

Designed for the post-16 education sector



2024

COMMUTING SURVEY

GUIDE AND TOOL



Preface

This commuting survey, tool and guidance package has been developed to assist post-16 education sector organisations report their staff and student commuting emissions. Commuting emissions are those that are formed from the transportation of someone from their term-time (student) or full-time (staff) residence to their ordinary place of work or study.

This guidance does not cover business travel or relocation travel emissions. Guidance has been released about this previously in the form of the [Business Travel Guide for Further and Higher Education](#) and [The Domestic and International Student Relocation Travel Emissions Calculator Tool](#).

This guidance aligns with the statutory requirements for the Scottish Government's [Public Bodies Climate Change Duties \(PBCCD\) reports](#), the [Standardised Carbon Emissions Framework \(SCEF\)](#) and the [Climate Action Roadmap for FE Colleges](#). Whilst developed by EAUC Scotland, this resource is relevant to the UK and Ireland institutions.

This resource package provides:

- Comprehensive **guidance** on conducting commuting surveys from initial inception to analysis and reporting.
- A **baseline commuting survey template** in Microsoft Forms that can easily be duplicated and modified to your own organisation's needs.
- **A commuting emissions calculator tool and user guide** for automating the data analysis process and creating a simple and efficient results summary without the need for external consultants.

This resource does not focus on all aspects of commuting, but rather travel surveys and data collection in particular. We hope to publish wider guidance on commuting in future years, pending funding.

This resource package is aimed at creating a standard baseline for post-16 education sector organisations to report on their staff and student commuting emissions. Institutions can choose to keep it simple and only report on these suggested areas or incorporate these questions into their pre-existing, longer surveys.

This guide has been developed by and delivered as part of EAUC Scotland's [Step-Change for Sustainability programme \(year 2\)](#), funded by the [Scottish Funding Council](#).

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Glossary

Active travel – Active travel refers to modes of travel that involve a level of activity. The term is often used interchangeably with walking and cycling, but active travel can also include trips made by wheelchair, mobility scooters, adapted cycles, e-cycles, scooters, as well as cycle sharing schemes ([Gov.uk](#), adapted from the definition in the [Future of Mobility: urban strategy](#)).

Business travel emissions – Emissions associated with transportation of - and hotel stays for - employees for business-related activities ([SCEF, page 13](#)). This includes student field trips and academic trips regardless of funding source.

Commuting travel – Transportation of students and employees between their homes and their places of study or work during the reporting year (in vehicles not owned or operated by the reporting company) (adapted from [SCEF, page 15](#)). Institutions may include emissions from teleworking (i.e. employees working remotely) in this category. Using SCEF, commuting emissions are reported separately for staff (category 7) and students (category 9). This guide does not cover student travel to and from their permanent residence at the start and end of term. For guidance on calculating this, please see [The Domestic and International Student Relocation Travel Emissions Calculator Tool](#).

CO2 equivalent (CO2e) - The universal unit of measurement to indicate the global warming potential (GWP) of each greenhouse gas, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a common basis ([GHG Protocol](#)).

Emissions - The release of greenhouse gases (GHG) into the atmosphere. For the purposes of this guide, GHG are the six gases covered by the UNFCCC: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF₆) ([GHG Protocol](#)).

FHE – Further and Higher Education.

Homeworking emissions – Emissions from staff working from home or remote working. These emissions are also classified as 'telecommuting' according to the Scottish Government's [Public Sector Leadership on the Global Climate Emergency Guidance, October 2021](#).

PBCCD – Public Bodies Climate Change Duties ([Scottish Government, SSN](#)).

Post-16 education organisation – In [EAUC's new 2024-2030 strategy](#), we have introduced a term inclusive of the breadth of education providers we work with. Not only does this include universities and colleges, but institutes, adult education services, independent training providers, royal colleges, conservatoires and other tertiary education providers. We hope that those familiar with our old terminology will understand the need for us to broaden our definition as our impact reaches new heights.

Public transport – A system of vehicles such as buses and trains that operate at regular times on fixed routes and are used by the public ([Cambridge Dictionary, 2022](#)).

SCEF – Standardised Carbon Emissions Framework ([EAUC](#)).

Scope 1, 2 and 3 emissions – Scopes 1, 2 and 3 are ways of classifying climate-warming greenhouse gas emissions attributed to an organisation's activities and are the basis of the international [Greenhouse Gas Protocol](#) standards and the SCEF.

Scope 1 emissions are greenhouse gases an institution puts into the atmosphere with its own property. For example, when a college burns gas to heat its buildings, burns petrol in its fleet vehicles, or loses refrigeration gases from its air-conditioning systems, these actions all create greenhouse gases. These emissions belong in scope 1.

Scope 2 emissions are "indirect" emissions associated with institutional energy needs. This includes electricity an institution purchases from the national grid and heat and steam purchased from external energy providers, such as through district heating systems, to run institutional operations. These emissions are classed as "indirect" emissions as the emissions themselves are generated off-site using externally owned infrastructure. However, as with scope 1 emissions, institutions are solely responsible for the demand of these resources and their associated emissions.

Scope 3 emissions include all other indirect sources of greenhouse gases from the institution's operations. These include, but are not restricted to, emissions associated with transmission and distribution of purchased energy, water supply and treatment, waste management, business travel, staff and student commuting, homeworking and supply chains for purchased products and services.

Transport Poverty - The lack of transport options that are available, reliable, affordable, accessible or safe that allow people to meet their daily needs and achieve a reasonable quality of life ([Transport Poverty: A Public Health Issue](#) report, Public Health Scotland, 2024).

Introduction

How we move around and what transport options are available to us make a significant difference to our lives. Transportation options could make the difference between choosing to join one workplace over another, how affordable education will be once we leave school and what opportunities are available to us. Transport availability is inextricably linked to social mobility, health and wellbeing and economic factors, but it is often one of the least prioritised areas when it comes to institutional investment. Transport is frequently tagged on to a busy colleague's already stretched remit and transport surveys are often de-prioritised to the bottom of the pile. Added to this there can be a leadership sense that commuting is largely an individual's responsibility and outside of scope for institutions and local authorities. This has led to heavily car-dominant and costly transport policies as prioritising the car is often the 'easiest' and least politically difficult position to take. However this has left many staff and students struggling to pick up the costs that both car ownership and public transport 'deserts' leave in their wake.

Public Health Scotland (PHS) published a report outlining the multidimensional definition of transport poverty ([Transport poverty: a public health issue](#) report, 2024). It outlines the causes of transport poverty within and beyond the transport system and details how transport poverty can influence health and health inequalities. PHS defines transport poverty as: 'the lack of transport options that are available, reliable, affordable, accessible or safe that allow people to meet their daily needs and achieve a reasonable quality of life.'

In 2023, the National Union of Students (NUS) found that the cost of public transport affected 32% of students' ability to eat a meal ([The Travel Barrier report, NUS, 2023](#)). In another report, [Fighting for Students: The Cost of Survival \(2023\)](#), NUS found that 21% of students had missed attending a class or lecture due to the costs of travel and 34% had missed out on taking part in sports, clubs or societies. Whilst in [Move It: Student Travel Costs Survey \(2023\)](#), NUS found that for 46% of students, travel costs make up a quarter of their weekly budget. The cumulative impact of transport and other financial costs is causing 37% of students to consider dropping out for financial reasons ([Cost of Survival Report, NUS, 2023](#)).

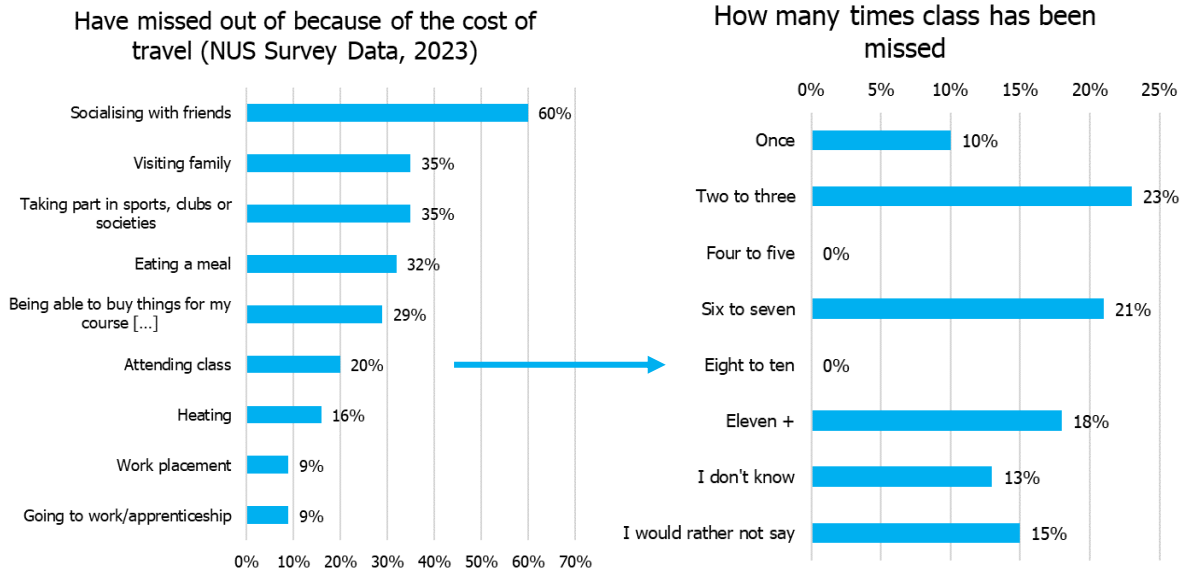


Image 1: Graphic illustrating survey results of students missing out on various activities due to the cost of travel (left) and detailed results (right) on how many times class has been missed for those answering yes to the 'Attending class' option (Adapted from [Move It: Student Travel Survey Report, National Union of Students, May 2023](#)).

