

Enabling Behaviour Change – Information Pack

Introduction

This guidance note outlines some of the key issues to consider in the development of initiatives which seek to enable changes in people's travel behaviour and offers practical tips when considering options for addressing barriers to sustainable behaviours.

What makes people change their behaviour?

This is a basic question well worth reflecting on. It is important to remember that government, local or central, cannot change people's behaviour even if it wanted to. People change their own behaviour in response to other changes in the world around them, in their understanding of the world and in their perceptions - including their perceptions of themselves. To be successful in enabling change new behaviours should seem:

- More advantageous - e.g. perceptions of costs and benefits change
- More 'me' – behaviour fits in with perceptions of self or aspirations
- More prevalent – increased awareness of who else is doing it
- More doable – increased confidence in ability to change
- OR make their old behaviour seem less of any of the above¹.

Designing initiatives

The reasons why people make the travel choices they do is often complex and dependent on a number of interrelated factors, but in designing solutions there are some basic questions you can ask yourself to test the logic behind your proposals:

- Q Have you started with analysing the problem rather than designing a solution?
- Q Have you clearly identified the specific behaviour/s you'd like to enable?
- Q Who are the target population and what is known about their current behaviour, attitudes, potential barriers to change and what has worked in the past? On the basis of this analysis it is possible to start designing an initiative or package of initiatives that aim to tackle the barriers and either work with attitudes or seek to influence them. Logic mapping can be a useful step to help think through the causal relationship between the initiative(s) and the behaviours it is aiming to influence².
- Q Have you thought through how the initiative will impact on different segments within the target population and who will be most/least amenable to change? Some initiatives might make a big impact on a

¹ Christmas, S. 'Nine Big Questions about Behaviour Change'. DfT, 2010
<http://www.dft.gov.uk/pgr/scienceresearch/social/behaviour-changes/>

² The Tavistock Institute 'Logic Mapping: Hints and Tips guide', DfT, 2010
<http://www.dft.gov.uk/pgr/evaluation/evaluationguidance/logicmapping/>

small hard-to-reach or high risk population, while others may have a smaller impact but across a larger population.

- Q How will you tailor the initiative for different segments of your target population? Are the key benefits attached to targeting the most amenable to change or focusing your efforts on the least amenable?
- Q How will you ensure that other policies and initiatives are pulling in the same direction and not 'nudging' people away from the aims of your initiative?

The rest of this note provides a summary of the evidence on what influences behaviour and the things it's useful to consider when addressing barriers to change.

What influences behaviour?

This section summarises the types of things which influence or drive the behaviour of people and organisations and how these factors may act as barriers to change.

Summary:

- Behaviour is usually determined by a number of inter-connecting factors, including structural, attitudinal and habitual factors
- We need to understand the full range of any potential barriers to change. Policies are unlikely to be successful if only one of the possible barriers is identified and then addressed in isolation.
- Even if change seems beneficial, people and organisations may still stick to existing behaviour, particularly if it is a matter of habit. Habitual behaviour can take longer to change.
- Change is often a process rather than the result of a one-off decision and without the right support and reinforcement people/organisations can also backslide and revert to their previous behaviour. Readiness to change can also be dependent on the circumstances of an individual or organisation at a particular point in time.
- In light of all of the above, packages of measures may offer the best way of enabling and locking in change.

Key influences on behaviour (for individuals and organisations)

- **Attitudes.** Although there are sometimes contradictions between what people say and what they do, attitudes are an important influence on transport behaviour. For example, the perception that public transport is unsafe to travel at certain times of the day and that cycling is 'dangerous' have been identified as key barriers to more people travelling by these modes. Broader attitudes to issues like privacy, health, and the

environment can also cross over into transport and affect the travel choices that individuals and organisations make³.

- **Structural factors.** These are external conditions (typically physical, technological, legal or financial) beyond the control of individuals and most organisations. Structural factors are particularly pertinent in transport because behaviour in this area is often mediated by the availability, accessibility, location and cost of infrastructure – from the provision of bus services in rural areas to the availability and cost of low-emission cars.
- **Knowledge and awareness.** People/organisations need to know about new or existing initiatives or types of behaviour, and understand what the benefits are for them. People take more notice of benefits that they themselves value. For example, the Concessionary Travel Club is an online journey planner specifically for older people who qualify for a concessionary bus pass. It allows users to search for places of interest in a chosen area (eg. museums, galleries, council offices) and enables them to plan their journey by bus or some other form of public transport. People also need to trust the source of information and be communicated with in a language they can engage with, otherwise they are unlikely to be persuaded to act on the information and change their behaviour.
- **Social and cultural norms.** People, and also organisations, are influenced by the behaviour of others, from their friends and peers to society as a whole. Even if a change is beneficial to them individually, they may still be deterred from changing if it means going against the prevailing attitudes and behaviours of those around them. However, if changes are viewed positively amongst peers then this may help to support change. An example here is the extent to which over the past 30-40 years behaviour and attitudes to drink driving have changed so that it is no longer the social norm to drink drive to/from pubs⁴ - although there are some specific groups amongst whom this is still acceptable, partly due to peer pressure and social norms amongst those particular segments of the population.
- **Habit.** Repeated behaviour can become automatic over time, meaning that people, and decision-makers within organisations, don't stop to weigh up the pros and cons each time they undertake the behaviour. This makes habitual behaviour much more of an effort to change. However, where changes to habitual travel behaviour can be achieved, the magnitude of impact could be significant. Seatbelt wearing as an example of habitual behaviour changing over time, due to a crucial combination of measures. In this case, legislation was introduced *after* it became normal for some to

