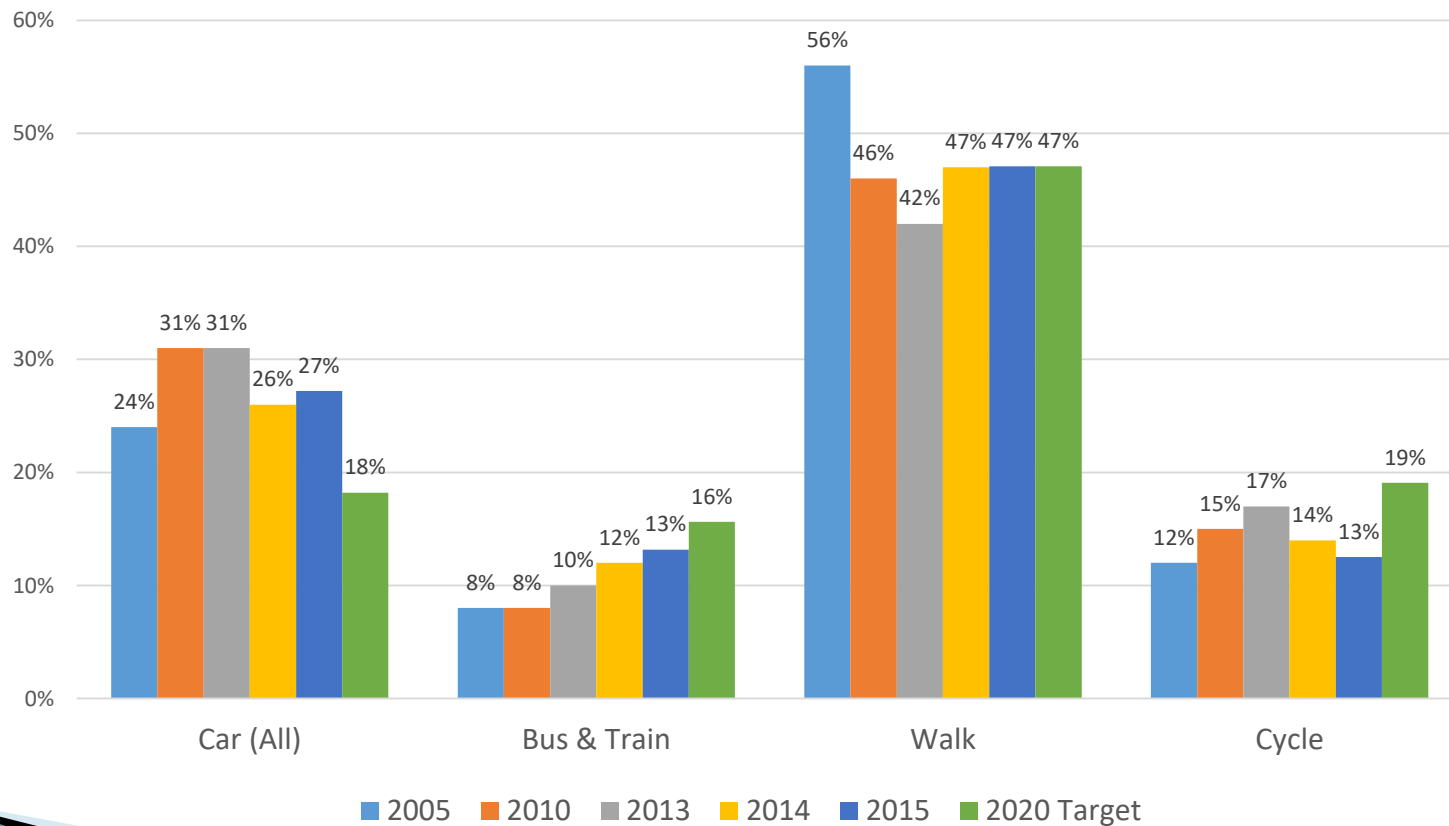
The Action Plan

>> Achieving our objectives

Management and coordination actions

Action	Responsible Person/ Organisation	Timescales
Appointment of a Full-Time Travel Planning Coordinator (TPC)	NUIG Management	Immediately
Setup of a Travel Plan Working Group	TPC (with NTA guidance on terms of reference)	Immediately
Strengthen linkages with NTA Smarter Travel Campuses unit	TPC	1-3 months, ongoing
Periodic staff and student focus groups	TPC	1-3 months, each semester
Action Plan Update	TPC	3-6 months, quarterly

Cycling infrastructure actions

Action	Responsible Person/ Organisation	Timescales
Coca Cola Bike Sharing Scheme	GCC/TPC	1-3 months, ongoing
More covered bicycle parking	TPC	< 18 months, phased
Improved staff & student changing facilities and lockers	TPC	< 2 years, phased
Enhanced cycle connections into the University	NUIG Master Plan	4-5 years
Development of city-wide cycle network	GCC/ NTA	5-10 years

Cycling information and awareness actions - 1/ 2

Action	Responsible Person/ Organisation	Timescales
Promote greater uptake of Cycle to Work scheme (staff)	TPC	1-3 months, each semester
Cycle purchase scheme (students)	TPC	< 1 year
Safety items giveaway (high-vis, accessibility maps, bike lights etc.)	TPC	1-3 months, ongoing
Journey planners with map routes and distance times	TPC	< 1 month

