

Moving forward

A year of delivering smarter travel choice



Foreword

by Malcolm Shepherd, Chief Executive of Sustrans



Transport is at a cross-roads. There are big opportunities to greatly increase travel choice whilst achieving far better value for money; to involve communities in transport decisions that affect their daily lives; and to begin the rapid transition to low-carbon and healthy travel.

And in all of these Sustrans plays a role. Last year, working with communities and partners, Sustrans enabled many millions of people to make smarter travel choices.

We built on proven initiatives like the National Cycle Network and started work on many new, walking and cycling networks. Inspired and supported by local people, these networks will give safe, direct access to shops, work, schools, libraries and post-offices.

We extended innovative ways of enabling people to leave their cars behind. We worked with universities to hire bikes to students, with employees to

enable people to leave their car behind on the daily commute, and with people at home to give them information to enable local journeys to be walked, cycled or made by public transport. We piloted a new way of empowering residents to redesign the street outside their front doors, reducing traffic speeds and making them safe for people to travel under their own steam. Initiatives like these are effective at extending travel choice, are quick to implement, and offer exceptional value for money. They can be replicated locally, or scaled-up to work regionally and nationally.

With this kind of smarter investment we could double the number of local trips being made on foot, bike and public transport over the next decade. By 2020 we would reap the benefits of reduced congestion and carbon dioxide emissions, improved access, increased physical activity, and more pleasant neighbourhoods.

The following pages show what one charity working in partnership can achieve in a year. Imagine what could be achieved if all transport spending was focused on enabling people to make smarter travel choices.

A handwritten signature in black ink, appearing to read 'M Shepherd'.

Malcolm Shepherd

About Sustrans

Sustrans is the charity that's enabling people to travel by foot, bike or public transport for more of the journeys we make every day.

Our vision is a world in which people choose to travel in ways that benefit their health and our environment.

Our mission is to influence practice and shape policy so everyone can travel by foot, bike or public transport for more of the journeys we make every day.

- we're a catalyst – we make smarter travel choices possible
- we campaign – we make smarter travel choices desirable
- we influence – we make smarter travel choices inevitable.

This report is just a snapshot of what Sustrans achieved in 2009. To find out about all our work visit: www.sustrans.org.uk

Value-for-money solutions to expensive transport challenges

Congestion, physical inactivity, carbon dioxide emissions, pollution, noise and accidents are amongst the wider impacts of a transport system dominated by car use.

A recent Government report reveals that in urban England the cumulative cost of these effects is £38.1 – £48.7 billion (or up to £56 billion when expanded to the UK)⁽¹⁾.

How Sustrans helped to reduce transport's burden on the economy in 2009:

The **National Cycle Network** carried 407 million journeys in 2009. **Cycling trips had a total health benefit of £288 million, walking trips a potential health benefit of £96 million⁽³⁾**, and, if each journey replaced a car trip, the **potential carbon savings were worth £32 million⁽⁴⁾**. These values far exceed the cost of developing walking and cycling paths.

At a **benefit to cost ratio of nearly 8:1, 40,000 households received local walking, cycling and public transport information**. This resulted in travel behaviour change and a reduction in car use of between 460 and 875 miles per household per year⁽⁵⁾.

At a **benefit to cost ratio of nearly 4:1 over just ten years (the current appraisal period for transport schemes is 60 years), 2,000 schools benefited from new walking and cycling routes** offering children, and the whole community, a safer journey by foot or bike. These benefits are mainly derived from improved health thanks to increased physical activity.

£280 million in petrol costs was potentially saved by users of the National Cycle Network had each trip replaced a car trip⁽⁶⁾.

This is more than the UK's income from vehicle excise duty and revenue from fuel sales, which raised £37.1 billion in 2007/08⁽²⁾.

With investment in walking, cycling and public transport, governments could immediately start reducing these costs to our wider economy.