By thinking holistically about commuting and the wide-ranging impacts it has on your institutional community, you will be helping to tackle all seventeen Sustainable Development Goals, either directly or indirectly. If you would like to read more about how public transport alone contributes to 14 out of 17 SDGs, please see the '[Why Public Transport is Key to Achieve the SDGs](#)' report by the [International Association of Public Transport](#).

SDGs Targets		
1 NO POVERTY	1.4. ...ensure that all men and women..have access to basic services 1.5. ...reduce their exposure and vulnerability to climate-related extreme events	1
2 ZERO HUNGER	2.1. ...access to food all year round 2.a. ...Increase investment...in rural infrastructure..	2
3 GOOD HEALTH AND WELL-BEING	3.6. ...halve the number of global deaths and injuries from road traffic accidents 3.9.... reduce the number of deaths from...hazardous chemicals and air pollution..	3
4 QUALITY EDUCATION	4.3. ...ensure equal access for all women and men to ...education	4
6 CLEAN WATER AND SANITATION	6.1. ... achieve universal and equitable access to safe and affordable drinking water for all	6
7 AFFORDABLE AND CLEAN ENERGY	7.3. ...improvement in energy efficiency...	7
8 DECENT WORK AND ECONOMIC GROWTH	8.8. Protect labour rights and promote safe and secure working environments for all workers	8
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	9.1. Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure	9
11 SUSTAINABLE CITIES AND COMMUNITIES	11.2. Provide access to safe, affordable, accessible and sustainable transport systems for all	11
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.3. ...reduce food losses along production and supply chains... 12.c. ...fuel subsidies 12.4. ...achieve the environmentally sound management of chemicals ...	12
13 CLIMATE ACTION	13.1. Strengthen resilience and adaptive capacity to climate-related hazards 13.3. / 13.a Climate Change Mitigation	13
14 LIFE BELOW WATER	14.1. ...prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities.....	14
17 PARTNERSHIPS FOR THE GOALS	17.5. Adopt and implement investment promotion regimes; 17.11 Significantly increase the exports of developing countries 17.17 Encourage and promote public-private partnerships	17

Image 2: An example of how work on transport maps to the SDGs from [The Way Forward: UNECE Sustainable Transport Division Contribution to Sustainable Development Goals](#) (United Nations Economic Commission for Europe).

It is time commuting took higher priority and this starts by understanding your baseline data. How many students are taking the bus to college? Is it a smooth journey or could they be helped along the way? Do staff know the discounts available to them or do they know the process for using the institution's lockers?

Not only will a renewed focus on commuting travel assist the day to day lives of your colleagues and learners, by making more sustainable options of transport available, we will also be tackling the climate crisis. In 2021, transport accounted for 27.9% of Scotland's total greenhouse gas emissions ([Scottish Transport Statistics 2023, Summary Transport Statistics, Transport Scotland](#)). In the UK, domestic transport remains the largest source of emissions, accounting for 29.1% in 2023 ([2023 UK greenhouse gas emissions, provisional figures, DESNZ 2024](#)). By providing robust emissions baselines and forming a plan of action, together we will help shift the dial on transport emissions and the impacts of transport poverty.

Policy drivers and emissions reporting

Scotland

Under the Scottish Government's public body guidance on [Public Sector Leadership on the Global Climate Emergency](#), colleges and universities must consistently, accurately and transparently report all Scope 1 and 2 emissions and all relevant and significant scope 3 emissions. Significant scope 3 emissions refer to emission sources that represent >1% of the total college or university emissions profile.

Staff and student commuting emissions are substantial scope 3 sources of emissions for all colleges and universities and therefore should be included in the Public Bodies Climate Change Duties (PBCCD) reporting to comply with guidance. This is reiterated in the [SSN Guidance on Public Bodies Climate Change Duties Annual Compliance Reporting](#) document (May 2024, v1, pages 6 and 7). In November 2023, only 15 Scottish institutions reported staff commuting emissions and 8 institutions reported student commuting emissions (figures from raw data analysis associated with the publication of the [EAUC Scotland 2022/23 College and University Emissions Analysis & Recommendations](#)). This suite of resources aims to improve this.

This guidance aligns the statutory requirements for the Scottish Government's [Public Bodies Climate Change Duties \(PBCCD\) reports](#), the [Standardised Carbon Emissions Framework \(SCEF\)](#) and the [Climate Action Roadmap for FE Colleges](#).

England, Wales, Northern Ireland and Republic of Ireland

The Commuting Survey Guide, Survey Template and Emissions Calculator Tool are of relevance to non-Scottish institutions as the resources align to international best practice (e.g. Greenhouse Gas Protocol and SCEF) and can be adapted as needed to institutional and national reporting requirements.

Institutional aims

Creating a travel survey doesn't just meet emissions reporting aims. In this section we explore how travel surveys can meet many different institutional strategic aims.

- **Funding applications:** When applying for funding, particularly for transport initiatives, many funding bodies will want to see baseline transport data and subsequent evidence that the funded project has positively benefited those metrics. Travel survey data is one of the best ways to collect evidence of strategic intervention needs for funders and subsequent impacts of funding.
- **Planning permission:** Local authorities have transport and planning guidelines they must adhere to before awarding permission to develop. One of these is ensuring new development does not negatively impact on transport for the local area. By having the necessary data to hand, you can provide evidence to the planning authority. These basic emissions reporting questions do not necessarily collect what you will need for planning applications, but you can work with your Estates team to build them into additional questions as and when required.
- **Health and safety:** Transport inherently has safety concerns. One example of this is students and staff trying to get home late at night without a bus service and cannot afford a taxi. If the journey home goes wrong, this can make headlines, causing reputational risk to the institution and can be very off-putting to international students in particular.

Another example is the harm of automobility in relation to air pollution, crash statistics and sedentary lifestyles. For an exploration of this, as well as some suggested interventions, please see '[Car harm: A global review of automobility's harm to people and the environment](#)' (Miner et al., Journal of Transport Geography, Vol 115 Feb 2024).

Understanding the transport needs of your staff and students can help plan for solutions and alleviate some of these concerns.

- **Campus expansion and renovation plans:** Knowing the transport pressure points for your institution will help to plan in solutions the next time those areas are due an upgrade or re-development. Not all surveys will give an answer to this, but, as with the planning permission section, you can work with your Estates team to build them into additional questions as and when required.
- **Accessibility and Inclusion:** Transport inherently impacts on those with a variety of mobility needs. These needs could be temporary (e.g. wide, smooth

pavements whilst wheeling a suitcase on the way to dorms at the beginning and end of term), short-term (e.g. a student navigating lectures with a broken leg in a cast), medium-term (e.g. staff members or students travelling with children) or long-term (e.g. staff manually handling heavy equipment requiring lifts, people using mobility aids including wheelchairs and walking sticks).

Ensuring the needs of these different groups are taken care of will not only boost health and wellbeing of your staff and students, it may also boost student experience ratings for rankings and meet legal duties relating to legislation including, but not restricted to, the Equality Act 2010. Working with access experts such as [AccessAble](#) to develop Detailed Access Guides to your institution will help those with mobility needs, as well as those with learning disabilities, sensory impairments, dementia, mental health conditions, and more, helping to reduce barriers to education for staff, students and visitors alike. For some it may make the difference of being able to attend at all.

Transport surveys can ask your community to feedback on the accessibility and inclusiveness of your transport infrastructure and these responses can be used to improve mobility for all.

