



OLLSCOIL NA GAILLIMHÉ
UNIVERSITY OF GALWAY

Monitoring & Reporting 2030 Framework

Business Travel & Staff Travel

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University
of Galway.ie

Agenda

- Introduction
- Section 1: Business Travel
- M&R 2030 Background
- Information submitted to SEAI
- Recommendations from Business Travel Plan
- Section 2: Staff Travel Survey 2022
- Recommendations from the Staff Travel Plan 2022
- Slides taken from the Staff Travel Plan 2022

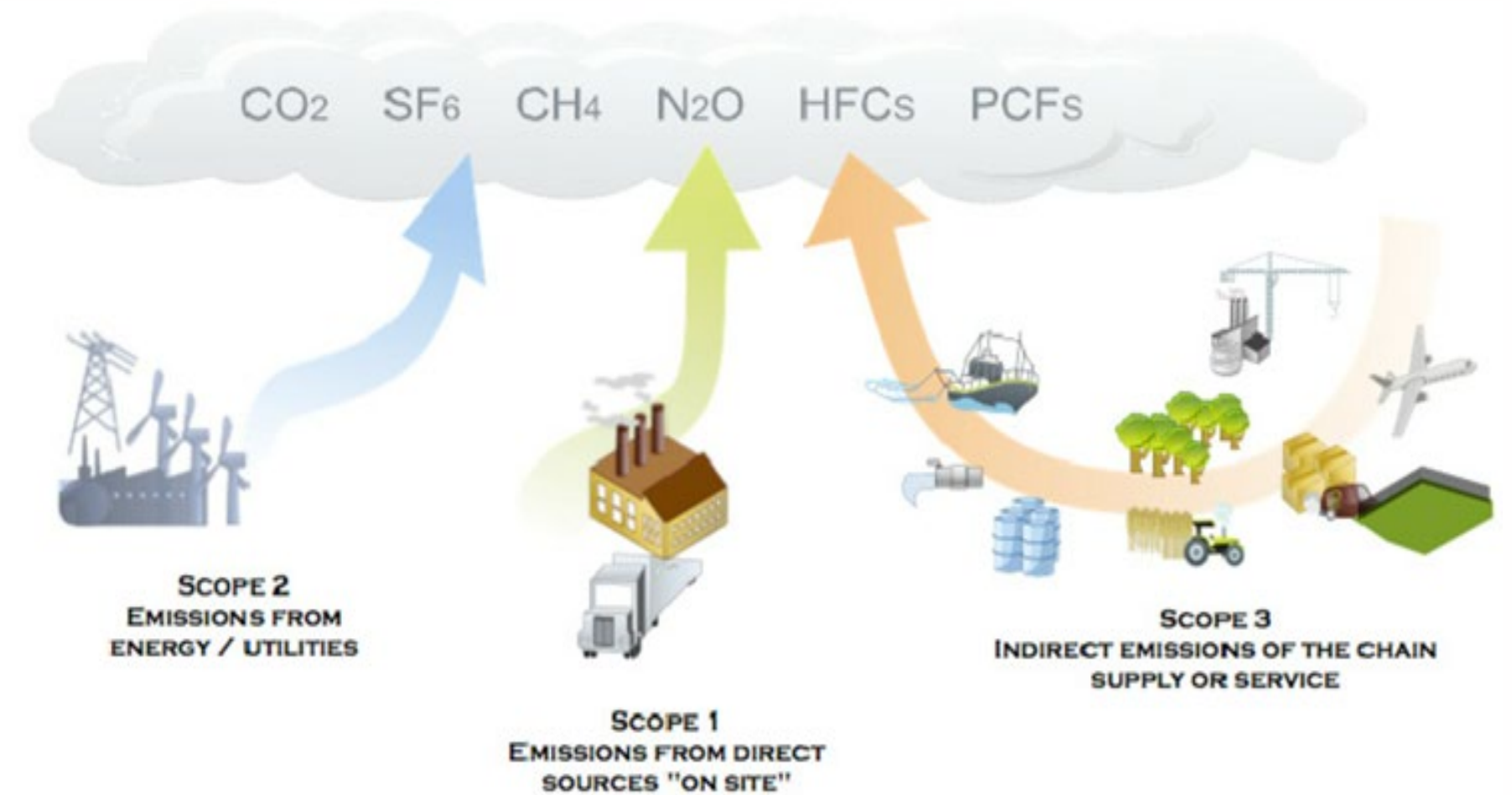


Diagram Carbon Strategy for Scope 1, 2 and 3.



Introduction

NUI Galway have set ambitious Carbon Reduction targets for 2030 in compliance with the governments Climate Action Plan. The action plan requires NUI Galway to reduce its Carbon Footprint by 51% on or before 2030.

NUI Galway submit Measured and Monitored results for Scope 1 and 2, new legislation requires Public Sector bodies to begin reporting some of the Scope 3 figures and this will be dealt with later in the report.

NUI Galway have calculated the Carbon footprint from 2017 to the current year, two categories reviewed as part of this report are Business Travel and Staff Travel.

The document will highlight the works completed to date and also outline some actions that could be introduced to help NUI Galway meet the targets.

Section 1: Business Travel – 8%

Section 2: Staff Travel – 17%

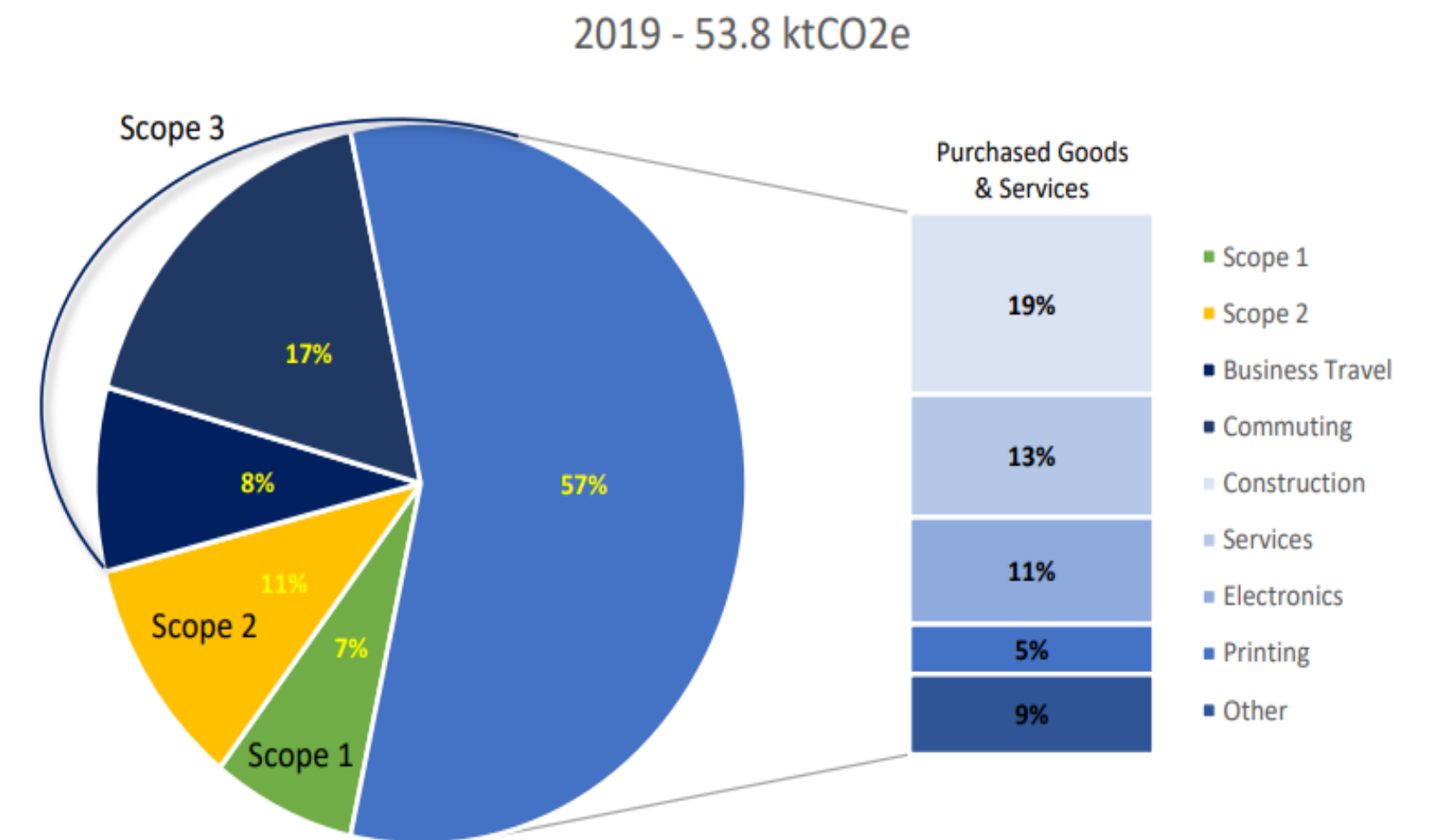
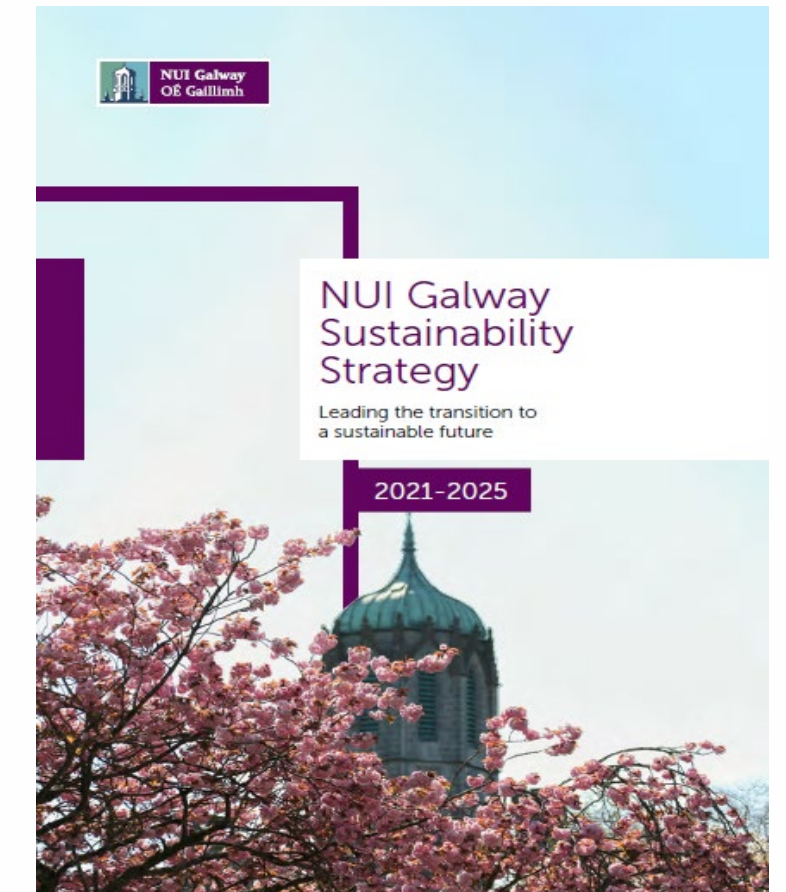
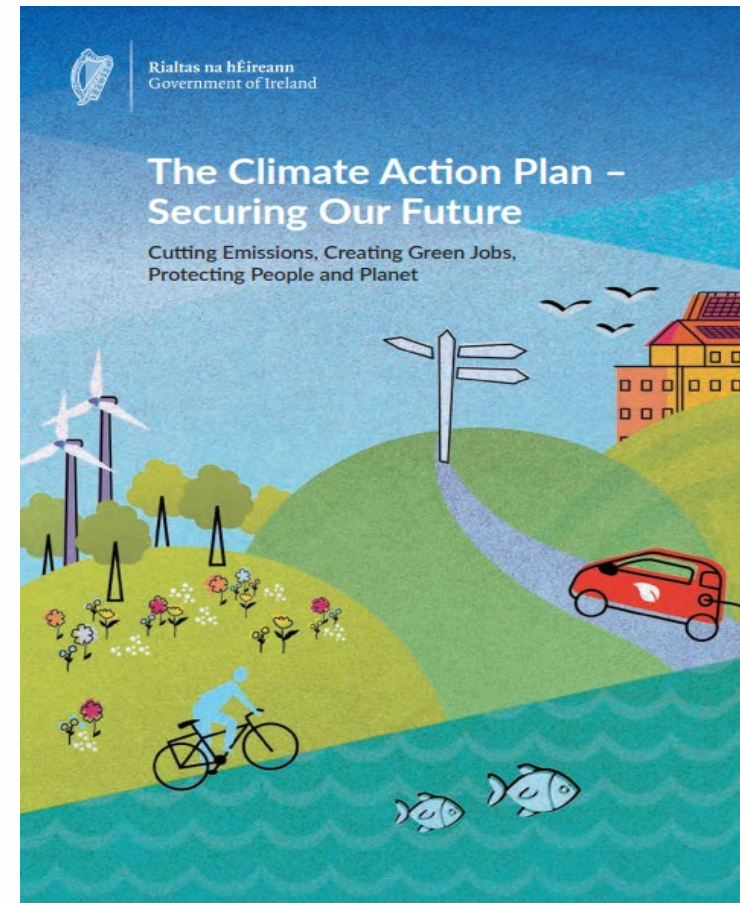
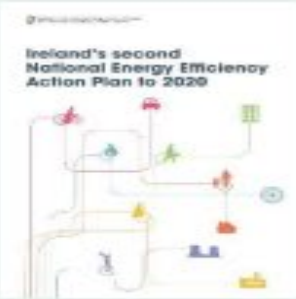




Figure 4 – NUI Galway 2019 GHG Inventory



Why are we reducing are Carbon Footprint?

