



TravelSmart Lowestoft

Final Report on the Individualised Travel Marketing
Project in Lowestoft (2008-2009)

**Report for Suffolk County Council and Waveney
District Council**

October 2010

EXECUTIVE SUMMARY

The TravelSmart® Lowestoft Individualised Travel Marketing (ITM) project was successful in increasing the use of sustainable and active travel modes, leading to significant reductions in car use. The project was conducted in 2008 and 2009 with a target population of 25,000 households.

The project achieved substantial increases in walking, cycling and use of public transport, leading to a relative reduction in car-as-driver trips of 13% and in car distance travelled for day-to-day trips of 12% (a net saving of 27.7 million car km per year against baseline levels). This level of behaviour change is in line with other UK TravelSmart projects.

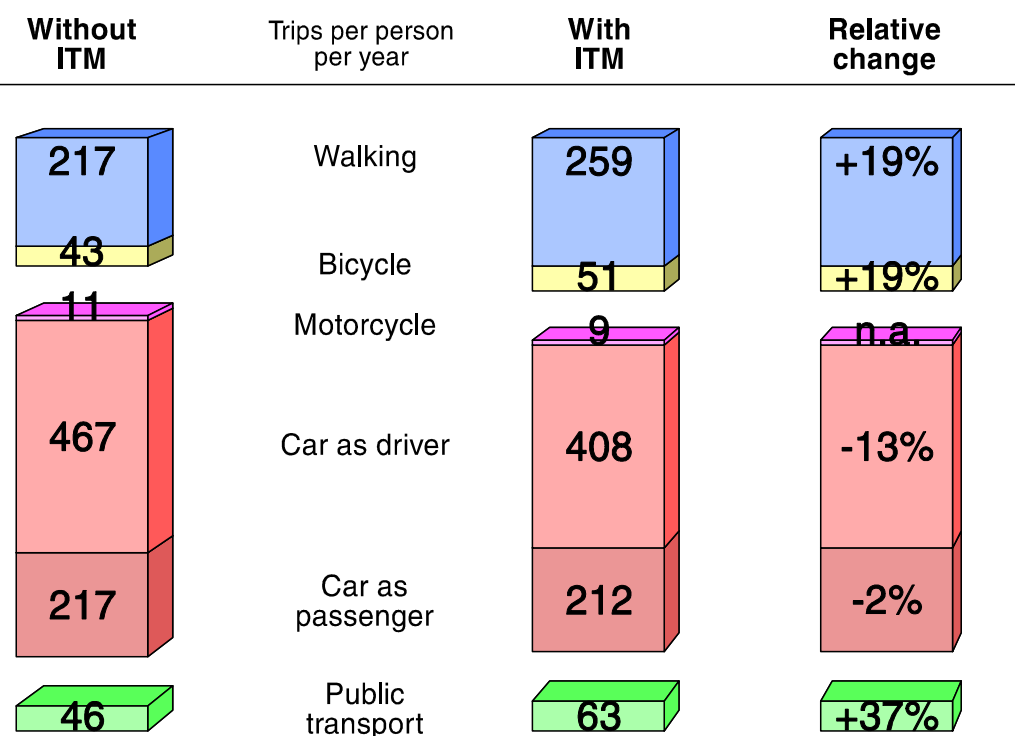
The shift from car travel to walking, cycling and public transport also resulted in a 16% relative increase in average daily exposure to physically active forms of travel.

Changes in travel behaviour were measured by detailed surveys conducted before and after the ITM project across the entire target population, with a separate control group in Great Yarmouth.

TravelSmart Lowestoft was managed by a working group consisting of Sustrans, Socialdata, Suffolk County Council (SCC) and Waveney District Council (WDC). The ITM project and evaluation activities were designed and implemented by Sustrans and Socialdata, with funding from the Big Lottery Fund's Well-being Programme, SCC and WDC. In addition, in-kind contributions were provided by SCC and WDC towards the development and supply of marketing materials and in staff time to support the project. Public transport test tickets were provided by First.

Changes in travel behaviour, measured in trips per person per year, are summarised in the figure below. This modal shift was achieved with no impact on daily mobility among the target population, and with only a very small increase in average daily travel time. The surveys also showed that modal shift occurred throughout the day, suggesting that TravelSmart contributed to reducing traffic and increasing active travel during both peak and off-peak periods.

Changes in trips by main mode (trips per person per year)



The first phase of the ITM project involved making contact with the target population of 25,000 households in Lowestoft. Eighty-two percent of these households responded to doorstep or telephone contact and were segmented into groups according to their current travel patterns and willingness to participate in the TravelSmart project. Of these contacted

households, 67% were interested in receiving personalised information and advice on sustainable and active travel modes.

In total, TravelSmart information packs containing 123,472 items of information, rewards and incentives were delivered to a total of 12,745 households in the target area. The most popular individual items were the new local travel maps (specifically developed for the TravelSmart project), followed by the Discount Card and stop-specific bus timetables.

Households were also able to request TravelSmart further services in the form of home advice sessions and incentives to encourage greater use of sustainable and active travel modes (including a one-month free test ticket to try out local public transport services). A total of 89 home visits were conducted by trained advisors on walking, cycling, or public transport (the latter by a representative of First).

TRAVELSMART LOWESTOFT
Final Report on the Individualised Travel Marketing Project in 2008-2009

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1 INTRODUCTION

1.1 This report

This report reviews the implementation and outcomes of the TravelSmart Lowestoft Individualised Travel Marketing (ITM) project conducted in 2008 and 2009. The project aimed to reduce levels of car use and encourage more environmentally-friendly forms of travel by promoting walking, cycling and use of public transport.

The report is intended primarily for Suffolk County Council (SCC) and Waveney District Council (WDC). However rights to the use of this report and data contained herein will be shared by the client group, Sustrans and Socialdata for the purposes of further developing TravelSmart in the UK.

1.2 Report structure

Although the report should be taken as a whole, each main section is designed to provide readers with a stand-alone account of the project background, methodology or outcomes, as follows:

- Section 2 provides general background to TravelSmart, sets out the key elements of the ITM methodology and reviews the local context for the TravelSmart Lowestoft project including its specific objectives, timetable and project management;
- Section 3 covers the work done by all project partners to prepare for the ITM project;
- Section 4 reviews the implementation of the project and provides a detailed account of responses at each stage;
- Section 5 reviews the methodology of the evaluation surveys and reports the behavioural changes achieved by the TravelSmart project;
- Section 6 presents key conclusions based on the project outcomes and compares the results of this project with those of other TravelSmart projects which have taken place in the UK.

2 PROJECT DESCRIPTION

2.1 Background

TravelSmart Lowestoft was funded by the Big Lottery Fund's Well-being Programme, SCC and WDC, and managed by Sustrans and Socialdata. TravelSmart Lowestoft was developed in close co-operation with SCC and WDC to ensure that it complemented other initiatives in the town.

TravelSmart Lowestoft was part of a portfolio of 50 projects being delivered by a consortium of walking, cycling and health organisations, led by Sustrans. This 'Travel Actively' consortium aims to provide people with the practical support they need to walk and cycle as part of their everyday lives, improving their mental and physical wellbeing. Three new TravelSmart ITM projects were commissioned through this consortium, each targeting 25,000 households (in Lowestoft, Exeter and Watford).

In order to measure the outcomes of TravelSmart Lowestoft, part of the funding was used by Socialdata and Sustrans to conduct a programme of travel behaviour research.

2.2 Aims and objectives

The aim of TravelSmart Lowestoft was:

- To reduce levels of car use among the target population by promoting walking, cycling and use of public transport.

The specific objectives were:

- To develop a package of information, incentives and other services to promote walking, cycling and public transport;
- To offer this package of information, incentives and other services to a target population of 25,000 households in Lowestoft and to fulfil all requests using the TravelSmart ITM technique (see below); and
- To evaluate the effects of this intervention against a range of performance indicators relating mainly to personal travel behaviour.

2.3 The TravelSmart Individualised Travel Marketing process

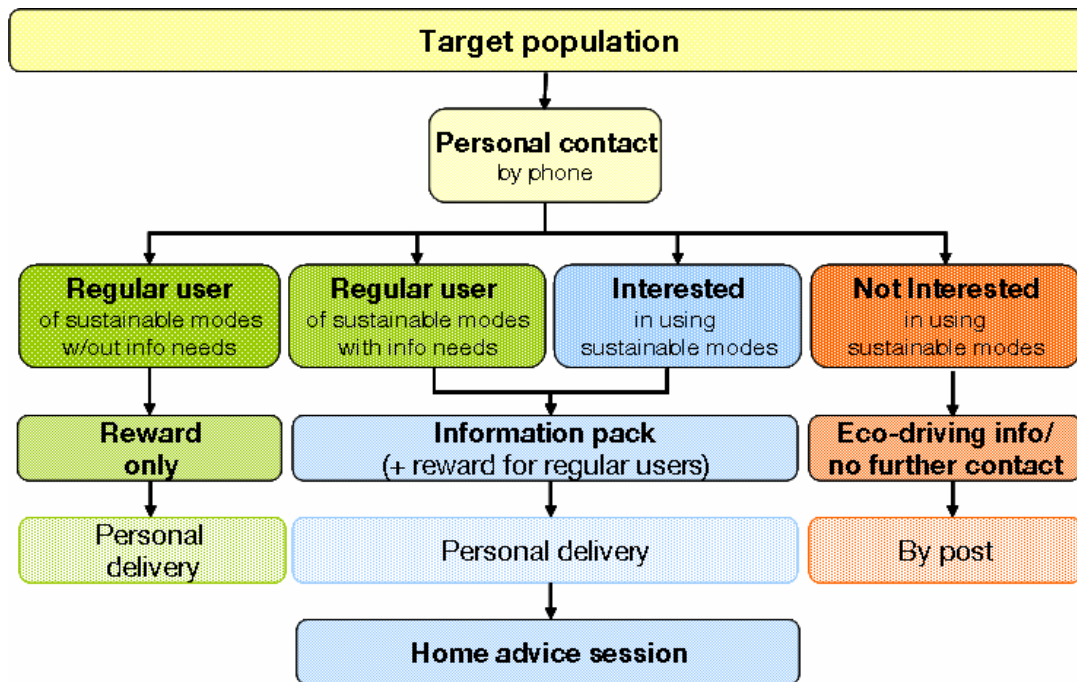
The TravelSmart ITM process has been developed and proven over many years as a highly successful tool for changing travel behaviour. Pioneered by Socialdata during the late 1980s, the technique has since been applied in more than 250 projects targeting a total of more than three million people worldwide. In the UK, the TravelSmart programme delivered by Sustrans and Socialdata has worked with more than 250,000 households to offer personalised travel information and support.

The ITM process was developed as a result of detailed research by Socialdata showing that poor information and lack of motivation were important barriers to walking, cycling and public transport use as alternatives to car travel. It is now widely recognised that while good infrastructure is needed to provide better alternatives to the car, the full potential for modal shift towards more sustainable travel cannot be realised unless people are well-informed about the options and motivated to use them.

The TravelSmart ITM process, as illustrated in Figure 2.1, involves three key stages each based on personal contact with the households in the target area. The process involves dialogue which motivates people to consider and review their travel behaviour in the context of their lifestyles. People who are interested in changing are supported and encouraged, but the choice is always left to the individual. This process enables people to make voluntary individual changes which add up to make a substantial difference to community-wide travel patterns.

The same Individualised Marketing technique has been successfully applied by Socialdata in Australia to promote domestic water efficiency. Other TravelSmart projects have included the use of health-related marketing materials and promoted other forms of physical activity alongside sustainable travel.