- **Saving money on consultants:** When consultants are engaged to carry out institutional transport surveys or write Transport Statements needed for Planning Permission Applications, these can cost tens of thousands of pounds per report. By doing an audit of transport consultant use across your institution, you may be able to save money by conducting some of this work in-house.
- **Cost-forecasting and budgeting:** By better understanding and being proactive, rather than reactive to transport needs, your institution can improve their cost forecasting models and budget implications.
- **Adaptation to extreme weather scenarios:** By understanding your institution's transport needs, emergency planning due to extreme weather events exacerbated by climate change will be easier to plan for and navigate. For example, communications channels that alert staff and students to changes in public transport or road availability will help everyone, during an emergency or not.
- **Net Zero progress:** Institutions will not be able to measure their progress in achieving their net zero ambitions without a clear idea of how their staff and students travel.

Commuting Surveys

Aims of survey

Apart from reporting basic commuting emissions figures to Scottish Government, or another internal or external authoritative body, you will need to be clear on the aims of your survey. This will form the basis of what questions you include, when the survey is conducted and how frequently it is conducted. Ask yourself the following questions:

1. Do you only want to collect basic commuting emissions and modal split information for legal, or other, requirements?
2. Do you want to improve sustainable transport options for your staff and students?
3. Do you want to make it more accessible for those with differing mobility needs?
4. Is the data going to inform funding bids or planning applications?
5. Is the data going to form a transport or climate action plan or policy?
6. Are you using the data to review staff conditions and/or perks?
7. Do you want to influence local development plans from Local Authorities, developers or other decision-making bodies? Or internally, for space management decisions?
8. Do you want baseline data to influence public transport operators in the local area?
9. Do you want to make people aware of the transport initiatives you already have on campus and where to find transportation information on your website via the question text or post-survey prompts?
10. Do you want data to negotiate terms on future transport-related contracts?

These are just a handful of suggested questions to ask yourself before finalising your survey. As mentioned earlier, transport surveys can cover a huge breadth of aims and outcomes for an institution. Meet with your colleagues and decide exactly what you want to get out of this survey and form questions around this. However, it must be stressed that surveys should be as concise as possible. Try not to ask questions for the sake of it. Have a plan for how the data from each additional question will be used. Ensure there is 'legitimate interest' for each question to comply with GDPR concerns.

Participation rates

Institutions find response rates vary significantly between reporting years and between staff and students. There are a number of reasons for this:

1. The survey clashes with exam times or times of heavy workloads.
2. The survey clashes with times when most staff are away on annual leave or it is outside of term-time.
3. The survey clashes with other significant surveys going out at the same time.
4. The survey is too long and respondents give up part-way through.
5. The language or format of the survey isn't accessible to all respondents.
6. There isn't any reward for participation. Respondents are giving up their time to help the institution with their data, they will be more motivated to give you that data if you offer something for it.
7. The survey doesn't have the support of the communications team and/or senior leaders and doesn't get sent out on the right mailing lists. It isn't promoted in any further communications.
8. The survey window isn't long enough to include responses from people on holiday.
9. Participants in previous surveys haven't had follow-up feedback, for example being shared survey results and how the results have better informed operations.



Image 3: Car Club Car outside a University of Edinburgh building. One of the many ways institutions can help their staff and students travel sustainably (Photo credit: Lara Fahey, EAUC, 2024).

If your institution is struggling with participation rates, here are a few suggestions to try:

- Ensure the survey doesn't clash with any other big surveys going out. Your communications team should know this.
- Let participants know approximately how many questions there are and how many minutes it will take. Be honest about response times, as you don't want to lose trust (e.g. don't say 1 minute if it actually takes 5 minutes).
- In-person tables with freebies/coffee vouchers and laptops/tablets with the survey already loaded and ready to go in high pedestrian traffic areas tend to produce good results. Anecdotally, from conversations with institutional leads, even a small reward such as a wrapped sweet as an instant reward for filling it out translates to much higher results. Ensure there are 'free-from' rewards too e.g. for vegetarians/vegans/religious dietary needs. You could even pay students (or give out vouchers) to go around to tables at lunch times asking people to fill out the survey.
- To encourage take up of the survey, many institutions add a little prize draw e.g. giving out two £50 vouchers for participation. You could choose 'Scotland Loves Local', 'Love2Shop' or grocery vouchers, for example, that are broad enough not to skew the results towards people with a particular interest in the prize (e.g. offering Halfords vouchers might skew to car drivers and cyclists). Connect to colleagues on the [EAUC Travel and Transport Topic Support Network](#) or [Community of Practice](#) to ask them what incentives worked best for them. Ensure any names and emails collected for prize draws are kept separate from their responses and are kept in a secure location as per your institutional privacy policy.
- Include the ability to end the survey after answering the basic questions, or add a second prize opportunity for answering more detailed questions.

Avoiding common pitfalls

There are a few sage words of advice from other institutions on what to avoid when drawing up a commuting survey. We would like to share some of these lessons learned here:

1. Survey wording and jargon-busting. Many people do not know what 'SOV' (Single Occupancy Vehicle), 'ICE' (Internal Combustion Engine), DDRT (Digital Demand Responsive Transport), Scope 3, Net Zero and other terms mean ([Key climate language poorly understood by majority in UK, Guardian 2024](#)). Better to test out the language with a few non-transport or sustainability-minded people first. Use this jargon-busting guide to communicating sustainability messages to the public '[Talk Like a Human: Lessons on how to communicate climate change](#)' by the Potential Energy Coalition (2024).
2. Allowing free-text boxes for quantitative questions. Free-text question responses can be very enlightening, but those analysing responses need to be prepared to sift through hundreds of entries, so they should be clear beforehand how much time this will add on, and what the analysis could look like. Normally, free-text responses can be only analysed by grouping into themes, perhaps as a tree chart output. For most questions, use drop-down menus or a selection-button format with distinct answers. Test the survey before launch to ensure the response text covers the range of replies needed.
3. Not specifying the units needed e.g. km or miles; days or weeks; single journey or return journey. Respondents will guess based on their own biases and skew your results.
4. The use of 'matrix' or 'grid' questions. This type of question format is not only complicated to analyse, it is not accessible for some people e.g. those using screen readers.
5. Running the survey during the middle of winter – it is best to survey in autumn or spring – this creates more realistic mode share. Anecdotally, some institutions report better response rates when surveys are held in the autumn months.
6. Don't make all questions mandatory. Think about exactly what questions you really need and allow those that have more time to give you more information. Reward those that do with extra entries into the prize draw, or equivalent.

7. Assuming staff and students don't fly for their commute. Although COVID provided many benefits for sustainable travel and virtual working, in some instances they became much worse. Due to the flexibility of remote working, during and post-COVID some workers moved significant distances away from their workplaces, even internationally. Sector feedback highlights that some staff, academics in particular, are flying domestically multiple times a week in order to attend lectures in person. Some research students have relocated internationally and fly a few times a year to meet with their staff supervisors. Although not from the education sector, one public example of this details how a worker in London moved to Argentina where the rent is so much cheaper it covers the airfare ([Artist evicted by London landlord cuts rent by commuting from Argentina](#), Guardian 2024). Although this may be shocking or unbelievable to some, it is important that we capture these travel behaviours and report the relevant emissions. This in time will help form policies to reduce such high carbon transport behaviours in future.



Image 4: Two different perspectives of the University of the Highlands and Islands Inverness Campus' eHUBS station. To find out more, visit the [eHUBS website](#). (Photo credits: Matt Woodthorpe, EAUC, 2024).

Emissions reporting basics and calculating the results

To meet the basics of commuting emissions reporting, you need to collect data on staff and student:

1. Mode of travel;
2. Distance of the journey;
3. Frequency of travel;
4. Staff hours worked from home;
5. Number of working or learning weeks in the reporting year (this data may also be assumed and not necessarily asked in a survey);
6. Total number of staff and students (exact figures) at the institution in the reporting year.

You will also need the relevant UK Government emission conversion factors for the year you are trying to calculate for.

Once you have calculated the emissions for your sample of staff and students, you will need to calculate the percentage of the institution this represents and extrapolate the data to the full staff and student body to create your institutional annual commuting travel footprint. Our commuting emissions calculator tool calculates this automatically when you input response rate and total staff and student number data.

Conversion factors

Use the DESNZ (Department for Energy Security and Net Zero, formerly DEFRA) conversion factors to estimate commuting emissions via the 'distance-based method'. The collection of government conversion factors can be found [here](#). To jump to [2024's conversion factors, click here](#). To read more about the distance-based method, see the [GHG Protocol](#).