£10.6 million



Construction of one mile of single carriageway road

£150,000



Construction of one mile of traffic-free National Cycle Network

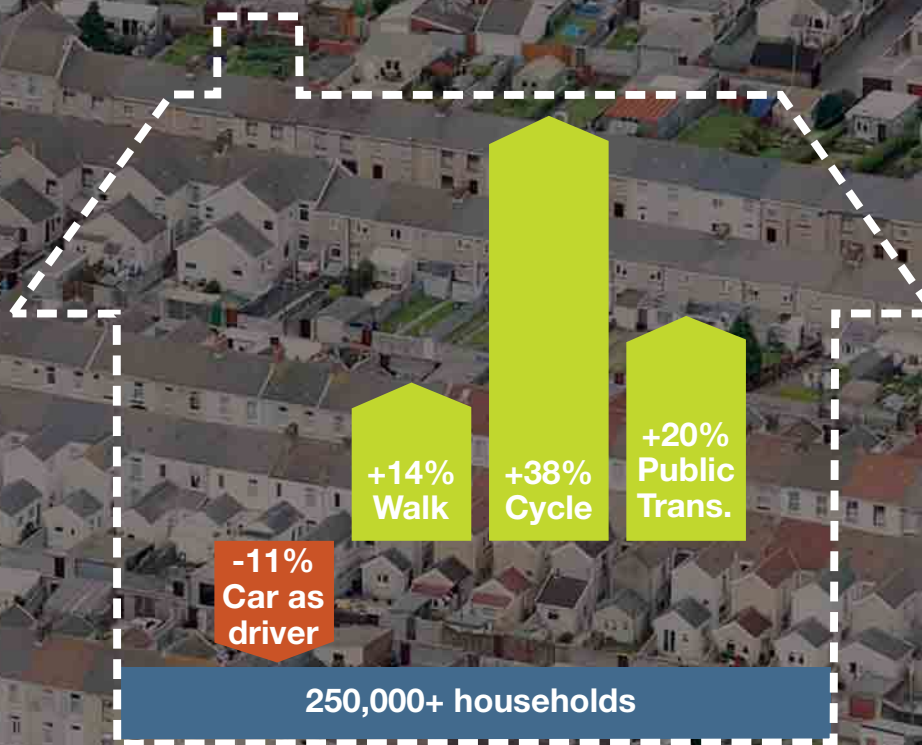
Source: Single carriageway road: *House of Commons, 2006 Written Answers to Questions [30 October 2006] Column 37W, Road Funding, Chris Grayling/Dr Ladyman.*

Enabling people to leave their car behind

Personal car use has reduced by up to 14% across areas where Sustrans and our partners Socialdata, have worked with households on our travel behaviour change programme, TravelSmart. Average household car mileage has been reduced by up to 875 miles per year on pre-project levels⁽⁶⁾.

Whilst the national trend for average car mileage has decreased in recent years, household mileage has remained fairly constant as the number of cars per household has risen⁽⁷⁾.

The UK's most successful travel behaviour programme



Source: Sustrans/Socialdata, 2010: data derived from combined analysis of completed TravelSmart project evaluations

During 2009 Sustrans engaged with people living in 40,000 households in Exeter, Lowestoft and Watford to give them the information they needed in order to leave their cars behind.

The baseline data in these three towns revealed that many short car trips could already be replaced by trips by foot, bike and public transport, with cycling offering the greatest potential for change. This replicates the findings from the English Sustainable Travel Demonstration Towns⁽⁸⁾.

Sustrans will publish the results of our work in Exeter, Lowestoft and Watford at the end of 2010.

Decarbonising local travel

In the UK 55% of total transport emissions comes from personal car use⁽⁹⁾ with more than half of all car journeys being under five miles⁽¹⁰⁾ (and many being less than a mile). Only 2% of journeys less than five miles are currently cycled⁽¹⁰⁾.

Evidence suggests that with the right investment in urban areas, 9 out of 10 journeys could be made on foot, bike and public transport⁽⁹⁾.

