Smarter Travel Sutton

# Lessons learnt in the delivery of a behaviour change programme

**Summary report**
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www.smartertravelsutton.org

MAYOR OF LONDON

Sutton

Transport for London

## Contents



# 1. Introduction

**The Smarter Travel Sutton (STS) three-year behaviour change programme was launched in September 2006. It followed the launch of the Department for Transport's (DfT) three similar 'Travel Towns' programmes in Worcester, Peterborough and Darlington.**

The STS programme was allocated a £5m budget and a three-year timescale to test whether it would be possible to influence the travel habits of a population by using social marketing and travel planning techniques. It was a partnership programme with Transport for London (TfL) and the London Borough of Sutton (LBS).

...influence the travel habits of a population...

A full description of the STS outputs can be found in its annual reports (**www.smartertravelsutton.org**), as well as case studies of its major projects. This summary report should be read alongside the annual reports to understand the context in which STS was delivered. In summary, the STS programme consisted of:

- Travel planning for larger employers.
- Two travel plan networks for geographically distinct business and retail areas.
- Travel planning in every school.
- Personal travel information and incentives (direct marketing) offered to every household and through medical professionals to patients and through junior sports leagues.
- Targeted direct marketing campaigns.
- Borough-wide advertising campaigns, delivered in bursts.
- Incentive and reward promotions.
- Promotions in schools and workplaces.
- Major festivals, events and a touring roadshow.
- A car club.
- Additional on street cycle parking.
- Additional cycle training.

A key purpose of the STS pilot programme was to learn lessons that can assist in the planning, delivery and monitoring of future programmes. Moreover, behaviour change as a public policy tool is in its infancy. Throughout the three-year STS programme, it was both learning from and contributing to the collective understanding of behaviour change in public policy.

This report outlines some of the key considerations in planning and delivering a behaviour change programme. These will be addressed in sections covering; what STS can tell us about the relevance and validity of some behaviour change models and theories, what is required in the strategic planning of a complex programme, how to effectively manage a complex programme and how to reliably monitor and evaluate its performance. While the objective of the STS programme was a reduction in car use, the lessons from the programme may be equally applicable to other areas of public policy, including recycling, antisocial behaviour and healthy living.

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# 2. Application of theories and models of behaviour change

**Theories and models of behaviour change can be broken down into: those that attempt to explain how a change takes place across a community or population; those that explain the stages an individual goes through in making a change; and those that explain the internal and external factors that influence an individual's behaviour change. This section outlines some of these theories and how they have been applied to the STS programme.**

## 1. Population change

The 'Tipping Point' (Malcom Gladwell, 2002) attempts to explain how a change is adopted by a community, characteristically as a social epidemic. The book argues that there is a particular moment when the epidemic explodes from affecting a small proportion of the population to almost everyone, known as the 'Tipping Point'.

It is argued that three types of people are vital for change to take place in a community, which Gladwell called:

- **Mavens** – information specialists who tell others about how a new approach works.
- **Connectors** – people with large social networks.
- **Sales people** – persuaders of change.

Additionally, Gladwell argues that the environmental context is hugely influential over change and the message of change has to have a 'stickiness' factor. In other words, it needs to be memorable and resonate with people.

The STS programme targeted Sutton's entire population

The STS programme targeted Sutton's entire population, but its strategy was not to overtly seek out and influence the types of people Gladwell describes. It did, however, benefit from the support of key ambassadors for the programme, who were actively sought out, including the Chair of the Chamber of Commerce who was instrumental in securing the support of a large number of small employers.

It is unclear whether a Tipping Point was reached, or is still about to be reached in Sutton, but it was apparent that there was a high level of participation in STS events and virtually no negative feedback from residents. The positive attitudes to STS are at least partially attributable to the vocal and active support of known and respected members of the community.

The Diffusion of Innovation model is also helpful in understanding how programmes such as STS can influence change. This model explains how a new technology or idea becomes adopted by a population and classifies people into five categories according to their willingness to innovate. These are described as Innovators, Early Adopters, Early Majority, Late Majority and Laggards. They are arranged linearly on a bell curve.