EU and public sector targets – transition to 2030 – 2050

	2020	2030	2050
EU	- 20% Greenhouse Gas emissions + 20% renewable energy + 20 energy efficiency	- 55% Greenhouse Gas emissions + 32% renewable energy + 32.5% energy efficiency	Climate neutral
IE	Public sector ‘exemplar’ 33% energy efficiency improvement  	Public sector ‘exemplar’ 50% energy efficiency improvement * 51% absolute greenhouse gas reduction * 50% renewable space heating Climate mandate Climate Action Roadmaps	Public sector ‘exemplar’ Net Zero greenhouse gas emissions 

Section 1 : Business Travel – 2019 - 8% of the overall Carbon Footprint for the University

Under the Climate Action Plan Public Sector bodies must submit for measurement to the SEAI from 2023 all Business Travel Kg Co2 for Business travel to be measured as part of the Carbon footprint measured.

In 2022 NUI Galway submitted its first figures along with other public bodies.

The following slides outlines some of the initial findings and recommendations.



Reporting obligations – Why?

All public bodies (PBs) must report annual data on business travel to SEAI for the years 2021 onwards. The requirement to report data for business travel was originally communicated to public bodies at an SEAI briefing to the public sector on 10 March 2021 and is set out in the 2021 Climate Action Plan.

The obligation to report data on business travel does not apply to standalone schools. The data reporting methodology requires public bodies to report data annually to SEAI on the distance travelled by mode of transport. SEAI uses this data to calculate each organization's GHG emissions from business travel.

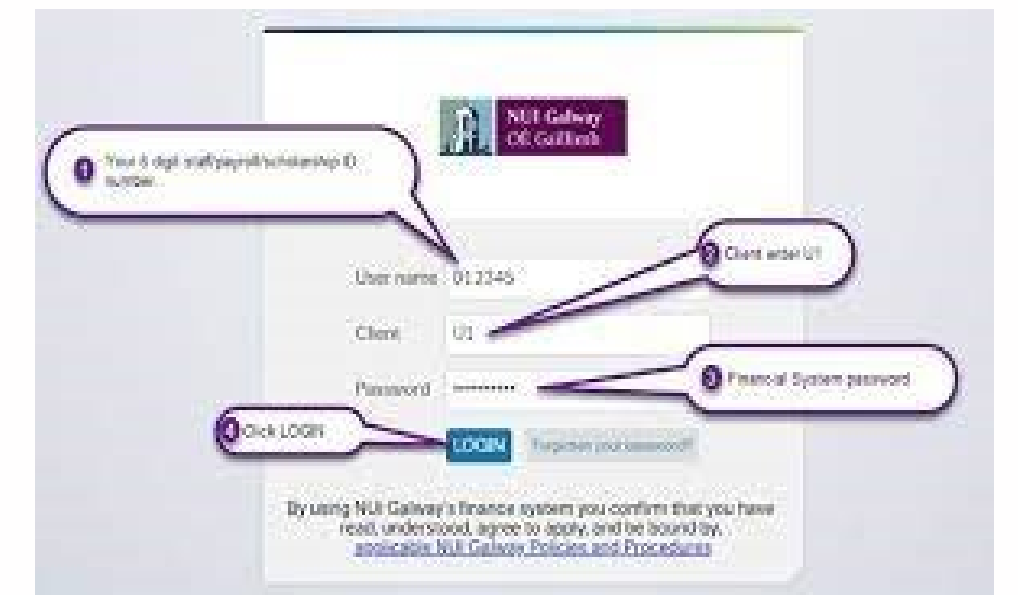
Wherever possible, SEAI has sought to align the data reporting requirements with data sources that are already available to public bodies.

The following is a summary of the data that is reportable by public bodies for each category of business travel:

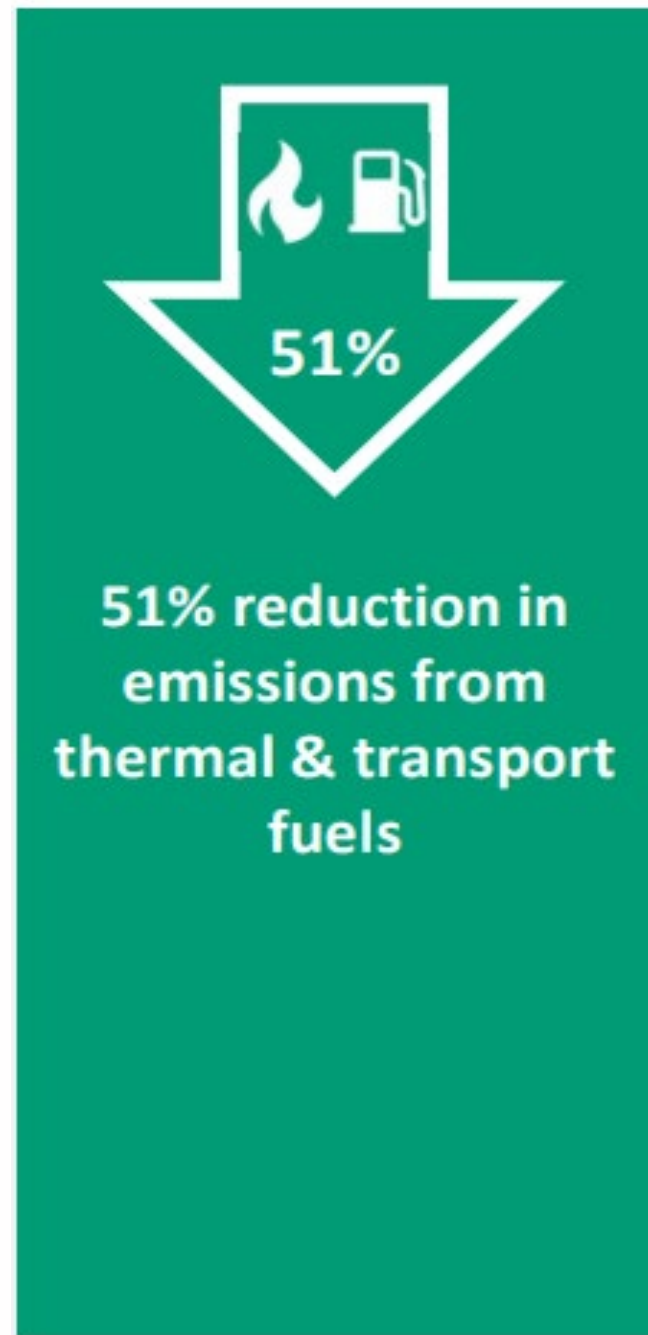
- Private road vehicle: total distance travelled in year (km), by type of vehicle.
- Commercial flights: list of flight segments undertaken in year, including to/from airports and cabin class.
- Commercial and public transport: total distance travelled in year (passenger.km), by mode of transport.



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M&R 2030 Background



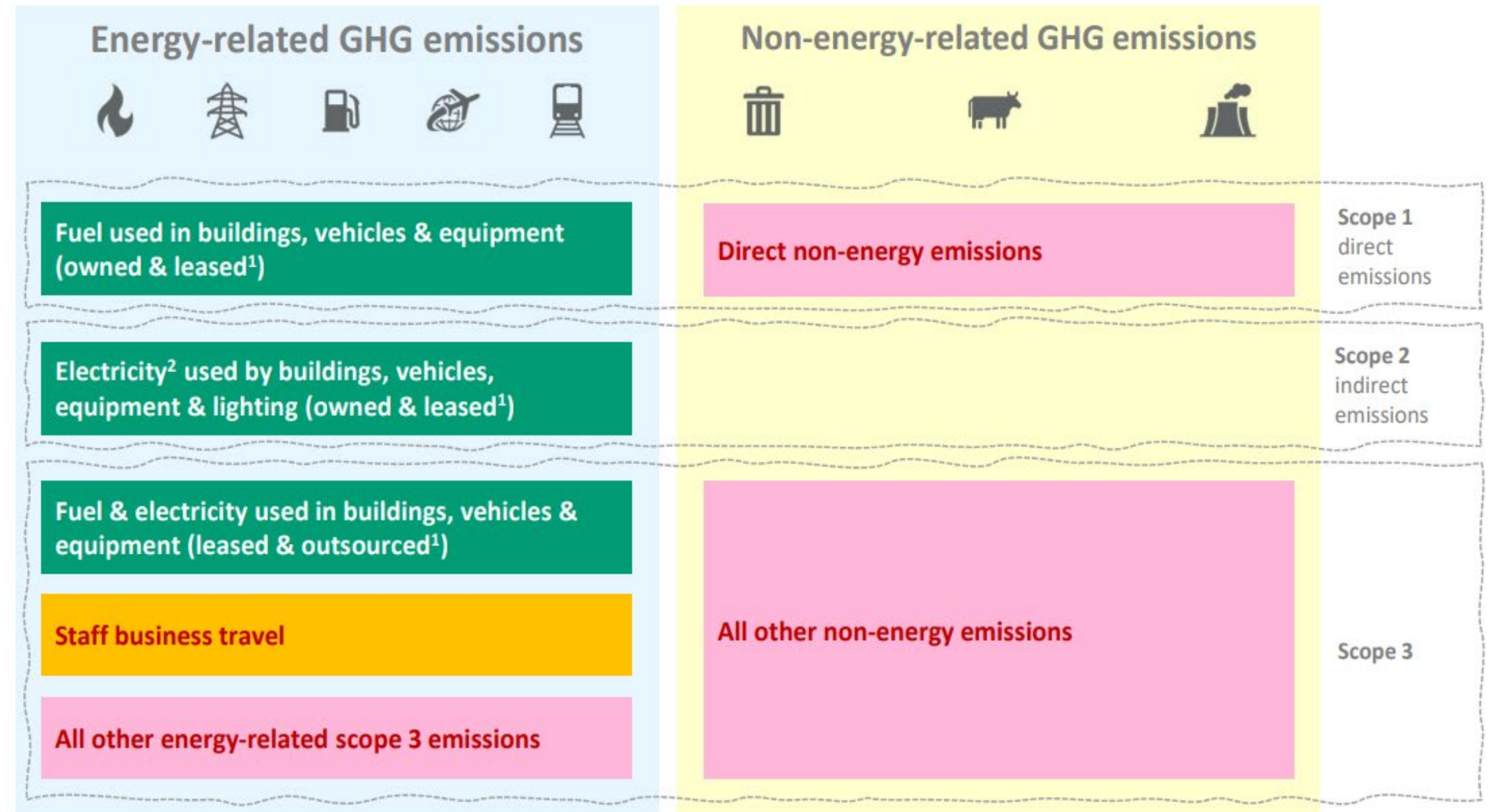
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2030 emissions target | scope

- Included in target
- Must be reported
- Already reported for 2020 target

- Must be reported via M&R-2030

- Optional reporting



Notes:

1 Carbon footprinting standards such as the Greenhouse Gas Protocol allow organisations some flexibility with respect to how they categorise some of their emissions. Depending on the consolidation approach applied by a public body, the public body could categorise certain emissions from leased buildings (public body = lessee) as being either scope 1 or scope 3.

2. Also includes purchased heat and purchased steam, as well as purchased electricity.

All Public Sector bodies must submit details of Staff Business travel for the year 2021 and if available submit back as far as 2017.

2023 this will be mandatory for all bodies to upload.

Categories of Business

Business travel occurs when people travel from one place of work to another place of work as part of their work duties.

For reporting purposes, SEAI has defined three categories of business travel:

- Private road vehicle
- Commercial flights
- Commercial and public transport



- **Private road vehicle**

Record of KM claimed on Agresso
No engine size specific
(Expenses office)

- **Commercial Flight**

Booked through Club Travel
Extensive Information
(Expenses office)

- **Commercial travel**

Train, Buses, Ferries and Hotels
Booked through mixture of Club
Travel and staff expenses office.



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Interesting takes from 2021 Report

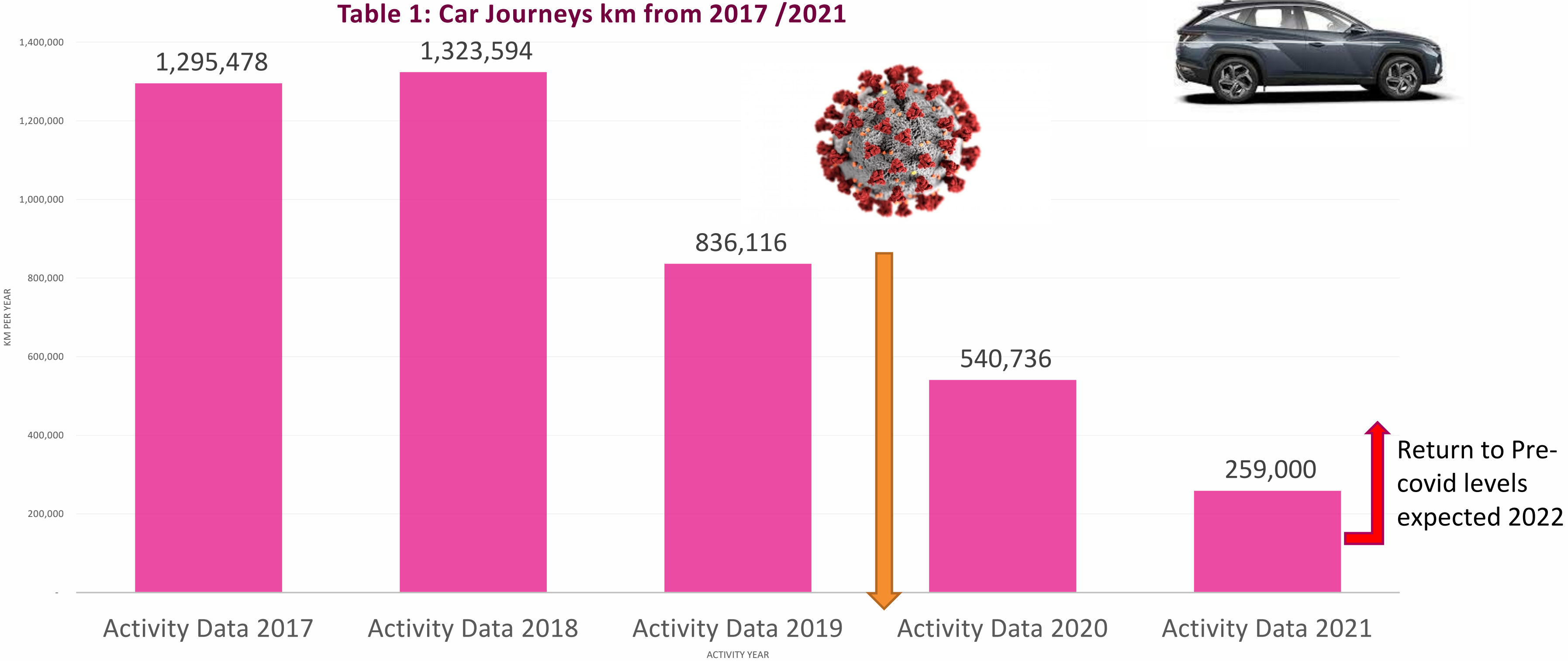


Table 1: indicates the drop in KMs claimed for business car journeys in 2020 and 2021, COVID-19 reduces travel. It is expected that 2022 Figures will return to 2019 figures with more activity.

