Behaviour Change Guide

This document provides a practical guide to creating behaviour change interventions for walking, wheeling and cycling projects where the primary intervention is the creation or improvement of physical infrastructure.

The guide discusses:
- the role of behaviour change in active travel infrastructure projects,
- consideration of the desired behaviours, and
- analysis of target audiences to enable the creation of a behaviour change campaign.

Use of the Sustrans Behaviour Change Template is recommended alongside this guide. This can be found at www.showcase-sustrans.org.uk/guidance/.

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What is Behaviour Change and why is it important?

Across the Active Travel industry, we find a broad spectrum of third and public sector organisations working to achieve change at a local level. This encompasses changes to our build environment ranging from the redevelopment of city centres and public realm projects, installation of tram networks, cycling infrastructure and pedestrian space improvements.

We also find a swathe of personalised support available across many sectors including Bikeability cycling lessons in primary schools, adult cycling lessons for road confidence, bicycle maintenance workshops and travel advice hubs. All these construction and support projects can be considered behaviour change projects as the aim is to generate modal shift.

A combination of factors must occur before someone makes a change in their behaviour. When looking at behavioural science we find a variety of models which set out several factors which must be utilised in combination before a shift in behaviour will take place. Therefore, when trying to create modal shift we must look at it from several different angles to see tangible benefits such as use of new cycling infrastructure or increased walking or use of public transport.

Holistic / diverse interventions → Greater chance of behaviour change → Reduced likelihood of low uptake of new infrastructure

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Defining behaviours

If the intended outcome is modal shift, then we can work back from there and begin to set out a process of activity to enable us to arrive at appropriate interventions. We may consider the process to look something like this.
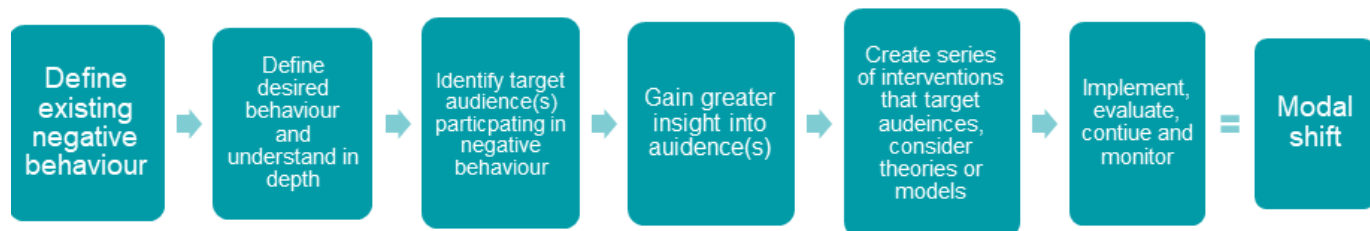
We can see from this sequence that to arrive at modal shift we first have to have a clear understanding of the current behaviour(s) we wish to change and what we wish them to be. For this we need to be context specific; consider the project area and the infrastructure that is being created.

E.G., if the project is to create a new shared use path from a residential area to a school to enable safe journeys by pupils, we can identify that one behaviour currently taking place is driving to school. The project aims to reduce car journeys (existing behaviour) and increase walking/cycling to school (desired behaviour). The desired behaviour is the one that we wish to promote. Therefore, understanding its benefits and what it can offer will be of value. One way to further extract greater understanding of the desired behaviour is to conduct a SWOT analysis of the behaviour itself.

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SWOT analysis

A SWOT analysis is a strategic planning aid to help determine the strengths, weaknesses, opportunities and threats of a product, company or proposal.

In this case we can use it to analysis an active travel journey, to provide greater clarity and more detail regarding the desired behaviour we are promoting.

Example

Desired behaviour – Cycling the school run	
Strengths • Quality time with child(ren). • Free/cheap	**Weaknesses** • Confidence of parent • Challenging the norm/social status impact
Opportunities • To sell the lifestyle • To tap into other movements such as slowing down, flexi working, etc. • To provide training for confidence	**Threats** • Perceived/actual time implications • Convenience

Aim to be specific in the desired behaviour, what exactly do you want people to do. Remember you are analysing the journey itself to better understand what it is. It may be helpful to think in terms of a "product" you wish to "sell".

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Audiences

Once the existing and desired behaviours are clearly defined this may point to particular sets of people associated with that behaviour, or more analysis may be required to define who is partaking in these behaviours.

For example, if the desired behaviour is active travel to/from primary school. This will point us towards:

1) **Parents and carers** as these are the ones driving (existing behaviour) who we wish to alter the behaviour towards active travel (desired behaviour) and

2) **School pupils** who need the skills, motivation and equipment to enable the desired behaviour.