Figure 2.1 Individualised Travel Marketing process



2.4 Target area and population

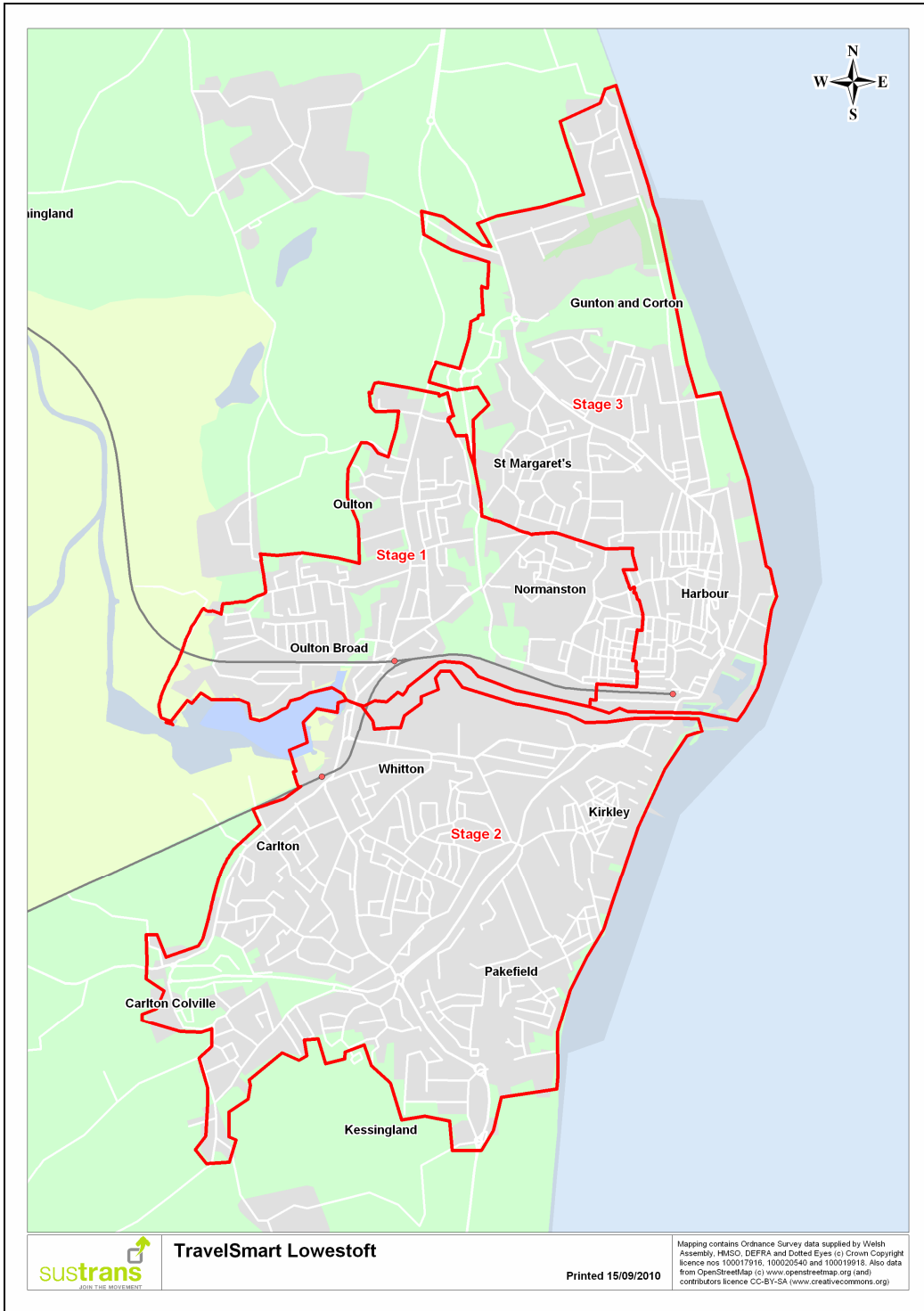
The target area for TravelSmart Lowestoft covered the whole town. The boundaries of the target area are shown in Figure 2.2, below.

This area was selected for a number of reasons:

- Good existing bus links linking the town centre and residential areas;
- An established network of walking and cycling routes;
- Proximity to the town centre and therefore access to its bus and rail stations; and
- Local facilities and amenities reducing the need to travel into the town.

The target population was drawn from this area at random using a commercially available address database. This process provided the total target population of 25,000 households.

Figure 2.2 Map of the TravelSmart Lowestoft target area



2.5 Project management

TravelSmart Lowestoft was co-ordinated by a working group which consisted of Sustrans, Socialdata, SCC and WDC. Meeting around four times per year over the course of the project, this group was responsible for finalising the overall project design, developing the marketing package and reviewing progress with fieldwork. Further inputs from SCC and WDC, in particular to the development of the marketing package, were sought as required.

Sustrans, with support from Socialdata, was responsible for day-to-day project management and reporting, as well as development of the marketing package. Sustrans also managed the local ITM fieldwork, including delivery of information packs and co-ordination of home visits. Implementation of the travel surveys, preparation of databases, ITM telephone contact and mailing operations were managed by Socialdata.

SCC and WDC supplied local travel information materials on public transport, walking and cycling. Local bus operator, First, supplied a number of bus service timetables and test tickets to encourage public transport use. The project also received support from a number of other local partners including: Norfolk County Council (NCC), National Express, National Rail, Ramblers, Broads Authority, Suffolk Tourism Partnership, RSPB, Belle Coaches and East Suffolk Lines.

2.6 Timetable

The project was delivered according to the following timetable:

July – September 2007	Project inception
January – March 2008	Travel behaviour survey (before)
February – August 2008	Preparation of ITM project
August 2008 – December 2009	Implementation of ITM project
January – March 2010	Travel behaviour survey (after)
October 2010	Final reporting

PREPARATIONS FOR THE TRAVELSMART PROJECT

3.1 Introduction

TravelSmart Lowestoft offered households a wide range of high-quality information, advice and support on local options for using sustainable travel modes (walking, cycling and public transport).

With support from SCC, WDC and other local partners, Sustrans coordinated the assembly of a marketing package consisting of printed information materials, incentives and rewards, and personal advice sessions (home visits).

In addition to the marketing package offered to households through doorstep or telephone contact, Sustrans worked with Free Rein, a web development company, to produce a website to support TravelSmart Lowestoft. The site was live during and after Stages 2 and 3 of the ITM project.

The site provides links to downloadable maps, guides and so on. After completion of ITM fieldwork it was handed over to SCC for maintenance as a local sustainable travel resource. At the point of handover, the site had received 1,327 unique visitors in 2009 and 790 in 2010. The number of registered users, however, was only 82.

3.2 Information materials

A range of information materials was assembled on local options for walking, cycling and public transport. The principal sources of these materials were SCC, WDC, Sustrans and the local public transport operators.

A checklist of available materials was developed and refined according to the following broad criteria:

- Relevance to local travel needs of households in the target area;
- Consistency with the overall aims of TravelSmart Lowestoft; and
- Availability in the quantities required and within project timescale.

A complete list of all information materials offered during TravelSmart Lowestoft is given in Table 3.1.

All materials selected for use in the project were listed on a TravelSmart Lowestoft order form (see Annex A). The form included the offer of a small incentive (see following section) to encourage households to respond quickly.

Table 3.1 Information materials assembled for the ITM project

Category / item	Publisher/provider
<p>Local Travel Map</p> <p>Lowestoft on foot, by bike, by bus (updated for each stage)</p>	<p>Sustrans</p>
<p>Public Transport</p> <p>Stop-specific bus timetables</p> <p>Free guide to Explore Suffolk</p> <p>Lowestoft & surrounding area</p> <p>Great Yarmouth & the Lowestoft area</p> <p>Bungay & Beccles</p> <p>Halesworth and Southwold</p> <p>Regional bus routes: 496 & 497</p> <p>National Express Discounted Bus Travel:</p> <p>Families</p> <p>Young Persons</p> <p>Senior</p> <p>Catch the bus or take the train (Stage 1 only)</p> <p>Bus service information straight to your phone</p> <p>Explore card</p> <p>Accessible and community transport</p> <p>National free travel bus pass information and application form</p> <p>PLUSBUS</p>	<p>SCC</p> <p>SCC</p> <p>SCC</p> <p>First</p> <p>SCC</p> <p>SCC</p> <p>National Express</p> <p>National Express</p> <p>National Express</p> <p>National Express</p> <p>SCC</p> <p>SCC</p> <p>SCC</p> <p>SCC</p> <p>SCC/WDC</p> <p>National Rail</p>

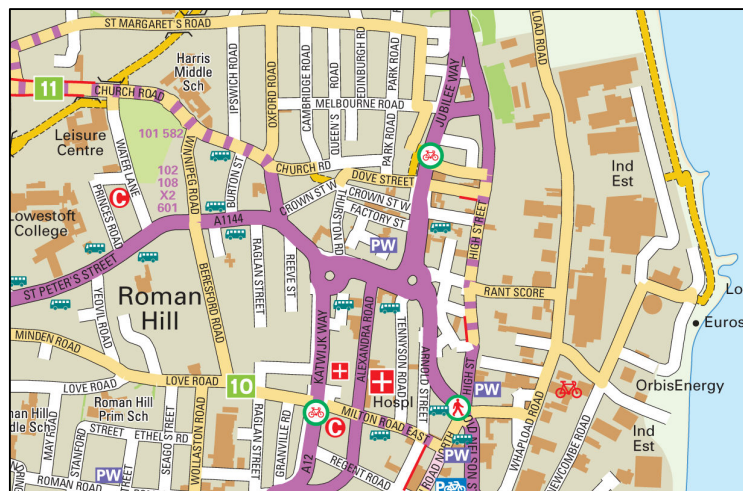
<p><i>Local train timetables:</i> The East Suffolk Line</p> <p>The Wherry Lines (Explore the Yare Valley Sunday trains – packed with Wherry Lines)</p> <p><i>Regional and national train timetables:</i> Lowestoft to London Liverpool Street</p> <p>Intercity timetable</p> <p><i>Railcards:</i> Family Young Persons Senior Disabled Persons Norwich Shopper Service (Stages 2 and 3 only) Personal journey plan</p>	<p>East Suffolk Lines Norfolk County Council (NCC)/RSPB</p> <p>National Express One</p> <p>National Rail National Rail National Rail National Rail Belle Coaches Traveline</p>
<p>Walking Angles Way Wherryman’s Way (Stages 1 and 2 only) Suffolk Wildlife Trust Waveney Ramblers Walk More – Feel the Difference (Stage 1 only) Walk in to Work out (Stage 1 only) Get Walking, Keep Walking Why Walk?</p>	<p>NCC/SCC NCC SCC Ramblers Sustrans Sustrans Ramblers Sustrans</p>
<p>Cycling Lowestoft cycle map Great Yarmouth cycling map Norwich cycling map Suffolk young cyclists training course Why cycle? Get cycling Cycling with children</p>	<p>SCC/WDC NCC NCC SCC Sustrans Sustrans Sustrans</p>

<p>Cycling by train Bike and canoe hire in the Broads Cycling and walking – the healthy options</p>	<p>National Rail Broads Authority SCC</p>
<p>Discount Card TravelSmart Lowestoft Discount Card</p>	<p>Sustrans</p>
<p>Other Information Car Share Safe Routes to Schools Broads Mini Guide (Stage 1 only)</p>	<p>SCC Sustrans Broads Authority</p>
<p>Days Out in Suffolk (Stage 1 only) Great Days Out (Stages 2 and 3 only) Cultural Directory 2007/08 and 2009/10 Climate Change Tracks (Stage 3 only)</p>	<p>Suffolk Tourism Partnership Choose Suffolk WDC SCC Sustrans</p>
<p>Incentives Key ring (with five years membership of a lost key recovery service)</p>	<p>Sustrans</p>

3.2.1 Local travel map

In partnership with SCC and WDC, Sustrans produced a local travel map for Lowestoft which was updated before each stage. The map showed integrated information on cycling, walking and public transport in and around the target area (see Figure 3.1).

Figure 3.1 Lowestoft (Stage 3) Local travel map (cover and extract)



(Licence No: 100015871, 2009)

3.2.2 Personal journey plan

The offer of a personal journey plan, downloaded from the Traveline journey planner, was included on the order form.

