

# An Evaluation of the '**Travelling to School Initiative'** Programme

**Final Report / October 2010**



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## Final Report

October 2010

### Notice

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# Evaluation Glossary

Acronym	Term
BCR	Benefit Cost Ratio
DCSF	Department for Children, Schools and Families
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
GO	Government Office
LA	Local Authority
LAA	Local Area Agreement
LTP	Local Transport Plan
MIS	Management Information System
NSCT	National Standard Cycle Training
NTS	National Travel Survey
PRU	Pupil Referral Unit
RSTA	Regional School Travel Adviser
RSTCA	Regional School Travel Curriculum Adviser
SEN	Special Educational Needs. <i>(SEN schools are referred to as 'special' schools throughout this report)</i>
SMoTS	Sustainable Modes of Travel Strategy
SOA	Super Output Area
STA	School Travel Adviser
STP	School Travel Plan
TTSI	Travelling to School Initiative

## Evaluation Terminology

Term	Definition
Mode Share	The proportion of pupils travelling to and from school by a given mode of transport.
Modal Shift	The change in modal share for any given mode e.g. a modal shift away from car use. Modal shift is presented as percentage points throughout this Report.
Active Travel Modes	Walking and cycling.
Sustainable Travel Modes	Walking, cycling and public transport.
STP subset	Schools that had a STP for one or more years between 2006/07 and 2008/09.
Non-STP subset	Schools that did not have a STP for any of the three years (2006/07, 2007/08, 2008/09), but still completed the School Census.
Trip Chaining	Use of journey to satisfy a number of different requirements such as dropping children off at school before heading to employment destination.

# Executive Summary

## The Travelling to School Initiative

The Travelling to School Initiative (TTSI) is a joint undertaking by the Department for Transport (DfT) and the former Department for Children, Schools and Families (DCSF), which comprises a series of measures to increase the use of healthy and sustainable modes of transport and reduce congestion in relation to pupils' travel to and from schools in England.

The Initiative was announced in September 2003 and aims to tackle a number of trends towards greater car dependency observed in school travel in recent years. A key focus has been on working with schools to develop School Travel Plans (STPs) supported by the appointment of School Travel Advisers (STAs), Regional School Travel Advisers (RSTAs) and Regional School Travel Curriculum Advisers (RSTCAs) and a range of capital grants for on-site and off-site facilities in and around schools. The intention was that all schools in England, including independent schools, should have an active School Travel Plan (STP) in place by the end of March 2010.

The programme has been led by a TTSI Project Board comprising officers from the DCSF and the DfT who provide direction, guidance and support to practitioners. It has been complemented by a number of separately funded and delivered initiatives to promote walking and cycling for school journeys. These included the 'Walking to School Initiative Grant Scheme' and a number of initiatives to increase cycling promoted by Cycling England.

The DfT completed an initial evaluation of the TTSI in 2005 after the first year of the programme to assess whether there was evidence of a modal shift away from car use. Limitations with the available data at the time, however, meant that it was not possible to draw conclusions about the national impact of the programme and a further evaluation toward the end of the programme was recommended.

## This study

This evaluation draws on a range of new and existing data sources, to examine issues of process (how the TTSI has been implemented in practice) and impact (the extent to which the intended outcomes of the TTSI have been achieved). These quantitative and qualitative sources of evidence include the annual School Census, an online School Survey, School Travel Adviser Survey, workshops with key stakeholders, and in-depth case studies of schools exhibiting good practice in terms of process and outcomes.

This approach allows the research to identify a range of view points and alternative explanations, and 'weight' the evidence available; whilst also recognising the limitations associated with the various data sources in terms of sample sizes, positive reporting bias, and the extent to which the School Census data can be used to assess travel behaviour change associated with the TTSI programme.

## Key achievements of the TTSI programme

The main achievements of the TTSI can be described as follows:

**Inputs** - The Government has provided extensive capital and revenue funding to support the TTSI. By March 2010 this included approximately £120 million of capital investment to local authorities and schools to help implement STPs, and £35 million of revenue funding, principally for TTSI staffing roles.

**Outputs** – This has funded approximately 250 STAs (including 68 in London Boroughs), 11 RSTAs, and two RSTCAs; and resulted in 81% of schools in England (primary, secondary, special and independent) having an STP in place by March 2009. In addition, a range of minor capital improvements such as cycle parking, storage facilities and local safety equipment have been delivered.

**Outcomes** – Evidence from a subset of the School Census data for the period 2006/07 to 2008/09, for example identifies small decreases in the proportion of pupils travelling to school by car, an increase in car share activity and small, but statistically significant, increases in walking and cycling. It is not possible, however, to attribute these changes directly to the TTSI: a comparison of data for schools with and without a STP suggests that **STPs have not had a significant impact on average mode share figures, at an aggregate level, to date**. It should be noted however, that the School Census may under-estimate the effect of the TTSI on travel behaviour, and further analysis of the data in 2010/11 may identify a more significant change in average mode share following STP implementation. Evidence from other sources, such as the School Survey, stakeholder workshops and case studies, provides a more positive picture with respondents perceiving that STPs may support substantial mode shift in certain circumstances.

Six key research questions were set by the DfT and DCSF at the outset of the study. The study findings relating to these key research questions are presented below:

## 1) What are the strengths and weaknesses of the TTSI?

The main strengths of the TTSI can be described as follows:

- the availability of **capital and revenue funding** to support the TTSI providing a powerful motivator and important factor for the development of STPs;
- the enthusiasm and commitment of **School Travel Advisers** to engage with schools and wider partners, without which many schools would not have been aware of the TTSI or motivated to develop or implement STPs;
- **wider benefits** beyond the immediate observed small changes in travel behaviour, such as awareness of health benefits associated with physical activity, awareness of environmental issues, stronger relationships between schools, local authorities and the police, increased community cohesion, improved pupil behaviour and ownership of travel to school issues by schools.

In addition, the TTSI has resulted in supporting processes (outside of the formal TTSI) relating to implementation and monitoring, including:

- **local authority accreditation and reward schemes**, which have encouraged schools to produce high quality plans and encouraged a long term commitment to sustainable travel; and
- **the inclusion of a question on the mode of transport used by pupils to travel to school in the annual School Census. Despite various limitations** this is becoming increasingly useful in monitoring school-related travel behaviour change, quantifying and demonstrating the benefits of investment in school travel initiatives, and informing future spending decisions.

The main weaknesses of the TTSI are as follows:

- **STP coverage**, with the target of 100% of all schools having a STP in place by March 2010 unlikely to have been achieved;
- **variable amount of STA contact with schools**, reflecting differences in workload, with many schools wishing to see more visits than actually undertaken. This may have been because some schools were more reluctant to take ownership of the STP development process and related issues;
- **the need for additional training** in ensuring all STAs have the necessary skills and up-to-date knowledge;
- **continued parental concerns about road safety issues** with evidence that STPs have been only partially effective at addressing these and therefore allowing their children to walk or cycle to school.

## 2) Has the TTSI helped tackle childhood obesity and reduce carbon emissions?

The TTSI has been effective in increasing awareness of childhood obesity issues amongst pupils, parents and teachers, based on evidence from the stakeholder workshops and over two-thirds of respondents to the School Survey agreeing STPs help raise awareness of the health benefits of active travel.

Evidence from the case studies shows that some schools have achieved substantial increases in walking levels and the workshops provided further examples of increased walking; however there is no significant difference in the change in the average proportion of pupils walking or cycling at STP and non-STP school based on data from the School Census. This suggests that some pupils will have benefited from health improvements, however, the actual impact on obesity levels will depend on whether or not those most 'at risk' have changed their behaviour, the frequency with which they are now walking to school, and the length of the journey, among other factors.

Evidence from a subset of the School Census data shows that there has been a small but significant decrease in car use (excluding car share) across all schools. Again, there is no significant difference in the average results for STP and non-STP schools, so this change cannot be linked to the TTSI programme, although evidence from the case studies shows that some schools have achieved substantial decreases in car use and workshop participants report examples of reduced congestion at the school gate. This suggests that some reduction in carbon emissions is likely to have occurred as a result of the TTSI programme, but this is likely to be very small in the context of overall emissions associated with the 'school run'.

The TTSI has been effective in increasing awareness of environmental issues amongst pupils, parents and teachers. This may have an impact on how pupils and parents use the car for other non-school trips, and may also influence future travel behaviour patterns.

### 3) Has value for money been achieved by the TTSI to date?

As noted, the Government has provided extensive capital and revenue funding to support the TTSI. By March 2010 this included approximately £120 million of capital investment to local authorities and schools to help implement STPs, and £35 million of revenue funding, principally for TTSI staffing roles.

Estimating the benefits associated with the TTSI is difficult. There are particular challenges associated with estimating health benefits in children and calculating decongestion benefits (due to uncertainty about the length of time over which travel behaviour change is sustained and the importance of taking account of traffic conditions in the vicinity of individual schools).

This evaluation has attempted to estimate an indicative range of partial Benefit Cost Ratios (BCRs), using a methodology following an approach outlined in DfT's Transport Appraisal Guidance and based on a subset of the School Census. These are based primarily on estimated decongestion and carbon benefits only (excluding health and wider social benefits) and BCR values range quite significantly from less than 0.1 for the least optimistic combination of assumptions to 1.2 for the most optimistic combination. They represent 'poor' to 'low' value for money using DfT Guidance.

The results suggest that, when considering the benefits of reducing car traffic only, the benefits of the TTSI programme cover their implementation costs to central Government if the programme is assumed to be responsible for a high proportion of the behavioural change observed, the changes are sustained for a number of years and a relatively high proportion of traffic reduction occurs on congested urban roads.

These BCRs exclude the important effect of improving the health of school children and potentially their parents. Quantification of these benefits, if possible, would add substantially to each BCR.

### 4) Will schools be able to maintain active school travel plans without the funding and support provided by the STAs?

In our view, many schools will not have the motivation, skills or capacity needed to maintain and implement their STP without the funding and support provided by the STAs (or an equivalent individual); unless there is a specific requirement by central or local Government for them to do so.

The availability of funding has been a powerful motivator and an important factor for the development of STPs. In addition, more than nine out of ten respondents to the School Survey state that they may or will require support from a STA in future (three fifths state that they will require support and a further third may 'possibly' require such support).

It is anticipated that, in the absence of the funding and support provided by STAs, schools which choose to continue to maintain their STPs are likely to be those who recognise the potential benefits of addressing travel to school issues, those experiencing specific travel problems, those active on other initiatives such as 'Healthy Schools' and 'Eco-School', those in a local authority with an effective accreditation / reward scheme; and those requiring a STP in order to secure planning permission.

It is anticipated that primary schools are likely to be more likely to continue to maintain their STP than secondary and special<sup>1</sup> schools, based on their willingness to engage in the process to date.

### 5) Does evidence support the ongoing role of STAs & RSTAs?

The role of a STA as an information provider, a motivator and supportive figure, and as a source of innovative ideas is seen by schools as being beneficial during both the development and implementation of STPs; and schools report that this has improved the quality of their STPs.

In addition, their role in encouraging regular reviews and updates of STPs has been important for on-going engagement with pupils and delivering travel behaviour change. They have also developed a relationship between schools and the local authority which has resulted in more informed decision-making. Furthermore they have raised the profile of school travel issues within local authorities and ensured that greater consideration has been given to these issues by those departments responsible for transport, environment, education and health.

This suggests that there is a case for the ongoing role of STAs, however, this role will need to adapt to a new environment where most schools have STPs. This will require a greater focus on reviewing STPs, administering local authority incentive and reward schemes, helping to incorporate transport issues into the school curriculum, liaising with MIS officers to improve the robustness of School Census data, and maximising mode shift where there is greatest potential.

<sup>1</sup> Schools for pupils with special educational needs.

The case for an on-going RSTA role funded by central Government is less clear from the evidence collated for this evaluation. However, the role of RSTAs in providing STAs with a greater level of guidance and support than would otherwise be possible, raising the profile of the TTSI, and overseeing the STP review role of STAs, is recognised. In addition, officers from the Government Offices report that RSTAs have played a useful role in terms of raising the profile of the TTSI (and of sustainable transport to school more widely), and have ensured that there has been more joint working across regions on transport, environment, and health issues related to school travel.

Going forward, some on-going (higher level) support role is likely to remain important in terms of retaining momentum on the TTSI, and without the input from the RSTAs the TTSI Project Board would have to identify alternative resources.

## 6) What decisions does the evidence support for the future of the TTSI?

The issues presented in the report suggest the following decisions regarding the future of TTSI:

### i) Should TTSI continue, either in its current or an adapted form?

The evidence suggests that the programme should be continued, but will need to be adapted to a new environment where most schools have STPs. Decisions will also need to reflect the current climate of constraints on public sector funding and the relationship between central and local Government.

The TTSI Project Board should be retained, but develop a stronger role in sharing best practice. The STA role should also be retained, but requires adaptation as set out above; it may be more appropriate for the role to become a local authority, rather than a Government-sponsored, responsibility.

The case for an on-going RSTA role funded by central Government is less clear from the evidence collated for this evaluation; although RSTAs are acknowledged as having played a useful role in terms of raising the profile of the TTSI and of sustainable transport to school more widely, and encouraging joint working between relevant bodies across regions. Going forward, some on-going (higher level) support role is likely to remain important in terms of retaining momentum on the TTSI, and without the input from the RSTAs the TTSI Project Board would have to identify alternative resources.

Assuming the TTSI continues, funding will need to be identified for the period beyond March 2011, either from central Government or, more likely, from local authorities themselves.

### ii) If the TTSI is to continue, what decisions should be made regarding future funding?

Decisions about funding beyond March 2011 need to reflect evidence on the value for money provided by the outcomes of the TTSI to date, which at present are inconclusive; the current climate relating to public spending; and the relationship between central and local Government. Further evidence is required on the health benefits of increased walking and cycling for children, as well as the length of time over which travel behaviour is sustained.

### iii) What needs to be done to secure better outcomes for school travel at an aggregate level?

Areas to focus on include:

- updated **STP Guidance** to focus attention on maximising mode shift;
- **accreditation / reward schemes** to encourage schools to implement and develop high quality and effective STPs, recognising the positive impact local authority-based schemes have had to date;
- addressing **parental concerns regarding road safety** to ensure the potential benefits associated with the implementation of on and off-site infrastructure are realised;
- developing a greater understanding on where there is greatest potential for influencing travel behaviour, to enable scarce **resource to be prioritised effectively**; and
- **sharing of best practice** amongst schools and local authorities in terms of engaging with pupils and parents, influencing attitudes and travel behaviour, and benefiting from lessons learnt in general.

### iv) How can future outcomes be monitored?

There is a need for further consideration regarding the collection of travel to school data through the School Census, including how partial changes in travel behaviour can be monitored effectively. In addition, further evidence is required on the health benefits of increased walking and cycling for children, as well as the length of time over which travel behaviour is sustained. Further research is also required to understand the long term impacts of STPs on travel behaviour.