To meet the reporting requirements within this document, you should be able to use the 'condensed set (for most users)'. The relevant tabs from the condensed version include the:

- Business travel – air
- Business travel – land
- Business travel – sea
- Homeworking

Active modes of travel are just 'zero' (e.g. walking or cycling).

We have inputted 2024's conversion factors into the Commuting Emissions Calculator Tool. If you would like to go above and beyond by using Well-To-Wheel factors, please see the 'full set (for advanced users)'.

To calculate the emissions, please see the User Guide section ([Appendix 2](#)).

Data quality considerations

To ensure a minimum level of data quality, a few considerations should be made when designing your survey.

Sample size and extrapolating data

It is likely that your entire staff and student body won't fill out the travel survey, so you will need to extrapolate the data you have from the proportion of responses you receive. However, you need to know the minimum amount of responses needed before making assumptions for the rest of the institution's commuting habits. It is unrealistic to report emissions for a whole staff or student body if only a handful of respondents fill out the survey. Including this guide's basic set of questions and ensuring a confidence level of at least 95% and margin of error no more than 5%, calculate your minimum sample size via the [Qualtrics Sample Size Calculator](#). Ideally, you would have a sample size larger than this minimum amount, but if for whatever reason you can't get more responses than this, you can feel confident to publish your results with the PBCCD and other emissions reporting frameworks. However, if for whatever reason you could not achieve the minimum response rate for your survey, we would recommend that you still publish the data. Irrespective of response rate, always include the rate alongside the emissions reporting. This aligns with transparency best practice set out within the Greenhouse Gas Protocol and SCEF and expectations within PBCCD reporting from Scottish Government.

Demographic diversity

If you are not asking demographic data in your questionnaire, we would recommend that they survey is distributed to a wide range of staff and student forums to ensure a diversity of responses. This could include sharing the link with student societies who engage specific student populations or student support services ensuring the views of vulnerable and/or marginalised groups of students are heard. The same goes for staff groups.

Comparing data over time and between institutions

Eventually your institution will build up a series of travel data sets over several years. It is important that the majority of your survey questions include quantitative responses, so data can be objectively compared between institutions and tracked over years. It is also important that these baseline questions do not change their wording significantly, so you can compare responses. Even slight changes in wording can change the outcome of the responses due to participant interpretation.

Emissions reporting frameworks

The SCEF, PBCCD and other reporting frameworks all have their own data quality criteria for institutions submitting reports to them. By working to a medium to advanced level of data quality, you will be able to submit data to most, if not all, of

these frameworks without concerns now and into the future. By using our methodology, you can be confident your survey will meet the main reporting framework's minimum data requirements.

The Standardised Carbon Emissions Reporting Framework (SCEF) (Version 3.0, December 2022, pages 15, 16 and 17)

In this guidance, we differ slightly on the methodology for reporting commuting emissions. This is partly because since the SCEF was published, there have been updates to the methodology, partly to align with Scottish guidance documents and partly to ensure reporting is as straight-forward as possible. These are the slight deviations to the SCEF methodology:

- To meet the requirements within this document, you should be able to use the DESNZ conversion factors in the 'condensed set (for most users)'. If you would like to go above and beyond by using Well-To-Wheel (WTW) factors, please see the 'full set (for advanced users)'. We have not included Well-To-Wheel emission factors in our calculator tool.
- All flight emissions should include Radiative Forcing (RF) factors.
- Student travel in the SCEF is considered 'Transportation of students to the institution including daily commuting.' For the purposes of this guidance, we have removed references to student relocation emissions at the start and end of term. To calculate this, please see [The Domestic and International Student Relocation Travel Emissions Calculator Tool](#). We don't consider these emissions to fall under 'commuting' and should be reported separately.
- The SCEF states that the 'Advanced and Intermediate Level: Best-in-class calculation methodology' for homeworking should be to follow [Ecoact's Homeworking emissions whitepaper, published in 2020](#). However, since DESNZ states that their methodology is based upon this whitepaper, to save time we recommend that you skip calculating this individually for your institution and instead use DESNZ's example homeworking methodology for 2024, which states:
 - For each year, [university or college] records information on the number of FTE (Full-time Equivalent) working hours of which its staff were working from home.
 - For each year, the total number of FTE working hours is then multiplied by the conversion factor.
 - Please note that the heating conversion factor has already taken into consideration both heating months and non-heating months. Users should multiply the heating conversion factor simply by the total "annual FTE (full-time equivalent) working hours", instead of just the months that require heating.

For 2024, the conversion factor to use is:

Activity	Unit	kg CO ₂ e
Homeworking (office equipment + heating)	per FTE Working Hour	0.33378

If you would like to read more discussion on homeworking emissions calculations, please see the [Sustainable Scotland Network’s \(SSN\) Guidance on Public Bodies Climate Change Duties Annual Compliance Reporting, May 2024 v1.0](#) (pages 11 and 12). SSN states that you could get FTE homeworking hours from your HR department. Use our methodology if you cannot. Anecdotally, many HR departments state that their figures aren’t always representative of what homeworking hours staff are actually working.

In the Scottish Government’s ‘[Public Sector Leadership on the Global Climate Emergency](#)’ (2021), it states that:

“Where high level of single use car travel is seen for commuting, survey staff to understand the blockers to alternative travel types and then address these areas of concern.” The free text answer boxes on the final page of the survey should address this point.



Image 5: Clockwise, from top left: Scotrail train at Edinburgh Waverley Station (2024), Borders College Electric Vehicle Charging (2023), Cycle repair station at the University of Bath (2023), Active travel infrastructure transformations outside of Stirling Train Station (2024). All photos taken by Lara Fahey (EAUC).

Basic Baseline Survey Questions

These basic baseline survey questions have been developed to assist institutions to report their staff and student commuting emissions. Commuting emissions are those that are formed from the transportation of someone from their term-time (student) or full-time (staff) residence to their ordinary place of work or study. This guidance does not cover business travel or relocation travel emissions.

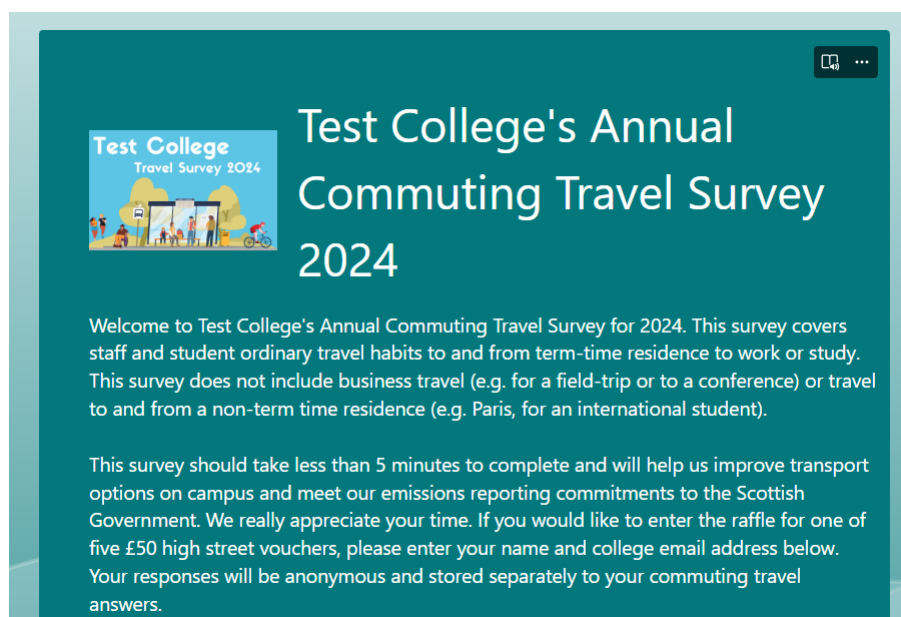


Image 6: Preview image of the landing page of our template [Test College's Annual Commuting Travel Survey 2024](#).

We have set up this survey in Microsoft Forms, called [Test College's Annual Commuting Travel Survey 2024](#). Feel free to enter as many fake responses as you like as you explore the questions and follow the different response pathways for staff and students. You can duplicate this form and make it your own it via this link ([Duplicate Test College Annual Commuting Survey](#)). Within Microsoft Forms, you can edit existing text and add your own words and new questions as appropriate.



Duplicate this form to use as your own.

Duplicate it

Image 7: Click on the '[Duplicate this form to use as your own](#)' link to create an editable version of the baseline survey in your own institution's Microsoft account. You will need to be signed in to your institution's Microsoft account in order to duplicate the form.