(Information from Expenses office)



Interesting takes from 2021 Report

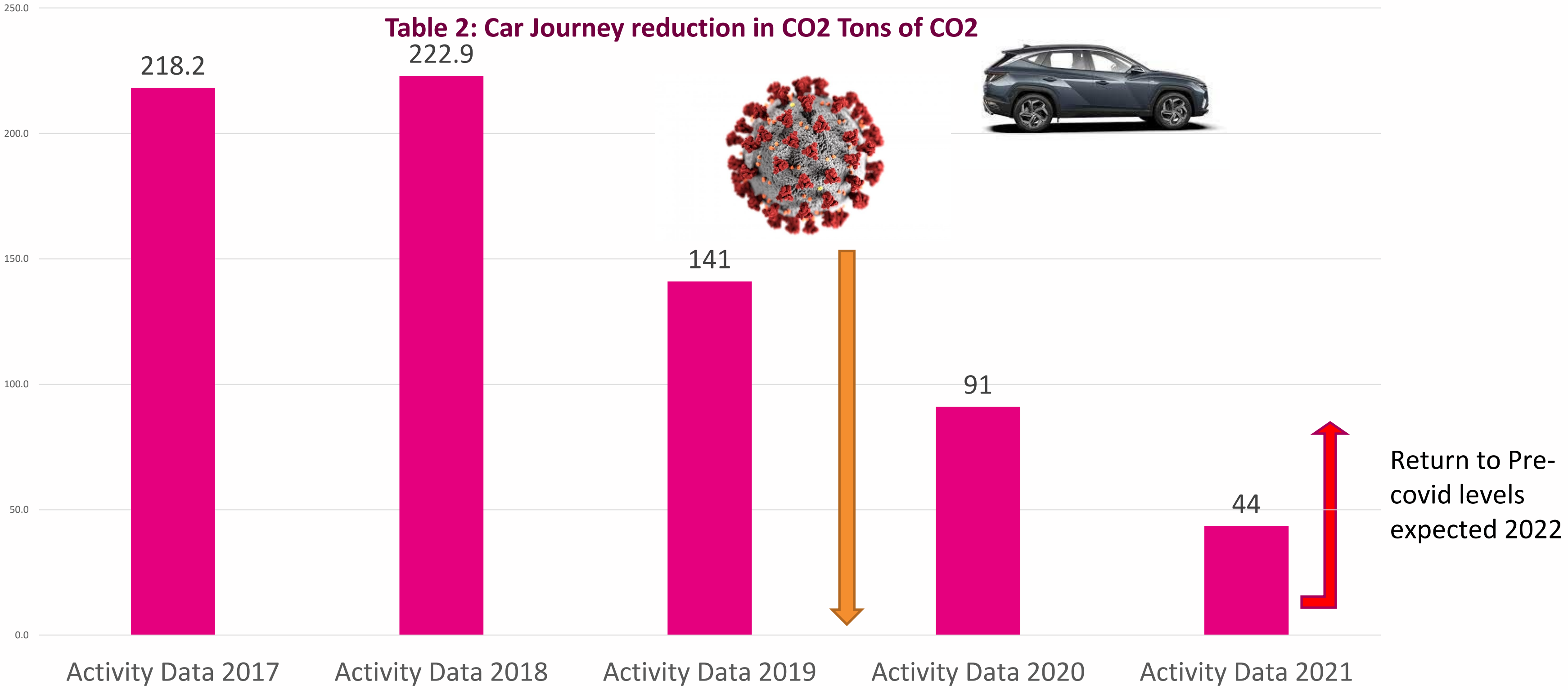
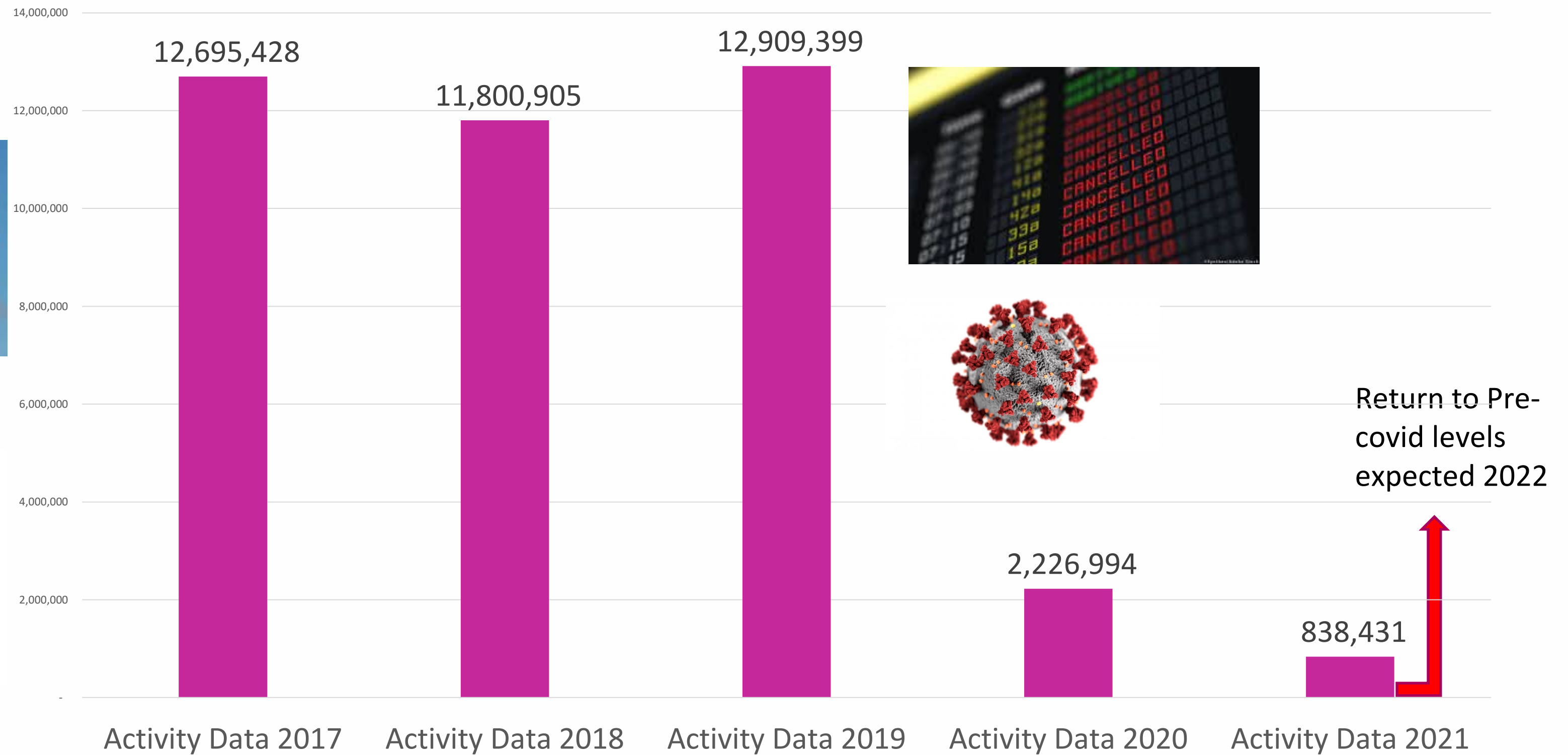


Table 2 indicates the drop in CO2 produced during business car journeys, the drop of in CO2 is inline with COVID-19 reduction in Km travelled. It is envisaged that the CO2 level will rise to 2019 Figures in 2022.

(Information from Expenses office)

Interesting takes from 2021 Report

Table 3: Km flown as measured through Clubtravel



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Table 3: indicates the KMs travelled for Flights through Club Travel journeys from 2017 to 2021. COVID-19 flights cancelled reduction in flying.
Caution: Some flights are booked independently and not recorded

Interesting takes from 2021 Report

Table 4: Tons of CO2 generated through flights, Short, medium and long haul flights

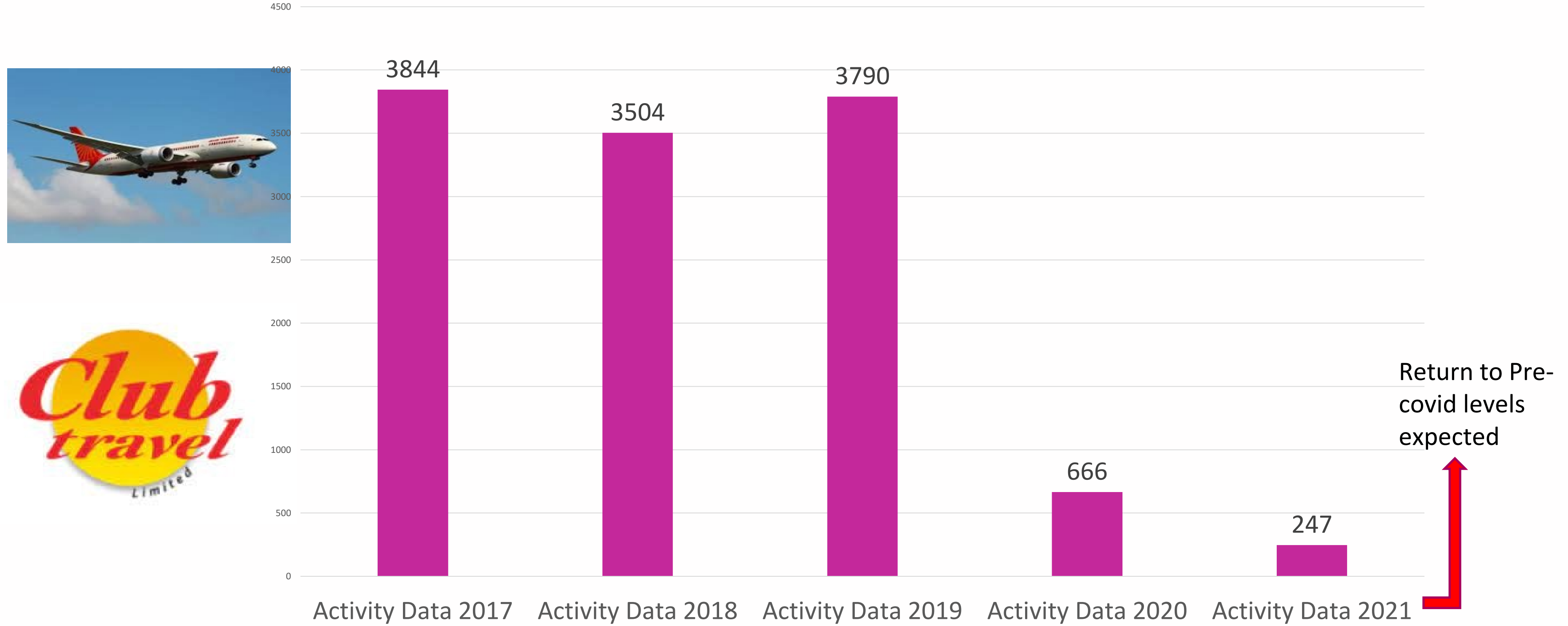


Table 4: indicates the level of CO2 generated through flying in each year, COVID reduction 2020/2021

(Information from Expenses office)

Some flights are booked independently and not recorded



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Interesting takes from 2021 Report