³ Lyons, G et al. 'Public Attitudes to Transport: Knowledge review of existing evidence', DfT, 2008

<http://webarchive.nationalarchives.gov.uk/http://www.dft.gov.uk/pgr/scienceresearch/social/evidence.pdf>

⁴ Avineri, E et al. 'Individual Behaviour Change: Evidence in transport and public health', DfT, 2010

<http://www.dft.gov.uk/pgr/scienceresearch/social/behaviour-changes/pdf/transport-and-health.pdf>

wear a seat belt and public awareness had been raised through social marketing.

- **Costs.** The relative costs of different behaviours are another influence on the day-to-day transport choices made by both individuals and organisations. People's perceptions of these costs may not be strictly accurate, but nonetheless influence their choices. For example, people often perceive car use to be cheaper than taking public transport for the same trip but don't take into account all the associated costs of motoring, such as tax, insurance, maintenance and vehicle price depreciation. Research has also shown that people tend to prioritise short-term costs and benefits over longer-term considerations. For instance, people and organisations may be deterred from investing in new lower-emission technology despite the long-term savings they could make from reduced fuel costs.
- **Capability and self-efficacy.** People may be prevented from adopting a new behaviour if they don't think they have the capability to do it – either because of a perceived lack of skills or resources, or a shortage of time. Similarly organisations, particularly smaller ones, may have been convinced of the potential benefits of a change in behaviour, but still be prevented from changing because they believe they lack the skills or resources in their workforce to do so.

What are the things to consider when addressing barriers to change?

One of the key hurdles to overcome when addressing barriers to change is whether your target population understands and accepts the rationale for change. People will need to be clear about the logic of why making a particular change is advantageous to them and to feel that all related policies are supporting each other and pointing in the same direction. It's important to understand which benefits people value most. In addition, people will want to see that the local authority and other key influential people/institutions are making comparable changes to their behaviour. Other findings about what works in addressing different types of barriers are outlined in the box below:

What works in addressing different barriers to behaviour change?

- **Attitudes** often reflect deeply-held values on the part of individuals and organisations, and consequently can take time to address. Social marketing, which raises awareness of a particular issue or gives its target audience new information which challenges their existing attitudes, has been shown to be effective in helping to modify attitudes to travel. DfT's THINK! campaign is an example of how social marketing and communications raised awareness and addressed attitudinal barriers in order to improve road user behaviour and encourage acceptance of engineering and enforcement initiatives to increase road safety. An example of how public attitudes have been addressed locally is the Brighton and Hove bus company 'On the Bus' marketing campaign. Since 2004 the company has used local advertising and images on buses to

publicise prominent local people, including businessmen, families and sportswomen, who use their bus service – as a means of changing the image of the bus as ‘down market’ and only for those who can't afford to use a car⁵.

- **Structural barriers** are potentially expensive to address directly, for example through the building of new roads or rail lines. However, small scale - targeted investments have the potential to deliver big impacts: for example, evidence indicates⁶ that cycling in bus lanes and cycle advance stop lines at junctions can lead to increased perceptions of safety and convenience whilst cycling, whilst the provision of cycling facilities such as parking and showers can help to encourage cycling. Car clubs or car sharing schemes may provide cost effective options for reducing the number of overall trips made by car. The use of technology may in some cases circumvent the need for major investment in new infrastructure (for example by using mobile and internet technology to remove the need for some journeys), although there is a danger you will just be replacing one structural barrier with another if part of your target audience is not able to use the technology. Structural barriers are also as much about what people perceive as what they experience. For example someone may perceive public transport in their area to be inadequate, based on a lack of knowledge or experience of using these services. Strategies to increase knowledge and awareness of existing infrastructure (discussed below) may be effective in overcoming ‘perceived’ structural barriers and leave more room for resources to be directed at addressing tangible structural barriers⁷.
- **Knowledge and awareness.** Raising awareness of a new or existing service is not necessarily a job just for central/local government, and there are advantages to using an ‘extended salesforce’ to perform part of this role. Information delivered by individuals or organisations that are perceived as being independent may have more credibility, while businesses and public sector delivery organisations have the distinct advantage over government of having direct contact with individuals. For example Newcastle City Council, in partnership with Newcastle United Football Club has developed travel information and a journey planning tool for fans travelling to the stadium, aimed at encouraging more use of public transport, cycling, walking and car-sharing⁸. The journey planner will be accessible via the club’s website, meaning it will have direct exposure to the intended target audience.