# 1. Introduction

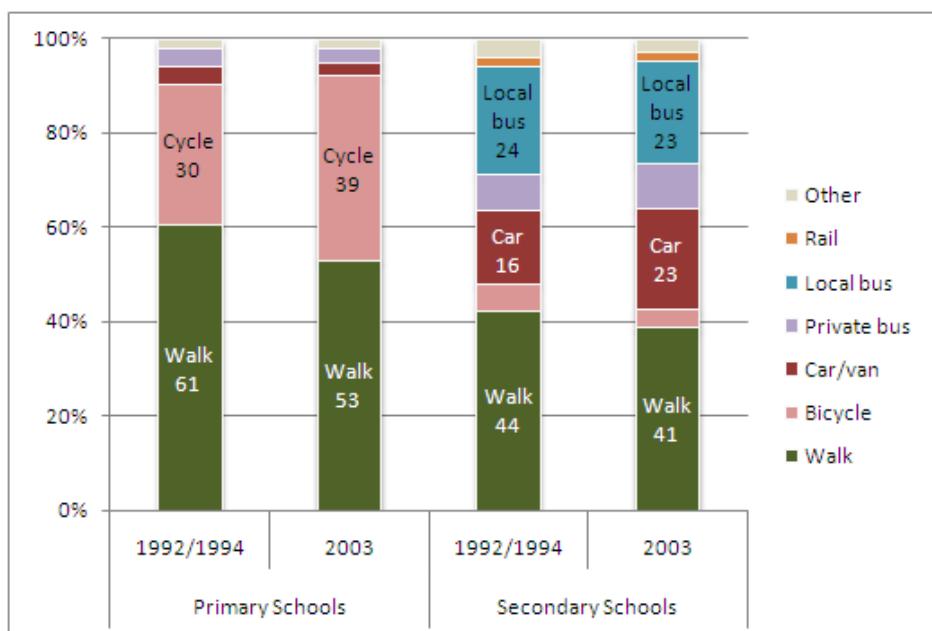
## 1.1 The Travelling to School Initiative

The Travelling to School Initiative (TTSI) was jointly launched in September 2003 by the Department for Transport (DfT) and the former Department for Children, Schools and Families (DCSF)<sup>2</sup> and comprised a series of measures designed to increase the use of sustainable modes of transport and reduce congestion in relation to pupils' travel to and from primary and secondary schools in England.

The Initiative aims to tackle a number of trends observed in school travel in recent years. Data from the National Travel Survey (NTS) shows that the proportion of pupils walking to school decreased during the ten years prior to the launch of the TTSI, with a corresponding increase in the proportion travelling by car. Specifically, the proportion of primary aged children travelling by car increased by 9 percentage points, from 30% to 39% between 1992/94 and 2003<sup>3</sup>, whilst the proportion of secondary aged pupils increased by seven percentage points, from 16% to 23% (Figure 1.1).

In addition, the average length of a journey to school increased from 1.2 to 1.4 miles amongst younger children (under 11) between 1992/94 and 2003, and from 3.0 to 3.2 miles amongst older children (between 11 and 16)<sup>4</sup>.

Figure 1.1 – Trips to and from school, per child, per year, by main mode: GB



Source: National Travel Survey 2003 (Table 11 – Unweighted data). Short walks believed to be under-recorded in 2003 compared with earlier years.

Since trips to school take place at around the same time each day, they can have a major impact on levels of traffic in some areas. For example, at the peak time for school travel of 08:45 am on weekdays during term time, up to 20% of car trips by residents of urban areas were generated by

<sup>2</sup> Formerly the Department for Education and Skills (DfES) until June 2007. The Department for Children, Schools and Families (DCSF) was further renamed the Department for Education in May 2010. Since the TTSI activity set out in this report predates May 2010, the Department is referred to as DCSF throughout the document.

<sup>3</sup> In 2002, the sample size was almost trebled, allowing figures to be presented on a single year basis. Previous years are reported for a three year period, e.g. 1992/94.

<sup>4</sup> National Travel Survey, Unweighted data, 2003.

the 'school run' in 2008<sup>5</sup>. The school run can therefore make a substantial contribution to congestion, pollution<sup>6</sup> and carbon emissions, and associated impacts, including poor local air quality, perceived and actual risks to safety, and severance<sup>7</sup>.

### Aims and components of the TTSI

The TTSI was announced in September 2003 with the following aims:

- to create a step change in home to school travel patterns away from the private car;
- to reduce road congestion and pollution; and
- to encourage more pupils to take regular exercise, thereby improving their health in future life.

The TTSI included a number of components, supported through capital and revenue-based measures, to expand the take up of School Travel Plans (STPs). In particular, funding was provided to English local authorities to appoint School Travel Advisers (STAs) and support capital improvements in and around schools for sustainable travel. The role of STAs, in place since April 2004, has been to work with all schools<sup>8</sup> to develop STPs, and carry out additional work that, whilst not necessarily resulting in an approved STP, does contribute to the TTSI's wider aims. The Initiative also allows all schools in England (except independent schools) who develop STPs that meet specific criteria to apply to Government for capital grant funding to help implement the STP.

The programme was due to end in March 2010, by which time it was intended that all schools in England, including independent schools, would have an active School Travel Plan (STP) in place. Funding was subsequently extended until March 2011.

The TTSI programme has been complemented by a number of separately funded and delivered initiatives to promote walking and cycling for school journeys. This included the 'Walking to School Initiative Grant Scheme', launched by DfT in 2006 to encourage more primary school children to walk to school; Cycling Demonstration Towns; and Cycling Cities and Towns. It also included a number of initiatives and grants to increase cycling promoted by Cycling England in partnership with local authorities and School Sport Partnerships, including National Standard Cycle Training, Links to School, Bike It and Cycle Parking for Schools.

The programme has been led by a TTSI Project Board, comprising of officers from the DCSF and the DfT, which provides direction, guidance and support to practitioners. A series of tools to monitor progress and evaluate outcomes have also been developed, including the addition of a question on the mode of transport used by pupils to travel to school in the annual School Census.

It is noted that some schools had a STP in place before the introduction of the TTSI programme, and a number will also have delivered initiatives to reduce car use and encourage walking and cycling without having a STP in place. These potentially complement the specific measures under the TTSI and support its aims.

### Supporting guidance

The launch of the TTSI programme was accompanied by two main supporting documents: '*Travelling to School: An Action Plan*' and '*Travelling to School: A Good Practice Guide*'. These documents offered practical advice to schools and local authorities, encouraging them to work together to:

<sup>5</sup> National Travel Survey, 2009.

<sup>6</sup> School Travel (Transport Committee - Second Report, 2009), Chap 5; and School Travel Schemes – Draft Bill and Prospectus (DfES, 2004), p1.

<sup>7</sup> Where individuals are deterred from accessing sustainable modes and/or community cohesion is hampered due to the presence of a physical barrier (e.g. a road or railway line).

<sup>8</sup> All primary and secondary schools, special and independent schools.

- put in place a STP in consultation with parents, pupils and local transport organisations which could include safer routes to school, provision for cycling, local restrictions on traffic and improved public transport;
- develop road safety skills, particularly for pupils at primary schools;
- work with the police, bus operators and the local community to promote positive behaviour by pupils on their journey to and from school;
- work with local transport bodies on how transport could support the extended school day;
- consider whether staggering school opening hours could allow pupils access to a wider range of school based activities;
- provide appropriate infrastructure such as secure cycle storage and lockers, new or improved bus stops and shelters, or changes to traffic management measures;
- use geography, citizenship or other lessons to explain the benefits of sustainable travel; and
- work with children with from special schools<sup>9</sup> to prepare them for independent travel wherever possible.

### Programme expenditure

The Government has provided extensive capital and revenue funding to support the TTSI. By March 2010 this included approximately £120 million of capital investment to local authorities and schools to help implement STPs, and £35 million of revenue funding, principally for TTSI staffing roles.

For illustration, a typical qualifying primary school has received £5,000 capital funding for the provision or upgrade of infrastructure and equipment as set out above. A typical qualifying secondary school has received £10,000.

In addition, individual schools have received other funding for school travel-related expenditure, through other Government initiatives such as Walking to School, Healthy Schools, Eco Schools and Bikeability initiatives (see Section 1.2 and 4.2.2).

### TTSI staffing roles

STAs were appointed by local authorities across England from 2004 and cover a mix of full-time, part-time and term-time posts. Some posts are permanent positions whilst others are fixed term contracts. Approximately 250 STAs are currently funded through the TTSI, including approximately 68 within the London Boroughs. Funding for STAs has been extended until March 2011.

In order to coordinate the STA programme, Regional School Travel Advisers (RSTAs) were seconded from local authorities and cover all nine English Regions, with two RSTAs covering both the North West and South East and one RSTA in each of the other regions. RSTAs sit between the TTSI Project Board and STAs providing advice and support to the STAs and feedback on progress to the TTSI Project Board.

Since April 2007, two part-time Regional School Travel Curriculum Advisers (RSTCAs) have been funded as a pilot scheme in the Yorkshire & Humber Region. These two advisers job share the role and have a series of key duties as outlined in the Yorkshire & Humber Sustainable Schools Partners' Network<sup>10</sup>:

- to support STAs as advisers to teachers on sustainable travel issues; and
- to develop teaching resources relating to sustainable travel issues.

<sup>9</sup> Schools for pupils with special educational needs.

<sup>10</sup> <http://www.yorkshireandhumber.net/esd/index.php>

The role of the RSTCAs originated from a formal approach to the TTSI Project Board from the RSTA requesting a remit to provide this role to Yorkshire & the Humber. There is no direct equivalent in any other region.

## 1.2 Complementary Initiatives

The TTSI has been complemented by a number of independent walking and cycling initiatives focused on school travel (Table 1.1). These initiatives have been implemented and funded through funding streams separate to the TTSI programme, but work towards the common goal of promoting and encouraging sustainable travel to and from school.

Table 1.1 – Walking and cycling initiatives complementary to TTSI

Initiative	Available Funding	Timeframe	Funding Source
Walking to School Initiative Grant	Up to £15 million in total for grants of: <ul style="list-style-type: none"><li>• £1,000 per year for every maintained primary school wanting to set up a <i>walking bus</i>; or</li><li>• £500 per year for every maintained primary school wanting to set up an alternative walking initiative e.g. <i>Walk on Wednesdays</i>.</li></ul>	2006/07 – 2009/10	DfT
Walk to School Week / Month	No grants available	Ongoing	Organised by Living Streets / ACT TravelWise
Cycle Funding	£15.6 million	2006/07 – 2009/10	DfT (Arranged by Cycling England)
Links to School	£47.7 million	2004 – 2011	DfT
Bike It	£3.9 million	2005 – 2011	DfT

In addition, there are a number of other associated programmes led and separately funded by the Government which have complemented the TTSI programme. These include:

- the Healthy Schools programme
- the Eco Schools scheme
- National Framework for Sustainable Schools
- Sustainable Modes of Travel Strategy
- Cycle Towns and Cities
- Sustainable Travel Towns

Further information about these initiatives is provided in Appendix A.

## 1.3 Evaluation of the TTSI Programme

### Initial evaluation

The DfT completed an initial evaluation of the TTSI in 2005 after the first year of the programme to assess whether the formalisation of the STP process had led to modal shift away from car use<sup>11</sup> (Figure 1.2). Limitations with the available data at the time, however, meant that it was not possible to draw conclusions about the national impact of the programme and a further evaluation toward the end of the programme was recommended.

The need for a further evaluation was supported by the Transport Select Committee, in 2008/09, following a report on school travel<sup>12</sup>:

*"School Travel Plans and Advisers are a means to an end – promoting sustainable school travel – rather than an end in themselves. It is vital the Government monitors the effectiveness of School Travel Plans. To*

<sup>11</sup> Travelling to School Initiative Report on the Findings of the Initial Evaluation (DfT, 2005).

<sup>12</sup> House of Commons Transport Committee 'School Travel – Second Report of Session 2008 – 09.

*do this the Government needs to make clear how it will measure success. A review of what has been achieved is needed before making a decision about funding School Travel Advisers post-2010."*

**Figure 1.2 – Key findings from the initial evaluation<sup>13</sup> of the TTSI programme**

- The initial evaluation of the TTSI found little evidence to suggest that there had been a widespread mode shift during the initial period of the Initiative, above that which may have happened in any case, in schools which had developed STPs.
- There had been a considerable increase in the number of STPs completed between 2003/04 and 2004/05, following the introduction of funding for STAs. However, it was not possible to differentiate the impact of School Travel Advisers from other contributing factors, for example the availability of capital grant funding from DfES, the impact of other local or national initiatives, economic factors or parental concerns about safety.
- Of those schools with STPs included in the analysis, the majority did not appear to have experienced a significant reduction in car use following implementation of the STP. Only 14% of primary and 40% of secondary schools analysed saw a significant reduction in car use. At the same time, 14% of primary and 56% of secondary schools analysed saw a significant increase in car use.
- There was a significant variation in mode shift results between regions. Schools in the North West appeared to have experienced the greatest reduction in car use.
- The study concluded that, due to the limitations of the data available, it was not possible to draw conclusions about the national impact of the Initiative.

### Final evaluation

In Summer 2009, Atkins was commissioned to conduct this further evaluation of the TTSI programme and complementary walking and cycling initiatives. The evaluation was intended to support the two sponsoring Departments – DfT and DCSF – in assessing the effectiveness of the Initiative to date and in establishing the best approach to continue work in reducing car journeys to/from school and encouraging more use of sustainable modes of travel in the future.

In addition to determining the extent to which the TTSI and other related initiatives have influenced travel behaviour, this evaluation also seeks to assess the effectiveness of key roles developed to aid delivery of the TTSI, namely STAs, RSTAs and RSTCAs.

Six overall research questions were identified for the purposes of the evaluation (Figure 1.3).

<sup>13</sup> <http://webarchive.nationalarchives.gov.uk/+http://www.dft.gov.uk/pgr/sustainable/schooltravel/research/tsi/travellingtoschoolinitiative5757>

Figure 1.3 – Key research questions for the final evaluation

#### Key Research Questions

- 1) What are the **strengths and weaknesses** of the TTSI?
- 2) Has the TTSI helped **tackle childhood obesity** and **reduce carbon emissions**?
- 3) Has **value for money** been achieved by the TTSI to date, specifically relating to changes in travel patterns and subsequent modal shift towards sustainable travel?
- 4) Will schools be able to **maintain active school travel plans** without the funding and support provided by the STAs?
- 5) Does evidence support the **ongoing role of STAs and RSTAs**?
- 6) What decisions does the evidence support for the **future of the TTSI**?

In order to address these objectives, the research has also sought to address the following supplementary issues as set out in Figure 1.4. References to the relevant chapter indicating where in the Report the research questions are addressed are shown in brackets.

Figure 1.4 – Supplementary research issues for the final evaluation

#### Supplementary Research Issues

- What have been the **outcomes of School Travel Plans**? (Chapter 4)
- To what extent has the **School Travel Adviser role** met the needs of the programme? (Chapter 5)
- To what extent has the **Regional School Travel Adviser role** met the needs of the programme? (Chapter 6)
- To what extent has the **Regional School Travel Curriculum Adviser role** met the needs of the programme? (Chapter 7)
- What have been the impacts of the **Walking to School Initiative**? (Chapter 8)

A list of supporting research questions is presented in **Appendix B**; along with a table illustrating where research questions are addressed within the report.

## 1.4 Structure of the Report

The rest of this report is structured as follows:

- Chapter 2 describes the overall evaluation approach adopted, presents each of the data sources, and highlights the limitations of the data and the methodology;
- Chapter 3 presents trends in mode share across different school types and locations since the introduction of the TTSI programme;
- Chapters 4 to 9 address each of the six Supplementary Research Issues listed in Figure 1.4, in respect of STPs, STAs, RSTAs, RSTCAs, walking and cycling initiatives; and
- Chapter 10 presents evidence on the value for money of the TTSI programme.

Evidence from each of these chapters is brought together in Chapter 11 in order to summarise findings against each of the six Key Research Questions listed in Figure 1.3 and presents our overall conclusions and recommendations.

## 2. Evaluation Methodology

### 2.1 Feasibility of Evaluating the TTSI

A number of factors need to be taken into account when considering the feasibility of evaluating the TTSI.

First, the evaluation has been conducted retrospectively: that is, using available information to look back at patterns observed in school travel. Data limitations (detailed below) mean that it has not been possible to robustly describe the baseline situation prior to the introduction of the TTSI.

Second, there is no clear comparison or control group against which to assess any changes in school travel in schools with School Travel Plans (STPs). This is because the TTSI was rolled out across the country in a way which did not create robust natural comparison groups as it proceeded, and because of difficulties (described below) with constructing a retrospective comparison group.

Third, as noted above, there are many different potential influences on school travel choices, ranging from overlapping policy initiatives to broader societal changes. Data limitations and the retrospective nature of the evaluation mean that it is not possible to disaggregate the impact of different factors to give a clear indication of the specific contribution of the TTSI among other influences.