Table 5: Chart showing CO2 generated from Ferry, Taxis, Hotels and Bus Journeys

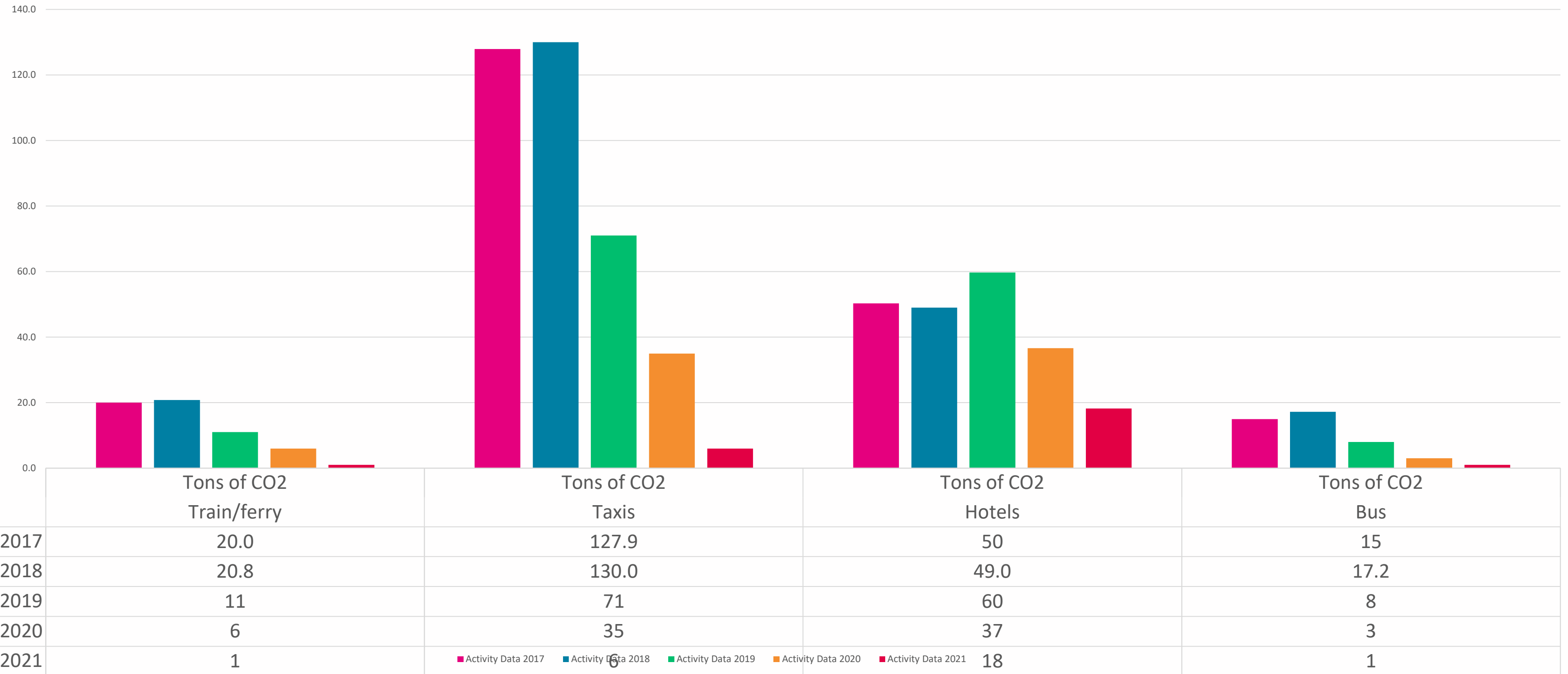


Table 5 indicates the level of CO2 generated through Staff Travel recorded using Trains/Ferry, Hotels, Taxis and Bus, COVID reduction 2020/2021
 (Information from Expenses office) This information is not 100% accurate requires more accurate recording.



Recommendations from Business Travel to be reviewed for implementation as part of strategy

Proposed recommendations from the report which will be considered for implementation before the recording strategy begins in 2023:

1. Implement new recording from Club Travel to ensure that all journeys are entered.
2. Develop behavior workshops and training for staff to evaluate their travel plans, ie flights to conferences, method of transport etc.
3. Ensure all travel is recorded by the Research teams and staff members enabling an accurate picture of Carbon usage.
4. Develop app to allow all staff generate a Carbon footprint for staff when they take Taxis, Ferry, Bus and Trains to enable capture of all CO2.
5. Develop CO2 Footprint allowances.
6. Develop opportunities for staff to offset their carbon footprints.



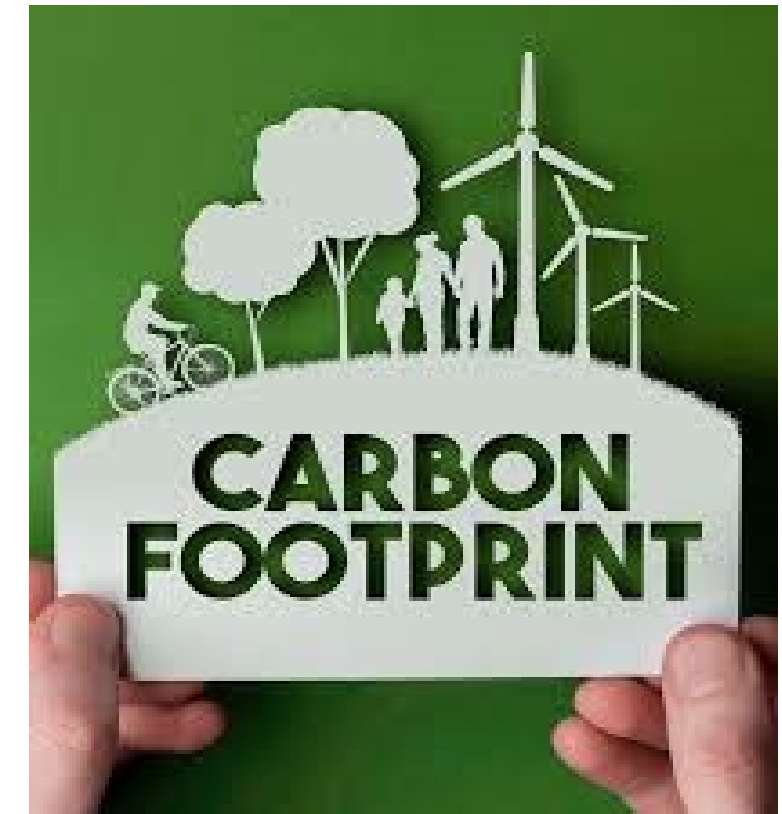
Section 2 : Staff Travel –

2019 - 17% of the overall Carbon Footprint for the University

This section of the report looks at findings from the NUI Galway Travel Survey 2022 carried out by Stephen Canney (ME Student), Dr Eoghan Clifford (Senior Lecture), Dean Pearce (Head of Facilities Management and Services) and Michael Wallace (Facilities Management).

The document is an extensive review of the current Staff travel trends and outlines CO2 generated through travel to work and college. 17% of the University Carbon footprint is generated through staff travel.

The document has been reviewed by the authors and myself to look at ways through behavior and operational changes the 17% can be reduced by 2030.



Register of Opportunities and Actions from Travel Report

- Work with commercial bus service operators to increase levels of service from across the region to Galway City and the University.
- Look at Potential of Hydrogen bus, this could form part of the Research project that Dr Rory Monaghan is involved in around travel.
- More changing facilities for cyclists and walkers.
- Car share app. Link to parking allocations?
- Refresh and refer the draft Parking Management policy for UMT to approve. This is an NTA recommendation.
- Retender campus park and ride and increase timetable frequency using income from permit fees. Helps campus mobility, connectivity with sports and research buildings.



Register of Opportunities and Actions from Travel Report (continued)

- Restrict all conference permits to June, July, August only.
- Disabling access between North and South campus for vehicles with only the following exceptions - buses and those with disability passes. The route under the bridge to be redesigned as a shared street.
- Strong encouragement for senior management to cycle or walking when living close to campus (e.g. Directors of Service, Deans, UMT members etc.)
- Some car parking space can be changed into outdoor gym space, or solar panel space (plenty of other ideas)!
- If commuting carbon budgets have to be reduced over time how is this managed – e.g. how can units stop staff travelling by car if budgets are to be used up?
- Ensure students can live as close as possible to NUI Galway (sufficient accommodation and cost of accommodation should be tackled - obviously NUI Galway have only some impact here but it still should be a priority)



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TRAVEL SURVEY 2022

Prepared by

Civil Engineering (School of Engineering)	Buildings and Estates
Stephen Canney (ME student)	Dean Pearce (Head of Facilities Management and Services)
Eoghan Clifford (Senior Lecturer)	Michael Wallace (Facilities Manager)



Overview of survey

Survey background

- Aligned with previous surveys from 2016 (and prior to that) to enable comparison
- New questions included
 - Questions to enable estimation of greenhouse gas emissions due to staff & student commuting to and from NUI Galway
 - Questions related to remote working and impacts of COVID on commuting
 - Questions in relation to impact of accommodation choices on student/staff commuting patterns
 - Questions related to other issues that might enable (e.g. knowledge of various subsidies etc.)

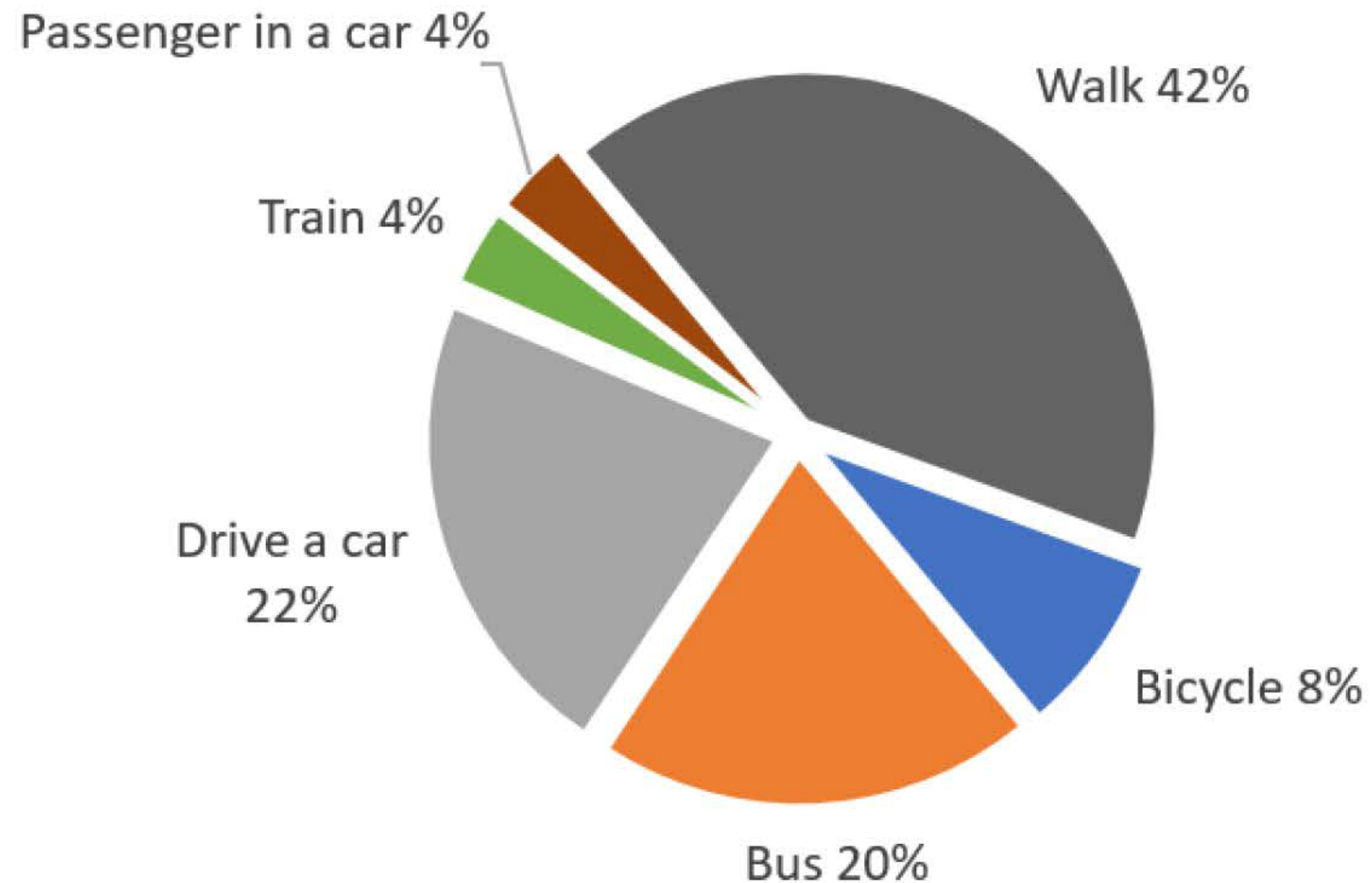
Key response data

- Survey Launched in January 2022

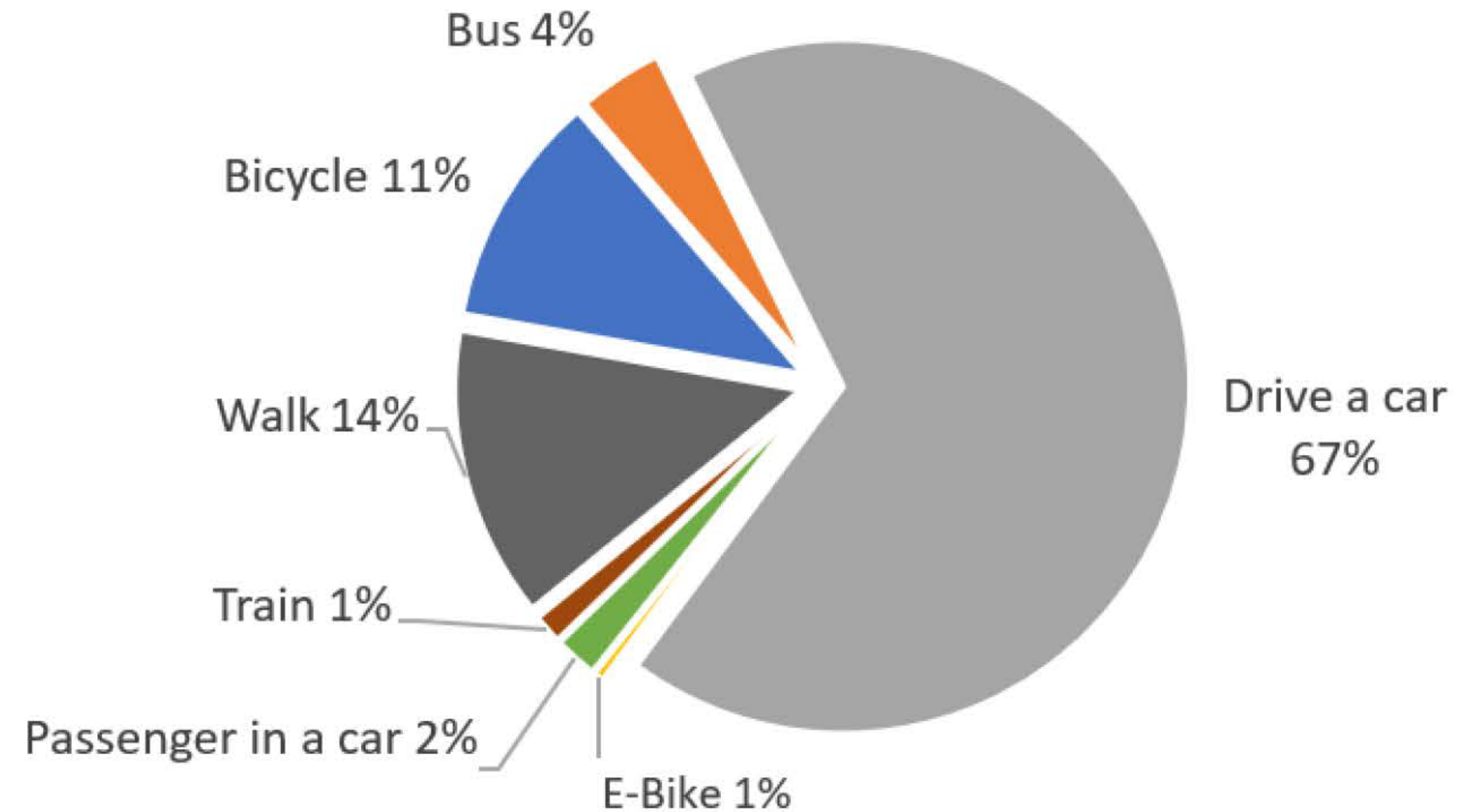
Responses	Gender	Disability/Long term illness
2136 total responses	64% female	92% No
1359 student responses	33% male	6% Yes
777 staff responses	3% non-binary/other	2% Prefer not to say

