Low Carbon Travel & Transport Challenge Fund

8. Evaluation guidance

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Investing in a Smart, Sustainable and Inclusive Future

Disclaimer

Applicants should be aware that as the Low Carbon Travel and Transport Challenge Fund (LCTT Challenge Fund) is a new programme, the guidance will be reviewed as the programme evolves and therefore may be subject to change. The European Union and Scottish Ministers reserve the right to amend the National Rules and Transport Scotland reserves the right to amend the published guidance during the period of the programme.

Version Control				
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29/06/2017	V1	FINAL	EST	Transport Scotland

Background

Transport Scotland has been awarded up to £8 million by the European Regional Development Fund (ERDF) 2014-2020 programme to deliver the active travel and low carbon transport operations of the Low Carbon Travel and Transport (LCTT) programme.

As part of the ERDF programme, Transport Scotland has committed to running a LCTT Challenge Fund and has appointed Energy Saving Trust to deliver this.

About this document

This document provides an overview of the evaluation guidance to be used by by Grantees of the LCTT Challenge Fund.

This document is one of four documents that form a suite of guidance available to Grantees. The full suite can be downloaded from the Energy Saving Trust website.

- Audit and compliance guidance
- Communications and publicity guidance
- Claims process and reporting requirements
- Evaluation guidance

For any questions please contact the Energy Saving Trust LCTT Challenge Fund project team: LCTT@est.org.uk / 0131 555 8691. Energy Saving Trust has been appointed by Transport Scotland to administer the LCTT Challenge Fund on their behalf.

CONTENTS

1   Context

High quality evaluation is critical to the success of a project. In the least, having a robust evaluation is of clear strategic and ethical value, helping us avoid making false conclusions and providing transparency for all stakeholders. At its best, good evaluation inspires confidence in the data and results, allowing policy makers to make clear decisions with reduced risk of getting it wrong.

ERDF funding requires all successful applicants to monitor and evaluate their project in terms of the outputs and outcomes that it is intended to deliver.

Accordingly, all successful applicants for the Challenge Fund are required to monitor and evaluate their individual projects in terms of their success against the overarching strategic aims of the LCTT Challenge Fund, which are to:
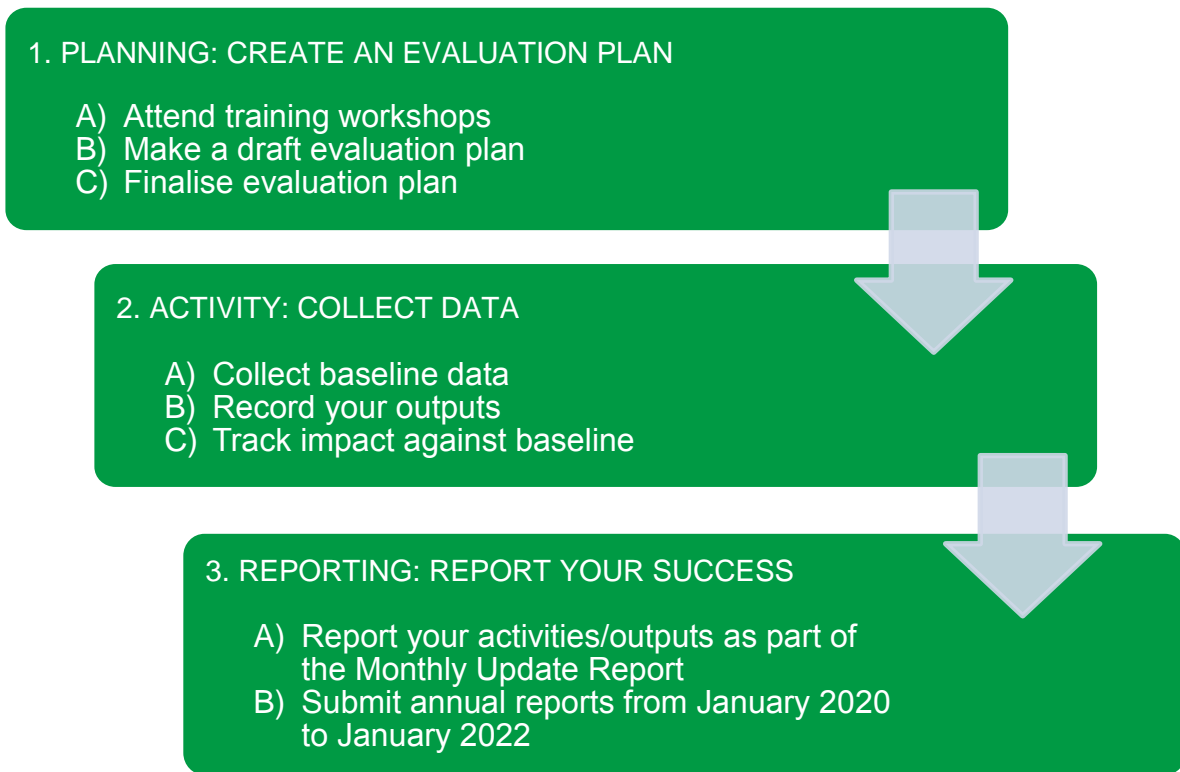
-   Increase the number of journeys made by public transport, active travel and low carbon vehicles;
-   Support Active Travel Hubs (facilities and routes to support cycling, walking and public transport use as an alternative to the car);
-   Provide Low Carbon Transport Hubs and reliable low carbon refuelling services at strategic sites.