Finally, the methodology is not able to identify long term benefits such as influences on travel behaviour and changes in attitudes towards the environment, health and safety later in life; or impacts on parental travel behaviour and wider attributes.

These factors mean that designing an evaluation which is capable of attributing any observed changes in school travel patterns to the TTSI is extremely challenging. As this chapter demonstrates, best efforts have been made to conduct a quasi-experiment by identifying a comparison group<sup>14</sup> and using available data to make an assessment of the impact of the Initiative. There remain, however, significant caveats regarding the strength of the evidence that the evaluation was able to gather, and attributing impact to the Initiative. Small changes in mode share trends may not be able to be differentiated from year-on-year variability using these methods.

### 2.2 Overview of Approach

The methodology for this evaluation draws on a range of pre-existing quantitative evidence sources such as the National Travel Survey (NTS) and the School Census. In addition, this quantitative evidence base was supplemented by a School Survey and a School Travel Advisers Survey. Qualitative evidence was also gathered via a series of workshops and a number of school case studies.

The sources of evidence used to address the six overall research objectives and the associated research questions outlined in Section 1.3 are summarised in Table 2.1

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<sup>14</sup> Consisting of schools for which comprehensive travel to school mode share data was available (via the School Census), but did not have a formal School Transport Plan in place as of 2008/09.

Table 2.1 – Quantitative and qualitative sources of evidence

Existing Data Sources	New Sources of Evidence
<b>Quantitative Sources</b> <ul style="list-style-type: none"> <li>- <b>National Travel Survey</b></li> <li>- Mode share data from 13,428 schools (2006/07 to 2008/09), collected via an annual <b>School Census</b> administered by the DCSF</li> </ul>	<b>Quantitative Sources</b> <ul style="list-style-type: none"> <li>- 576 fully and partially completed responses to an online questionnaire-based <b>School Survey</b></li> <li>- 185 responses to an electronic self-completion <b>School Travel Advisers Survey</b></li> </ul> <b>Qualitative Sources</b> <ul style="list-style-type: none"> <li>- 32 <b>Workshops</b> with key stakeholders (including STAs, RSTAs, RSTCAs, local authorities, Passenger Transport Executive / Integrated Transport Authority officers, and relevant regional and national stakeholders)</li> <li>- Nine <b>in-depth case studies</b> covering a range of school types, locations and sizes</li> </ul>

The different evidence sources enable a focus on both:

- **process** – how the TTSI has been implemented in practice; whether the STA, RSTA and RSTCA roles are meeting the needs of the programme; and whether expected outputs (e.g. 100% of schools with active STPs) have been delivered; and
- **impact** – the extent to which the intended outcomes of the TTSI have been achieved, factors influencing actual outcomes, and identification of unintended outcomes (positive or negative).

In addition, this approach allows the research to:

- identify a range of viewpoints and alternative explanations, whilst recognising the limitations of the data available;
- consider the views of different 'players' in the process (including those involved in the delivery and implementation of the programme, as well as recipients of the outcomes);
- test for consistency and divergence in the emerging findings;
- identify the causes behind conflicting evidence and explanations; and
- identify a *best fit* answer based on the range of evidence available.

The overall evaluation has been informed by a theoretical framework, termed a 'causal chain', which sets out a logical process that should occur if the TTSI programme is operating as intended (Figure 2.1).

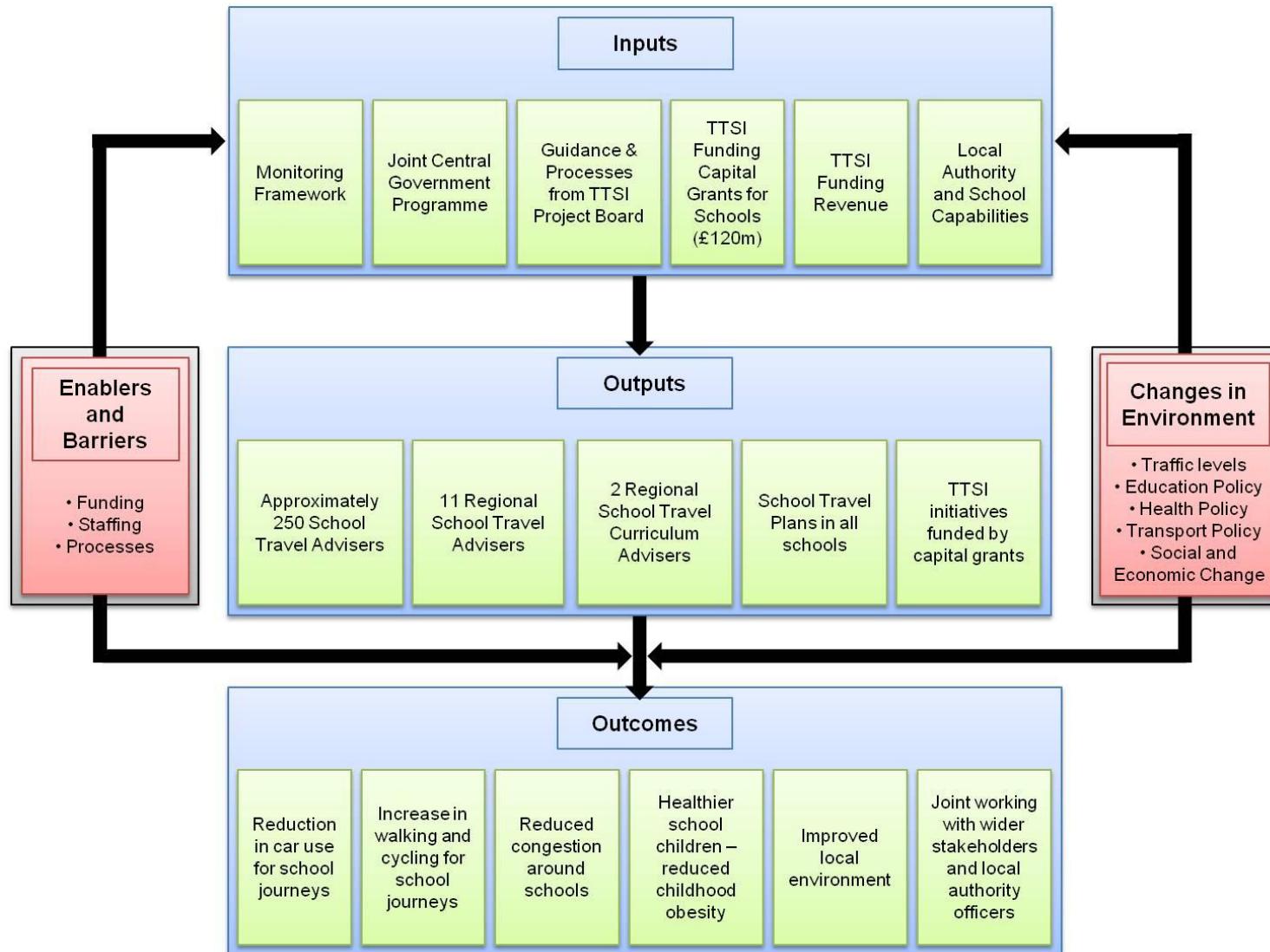
The framework, and supporting evidence, seeks to understand the role of and the relationship between:

- **inputs** - resources and activities (process evaluation);
- **outputs** - STPs and complementary initiatives, advisers, and TTSI initiatives funded from capital grants for schools (process evaluation); and
- **outcomes** - change in travel behaviour and wider impacts (impact evaluation).

The framework set out in Figure 2.1 also highlights the factors which constrain or assist the process. More specifically, these are identified as **barriers, enablers and external factors**.

The remainder of this chapter reviews the relevance and use of the respective sources of evidence and their limitations.

Figure 2.1 –Overview of TTSI process



## 2.3 Quantitative Evidence

### 2.3.1 NTS Data (Mode Share)

The National Travel Survey (NTS) gathers information on travel habits from a representative sample of households in Great Britain, including data on mode of travel to school. This data has been gathered on an ad hoc basis since the mid-1960s and on a continuous basis since 1988.

NTS data is collected via two main sources: face to face interviews and travel diaries, which record details of all household trips over a seven day period. Since 2002, mode of travel to school information has been based on an annual weighted sample of between 3,500 and 4,000 travel diaries. Prior to 2002, the yearly sample was less than half this number of diaries.

#### Data limitations

**Non-response bias<sup>15</sup> / small sample size** - The NTS is a continuous survey designed to identify long-term trends. Although measures are taken to ensure that the sample is representative of the national population in terms of demographic and socio-economic characteristics the relatively small sample size means that care should be taken when drawing conclusions about short-term changes, such as before and after the implementation of the TTSI. The data from the travel diaries only represents changes in travel behaviour in a small fraction of the 8.1 million<sup>16</sup> pupils (January 2009) travelling to school.

The NTS data is used in this study to provide an indication of background levels of change against which to interpret the changes observed in STP schools.

### 2.3.2 DCSF School Census (Mode Share)

The School Census collects data on schools and pupils in England and is administered by the DCSF. School Census returns are a statutory requirement of the Education Act 1996. Information on usual mode of travel to school was introduced to the Census in January 2007.

Guidance<sup>17</sup> states that "*Usual mode of travel to school should be recorded for all pupils in schools with an approved Travel Plan. Where a pupil uses more than one mode of travel for each journey to school, the longest element of the journey by distance should be recorded. Car share covers both informal car share arrangements and formal car share schemes.*

*If a pupil uses different modes of travel throughout the week and the most frequently used weekly mode cannot be determined, then the most commonly used mode throughout the academic year must be recorded. Pupils whose usual mode of travel is by scooter, skateboard or roller skates/blades should record their usual mode of travel as Walking.*"

The Guidance recommends travel data is collected from children (or parents) during the autumn term, to provide a level of consistency and help avoid complications caused by seasonal issues. It also recommends that information is included on schools' data checking sheets<sup>18</sup> or collected during registration.

<sup>15</sup> Non-response bias occurs where those who respond to a survey differ in the outcome variable (i.e. their views and experiences of the TTSI) from those who do not respond.

<sup>16</sup> <http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000843/index.shtml>

<sup>17</sup> School Census for Primary Schools in England: Preparation and Guidance for 2009 (DCSF) and School Census for Secondary Schools in England: Preparation and Guidance for 2009 (DCSF).

<sup>18</sup> Data Checking Sheets are given to pupils to take home, so that parents can check that the information the school has is correct.

## Validation checks

The School Census data is extracted from a school's Management Information System (MIS). A number of validation checks are run by the school before the Census return is submitted to the local authority<sup>19</sup>. The validation checks for 'mode of travel' data are:

- that only valid 'mode of travel' codes have been used;
- that pupils with 'mode of travel' recorded as 'boarder', have been coded as such elsewhere in the School Census; and
- that 'mode of travel' has been entered for all pupils.

Each authority's Management Information Systems (MIS) officer then collates the School Census and is responsible for providing a comprehensive and robust data set to DCSF. Part of the STA role is to obtain the pupils' mode of travel data from the MIS officer and check the data in time to feed any corrections into the return to DCSF. Alongside other quality assurance processes, DCSF check that all schools with an approved STP have submitted 'mode of travel' data, before issuing to other organisations, including DfT.

## Dataset used for analysis purposes (Census Subset)

For the purposes of this evaluation, DfT provided School Census data for 2006/07, 2007/08 and 2008/09, covering the following types of school: primary (aged 5 to 10); secondary (aged 11 to 16); and special schools. The database included approximately 22,000 records summarising travel to school mode share over the three year period.

To enable detailed analysis to be undertaken, the following additional variables were also included in the dataset:

- rural / urban location – based on output area classification used by the Department for the Environment, Food and Rural Affairs (DEFRA);
- whether or not the school is located within the 20% most deprived areas nationally (using the Index of Multiple Deprivation (IMD) 2007 dataset); and
- whether the school is situated within one of the first six Cycling Demonstration Towns.

In addition, the following records were removed in order to provide a robust set of data for analysis purposes:

- schools that did not have associated geographic coordinates and could not be mapped;
- schools that opened, closed or were part of a merger during the three year period; and
- schools reporting mode of travel data for less than 90% of their pupils in one or more years.

The resultant **Census Subset** contained 13,428 school records (for each of the three years), accounting for **62% of schools nationally and approximately 3.6 million pupils** (Table 2.2).

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<sup>19</sup> With the exception of academies, City Technology Colleges and non-maintained special schools who submit data direct to DCSF.

Table 2.2 – Census Subset: Sample rate by school type

School Type	No. of school records per year (2006/07 to 2008/09)	% of schools nationally <sup>20</sup>	Number of pupils (2008/09)
Primary	11,181	65%	2,090,512
Secondary	1,661	50%	1,433,890
Special	586	55%	42,245
All	<b>13,428</b>	<b>62%</b>	<b>3.6 million</b>

Table 2.3 shows that the characteristics of the 13,428 schools comprising the School Census Subset are broadly representative of the characteristics of all primary, secondary and special schools<sup>21</sup>, despite the exclusion of schools failing to provide comprehensive responses. The only sizeable difference between the two sets of data is a small under-representation of secondary and special schools in London in the Census Subset.

Fifty-nine percent of schools in the Census Subset have had a STP in place for three years or more (Table 2.4). As School Census data is only available for 2006/07 to 2008/09, these schools have been analysed together and referred to as “**STP 3+ years**” in the rest of the report.

<sup>20</sup> In 2008, there were 17,205 primary schools, 3,295 secondary schools and 1065 special schools (DfE: Schools, Pupils and their Characteristics: January 2010; Table 2a) <http://www.dfes.gov.uk/rsgateway/DB/SFR/s000925/SFR09-2010NT.xls>.

<sup>21</sup> The characteristics of 'all schools' have been based on the 20,037 records in the full School Census dataset for which geographic location data (coordinates) has been provided. Although this data represents only just over 90% of all primary, secondary and special schools in England, the information is considered to be sufficiently representative of 'all schools'

**Table 2.3 – Detailed composition of Census Subset**

School Type	Primary	Secondary	Special	All
Primary	-	-	-	83% (80%)
Secondary	-	-	-	12% (15%)
Special	-	-	-	4% (5%)
Urban location	67% (69%)	80% (83%)	87% (89%)	70% (72%)
Rural location	33% (31%)	20% (17%)	13% (11%)	30% (28%)
East Midlands	9% (9%)	9% (9%)	10% (8%)	9% (9%)
Eastern	13% (12%)	14% (13%)	10% (9%)	13% (12%)
London	8% (10%)	<b>6% (11%)</b>	<b>10% (14%)</b>	8% (10%)
North East	5% (5%)	7% (6%)	6% (6%)	5% (5%)
North West	13% (15%)	12% (14%)	18% (16%)	13% (15%)
South East	16% (16%)	17% (15%)	17% (18%)	16% (16%)
South West	12% (12%)	12% (10%)	9% (9%)	12% (11%)
West Midlands	10% (11%)	12% (12%)	12% (11%)	11% (11%)
Yorkshire and the Humber	13% (11%)	11% (10%)	9% (8%)	12% (11%)
No. of schools located within the 20% most deprived areas nationally	18% (19%)	14% (15%)	18% (21%)	17% (18%)
No. of schools within one of the six Cycling Demonstration Towns	2% (2%)	2% (2%)	3% (3%)	2% (2%)
Total	<b>100% (100%)</b>	<b>100% (100%)</b>	<b>100% (100%)</b>	<b>100% (100%)</b>

Source: School Census Subset, 13,428 schools. Percentages in brackets relate to 'all' 20,037 primary, secondary and special schools on the full School Census database (see previous footnote). Highlighted cells indicate those sub-groups with the largest percentage point difference between the proportion of schools in the Census Subset and the proportion found amongst 'all schools'.

**Table 2.4 – Breakdown of STP status in School Census subset**

STP Status	School Census Subset	%
Non-STP Schools	2,183	16%
STP – 1 year	1,344	10%
STP – 2 years	1,984	15%
STP – 3 years	3,014	22%
STP – 4 years	3,050	23%
<b>Total</b>	<b>13,428</b>	<b>100%</b>

Source: School Census Subset, 13,428 schools.