This resource package is aimed at creating a standard baseline for institutions to report on their staff and student commuting emissions. Institutions can choose to keep it simple and only report on these suggested areas or incorporate these

questions into their pre-existing, longer surveys. Suggested 'advanced' questions are listed in the next section. These suggested additions are not exhaustive and should only be included if you have a clear plan for how the data will add value to your existing survey. We envision this would be highly context specific and should be the result of conversations with the relevant colleagues. You should also be mindful of how long the survey will be and its subsequent effect on response rates.

As with any transportation survey, the baseline questions asked need to make sense to your institutional context. We have provided some notes to accompany why certain questions have been included and what modifications can be made to suit institutional circumstances below.

Preface

The main components of the preface are:

1. Defining what you mean by 'commuting'.
2. How long the survey should take. Be realistic and don't pretend the survey will take 1 minute if it takes 5 minutes instead.
3. Why you are running the survey and how the data will be used.
4. How the survey will benefit the participant. This might be through the chance to win a prize or improved facilities on campus.
5. A note on the prize draw details.
6. A note on the privacy details and GDPR.
7. A contact email address in case participants have any questions or comments.

Please edit the above text to make it relevant to your institution.

Privacy and GDPR

- The survey platform you choose should comply with your institution's IT policy and GDPR requirements. Ask your relevant colleagues for support on this if you need it.
- You will need to include a Privacy Notice to inform participants on what legal basis their data is collected, for what reason, and how this is stored, the need to keep to data safe internally and ensure data is deleted when indicated.
- GDPR is clear that only data is collected for specific purposes. You should touch on this in the introduction, asking those embarking on a survey to think ahead what the outcomes will be. According to GDPR, data should not be collected where there is no legitimate reason for its collection and there is a clear benefit from its analysis.
- If you are using consultants to analyse the results (perhaps for a more advanced survey than the one included in this resource), there should be mention of a data sharing agreement if the results are analysed by a consultant or other third party.

Homeworking

- The question on hours worked from home has been included for staff only. However if you would like to get a measure of how many students are learning from home, you can add this in. It must be noted that there isn't currently a requirement to report student home-based emissions and results might be complex to analyse due to the fluctuations in course workloads across the year. For example, asking this question in the May exam period may result in a very different answer to a travel survey run at the beginning of the learning year.

Campus location

- This question has been included not to calculate emissions, but is usually a good measure of where transport interventions need to be made. If people reporting that they walk to 'Campus A' and the lighting doesn't make them feel safe or the footpaths aren't gritted well enough in the winter, but there haven't been any of those concerns for 'Campus B', interventions can be properly targeted. If your institution only has one location, you could change this to 'building' or leave it out altogether.

Travel modes

- Not all modes included in this list will be relevant for your institution. For example, if you don't have a subway within a reasonable distance to your buildings (e.g. University of the Highlands and Islands), please do leave this out. On the other hand, if there is a travel mode that isn't included (e.g. e-scooters for those institutions in trial locations), add it in.
- We have included flying as part of the commuting survey due to reports of particularly postgraduate students, researchers and lecturers flying to attend campus. This issue is probably more prevalent at universities, rather than colleges, however without robust data collection, we can't say for sure. We would encourage institutions to put the question out there and see what responses come back. The intertwining crises of housing availability, cost-of-living, insecurity of work contracts, visa issues (of staff, students and their dependents) as well as the flexibility of hybrid working has assumedly exacerbated this as an issue that may not have been present before COVID.
- 'Blue badge vehicles' has been included as a travel mode in lieu of demographic questions about disability. It is a handy way to siphon off clearly necessary Single Occupancy Vehicle use from the rest of the staff body. Due to the relatively low prevalence of blue badge vehicles, we would deem it appropriate to use average vehicle emissions factors.

- We have included an 'unknown fuel' category for shared vehicles (yourself and passenger/s) due to not all passengers knowing the fuel type of the vehicle they are sharing.

Survey Platform

- We have chosen to host the example survey in Microsoft Forms due to ease of use and its ability to comply with your institutional cyber security needs. Another major platform we would endorse is [Jisc Online Surveys](#). However we know that not all institutions will have a license to operate Jisc.
- At this stage, we can't officially endorse other platforms. We know institutions use quite a breadth of platforms to conduct their surveys. Talk with your digital security teams or Business Intelligence Unit about what platforms might be able to meet both the functionality and security requirements needed.

To see the baseline questions written out in full, please see [Appendix 1](#).

Using the emissions calculator

To manipulate the raw response data and to use the Emissions Calculator Tool, please see the instructions provided in the [User Guide in Appendix 2](#).

Suggested Advanced Survey Questions

If you would like to collect data to holistically address transport issues at your institution, these are suggested questions you can add in to your survey. These are not mandatory, but should be used as inspiration if you would like to collect data on other areas.

These suggested additions are also not exhaustive and should only be included if you have a clear plan for how the data will add value to your existing survey. That is highly context specific and should be the result of conversations with the relevant colleagues. You should also be mindful of how long the survey will be and its subsequent effect on response rates.

Demographics

If you would like to analyse transport behaviours and how they might be affected by different demographic traits, you could collect data on sex, gender, disabilities, race, socio-economic status, age, career stage etc. Ensure these questions are optional and not mandatory. Some participants will be put off answering the survey all together if they think they will be personally identifiable by demographic data. Socio-economic data is also quite emotive, especially during a cost-of-living crisis, so careful consideration in choosing what demographic data you collect and why will be needed. Be prepared to justify the reasoning to colleagues and students.

Postcode data

Some institutions choose to take the first four characters of participants' postcodes to automate location distance analysis, usually via Geographic Information System Mapping (GIS) or another software programme. As this requires a lot of technical knowledge to carry out and requires even more care to protect participants' personal data, we have excluded this from this survey. Postcode data is also useful for analysing public transport availability and lift-share opportunities. However, only collect this data if you have the time and expertise to analyse it.

Relocation emissions

If the survey respondent is a student, you could ask:

1. Are your home and your term-time residence the same? i.e. do you commute to study from your ordinary home (e.g. parental residence)?
2. How do you ordinarily travel from your home to your term-time residence at the start and end of the academic semester/year?
3. How many return journeys do you make from your home to college/university each academic year?
4. How far is that distance in miles, one-way?

Awareness of transport infrastructure and facilities

Some questions can be phrased in such a way that they spread awareness for different transport initiatives and facilities offered by the institution at the same time. Some institutions include links to the various initiatives after participants have completed the survey. For example:

- Are you aware of the following facilities and services available to you on campus: Dr Bike sessions once a month, showers, lockers, bike maintenance training, Cycle to Work scheme, public transport discounts etc.?

Modify to suit the services and facilities available at your institution.

More accurate emissions calculations

If you would like to improve accuracy of emissions calculations, you could ask:

- How many passengers the participant lift-shares with. In this survey if someone answers 'vehicle (yourself and passenger/s)' we have assumed there is just one other passenger for ease of analysis.
- Vehicle engine size – if you would like to differentiate between large, luxury SUVs and small hatchbacks, for example, you could ask more detailed questions on this (e.g. vehicle size, engine size or average fuel consumption). Fossil-fuelled SUVs emit approximately double the amount of CO₂e per km than a small fossil-fuelled car and emit about the same as passengers on economy-class flights ([DESNZ Conversion Factors 2024](#)).

Shifting from high-carbon to low-carbon behaviours

To find out how best to encourage modal shift from unsustainable to sustainable modes of transport, you may wish to include questions approximately worded as:

- If you use a high-carbon mode to travel to Test College (flight, petrol or diesel car), what would help you shift to a lower-carbon mode of travel (e.g. bus, train, cycle, walk)? This could also be automated in the survey question pathway if a respondent answers 'yes' to certain modes. Some participants will not see that they are taking 'high-carbon' modes by their own judgement.
- If you commute sustainably, what would help you maintain that behaviour? What would help make it easier?

Investigative questions

If you want to investigate particular metrics, for example to support a planning application or feasibility study, you could ask questions such as the following:

- Do you own/have access to a car daily/weekly?
- How far away is your nearest bus/rail stop?
- Would you consider using a car club?
- If you drive and don't have a parking permit, where do you usually park?

Sector examples

- Please see more sector-specific questions in the transport survey reports from a selection of institutions in our 'Further Resources' section on the next page.

Survey banks

For further advanced question inspiration, you could utilise the following:

- [UK Government Transport Survey Question Bank](#): A tool to search questions asked in main transport surveys conducted since 2000, including user guide and background information.
- [Scottish Household Survey Questionnaires](#): A brilliant repository of Scotland-relevant transport statistics, you can see archived surveys dating back to 2016.

Further Resources

EAUC Resources

Business Travel Guide for the Further and Higher Education Sector

Published in February 2023, [EAUC Scotland's Business Travel Guide for the Further and Higher Education sector](#) highlights the Scottish policy and social drivers for addressing business travel emissions, and showcases best practice in strategies, reporting and reduction activities.