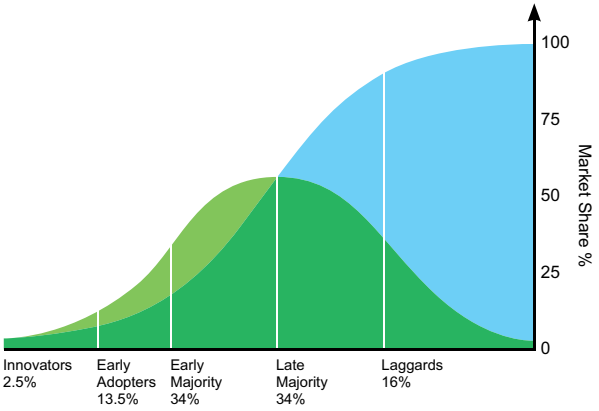


Fig 2.1 Diffusion of Innovation Model

The STS programme assumed that, in terms of regular sustainable transport use, in particular cycling and car clubs, there were a small number of Innovators and possibly some Early Adopters. One of the main aims of STS was to create the conditions in which sustainable travel patterns are adopted by Early Adopters and possibly the Early Majority. In many ways this matches the Tipping Point concept in which a new idea is rapidly adopted across a population from its origins in a small group of people.

While the Diffusion of Innovation model has been widely used to predict the purchase of new products, its application in this context may have been far more effective if baseline consumer research was carried out into the characteristics of the Early Adopters. Also, Sutton started from a relatively low base in terms of cycling and car club numbers, so increasing participation from Innovators to Early Adopters rather than the wider population in the three years may have been a more realistic goal.

Consideration of these models in the planning of future programmes needs to include asking to what extent behaviour change is a population phenomenon and to what extent it is the result of decisions and actions made by many people. The likely answer is that it is a combination of the two.

One of the main aims of STS was to create the conditions in which sustainable travel patterns are adopted

Identifying what residents feel is their community is vital for being able to influence their behaviour and that of the whole community. The evidence from a number of sources in Sutton suggests that its residents strongly identify with their local community and will make decisions that are at least partially based on preserving community life. STS did not always resonate as well as it could have done with residents because they do not identify themselves with Sutton as much as they identify themselves as residents of Carshalton or Cheam, for example.

The sections below explain how community norms can influence an individual's behaviour.

## 2. Stages of change

This section discusses models that identify the stages that people may need to travel through to achieve a behaviour change. STS, and also the DfT Travel Towns, initially relied on the Prochaska and DiClemente Transtheoretical model of behavioural change to understand the stages people may need to pass through to achieve a change. This model, developed to explain and manage changes in health behaviour, identifies five linear stages of change: pre-contemplation, contemplation, preparation, action and maintenance.

The model has been challenged for explaining behaviour change as a linear rather than a fluid process and for not taking into consideration external/ environmental factors. It also tends to assume that behaviour change needs to take considerable time. Some evidence suggests behaviour change can occur quite rapidly if the right internal and external factors are in place.

The major difficulty for STS in use of this model was being able to reliably identify the target audience's stage of change and then tailoring a communication message or intervention for the audience at a specific stage. It is likely that when targeting a community many of its individuals will be at different stages of transition. It was found to have more practical application in personal interventions, such as personal travel planning and the NHS GP signposting service Active Steps. These involve one to one conversations in which it was possible to assess an individual's likely stage in this model and tailor the intervention to move the individual on to the next stages.


Fig 2.2 Transtheoretical Model

## 3. Factors that influence behaviour change

A third type of model helps us understand the factors that can influence or restrict behaviour change. According to recent research carried out for the Department of Health (Paul Devenish, internal DoH Behaviour Change Discussion Paper, 2009), behaviour change is influenced by a set of factors that can be mapped on a continuum from 'societal' or 'distant' factors to 'personal' or close' factors (Fig 2.3). Personal factors include self-esteem, beliefs and values, while societal factors include cultural and community attitudes and family and peer group norms.

Throughout its three years, the pilot STS programme delivered a range of parallel projects to influence both personal and societal factors. These included initiatives to influence individual attitudes, perceptions (about level of effort required) and beliefs about the benefits of sustainable travel. It also delivered projects and initiatives to influence a whole community, including advertising campaigns, community events and festivals and new cycling parking. The latter, while primarily important for improving cycle security, was also acting as statements to the community that Sutton is a place where people cycle.