How Sustrans helped to reduce personal carbon footprints in 2009:

Work began on **new walking and cycling networks in 30 communities** overcoming barriers including roads, rivers and railways to give people easier access to schools, work and green spaces. In the next two years, a further 49 communities will benefit from similar schemes and in total up to six million people UK-wide will be able to choose to walk and cycle their everyday journeys, **potentially saving 80,000 tonnes of carbon dioxide annually** at a value of over £4 million⁽⁴⁾.

Thanks to our work with an additional 40,000 households with the successful travel behaviour change programme TravelSmart, we expect car use across our target populations in Exeter, Lowestoft and Watford to decrease by 10% or more. If the results from Watford were **replicated UK-wide, this approach could save around 8.5 million tonnes of carbon dioxide per year.**

Sustrans' National Cycle Network carried over one million zero-carbon journeys every day. If each of these journeys replaced a car trip, this is a potential carbon dioxide saving of 625,000 tonnes a year, the equivalent annual emissions of more than 227,000 cars.

In Britain, on average, everyone travels about 1,300 miles a year on journeys of less than five miles⁽¹¹⁾. If by 2020, we could increase cycling levels from 2% to 20% and walking levels for these shorter journeys from 34% to 40%, the annual reduction in carbon dioxide emissions by 2020 would be nearly 3.9 million tonnes valued at approximately £236 million a year⁽⁴⁾.



A nationally important network for local journeys

Sustrans began work on creating the **National Cycle Network** in 1995. It now extends to **12,600 miles**, passing within a mile of **57% of the UK's population**.

During 2009 on the National Cycle Network:

- **407 million walking and cycling journeys were made**, a like for like increase of nearly 6% on the previous year
- **208 million of these journeys were by bike, and 199 million by foot**
- our research suggests that during 2009 the National Cycle Network was used by **1.5 million cyclists and 1.6 million pedestrians**
- **11% of cyclists were new to, or returning to, cycling**
- **95 million commuting trips** were made – nearly a quarter of all the journeys made on the Network
- **79% of trips were made by foot or bike alone – zero carbon from beginning to end**
- **87% of users used the Network because it felt safe** and offered the most convenient route
- **42% of users got at least 30 minutes of physical activity** on at least five days a week – the recommended levels suggested by health experts⁽¹²⁾
- **10% of all trips were made by those over the age of 65**
- **17% of users described themselves as black and minority ethnic**
- **women users increased by 8%** (a greater increase than male users), making over **146 million** trips in 2009.

The National Cycle Network carries about a third of the number of journeys made on the UK's rail network. This generates huge economic benefits in terms of health and carbon savings.

Despite this, it is the UK's only national transport network with no obligation by government to support it, develop it or maintain it, either at a local or national level.

Since Sustrans began monitoring in 2000, the Network has grown in length by 200%, and its usage has grown even more quickly with cycling increasing by 400% and walking by 300%.

The Network is a catalyst proving that when you create the right environment for people of all ages and abilities to walk and cycle, people will use it, and will often choose to leave their car behind.

Improving health through active travel

Obesity and related chronic conditions are predicted to cost the UK nearly £50 billion a year by 2050⁽¹³⁾. In 2010, the National Institute for Health and Clinical Excellence issued guidance on preventing cardiovascular disease, calling on governments to invest in active travel⁽¹⁴⁾. This followed previous guidance calling for greater investment in creating public space to encourage walking and cycling because of their major contribution to public health⁽¹⁵⁾.

There is significant evidence of a relationship between increased physical activity, improved

cognitive performance and achievement in children⁽¹⁶⁾. Evidence also points to the link between physical activity and people's perception of their own well-being and quality of life⁽¹⁷⁾.

Enabling people to walk and cycle more for everyday journeys is one of the easiest ways of introducing physical activity into our daily lives. If everyone could choose to walk or cycle for more journeys, the nation's health would improve, with considerable savings to the NHS and wider economy.