The EAUC Scotland Business Travel Action Plan, within the guide, compiles suggested actions from a range of institutions from Scotland and around the world. Many actions listed in this section will also support sustainable commuting, especially when the travel is local or regional. This has the benefit of reducing emissions from both sources with the same action.

This resource is of benefit to both Scottish and non-Scottish institutions.

The Domestic and International Student Relocation Travel Emissions Calculator Tool

The "[Domestic and International Student Relocation Travel Emissions Calculator Tool](#)" provides UK universities and colleges with a user-friendly, prepopulated framework for reporting scope 3 domestic and international student travel at the start and end of the academic year.

Developed by the University of Aberdeen (Estrid Jonsson – Travel Emissions Intern, University of Aberdeen Net Zero Research; Roederer Rose Lyne – University of Aberdeen Net Zero & Emissions Manager), and in collaboration with EAUC Scotland to open the tool up to the UK FHE sector, the tool helps institutions fulfil the principles of emissions reporting under the [Greenhouse Gas \(GHG\) Protocol](#), aligns with the sector's [Standardised Carbon Emissions Framework](#), and, for Scottish institutions, will help the sector meet the expectations set out in the [latest public sector bodies guidance from Scottish Government](#).

This resource is of benefit to both Scottish and non-Scottish institutions.

EAUC Scotland Travel and Transport Topic Support Network

The [Travel and Transport Topic Support Network \(TSN\)](#) is a supportive network of people sharing knowledge and best practice on sustainable transport that is relevant to Scottish colleges and universities. Members of the network can be staff in further and higher education or in public or not-for-profit organisations.

Each TSN has a JISCMail list, in addition to lists for the EAUC and EAUC Scotland more generally. These lists are used to circulate information on tools and events which will be of interest to those on the list, and can be used by all members to seek advice or support. Our lists are open to all members.

There have been a few TSN meetings that have discussed Transport Surveys. Here are a few recent events with associated resources:

- [April 2023 Transport TSN meeting](#)
- [December 2022 Transport TSN meeting](#)

EAUC Transport Community of Practice

The EAUC is committed our Members' ability to exchange ideas, skills and experience. To encourage more specialist learning and information sharing, we operate numerous Communities of Practice (CoP) that support focused and efficient networking among Members, including one for Transport.

If you are an EAUC member and have logged into the EAUC member's area, you can access the following resources on the [Transport COP webpage](#):

- March 2023 Transport CoP meeting
- June 2023 Transport CoP meeting
- EAUC Transport Community of Practice Data Resource (Excel spreadsheet which pools numerous institutional data points, including but not restricted to: Staff Mode Share, Staff Travel to Campus and Student Mode Share). If you are a member of EAUC, please email us to request these resources. If your institution hasn't contributed to the data points yet, please do enter them in. This will help make this incredibly useful document even more helpful for everyone.

Sector Resources

A non-exhaustive list of sustainable commuting resources to inspire improvements at your institution.

Transport Surveys and Reports

University of Reading Sustainable Transport webpage

The [University of Reading](#) has one of the most comprehensive publicly-available [sustainable travel websites](#) of any institution in the UK. A few initiatives include:

- [Travel offers for students](#) (and an equivalent page for [staff](#))
- A comprehensive [Travel Plan](#) and associated [monitoring](#), including the brilliant [Travel Survey Results Reports for 2024](#) and [Travel Plan Report for 2022-23](#).

University of Edinburgh

The University of Edinburgh also have a very comprehensive publicly available transport suite of resources, stemming from their main [Transport and Parking page](#). They are transparent about their [transport policies, plans and reports](#). If you would like inspiration on what to include for any advanced questions on your transport surveys, we would recommend looking through their resources. Reading the [University of Edinburgh's Integrated Transport Plan for 2023-30](#) particularly gives an excellent insight into how a large institution can use its partnership working and lobbying power to be a force for good when influencing the regional and national sustainable transport landscape – benefitting both its staff and students and the wider community of sustainable transport users.



Image 8: The University of the Highlands and Islands Inverness Campus' wide active travel paths and greening measures (left) and close up of a comfortable, protected bus shelter with accompanying transport information (right) (Image credit: Matt Woodthorpe, EAUC, 2024).

Institutional Commuting Best Practice

Transition University of St Andrews

Transition University of St Andrews is a thriving hub for sustainability initiatives that involve both the university and local communities alike. With a few paid staff members and many volunteers, Transition UStA carries out a range of sustainable transport initiatives including, but not restricted to: [Active Travel Champions](#), [Route Maps](#), [Bike Pool repair and hire schemes](#), [air quality monitoring](#) and they are the driving force behind the [Go St Andrews](#) initiative. Most of all, Transition UStA creates a thriving community of diverse individuals who feel like they are making a positive difference to the world. Navigate the pages under the '[Smarter Travel](#)' header to find out more.

Forth Valley College's Strategic Travel Plan

[Forth Valley College's Strategic Travel Plan](#) has recently scored very highly in an assessment of the strength of public bodies' policies and targets to tackle emissions from flying ([Fight or Flight report, Transform Scotland 2024](#)). It is a great example of a leading college travel plan and is to be applauded, especially regarding its comprehensive action plan forming the second half of the document.

West Lothian College Travel Policy

[West Lothian College's Travel and Subsistence policy](#) is very thorough and has gained admiration for its attention to detail.

Dundee and Angus College 'Walk Up' Videos

[Dundee and Angus College give videos of walk-ups to different campuses via different modes](#). This is a great accessibility initiative, not just for those with physical mobility needs, but also for some neurodiverse individuals too. Being able to anticipate what a campus will be like to navigate before arriving can alleviate much anxiety for some individuals.

Strathclyde Sustainable Campus Map

The [University of Strathclyde have a very accessible transport map](#), showcasing where cycling and electric vehicle charging facilities are available to staff and students. Many of the sites include photos and detailed descriptions of the facilities available e.g. 'Bike racks – John Anderson South. 12 spaces, open, loops'. This

allows those new to commuting to the university to easily scope out the facilities available and plan their trip before even investing in a cycle.

Glasgow Kelvin College

Glasgow Kelvin College have a great [website](#) showcasing their sustainable transport initiatives and information. With detailed information on the facilities available, route maps and who to contact with more information, it is a great example of a college taking action on sustainable transport.

University of Surrey

The [University of Surrey Travel Plan 2018-2022](#) is to be commended for its comprehensive action plan, detailing actions under parking, cycling and walking, public transport, using vehicles sustainably and smarter working arrangements. It contains detailed action points that we hope might inspire sustainable change at your institution.



Image 9: Electric vehicle charging facilities at Forth Valley College, Falkirk Campus (image credit: Lara Fahey, EAUC, 2023).

Wider Resources

This selection of resources is not exhaustive and is intended as a point of inspiration to learn more on the topic of transport policy and practice.

Edinburgh Napier University's Transport Research Institute: Essential Evidence 4 Scotland

Edinburgh Napier University's Transport Research Institute produces one-page, plain-English summaries on aspects of transport planning from robust peer reviewed studies, released fortnightly by Prof Adrian Davis. They come under the title of '[Essential Evidence 4 Scotland](#)' and are regularly quoted by civil servants, politicians and transport professionals alike. If you need evidence for sustainable transport interventions at your institution, it is a good first port of call. For more information, contact Prof Davis directly at a.davis@napier.ac.uk.

National Union of Students (NUS)

The National Union of Students (NUS) have published a number of reports detailing the impact of transportation costs on students. View their '[Move It: Student Travel Costs Survey](#)' [report](#) (May 2023) for detailed insights into this area.

NUS Scotland also published a new report estimating 311,000 students are ineligible for free bus travel whilst the cost of public transport has affected 32% of students' ability to eat a meal. Read the '[The Travel Barrier: The case for half price bus and rail fares for all students and apprentices](#)' report here. This report was compiled in collaboration with [Transform Scotland](#), another brilliant charity working to shift Scotland's transportation systems to be more sustainable, accessible and inclusive for all.

Glasgow Centre for Public Health

The Glasgow Centre for Public Health (GCPH) focus on improving population health and reducing inequality, conducting research of direct relevance to policy and practice, and work with partners to support change.

Their report '[Commuting, COVID, and Decarbonising Transport](#)' (June 2023) involved the [University of Strathclyde](#), [University of Glasgow](#), [City of Glasgow College](#), [Glasgow City Council](#), and the [Scottish Parliament](#) to understand the progress each is making in shifting to more active and sustainable travel behaviours among staff and students.

RouteZero

[RouteZero](#) is a free personal travel planning (PTP) platform where staff and students can see lower carbon versions of their usual commute. There is also a [paid-for service](#) that can help reduce business travel emissions.