The back page of the order form was designed to capture the same information about the user's requirements as the Traveline internet journey planner.

3.2.3 Discount Card

When a household pledged to use environmentally-friendly travel options more often, they qualified for a TravelSmart Lowestoft Discount Card. The Discount Card enabled households to take advantage of discounts at cycle and outdoor shops in Lowestoft. These discounts were arranged by Sustrans with local retailers and included savings on spares, accessories, clothing and equipment hire.

The Discount Card also included a 20% discount on all orders placed by phone with the Sustrans shop.

3.3 Incentives and gifts

Sustrans sourced a range of incentives and gifts to support the ITM project:

- TravelSmart Lowestoft-branded calico shopping bags and folders in which to package materials and facilitate deliveries;
- TravelSmart Lowestoft-branded key rings to encourage a quick response to the order form; and
- TravelSmart Lowestoft-branded pens, notepads and fluorescent armbands, and an unbranded puncture repair kit, to reward regular walkers, cyclists and public transport users and reinforce their sustainable travel behaviour.

Incentives offered as part of further services are discussed separately in the following section.

3.4 Further Services

A package of 'further services' was developed and offered on the TravelSmart Lowestoft order form as a means of providing further support

and encouragement to households with a particular interest in making greater use of sustainable travel modes. These services were provided in the form of a home advice session and were geared towards people currently making little or no use of the travel modes concerned. Households could receive a home visit from a local advisor on cycling, walking and/or public transport.

The TravelSmart order form¹ carried the following text to allow households to sign up for further services.

“Your household may be eligible for a personal advice session with one of our local experts on public transport, cycling and/or walking in your area. Select one (or more) of the options below and we’ll be in touch to arrange a home visit to suit your needs. You’ll be surprised at the opportunities available!

- *Choose the bus* – get the most out of public transport with the help of one of our specialist advisors, including tips on all the best ticket deals and a chance to try out local services.
- *Choose cycling* – get going on two wheels with the help of one of our cycling consultants, including advice on the best local routes, a bike ‘health check’ and the limited offer of a free cycle trip computer.
- *Choose walking* – put your best foot forward with the help of one of our walking experts, including advice on the best local routes, health information and the limited offer of a free pedometer.”

For *Choose the bus*, local bus operator, First, agreed to offer a one-month free test ticket to try out its services in Lowestoft.

For *Choose cycling*, a local Sustrans cycling advisor was able to provide households with personal advice, a bike health check and the offer (and set-up) of a free cycle trip computer.

¹ Only households that were not regular bus users were sent this version of the order form.

For *Choose walking*, households could receive personal advice and route planning from a local Sustrans walking advisor, as well as the offer (and set-up) of a free pedometer to help measure progress.

3.5 Local field offices

Sustrans managed the door-to-door canvassing and packing and delivery of personalised information packs from temporary field offices set up for each stage of the ITM project. A team of local field office staff was recruited and trained for each stage, and led by a field office manager. The team included walking and cycling home visit advisors using the field office as a base. The following premises were used in each stage:

Stages 1 and 2 International Boatbuilding Training College, Sea Lake Road, Oulton Broad

Stage 3 The Sun Rise Inn, Corton Road, Lowestoft

3.6 Call centre

Socialdata managed the telephone contact process, together with the mailing of all announcement letters, order forms and gift lists, from its office in Bristol. A team of dedicated staff carried out telephone contact and motivation throughout the project. Other specialist staff were called upon to book home visits and carry out a thorough process of quality control.

4 IMPLEMENTATION OF TRAVELSMART LOWESTOFT

4.1 Introduction

This section describes the implementation of the TravelSmart Lowestoft in its three main phases: ‘Contact and Segmentation’; ‘Service (Confirmation, Motivation and Information)’; and ‘Convincing’.

4.2 Contact and Segmentation Phase

The aim of the Contact and Segmentation Phase was to make direct contact with as many private residential households as possible in the target population, and to segment them into groups for the later phases of the ITM process.

All households were sent an official announcement letter² explaining the purpose of the project. A total of 20,480 households (82% of the initial 25,000 households) were successfully contacted. Based on their current use of sustainable travel modes and level of interest in receiving information on walking, cycling and/or public transport, they were segmented into Interested, Regular User and Not Interested (‘I’, ‘R’ and ‘N’) Groups (see Table 4.1).

² Signed by Councillor Guy McGregor, Portfolio holder for Roads and Transport, Suffolk County Council and Councillor Wendy Mawer, Waveney District Council.

Table 4.1 Contact and Segmentation Phase

	Households
Total Households	25,000
Contacted / segmented Households (total)	20,480
<i>Contacted / segmented Households (%)</i>	82%

Comprising:

Group 'I' households interested in receiving information (not including regular public transport users, but including regular walkers and cyclists)	10,001	49%
Group 'R with' households with at least one member regularly using environmentally-friendly modes (including public transport), and with an information wish	3,783	18%
Group 'R without' households with at least one member regularly using environmentally-friendly modes, (public transport, walking or cycling), but which did not require further information	1,611	8%
Group 'N' households who did not wish to participate, had no interest or were unable to use environmentally-friendly modes	5,085	25%

4.3 Service Phase: Confirmation, Motivation and Information

The aim of this phase was to offer information and support to households contacted during the ITM process according to their specific needs.

An order form of information on walking, cycling and public transport was sent to households in Groups 'I' and 'R with'. An offer of a small incentive (a key ring) was included on the order form to encourage households to return their requests promptly.

In the Confirmation Phase, all households in Group 'R' (with or without information needs) and those in Group 'I' that regularly walked or cycled

were offered a TravelSmart Lowestoft-branded gift as a way of reinforcing (or ‘confirming’) their behaviour. This offer was made on a separate mail-back order form.

The outcomes of this Confirmation Phase are detailed in Tables 4.2 and 4.3. These show that a total of 8,528 rewards were delivered, 3,988 to households in Group ‘I’³, 3,370 to Group ‘R with’ and 1,170 to Group ‘R without’. Of the total rewards delivered, 1,480 were puncture repair kits, 4,173 were pens and notepads and 2,875 were fluorescent armbands.

Table 4.2 Confirmation Phase (Groups ‘I’ and ‘R with’)

	I	R with	Total
Total Households	10,001	3,783	13,784
Households with wish for reward	3,988	3,370	7,358
Puncture Repair Kit	1,133	173	1,306
Recycled Notepad and Pen	1,727	1,866	3,593
Fluorescent Arm Band	1,128	1,331	2,459
Households with no wish for reward	5,352	297	5,649
Total Response	9,340	3,667	13,007
Response Rate	93%	97%	94%

³ Group ‘I’ includes households with regular use of walking and/or cycling which are therefore eligible for a reward.

Table 4.3 Confirmation Phase (Group ‘R without’)

	R without
Total Households	1,611
Households with wish for reward	1,170
Puncture Repair Kit	174
Recycled Notepad and Pen	580
Fluorescent Arm Band	416
Households with no wish for reward	6
Total Response	1,176
Response Rate	73%

During the Motivation and Information Phase, households successfully segmented into Groups ‘I’ and ‘R with’ received order forms by post. Motivation phone calls were made to households not returning their forms within a specific time period. As shown in Table 4.4 (below) a total of 13,784 households were included in the Motivation and Information Phase. Of these 94% (13,007 households) responded by completing the order form and a total of 11,575 requested information.

Table 4.4 Motivation and Information Phase

	I	R with	Total
Total Households	10,001	3,783	13,784
Households with information wish	8,106	3,469	11,575
Households with no wish for information	1,234	198	1,432
Total Respondents	9,340	3,667	13,007
Response Rate	93%	97%	94%

Table 4.5, below, reviews the quantities of information materials and incentives delivered during the TravelSmart Lowestoft project. All items were included in personalised packs on the basis of requests made via the order form. These packs, together with the rewards for regular users, were delivered almost entirely by bike and on foot, with a small proportion by post.

The local travel maps were the most popular items of information requested across all stages, followed by the Discount Card and stop-specific bus timetables. The most popular item of walking information was the *Angles Way* leaflet and the most popular item of cycling information was the Lowestoft Cycle Map.

In addition to the main Service phase, a pack of information materials on responsible driving was sent to 1,548 households in Group ‘N’. This pack consisted of the stage-specific local travel map; *TransportEnergy* top tips card; *Speed: Know your limits* leaflet; *Transport Direct* card; *Car Share* leaflet; *Get on Board – catch the bus or take the train* leaflet; *C Red Suffolk Carbon Reduction* leaflet; *Norwich Park and Ride* leaflet; (in Stage 1 only) the *London Road, Martlesham Park and Ride* leaflet; and (in Stages 2 and 3) the *Ipswich Park and Ride* leaflet. The remaining households in Group ‘N’ were not sent this information because their responses to the Contact phase suggested that this service would be inappropriate (e.g. households with strong data

confidentiality concerns; very aged and/or infirm occupants; or long-term absence).

Table 4.5 Information materials and incentives delivered

	I	R with	Total
Total items	82,718	32,249	114,967
Items per participating household⁴	8.3	8.5	8.3
Items per pack⁵	10.2	9.3	9.9
General Materials: Local Travel Maps	6,211	2,661	8,872
Public Transport Information (Total)	34,221	16,009	50,230
Cycling Information (Total)	11,284	2,445	13,729
Walking Information (Total)	12,324	3,698	16,022
TravelSmart Discount Card	4,413	1,598	6,011
Other Information (Total)	10,918	4,201	15,119
Incentives (Key Club Membership Key Ring)	3,347	1,637	4,984

4.4 Convincing Phase

4.4.1 Overview

The Convincing Phase aimed to further encourage people to make sustainable travel choices by offering additional personal advice and support. This support was included on the order form under the heading of *TravelSmart Plus*.

A total of 438 households expressed an interest in *TravelSmart Plus* (see Table 4.6). These households were telephoned to explain the offer of a home visit conducted by an advisor on walking, cycling and/or public transport⁶.

⁴ Based on all households in Groups 'I' and 'R with' included in the motivation and information phase.

⁵ Based on all households in Groups 'I' and 'R with' receiving a pack.

⁶ Households already using public transport regularly were not offered public transport services.

As a result, 89 households booked a total of 116 home visits. Of these, 89 were successfully conducted.

Table 4.6 Further service requests and home visits

	I	R with	Total
Total Households	10,001	3,783	13,784
Households interested in further services	313	125	438
Number of potential home visits by type:			
<i>Public Transport</i>	300	-	300
<i>Cycling</i>	170	98	268
<i>Walking</i>	165	115	280
Households booking one or more home visits	60	29	89
Number of booked home visits:			
<i>Public Transport</i>	25	-	25
<i>Cycling</i>	35	20	55
<i>Walking</i>	22	14	36
Number of conducted home visits:			
<i>Public Transport</i>	18	-	18
<i>Cycling</i>	26	16	42
<i>Walking</i>	18	11	29

4.4.2 Public transport further services

Households which wanted to use public transport more often and which were not already using the bus regularly were offered a home visit conducted by a trained representative of First, together with a one-month free test ticket to try out First's Lowestoft bus services.

Households that expressed an interest were contacted by phone to schedule an appointment for a home visit. In total, 25 households booked an appointment, of which 18 took place⁷.

Following the home visits a record form was completed by the advisor. Most of the visits were rated as successful or very successful.

4.4.3 Cycling further services

Households interested in further support on cycling were offered a home visit including personal advice, a bike health check and the offer of a free cycle trip computer.

Following phone contact, 55 cycling home visits were booked, and 42 were subsequently completed⁷.

Advisors found that the most frequently stated motivations for wanting to cycle more were exercise, family/social reasons and convenience. Other reasons included environmental and economic concerns. Barriers to cycling included weather, poorly maintained bikes, not owning a bike, lack of bike storage, lack of confidence, and lack of knowledge of local routes.