Main mode of transport 2022

Students



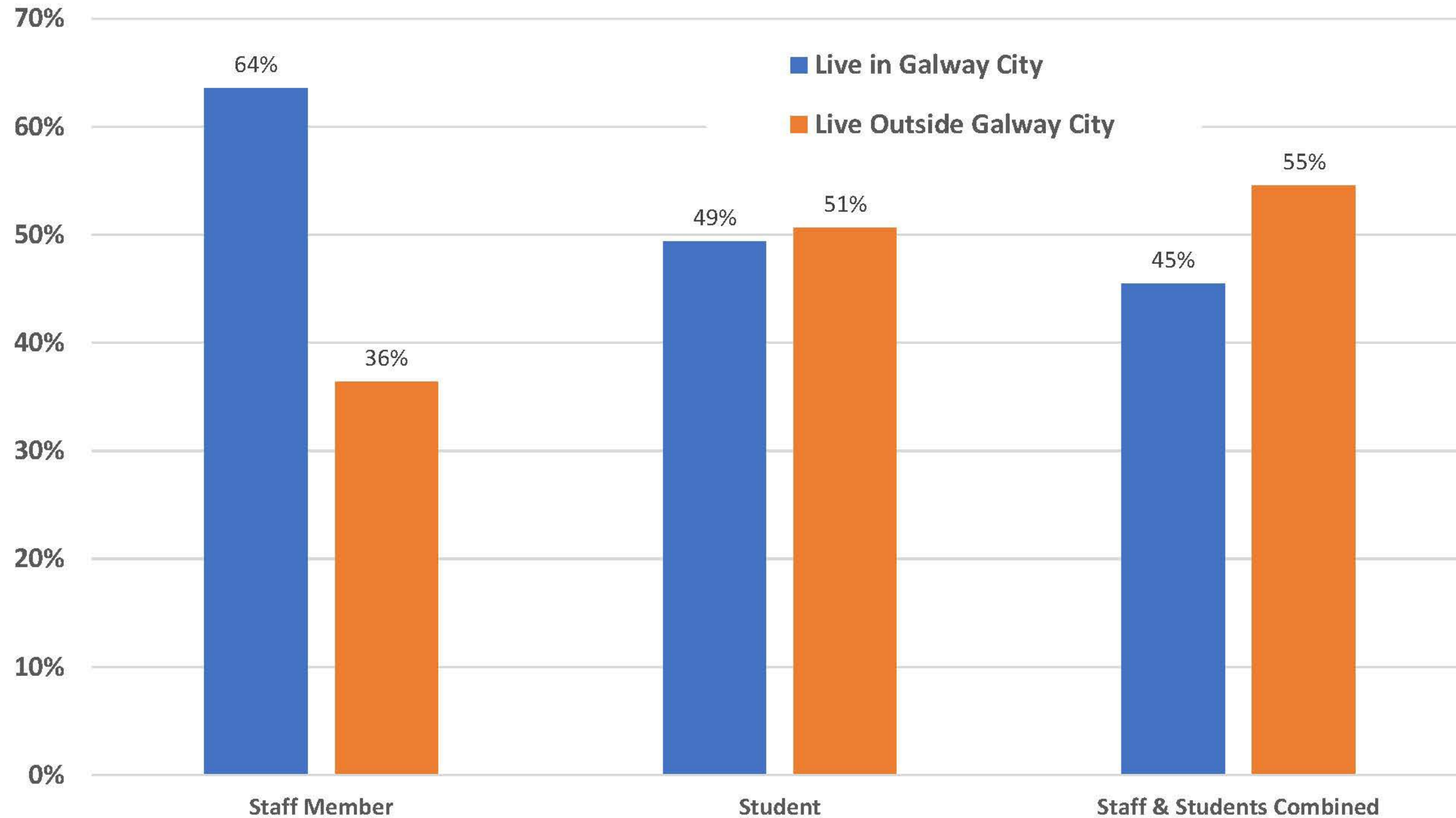
Staff



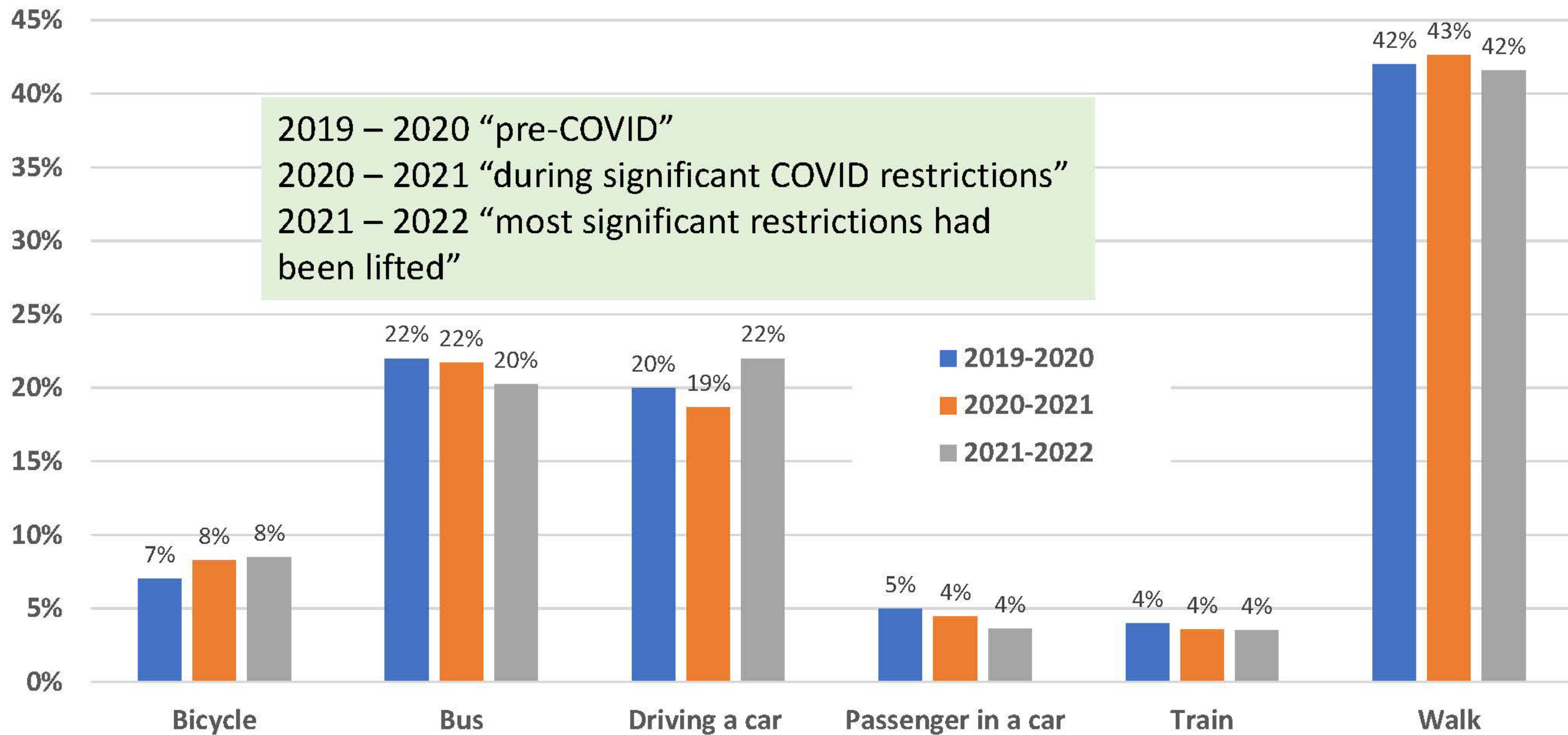
HIGHLIGHTS

- Car use still the dominant form of transport for staff
- 50% of students actively commute vs 25% of staff

Where do NUI Galway staff and students live?



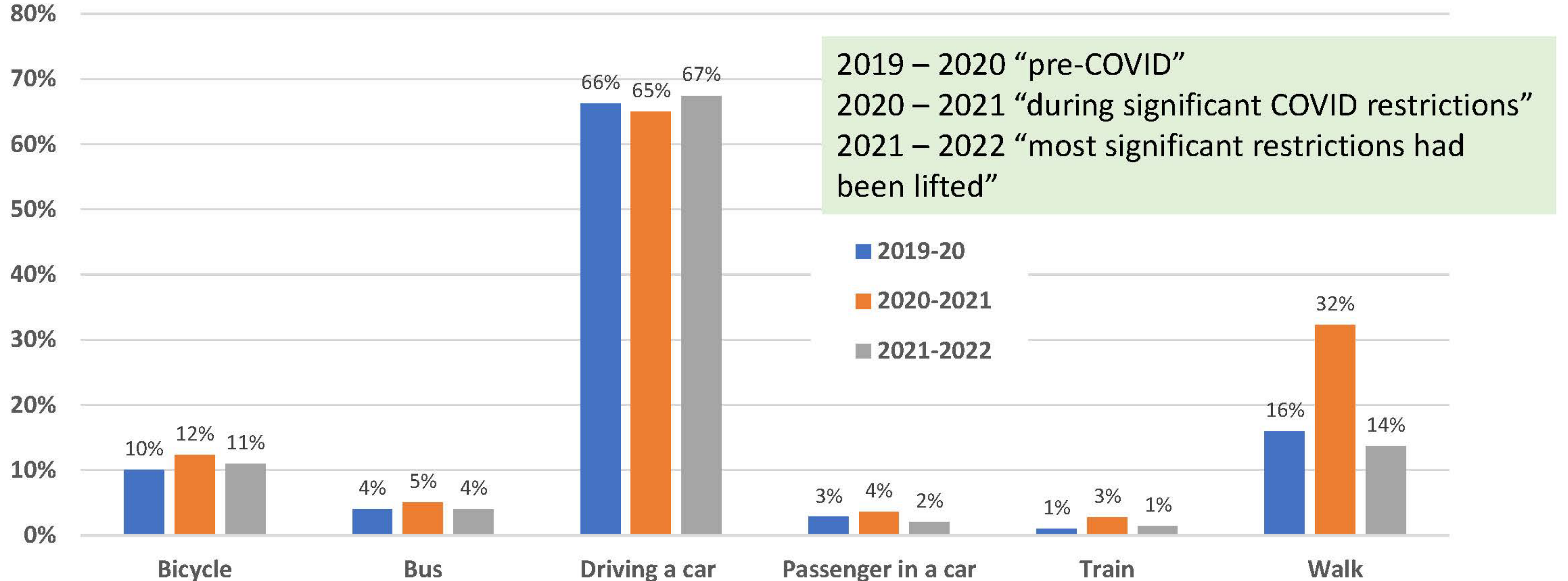
Student Modal Share



HIGHLIGHTS

- No significant change in modal choice due to COVID
- Frequency and distance travel to and from campus did change (presented later)