⁵ <http://www.buses.co.uk/information/onthebus.aspx>

⁶ Independent Social Research 'Impacts of better use transport interventions; A review of the evaluation evidence base', DfT, 2009
<http://www.dft.gov.uk/pgr/evaluation/evaluationguidance/existingnetworks/betteruse.pdf>

⁷ See Anable, G et al. 'An evidence base review of public attitudes to climate change and transport behaviour' DfT, 2006

<http://webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/sustainable/climatechange/iewofpublicattitudestocl5730.pdf>

⁸ <http://www.altoonativetravel.com/>

- **Social and cultural norms.** Helping people and organisations to make connections with others who are seeking to make the same changes in behaviour can be a powerful catalyst, individually and collectively. In addition, the use of influential and credible popular public figureheads can also help to deliver messages about the rationale for change. Conversely credible counter-champions may also emerge who campaign against certain measures – thinking through likely sources of opposition and whether/how differences in opinion can be overcome is something which can be tackled at the design stage.
- **Habit.** Changing habitual behaviour is likely to require intensive and possibly ongoing interventions, using a combination of targeted information, financial and other incentives. It's also useful to consider targeting initiatives at people who are at key transition points, e.g. moving job/house/school/retiring/having children, and who are yet to form new habits regarding their travel behaviour. Encouraging people to reflect on their habitual behaviour can be helpful. For example, research from the driver training field has highlighted the value of discussion groups in getting drivers to reflect on their habitual behaviour⁹. People need to have sufficient knowledge and understanding of alternatives in order to change habits and form new ones.
- **Costs.** The key messages from what works in using price incentives to promote changes in travel behaviour include: learning about how similar incentives have worked and why; keeping pricing structures simple in the first instance as some personality types disengage from complexity; rewarding good behaviour rather than punishing bad; presenting short term benefits as well as long term gains where possible and being careful about putting a price on something people may already be doing for free.
- **Capability and self-efficacy.** The provision of practical tools and guidance can be effective in equipping your target population with the skills necessary to change their behaviour. Networks or forums can be effective in allowing individuals and organisations contemplating a change in behaviour to learn from each other – see discussion of social and cultural norms. Case-studies or testimonials of individuals or organisations who have already changed their behaviour can also be effective in giving others confidence in their own ability to do so themselves.
- **Choice architecture.** Changing the choice architecture (i.e. the way in which choices are presented to people) to promote better choices over less beneficial ones and to make choosing the 'better choice' feel more effortless, is another way in which barriers can be overcome. Changing the choice architecture is often referred to as introducing 'Nudges'¹⁰. For example, a commuter who needs to decide how to get to/from the train station might be more inclined to choose the bus rather than their car if a

⁹ Avineri, E et al. 'Individual Behaviour Change: Evidence in transport and public health', DfT, 2010

<http://www.dft.gov.uk/pgr/scienceresearch/social/behaviour-changes/pdf/transport-and-health.pdf>

¹⁰ Thaler, R. and Sunstein, C. 'Nudge: Improving Decisions About Health, Wealth, and Happiness'. Penguin, 2009

smart ticket is available which allows the same ticket to be used on both (e.g. the London Oystercard system). This choice is further reinforced/promoted if bus timetables/routes are convenient, car parking charges act as a disincentive and the public transport option is set as the default on sources of journey planning information such as web sites.

What works in achieving changes of different nature and magnitude?

- For changes to **one-off actions**, that don't require people or organisations to fundamentally alter their everyday behaviour, Nudge style approaches may be most appropriate. However, Nudges are not likely to be sufficient to change more habitual behaviour, or where there are significant structural barriers.
- For more **complex actions**, that require significant changes to people's lifestyles then a broader package of different types of measures is likely to be required, all pulling in the same direction and with lots of ongoing help to assist people in reinforcing/rewarding any changes they make.

End to end journey experience

A further factor that it is useful to consider when thinking through enabling changes to travel behaviour is how people consider the journeys they make. Often people are focussed on the whole journey rather than specific legs and the 'hassle factor' people sometimes associate with using public transport can be very off-putting. So, for example, a commuter will take into account how they get to the rail station in relation to the train journey and any further legs they need to make once they get off the train. Thinking holistically about someone's journey, aiding access to information pre-travel and smoothing interchanges between different parts of journeys can help to make changes in travel behaviour more attractive (e.g. taking the bus instead of the car to station because bus times are convenient and/or smart ticketing is in place).