Among the home visits conducted, 21 included a cycle health check to identify any maintenance issues in need of attention, and 26 households also took advantage of the free cycle trip computer. Visits typically lasted 30 to 60 minutes. Nearly all of the visits were rated as either successful or very successful.

⁷ A small minority of visits were either cancelled before the visit, cancelled at the door or the household was not in and the appointment could not subsequently be re-booked.

4.4.4 Walking further services

Households interested in further support on walking were offered a home visit including personal advice and route planning, as well as the offer of a free pedometer to help measure their progress.

Following phone contact, 36 walking home visits were booked, and 29 were subsequently completed⁸.

During the home visits, the most frequently stated reason for wanting to walk more was for physical exercise. Other motivations included family/social reasons, economic and environmental concerns. Among the reported barriers to walking were lack of knowledge about local routes, personal health, weather and personal safety concerns.

Visits typically lasted 30 to 60 minutes. The majority of visits were rated as either successful or very successful by the advisors.

4.5 Summary

In summary, during TravelSmart Lowestoft, deliveries containing 123,472 items of travel information, incentives and rewards were made to a total of 12,745 households. Each delivery was packed in a project-branded folder and calico bag before being hand-delivered on foot or by bicycle wherever possible. A total of 89 home visits were conducted.

⁸ A small minority of visits were either cancelled before the visit, cancelled at the door or the household was not in and the appointment could not subsequently be re-booked.

5 EVALUATION

5.1 Introduction

TravelSmart Lowestoft was evaluated against a range of performance indicators focusing mainly on changes in personal travel behaviour.

In common with most other TravelSmart projects, the key component of monitoring and evaluation was a set of detailed travel behaviour surveys, conducted by Socialdata before and after the ITM project.

As well as results from these surveys, a number of additional outputs have been provided to SCC and WDC. These include:

- Detailed Field Reports summarising the implementation of each stage of the ITM project and responses from the target population (amalgamated in Section 4 of this report).
- Quote of the Day Booklets, containing comments collected from households during the ITM project.
- Quality control checks, where a sample of households receiving information from the ITM project were telephoned to check safe receipt of their information pack, whether all items had been included, and whether they were satisfied with the contents.

The remainder of section 5 focuses on the objectives, methodology and analysis of the travel behaviour surveys.

5.2 Travel behaviour surveys

5.2.1 Objectives

The key objective of these surveys was to provide a robust measure of changes in travel behaviour associated with TravelSmart Lowestoft. In particular, the surveys were designed to evaluate the effects of the ITM project on mode choice, car use and average daily participation in walking and cycling as modes of travel.

5.2.2 Method and implementation

The New KONTIV[®] survey method has been developed over many years by Socialdata and applied successfully in travel behaviour research and the evaluation of ITM programmes in more than 15 countries, including most previous UK TravelSmart projects.

For each household, the survey consists of a household questionnaire and an individual travel diary for each member, for a nominated day of the week. The survey sample includes households completing travel diaries for all seven days of the week. To ensure a high response rate a pre-paid return envelope is provided with the survey and in cases where surveys are not returned Socialdata provides further motivation by post and telephone.

The survey aims to collect information on all trips⁹ to all out-of-home destinations on a nominated travel day for each respondent. The customer focus of the questionnaire design and individualised approach in the introductory mailing and subsequent motivation ensures high response rates and reliable results.

Surveys were conducted before and after the ITM project to evaluate changes in key mobility indicators over the project period. The key elements of the survey design were as follows:

- Separate samples were drawn from the ITM target population and from nearby Great Yarmouth (as a control group). This allowed the analysis to take into account any external influences on travel behaviour across Lowestoft (e.g. changes in the weather including seasonal effects: major events affecting the highway network).
- All samples were drawn at random from residential households. To further ensure that results were representative of the whole ITM target population, the target group sample for the after survey included a proportional share of households which chose not to participate in the ITM project.

⁹ The subsequent analysis of day-to-day mobility excludes trips of more than 100km (a very small percentage of personal trips) to avoid skewing any distance-related indicators.

- Minimum sample sizes for both target and control groups (i.e. the number of complete survey responses) were designed to provide statistically significant results¹⁰. For the before survey, the required sample size was set at 1,200 persons net for the target group and 600 persons net for the control group. For the after survey, the required sizes were 1,000 persons net for the target group and 500 persons net for the control group.

The before survey was implemented by Socialdata with support from Sustrans during January to March 2008, and the after survey during January to March 2010. The procedure for each of the surveys was as follows:

- i) Mailing of an official announcement letter to all households in the gross sample;
- ii) Mailing of survey forms and official covering letter to all households in the gross sample;
- iii) Mailing of an official reminder letter to all households from which a response had not been received after one week;
- iv) Mailing of a second reminder letter (on Socialdata headed paper and signed by the Socialdata project manager) to non-responding households a further week later; and
- v) Reminder telephone calls to non-responding households each week to offer support in completing the forms and to motivate returns.

The sample sizes and response rates achieved in the before survey are summarised in Tables 5.1 and 5.2, below. Sample sizes and response rates for the after survey are detailed in Tables 5.3 and 5.4.

¹⁰ The statistical tests used in analysing the survey data are explained in Annex B.

Table 5.1 Survey sample sizes (persons) and response rates (%) – Before survey, target area (Lowestoft)

Contract requirements: 1,200 persons net

Period of implementation: January 21st to March 2nd 2008

	TOTAL	With Telephone	Without Telephone
Mail-out Gross	2,600	1,000	1,600
Sample loss ¹⁾	316	177	139
Adjusted gross sample	2,284	823	1461
Returns persons	1,365	605	760
Response rate in %	60%	74%	52%
(Contract persons)	1,200		

¹⁾ Sample loss: Moved away; deceased etc.

Table 5.2 Survey sample sizes (persons) and response rates (%) – Before survey, control area (Great Yarmouth)

Contract requirements: 600 persons net

Period of implementation: January 21st to March 2nd 2008

	TOTAL	With Telephone	Without Telephone
Mail-out Gross	1,350	450	900
Sample loss ¹⁾	183	65	118
Adjusted gross sample	1,167	385	782
Returns persons	673	274	399
Response rate in %	58%	71%	51%
(Contract persons)	600		

¹⁾ Sample loss: Moved away; deceased etc.

Table 5.3 Survey sample sizes (persons) and response rates (%) – After survey, target area (Lowestoft)

Contract requirements: 1,000 persons net

Period of implementation: January 25th to March 7th 2010

	TOTAL	With Telephone	Without Telephone
Mail-out Gross	2,100	900	1,200
Sample loss ¹⁾	236	94	142
Adjusted gross sample	1,864	806	1,058
Returns persons	1,120	580	540
Response rate in %	60%	72%	51%
(Contract persons)	1,000		

¹⁾ Sample loss: Moved away; deceased etc.

Table 5.4 Survey sample sizes (persons) and response rates (%) – After survey, control area (Great Yarmouth)

Contract requirements: 500 persons net

Period of implementation: January 25th to March 7th 2010

	TOTAL	With Telephone	Without Telephone
Mail-out Gross	1,100	500	600
Sample loss ¹⁾	253	102	151
Adjusted gross sample	847	398	449
Returns persons	505	283	222
Response rate in %	60%	71%	49%
(Contract persons)	500		

¹⁾ Sample loss: Moved away; deceased etc.

With 1,365 respondents in the before survey and 1,120 respondents in the after survey (for the target area), and 673 respondents in the before survey and 505 respondents in the after survey (for the control area), a larger sample was provided by Socialdata than in the initial design at no additional cost.

5.2.3 Analysis

The analysis of the before and after surveys was designed to show changes in key mobility indicators associated with the TravelSmart project. This involved a comparison of behavioural data from the target and control groups in the before and after surveys. A summary of this methodology, including the statistical procedures used to account for changes due to sampling factors or external influences, is shown in Annex B.

The basic measure used for this analysis was the average number of trips per person per year. This gives the best overall picture of personal travel behaviour, as opposed, for example, to average distances per person per year, the results for which would be skewed by the very small number of long trips.

The main indicators selected for the evaluation were as follows:

- Trips per person per year by main mode¹¹;
- Personal daily mobility (including trip rates, distances travelled and trip purposes);
- Time spent travelling per person per day by main mode, and total daily exposure to walking and cycling; and
- Car use measured by actual usage, number of trips, travel time, distance travelled and average occupancy per private car per day.

A series of other indicators are also used to show changes in mode choice by trip purpose, time of day, gender and age group.

For the purposes of this evaluation, a trip is defined as a one-way course of travel having a single main activity as its purpose. The number of trips per person per year was calculated on the standard formula that on average, a person will spend 341 days of the year at home. This takes into account the days that a person travels away, for example on holiday or business.

¹¹ The main mode of a trip is determined according to the following ranking: public transport; motorised private modes (car or motorbike); non-motorised modes (bicycle, walking).

The charts below use ‘Without ITM’ and ‘With ITM’ to represent the changes in the ITM target group before and after the implementation of the TravelSmart project, taking into account the effects of external influences measured in the control group (i.e. with control group changes subtracted).

It is important to note that the following results show the changes in travel behaviour that were achieved across the whole target population including those in the ‘N’ (‘Not Interested’) group and non-respondent households.

5.2.4 Changes in travel behaviour

Figure 5.1 shows the percentage of trips by main mode (i.e. ‘mode share’), at the time of the after survey (‘With ITM’) and the before survey (‘Without ITM’). This comparison takes into account changes measured in the control group in Great Yarmouth that was not involved in TravelSmart Lowestoft. The share of car-as-driver trips was reduced from 47% to 41%, with corresponding increases in walking, cycling and public transport mode share.