## Data limitations

**Timescale** - 2006/07 was the first year School Census data on mode of travel to school was collected in a comprehensive and consistent manner. Comparison with modes used prior to the launch of the TTSI is not possible. **This lack of a baseline limits the ability of the evaluation to quantify the extent of any changes observed in school travel following the introduction of the TTSI, and attribute them to the intervention.**

**Non-response bias** – Potential sources of non-response bias are summarised below:

- To date, Independent Schools, General Hospital Schools, and Pupil Referral Units have not been asked to provide information for the School Census<sup>22</sup>. These schools are more likely to be reliant on car use, and may find it more challenging to achieve positive mode shift<sup>23</sup>.
- Schools without STPs are not required to provide travel to school data, but may respond to requests to do so from local authorities or may volunteer to do so, particularly if they wish to demonstrate positive mode shift results. **A potential positive 'reporting bias' may therefore exist within the non-STP data, and the reduction in car use may be above average for those who have provided travel to school data compared to those who have not. If present, this bias would make it more difficult to detect any positive impacts of the TTSI on mode share in schools with a STP.**

**Difficulties creating a robust comparison group** – Schools with an 'approved' STP in place have been categorised as 'STP Schools' and those without are referred to as 'Non-STP Schools'. However, this ignores the fact that some schools implemented school travel initiatives prior to 'sign-off' of their STP, whilst others may take no action until they receive their capital grant funding. In addition, many authorities have implemented cross authority schemes that are available to both groups of schools. The Initial Evaluation<sup>24</sup> suggested that it may be more appropriate to classify schools as "schools carrying out travel planning work" and "schools not carrying out travel planning work". While this seems sensible it has not been practical to adopt this approach, as recognised by the original evaluation team

**Extent to which School Census data can monitor TTSI impacts** – Several participants at the STA workshops raised concerns about the extent to which mode share data collected via the School Census can be used to monitor travel behaviour change resulting from the TTSI:

- Success in encouraging small changes in travel behaviour may not be picked up. For example, those switching from car to 'park and stride' and walking at least part of the way to school will continue to be recorded as coming by car; as will WOW<sup>25</sup> participants walking less than 3 days a week and a child cycling 3 days a week during the summer months but coming by car the rest of the year. *It could be argued that these types of travel behaviour change are unlikely to have a significant impact in terms of reducing congestion / pollution and improving health (in some cases 'park and stride' participants only walk for 100 – 200 metres), and are more likely to be short term in nature compared to those pupils who completely change their mode.*
- Time and resource pressures may mean that some schools do not undertake a robust survey of pupils' mode of travel.
- Primary school pupils may find it difficult to identify their usual main mode, as opposed to the last leg of their journey that day or what they perceive to have been the main mode.

<sup>22</sup> However, from January 2010, School Census data will also be collected from Pupil Referral Units.

<sup>23</sup> Presently, 7% of children attend independent schools. See <http://www.dfes.gov.uk/rsgateway/DB/SFR/s000744/index.shtml>.

<sup>24</sup> Travelling to School Initiative Report on the Findings of the Initial Evaluation (DfT, 2005).

<sup>25</sup> Walk on Wednesday.

**Despite the above limitations, the School Census Subset has been used for the majority of analysis presented in this report, rather than the NTS.** The Subset reflects 62% of schools nationally, and is therefore considered to be more representative of year-to-year changes in travel behaviour than the NTS. It is also sufficiently large to enable results to be disaggregated by categories of school type. Furthermore, the data has been subject to some basic validation checks undertaken by MIS and DCSF officers (see above).

### Statistical analysis

Where appropriate, statistical tests have been used to assess whether differences between groups of School Census data are '*statistically significant*'. i.e. if the differences are unlikely to have occurred by chance.

Very small changes can be found to be '*statistically significant*' and it is therefore also important to consider the size of change observed and whether this is meaningful in a practical sense.

**Unless otherwise stated, only results which are statistically significant (at a 95% confidence level) are presented in the main text of this report.**

## 2.3.3 School Survey

As part of this evaluation, an online School Survey was distributed to a sample of 5,000 schools in September/October 2009, out of a total of approximately 22,000 primary, secondary and special schools in England<sup>26</sup>. The sample was stratified by English region, local authority type, school type, urban / rural classification, and school size.

The purpose of the survey was to understand the impact of the TTSI from a school's perspective, focusing on the impact of the TTSI, the effectiveness of School Travel Plans, the success of walking and cycling initiatives, and the importance of School Travel Advisers.

The 20 minute self-completion survey comprised of predominantly closed questions, and sought the views of those responsible for some aspect of travelling to school (i.e. head teachers, deputy head teachers, governors, teachers or those tasked with reviewing how pupils travel to school).

Over half of the surveys were completed by either a head (33%) or deputy head teacher (19%). A further 16% were teachers and 12% were administrators. Responses from governors and teaching assistants, who are likely to be least qualified to respond to the survey questions, made up less than 4% of all responses.

Throughout the process, the response rate was monitored, and where necessary, reminder emails were sent to the initial 5,000 schools in order to prompt participation.

### Data limitations

**Small sample size** - After cleaning and checking the data, 409 fully completed surveys were received<sup>27</sup>, with a further 167 being partially completed, totalling 576 schools. This gave a survey response rate of 11.5%, or 8.2% for full responses.

**Representativeness of sample** - A breakdown of the achieved sample compared to the target sample, by each of the survey strata, is presented in Appendix C (Table C1). Whilst there are some variations in observed characteristics between the profile of the achieved sample and the target sample, in general this variation is relatively small. However:

- a higher proportion of responses were achieved from schools in London (20.6% compared with a target of 10.9%) and the South East (19.2% compared with a target of 15.6%), with

<sup>26</sup> The original sample size of 5,000 was based on an assumed response rate of 20%, with the aim of achieving 1000 responses.

<sup>27</sup> Including six from independent schools.

fewer than expected responses achieved in other regions - only 14 responses were achieved in the North East; and

- a lower proportion of responses were achieved from primary schools (70.5% compared with a target of 80.1%), with more than expected responses from secondary schools (20.8% compared with a target of 15.1%) and special schools (8.7% compared with a target of 4.8%).

These biases need to be considered when presenting and interpreting data from the School Survey<sup>28</sup>.

**Non-response bias** - Potential skewing because of non-response. The views of individuals who did respond may differ to those of individuals that do not reply. For example, people who respond to a request to complete a survey are likely to be more interested in or enthusiastic about the topic and therefore more willing to complete the survey, which biases the results. It is not possible in this study to ascertain the degree to which non-response bias is present because no information was gathered on the characteristics of non-respondents or reasons for non-response. However, there are strong reasons for assuming that response bias is likely to be present: the achieved response rate was lower than expected, and it could be argued that those schools which place a particular value on school travel planning or had extreme views would be most likely to respond.

**Policy response bias** - Policy response bias is a type of cognitive bias which can affect the results of a statistical survey if respondents answer questions in one of two ways. The respondent might answer questions in the way they think the questioner wants them to answer rather than according to their true beliefs. The second type of policy response bias relates to circumstances where a respondent has a vested interest in the outcome of a study and hence may try to influence the survey results by modifying the answers they provide. This could apply to schools which are keen to see the STA role retained and funding continued.

**Taking these all issues into account, the School Survey findings should be treated with caution, and used as indicative evidence only.**

**Appendix C** provides further information on the School Survey, presenting the sampling stratification, the number of responses to each question, and a summary of headline responses to the survey questions. A breakdown of results by school type (primary, secondary and special schools) and region is also provided.

## 2.3.4 STA Survey

All STAs were sent a short electronic self-completion survey to seek specific information on their responsibilities and opinions on the success of the TTSI.

A total of 185 STAs responded (out of approximately 250), from 107 local authorities. This represents approximately three-quarters of STAs. The sample includes an over-representation of responses from County-based STAs and an under-representation of responses from Unitary-based STAs<sup>29</sup>. Over half of the respondents (53%) had been in the role for over three years, and were able to base their responses on experience and a good knowledge of the role.

**Appendix D** provides further information on the STA Survey, including headline responses to the survey questions.

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<sup>28</sup> For example, views on the success of cycling initiatives may vary between primary and secondary schools due to different levels of parental safety concerns regarding cycling and willingness to let their children cycle to school. The small over-representation of secondary schools in the overall sample may over-estimate the success of complementary cycling initiatives. In parts of London, the success of the TTSI may have been influenced by the introduction of the Central London Congestion Charge and across London, the generally higher levels of traffic on the roads may have acted as a greater deterrent to cycling than in other regions.

<sup>29</sup> Counties make up just 23% of all authorities in England but accounted for 46% of STA responses. In contrast, Unitaries account for 31% of all authorities in England but accounted for just 18% of STA responses. See Appendix D, Table D.2 for further information.

### Data limitations

**Response bias** – As noted above, it is important to note that responses are likely to include a bias towards respondents with strong views or polarised experiences (i.e. supporters or opponents of the initiative).

In addition, STAs have a vested interest in promoting the positive outcomes of their roles, and may also be unintentionally biased in their perceptions of mode shift success, based on particular successes with groups of pupils and the influence of other positive aspects of STPs (e.g. awareness raising or changes in attitudes which may have yet to be translated into actual changes in travel behaviour).

## 2.4 Qualitative Research

The earlier evaluation of the TTSI programme in 2005 focussed predominantly on quantitative data and drew inconclusive evidence regarding the effectiveness of the TTSI. The methodology for this evaluation therefore includes qualitative research to complement and supplement the quantitative analysis.

### 2.4.1 Workshops

A series of workshops were held with a range of stakeholders involved in the TTSI (Table 2.5). The aim of these workshops was to understand the roles and responsibilities of STAs, RSTAs and RSTCAs, and seek views and feedback on the TTSI and complementary initiatives.

Invitations were sent to all relevant stakeholders from the above groups. A total of 244 individuals accepted and participated in the workshops.

Table 2.5 – Evaluation workshops and participants

Stakeholder Group	Number of Workshops	Number of participants
School Travel Advisers	11 (1 to 2 per region)	113
Regional School Travel Advisers	1	8
Regional School Travel Curriculum Advisers	1	2
Local authority and Passenger Transport Executive / Integrated Transport Authority officers	9 (1 to 2 per region)	102
Government Office officers	9 (1 to 2 per region)	13
National Stakeholders <sup>30</sup>	1	6
<b>Total</b>	<b>32</b>	<b>244</b>

The workshops were structured in two parts:

- **Part 1 – Introduction and Presentation** including a presentation describing the purpose, background and outcomes sought by the evaluation, and outlining the workshop format; and

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<sup>30</sup> National stakeholders included Living Streets, Cycling England, Modeshift, Sustrans, ATCO, and Department of Health.

- **Part 2 – Focus Group Discussion**, involving discussion of the TTSI and complementary initiatives in small groups of between 8 and 12 participants per group.

Focussed topic guides were developed in consultation with the project steering group to enable a level of consistency in questions posed to attendees, and ensure a balance was met between the number of questions / topics covered and the time available. A copy of each topic guide is provided in **Appendix E**.

All sessions were recorded and detailed notes produced to enable a full and comprehensive account of comments and opinions to be captured and evaluated. All comments captured during the sessions were analysed using a framework approach to allow key themes and ideas to be explored along with the range of opinion expressed by each group. These findings are presented in the subsequent chapters of this report.

#### Data limitations

**Response bias** - Workshop participants were self-selecting in terms of agreeing to attend, and are again likely to include a bias towards respondents with strong views or polarised experiences. In addition, there may be a tendency for participants to focus on positive experiences, rather than presenting a balanced viewpoint.

### 2.4.2 Case Studies

In depth case study evidence was collected from nine schools, involving more detailed discussion of the impacts and outcomes of the TTSI programme with the head teacher (or school representatives), STA and RSTA for each school.

#### Case study identification

It was agreed with the Project Board that the focus should be on 'exceptional' schools, in order to help identify best practice. Schools were therefore selected via two approaches:

- all RSTAs and STAs were asked to suggest schools within their region or local authority which they considered to be 'exceptional' in terms of modal shift, developing and implementing sustainable travel initiatives and proactively supporting the TTSI. In total, 157 case studies were recommended from 44 different local authorities; and
- a further 40 schools were selected by DfT using School Census data to identify the top performing schools in terms of reduced or sustained low levels of car use, or increased or sustained high levels of cycling and walking use, over the three year time frame analysed.

Nineteen schools were short listed, covering primary, secondary, special and independent schools, small and large sized schools, and including those from a range of different authority types and locations (urban/rural and deprived areas). The short-listed schools were picked because they were seen as strongly performing with respect to at least one access mode. This enabled examples of good practice to be identified and investigated in slightly more depth than was possible via the other qualitative research undertaken. Due to timescales, it was not possible to undertake additional case study research in order to focus on schools where access to school by car had increased and there had been little or no increase in access by walk, cycle, public transport or car share.

Contact was made with these 19 schools to confirm their suitability and willingness to participate in the evaluation, and nine agreed to fully participate in the research (Table 2.6). The case study research was undertaken by visiting the school, interviewing a person who has been involved in the initiatives implemented at the school, and by reviewing the school's location in relation to its catchment area and to likely access routes.

Case study write-ups are presented in **Appendix F**.

**Table 2.6 – Case study schools**

	Local Authority Type	Region	School Type (1)	School Type (2)	Pupil Numbers	Within 20% Most Deprived Areas	Reason for inclusion in the Evaluation
1	County	West Midlands	Primary	Rural	120 to 150	No	Large decrease in car use observed
2	County	South West	Primary	Rural	120 to 150	No	Large decrease in car use observed
3	County	East of England	Independent / Secondary	Urban	3,400 to 3,500	No	Decrease in car use
4	County	East of England	Primary	Urban	340 to 375	No	Successive improvements in % walking
5	Met. District	Yorkshire & Humber	Primary	Rural	85 to 100	Yes	Large walking increase
6	County	South East	Secondary	Urban	1,300 to 1,400	No	Sustained 50% cycling
7	Met. District	Yorkshire & Humber	Primary	Urban	200 to 230	Yes	Large walking increase, sustained
8	Unitary Authority	East Midlands	Junior	Urban	340 to 375	No	Successive improvements in % cycling and walking
9	Met. District	Yorkshire & Humber	Special	Urban	120 to 150	No	Requirement for a special school. Identified from the School Survey responses

### 3. Trends in Mode Share for Travel to School

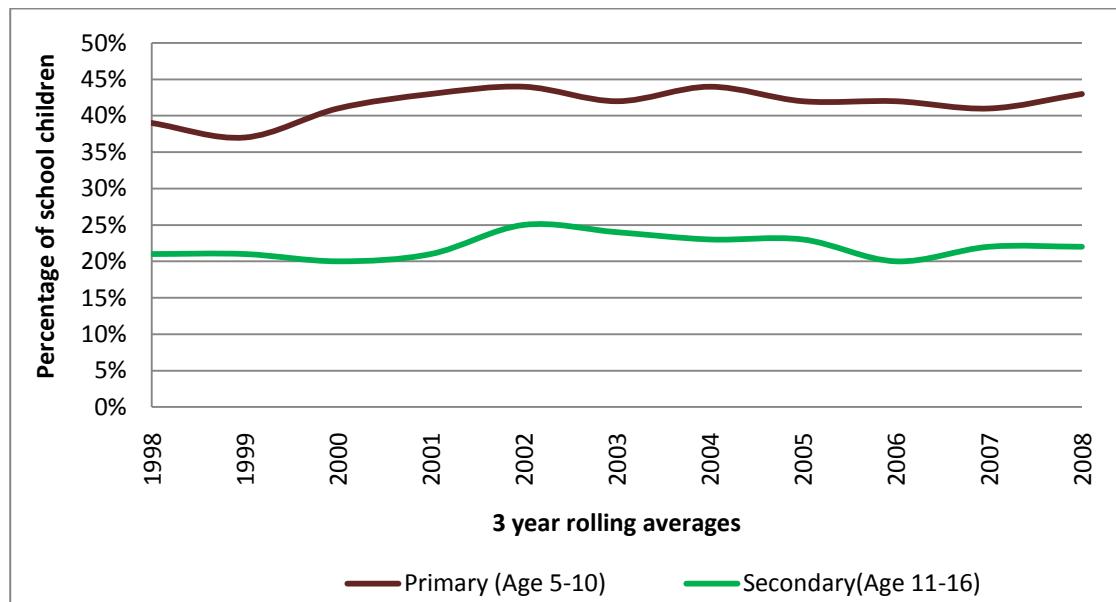
This chapter examines the evidence available on recent trends in modes used for travel to/from school. It is intended to set the context for Chapters 4 to 9 of this report which examine the role of the TTSI and complementary initiatives in influencing observed travel to school trends. It does not compare trends at schools with and without School Travel Plans (STPs); this is considered in Chapter 4.