Cycling information and awareness actions - 2/ 2

Action	Responsible Person/ Organisation	Timescales
Bike Maintenance Classes	TPC	Current, ongoing
Bike Tour of NUIG & Galway City	TPC	3-6 months, each semester
Active Commute Day	TPC	1-3 months, weekly
Student Cycle Challenge	TPC	6-12 months, annually
Changing Lanes Challenge	TPC	< 6 months, annually
European Mobility Cycle Week	TPC	< 1 year, annually
RSA Leading Lights Awards	TPC	< 1 year, annually

Public transport infrastructure and service actions

Action	Responsible Person/ Organisation	Timescales
Improvements to City-wide bus infrastructure (priority, bus stops)	GCC/ NTA	4-5 years
Enhanced staff/ student bus services accessibility, e.g. • re-routing bus access to within the Campus • enhanced quality pedestrian linkages from Campus to external bus services to University Road	NUIG Master Plan/ NTA/ GCC	4-5 years
Enhanced bus frequencies, reliability and routings	NTA	< 4 months, phased

Public transport information and awareness actions

Action	Responsible Person/ Organisation	Timescales
Improved route maps and timetable information	TPC	< 6 months
Enhanced on- and off-campus RTPI	NTA/ TPC	1–2 years
Enhance information on Tax Saver scheme (staff)	TPC	1-3 months, each semester
Maintain leap cards for work time staff use (off-site meetings etc.)	TPC	3-6 months

Travel promotion actions - 1/2

Action	Responsible Person/ Organisation	Timescales
Targeted communication: • Smarter Travel Facebook page • Campus newspaper/ posters • Website updates	TPC	Immediately, ongoing
Embed travel education within curriculum	TPC	Each semester
Weekly Sustainable Travel Day	TPC	1-3 months, weekly
NUIG Sustainable Travel Awards	TPC	3-6 months, annually

Travel promotion actions - 2/2

Action	Responsible Person/ Organisation	Timescales
Promote walking through annual Marchathon event	TPC	1-3 months, annually
Staff and student car park permit allocation review	TPC	1-2 years, phased
Staff and student car parking permit pricing review (incl. main vs. P & R differential)	TPC	1-2 years, phased
Continued promotion (and expansion, if needed) of P & R	TPC	1-3 months, ongoing
Fresher's information pack	TPC	6-9 months, annually
Staff induction packs	TPC	1-3 months, ongoing

Travel Plan targets – key risks

- **Internal/ NUI Galway** - Ensuring sufficient support of and to Travel Planning Coordinator on an ongoing basis throughout the lifetime of the Plan

- **External** - Timely delivery by Galway City Council/ National Transport Authority of enhanced cycle network, and enhanced bus network and services as set out in the Galway Transport Strategy

Selling the Vision

How do we spread the word?

Marketing the Plan – why?

▸ To inform staff and students of the range of travel options available, and benefits of adopting sustainable travel choices

▸ To raise awareness and maximise effectiveness of planned and ongoing travel promotional and awareness initiatives

▸ A Marketing Plan will enhance the Travel Plan's impact!

How market the Plan?

▸ The Marketing Plan should have clear aims, identifiable branding, an identified target audience, e.g. staff and/ or students living <5km from the Campus

▸ It should seek to harness University specific communication tools and networks, and:

- identify what you want to communicate
- understand what will resonate with the target audience, e.g. faster journeys by bike
- start small, e.g. take the bus one day a week
- accept that for some people, change will take time
- the Travel Plan is not anti-car, but offers more travel choices

Monitoring Impact

>> Monitoring the Plan's effectiveness

Responding to change

Why monitor?

▸ The Action Plan is a living document, to be reviewed and updated throughout the lifetime of the Travel Plan:

> *"When promoting sustainable transport, it is essential to monitor and measure your progress. If you can't measure, you can't manage."* (Workplace Travel Plans, A Guide for Implementers, NTA)

▸ Monitoring allows the success of a particular initiative, and the Travel Plan as a whole, to be reviewed against its objectives and targets

▸ Reporting on success essential to the Plan's ongoing success – people want to be associated with a good news story!

Monitoring approach

- Quantitative indicators:-
  - Quarterly:- bikes parked, Cycle to Work bikes sold, Tax Saver ticket sales, park and ride bus ridership, cars parked on- and off-campus, facilities upgraded, event participation levels etc.
  - Annually (at same time of year):- modal split – 'usual' and 'occasional' modes used
- Qualitative indicators:- staff/ student comments, senior management support, travel awards etc.
- The Working Group and key stakeholders (local residents, City Council, NTA etc.) have an interest in the Action Plan – on-site tours and presentations can communicate success!

Conclusions

>> 2020 vision

What's achievable by 2020?

▶ The new Travel Plan represents a major opportunity for NUI Galway to:

- increase staff and student active travel and public transport use

- reduce staff and student car use

- improve the health and well being of staff and students

- reduce the impact of University travel on the City's road network, i.e. traffic congestion; and in the locality of the university, i.e. off-site car parking

- support the University's Green Flag aspirations

▶ Ultimately **the Travel Plan can facilitate continued growth and ongoing future success of our University!**