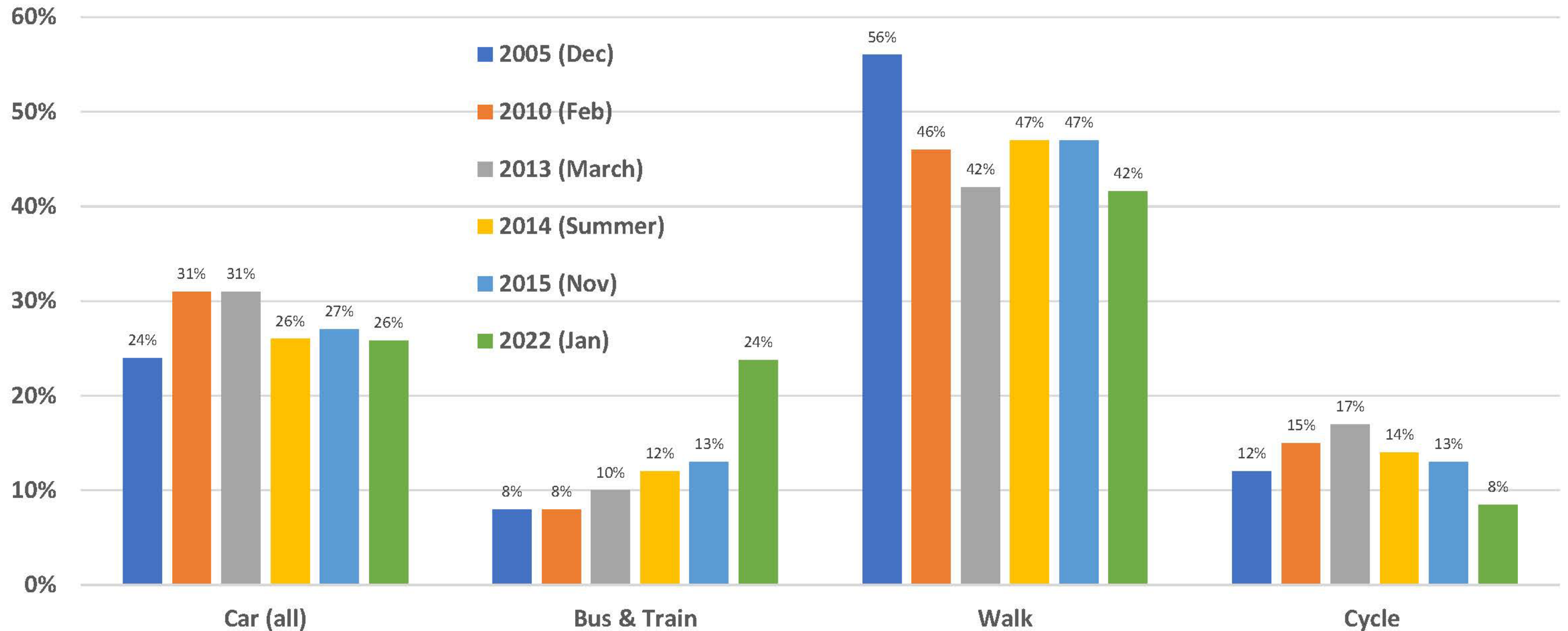
Staff Modal Share



HIGHLIGHTS

- No significant change in modal choice due to COVID
- Reduced numbers of staff walking to campus (likely impact of remote working) rather than a long-term trend

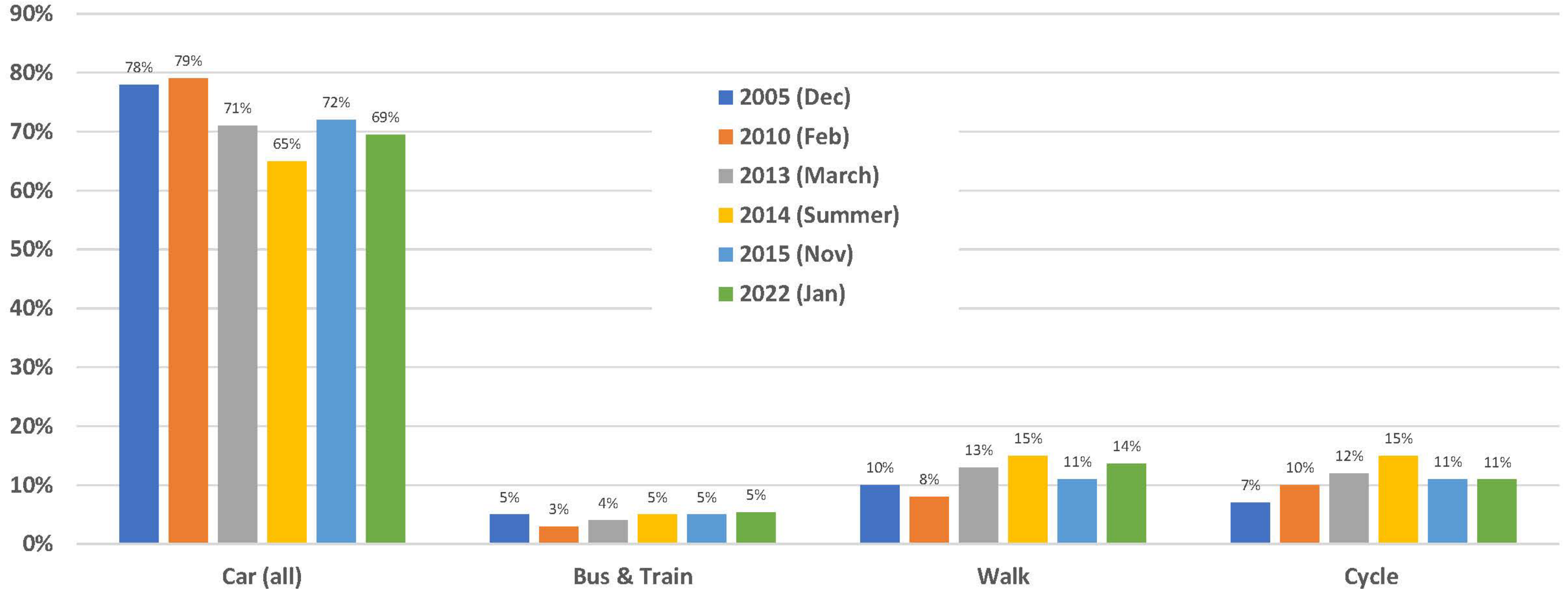
Long-term trends in student travel patterns



HIGHLIGHTS

- Significant reduction in car dependence 2010 – 2015. Limited change since then.
- Modal share of postgraduate and undergraduate students is similar.

Long term trends in staff travel patterns

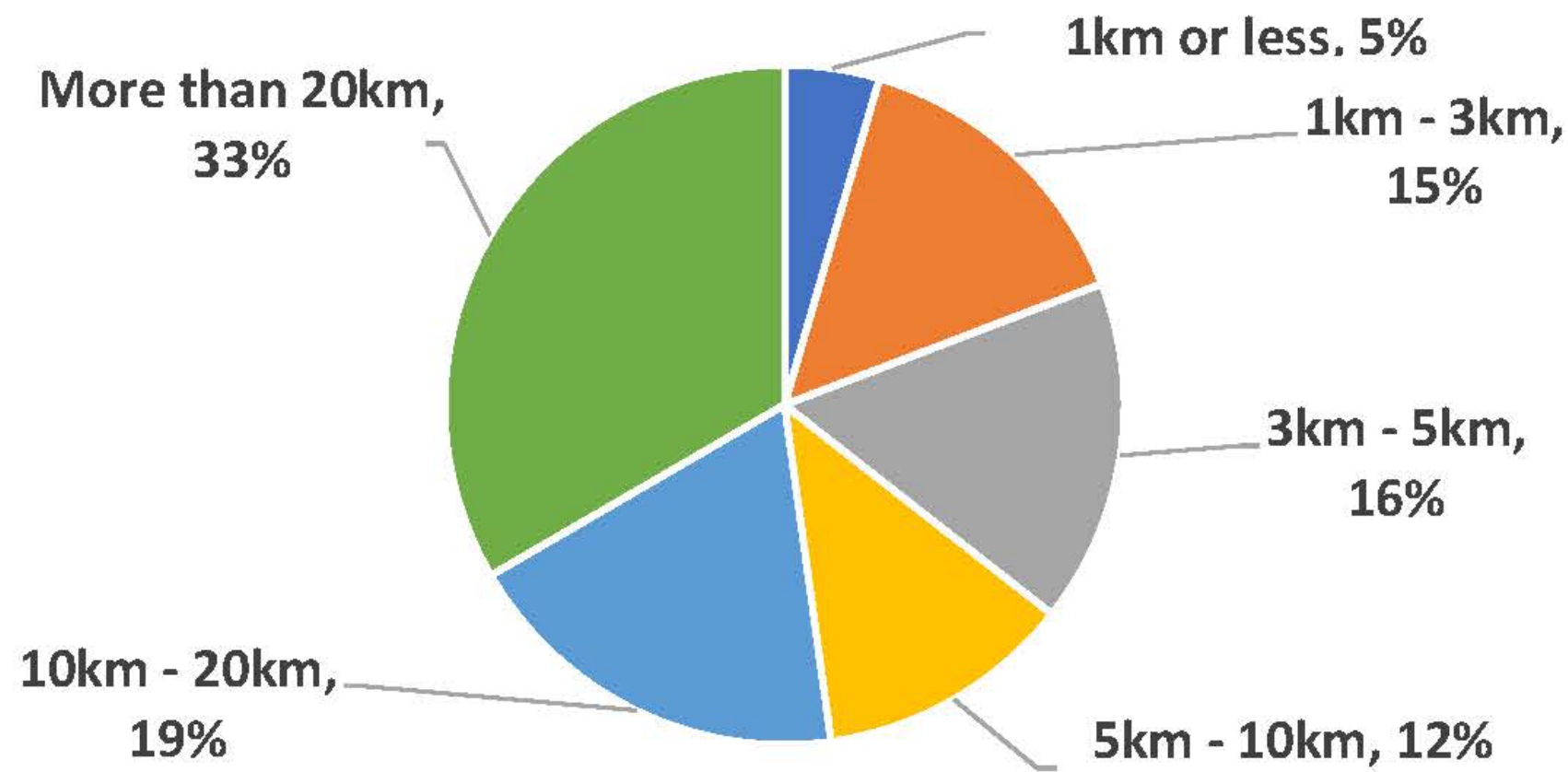


HIGHLIGHTS

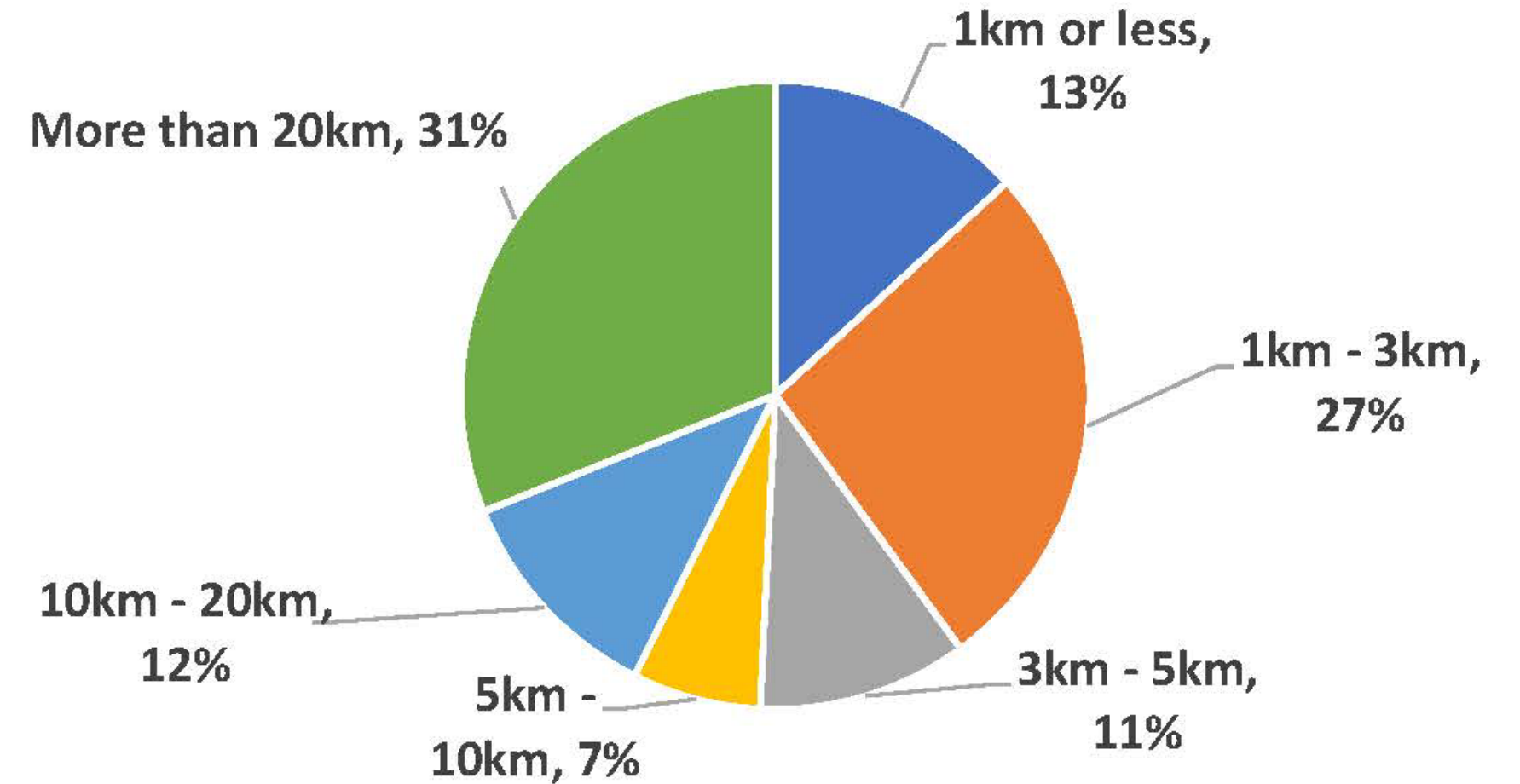
- Significant reduction in car dependence 2010 – 2015. Limited change since then.
- Car remains, by far, the dominant mode of transport.