The Rosenstock Health Belief Model (1975) uses individual's perceptions of the benefits and barriers to a new health behaviour, their perceptions of the severity of the risk of their current

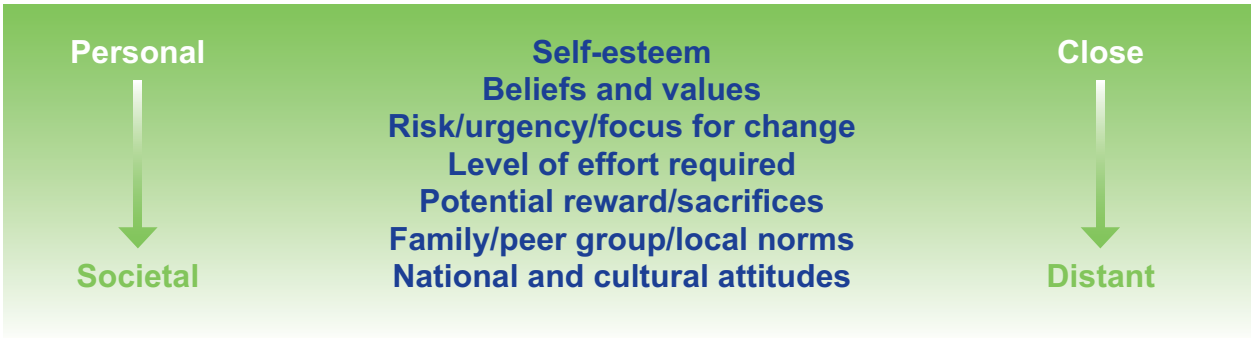


Fig 2.3 Mapping societal and personal factors that influence behaviour change

While this research is useful it does not explain the relative strength of, or the relationship between, these 'influencers'. For example, does influencing the beliefs of some members of a community about cycling lead to them converting to cycling for some journeys, which in turn influences local norms, so creating the appearance of more cyclists and more cycling and ultimately creating a virtuous circle of behaviour change?

behaviour and vulnerability to the outcomes. The model is helpful in providing a framework for designing campaigns to influence perceptions of vulnerability to negative outcomes, such as heart disease as a consequence of inactivity and the health benefits of a new behaviour, for example cycling to work.

There are three key weaknesses inherent in this model, all of which relate to human behaviour: hyperbolic discounting, limited decision-making capacity and inertia. Hyperbolic discounting is the term used to explain the underestimation of the future impacts of current behaviours. While campaigns such as STS can attempt to raise awareness of the health benefits from increased levels of cycling, the target audience is likely to underestimate the likelihood of their own future risk of heart disease and the personal impacts of the disease, therefore potentially making this type of communication less effective.

The second is that humans have a limited capacity or willingness to rationally consider all information when faced with complex decisions. Instead, people will rely on 'heuristics' to make a decision, meaning relying on what they have done before, what seems easiest and what others might be doing. Travel behaviour change programmes are asking people to consider a relatively large amount of information to make a decision that is likely to impact on their own time, work life, responsibilities to others and leisure opportunities. While rationally considering all of the travel options and information may be easier than it first appears and can bring many cost and time-saving benefits, it at the time feels like a difficult task to carry out.

Thirdly, the model does not take into consideration inertia or procrastination, in which stated intentions to carry out a new behaviour do not always result in action. The combined effect of discounting the likelihood of a negative outcome and believing taking action is difficult also contributes to inertia and behaviour change.

The Vlaev and Dolan Reflective-Automatic (RAM) model is based on recent evidence that human behaviour may be very responsive to small changes in the environment. The model identifies two different decision-making systems:

- Reflective processing uses reason, arguments, evidence and information to make decisions.
- Automatic processing is usually made subconsciously and out of habit.

> ...human behaviour may be very responsive to small changes in the environment.

The model suggests that automatic processing is influenced by changes to the environment, while reflective processing responds to internal cues. External cues can be changes to cultural attitudes, such as more people talking about cycling in a positive way or a change to local norms, such as seeing more cycling, particularly among identifiable groups. These can be family members, neighbours or peers, such as other parents. Additionally, they can be physical changes, for example creating a cycling environment of new routes and cycling parking.

This model may help explain the relative discrepancy between the evidence from self-reported or intended behaviour and actual behaviour. Personal travel planning (PTP) for example, targets an individual's reflective processing systems. PTP engages individuals in a conversation about the need to reduce car use (for example, for health and environmental reasons) and attempts to identify trips that the individual can carry out using more sustainable travel options. By considering the information, the individual's reflective processing may agree that there is a need to reduce car use and it is possible for them to do so. However, the individual's automatic processing system is engaged when faced with a travel decision, usually resulting in continuing with their current car use, often out of habit. The PTP intervention, therefore, is over-ridden by habit and the automatic processing system.