MobilityWays

Mobilityways is a tech company and certified social enterprise that helps employers to meet their sustainable commuting goals. Their suite of climate-tech tools enables companies to measure, reduce and report their commuter emissions. Many of their services are paid for, however they do have some good free resources on offer. Their short 20-30 minute [Commutology 101 Training](#) gives a good introduction to Net Zero, Scope 3 and commuting emissions for those that may need a refresher or basic background to commuting emissions in the UK. They also host the '[Zero Carbon Commuting Conference](#)' each year which is currently free to participants. You can watch back previous conference sessions and other webinars on the [MobilityWays YouTube Channel](#).

Scottish Parliament Information Centre (SPICe)

The Scottish Parliament Information Centre (SPICe) is a great resource hub for well researched articles on a range of topics. In December 2023, they published a blog on '[Bus accessibility, affordability, and reliance across Scotland](#)'. It shines a spotlight on some of the issues with transport poverty we have in Scotland.

Wheels for Wellbeing

Wheels for Wellbeing exists to enhance disabled people's lives by ensuring that anyone can access the physical, emotional, practical and social benefits of cycling. Their '[Guide to Inclusive Cycling \(4th Edition\)](#)' is one of the most comprehensive guides on improving cycling accessibility for disabled people we know of and is a must read for anyone working in this area. They also have [shorter guides to accessible active travel](#) that we would recommend.

Public Health Scotland

In January 2024, Public Health Scotland released their report '[Transport poverty: a public health issue](#)'. This briefing describes a multidimensional definition of transport poverty. It outlines the causes of transport poverty within and beyond the transport system and details how transport poverty can influence health and health inequalities.

The purpose is to inform discussion and shape future policy, action and evaluation to ensure the causes of transport poverty are addressed and that there are more equitable transport options for all.

The contents of the report are highly relevant to any transport professional trying to alleviate transport-related barriers to education in Scotland.



Image 10: Cycle Lockers at West Lothian College (image credit: Lara Fahey, EAUC, 2023).

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Principle authors:

- Lara Fahey, Scotland Sustainability Project Officer, EAUC Scotland

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Image credits

Front page graphics are a compilation of various designs on CanvaPro, brought together by Lara Fahey. These are:

- Main image: 'People Waiting for Bus at Public Transport Stop' (goodstudio);
- Two runners on left: 'Detailed Flat Diverse People...' (Yuzen Zhang from sketchify);
- Person in wheelchair: 'Detailed Flat Masc Presenting...' (Jea Gavina from sketchify);
- Cyclist on right: 'Bicyclist' (Ouch! Illustrations).

All other images have been credited below the respective figure.

Contact Us

Do you have a commuting case study from your institution? Would you like it included in this guide? Share it with EAUC Scotland via scotland@eauc.org.uk.

Found a broken link or a gap in information? This guide was published in August 2024 and will be reviewed on a regular basis. Please email us about any errors or omissions.

We are a home-based organisation so please contact us by email at info@eauc.org.uk. Our website can be found [here](#). We are also available to reach via X (formerly Twitter) ([EAUC](#), [EAUC Scotland](#)) and [LinkedIn](#).

EAUC are a registered charity with the Charity Commission for England and Wales (No. 1106172). We are an incorporated company limited by guarantee, registered with Companies House (No. 5183502).



Image 11: Stirling Train Station active travel transformation (Lara Fahey, 2024).

Appendix 1: Basic Baseline Survey Questions

Test College's Annual Commuting Travel Survey 2024

Welcome to Test College's Annual Commuting Travel Survey for 2024. This survey covers staff and student ordinary travel habits to and from their term-time residence to work or study. This survey does not include business travel (e.g. for a field-trip or to a conference) or travel to and from a non-term time residence (e.g. Paris, for an international student).

This survey should take less than 5 minutes to complete and will help us improve transport options on campus and meet our emissions reporting commitments to the Scottish Government. We really appreciate your time.

If you would like to enter the prize-draw for one of five £50 high street vouchers, please enter your name and college email address below. Your responses will be anonymous and stored separately to your commuting travel answers, as per Test College's Privacy Notice.

If you have any questions or comments regarding this survey, please contact the Sustainability Team at sustainability@testcollege.ac.uk

Section 1: Main mode of travel to campus

1. Are you a staff or a student? * (mandatory for all)

If you are both a staff member and a student at Test College, please fill in this form according to the status you spend the most hours on.

- Staff
- Student

2. What type of course are you on? * (mandatory for students)

- Course Type A
- Course Type B
- Course Type C

Note: 'Course Type' relates to estimating the learning weeks of students on different educational pathways. These could be 'undergraduate', 'postgraduate' or 'semester abroad' for universities or 'full-time', 'part-time', 'evening class' or 'leisure' for colleges. You might develop other relevant categories depending on your educational context. The main aim is to make it easy for students to complete the survey, whilst also providing more accurate estimations of weeks spent commuting to the educational organisation. For example, if a student is an undergraduate, you might assume 30 learning weeks (depending on your institution's timetable), whereas a postgraduate student might be assumed to be learning for 44 weeks. These estimates can then be inputted into the emissions calculator.

3. How many hours per week do you work, as per your contract? *
(mandatory for staff only)

If you work variable hours, just estimate an average.

The value must be a number

4. How many hours per week do you work from home, if at all? *
(mandatory for staff only)

If you work variable hours from home, just estimate an average.

The value must be a number

5. How many weeks do you work per year, excluding holidays? *
(mandatory for staff only)

Note: Typical full time working weeks are:

48 (with 4 weeks holiday, excluded from this analysis);

36 weeks (i.e. term-time teaching weeks and reading weeks only);

30 weeks (i.e. term-time teaching weeks only).

- 48
- 36
- 30
- Other

6. What campus or location do you typically work or study at? *
(mandatory for all)

If you find it hard to know exactly what is your 'main location', chose the location you most frequently travelled to in the last week. To see a map of the Test College's buildings, please see this link *insert link*.

- Campus A
- Campus B
- Campus C
- I spread my time equally between campuses
- I never, or only scarcely (a couple of times a year), visit campus (e.g. distance learning)
- Other

7. For a typical week, what is your main mode of travel to commute to campus? * (mandatory for all)

Note: If you find it hard to know exactly what is your 'main mode', just put down the mode you used most frequently in the last week.

If you typically use a combination of modes, for example: taking the bus for 10 miles and then walking for 1 mile, list the bus as your main mode and walking as your secondary mode in the next section.

Or if you drive by yourself for three days a week and catch the train twice a week, put 'car (yourself only)' as your main mode and 'train' as your secondary mode in the next section.

- Walking or Running
- Cycling (including e-cycles)
- Wheelchair or Mobility Scooter
- Bus
- Train
- Tram
- Subway
- Taxi
- Blue badge vehicle
- Motorbike
- Ferry
- Car electric (yourself only)
- Car hybrid (yourself only)
- Car diesel (yourself only)
- Car petrol (yourself only)

- Car electric (yourself and passenger/s)
- Car hybrid (yourself and passenger/s)
- Car diesel (yourself and passenger/s)
- Car petrol (yourself and passenger/s)
- Car unknown fuel (yourself and passenger/s)
- Flight (domestic - within UK)
- Flight (Europe to UK)
- Flight (Outside Europe to UK)

Note: we haven't included an 'other' option in this list of travel modes due to Microsoft Forms not differentiating what a manually inputted response is, making it more difficult to analyse via the emissions calculator tool. However different survey platforms may make it easier to sort non-standard answers, so you may wish to add this in during the creation of your survey.

8. For the above travel mode, how far do you travel in miles? (one-way distance) * (required for those that chose Flight only)

For air miles use (<https://www.distancefromto.net/>)

The value must be a number

9. How often do you make this return journey in a year? * (required for those that chose Flight only)

For example, enter '12' for once a month.

The value must be a number

10. For the above travel mode, how far do you travel in miles? (one-way distance) * (required for those that chose non-Flight modes only)

Note: to work out travel distance, please use Google Maps for most modes (<https://www.google.co.uk/maps/>), for rail miles use (<https://my.railmiles.me/mileage-engine/>).

The value must be a number

11. How often do you travel via the above mode to Test College in a typical week? * (required for those that chose non-Flight modes only)

Note: If you find it hard to know what a 'typical week' is, just record the journeys you made last week. Chose '4' for commuting four times a week, for example.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- Other

12. Do you ordinarily travel to campus by another mode? * (mandatory for all)

Also known as a 'secondary' mode, as referred to above.