Commute distance (one way)

Staff Commute Distance



Student Commute Distance



HIGHLIGHTS

- Increase in distance travelled since 2015 (especially for students).
- 18% students & 21% staff live outside Galway city due to “lack” of accommodation

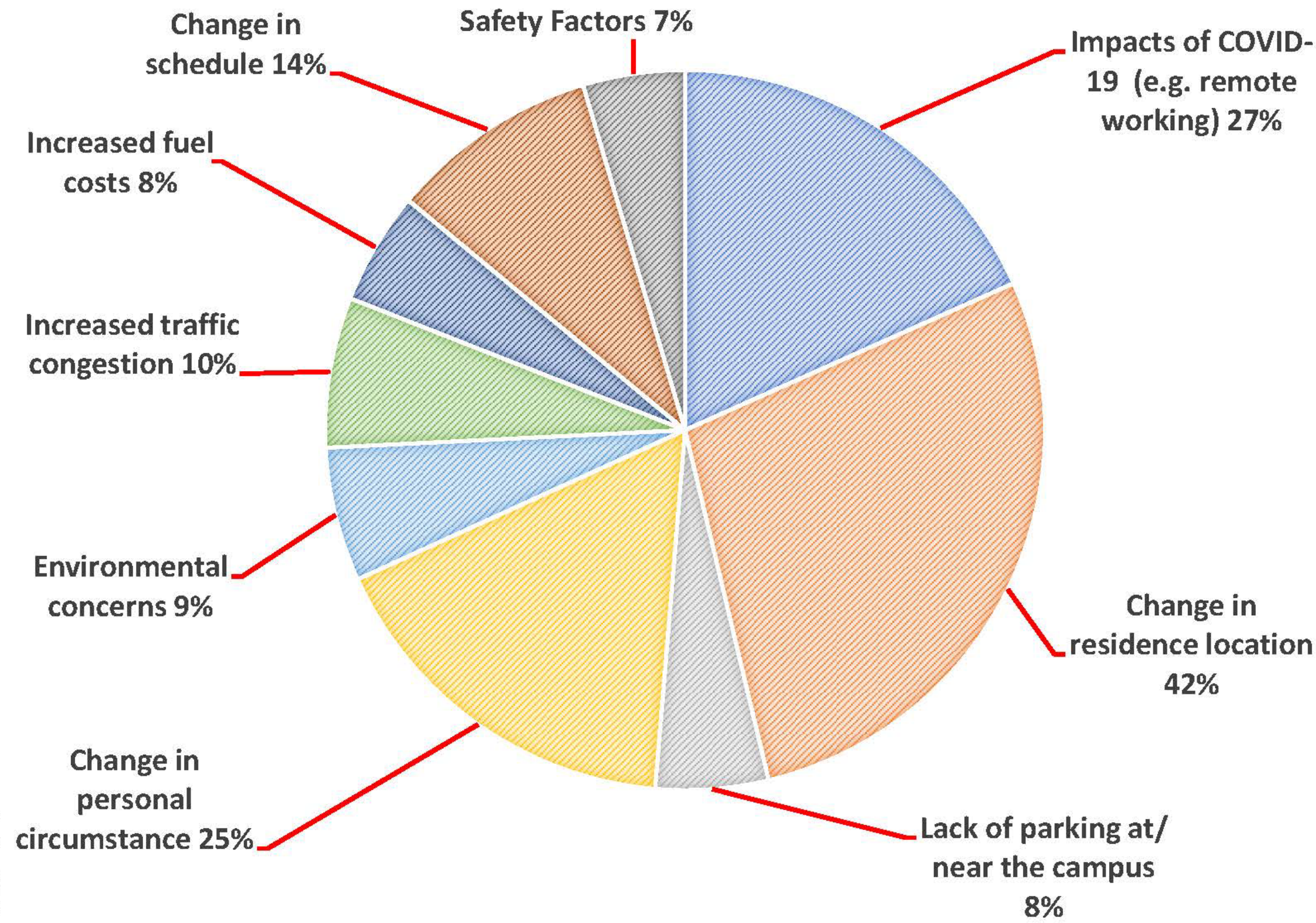
	Staff		Students	
	2015	2022	2015	2022
Travelled more than 20 km	24%	33%	13%	31%
Travelled less than 5 km	36%	31%	58%	38%

Reasons behind change in modal choice

- 13% changed modal of transport in the last year

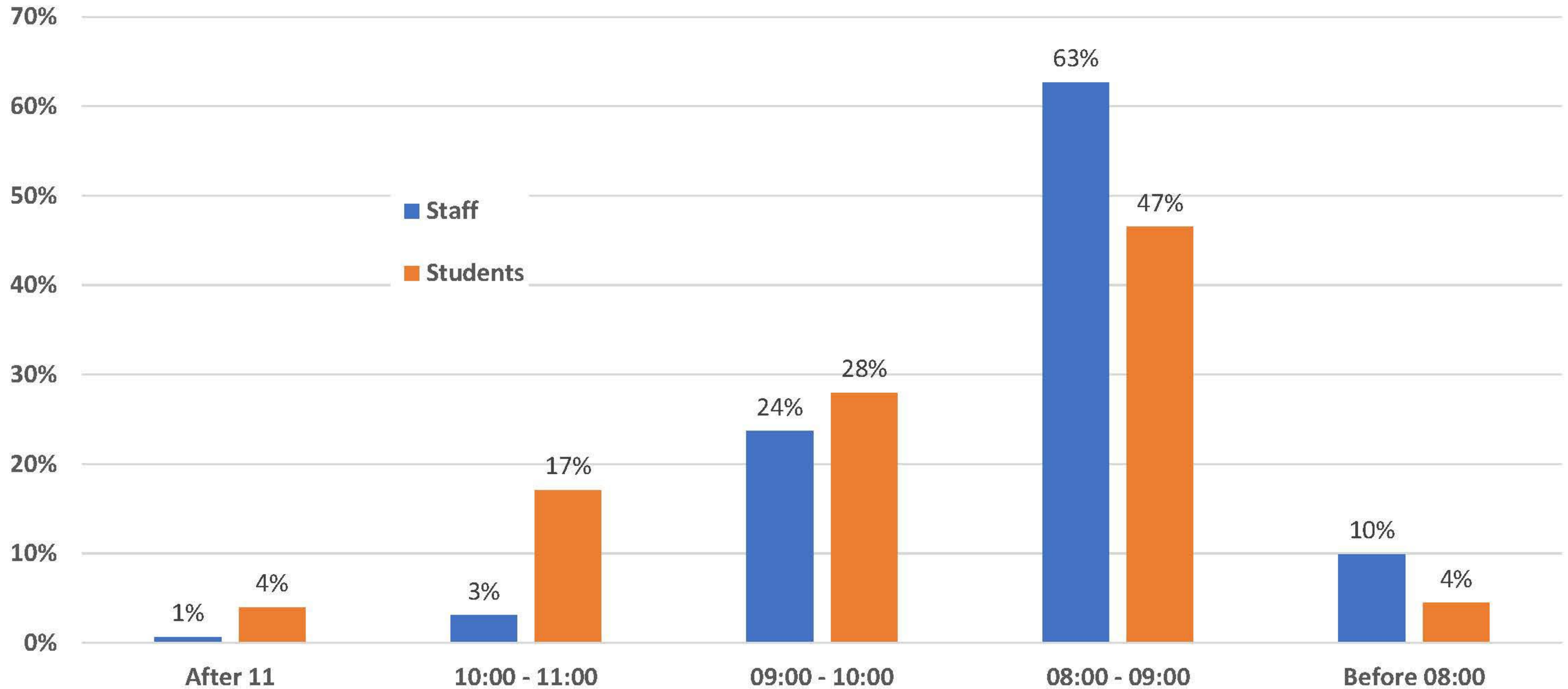
- ~ 27% to walking
- ~ 23% to bus
- ~ 16% to driving a car
- ~ 14% to bicycle
- ~ 6% to car passenger

- Limited overall gains in active travel due to switches between active travel mode and switches to driving
- Evidence of lack of progress in (city) infrastructure to enable switch

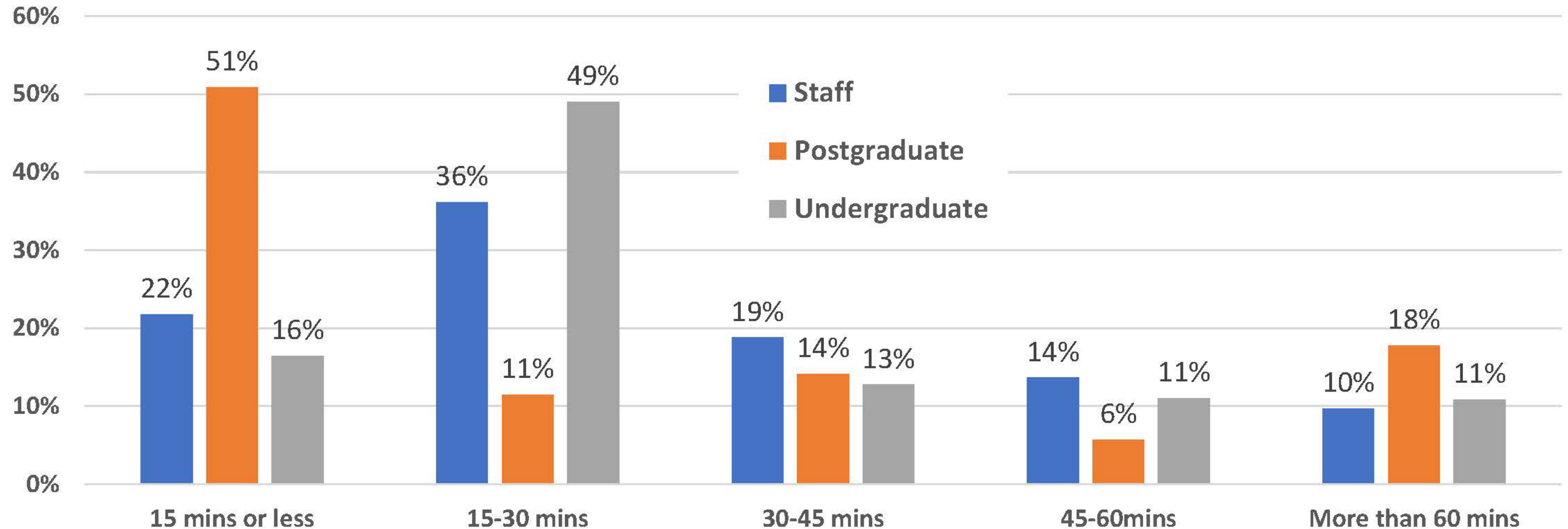


Improvements to transportation infrastructure: 1% | Improved cycling infrastructure: 1%