Case study examples

Because of the large number of factors that influence behaviour, packages of measures can often be effective in enabling behaviour change. The following are examples of such an approach:

Case Study 1: Travel to school in the Cycling Demonstration Towns

Each of the six Cycling Demonstration Towns (CDTs) focussed some of its cycling programme on schools and the promotion of cycling for the school journey. By targeting schools and 'hubs' where cycling could be promoted to pupils, the CDTs were able to work with large numbers of children at once¹¹ Modal shift from cars to cycling for the school run has been targeted through a

¹¹ 'Making a Cycling Town', Department for Transport and Cycling England, 2010
http://www.dft.gov.uk/cyclingengland/site/wp-content/uploads/2010/05/making_a_cycling_town_qualitative_report1.pdf

package of measures which aim to address structural, educational and perceptual barriers to cycling. Measures include:

- Universal provision of Bikeability (cycle training) to ensure children have the confidence and skills to ride safely on the road, and give parents confidence too that their children will be safe.
- “Bike It” Officers who help schools to make the case for cycling in their school travel plans, support cycling champions in schools, and create a sustainable cycling culture in the school.
- “Go Ride” Officers, who provide high-quality coaching and introduce children to different kinds of cycling such as BMX and mountain biking.
- Increasing the amount of cycle parking at schools, thus addressing a key practical barrier to cycling.
- Improving the safety of cycle routes to schools.
- Out of school activities such as bike clubs.

Case Study 2: Sustainable Travel Towns

From 2004 to 2009, Darlington, Peterborough and Worcester – working in partnership with their communities – explored the effectiveness of ‘Smarter Choices’ measures to influence travel behaviours in their areas in favour of more sustainable modes.

Smarter Choices were ‘packages’ of measures tailored to each local area, comprising both ‘soft’ measures such as marketing and information to encourage people to use sustainable transport modes, and ‘hard’ measures such as improvements to infrastructure and services.

Soft measures implemented by the STTs included personal travel planning, travel awareness campaigns, promotion of walking and cycling, and public transport marketing and information. Hard measures included cycle parking facilities, cycle lanes and signage, traffic management improvements (such as better crossings and dropped kerbs), pedestrianisation of the town centre (in Darlington), bus service improvements, including more frequent buses and real-time information, and bus stop improvements (including new bus shelters, better lighting, an ‘express’ service to and from the park and ride, etc).

Measured outcomes from the STTs compared with similar towns without the programme included reductions in the number of car trips and the amount of traffic and increases in cycling and bus trips¹².

Data sources for understanding target populations

The following are links to national level data and guidance that might be useful for understanding target populations and designing initiatives.

¹² Sloman, L. et al. 'The Effects of Smarter Choice Programmes in the Sustainable Travel Towns', DfT, 2010
<http://www.dft.gov.uk/pgr/sustainable/ltplanning/travelguide/sttresults/>

- **National Travel Survey** – comprehensive source of national data on transport behaviour
<http://www.dft.gov.uk/pgr/statistics/datatablespublications/nts/>
- **DfT attitudinal research** – range of evidence on public attitudes to transport
<http://www.dft.gov.uk/pgr/scienceresearch/social/>
- **Segmentation Study interim report and dataset** – outputs from national survey of public attitudes and behaviour in relation to climate change and transport
<http://www.dft.gov.uk/pgr/scienceresearch/social/climatechangetransportchoices/>
- **Logic Mapping: Hints and Tips for Better Transport Evaluations report** – in-depth support and advice on developing logic maps to inform the planning, design and evaluation of transport initiatives
<http://www.dft.gov.uk/pgr/evaluation/evaluationguidance/logicmapping/pdf/ogicmapping.pdf>

The following are links to local level data published by DfT and DECC, which may be a useful resource alongside other locally collected data.

- Data on accessibility to key services by public transport and other modes
<http://www.dft.gov.uk/pgr/statistics/datatablespublications/ltf/>
- Data on road transport energy consumption at regional and local authority level
http://www.decc.gov.uk/en/content/cms/statistics/regional/road_transport/road_transport.aspx

Summary

In summary, in applying insights from behavioural science to the transport field it's important to:

- start with the problem not the solution
- clearly define the specific behaviours involved
- identify the target populations and whom it is best to target (e.g. those most or least amenable to change)
- learn lessons from what has worked well in the past

This analysis can help to ensure that there is a clear logic behind how changes will be enabled and the magnitude of behaviour change required to achieve outcomes. Testing and refining the logic behind the initiative following implementation will also be important in order to assess its effectiveness in achieving the anticipated outcomes.