- Yes
- No (those answering 'No' go to Q20 in Section 3)

Section 2: Additional mode of travel (secondary mode)

13. For a typical week, what is your secondary mode of travel to commute to campus? * (mandatory for all that answered 'yes' to Q12)

Note: If you find it hard to know exactly what is your 'secondary mode', just put down the mode you used next most frequently in the last week.

If you use a combination of modes, for example: taking the bus for 10 miles and then walking for 1 mile, list the bus as your main mode in the previous section and walking as your secondary mode in this section.

Or if you drive by yourself for three days a week and catch the train twice a week, put 'car (yourself only)' as your main mode in the previous section and 'train' as your secondary mode in this section.

- Walking or Running
- Cycling (including e-cycles)
- Wheelchair or Mobility Scooter
- Bus
- Train

- Tram
- Subway
- Taxi
- Blue badge vehicle
- Motorbike
- Ferry
- Car electric (yourself only)
- Car hybrid (yourself only)
- Car diesel (yourself only)
- Car petrol (yourself only)
- Car electric (yourself and passenger/s)
- Car hybrid (yourself and passenger/s)
- Car diesel (yourself and passenger/s)
- Car petrol (yourself and passenger/s)
- Car unknown fuel (yourself and passenger/s)
- Flight (domestic - within UK)
- Flight (Europe to UK)
- Flight (Outside Europe to UK)

14. For the above travel mode, how far do you travel in miles? (one-way distance) * (required for those that chose Flight only)

For air miles use (<https://www.distancefromto.net/>)

The value must be a number

15. How often do you make this return journey in a year? * (required for those that chose Flight only)

For example, enter '12' for once a month.

The value must be a number

16. For the above travel mode, how far do you travel in miles? (one-way distance) * (required for those that chose non-Flight modes only)

Note: to work out travel distance, please use Google Maps for most modes (<https://www.google.co.uk/maps/>), for rail miles use (<https://my.railmiles.me/mileage-engine/>).

The value must be a number

17. How often do you travel via the above mode to Test College in a typical week? * (required for those that chose non-Flight modes only)

Note: If you find it hard to know what a 'typical week' is, just record the journeys you made last week. Chose '4' for commuting four times a week, for example.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- Other

18. Do you ever travel to campus by any another mode? * (required for all participants answering Section 2 questions)

This could be infrequently, for example once a month. Another example could be if you usually cycle during the warmer months and drive during the colder months, tell us about the mode you didn't include in this survey.

- Yes (participant goes on to Q19)
- No (participant goes on to Q20)

19. Please enter your other methods of travel to campus

Please also enter the one-way distance and frequency you typically travel to campus by this/these mode/s. Feel free to say why you use this mode if you would like to.

Note: to work out travel distance, please use:

- Google Maps for most modes: <https://www.google.co.uk/maps/>
- For rail miles use: <https://my.railmiles.me/mileage-engine/>
- For air miles use: <https://www.distancefromto.net/>

Long-form text box without restrictions

Section 3: Final comments

20. Do you have any comments, criticisms or compliments to share with us about your commute to work or study?

Long-form text box without restrictions

21. Is there anything we could do to improve sustainable transport to/from campus?

Long-form text box without restrictions

22. If you would like to join the prize draw, please enter your name and institutional email address here:

Note: Names and email addresses will be kept separate from your travel survey answers. Emails that are not verified Test College emails will not be eligible for the prize draw. You can view Test College's Privacy Notice here: [*insert link*](#).

Long-form text box without restrictions

Section 4: Thank you

Thank you

Thank you for participating in this survey. Please press the 'Submit' button to complete your entry.

End of Survey

Appendix 2: Emissions Calculator Tool User Guide

This section is a step-by-step guide to sorting and assembling the raw data ready for input into the emissions calculator. We will be using fake data inputted into our example 'Test College' Microsoft Form survey. However, if you set up a survey in another platform, it should be broadly the same process. In addition to the text user guide below, you can also watch the [accompanying video user-guide](#) (hosted on YouTube).

Step 1: Download the survey data

Once the survey has closed, download the Excel spreadsheet of raw response data and save it to a secure location (make sure to follow your institutional GDPR guidelines, as the survey contains names and emails, which are personally identifiable data points).

Step 2: Filter out and store prize draw details

Create another secure Excel spreadsheet and cut and paste the names and emails from the prize draw into this for later. Ensure only institutional emails have been inputted (clear any generic emails), assign each entry a number and use a random number generator to pick the winners. You could also sort the entries from A to Z to ensure there aren't any duplicate entries. Save and close the document.

Back in the commuter survey data spreadsheet, you should have no personally identifiable information left. You can now start to sort out and assemble your data.

Step 3: Calculating student learning weeks

Before you can input the survey data into the emissions calculator you must first insert the number annual learning weeks for each student response, based on their answer to the questions "What type of course are you on?"

In the test survey we have given students the option to select "Course Type A", "Course Type B" and "Course Type C". In the example test data, we have assigned Course Type A, B and C with 48, 36 and 10 annual learning weeks, respectively. The numbers you use will depend on your own institutional context. It is important to discuss internally what appropriate assumptions for these are.

Once you have your assumptions for each course type, in the commuter survey data spreadsheet you can use the "Find and replace" function to quickly replace student responses with the appropriate annual learning weeks. On your keyboard hold down

ctrl and press F. The Find and Replace box should appear – click on the “Replace” tab. In the “Find what:” text box, add the course type you wish to find. Next, in the “Replace with:” text box, add as a number the annual learning weeks assumption for that course type. Finally press “Replace All” at the bottom left of the table. All the cells containing that selected course type should now be changed to the annual learning weeks.

Repeat this step for each of the survey course types.

Step 4: Input data into the emissions calculator

You can now transfer data from your survey spreadsheet into the emissions calculator. To start, open up the calculator.

To use the calculator, you just need to copy the relevant raw data columns from the commuter survey data spreadsheet and paste into the calculator (just the data, not the headings). Please note that you need to do the special paste action when in the calculator. To do this, once you have copied the cells you wish to transfer, go to the top left corner of the calculator sheet and click the arrow under “Paste”, then select the first option underneath “Paste values” (this shows as a clipboard with 123).

The data should be copied over as follows:

Commuter survey data spreadsheet -> Calculator "Cleaned survey data" tab

Column G -> B35
Column H -> C35
Column I -> D35
Column J -> E35
Column K -> F35
Column M -> H35
Column N -> I35
Column O -> J35
Column P -> L35
Column Q -> M35
Column S -> P35
Column T -> Q35
Column U -> R35
Column V -> T35
Column W -> U35

Once completed, the calculator will auto-complete annual distance travelled by each mode, and break these down by staff and student respondents. This is shown at the top summary tables of the “Cleaned survey data” tab in the calculator.

Step 5: Add key numbers

Next click on the “Basic staff emissions calc.” tab and complete the Key numbers table. Do not fill in the grey shaded cells, these will auto-fill.

Once complete, repeat this step within the “Basic student emissions calc.” tab.

Step 6: Review summary and report your emissions

You have now completed the emissions calculator! Click on the “Results summary” tab for an overview of your survey responses and the emissions associated with staff and student commuting, and staff homeworking. We have also added in an example of further analysis you can do with the data – in this case you can see graphs for the % mode share by annual distance travelled and emissions for each transport type.

For Scottish institutions, you can use these results within your PBCCD returns. Make sure you report staff and student commuting emissions separately and add relevant comments. As an example, based on the test survey example, alongside the relevant emissions figure we would write:

Staff commuting emission; extrapolated from October 2023 commuter survey with a 5% response rate
--

Student commuting emissions; extrapolated from October 2023 commuter survey with a 3% response rate

Developing the survey and calculator

The ‘Additional conversion factors’ tab is for calculating categories that haven’t been included in the basic emissions calculator. Copy and paste the relevant categories into the Staff and Student tabs as needed. For example, some institutions in London might choose to use the ‘Black cab’ figures for taxi emissions, rather than ‘regular taxi’. Or institutions might choose to take data on vehicle size to monitor the impact of increasing SUVs on campus, rather than just using the average figure.

Please note that you will need to expand the summary tables within the “Cleaned survey data” tab and add the appropriate formula to ensure data for new transport modes are picked up by the calculator.

Note on student homeworking emissions

In this basic emissions calculator, we have decided not to include student homeworking emissions, as it was considered too complex to decide what was within scope and not, especially as many students will be studying in institutional buildings such as libraries and halls of residence, where the heating and cooling emissions will be captured by institutional scope 1 or 2 emissions already. Institutions can of course collect this data if they wish to do so. For example, it might be of interest to know how frequently students are learning from home as opposed to travelling onto campus. This could be interesting to baseline and compare between years. This is potentially an update that we will include in future. If you have a methodology to calculate this at your institution, please do let us know.