And at least one of the three ERDF Horizontal themes, which are:

-   Equal opportunities: to increase opportunities for all groups and to prioritise and adapt support for groups facing particular disadvantages to participation
-   Environmental sustainability: to promote the sustainable use and conservation of Scottish environmental assets by enhancing the role of environmental sustainability in economic and social development.
-   Social inclusion: to ensure that economic growth and tackling exclusion go hand in hand to help people overcome multiple barriers to employment and realise their full potential.

Furthermore, this evaluation must be done using a **before/after evaluation design that involves comparing baseline data collected before the intervention to data collected after the intervention**. The broad process for this is shown in Figure 1, with the timing of key milestones in section 4 of this document.

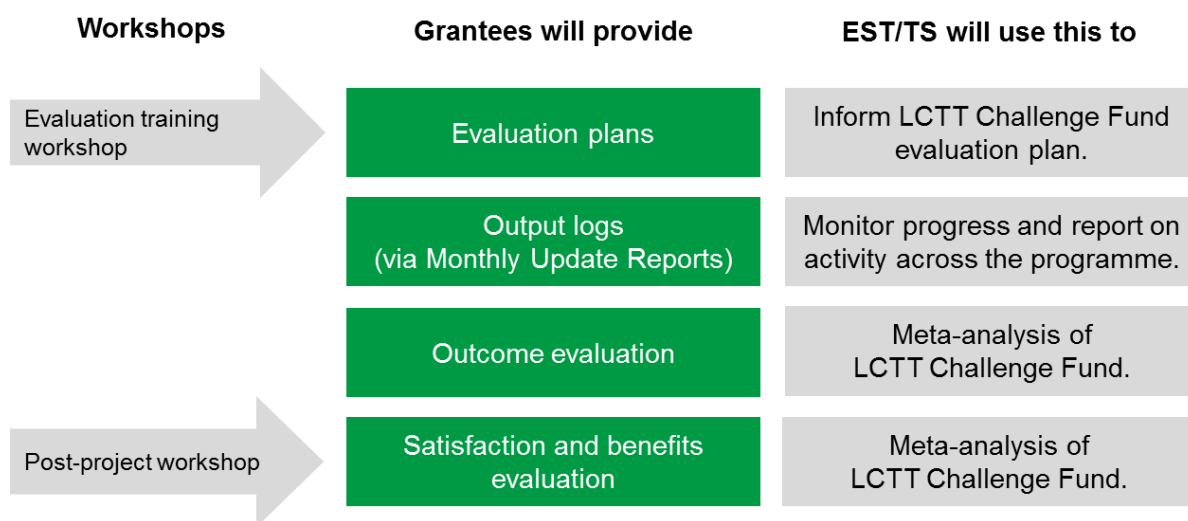**Figure 1: Key tasks for evaluating your challenge fund project**

> **1. PLANNING: CREATE AN EVALUATION PLAN**
>
>   A) Attend training workshops
>   B) Make a draft evaluation plan
>   C) Finalise evaluation plan

> **2. ACTIVITY: COLLECT DATA**
>
>   A) Collect baseline data
>   B) Record your outputs
>   C) Track impact against baseline