Section 3.1 examines the trend since 1998 based on evidence from the National Travel Survey (NTS), while Section 3.2 involves a more detailed analysis of travel behaviour change by school type since 2006/07 based on data from School Census Subset.

#### 3.1 NTS Data

Data from the NTS shows a general increase in the proportion of pupils travelling to school by car between 1998 and 2002, in both primary and secondary schools (Figure 3.1). Since the introduction of the TTSI in 2003/2004<sup>31</sup>, car use has fluctuated between 41% and 44% at primary schools and 20% and 24% at secondary schools. There is no clear evidence of an overall increase or reduction in car use since 2003/04 to date.

Figure 3.1 – Proportion of pupils travelling to school by car: National Travel Survey: England



Source: National Travel Survey – England, 2008

However, as discussed in Section 2.2.1, it should be noted that NTS data is based on travel diaries representing less than 1% of all travel to school trips, and provides only a very general indication of travel behaviour trends. We have therefore focused on the School Census Subset as our principal evidence base in this report.

<sup>31</sup> The TTSI was launched in 2003, with funding and implementation starting in 2004.

## 3.2 School Census Subset

Data from the School Census Subset (see Section 2.2.2) describes changes in travel to school behaviour between 2006/07 and 2008/09 covering the more recent years of the TTSI. It should be noted that the Initiative had already been in place for two years by 2006/07 and during this time there had already been a considerable increase in the number of schools with STPs.

There are a number of limitations with the dataset (described in Chapter 2) which need to be taken into account when using the results. However, the data is believed to provide a more representative picture of travel to school trends than the NTS data. The remainder of this section reports key trends.

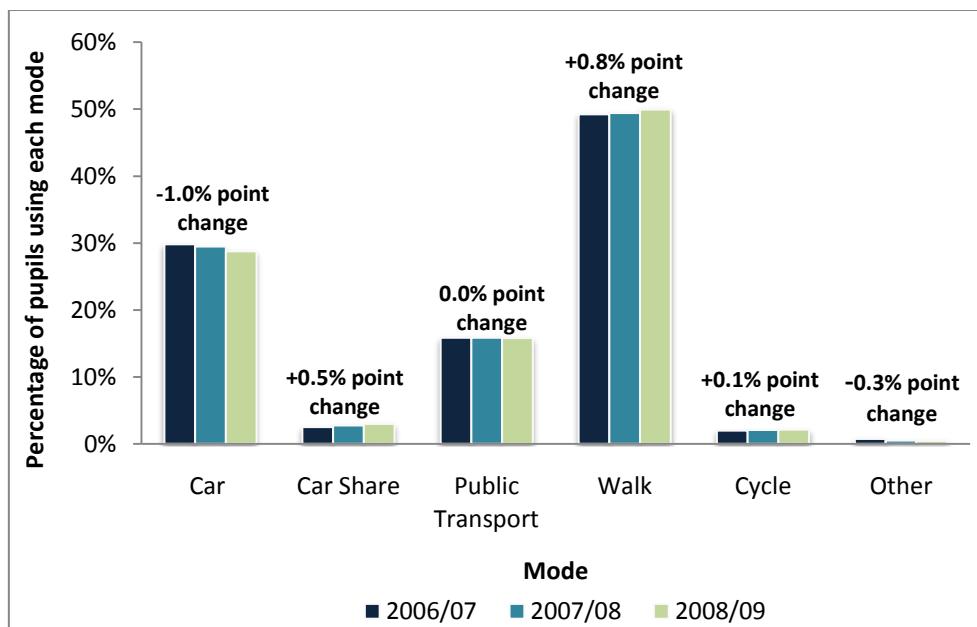
### 3.2.1 Overall Change in Mode Share

Figure 3.2 shows the change in the modes used to travel to school by pupils represented in the School Census Subset. The biggest changes between 2006/07 and 2008/09 include:

- a 1.0 percentage point reduction in the proportion of pupils travelling by car (from 29.8% of all pupils in 2006/07 to 28.8% of pupils in 2008/09);
- a 0.8 percentage point increase in walking (from 49.2% to 49.9%); and
- a 0.5 percentage point increase in car share (from 2.5% to 3%).

Percentage mode use figures represent the **overall proportion of pupils (within the subset)** using each mode in the 2006/07 and 2008/09<sup>32</sup>, and can be viewed as a **pupil-based mean**<sup>33</sup>.

Figure 3.2 – Change in overall proportion of pupils using each mode: all pupils



Source: School Census Subset, 13,428 schools. The percentage point change in the proportion of pupils using each mode between 2006/07 and 2008/09 is displayed above each set of bars.

The data has also been analysed on a school by school basis<sup>34</sup>, involving the calculation of a **school-based mean**<sup>35</sup> (Table 3.1). Statistical analysis (based on a paired t-test) has then been

<sup>32</sup> For example, in 2007, 1.079 million pupils out of a total of 3.623 million travelled by car, equating to 29.8%.

<sup>33</sup> Note, larger schools have a bigger influence on the overall average than smaller schools.

<sup>34</sup> Considering the change in use reported by School A, School B, School C, etc.

used to determine whether the difference in the school-based mean is large enough to be statistically significant.

**Table 3.1 – Change in average mode use reported across schools**

Mode	Average mode use across schools in 2006/07 (school-based mean)	Average mode use across schools in 2008/09 (school-based mean)	Percentage point difference	Is the change large enough to be statistically significant?
Car	37.6%	36.1%	-1.5%	Yes
Car Share	3.0%	3.5%	0.5%	Yes
Public Transport	9.7%	9.6%	-0.1%	Yes
Walk	47.8%	49.1%	1.3%	Yes
Cycle	1.3%	1.3%	0.0%	No
Other	0.6%	0.4%	-0.2%	Yes

Source: School Census Subset, 13,428 schools.

Table 3.1 shows that there has been a significant change, on a school by school basis, for all modes except cycling; however, the changes reported for public transport and 'other' modes are considered to be too small to be meaningful in a practical sense.

*Note – It is not feasible or meaningful to undertake similar statistical analysis relating to the pupil-based mean.*

### **Change by school type (primary, secondary and special schools)**

Figures 3.3 to 3.5 show different trends across primary, secondary and special schools (including the change in the pupil-based mean). It is worth noting that mode share differs across the three types of school, with car and walk being the dominant modes at primary schools; public transport and walk the main modes at secondary schools; and car and public transport dominating at special schools.

Analysis of the school-based mean shows that the following changes are statistically significant.

In primary schools:

- a reduction in average car use, resulting in a 1.6 percentage point reduction in the proportion of all pupils (within the subset) travelling by car (Figure 3.3); and
- an increase in the average proportion walking, resulting in a 1.5 percentage point increase in the proportion of all pupils (within the subset) walking (Figure 3.3).

*The average change in car share, public transport and 'other' mode use was also found to be statistically significant, but the scale of the changes is considered to be too small to be meaningful in a practical sense.*

In secondary schools:

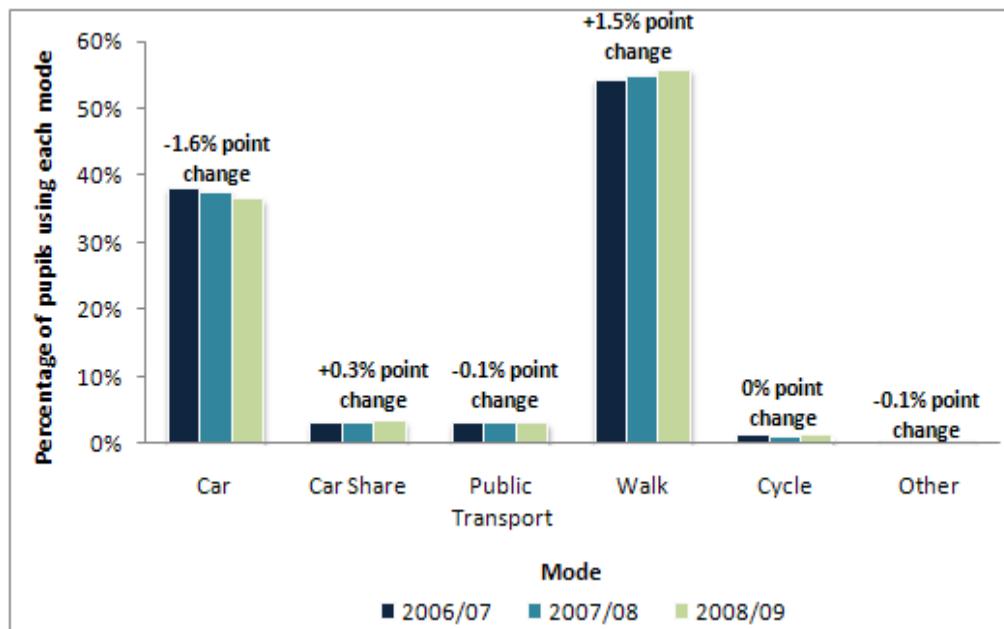
- an increase in the average proportion using car share, resulting in a 0.7 percentage point increase in the proportion of all pupils (within the subset) using car share (or, the pupil-based mean) (Figure 3.4); and
- an increase in the average proportion using 'other' modes, resulting in a 0.5 percentage point increase in the proportion of all pupils (within the subset) using 'other' modes (Figure 3.4).

<sup>35</sup> For example, in 2007, School A reported a 2 percentage point reduction in car use, School B a 4 percentage point reduction, and School C a 5 percentage point reduction; giving a **school-based mean** reduction across these schools of 3.7 percentage points. All schools have an equal influence on the overall average, regardless of size.

*The average change in car use and cycling was also found to be statistically significant, but the scale of the changes is considered to be too small to be meaningful in a practical sense.*

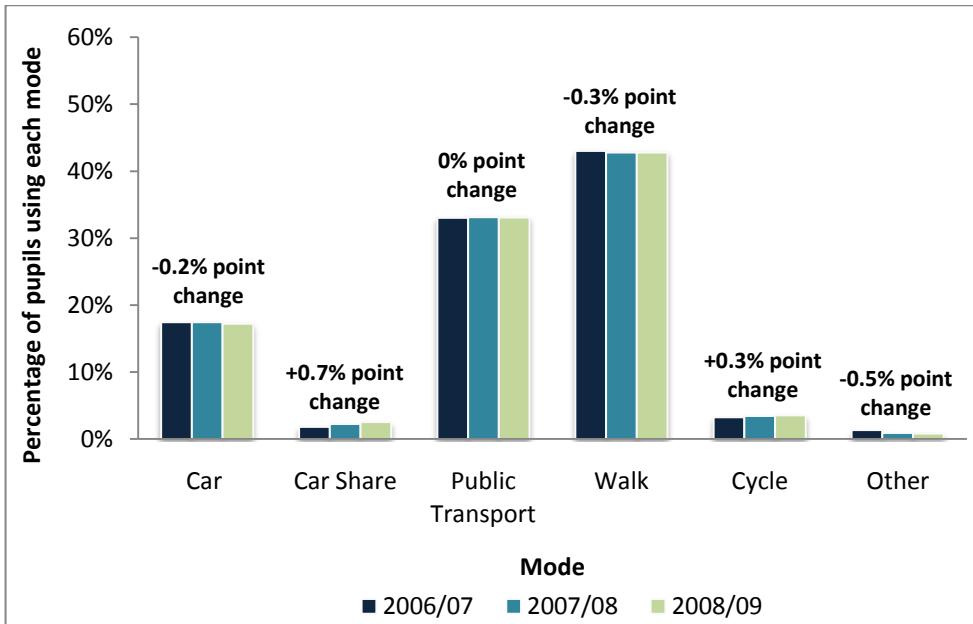
No other significant changes relating to mode use in primary, secondary and special schools have been identified.

**Figure 3.3 - Change in overall proportion of pupils using each mode: primary school pupils**



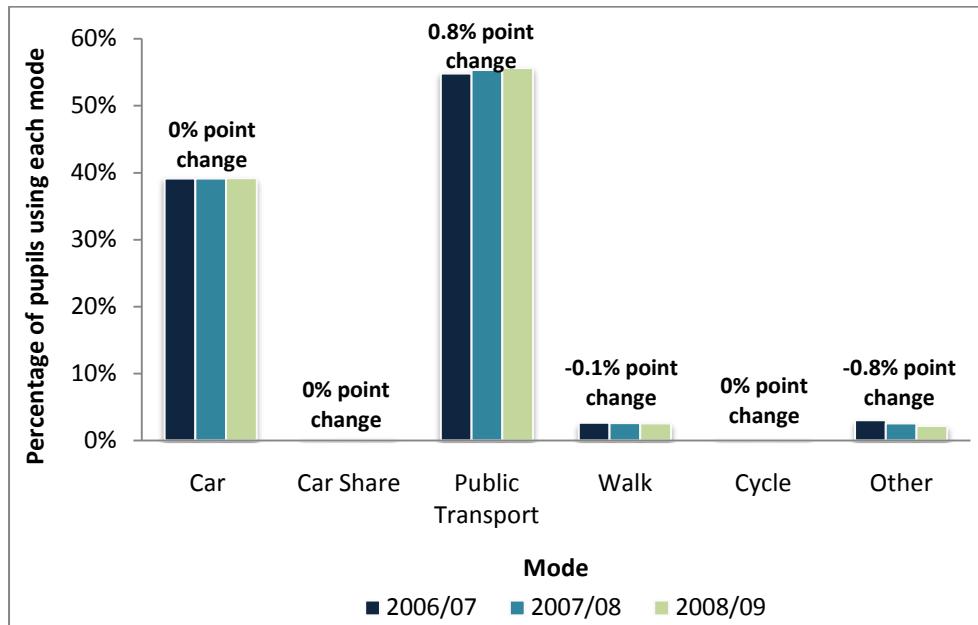
Source: School Census Subset, 11,181 schools. The percentage point change in the proportion of pupils using each mode between 2006/07 and 2008/09 is displayed above each set of bars.

**Figure 3.4 - Change in overall proportion of pupils using each mode: secondary school pupils**



Source: School Census Subset, 1,661 schools. The percentage point change in the proportion of pupils using each mode between 2006/07 and 2008/09 is displayed above each set of bars.

**Figure 3.5 - Change in overall proportion of pupils using each mode: special school pupils**



Source: School Census Subset, 586 schools. The percentage point change in the proportion of pupils using each mode between 2006/07 and 2008/09 is displayed above each set of bars.

### Further analysis

Further analysis of the school-based mean for different types of schools is presented in Table 3.2.

Here, results for 'car travel' combine 'car' (one pupil per car) and 'car share', to enable the implications of travel behaviour change on traffic levels and associated impacts to be considered in later chapters.

Statistically significant differences in 'car travel' and 'walking' are identified for a range of school classifications, while very few categories of school report a significant difference in cycling and public transport use between 2006/07 and 2008/09.

### 3.2.2 Profile of Mode Share Change

Figures 3.6 – 3.13 show the profile of mode share change (for all schools and by school type) for:

- car travel (combining 'car' – one pupil per car, and 'car share');
- walking;
- cycling; and
- public transport.