Figure 5.1 Changes in percentage of trips by main mode

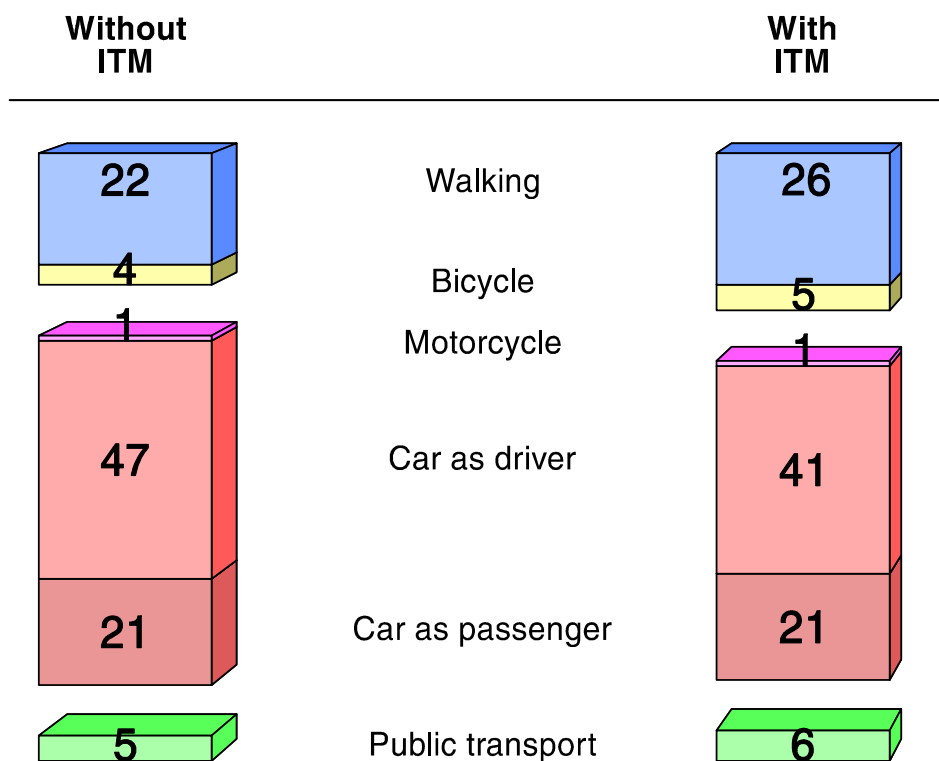
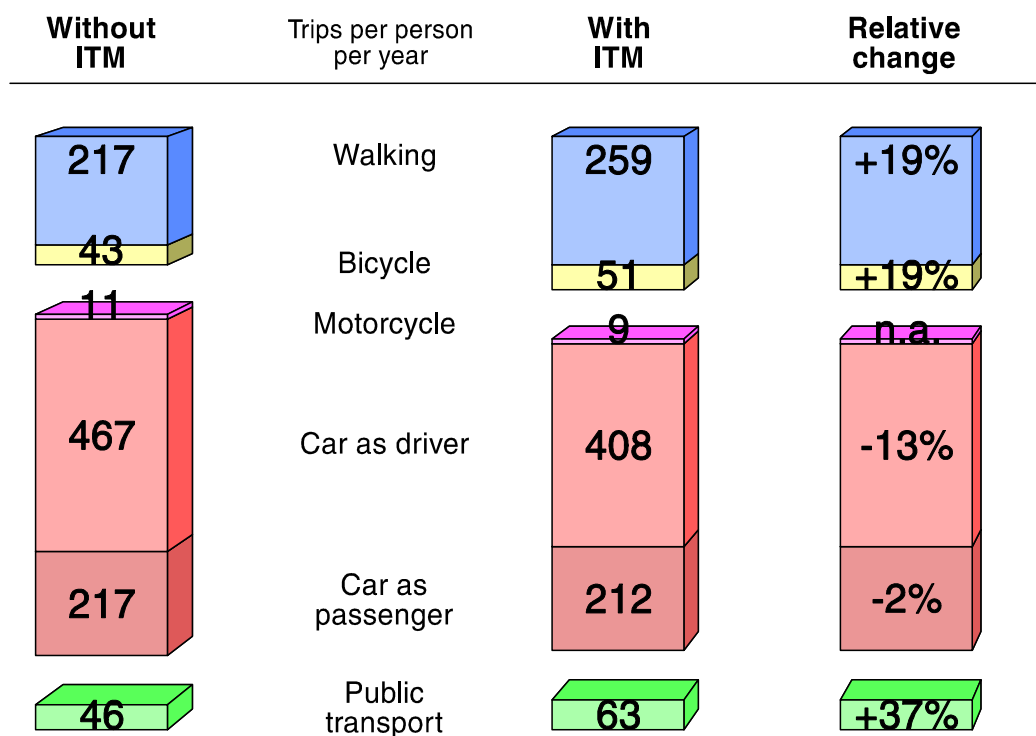


Figure 5.2 expresses changes in mode choice in terms of trips per person per year and shows the relative changes associated with the TravelSmart project. It shows that the 13% relative reduction in car-as-driver trips was accompanied by a total average increase of 67 trips per person per year in trips by other modes (i.e. an average across the target population of just over one trip per person each week). There were also very small decreases in average trips per person per year by motorcycle and by car as passenger.

Among the sustainable travel modes, walking saw the biggest gains in absolute terms with an additional 42 trips per person per year being made on foot, a relative increase of 19%. Public transport gained an additional 17 trips per person per year (a relative increase of 37%), while cycling saw a 19% relative growth, from 43 to 51 trips per person per year.

Figure 5.2 Changes in trips by main mode (trips per person/year)



As shown in Figure 5.3, there was little change in personal daily mobility between the two surveys. This suggests that while TravelSmart Lowestoft influenced how people travel, it did not impact on the number of activities they undertook on a daily basis, their daily travel demand (measured by distances travelled), or number of trips, and had very little impact on total daily travel time.

Figure 5.3 Changes in personal mobility (per person/day)

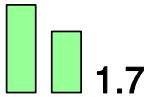
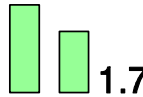


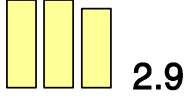
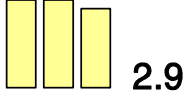


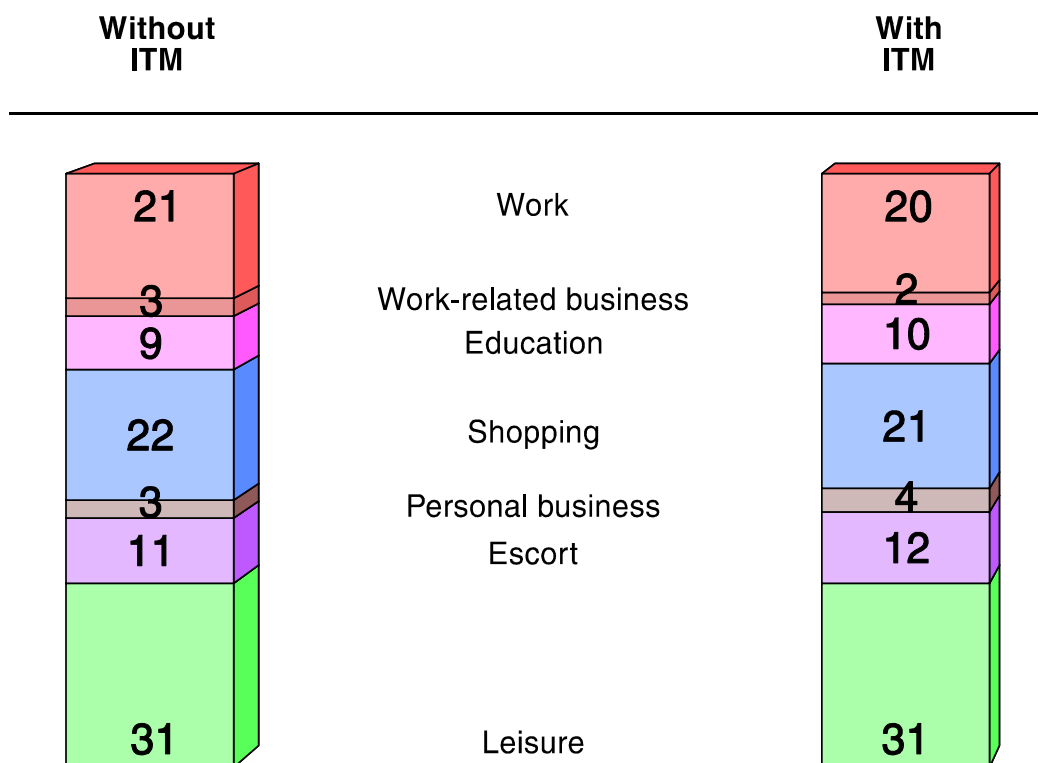
Without ITM	Per person/day	With ITM
	ACTIVITIES	
	TRAVEL TIME (min)	
	TRIPS	
	DISTANCE (km)	

Figure 5.4 provides an analysis of trips by purpose, with and without ITM. This shows that on the whole there was little change in the types of trips being undertaken by residents in the Lowestoft target population between the two surveys. The proportion of commuting trips decreased slightly to exactly a fifth of all trips, with leisure remaining the most common trip purpose, accounting for just under a third of all trips.

Figure 5.4 Changes in trip purpose (%)



The changes in car use for day-to-day trips shown in Figure 5.5 reflect the reduction in car-as-driver trips reported above. There were reductions in the proportion of cars used each day (from 76% to 72%), average trips per car per day (from 2.5 to 2.2), average duration of use per car per day (from 42 to 37 minutes), and average distance travelled per car per day (from 23.5 to 21.0 km). Average car occupancy remained stable at 1.5 people per trip.

Figure 5.5 Changes in car usage (per car/day)

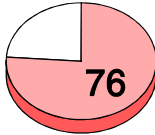
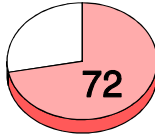
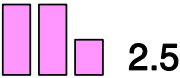
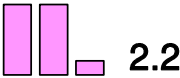




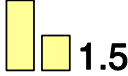
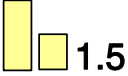
Without ITM	Per (private) car/day	With ITM
	USAGE (%)	
	TRIPS	
	DURATION (min)	
	DISTANCE (km)	
	OCCUPANCY (per trip)	

Figure 5.6 shows changes in car distances at the population level. The number of cars owned by households across Lowestoft fell slightly from 30,000 to 29,700 between the two surveys, and the distance travelled per car per day for day-to-day trips¹² fell from 23.5km to 21.0km, resulting in a net saving of 27.7 million car km per year, a relative reduction of 12%¹³.

Figure 5.6 Changes in car distances travelled

Without ITM		With ITM
30,000	(Private) Cars in total	29,700
23.5	Kilometres per car per day (everyday mobility)	21.0
240.4	Total kilometres per year (341 days)	212.7
	Reduction (kilometres per year)	-27.7 m
	Relative reduction	-12%

Using Defra’s standard CO₂ emissions factor¹⁴, this equates to annual emissions reductions of 5,617,560 kg (or 5,618 tonnes) CO₂ compared to pre-project levels. (This assumes that the average car is used on 341 days per year.)

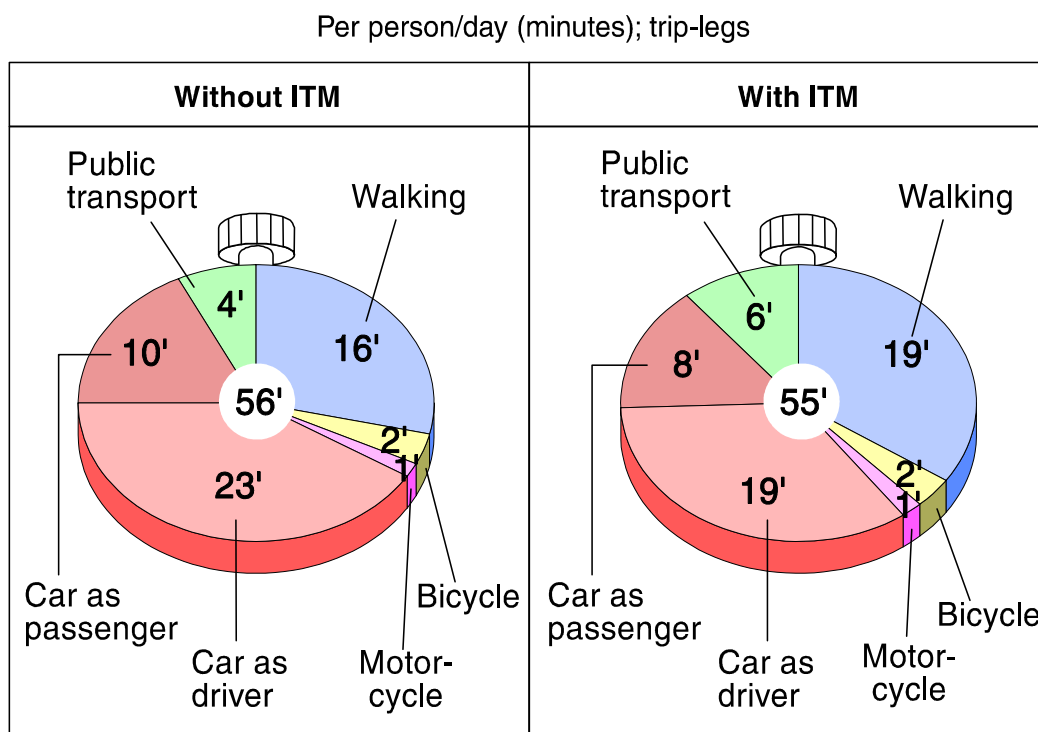
¹² As stated earlier, this analysis excludes the small proportion of trips over 100km.

¹³ The relative reduction in km per car per day was 11%. The overall reduction of 12% also includes the slightly reduced number of cars overall.

¹⁴ Based on a fleet average emissions factor of 202.8g CO₂ per vehicle km, from Defra’s (2009) *Guidelines to GHG Conversion Factors for Company Reporting*.