There is both quantitative and qualitative evidence that the STS initiative was popular and well received by residents of Sutton.

The authors of Nudge (Thaler and Sunstein, 2005) argue that 'Choice Architecture' is important in influencing behaviour change. The principle of Nudge is that preferences can be influenced by small changes to systems, processes or the environment, without restricting individual choice. An example of this is installing cycle parking in prominent positions at workplaces, ideally replacing car parking spaces. It acts as a prompt to cycling, while at the same time the option of driving has not been restricted.

The principle of Nudge is central to travel planning, in particular in workplaces. Workplace travel planning carries out a review and recommends changes to the working practices, policies and working environment of an organisation to identify opportunities to influence travel behaviour. These may include introducing measures such as flexible working, reducing car allowances and increasing cycle use allowances. These act as 'nudges' to a new behaviour but do not restrict the current behaviour.

The STS pilot programme has shown that at the very least the attempt to influence an entire population does not necessarily result in resistance or indifference. There is both quantitative and qualitative evidence that the STS initiative was popular and well received by residents of Sutton. The pilot has also shown that changing behaviour across a community requires an understanding of community attitudes, norms and values, the stages of change or an individual's position in relation to a new behaviour and the internal and environmental factors that can influence a change decision. Future behaviour change programmes can benefit from thorough consideration of the three theory types during their planning stage and also testing of these with target audiences before launch of the initiative.

# 3. Strategic planning and delivery

**The first section of this report identified models that can help understand the complexity of behaviour and how to potentially influence change. These models can assist in designing and planning a programme to influence behaviour. This section summarises the other major considerations in the design and planning of an effective behaviour change programme.**

The STS pilot programme has shown that strategic planning of a behaviour change initiative requires:

- A period of time for planning time prior to the launch and delivery phase.
- Research into consumers, their motivations and attitudes to current travel behaviour and barriers to switching to alternative modes. Ideally, this needs to consist of quantitative and qualitative research.
- Segmentation of the market to identify the profile of a distinct group of people who are more likely to shift to alternative modes. Segmentation helps target limited resources to where they are most likely to have an impact, therefore improves return on investment.
- Development of a strategic plan, with both a detailed analysis of the transport issues that the programme is attempting to contribute to resolving and also the behavioural barriers of the target audiences.
- Embedding the strategy in wider policy documents and strategic priorities. This increases its relevance to colleagues and partners working in other policy areas that may not seem immediately relevant to sustainable transport, so making it easier and more attractive for them to engage with the programme.

Segmentation of the market to identify the profile of a distinct group of people who are more likely to shift to alternative modes.

- Planning and developing a complementary toolkit of communication tools and channels. These are likely to vary in their cost and intensity of dialogue with the target audience.
- Building political support. Social marketing techniques and behaviour change programmes are attracting interest from all political persuasions, although support should not be taken for granted. The STS programme was launched by the Labour Mayor of London in 2006 and later embraced by the Conservative Mayor Boris Johnson. In Sutton, lead councillors for transport from the Conservative and LibDem Groups sat as members on the Programme Board and supported the programme.

- Engagement with stakeholders, at the policy, strategic and delivery levels. The benefits are that ambassadors for the programme are created, often themselves contributing to spreading the message or acting as a spokesperson in media interviews or conference presentations. In addition, delivery can take place across a number of partner organisations. In Sutton, the police, Primary Care Trust (PCT), Chamber of Commerce and a local charity successfully delivered projects for STS.

- Understand, identify and agree the objectives and benefits of the programme. A risk to any programme of this kind is mission creep (diversion of resources to associated but not specifically relevant projects and services).

- Develop a monitoring strategy, with key performance indicators (KPIs) to know what is being monitored and how performance will be monitored.

- Plan and allocate resources according to where they are needed, to ensure maximum effectiveness.

- Adopt style guidelines to ensure every aspect of the programme has a consistent look, feel and messages. This kind of consistency helps build audience recognition and recall of the key messages.

- Be transparent and honest with residents about what the programme is trying to achieve. STS has shown that most residents will want to support the aims of a behaviour change programme if its intentions are well communicated and it is seen as supporting, rather than restricting, choice. Of Sutton's 180,000 residents, the STS programme received only one complaint about the level of investment in the programme.