> **3. REPORTING: REPORT YOUR SUCCESS**
>
>   A) Report your activities/outputs as part of
>   the Monthly Update Report
>   B) Submit annual reports from January 2020
>   to January 2022

Specifically, grantees must complete: (1) an **evaluation plan** that details the proposed methodology for the evaluation of outputs and outcomes[1]; (2) **output logs**, as part of the monthly update report which will be a comprehensive record of what was delivered, when it was delivered and to how many people; (3) an **outcome evaluation**, which uses a before/after data comparison to estimate the impact and influence of all activity on the target audience in terms of the desired outcomes , and (4) **a satisfaction and benefits evaluation**, which considers whether any wider benefits of the projects and programme can be added to the evidence base in support of active travel and low carbon interventions. Energy Saving Trust (EST) and Transport Scotland will draw all of these plans and data sets together to as a meta-analysis to evaluate the overall impact of the LCTT Challenge Fund. Figure 2 shows how this fits together and how EST and Transport Scotland will use the information provided by grantees.

Guidance on how to do each of these tasks (including the before/after design) is given in the next section. **General training via a workshop and bespoke advice is available for the development of each grantee's evaluation plan.** The workshop will comprise a two hour tutorial style session that will cover all aspects of this document, allowing for discussion and questions followed by a two hour clinic session where successful applicants will be able to workshop their specific plans with an expert. Expert advice will also be available via email and by appointment from any time after the workshop until project completion.

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[1] *Outputs* are engagement work done, while *outcomes* are benefits or changes realised on the back of that work

Figure 2: How the information provided by grantees will be used

Workshops	Grantees will provide	EST/TS will use this to
Evaluation training workshop →	Evaluation plans	Inform LCTT Challenge Fund evaluation plan.
	Output logs (via Monthly Update Reports)	Monitor progress and report on activity across the programme.
	Outcome evaluation	Meta-analysis of LCTT Challenge Fund.
Post-project workshop →	Satisfaction and benefits evaluation	Meta-analysis of LCTT Challenge Fund.

2   Methodology framework

The evaluation process is done over three broad stages: (1) Planning, (2) Activity and (3) Reporting (Figure 1). Planning involves the production of an evaluation plan that details how grantees intend to monitor outputs and evaluate outcomes. Activity is the delivery stage, where each grantee will collect data before, parallel to and after the delivery of their project. Reporting is when grantees submit their final documents including records, data, results and describe any recommendations and/or lessons learnt.

2.1   **Planning**

During the planning phase you will define output and outcome objectives and then create an evaluation plan that will allow you to tell if those objectives have been met. How to define objectives and create evaluation plans will be a focus of the training workshop and are described below.

2.1.1 Defining objectives

In the planning phase grantees will define their output and outcome objectives. These objectives should be specific, measurable, achievable, relevant and time-bound (SMART) and be directly related to the strategic aims of the LCTT Challenge Fund of increasing the number of low carbon journeys, supporting active travel and providing low carbon transport hubs, and at least one of the three ERDF horizontal themes of equal opportunity, sustainability, and social inclusion.

Each output objective will fit in to one of five broad categories, which are deliverables, reach, engaged, trained and organisations. These would be phrased as some derivative of:

- Number of specific deliverable outputs created (e.g. training workshops held)
- Number of people reached (passive audience) by a specific output (e.g. people invited to a training workshop)
- Number of people engaged (actively participating) by a specific output (e.g. people attending a training workshop)
- Number of people trained (up-skilled) via a specific training output (e.g. people getting certification as a result of attending a training workshop)
- Number of organisations engaged by a specific output (e.g. organisations sending delegates to the training workshop)

Each outcome objective will fit in to one of two broad categories: changes in travel mode (e.g. from car to bicycle or combustion engine to hydrogen-fuelled engine) or psychological change (e.g. change in knowledge, awareness, values, beliefs, attitudes, emotions and/or agency). These would be phrased as some derivative of:

- Percentage increase in the number of people adopting a targeted travel mode.
- Percentage improvement in the number of people with positive attitudes, values, knowledge and/or awareness with regard to the targeted travel mode.

Each grantee will need to describe the specifics of their objectives. An example output objective might be to hand out 1,000 leaflets on planned works to pedestrians at a train station between 0700 and 0830 week day mornings between March and June 2019. An example outcome objective might be to increase the number of pedestrians passing through a train station by 5 per cent by end of 2019.