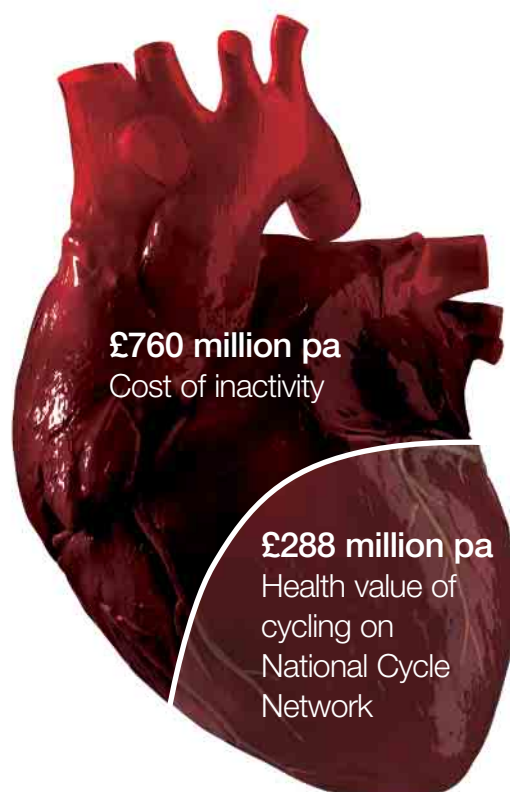
How Sustrans helped to improve personal health in 2009:

42% of adult users of the National Cycle Network got at least 30 minutes of physical activity on at least five days a week – the recommended levels suggested by health experts⁽¹²⁾. On average only 34% of adults in England are achieving these recommended levels of activity.

The percentage of **children who never cycle to school dropped by 17 percentage points in schools where Sustrans worked**. We worked with 130,000 children who had a positive experience of cycling, and **94% of head teachers said that this had helped pupils become more physically active**.

The total **health benefit to cyclists using the National Cycle Network during 2009 was worth £288 million** when valued using the World Health Organisation's Health Economic Assessment Tool.

The target for the London 2012 Olympic Games legacy is to help at least two million people to be more active. **Over two million people were more physically active in 2009 alone thanks to the National Cycle Network**. Of these, over half were previously not active enough to benefit their health.



Source: Inactivity: Derived from Department for Health, 2009 (Cost of physical inactivity for each primary Care Trust in England is £5million. At September 2010 there were 152 Primary Care Trusts in England)

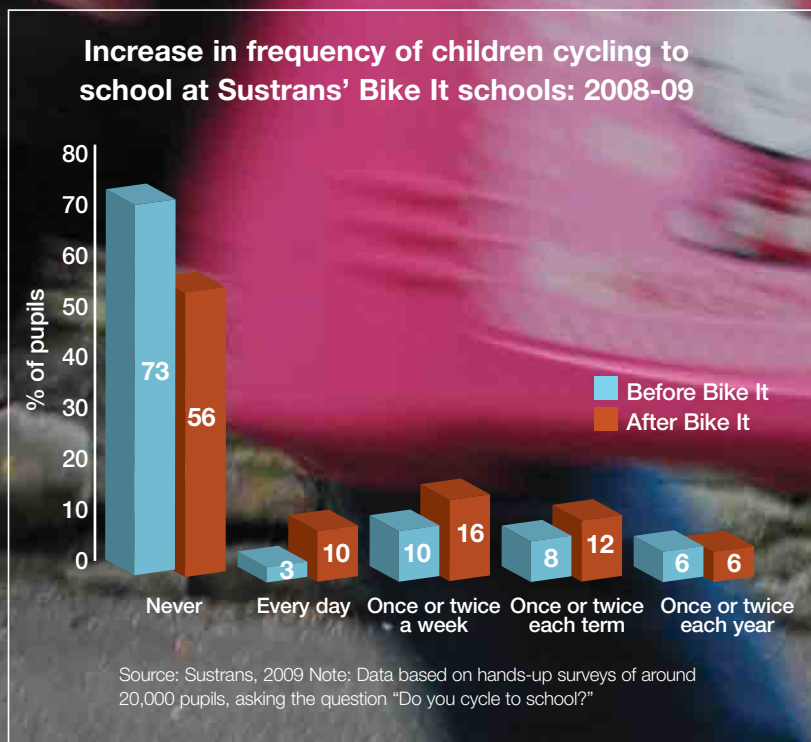
Creating the low-carbon, active travellers of tomorrow