- The use of case studies. They can be far more powerful than data and facts in communication. They add 'social proof' that change is happening and contribute to the feeling of a change taking place in a community. Case studies can help to deliver behaviour change through the 'norming' of actions, which is more likely to lead to people adopting new ways of travelling when they can see evidence of their peers, neighbours or colleagues doing the same. Case studies are most likely to become known and available after the programme has been running for some time.

- Record and celebrate success as a team. Delivery takes a lot of effort and commitment, so it is important for the team to take stock of its achievements and celebrate them together.

- Succession planning needs to take place from the outset to ensure the legacy benefits are captured and continue to be delivered. Sutton Council's commitment to mainstreaming the STS behaviour change work was established from the beginning of the programme but grew as the results and benefits became evident. Engaging partner and political support and also publicising achievements are important for securing legacy delivery.

# 4. Programme and project delivery

**The STS programme was managed as a three-year initiative, with coordinated and integrated delivery of projects. Planning took place as part of an annual cycle of activities, with a feedback loop to ensure lessons were learnt in order for the programme to continually improve. The following diagram outlines the annual cycle of phased activity.**


Fig 4.1 Delivery Cycle

Effective programme and project management is essential for timely, targeted delivery of behaviour change programmes. Project management provides a route map for delivery, taking into consideration the constraints of budget, time and quality or performance.

The often small-scale nature of early examples of transport behaviour change initiatives has mistakenly led to these being delivered in a non-project management framework, often resulting in unclear deliverables and ever-extending timelines.

STS's workplace and school travel planning, in particular, benefited from being approached as projects, with a defined budget, timescale and outputs. In the past, travel planning has often progressed at the same pace the organisation is developing the travel plan. Also, development of a travel plan would often halt at a difficult juncture. This has had both time and budget implications for councils and other organisations attempting to secure the adoption of travel plans.

Programme and project management covers a number of themes, including:

- **Governance**
  STS had a Board, with representatives from the delivery partner organisations, senior responsible officers, a steering group and a local strategic partner stakeholder group. The Board ensured the STS programme remained focused on achieving its stated objectives, therefore avoiding mission creep. It also provided leadership and support for the delivery team and a clear mechanism for resolving difficult decisions. The Board was chaired by a Sutton Council Director, which ensured the programme benefited from Chief Officer support and remained one of Sutton Council's strategic delivery priorities.

- **Processes**
  Throughout its three years, the STS programme adopted increasingly clear and simple processes for approving the programme and annual budget, and also signing-off and managing the delivery of projects. This gave clear lines and span of responsibility to each team member.

- **Staff resource management**
  Behaviour change initiatives in transport are seen as innovative and can attract candidates with a passion for environmental issues. This may not be sufficient to deliver effective behaviour change programmes. To maximise effectiveness the main skills that are needed across a team for delivering programmes such as STS are:

  - Research and monitoring – to carry out both transport and consumer research to inform the development of a strategic plan and an understanding research methodologies and issues to facilitate reliable monitoring and reporting.
  - Transport planning – to be able to understand and contribute to embedding behaviour change initiatives into a medium-term transport strategy, such as a Local Implementation Plan or Local Transport Plan.
  - Travel planning – to advise organisations on initiatives they can introduce to encourage sustainable travel.

Behaviour change initiatives in transport are seen as innovative and can attract candidates with a passion for environmental issues.

  - Social marketing – to design and deliver integrated behaviour change campaigns that have clear goals, target audiences, specific calls to action and appropriate channels of communication. It is recommended that the design of future programmes follow the National Occupational Standards for Social Marketing, developed by the Chartered Institute of Marketing.
  - Project management – STS team members took the Association of Project Managers introductory course and exam.

STS attributes it success in the effective delivery of projects and campaigns on time and within budget to the following factors:

- Planning, based on evidence and understanding of the target audience and their barriers to changing their travel behaviour.
- Setting of clear goals and objectives which contribute to strategic priorities, for example as outlined in a Community Plan.

- Establishing a set of specific, measurable, achievable, realistic, time-based (SMART) targets.

- Assigning clear responsibility for delivery, with a sufficient timescale and budget and appropriately experienced project manager.
- Tangible and time-specific milestones for each project.

- The use of financial data as indicators of a project's performance.

- The use of contracts, Service Level Agreements (SLAs) and Memorandums of Understandings (MOUs) for suppliers and partners.

- Introduction of performance-related contracts for suppliers.

Similarly, where problems arose in the performance of a project, its causes could almost always be attributed to inadequate consideration of at least one of these factors.