Some desired behaviours may have less, clearly defined audiences, such as, active travel to the local shops. This will prompt more research to be able to define the different types of people currently driving these journeys. This table prompt can be found in the Behaviour Change Plan Template:

Please define the **existing** behaviour(s), be specific, *e.g., driving leading to car congestion outside school at 9am. You may list as many as you have.*	Please identify what the **desired** behaviour is. Be specific. *E.g., cycling to school.*	Identify **target audience(s)**. Ensure these are specific and defined by the behaviour to be changed/desired behaviour. There may be more than one target audience and behaviour change interventions should be designed around each audience as they will be receptive to different messages. Give consideration to priority and influencing groups, e.g., priority group = school children, influencing group = parents.
1.		
2.		
3.		

For audience identification, you may wish to consider priority and influencing groups. For example, the priority group in our school run example are parents/carers who are currently driving this journey. The influencing groups may be their children, friends, peers, teachers etc. When learning about the priority audience you may also wish to learn about the influencing audiences as interventions should be designed for both.

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Engagement to inform behaviour change

The stakeholder mapping and engagement plan for infrastructure projects should focus on who may be impacted and the expected beneficiaries. This will also help inform who should be targeted for behaviour change interventions. Within the engagement plan, ensure the purpose of engagement focuses on both the infrastructure and what will make that infrastructure successful, i.e., learning about target audiences partaking in the existing behaviour; their capabilities, attitudes and media choices to inform interventions to support activation on the route.

Information from your engagement process in terms of identifying barriers may be useful but may not paint the full picture depending on how in-depth the engagement is. E.g., someone may say they don't cycle short journeys owing to lack of confidence but in reality, they may have time constraints or view cycling as inconvenient. Involving them in cycle training interventions alone is unlikely to create behaviour change.

That's why getting the engagement questions right early, looking at evidence on good practice in effective behaviour change and involving people in shaping those interventions is key to success.

Consider your engagement as part of the behaviour change process. By including and involving people in decisions that directly impact them, they are more likely to feel motivated to participate and feel confident that those activities are for them.

Also consider that those you wish to change the behaviour of may not participate in engagement. Draw on other areas of research to learn more about these audiences.

COM-B Model

For sustained behaviour change, the COM-B model explains people need the **capability** (skills, abilities, knowledge), **opportunity** (social influences/pressures, physical opportunities) and **motivation** (emotions, beliefs, identity) to achieve sustained behaviour change.
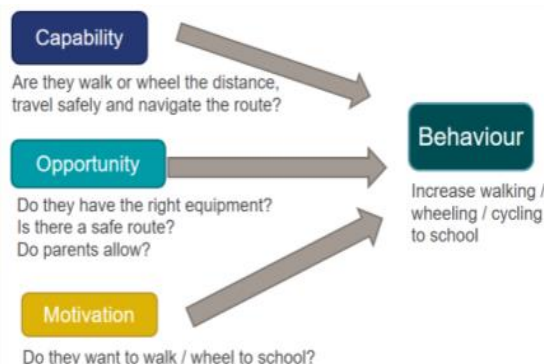
This model can support you to consider your target audience holistically, and to identify effective interventions to meet all three.

Capabilities	Opportunities	Motivations
Physical	**Physical opportunity**	**Automatic motivation**
Skills and abilities acquired through practice.	Environmental context Resources	Emotions Reinforcement Incentives
Psychological	**Social opportunity**	**Reflective motivation**
Knowledge Attention Decision processes Behavioural regulation	Social influences Social pressures, Conformity, norms Social comparisons	Beliefs about capabilities Roles and identity Goals
Intervention functions	**Intervention functions**	**Intervention functions**
Restrictions Education & training Persuasion	Environmental restricting Modelling Enablement	Incentivisation Coercion Training

By gaining greater understanding of people's capabilities, opportunities and motivations, interventions can be designed to reach them in the most appropriate way. You will need to understand which communication methods are most appropriate for each audience to ensure messaging has as wide a reach as possible.

The main way to understand your audience, in the specific scenarios you are focussing on, is to speak directly with audiences through the community engagement process. You can also obtain additional information and further research using market research software (influencermarketinghub.com/audience-insights-tools/).

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Designing Interventions

The important thing to stress is that a combination of targeted activities over an extended period which appeal directly to the audience in question is the most effective. Consider the combination of factors in COM-B.