A template for designing objectives, with more examples, will be provided at the LCTT Challenge Fund evaluation training workshop.

2.1.2 Creating an evaluation plan

In the planning phase grantees will need to decide the data they want to collect, as well as who will collect it, and how, when and where it will be collected. For example, if an output objective is to hand out leaflets to cyclists they might conclude that the person handing out the leaflets would count the number of cyclists given leaflets, using a clicker counter to count cyclists (as opposed to other members of the public) given leaflets.

The evaluation plans for outcome objectives will be more complex as they will involve comparing baseline data with data collected during and after the intervention as part of an outcome evaluation. For example, if a project aims to increase the number of cyclists passing through a train station the grantee would measure cycling numbers before and after the project, potentially comparing the change at the train station of interest to a counterfactual such as any changes in patterns seen at other train stations. The grantee will still need to decide exactly which data they want to collect, as well as who will collect it, how, when and where it will be collected and how it will be analysed.

Grantees will need to collect their own baseline data however there may be relevant existing data sources that can be used. See Annex 2 for examples of existing data sources.

Evaluation plans should also identify target populations the outputs and outcomes will relate to and impact upon.

How to create these plans will be a focus of the training workshop. A template for making these plans, with more examples, will be provided at the workshop.

2.2 **Activity**

During the activity phase, each grantee will need to A) monitor, quantify and record their outputs, B) collect data before, during and after their project is launched, and C) collect satisfaction and benefits feedback after the project is launched.

A)   Grantees are required to provide information on their activities in each monthly report (see *Claims guidance and reporting requirements*). This involves quantifying how many outputs were done, as well as where, when and with whom the interaction occurred. For example, if part of a project involved giving leaflets to cyclists, the grantee would record when and where the leaflets were given (e.g. at the northern entrance to an underpass cycle tunnel during peak hour), and to what scale (e.g. how many cyclists received leaflets).

B)   Collection of outcome impact data will be defined by each grantee's evaluation plan, which they will develop with dedicated support through the training workshop, and bespoke advice from EST. In practise, this will involve grantees collecting the data they need to draw robust conclusions regarding whether they have met their outcome objectives. This will be done using the survey template (provided at the workshop), the use of which is described below.

C)   After grantees have completed all their activity they will need to measure users' satisfaction with the project, as well as collect information to better understand any wider benefits that users' see that the project has for themselves and their wider community. This will be done by asking a range of stakeholders a small set of questions on these issues.

2.2.1 Outcome survey

Grantees should use the survey template provided at the workshop to measure against their outcome objectives. This template allows for collecting baseline data, as well as data during and following the project that can be compared to detect any change in transport modes used and to identify the reasons for behaviour changes (including pre-conditions or stimuli required to trigger behaviour change). This template will also help grantees segment their respondents by useful categories such as age and journey purpose, and/or equality considerations such as NRS social grade (as inferred from occupation) or gender. Having all grantees measure impact via similar metrics and methods to measure success will reduce duplication of effort and allow EST to compare and contrast the successes of various travel hubs.

Successful applicants should include in their survey only those questions relevant to their specific project, aiming to keep the survey concise. Furthermore, the survey template is not exhaustive in its current form. Other outcomes specific to each project that are not covered in the template should be discussed with EST during the evaluation workshops.

In terms of survey sample size, grantees should collect at least 400 responses for each metric they are measuring. These should be split evenly between the before,

during and after data collections (100 baseline and then 100 for each of the three annual iterations). The same individual can, and often should, be used for multiple metrics (for example, a survey could ask 380 people about travel behaviour, knowledge and attitudes. There is no need to ask 400 individuals about travel behaviour, 400 different individuals about knowledge and 400 further individuals about attitudes).

Guidance on how to do all of this will be provided via training materials and workshops. In many cases grantees will be able to use real data (i.e. traffic counters or other tallies, EV or public transport ticket sales records, etc.) to directly observe and track change in outcome metrics. If desired, these data could be used to complement the survey data.