Figure 5.7 shows the total time spent travelling per person per day by mode, with and without ITM. This analysis includes all trip stages (e.g. walking to a bus stop or from a car park to the final destination). It shows an increase in the average time per person per day spent walking from 16 to 19 minutes. Time spent cycling remained the same at an average of two minutes per person per day.

Figure 5.7 Changes in travel time by mode



Over the course of a year, the effect of ITM would be to increase the total exposure to active travel from 104 to 121 hours per person (Figure 5.8). This 16% relative increase could make a substantial contribution to increasing overall levels of physical activity amongst the target population, especially for those whose baseline levels are particularly low.

Figure 5.8 Changes in total active travel time (per person/year in hours)

	Without ITM	With ITM	Change	Relative change
Hours per person/year	104	121	+17	+16%

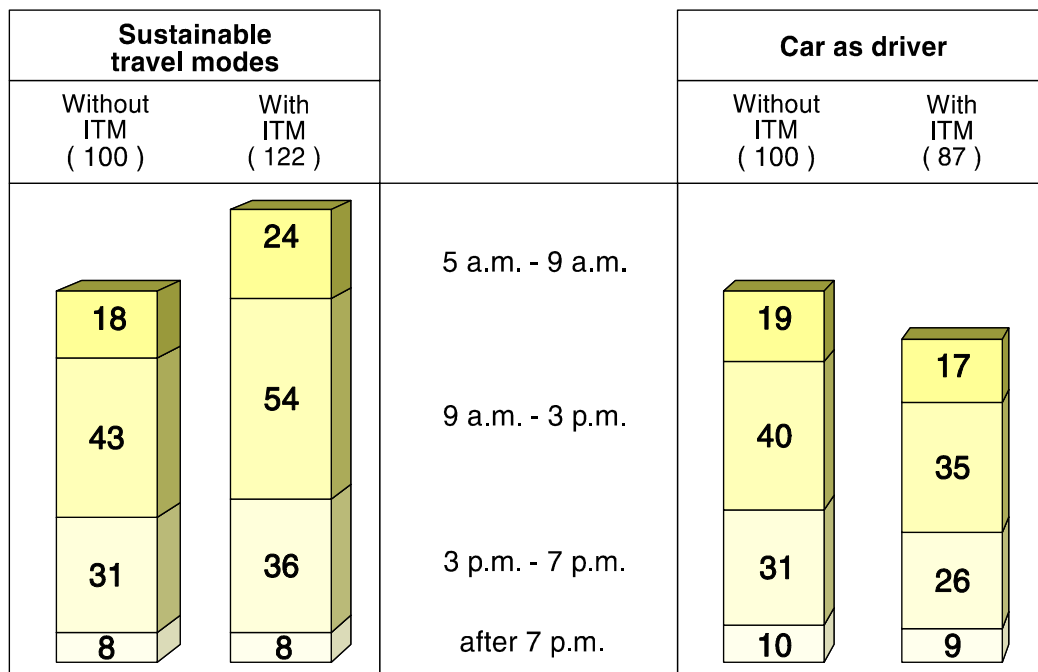
Walking, cycling and access / egress to public transport or car (parked)

The next three figures show how increases in use of sustainable travel modes and reductions in car-as-driver trips associated with TravelSmart Lowestoft were distributed by time of day, age and gender, and by trip purpose. For the purposes of this analysis, trips by sustainable travel modes (walking, cycling and public transport) are aggregated and compared with car-as-driver trips. There was an overall 22% relative increase in use of sustainable travel modes for all trip purposes (increasing from a baseline index of 100 to 122). The relative reduction in car-as-driver trips of 13% is shown by the change from a baseline index of 100 to an index of 87.

Figure 5.9 shows that the use of sustainable travel modes increased throughout the period between 5am and 7pm, with the greatest relative increase occurring between 5am and 9am.

The greatest relative reductions in car-as-driver trips occurred between 3pm and 7pm. Overall this analysis suggests that TravelSmart Lowestoft contributed to increasing active travel and reducing car trips most notably in peak periods, although there were also changes at off-peak times.

Figure 5.9 Changes in mode choice by time of day (%)



The distribution of travel behaviour change by age and gender is shown in Figure 5.10. Increases in walking, cycling and use of public transport were measured across the different age and gender groups, with the largest relative increase observed among males aged 20-59. The greatest absolute and relative reductions in car-as-driver trips were seen among females aged 20-59.

Figure 5.10 Changes in mode choice by age and gender (%)

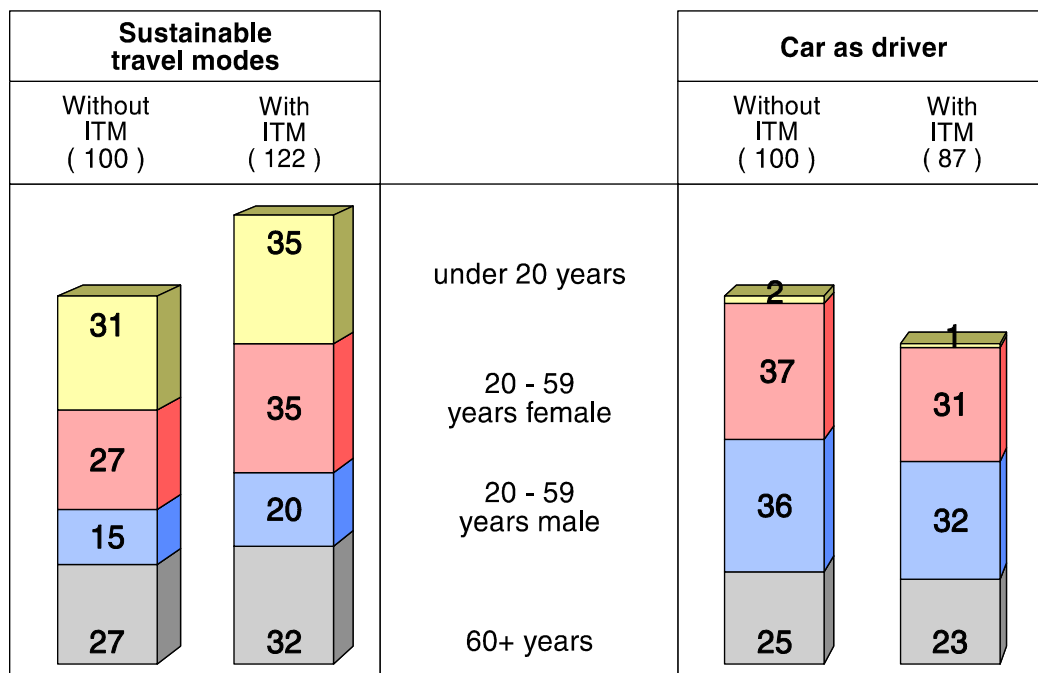
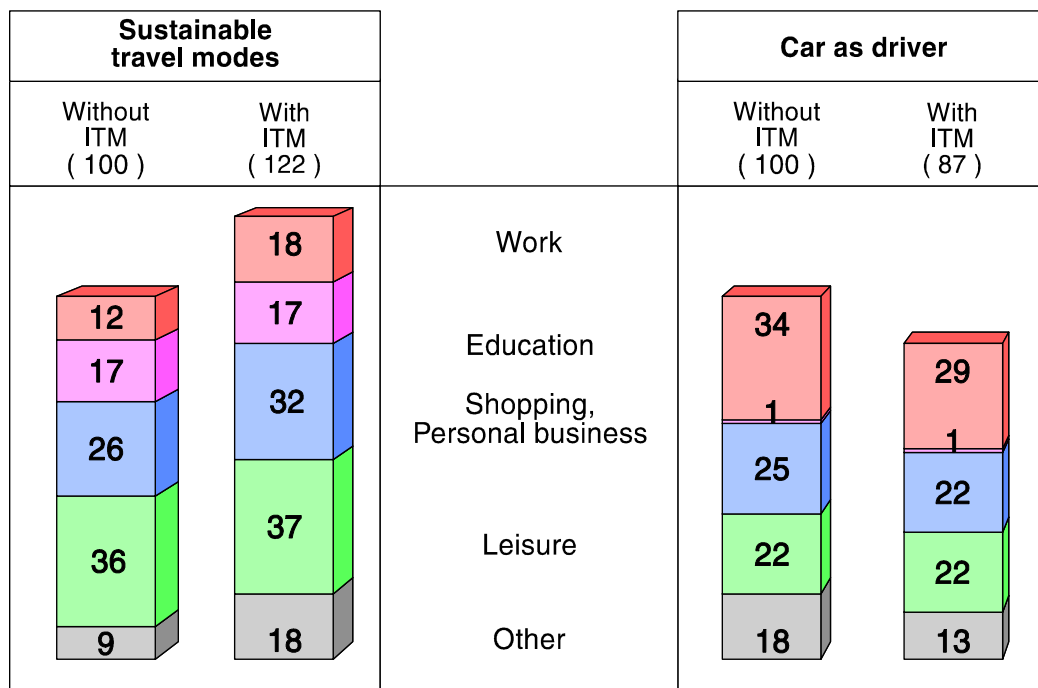


Figure 5.11 shows changes in mode choice for different types of trips. Increases in use of sustainable travel modes were apparent for all trip purposes except education. The greatest relative and absolute increase was for trips in the ‘other’ category. The greatest relative reduction in car-as-driver trips was also for ‘other’ trips. Car trips for education and leisure remained stable.

Figure 5.11 Changes in mode choice by trip purpose (%)



6 CONCLUSIONS

6.1 Introduction

The aim of TravelSmart Lowestoft was to promote greater use of sustainable and active travel modes (walking, cycling and public transport) as alternatives to car travel among a target population of 25,000 households.

In order to achieve this aim, the following components were put in place:

- The design of a coherent and attractive marketing offer consisting of local sustainable transport information;
- The identification of key individuals and project partners to ensure relevance, supply and shelf-life of marketing materials;
- The recruitment of local staff to implement the fieldwork, providing an effective knowledge base and adding value as a community initiative; and
- The application of the proven TravelSmart ITM technique, with supporting project management systems, adapted where appropriate to local conditions.

The success of the project in achieving its aim is measured ultimately by the responses of the target population, in particular the willingness of households to participate in TravelSmart; the volume of information and other services requested; and, critically, the changes in travel behaviour.

The following sub-sections review the key outcomes of TravelSmart Lowestoft under these broad headings.

6.2 Key outcomes

6.2.1 Travel behaviour change

The travel behaviour surveys conducted before and after TravelSmart Lowestoft show substantial increases in levels of walking, cycling and use of public transport as modes of day-to-day travel, along with notable reductions in car use. The key indicators, measured across the whole target population (i.e. not only those who actively participated in TravelSmart), are:

- Growth in trips by sustainable and active travel modes, with relative increases in walking (19%), cycling (19%) and public transport (37%);
- A relative increase of 16% in daily exposure to active forms of travel (i.e. time spent per person per day participating in walking and cycling as modes of transport);
- A relative reduction in car-as-driver trips of 13%, with a 12% reduction in car distances travelled, a net saving of 27.7 million car km per year on pre-project levels, and an estimated annual CO₂ saving of 5,618 tonnes.

The evaluation suggests that the greatest modal shift occurred from car-as-driver trips (which declined by 59 trips per person per year) to walking (which gained 42 trips), although we cannot be sure that this was direct trip substitution. Public transport also gained 17 trips per person per year (a relative increase of 37%) and cycling saw a 19% relative growth, albeit from a lower baseline level than other modes.

These changes are broadly in line with those measured in other recent TravelSmart projects (as shown in Table 6.1 below), although the relative reduction in car-as-driver trips is at the upper end of the typical range.