Behaviour change interventions within active travel may include but not limited to:

Capability	Opportunity	Motivation
Cycle training (adults, children or family)	Led bike rides	Led bike rides
Cycle to work scheme	Cycle buddies	Cycle buddies
Travel planning	Led walks	Led walks
	Promotional activity of any kind	Promotional activity of any kind
Dr Bike sessions	Information flyers,	Cycling festivals/events
Bike hire	Talks / presentations / workshops	Information flyers, talks/presentations, workshops
Bike or walking bus	Bike or walking bus	Field trips
	Racing – watching or participating	Racing – watching or participating
Cycling skills sessions	Clubs	Bike or walking bus
		Equipment demonstrations
		Clubs

Some activities may span across multiple categories, this will be determined by how it is presented to the audience. If planned well, to meet the interests of the audience, all interventions can positively impact on motivation.

Use your community asset map to identify people or organisations who can deliver behaviour change activities on behalf of the project team.

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Behaviour Change Template

Our behaviour change template and schedule document can be downloaded from the Showcase website here. This guides you through defining behaviours, SWOT analysis, audience insights and space for your intervention schedule overview. The template will cover your behaviour change plan and the schedule is to outline your specific activities for each audience.

The template provides a structure to expand or add other elements agreed by your organisation, such as:

- Use of the APEASE criteria: Affordability; Practicability; Effectiveness and Cost Effectiveness; Acceptability; Side Effects or Safety, and Equity.
- Risk Assessment - identifying risks and barriers to effective delivery of the plan, and mitigation measures.

Places for Everyone
Behaviour Change Plan Template

This template may provide a useful structure and guidance to those when planning their behaviour change activities. This format can be updated to reflect changing activities at different RIBA stages and may provide additional support whilst compiling a Communications Plan and report at each stage review. For additional guidance please refer to the Behaviour Change Guidance. Please use this template flexibly adding additional sections where required.

Project lead organisation	e.g. Made Up Council.
Project title	e.g Big Town Active Travel corridor
Reference	MUC-PfE-1234
Project background	Please briefly state the background of this project to give context to the following behaviour change plan.
Project stage and status	Please state the RIBA stage the project is at and any notes th

Intervention Title Month	
Pull background knowledge from template and apply to design intervention. • Behaviour to be changed • SWOT data • What you know about this audience? • Appropriateness of timing, i.e., seasonal, events, holidays, etc. • Resourcing	
What activity will be carried out? N.B. this can be physical interventions such as cycle training or can be publicity interventions to communicate key message.	
Where will this take place?	
Date of activity	
Communications • Channel, frequency, message	
Delivery partner	
Evaluation method	
Breakdown of costs	

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Evaluation

Monitoring and evaluating any series of activity is an important part of the work to ensure the series is achieving the desired effect and to understand which elements should be continued or ceased. Both quantitative and qualitative data should be collected to ensure understanding of the impacted audiences, any diversity considerations or feedback which may amended future interventions.

In order to evaluate you must have a clear set of objectives, both for the overall intervention series for a particular audience and for each individual activity within it. Evaluation of long-term behaviour change as well as the success of short-term interventions should be considered.

Long term behaviour change

The best way of finding out if an intervention has been successful is to measure behaviours beforehand and sometime after. Travel diaries, follow up surveys and schools Hands Up Scotland survey can be effective means of tracking the success of behaviour change interventions.

Gathering disaggregated demographic data

It's important to monitor **who** engages with the interventions, not just **how many**. Ensure there are opportunities to collect demographic data that can inform how successful your interventions have been at a) reaching the intended audience, b) how successful they have been with diverse groups and c) whether there are gaps that may inform future intervention planning.

In-depth vs mass methods of evaluation

Ensure there are a variety of approaches of monitoring interventions.

Data gathering should aim for near 100% response-rate. This should be light touch, part of a required participation form, require minimal or no input from participants.

Qualitative, in-depth feedback that will give greater insights may be harder to achieve 100% response rate but should focus on quality of responses.

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Encouraging high levels of feedback

- Identify approaches to integrate feedback into the intervention itself. E.G., in a cycle training session, ask a series of binary questions (true or false / yes or no) in which they cycle to one side or the other.
- Incentivise feedback (e.g. enter into a prize draw)
- Include (e.g., demographic data / equalities questions) within pre-participation form. Be clear on intended use and ensure special category data is kept anonymously and used only for the intended and anonymised purpose. Comply with GDPR requirements when collecting personal data.

Interventions can be evaluated in a number of ways:

Participation / engagement levels data	Satisfaction with intervention	Long term impact of intervention
Social media impressions / clicks/ views	Surveys	Surveys
Call to action take-up levels	Focus groups	Focus groups
Numbers of participants	In-session feedback	Travel diaries
Pre-participation form / return slips	Immediate, verbal feedback	Follow-up direct contact with participants
In-person or automated travel counts		In-person or automated travel counts

Further guidance on evaluation methods can be found at Resources - Evaluation Support Scotland.[1]

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[1] www.evaluationsupportscotland.org.uk/resources/

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Reporting

A behaviour change impact report is a useful part of your evaluation process and aid transparent communication with your community.