Enabling children to walk and cycle from an early age helps establish healthy, low carbon travel for life. In the Netherlands children cycle for a third of the journeys they make, and people over the age of 65 for nearly a quarter of all journeys. By contrast British children cycle for 2% of all journeys, and those over 65 for just 1%⁽¹⁸⁾.

The lifetime carbon and health value of creating sustainable travel habits early is money well spent. Focusing on giving children the skills and confidence they need to walk and cycle the school journey is a good way of enabling children to incorporate physical activity into their everyday lives whilst enabling them to travel independently for the other journeys they make.

During 2009 we worked with 130,000 children to increase levels of cycling to school. At Sustrans' Bike It schools the number of children cycling to school every day more than trebled to 10%. The number of children who began cycling to school was even more impressive with the percentage of children who never cycled to school dropping from 73% to 56%.

Creating safer environments for children around schools also benefits the whole community. During 2009, 2,000 schools worked with Sustrans to develop new walking and cycling links, but since schools are often in the heart of their community, the benefits extended far beyond the school journey, enabling many more people to become low-carbon, active travellers.



A typical example is a new walking and cycling route created to benefit the 1,500 pupils at two schools in Redcar:

- overall usage has increased to 145,000 from 106,000 trips – a 37% increase
- trips to school have increased by 300% to nearly 26,000
- the path is now used to reach a wider variety of destinations and the number of commuting trips has trebled
- nearly a third of respondents could have used a car for the journey but chose not to
- the proportion of users who have no car in their household has doubled
- the percentage of users who have had no physical activity in the last week has halved.

Empowering people and communities to influence travel choices

Traffic and speed are blighting many of our communities. When asked, residents frequently cite speeding cars and nuisance parking as key issues that reduce the quality of their daily lives⁽¹⁹⁾.

Evidence from the English Sustainable Travel Demonstration Towns shows widespread dissatisfaction with levels of traffic growth, and strong public support for policies that favour walking, cycling and public transport over car travel⁽⁹⁾.

How Sustrans enabled people to improve their local travel environment in 2009:

More than 600 families worked with Sustrans to pioneer a new partnership approach to traffic-calming their streets.

Sustrans' 3,000 volunteers donated over 180,000 hours of their time to maintain and sign sections of the National Cycle Network in their community. They also organised walks and rides to introduce people to their local routes, as well as working to assist Sustrans in schools and on delivering community projects. Their contribution is the equivalent of 100 people working full-time for a year.

We worked with **artists within schools and communities to create many new artworks that enhance public space, and increase people's pleasure of their local environment.** On one stretch of the National Cycle Network **52% of the users told us they liked the route specifically because of the artworks along it.**

Concerns about safety often prevent people from walking and cycling. When, in 2009, Sustrans surveyed 2,000 women, not feeling safe was the most common reason why women didn't cycle, and the change that women felt would most enable them to cycle more was more cycle lanes separated from traffic.

Most day-to-day travel is local, so working with communities to improve the environment for those travelling on foot and bike and by public transport is key to enabling people to make smarter travel choices.



Giving more power to people

Reducing traffic speed is crucial to enabling people to get out and about more. During 2009, Sustrans partnered with over 600 families on a pioneering project called DIY Streets. It helped the residents in 11 communities re-design their streets for their benefit, creating a safer and more attractive environment outside their front doors.