Some of the projects undertaken by STS were slow to gain momentum but reached their own Tipping Point when they began to achieve results. Projects that are well defined, have good resources and are well-tested before launch are more likely to succeed. There is, however, an element of judgement in deciding which projects or campaigns to continue to support during an initial slow period and which to terminate to reduce waste of limited resources.

## Ongoing reporting is crucial in helping to gauge whether a project should be allowed to continue...

The role of any pilot is to test new initiatives and evaluate them, to gauge their effectiveness. Ongoing reporting is crucial in helping to gauge whether a project should be allowed to continue or whether it needs to be amended or halted. The timing of the decision to continue, amend or abandon a project is crucial because some projects take much longer than anticipated to achieve their desired objectives.

# 5. Evaluation and monitoring of performance

**The new and innovative character of behaviour change programmes means it is particularly important to measure and understand their effectiveness. Increasing pressure on public sector budgets makes it more vital for these programmes to be able to reliably demonstrate results and provide a business case for investment in future programmes.**

The STS monitoring framework consisted of:

- Resident opinion surveys, consisting of 1,500 telephone interviews and 500 telephone interviews in the 'control' area (Croydon) every September.
- Bus patronage data.
- Automatic cycle counts.
- Automatic traffic counts.

The annual reports can be found at **www.smartertravelsutton.org**

Develop a monitoring strategy.....with SMART targets

The key monitoring and evaluation lessons from the STS programme are:

- Develop a monitoring strategy before the launch of the programme, with SMART targets, KPIs and identified ways of collecting the data to measure performance against the KPIs.
- Directly link the targets and KPIs to the objectives of the programme.
- Include in the monitoring strategy reporting on input, output and outcome data.
- Keep the monitoring strategy simple to understand and manage, particularly if budgets are limited. A large set of indicators may be robust but is likely to be a burden to collect and report on every year.
- Identify and manage stakeholders' expectations of monitoring data and reporting from the outset. If it is only feasible to collect from some data sources, or there is a reliability issue with some of the data sets, then it is better to be honest about these from the beginning.
- Distinguish between essential monitoring data and data that may merely be interesting to know.

- Design the monitoring around the principle of a 'funnel of behaviour change' (likely to show a larger proportion of residents at awareness level, decreasing at each stage to a smaller number recording actual behaviour change) to measure changes to:
  - Awareness
  - Attitudes
  - Understanding
  - Self reported behaviour and intention
  - Actual behaviour
- Monitoring that is built around the 'funnel of behaviour change' will require the use of different data collection methods. Actual behaviour can be measured by cycle counts, traffic counts and public transport data, while awareness, attitudes, intentions and self-reported behaviour can be understood from survey interviews.
- Design a survey interview to be short and pilot this before carrying out the full survey. Piloting can test comprehension of the questions, survey flow and length.
- Understand the limitations to data sources. In particular, self-reported data can be influenced by social desirability factors, such as respondents wanting to be seen to give the right answer, rather than accurately answer the question.
- Use a 'control' area where possible, which cannot be 'influenced' by the projects in the intervention area. The population demographics of the 'control' should also match those in the intervention area.
- Look for, and understand, the possible impact of exogenous factors (fuel prices, economy) and complementary measures (cycle lanes, new bus routes) on behaviour.
- Use qualitative and anecdotal sources, such as quotes from residents and stakeholders, to add context to reported monitoring data.
- Use monitoring data to inform future planning and do not be afraid to abandon or revise under-performing projects.
- Make time to reflect as part of annual cycle of planning, delivery and monitoring. Use the learnings to inform future delivery (adapt and improve some projects, abandon the failures and invest more resources in successes).
- Share the results and findings with others.

# 6. Conclusion

**Behaviour change initiatives, although still in their infancy, are increasingly becoming a mainstream public policy tool. The evidence from STS is that, with the use of behaviour change models and thorough planning of targeted initiatives, they can be an effective addition to public policy strategies.**

Behaviour change initiatives contrast with more traditional approaches taken by the public sector, which tend to be less popular because they are seen as coercing people to change a behaviour, for example through regulation, financial disincentives or threats. Also, the public seem to be increasingly mistrustful of public sector intrusion into private lives, with notable examples such as 'spies in bins' to monitor and penalise households that do not recycle their waste. Consequently, behaviour change programmes, such as STS, offer a less intrusive and more acceptable approach to achieving change across a number of policy agendas.

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