A Behaviour Change report may be useful:

– For monitoring and evaluation

– To review which aspects to continue

– To celebrate and showcase your work to your organisation, funders, the public and other stakeholders

– To continue transparency with your community

What should be included?

– Project background/context

– Link to behaviour change plan

– Monitoring methods

– Quantitative and Qualitative data

– Demonstration of impact

– Quotes from participants

– Images

– Evidence of early adoption

– Future behaviour change interventions, links with the local community

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Appendices

1) Theories and principles to support behaviour change

In this guide we have looked at COM-B and it's uses as a tool to understand our audiences, however there are several other theories which are useful in designing interventions. These can support both planning communication techniques and understanding audiences to design interventions.

Social Marketing

Social marketing applies marketing principles and techniques to influence target audience behaviours that benefit society (e.g., public health, environment)
www.studysmarter.co.uk/explanations/marketing/introduction-to-marketing/social-marketing/

Social Norms

Our behaviour is influenced by what we perceive the "normal thing to do" is: Showing, describing, stating what other people do.

Social Cognitive Theory

We learn from ourselves and by observing others in our environment and are more likely to imitate those who we see are rewarded for their behaviour, but we are shaped by many factors including our own expectations, goals and self-evaluation.
www.simplypsychology.org/social-cognitive-theory.html

Exchange Theory

This is a cost benefit analysis; people are only willing to change their behaviour when they believe that the benefits outweigh the costs. Two essential questions for the success of our behaviour change planning:

- How can we reduce the perceived costs of practicing the promoted behaviour?
- How can we increase the perceived benefits of practicing the behaviour?

These theories can be used to guide our communications to the appropriate audiences regarding the behaviour change interventions in addition to what has been learnt about them.

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Stages of Change

People can be in any one stage and move between them. Interventions should be mindful to aim activities at the audience's stage and continue to maintain activities as the individuals progress through the stages to lasting exit.

1) Pre-contemplation – not considered behaviour
2) Contemplation – aware of behaviour and giving thought to change
3) Preparation – preparing to change behaviour
4) Action – actively partaking in behaviour change activities
5) Maintenance – new behaviour not habitual, requires ongoing support.
6) Termination/Lasting exit – new behaviour ingrained, no support required.

sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/behavioralchangetheories6.html

ISM

Similar in respect to COM-B in outlining a range of factors which must be combined in order for behaviour change to take effect.

- o **I**ndividual – values, beliefs, motivations, skills
- o **S**ocial – norms, identity, relationships,
- o **M**aterial – regulations, infrastructure, time

www.gov.scot/publications/influencing-behaviours-moving-beyond-individual-user-guide-ism-tool/pages/2/

COM-B

The principle that for sustained change to take place, all three of

- o **C**apability
- o **O**pportunity and
- o **M**otivation are required. Interventions should ensure all three are achieved

modelthinkers.com/mental-model/com-b-behaviour-change-wheel

www.youtube.com/watch?v=o3vjG-HAwGw

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2) Example outline behaviour change plan

Use schedule template for full details:

Desired behaviour: cycling/walking the school run.

Audience: working mums driving the primary school run

Learnt from engagement that time pressures exist, therefore most likely interventions would centre around cycling as it's quicker than walking.

This is an outline example for indicative purposes and does not represent a full BC plan.

Interventions	Dates
• Information flyers and social media with example of how cycling the school run might fit a busy schedule. • Communication to use social norms and contain imagery of ordinary women of the same demographic cycling with their kids.	March
• Workshop with equipment demonstrations to discuss all aspects of cycling the school run for speed, efficiency and well-being.	April
• Cycle training for mums and kids	May x 4 sessions (weekly)
• Twice weekly cycling bus(es) to/from school.	June
• Summer holiday challenge –parent / carer and child(ren) to cycle one everyday journey a week. Kids to stamp logbook and win prizes.	July and August
• Mums and kids focus group workshop – fact finding, what have they liked/disliked, what's worked for them, what can they pass on to others. • Cycle training revisit and/or with new mums – x 2 sessions. • Twice weekly cycling bus(es) to/from school.	September
• Social media campaign – cycle chic in wet weather • Free (good quality) lights giveaway. • Twice weekly cycling bus(es) to/from school.	October
• Social media campaign – cycle chic in wet weather • Twice weekly cycling bus(es) to/from school.	November
• Social media campaign – winter riding • Twice weekly cycling bus(es) to/from school. • Christmas festival – bikes with Christmas lights, hot choc, etc.	December

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