Table 6.1 Summary of recent TravelSmart project outcomes

Location	Project dates	Target population (households)	Relative change in mode share				
			Walking	Bicycle	Car-as-driver	Car-as-passenger	Public transport
Peterborough	2005-07	30,006	+9%	+36%	-11%	-5%	+33%
Worcester	2005-07	23,504	+15%	+19%	-10%	-5%	+30%
Preston	2006-07	25,231	+11%	+35%	-10%	+3%	+9%
Lancaster & Morecambe	2006-07	25,001	+18%	+69%	-14%	+10%	+7%
Inverness	2007	1,500	+22%	+27%	-13%	+1%	+11%
Weston-super-Mare	2008	2,078	+15%	+36%	-12%	+5%	+10%
Brislington & Knowle (Bristol)	2009	1,900	+14%	+26%	-11%	not measured	+13%

Further analysis of the travel survey data for TravelSmart Lowestoft shows that:

- The changes in mode choice were achieved with no effect on daily mobility (i.e. activities, number of trips, distances travelled) among the target population;
- Although there was markedly increased use of sustainable travel modes, there was a small reduction in average daily time spent travelling among the target population;
- The greatest relative increase in use of sustainable modes occurred between 5am and 9am and the greatest relative reduction in car-as-driver trips was observed between 3pm and 7pm, although smaller changes were also observed at off-peak travel times;
- Leisure remained the most common trip purpose after TravelSmart Lowestoft, accounting for just under a third of all trips; and
- Growth in the use of sustainable and active travel modes was seen across all age and gender groups, with the most notable growth occurring in males aged 20-59.

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6.2.2 Participation in the ITM project

The ITM process resulted in high participation rates among the target population of 25,000 households. This demonstrates a positive response to the personalised TravelSmart approach, and suggests a previously unmet demand for information on local transport options.

- Eighty-two percent of households in the target population responded to the initial contact phase;
- Of these, 67% were interested in receiving information through the TravelSmart Lowestoft project and a further eight percent were already regular users of sustainable travel modes which did not request additional information;
- Ninety-four percent of those initially interested in receiving information then responded to the offer of information and advice by completing a

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TravelSmart Lowestoft order form, either in their own time at home, over the phone or on the doorstep; and

- A total of 12,745 personalised TravelSmart Lowestoft packages were hand-delivered to participating households (including 1,170 containing only rewards for regular users of sustainable modes): over half of the initial target population.

6.2.3 Demand for information and advice

The profile of requests received during the TravelSmart Lowestoft project indicates a high demand for information and advice on local transport.

- 123,472 items of information, incentives and rewards were requested during TravelSmart Lowestoft, an average of 8.3 information materials per participating household.
- Of the information materials on offer, the new local travel maps (developed specifically for TravelSmart Lowestoft) were the most popular items, followed by the Discount Card and stop-specific bus timetables.
- A total of 438 households expressed an interest in further personal advice on walking, cycling and/or public transport. Eighty-nine households went on to book one or more home advice sessions, and 89 sessions were successfully completed. These advice sessions were conducted at people's homes and included the offer of a sustainable travel incentive.

***ANNEX A:
TRAVELSMART ORDER FORM***



Harbour, St Margaret's, Gunton & Corton

Please fill in and return this form to order your **free** personal information pack

Help us to help you!

Help us to ensure prompt delivery of your materials - please fill in your contact details below

Name: _____
 Address: _____
 Tel. No: _____ Day: _____ Evening: _____



Your order form for a personal journey plan

Please tell us about the journey you wish to make by public transport. In order for us to provide you with the most useful information, please complete ALL sections of this form. Please note that we may not be able to process your journey plan without exact locations with correct postcodes. Journey plans are available for travel starting in Lowestoft going to any location in the UK.

From: (Please give exact location with postcode)
 House number/name: _____
 Street: _____
 Town/City: _____
 Postcode: _____

To: (Please give exact location with postcode)
 House number/name: _____
 Street: _____
 Town/City: _____
 Postcode: _____

Outward journey:
 I need to depart / arrive (delete as appropriate)
 on (day of the week) _____ at (time) _____ am / pm

Return journey:
 I need to depart / arrive (delete as appropriate)
 on (day of the week) _____ at (time) _____ am / pm

Means of travel:
 I am prepared to travel part/all of the way by: Bus Coach Rail Any mode

Sustrans registered charity No. 206650



Project enquiries: **Socialdata** PO Box 526, Bristol BS99 2UX Freephone 0800 89 78 029

If you are aware of someone who needs this document in an alternative format or language please contact the Waveney District Council Economic Regeneration Team by calling 01502 523394 or email economicreg@waveney.gov.uk and they will endeavour to assist.

Thank you for taking part in TravelSmart Lowestoft!

Bus travel

- Bus stop timetables:** showing the frequency and destination of all main services using the bus stop(s) nearest to your home.
- Free Guide to Explore Suffolk:** a map and guide to bus routes and destinations throughout the county.
- Lowestoft & Surrounding Area:** a compact booklet with timetable and route information for all local bus services. Accompanied by 'M4', a handy guide to Lowestoft's new Real Time Passenger information system.
- Great Yarmouth and the Lowestoft Area:** regular bus services to Kings Lynn and Peasenhorough.
- Bungay & Beccles:** local bus services
- Halesworth & Southwold:** local timetables
- Regional bus routes 496 & 497:** Great Yarmouth & Colmer to London
- Norwich Shoppers Service:** timetable information for this daily service between Lowestoft and Norwich.
- Bus service information straight to your phone:** text messaging service for departure information from any bus stop in the region.
- Accessible and community transport:** information about using door-to-door services, accessible buses and coaches and other concessionary travel services.



New local travel map
Lowestoft on foot, by bike and by bus: a new TravelSmart map for the town including walking and cycling routes, bus service information and details of local facilities.

Fares and discounts

- Explore card:** young persons discount card for local bus and train travel.
- National Free Travel Bus Pass:** travel scheme offering over 60s and eligible disabled people free off-peak travel on local buses anywhere in England.
- National Express Discounted Coach Travel:**
 - Family
 - 16-26
 - Senior
- PLUSBUS:** information on ticket options for combining bus and train travel.
- Railcards:** details on discounted travel:
 - Family & Friends
 - 16-25
 - Senior
 - Disabled Person

Walking

- Angles Way:** information on the seven local circular walks that run from Great Yarmouth to Thetford, passing through Outon Broad.
- Suffolk Wildlife Trust - What's on:** information on walks and events in all local Suffolk Wildlife Trust centres, including Carlton Marshes.
- Waveney Ramblers:** how to get involved in local Ramblers group walks and social events.
- Why walk?:** find out how to step your way to a happy, healthy lifestyle.
- Get Walking, Keep Walking:** plenty of tips to help you get started and a walking plan to track your progress.

Train travel

- Local train timetables:**
 - The East Suffolk Line:** journeys between Ipswich and Lowestoft
 - The Wherry Lines:** Norwich to Great Yarmouth and Lowestoft
- Regional and national train timetables:**
 - Lowestoft to London Liverpool Street:** via all local stations
 - InterCity timetable:** Norwich to Liverpool Street

Cycling

- Lowestoft Cycle Route Map:** official cycle routes and local facilities, including cycle parking facilities (including cycle parking) and information on bike security and cycle safety.
- Great Yarmouth Cycling Map:** cycle routes, routes and local facilities, including cycle parking facilities (including cycle parking) and information on bike security and cycle safety.
- Norwich Cycling Map:** showing the cycle network for the city and surrounding area.
- Why cycle?:** find out for yourself what's making more and more people take to two wheels.
- Get cycling:** an indispensable guide to buying, riding and maintaining your bike.
- Cycling with children:** choosing bike seats and trailers, buying the right bike for your child and planning family trips.
- Suffolk Young Cyclists Training Course:** how to find out whether your child's school is involved
- Cycling by Train:** find out how easy it is to take your bike on a train.
- Bike & Canoe Hire in the Broads:** hire centres in and around the Broads.
- The Healthy Options - take the route to a healthier life!** the health and environmental benefits of cycling and walking.

Other information

- Car Share:** details of Suffolk's Car Share scheme, the benefits and how to get involved.
- Tracks:** newsletter aimed at 8-18 year olds, featuring pupils' articles on transport and the environment.
- Safe Routes to Schools:** information for parents who want to provide their children with a safe and healthy journey to school.
- Great Days Out:** places to visit and events throughout the year in Suffolk. Accompanied by the 'Free Guide to Explore Suffolk', the indispensable guide to public transport in the county.
- Waveney Cultural Directory 2009/10:** booklet listing cultural events happening in and around Waveney.
- Climate Change:** 50 easy actions you can take to reduce your carbon emissions.

Discount card

By ticking 'Yes' to the question at the top of this form, you qualify for a unique discount scheme. The TravelSmart Lowestoft Discount Card offers savings on outdoor clothing, new bikes, servicing and accessories at local cycle and outdoor shops.

TravelSmart PLUS

- Your household may be eligible for a personal advice session with one of our local experts on public transport, cycling and/or walking in your area. Select one (or more) of the options below and we'll be in touch to arrange a home visit to suit your needs. You'll be surprised at the opportunities available!
- Choose the bus - get the most out of public transport with the help of one of our specialist advisors, including tips on all the best ticket deals and a chance to try out local services.
- Choose cycling - get going on two wheels with the help of one of our cycling consultants, including advice on the best local routes, a bike 'health check' and the limited offer of a free cycle trip computer.
- Choose walking - put your best foot forward with the help of one of our walking consultants, including advice on the best local routes, health information and the limited offer of a free pedometer.

Free gift!

On quick return of this order form, you can receive this FREE keyring with 5 years membership of a lost key recovery service (value up to £25). Limited numbers available. Please tick the box to accept this offer.



See back page for your personal journey plan order form

***ANNEX B:
CONCEPT OF EVALUATION***

ANNEX B: CONCEPT OF EVALUATION

1 Travel behaviour surveys

To demonstrate the effects of the TravelSmart Individualised Travel Marketing (ITM) project in Lowestoft, travel behaviour surveys were conducted to measure changes in travel behaviour. The surveys used the New KONTIV®-design, a self-administered mail-back survey technique with follow-up by post and telephone.

The research used ‘before’ (baseline) and ‘after’ surveys, each involving members of the ITM target group (in Lowestoft) and a separate control group not approached in the marketing intervention (in Great Yarmouth). The ‘after’ surveys were cross-sectional surveys based on independent randomly drawn samples of households from the same areas as the ‘before’ survey.

Table A1 shows the dates, response rates and net sample sizes for each of the surveys.

Table A1: Survey Response Rates

	Survey date	Response rate	Net sample Persons
BASELINE SURVEY			
Target area	Jan - Mar 2008	60%	1,365
Control area		58%	673
AFTER SURVEY			
Target area	Jan - Mar 2010	60%	1,120
Control area		60%	505

The survey samples ensure an acceptable level of statistical significance in the key outcomes presented (see Section 3 of this Annex). However the evaluation also includes a weighting procedure to ensure the response behaviour of the target group sample is representative of that found in the ITM target population as a whole. To provide the correct basis for comparison, the distribution of the ITM groups ('I', 'R' and 'N' and non-respondents) in the 'after' survey sample is adjusted to match that found during the contact phase of the ITM project. Furthermore a weighting (based on gender, age and with/out telephone, to reflect local demographics) was applied for both surveys.

2 Control group effects

Changes in mode choice are the central indicators of the success (or otherwise) of an ITM project. To separate the effect of ITM from other influences, a survey design with a control group was applied. Both the target group and the control group were surveyed before and after the project.

Table A2 shows the before and after results for the target group. Before the ITM project, 23% of all trips were made (exclusively) on foot, 4% by bicycle, 1% by motorcycle, 46% by car as driver, 21 % by car as passenger and 5% by public transport. After the project the share of walking had risen to 26%, whereas the share of car-as-driver trips decreased to 41%. Bicycle trips increased from 4 % to 5 % and public transport trips from 5 % to 6 %.

Table A2: Mode Choice (%) – Target Group

	TARGET GROUP	
	Before %	After %
Walking	23	26
Bicycle	4	5
Motorcycle	1	1
Car-as-driver	46	41
Car-as-passenger	21	21
Public transport	5	6
TOTAL	100	100

Mode choice can also be shown in trips per person per year. At the time of the before survey, an average person in the target group undertook 990 trips per year (on 341 days at their place of residence). 228 of these trips were made on foot, 42 by bicycle, etc. (see Table A3).