2.3 **Reporting**

The reporting obligations for grantees are simple and straightforward, and include the submission of:

- Your Monthly Update report will include records of activities done (see *Claims guidance and reporting requirements*);

- Three draft annual reports (see Annex 1) submitted annually by the end of January from 2020 to 2022 that comprises
    - o (1) a completed report template, that includes (A) a short summary that summarises the project overall aims and activities, a summary of what has happened to date, and (B) results against objectives and (C) a discussion of recommendations and lessons learnt from activities and impact, citing evidence from your data set or experience that explains each recommendation/learning, how the project has met any ERDF Horizontal Theme and any findings the against national data.
    - o (2) an updated output and outcome evaluation plan that describe the methods actually used (which may differ from those originally planned), and
    - o (3) any raw data collected as part of any outcome evaluation;

- Three final annual reports that takes account of any comments. Each year, LCTT programme administrators' comments will be given by the end of February and final versions are due by the end of March.

- Attendance at two grantee post-project and programme evaluation workshops. These workshops will involve frank and transparent conversations with key stakeholders including representatives from the EST project delivery team, Transport Scotland and each of the successful applicants. The two workshops will be held a year apart, with the first in early 2019 and the second in early 2020. The first workshop will be attended by to discuss the build process and (2) early 2020 to discuss the wider impacts and benefits observed so far.

3   Principles of Evaluation

Evaluation plans should be guided by three core principles: *transparent*, *ethical*, and *robust*.

3.1   Transparent

Transparent is defined as being able to explain how conclusions and statistics were made. In practice, this involves providing a clear methodology for all data collected and analyses made and the ability to provide raw data and show all working out on request.

3.2   Ethical

Ethical is defined as the evaluation being in accordance with the eight Data Protection principles outlined by the Information Commissioners Office with regard to the consensual and transparent processing of personal data and following the principles of respect, purpose and social responsibility outlined by the British Psychological Society (BPS) with regard to social research.

The full list of Data Protection Principles is here, but be sure to:

- Gain consent;
- Only use the data for specific transparent purposes;
- Honour subjects' rights of access to data and freedom from marketing;
- Keep the data safe and secure within the European Union (i.e. not on a Google drive!).

> *Would the participant(s) be surprised to find out what you're doing with their information? If so, go back and get specific transparent consent from them.*

The BPS code of ethics is here, but be sure to:

- Respect the autonomy and dignity of persons;
- Work towards the purpose of new knowledge and understanding;
- There must be clear social benefit to be gained from the research.

> *Law of reciprocity: only do unto others as you would have done unto you!*

3.3   Robust

Robust is defined as ensuring that the evaluation methodology is logical and defensible, and that any sampling, as part of the outcome evaluation, is fit for the purpose of that evaluation. This involves ensuring that the sample: (1) has elements of randomness to minimize selection biases; (2) is broadly representative of all the individuals participating in the project; and (3) is sufficiently replicated for us to have high confidence in the validity of our conclusions.

4   Key milestones

Milestone	Dates	Description
Successful Applications informed	By 24/05/2017	Grant offer letters issued
Applications return signed grant offer letters and formal announcement made	By 23/06/2017	
Training webinars/workshops	Up to three sessions held during the week commencing the 10th July 2017. We will set up a poll to figure out the most convenient time for the workshop, with a maximum of four attendees per session. If these dates are inappropriate for the grantees we will suggest more options.	Free training workshops to help grantees develop their evaluation plan and ensure that all projects are using similar metrics and methodologies.
Evaluation plan	Draft for review by 28thJuly

Comments from EST provided by 2508/2017

Final draft lodged by 15/09/2017. | A plan of what data grantees are going to collect for the evaluation. Grantees are expected to submit a draft version for review and a final version. Prior to the release of Grant the Grantee will provide a satisfactory monitoring and evaluation plan for the Project in line with the monitoring and evaluation framework of the ERDF LCTT programme. |
| Output logs | As part of Monthly Update Reports to be provided on the 5th day of every month. See *Claims guidance and reporting requirements.* | To ensure everyone is up to date and diligent in recording their outputs grantees will be required to submit their cumulative output log each month, and at the end of the project. |
| 3 x annual report | Draft reports given annually end January from 2020 to 2022. LCTT programme administrator comments annual end of February from 2020 to 2022. Final drafts due annually end of March from 2020 to 2022. | The Grantee will be required to monitor and evaluate the Project to evidence its cumulative output and outcomes. |

Evaluation workshops	Early 2019 and early 2020	Grantees must attend two evaluation workshops that will involve frank and transparent conversations with key stakeholders including representatives from the EST project deliver team, Transport Scotland and each of the successful applicants.