All graphs show examples where large positive or negative changes in mode use have been experienced in schools.

The distribution of reported changes across different sub-categories of school is presented in **Appendix G**.

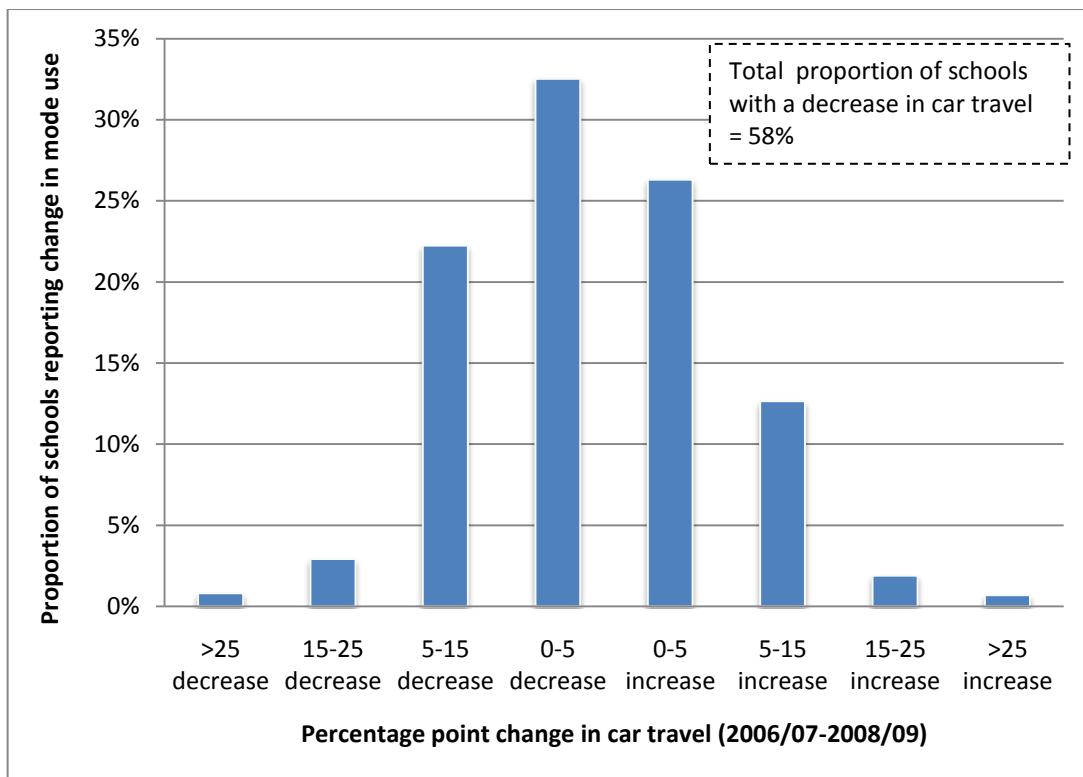
**Table 3.2 – Change in mode use, 2006/07 to 2008/09, by school classification**

Mode	Car Travel (Car + Car Share)		Walking		Cycling		Public Transport	
	Is the difference in mode use across schools statistically significant? (School-based mean)	Overall % point change in the proportion of pupils travelling by car (Pupil-based mean)	Is the difference in mode use across schools statistically significant? (School-based mean)	Overall % point change in the proportion of pupils walking (Pupil-based mean)	Is the difference in mode use across schools statistically significant? (School-based mean)	Overall % point change in the proportion of pupils cycling (Pupil-based mean)	Is the difference in mode use across schools statistically significant? (School-based mean)	Overall % point change in the proportion of pupils using public transport (Pupil-based mean)
Overall	<b>Yes</b>	-0.8%	<b>Yes</b>	+0.8%	No	+0.1%	<b>Yes</b>	0.0%
<b>School type</b>								
Primary	<b>Yes</b>	-1.5%	<b>Yes</b>	+1.5%	No	0.0%	<b>Yes</b>	1.6%
Secondary	No	+0.1%	No	-0.3%	<b>Yes</b>	+0.3%	No	0.0%
Special	No	+0.1%	No	-0.1%	No	0.0%	No	0.8%
<b>Urban / rural location</b>								
Urban	<b>Yes</b>	-0.8%	<b>Yes</b>	+0.8%	No	+0.1%	No	0.0%
Rural	<b>Yes</b>	-0.7%	<b>Yes</b>	+0.4%	No	+0.1%	<b>Yes</b>	-0.2%
<b>Region</b>								
East Midlands	No	0.0%	<b>Yes</b>	+0.7%	No	0.0%	<b>Yes</b>	-0.7%
Eastern	<b>Yes</b>	-1.2%	<b>Yes</b>	+0.8%	No	+0.1%	No	0.0%
London	<b>Yes</b>	-1.7%	<b>Yes</b>	+2.1%	No	+0.1%	No	0.3%
North East	No	0.3%	<b>Yes</b>	0.0%	No	+0.2%	No	0.4%
North West	<b>Yes</b>	-0.1%	<b>Yes</b>	+0.2%	No	0.0%	No	-0.3%
South East	<b>Yes</b>	-1.9%	<b>Yes</b>	+1.5%	<b>Yes</b>	+0.3%	No	-0.1%
South West	<b>Yes</b>	-1.1%	<b>Yes</b>	+1.0%	No	+0.1%	<b>Yes</b>	-0.1%
West Midlands	<b>Yes</b>	-0.1%	<b>Yes</b>	0.0%	No	+0.1%	No	0.3%
Yorkshire and the Humber	<b>Yes</b>	-0.1%	<b>Yes</b>	-0.1%	No	0.0%	No	0.1%
<b>Level of deprivation</b>								
Within the 20% most deprived areas nationally	<b>Yes</b>	-0.4%	<b>Yes</b>	+0.6%	No	+0.1%	No	0.1%
Elsewhere	<b>Yes</b>	-0.9%	<b>Yes</b>	+0.8%	No	+0.1%	<b>Yes</b>	-0.1%
<b>Cycling Demonstration Towns (CDTs)</b>								
Within one of the first CDTs	<b>Yes</b>	-0.7%	<b>Yes</b>	+0.8%	<b>Yes</b>	+0.6%	No	-0.7%
Elsewhere	<b>Yes</b>	-0.8%	<b>Yes</b>	+0.8%	No	+0.1%	No	-0.1%

Source: School Census Subset, 13,428 schools

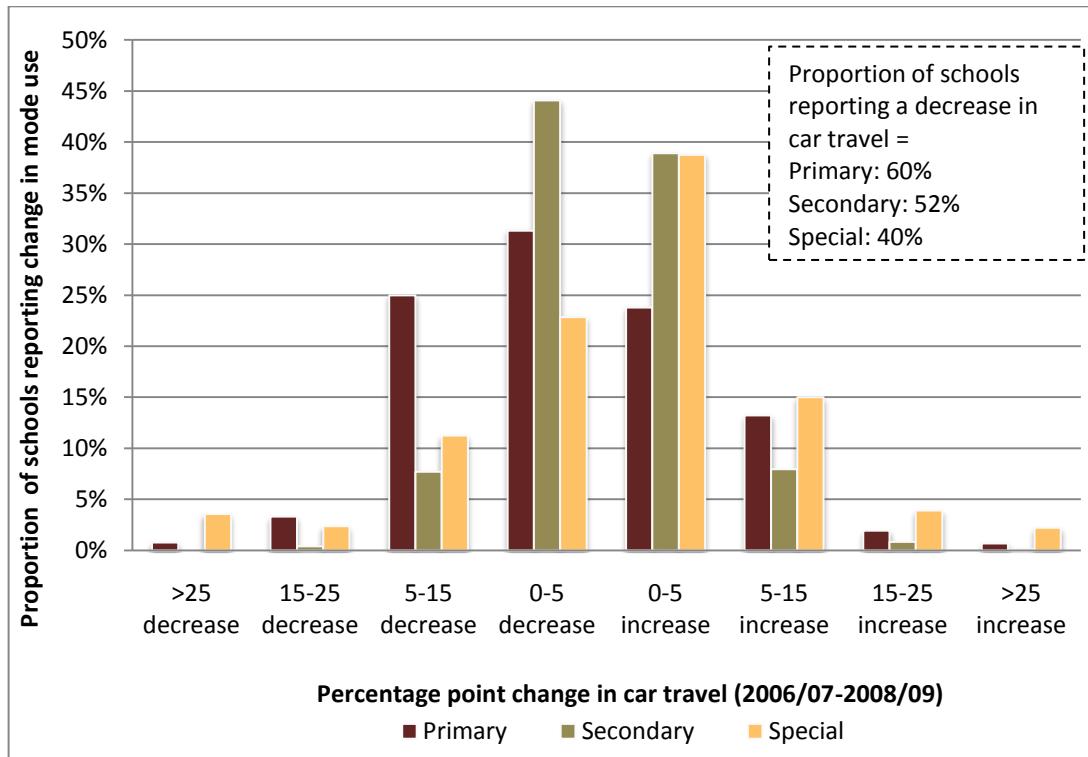
### Car travel (car and car share)

Figure 3.6 – Profile of change in car travel: all pupils



Source: School Census Subset, 13,428 schools

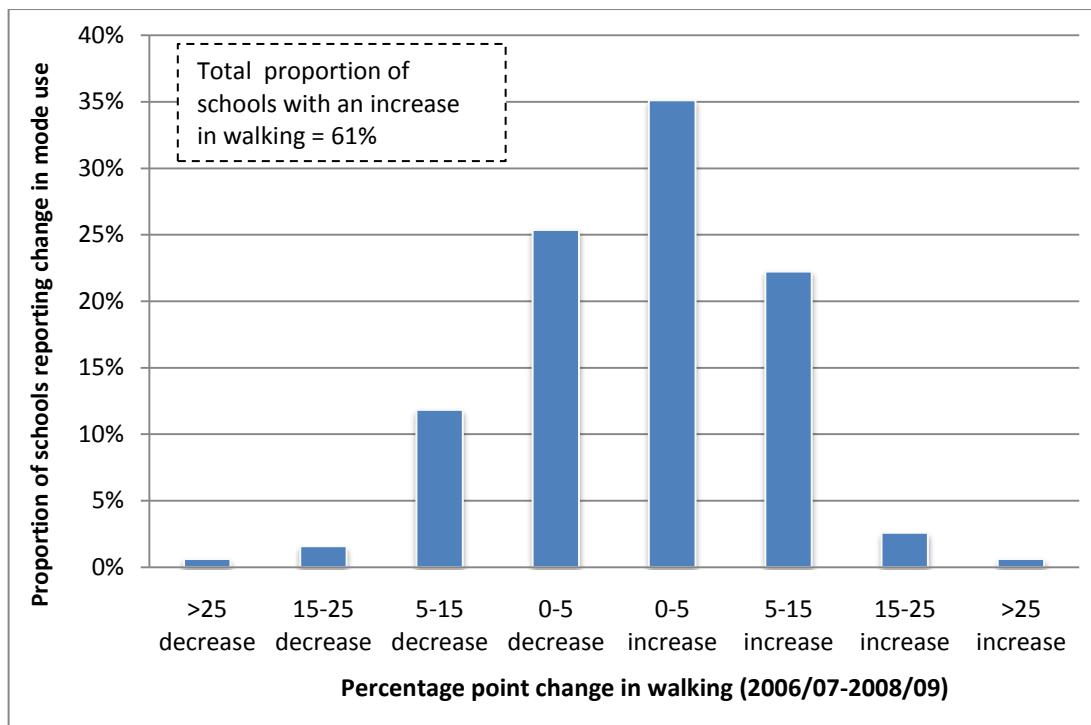
Figure 3.7 – Profile of change in car travel: primary, secondary and special school pupils



Source: School Census Subset, 11,181 primary schools, 1,661 secondary schools and 586 special schools

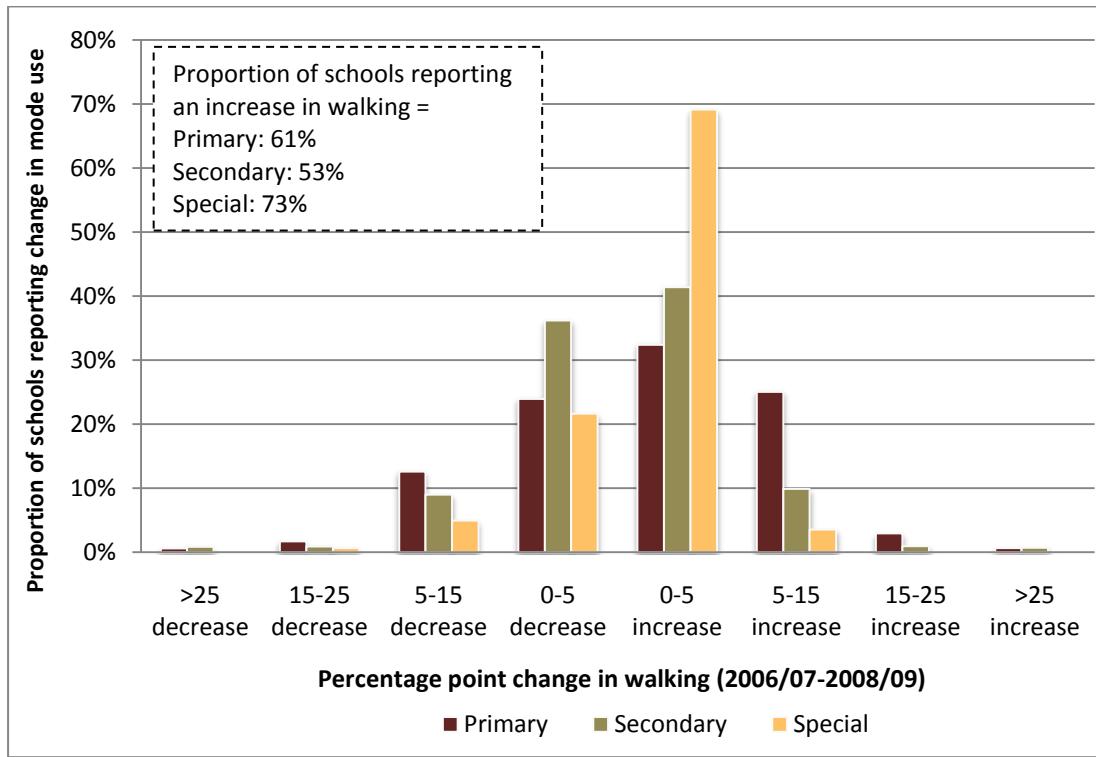
## Walking

**Figure 3.8 – Profile of change in walking: all pupils**



Source: School Census Subset, 13,428 schools

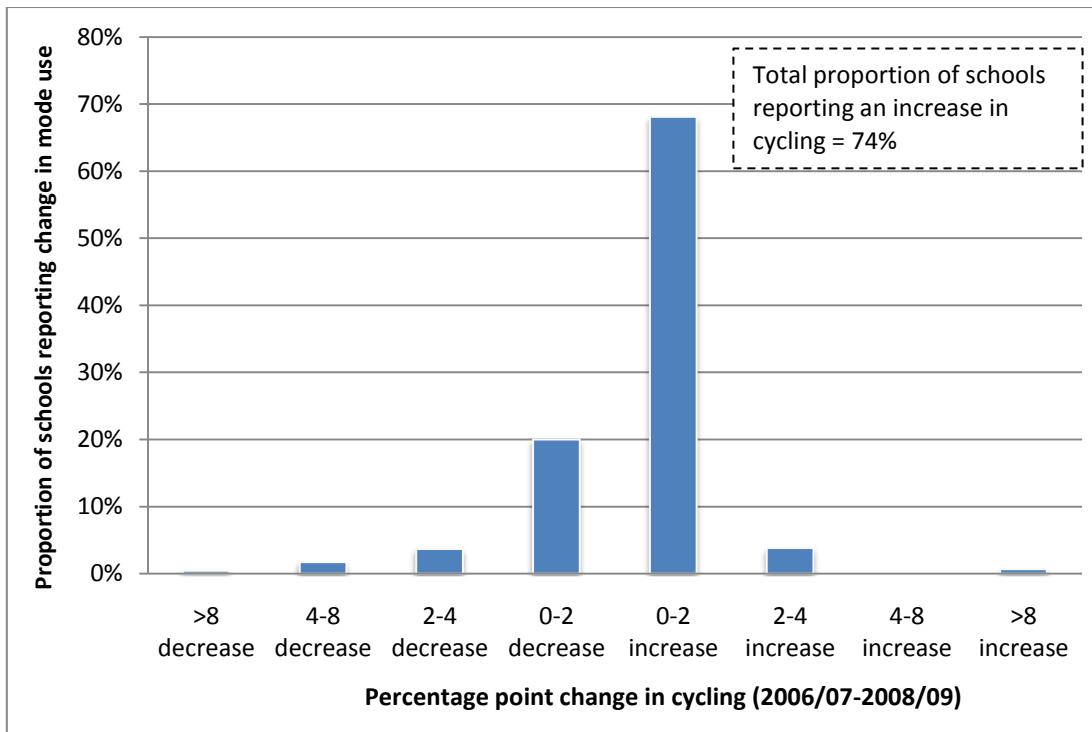
**Figure 3.9 – Profile of change in walking: primary, secondary and special pupils**



