Doing it differently: Transport

Modal shift

‘Doing it differently’ for journeys means reducing the ‘carbon intensity’ of the mode of transport used for journeys.

Project Aims

Households decrease miles travelled by car and increase:
- Distance travelled by public transport.
- Distance travelled by active travel.

How does that save carbon? What’s the measurable outcome?

All motorised forms of transport result in carbon emissions – whether this is from combustion of petrol/diesel or in generating electricity to power them. The amount of carbon emissions to transport one person one mile is different for each type of transport – swapping a more carbon intensive mode of transport for a less carbon intensive one will reduce travel emissions for the same distance travelled. This is called ‘modal shift’.

Measurable outcome: Reduce carbon intensity of journeys.

The CCF reporting tool and data collection guidance explains how you can monitor and evaluate how much your project has saved.

Before project

\[
\text{Emissions factor – car travel} \times \text{Distance travelled} = \text{Carbon footprint from travel method.}
\]

After project

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\text{Emissions factor – new transport mode} \times \text{Distance travelled} = \text{Carbon footprint from travel method.}
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What are the co-benefits? What are the potential ‘community outcomes’

- There can be financial benefits to swapping car journeys for public transport or active travel.
- Reducing car journeys in the community can lead to improvements in local air quality.
- Choosing active travel has health and well-being benefits.
How do we demonstrate co-benefits?

Financial savings: This is closely linked to the carbon savings you are already monitoring – swapping car journeys for active travel saves money.

Health and wellbeing: There are a variety of methods you could use to monitor whether active travel is having an impact on participants’ mental or physical wellbeing. Evaluation Support Scotland have a range of resources, guides and tools to help you monitor your impact. http://www.evaluationsupportscotland.org.uk/resources/

Local Air quality: This is difficult for a community group to measure. If you’re monitoring travel to a specific site – e.g. high street or school gate, you could use an indicator such as number of cars to give you a sense of whether your project is likely to be having a benefit.

What are the risks?

Active travel journeys only reduce carbon emissions if they are replacing journeys that would normally have been taken by car. Recreational cycling is great way to build confidence and demonstrate the benefits of cycling but the focus of a carbon reduction must be on replacing car journeys.

Looking solely at ‘emissions per passenger km’ can turn up some perverse results. As one of two passengers in a car the figure is .180gCO2e/km compared to a figure of 200gCO2e/km as a passenger on a bus so it would appear that taking two people off a bus to take the journey by car saves carbon emissions, when clearly it would do the opposite!

The feasibility of switching the mode of transport for a journey is often particularly dependent on factors outwith the control of a community project such as the existence of safe cycle routes or convenient public transport links.

How do you encourage ‘modal shift’ in your community?

Designing your project: If you wish to develop a project to encourage people to reduce carbon intensity of travel, you should investigate what are the most important barriers and opportunities in your community. Your consultation could look into:

1. What kinds of journeys and modes of transport are most common in your community?
2. How likely people are to take part in your proposed activities.
3. What are the opportunities/barriers for uptake of less carbon intensive modes of transport in your community?
4. What assets are there in the community, or wider opportunities, that could support your project aims?

The Four Questions, Four Zones grid from Shifting Normal can help you identify factors that could influence the willingness or ability of people in your community to change their mode of transport.

Example project activities

Below are some examples of typical activities that CCF projects run in order to encourage modal shift for journeys.

Awareness raising/information: Projects can promote the benefits of active/alternative forms of travel, provide information on cycle routes or public transport, highlight support such as the ‘cycle to work scheme’, etc.

Improving cycle skills: Projects run courses and activities to build cycle skills in the community and increase people’s confidence in cycling for everyday journeys.

Social/led-rides: Projects run social and led-rides to get people enjoying cycling and to build confidence. To reduce carbon emissions project they need to encourage participants to cycle for everyday journeys.

‘Dr. Bike’ and cycle maintenance classes: Projects provide a simple repair/maintenance service to get neglected bikes back on the road. Classes/workshops teach people basic maintenance skills so they can keep on cycling.

Walking/cycle buses: Projects organise and facilitate parents to co-operate and take turns to supervise children’s journeys to school on foot or by bike.

Community mapping and/or promoting safe routes: Projects use the knowledge of local people to identify routes with less traffic in a community and create resources (such as maps) to promote these.