Annex 1 – Annual Reporting Template

In your annual reporting you will complete this form, attaching (1) updated output and outcome evaluation plans that describe the methods actually used (which may differ from those originally planned), (2) your cumulative activity log, (3) any raw data collected as part of any outcome evaluation to date, and (4) any qualitative evidence (e.g. media coverage, workshop outputs, blogs, case studies and so on) you think would be of interest.

Project context and activities

Please summarise your project aims and activities.
Project aims (100 words max)
Please summarise your project, saying what you have done to date, and what is still to be done (150 words max)

Please list your results to date against each of your SMART objectives.

OBJECTIVE	RESULT

Discussion and recommendations

Please discuss recommendations/lessons learnt from activities and impact, citing evidence from the literature, your data set or experience that explains each recommendation/learning. This can be from any quantitative and qualitative evidence you have. Discuss any external factors that may have impacted your results. *(500 words max)*

How did your project fare against the three ERDF horizontal themes of sustainability, social inclusion and equal opportunity*? (500 words max)*

Compare and contrast your findings to any other research available, e.g. national trends. (*500 words max)*

Bibliography

Please list all the sources you referenced, cited or utilised throughout this document.

Annex 2 – Existing Data Sources

Resource	Key Data Available	Level of Data	Data Time-frame And Latest Publication	Available at
Scottish Household Survey (SHS) – Transport: Local Area Analysis	Travel to work method Main mode of travel Main purpose of travel No. of cars/bicycles available to households Use of and views on public transport Frequency of walking/driving Distance travelled	Local authority ☑	**1999 - 2012/13** Latest publication: September 2016	http://www.gov.scot/Resource/0050/00506173.pdf
SHS – Local Authority Tables	Participation in sport Rates of walking for at least 30 minutes	Local Authority ☑	**2007/08 - 2013** Latest Publication: Nov 2016	http://www.gov.scot/Topics/Statistics/16002/LAtables2015
Transport and Travel in Scotland	Travel to work mode Travel to school mode and reasons Household car access Park and ride use (and reasons) Walking and cycling rates (and reasons) Convenience of using public transport to access services Car sharing details	National ☑ Demographic breakdowns ☑	**1999 - 2013** Latest Publication: September 2016	https://www.transport.gov.scot/publication/transport-and-travel-in-scotland-2015-27-september-2016/
New car CO_2 report 2017	UK performance on new car CO_2 emissions	National ☑	Latest Publication: 2017	https://www.smmt.co.uk/wp-content/uploads/sites/2/DEF571-SMMT-Co2-report-2017.pdf

2011 Census	Main method of travel to work or study Travel to work distance	Local (various categories) ☑ National ☑	**2011** (2001 for some topics until late 2014 publications) Latest Publication: July 2014	http://www.scotlandscensus.gov.uk/ods-web/standard-outputs.html
Carplus Annual Survey of Car Clubs 2015/16: Scotland	Details of car club use (including how, why and when utilised) Demographic information about car club members Details of emission profiles of car club fleet and general national fleet	National (mainly Glasgow and Edinburgh) ☑	**2011/15 – 2013/16** (some topics) Latest Publication: 2016	https://www.carplus.org.uk/wp-content/uploads/2017/03/Carplus-Annual-Survey-of-Car-Clubs-2015-16-Scotland.pdf
Public attitudes to electric vehicles	people's attitudes towards electric vehicles	National ☑	**2016**	https://www.gov.uk/government/statistics/public-attitudes-towards-electric-vehicles-2016
Hands Up Scotland Survey	Travel to school method	Local authority ☑ National ☑	**2009 – 2013** Latest Publication: May 2016	http://www.sustrans.org.uk/scotland/what-we-do/schools-and-universities/hands-scotland
Sustrans Scotland: walking and cycling outcomes	Walking and cycling rates Purpose of travel on National Cycle Network (NCN) Economic benefits of parts of NCN	Local (specific areas on National Cycle Network) ☑ National ☑	Ranges from early **2000s to 2012**, but much is 2011-2012 Latest Publication: September 2014	http://www.sustrans.org.uk/sites/default/files/images/files/scotland/policy/Sustrans-Scotland-walking-and-cycling-outcomes-report-September-2014-optimised.pdf
SPOKES Bulletin	Details of mainland local authority spending on cycling Percentage of overall transport budget spent on cycling Amount spent per head of population on cycling	Local authority ☑ National ☑	**2009/10 – 2012/13** (Although conducted historically, the most relevant data) Latest Publication: March 2017	http://www.spokes.org.uk/wp-content/uploads/2009/09/pall-4.pdf