Table A3: Mode Choice (trips per person per year) – Target Group

	TARGET GROUP	
	Before	After
Trips per person per year		
Walking	228	259
Bicycle	42	51
Motorcycle	6	9
Car-as-driver	453	408
Car-as-passenger	212	212
Public transport	49	63
TOTAL	990	1002

However, mode share changes between the ‘before’ and ‘after’ surveys are not necessarily effects of the ITM project. To determine other influencing factors, a control group which was not exposed to ITM was used.

Before the ITM project in the control group (Table A4), 28% of all trips were made (exclusively) on foot, 41% by car-as-driver and 19% by car-as-passenger. Public transport accounted for 9% and cycling for 3% of all trips. After the ITM project, there were only slight changes: an increase in car-as-driver trips (+1 % point) and a decrease in walking trips (-1 % point).

Table A4: Mode Choice (trips per person per year) – Control Group

	CONTROL GROUP	
	Before %	After %
Walking	28	27
Bicycle	3	3
Motorcycle	0 ^{*)}	0 ^{*)}
Car-as-driver	41	42
Car-as-passenger	19	19
Public transport	9	9
TOTAL	100	100

^{*)} less than 0.5 %

These changes in the control group have to be taken into account when the reference for the situation ‘with ITM’ (see section 5 of the main body of this report) is established. The observed changes for the control group between the ‘before’ and ‘after’ surveys would also be expected in the target group. Comparing ‘before’ and ‘after’ on the basis of trips per person per year for the control group, a ‘transfer factor’ is derived (Table A5), and with this transfer factor the before figures for the target group are adapted (Table A6). On this basis, the ‘before’ situation in the target group *corrected by control group effects* forms the baseline against which change is measured.

Table A5: Mode Choice (trips per person per year) – Control Group

	CONTROL GROUP		Transfer Factor
	Before	After	
Walking	277	264	0.950
Bicycle	31	32	1.032
Motorcycle	1	2	1.850
Car-as-driver	402	415	1.030
Car-as-passenger	186	190	1.022
Public transport	92	87	0.940
TOTAL	989	990	

Table A6: Mode Choice (trips per person per year) – Target Group

	TARGET GROUP		
	Before	Transfer factor	Without ITM
Walking	228	0.950	217
Bicycle	42	1.032	43
Motorcycle	6	1.850	11
Car-as-driver	453	1.030	467
Car-as-passenger	212	1.022	217
Public transport	49	0.940	46
TOTAL	990		1,001

This shows that following the after survey there would have been, on average, 217 walking trips per person per year ‘without ITM’, 43 bicycle trips, 467 car-as-driver trips, 217 car-as-passenger trips, and 46 public transport trips. The changes associated with ITM can be measured on this basis.

Table A7 shows the findings of the after survey (‘with ITM’) for the target group. In this group 26% of all trips were now made (exclusively) on foot, 5% by bicycle, 1% by motorcycle, 41% by car as driver, 21% by car as passenger and 6% by public transport.

Compared to ‘without ITM’, the share of walking trips had risen from 22% to 26%, cycling trips from 4% to 5%, and public transport trips from 5% to 6%. The share of car-as-driver trips decreased from 47% to 41%.

Table A7: Mode Choice – Target group

	Without ITM %	With ITM %
Walking	22	26
Bicycle	4	5
Motorcycle	1	1
Car-as-driver	47	41
Car-as-passenger	21	21
Public transport	5	6
TOTAL	100	100

Again, mode choice can also be shown in trips per person per year. At the time of the after survey an average person undertook 1,001 trips per year ‘without ITM’ and 1,002 trips ‘with ITM’.

Walking was the means of transport for 217 trips ‘without ITM’ compared to 259 trips ‘with ITM’. Cycling increased from 43 to 51 trips per person per

year, public transport from 46 to 63 trips. Car-as-driver trips decreased from 467 to 408, while car-as-passenger trips dropped slightly from 217 to 212 per person per year (see Table A8).

Table A8: Mode Choice (trips per person per year) – Target Group

Trips per person per year	Without ITM	With ITM
Walking	217	259
Bicycle	43	51
Motorcycle	11	9
Car-as-driver	467	408
Car-as-passenger	217	212
Public transport	46	63
TOTAL	1,001	1,002

This also be expressed as relative change, as shown in Table A9.

Table A9: Mode Choice – Relative Change

Change in trips per person per year		Relative change %
+42	Walking	+19
+8	Bicycle	+19
-2	Motorcycle	n/a
-59	Car-as-driver	-13
-5	Car-as-passenger	-2
+17	Public transport	+37

Walking trips per person per year increased by 42 (a relative increase of 19%). This was the greatest absolute increase in number of trips. Cycling increased by 8 trips per person per year (+19%) and public transport by +17 (+37%).

There was a decrease of 59 car-as-driver trips per person per year (-12%).

This evidence suggests that the TravelSmart Lowestoft ITM project reduced car use by 12% and increased the share of sustainable travel modes: walking (+19%); cycling (+19%); and public transport (+37%).

3 Statistical Significance of the Changes in Mode Choice

Expert opinions differ regarding the statistical significance of changes in mode choice should be tested based on persons or trips. For that reason the following test was implemented for both persons and trips. The statistical significance of change in mode choice is located between the results of these two tests. Bases for the test are persons in independent samples 'before' and 'after'.

3.1 Share of car-as-driver trips

a) Based on persons

The following test can be performed. The zero-hypothesis and the alternative-hypothesis are:

$$H_0: P_1 \leq P_2$$

$$H_1: P_1 > P_2$$

P_1 = share of car-as-driver 'without ITM'

P_2 = share of car-as-driver 'with ITM'

The zero-hypothesis states that the share of car-as-driver trips 'with ITM' is not lower than 'without ITM'. If this zero-hypothesis can be rejected, we can say that the change in car-as-driver mode share between the two time points is real (at a given probability level).

The calculation is done as *t*-test for independent samples. The share of car-as-driver ‘without ITM’ (47%) and ‘with ITM’ (41%) and the number of observed persons are the inputs (before: $n_1 = 1,365$; after: $n_2 = 1,120$).

For the test value the following formula exists:

$$T = \frac{P_1 - P_2}{\sqrt{\frac{P_1(1-P_1)}{n_1} + \frac{P_2(1-P_2)}{n_2}}} =$$

$$= \frac{0.059}{\sqrt{0.0004}} = 2.9654$$

Test-decision:

$$\varphi(y, y) = \begin{cases} 1 & \text{if } T < z_a \\ 0 & \text{other} \end{cases}$$

$z_{0.05} = 2.326$ (critical value for a level of significance of 99 %).

It follows that based on this test the zero-hypothesis (no decrease in the share of car-as-driver ‘with ITM’) can be rejected with a probability of over 99%.

b) Based on trips

For testing on the basis of trips, the same test can be performed.

The zero-hypothesis and the alternative-hypothesis are:

$$H_0: P_1 \leq P_2$$

$$H_1: P_1 > P_2$$

P_1 = share of car-as-driver ‘without ITM’

P_2 = share of car-as-driver ‘with ITM’

The zero-hypothesis states that the share of car-as-driver trips ‘with ITM’ is not lower than ‘without ITM’. If this zero-hypothesis can be rejected, we can say that the change in mode share between the two time points is real (at a given probability level).

The calculation is done as *t-test* for independent samples. The share of car-as-driver ‘without ITM’ (47%) and ‘with ITM’ (41%) and the number of observed trips are the inputs (before: $n_1 = 4,089$; after: $n_2 = 3,233$).

For the test value the following formula exists:

$$T = \frac{P_1 - P_2}{\sqrt{\frac{P_1(1-P_1)}{n_1} + \frac{P_2(1-P_2)}{n_2}}} =$$

$$= \frac{0.059}{\sqrt{0.00014}} = 5.0801$$

Test-decision:

$$\varphi(y, y) = \begin{cases} 1 & \text{if } T < z_a \\ 0 & \text{other} \end{cases}$$

$z_{0.01} = 2.326$ (critical value for a level of significance of 99 %).

It follows that the zero-hypothesis (no decrease of the share of car-as-driver ‘with ITM’) can be rejected with a probability of more than 99%. The reduction in car-as-driver trips associated with the ITM project in the target area is therefore statistically highly significant.

Table A10: Overview of significance tests for car-as-driver trip reduction

	Persons	Trips
Level of significance	> 99%	> 99%

These values enable us to say with great confidence that the observed changes in mode choice among the ITM target population did not occur by chance.

3.2 Share of environmentally friendly modes

The analysis also involved testing the statistical significance of changes in use of environmentally friendly modes (EFM = walking, cycling and public transport combined).

a) Based on persons

The following test can be performed. The zero-hypothesis and the alternative-hypothesis are:

$$H_0: P_1 \geq P_2$$

$$H_1: P_1 > P_2$$

P_1 = share of EFM ‘without ITM’

P_2 = share of EFM ‘with ITM’

The zero-hypothesis states that the EFM share ‘without ITM’ is larger than or equal to the EFM share ‘with ITM’. If this zero-hypothesis can be rejected, we can say that the change in EFM mode share between the two time points is real (at a given probability level).

The calculation is done as a *t-test* for independent samples. The share of EFM ‘without ITM’ (31%) and ‘with ITM’ (37%) and the number of observed persons are the inputs (before: $n_1 = 1,365$; after: $n_2 = 1,120$).

For the test value the following formula exists:

$$T = \frac{P_1 - P_2}{\sqrt{\frac{P_1(1-P_1)}{n_1} + \frac{P_2(1-P_2)}{n_2}}} =$$

$$= \frac{0.059}{\sqrt{0.00014}} = 5.0801$$

Test-decision:

$$\varphi(y, y) = \begin{cases} 1 & \text{if } T > z_a \\ 0 & \text{other} \end{cases}$$

$z_{0.1} = -2.326$ (critical value for a level of significance of 99 %).

It follows that based on this test the zero-hypothesis (no increase of the share of EFM ‘with ITM’) can be rejected with a probability of over 99%. The increase in EFM usage associated with the ITM project is highly statistically significant.

b) Based on trips

For testing on the basis of trips, the same test can be performed. The zero-hypothesis and the alternative-hypothesis are:

$$H_0: P_1 \geq P_2$$

$$H_1: P_1 > P_2$$

P_1 = share of EFM ‘without’ ITM

P_2 = share of EFM ‘with’ ITM

The zero-hypothesis states that the EFM share ‘without ITM’ is larger than or equal to the EFM share ‘with ITM’. If this zero-hypothesis can be rejected, we

can say that the change in EFM mode share between the two time points is real (at a given probability level).

The calculation is done as *t*-test for independent samples. The share of EFM ‘without ITM’ (31%) and ‘with ITM’ (37%) and the number of observed trips are the inputs (before: $n_1 = 4,089$; after: $n_2 = 3,233$).

For the test value the following formula exists:

$$T = \frac{P_1 - P_2}{\sqrt{\frac{P_1(1-P_1)}{n_1} + \frac{P_2(1-P_2)}{n_2}}} = \frac{-0.067}{\sqrt{0.00012}} = -5.9782$$

Test-decision:

$$\varphi(y, y) = \begin{cases} 1 & \text{if } T > z_a \\ 0 & \text{other} \end{cases}$$

$z_{0.01} = -2.326$ (critical value for a level of significance of 99 %).

It follows that the zero-hypothesis (no increase in the share of EFM ‘with ITM’) can be rejected with a probability of at least 99%. The increase of EFM usage in the ITM target area is highly statistically significant.

The significance tests performed produced a significance level of over 99% both based on persons and on trips.

Table 11: Overview of significance tests for EFM increase

	Persons	Trips
Level of significance	> 99%	> 99%

These values enable us to say with great confidence that the observed changes in mode choice did not occur by chance.

In case of any queries regarding this report, please contact:

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