Since the introduction of the DIY Street in Torquay, the speed of traffic has been reduced



Source: Sustrans, 2010 Data based on survey of residents at Torquay's DIY Street. (Actual traffic speeds reduced from 25mph to 18mph)

The results were extremely positive. As one resident puts it: "Thanks to Sustrans, our bins were swapped for larger communal ones with better recycling facilities, and the street is now a far more pleasant place to be. Our new speed table makes getting to the parkland opposite far safer, too. The changes, including new trees and planters, have had an enormously positive effect for the whole street."

As a result of our partnership with residents on DIY Streets:

- 40% of residents are socialising with people that they hadn't done before
- 36% of residents now see their street as safe for children's play, compared to just 9% before DIY Streets
- 67% of residents now find their street greener and more attractive
- 73% of those living in a DIY Street with new artwork feel it improves the street
- 81% of residents feel that their street is now pedestrian friendly
- 13% of residents think that living on a DIY Street will allow them to walk more.

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Methodology

Methodology for reporting on usage of the National Cycle Network

Sustrans would like to thank all those who have contributed to the National Cycle Network monitoring programme. Those requiring more information on any part of this report, or wishing to become involved in the programme, should contact Sustrans' Research and Monitoring Unit. researchandmonitoring@sustrans.org.uk

Measuring changes in the levels of cycling

Sustrans has been collating data from local authority networks of automated continuous cycle counters throughout the UK for several years. This data is the basis for expressions of the changing levels of cycle use. An independent review of analytical techniques employed has recently been completed.

Estimating total National Cycle Network use

A complex model is used to generate estimates of National Cycle Network usage. Figures for usage on different types of routes, combined with the figures describing changes in levels of cycling, form the basis for national level aggregation. An independent review of the model has recently been completed.

Methodology for deriving benefit cost ratios

Benefit to cost ratios have been calculated using Department for Transport guidance. Benefit to cost ratios for new walking and cycling routes near schools were informed by surveys of route users. The total benefit was estimated and divided by the cost of the scheme and was estimated on the basis of nine schemes. The tools currently used in economic appraisal of walking and cycling allow only for health benefits to adult populations and are likely therefore to represent a conservative estimate of the overall benefit of the schemes assessed particularly in relation to children's health.

Methodology for school cycling figures (Sustrans' Bike It)

Sustrans conducts hands-up surveys of pupils at schools where Sustrans' Bike It project is being introduced for the first time.

In total, in the year 2008/09 Sustrans surveyed around 20,000 pupils at 114 Primary and nine Secondary schools in England (excluding schools surveyed in London and in Wales). Before the project began, Sustrans asked the pupils how often they cycled, walked or were driven to school and how they would prefer to travel to school. Sustrans then asked the same questions after Bike It had been delivered. Regular bike shed counts were also conducted throughout the academic year. For more information about Sustrans' Bike It surveys please refer to the Bike It Technical Report: www.sustrans.org.uk/bikeit

Methodology for neighbourhood street surveys (Sustrans' DIY Streets)

Sustrans' Door to Door survey method was used to collect data on residents' household demographics, travel behaviour (in particular parking issues and bicycle ownership and travel), their views and perceptions of the street and a means of planning and evaluating the changes delivered through the DIY Streets project. The Door to Door survey was conducted with one member of each household where possible. An individual survey before and after the project was considered the most appropriate way of collecting a wide range of information from residents, providing the entire street with the opportunity to contribute where possible. Surveys were conducted before the project when street visits and events were held. Post DIY Streets surveys were collected during street visits following the delivery of the works. For more details visit www.sustrans.org.uk/diystreets

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Make your move

We hope that this report has demonstrated the huge potential that relatively simple and affordable changes to the way we travel can bring to people's health, mobility and their environment.

Sustrans has over 400 full and part-time staff, and more than 3,000 volunteers working all over the UK. We have specialists in designing public space, active travel, school travel, community engagement and low carbon travel. We're sure to already have someone working in your local area that can help you begin reaping the rewards of smarter travel.

Make your move and give your nearest Sustrans office a call today to find out how we can help.

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