Scotland Cycling Potential	National Cycle Network provision Topography (hilliness) Average travel to work distance	Local authority ☑ National ☑	**Forthcoming** Publication expected in late 2016	http://www.sustrans.org.uk/ncn/map
Monitoring the Progress of Access Authorities	Total length of core paths Extent of signposting/way-marking Extent of core paths maintained by LAs Details of land purchases and new path orders Expenditure on issues related to the Land Reform (Scotland) Act 2003	Local authority ☑ National ☑	**2005-2013** Latest Publication: March 2016	http://www.scotland.gov.uk/Topics/Environment/Countryside/16328/AccessAuthorities
2013 National Assessment of Local Authority Cycling Policy	Details of local cycling policy Percentage of journeys less than 5km Household access to bicycles Delivery of Bikeability Scotland On-Road	Local authority ☑	**2013** (reports also available for 2005 and 2008) Latest Publication: 2013	http://www.cyclingscotland.org/policy/national-assessment-of-local-authority-cycling-policy
2015 Annual Cycling Monitoring Report	Trends and statistics from both a national and local point Statistics and data on cycling to work or study.	Local authority ☑ National ☑	Latest publication: 2017	http://www.cyclingscotland.org/policy/monitoring

Air Quality in Scotland	Daily mean, maximum and minimum for emissions/pollutants (e.g. NO_2) Data for particular hour, week and month also available	Local (largely populous urban areas) ☑	Ranges from **1986 – present** for some sites, but recent monthly and daily averages which may prove most useful. Updated daily	http://www.scottishairquality.co.uk/latest/summary
Scottish Environment Statistics Online	Air quality datasets	Local (largely populous urban areas) ☑	Ranges from **1980 – present** for some topics.	http://www.scotland.gov.uk/seso/Datasets.aspx?TID=2
Civilising the Streets	Information and data on cycling and walking rates Information on political and social environment in relation to active and sustainable travel (e.g. leadership in a particular city)	Cities in Scotland (and others abroad) ☑	**2007/08** (Scottish data) Latest Publication: June 2010	http://transformscotland.org.uk/what-we-do/research/civilising-the-streets/
Scottish Index of Multiple Deprivation (SIMD)	Geographical access topic Considers issues such as 'time to travel to the nearest GP' by car and by public transport	Local (various breakdowns) ☑	**Publication 2016**	http://simd.scotland.gov.uk/publication-2012/
Scottish Transport Statistics	Volume of traffic on roads	Local authority ☑	**Publication 2016**	https://www.transport.gov.scot/publication/scottish-transport-statistics-no-35-2016-edition/

Scotland's People and Nature Survey	Participation rates for outdoor activities (including walking and cycling) Number of visits taken to a local area and where these trips originated Outdoor trips taken in own local area	Local authority (limited) ☑ National ☑ Demographic breakdowns (at national level) ☑	**2013/14** Latest Publication: 2014	http://www.snh.gov.uk/docs/A 1471713.pdf
Department for Transport: Traffic Counts	Figures for traffic passing each counter including bicycles	Local (specific locations where counters situated) ☑ National ☑ Regional ☑	**2000 – 2015** Latest Publication: 2015	http://www.dft.gov.uk/traffic-counts/area.php?region=Scotl and
Key Scotland Statistics Data Sheet	Details of various issues to discuss key transport trends Includes average amount spent per household on transport each week Details on congestion and obesity	National ☑	Draws on data from **2010 – 2013** Latest Publication: December 2014	http://www.sustrans.org.uk/site s/default/files/images/files/Key %20Scotland%20Statistics%2 0Data%20Sheet%201214.pdf
Public attitudes to walking in Scotland	Walking activity undertaken Accessibility of key services Reasons for not walking more	National ☑	**2014** Latest Publication: March 2014	http://www.pathsforall.org.uk/p fa/news/public-attitudes-walking-scotland.html

For more information about the Low Carbon Travel & Transport Challenge Fund, please contact the Energy Saving Trust LCTT Challenge Fund project team:

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