Source: School Census Subset, 11,181 primary schools, 1,661 secondary schools and 586 special schools

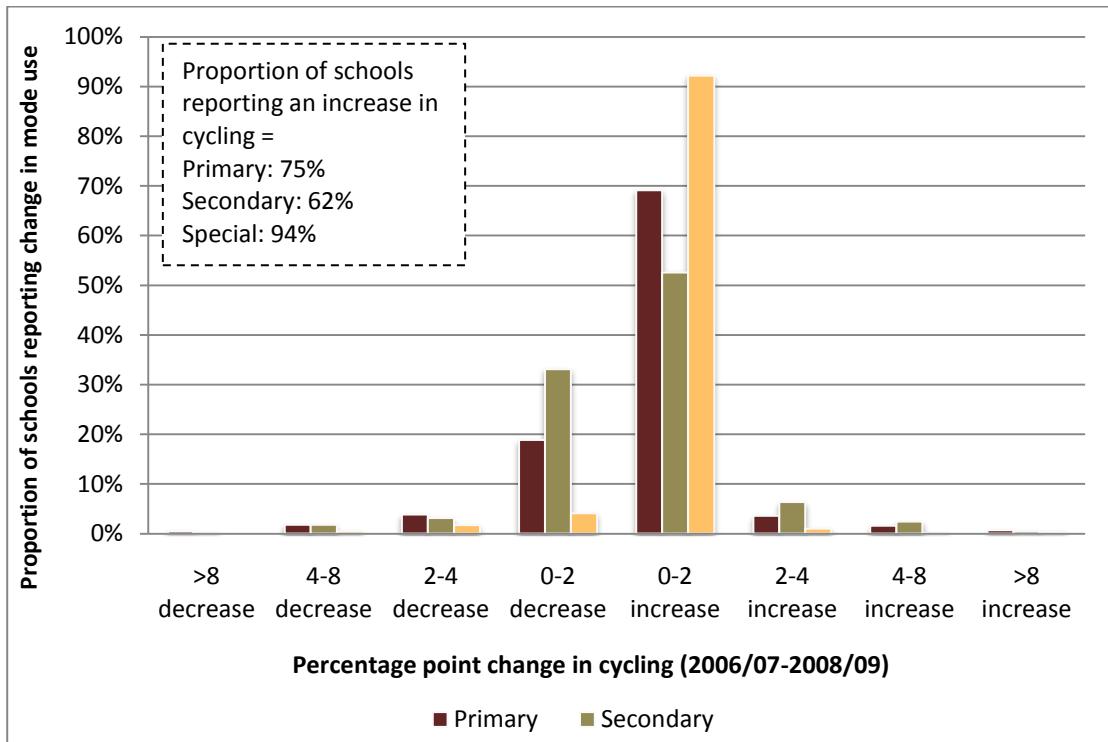
## Cycling

**Figure 3.10 – Profile of change in cycling: all pupils**



Source: School Census Subset, 13,428 schools

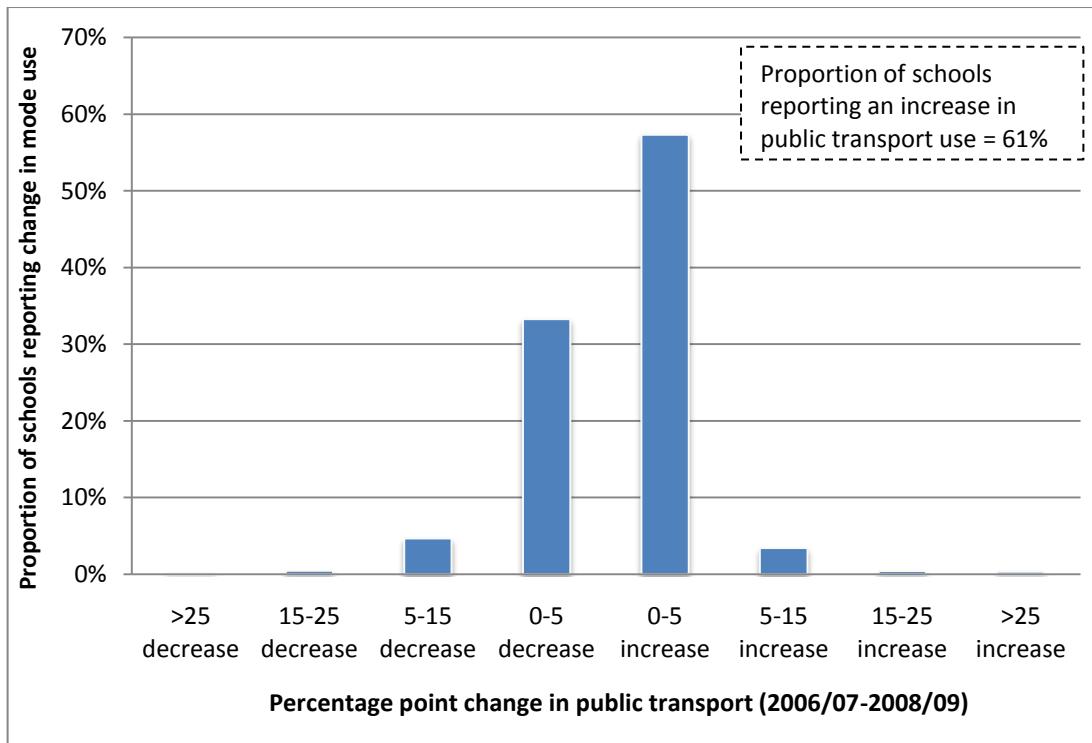
**Figure 3.11 – Profile of change in cycling: primary, secondary and special pupils**



Source: School Census Subset, 11,181 primary schools, 1,661 secondary schools and 586 special schools

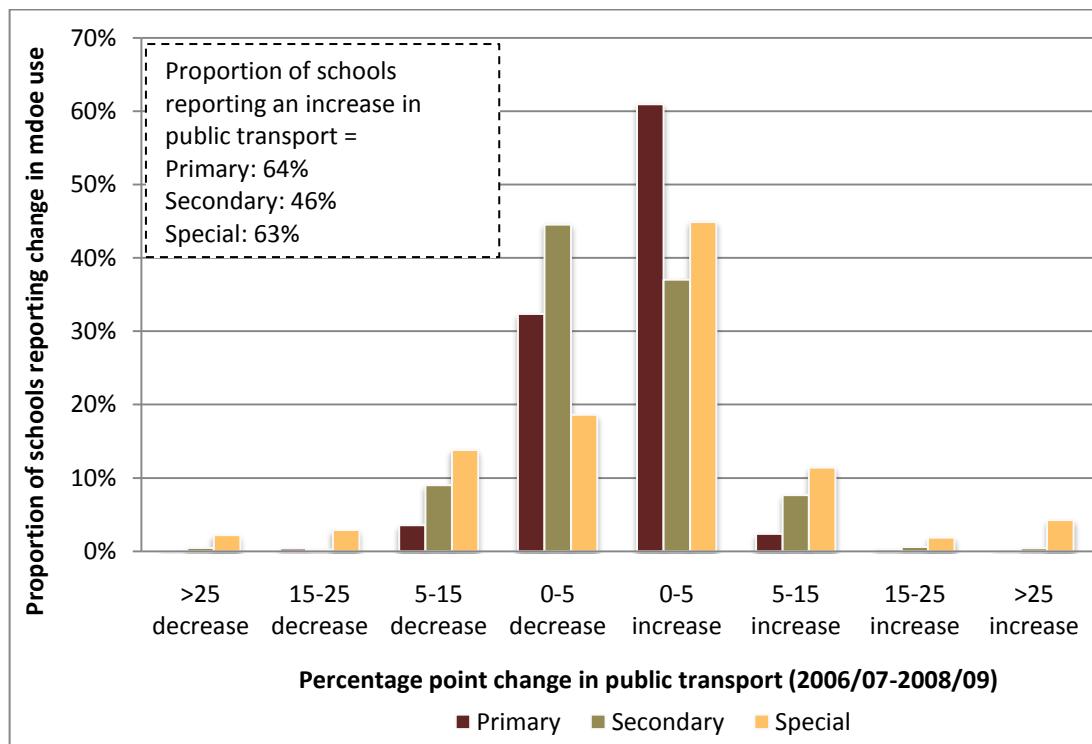
## Public transport

Figure 3.12 – Profile of change in public transport: all pupils



Source: School Census Subset, 13,428 schools

Figure 3.13 – Profile of change in public transport: primary, secondary and special pupils



Source: School Census Subset, 11,181 primary schools, 1,661 secondary schools and 586 special schools

### 3.3 Summary of Findings

Based on the evidence presented in this chapter, recent trends in mode share for travel to school can be summarised as follows:

- Data from the National Travel Survey (reflecting less than 1% of school trips nationally) provides no clear evidence to date of an overall increase or reduction in car use since 2003/04.
- However, analysis of data from the School Census Subset (based on 62% of school trips nationally) on a school by school basis shows that the following changes are statistically significant:
  - a reduction in average car use (one pupil per car) of 1.5 percentage points across schools, resulting in a 1.0 percentage point reduction in the proportion of all pupils (within the subset) travelling by car;
  - an increase in the average proportion car sharing of 0.5 percentage points across schools, resulting in a 0.5 percentage point increase in the proportion of all pupils (within the subset) car sharing; and,
  - an increase in the average proportion walking of 1.3 percentage points across schools, resulting in a 0.8 percentage point increase in the proportion of all pupils (within the subset) walking.

*The average change in public transport and 'other' mode use across schools was also found to be statistically significant, but the scale of the changes is considered to be too small to be meaningful in a practical sense.*

At the start of this period, the TTSI had already been in place for two years.

- Primary schools report the biggest changes: a 1.6 percentage point reduction in the overall proportion of pupils travelling by car (one pupil per car) and a 1.5 percentage point increase in walking. Secondary schools report a 0.7 percentage point increase in the overall proportion of pupils using car share. No significant or consistent trends are observed at special schools.
- Variations exist between regions, urban and rural locations, deprived and more affluent areas.
- Examining the profile of change indicates that there are instances of large increases and decreases in the use of each travel mode, and variations between the different school classification groups.

These findings set the overall context within which the role of the TTSI and other complementary initiatives is considered.

## 4. Evaluation of School Travel Plans

### 4.1 Introduction

A School Travel Plan (STP) is a written document which outlines a series of practical steps for improving children's safety on the journey to and from school. The STP also sets out a strategy for the implementation of a variety of initiatives to help reduce the number of children travelling to and from school by car, encourage pupils to take more regular exercise and reduce the impact of school travel on congestion and pollution.

STPs are an important focus for the TTSI and the achievement of its aims. The roles of School Travel Advisers (STA)s and Regional School Travel Advisers (RTAs) are seen as being key to the development and delivery of STPs.

This chapter evaluates:

- the process of STP implementation including coverage / take up of STPs, funding issues, the role of complementary measures, factors motivating schools to develop STPs, and reasons for not doing so (Section 4.2);
- the impact of STPs on travel behaviour (Section 4.3) and other wider benefits (Section 4.4);
- factors determining the effectiveness of STPs including barriers, enablers and external factors (Section 4.5); and
- support for STPs, now and in the future (Section 4.6).

### 4.2 Implementation of School Travel Plans

#### 4.2.1 Coverage in England

By the end of March 2009, just over 80% of all schools in England (primary, secondary, special and independent) had a STP in place (Table 4.1). STP coverage has grown at a fairly steady rate since March 2004.

Table 4.1 – Number of STPs implemented each year

Region	No. of Schools	Number of STPs Implemented						Total STPs	% STP Coverage
		2004	2005	2006	2007	2008	2009		
East Midlands	2,294	213	256	346	424	338	239	1816	79%
East of England	2,902	286	726	429	428	372	179	2420	83%
London	3,048	149	357	528	543	481	490	2548	84%
North East	1,284	153	176	203	171	174	150	1027	80%
North West	3,632	347	321	473	665	539	496	2841	78%
South East	4,047	423	579	596	622	466	313	2999	74%
South West	2,676	366	414	294	389	306	292	2061	77%
West Midlands	2,668	250	464	437	431	392	308	2282	86%
Yorkshire & Humber	2,503	183	517	474	430	275	255	2134	85%
<b>All Regions</b>	<b>25,054</b>	<b>2370</b>	<b>3810</b>	<b>3780</b>	<b>4103</b>	<b>3343</b>	<b>2722</b>	<b>20128</b>	<b>81%</b>
<b>Cumulative Coverage</b>	-	<b>9%</b>	<b>25%</b>	<b>40%</b>	<b>56%</b>	<b>69%</b>	<b>81%</b>	-	-

Source: DCSF (Includes all Primary, Secondary, Special and Independent Schools in England).

Responses to the School Survey showed that most (79%) of the schools that did not have a STP in place in September/October 2009 were planning on having one in place within the year (see Appendix C, School Survey, Q9). This suggests that STP coverage is likely to have increased further in the period up to the end of March 2010<sup>36</sup>. However, responses to the School Survey suggest that a small proportion of schools are likely to remain without a STP by the end of March 2010 – the deadline by which the Government was aiming to have achieved 100% coverage.

### Variation in coverage by school type and location

Table 4.1 shows some regional variation in take up by region, ranging from 86% in the West Midlands and 85% in Yorkshire & Humber to 74% in the South East and 75% in the South West.

Data from the School Census Subset allows analysis of take up by school type, based on data for 13,428 schools<sup>37</sup> (Table 4.2). This highlights a lower take up of STPs by special schools: 52% coverage within the subset, compared to 85-86% for primary and secondary schools.

It should be remembered that the School Census Subset does not include independent schools and that STP coverage is expected to be considerably lower for independent schools, primarily because they are not eligible for any TTSI capital grant.

**Table 4.2 - STP coverage by school type and location within the School Census subset**

School Classification		No. of Schools	% STP Coverage by end March 2009
School Type	Primary	11,181	85%
	Secondary	1,661	86%
	Special	586	52%
Rural / Urban Location	Rural	4,064	84%
	Urban	9,364	84%
Deprivation	Within 20% most deprived areas nationally	2,346	82%
	Elsewhere	11,082	84%
Cycling Demonstration Town	Within original 6 Cycling Demonstration Towns	253	77%
	Elsewhere	13,175	84%
<b>Total</b>		<b>13,428</b>	<b>84%</b>

Source: School Census Subset

### Take up by special schools

Evidence from the STA workshops suggests that the specialist needs of some pupils attending these schools often limits their travel options.

Where schools have developed STPs, they tend to focus on raising the awareness of other modes of transport for those who are able to use alternatives.

Some STAs commented on difficulties in finding an appropriate person within schools to engage with.