Usual arrival time to campus



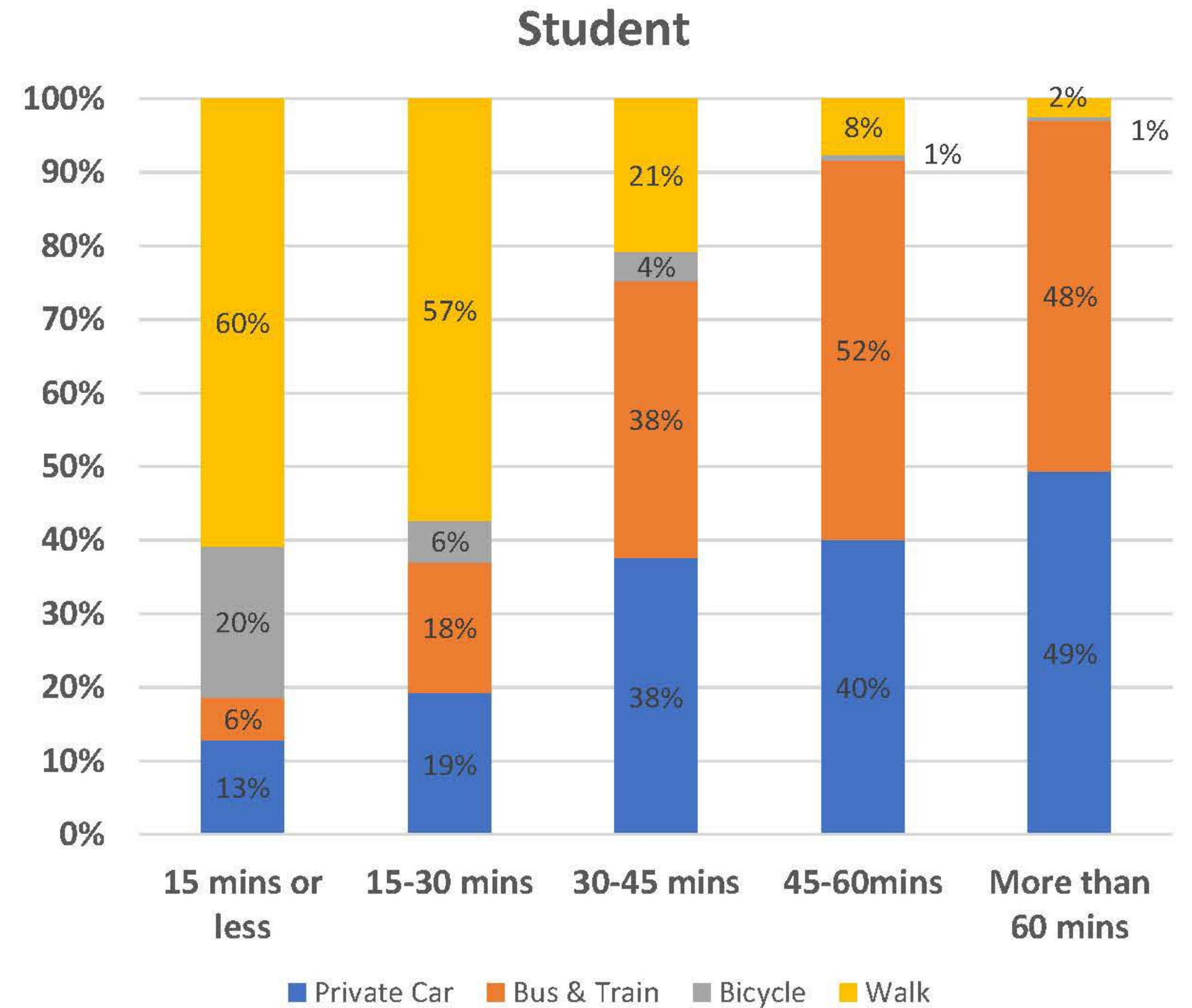
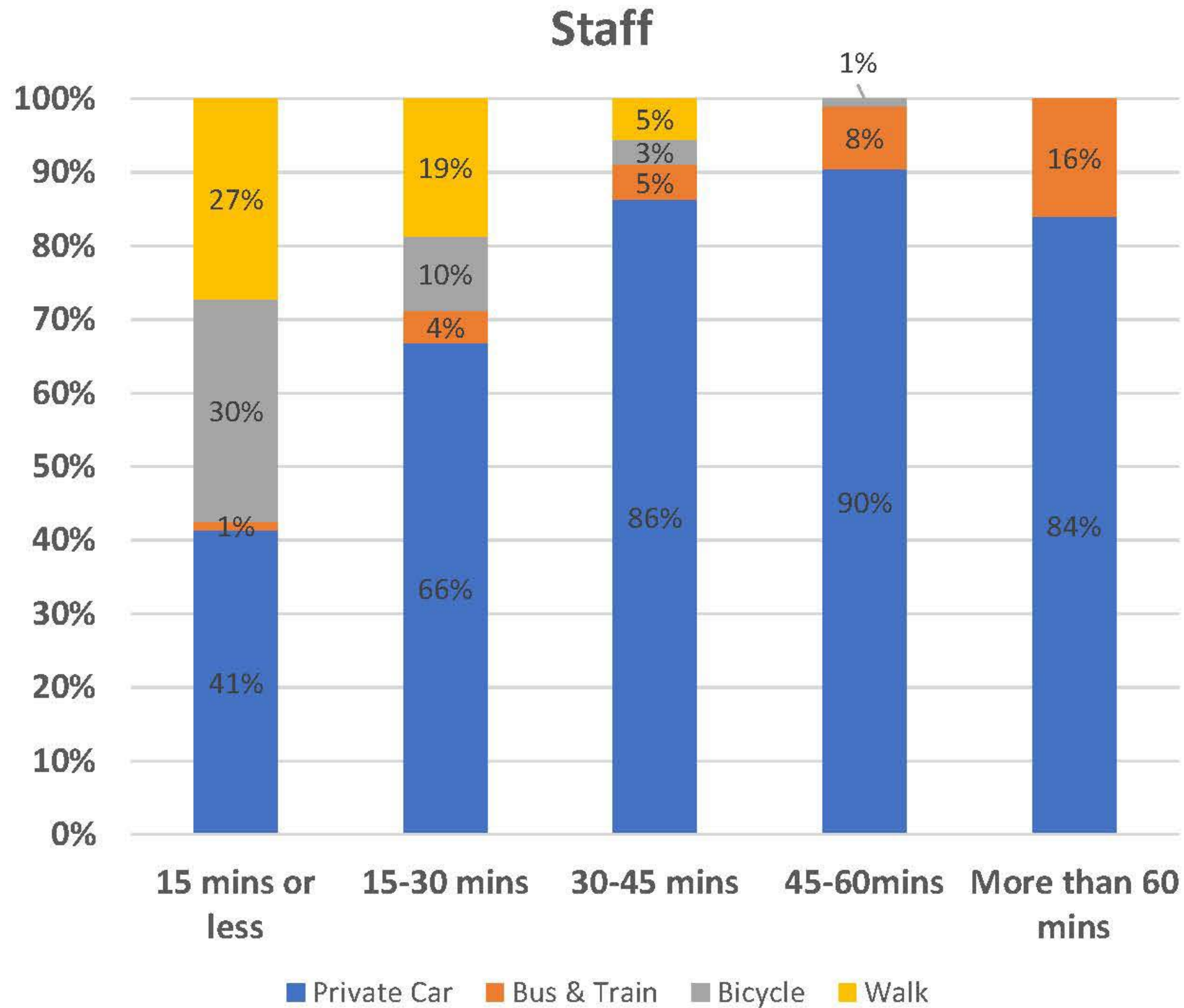
Commute time to campus



HIGHLIGHTS

- Postgraduate students have the shortest commuting time
- 58% staff and 65% students commute is less than 30 minutes
- Staff: In 2015, 40% had commute > 30 minutes. This increased to 43% in 2022
- Students: In 2015 21% had commute > 30 minutes. This increased to 35% in 2022.

Modal choice and commuting time

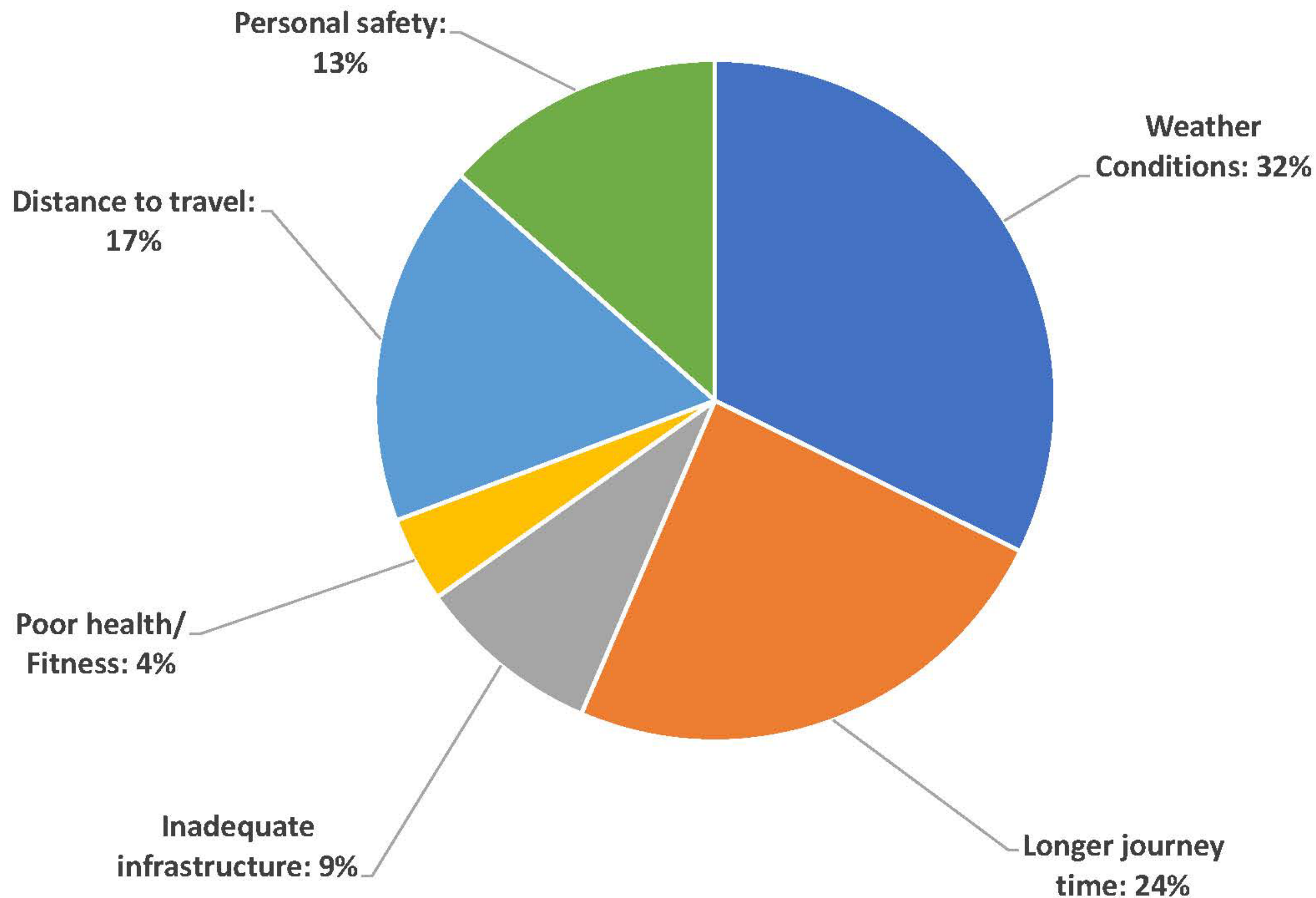


HIGHLIGHTS

➤ 41% of staff commutes by car are < 15 minutes

Focus on short commutes by car (< 5 km)

Reasons for not walking



HIGHLIGHTS

The key reasons for not walking are

- Weather
- Journey time + distance
- Safety

(% of all responses shown in diagram)

Annual CO₂ eq emissions due to commuting

Annual Extrapolation (18,000 students + 2,500 staff)

Student commuting 2022 travel survey	Student commuting (remote working)*	Staff commuting 2022 travel survey	Staff commuting (remote working)*
13,106 tonnes CO ₂ eq	8,639 tonnes CO ₂ eq	4,722 tonnes CO ₂ eq	2,861 tonnes CO ₂ eq

*The survey asked how often respondents would prefer to come to campus in an ideal scenario. It is acknowledged this may be more feasible for staff than students

**Comparison based on 2019 NUI Galway greenhouse gas emission report ([https://sustainability.nuigalway.ie/media/sustainability/files/NUI-Galway-GHG-Report-\(2017-2019\).pdf](https://sustainability.nuigalway.ie/media/sustainability/files/NUI-Galway-GHG-Report-(2017-2019).pdf))

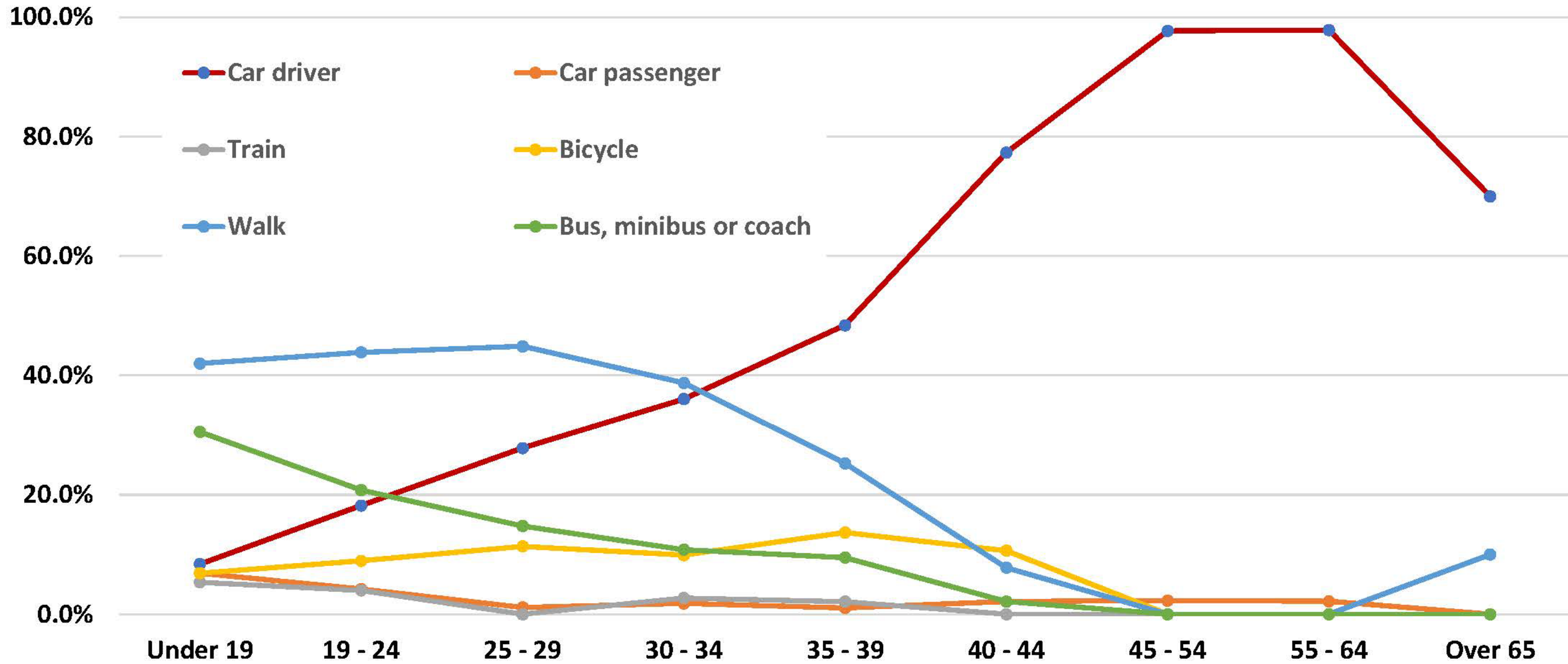
- 48 working weeks were assumed per year for staff
- 24 working weeks were assumed per year for students

NOTE: Data presented is overall life cycle related emissions. Fuel consumption would account for 30% - 40% of the above total. Fuel consumption may be a more realistic figure of greenhouse gas savings

HIGHLIGHTS

- Total commuting emissions estimated at **17,800 tonnes CO₂ eq/annum**
- **Commuting comprises 33% of NUI Galway emissions****
- Remote working for staff could “save” 40% staff commuting emissions
- This equates to 3.5% of all NUI Galway emissions**
- Ensuring students can find/afford accommodation close to camps would have a very significant impact on emissions

Percentage of each age cohort and mode of transport (student & staff)



Other ongoing analyses includes

Gender impacts on transport (if any)	Transport habits relative to accommodation in the city (to identify areas with poor public transport/cycling facilities)
Knowledge of on campus facilities (e.g. drying facilities, showers etc.)	Analysis of comments left on various questions
Impact of discipline and/or staff role on transport (if any)	Impact of staff role on ability to work remotely
Awareness of tax incentives, non-adjacent maintenance grant for students and other schemes	Further analysis on fuel consumption relative to overall life cycle emissions (see note on Slide 19)
Mode of transport that would be taken in an ideal scenario	



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