<sup>36</sup> Final audited data on the number of schools with STPs in place was unavailable at the time of writing.

<sup>37</sup> Note, the Subset includes 16% of schools that did not have a STP by end of March 2009 compared to 20% in Table 4.1. In addition, it is believed to slightly under-represent secondary schools in London.

### Take up by independent schools

At present, there is a lack of robust data on the level of STP coverage in independent schools. Nevertheless, STA respondents in several workshops felt that this was the hardest group of schools to engage with; partly because they are not entitled to the TTSI capital grant.

*"Independent schools are often more difficult to engage than other schools, but by no means impossible. We have produced plans with all our Independent schools and on the whole they embrace the benefits of the scheme"*

STA

That said, STAs also reported a number of successes with independent schools. Whilst they may be hard to engage with initially, once on board, they can often embrace the TTSI and produce high quality STPs.

## 4.2.2 Funding STPs

In workshops, STAs discussed that the availability of funding is a powerful motivator and important factor for the development of STPs.

Eighty-one percent of schools responding to the School Survey (Appendix C, School Survey, Q27), have received other sources of funding, in addition to the TTSI capital grant, to help implement a STP or related sustainable transport initiative.

Funding sources secured by schools responding to the above survey included: Walking to School Initiative Grant (18% of schools); Bikeability (15%); Healthy Schools (14%); School Travel Plan Grant (13%) and Eco Schools (3%).

These sources have primarily been used to fund bike shelter/storage facilities, covered shelters, traffic calming measures, cycle training initiatives, and safety equipment such as high visibility jackets and helmets. (Appendix C, School Survey, Q28).

## 4.2.3 Complementary Measures

Many schools have complementary initiatives in place, which may or may not be part of their STPs. Of those responding to the School Survey 48% had 'walking to school' initiatives and 58% had cycling initiatives in place (Appendix C, School Survey, Q33 and 35). Further consideration is given as to the role of these measures in influencing outcomes in Chapters 8 and 9.

## 4.2.4 Perceived Objectives of STPs (and the TTSI Programme)

STAs stated that their primary objective during the TTSI programme had been to achieve 100% of schools with a STP by end of March 2010. It was suggested at a number of the workshops (6 out of the 11 STA workshops) that there may have been too much focus on achieving this target at the start of the initiative and that a more effective approach might be to focus resources on those schools which had greatest potential for mode shift. In practice, however, it would have been difficult for STAs to have identified which schools had the greatest potential for change in advance of having a robust data set and without information about the barriers to sustainable travel at individual schools.

Local authority officers supported this view, but felt that other objectives had become more important over time, particularly:

- reducing car use (8 workshops)<sup>38</sup>, reducing carbon emissions (4 workshops), and reducing congestion (3 workshops);

<sup>38</sup> Number of local authority workshops where this factor was mentioned. Nine local authority workshops were held in total.

- increasing physical activity and raising awareness of / reducing obesity (6 workshops); and
- improving road safety / reducing casualties (5 workshops).

STAs, RSTAs and local authority officers all stressed that the development of a STP should be seen as the beginning of a process, rather than the end result. It is therefore important to maintain and refresh the plan after its establishment.

#### 4.2.5 Factors Motivating Schools to Develop STPs

Comments from School Travel Advisers (STAs) at workshop sessions suggest that the motivating factors for schools implementing a STP vary widely.

*"I think it is impossible to identify a single motivating factor, as all schools seem to have very different motivations for engaging in the programme"* STA

The potential for securing additional funding for the school is a primary driver, but opportunities to address health and environmental issues and/or tackle existing transport problems (e.g. congestion around the school gate) can also be important.

The factors mentioned most frequently at the STA workshops are summarised below:

- developing a STP allows schools to apply for TTSI-related funding (9 workshops)<sup>39</sup>;
- developing a STP helps schools to secure 'Healthy Schools' accreditation (6 workshops) - a number of STAs mentioned that schools that were pro-active in the production of their STPs were generally those who were also pro-active in the Eco-schools and/or Healthy Schools initiatives;
- many schools have a genuine interest in raising awareness about environmental and sustainability issues, and the STP provides a mechanism or focus for doing this (5 workshops);
- some schools have developed a STP to secure planning permission or meet OFSTED or local authority requirements (5 workshops) – some STAs report that local authorities require schools to have developed a STP before agreeing to engage with them on transport issues, such as the provision of safe crossings;
- developing a STP can help address congestion around the school gate (4 workshops).

Although not frequently mentioned explicitly, the presence of someone in the school willing to 'champion' the development of STP was regarded as important by some STAs.

#### 4.2.6 Reasons for Not Developing a STP

As noted in the preceding section, it is anticipated that by the end of 2010, the majority of state-funded schools are likely to have a STP in place.

A small proportion of schools, however, are likely to remain without. For example, four schools responding to the School Survey stated that they would 'never' have a STP in place (Appendix C, School Survey, Q9).

*"At some schools, there is no perceived potential for change in travel mode or appreciation of other benefits. Some schools are put off by the bureaucracy of a travel plan even though they run their own events to promote sustainable travel"* STA

Reasons identified by STAs during workshops focus on two main areas:

<sup>39</sup> Number of STA workshops where this factor was mentioned. Eleven STA workshops were held in total.

- resource / time constraints, including lack of appropriate leadership within the school - STAs felt that school teachers already had a busy schedule and workload, and developing a STP was an additional call upon their limited time and availability. These are barriers, however, that most other schools have overcome, suggesting that lack of leadership and willingness to participate in the TTSI programme is a stronger factor;
- a lack of recognition of the benefits and / or relevance of STPs in the local context. e.g.
  - a school may already have a high proportion of students travelling to school by sustainable modes;
  - schools already have initiatives in place and perceive no need for a STP;
  - a lack of appreciation of how the development of a STP links with other school initiatives;
  - expected changes such as threat of closure / moving location / new schools opening; and
  - in rural locations - schools may question the relevance of the programme due to their remote location and reliance on the car.

Responses to the School Survey identified similar factors to those from the STA workshop outlined above. Of the 16 schools that did not yet have a STP in place, eight were special schools and six were primary schools. The most common reason for special schools not having a STP related to the complex needs of some pupils, often requiring them to be brought to school by local authority transport. The four respondents stating that they would never have a STP were all 'special' schools. Pupils were not able to travel by public transport, walking or cycling, and therefore a STP was not considered to be suitable. (Appendix C, School Survey, Q7 and Q9).

## 4.3 Impact of STPs on Travel Behaviour

### 4.3.1 Evidence from the School Census Subset

Evidence from the School Census Subset, presented in Chapter 3, shows that there has been a 1.0 percentage point reduction in the proportion of all pupils within the subset travelling by car; a 0.5 percentage point increase in car sharing; and a 1.3 percentage point increase in walking (based on a comparison of the pupil-based mean for 2006/07 and 2008/09). These changes correspond to a statistically significant increase/decrease across schools, on a school by school basis<sup>40</sup>.

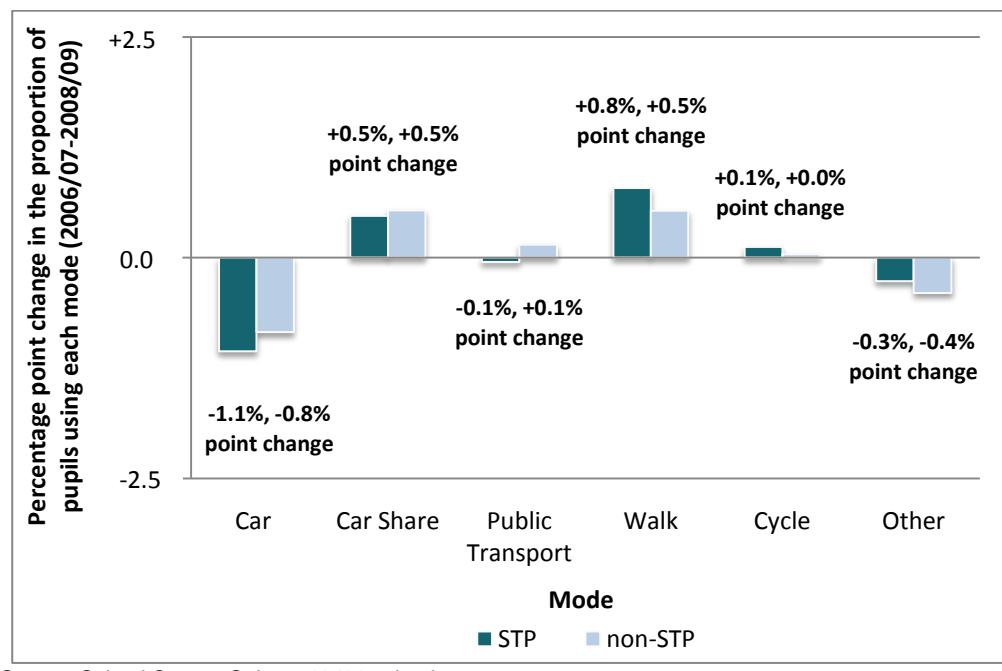
This section compares trends reported by schools with and without a STP to determine whether schools with a STP in place have been more successful at achieving mode shift.

It is important to note that due to the caveats associated with the School Census Subset this analysis may underestimate the effect of STPs on travel behaviour. Caveats include the fact that the data represents 62% of schools only; trends can only be examined since 2006/07, more than two years after the launch of the TTSI; the potential positive bias in data reported by non-STP schools who are not obliged to provide mode share information; limitations regarding the recording of small behaviour changes (1 or 2 days a week or for part of the school journey); and uncertainty over whether schools are implementing travel initiatives prior to 'sign-off' of their STP (see Chapter 2 for further information).

#### Overall change in mode share by STP status

Figure 4.1 shows the overall change in the modes used to travel to school by all pupils (within the subset) for STP and non-STP schools.

**Figure 4.1 – Overall change in mode use for travel to school - STP vs non-STP schools: all pupils**



Source: School Census Subset, 13428 schools

It shows marginal benefits reported by schools with STPs in terms of a greater reduction in car use and a greater increase in walking; however differences between the two datasets are small.

<sup>40</sup> The average change in public transport and 'other' mode use, across schools, was also found to be statistically significant, but the scale of the changes is considered to be too small to be meaningful in a practical sense.

Figure 4.2 shows the corresponding results by school type. The results indicate marginal benefits:

- in primary schools – in terms of a greater reduction in the overall proportion of pupils (within STP schools) using car and a greater increase in walking; and
- in secondary schools – in terms of a greater reduction car use and a greater increase in cycling.

The data has also been analysed on a school by school basis (involving the calculation of a school-based mean) and statistical analysis (based on a paired t-test) has been used to determine whether the difference in mode use reported across the 11,245 STP and 2,183 non-STP schools is large enough to be statistically significant. Table 4.2, however, shows that none of the differences between STP and non-STP schools are statistically significant.

**Table 4.3 – Overall change in mode use reported across schools (2006/07 – 2008/09)**

Mode	Average percentage point change in mode use across STP schools (school-based mean)	Average percentage point change in mode use across non-STP schools (school-based mean)	Percentage point difference	Is the change large enough to be statistically significant?
Car	-1.5%	-1.4%	-0.1%	No
Car Share	0.5%	0.5%	-0.1%	No
Public Transport	-0.1%	0.1%	-0.2%	No
Walk	1.3%	1.1%	0.2%	No
Cycle	0.0%	0.0%	0.1%	No
Other	-0.2%	-0.3%	0.1%	No

Source: School Census Subset, 13428 schools.

As stated in Chapter 3, the school-based mean differs from the pupil-based mean which is presented in Figure 4.1.

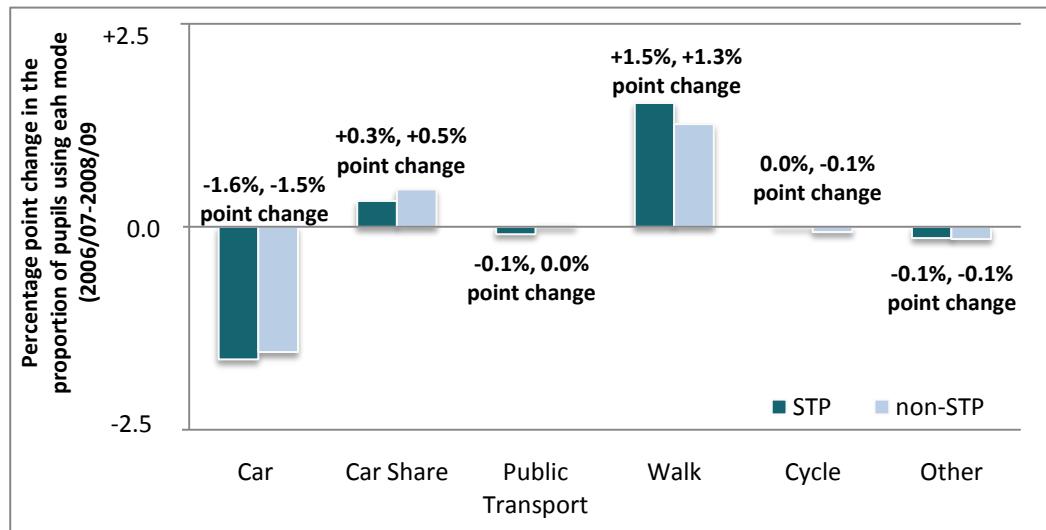
#### Further analysis

Further analysis of the school-based mean for different types of schools is presented in **Appendix G (Tables G.5 to G.8)**. In general, the changes reported by STP and non-STP schools are not statistically significant for schools in different regions, urban/rural locations, or in deprived / more affluent areas. The exceptions (which are statistically significant) are as follows:

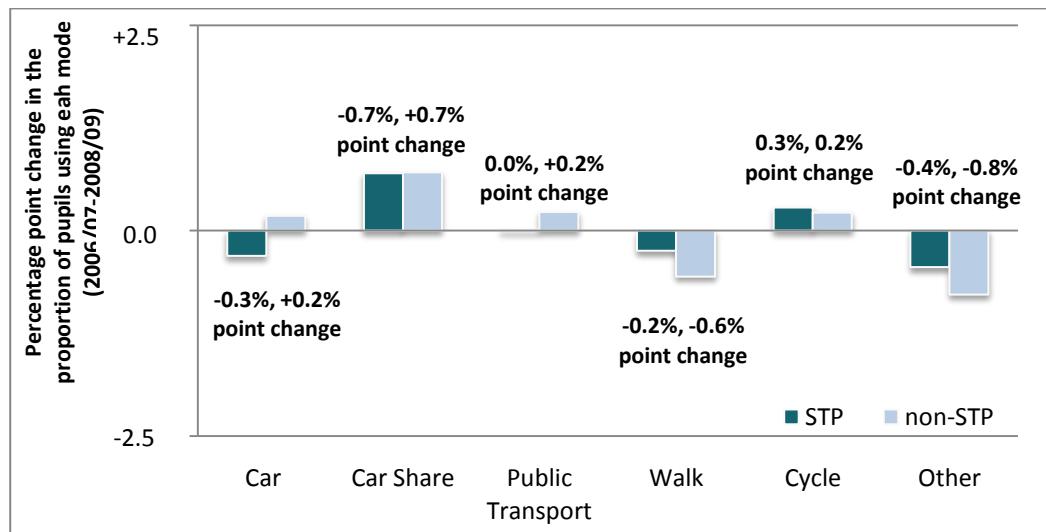
- in the South East – in terms of the increase in the average proportion cycling to school (0.4 percentage points across STP schools compared with a 0.0 percentage point change across non-STP schools); and,
- in the East of England – in terms of the increase in the average proportion travelling by car or car share (a 1.0 percentage point reduction in use was reported across STP schools compared with a 2.4 percentage point reduction across non-STP schools) and in terms of the increase in the average proportion walking (a 0.6 percentage point increase was reported by STP schools compared with a 2.5 percentage point increase for non-STP schools).

**No other statistical differences in the results for STP and non-STP schools were found.**

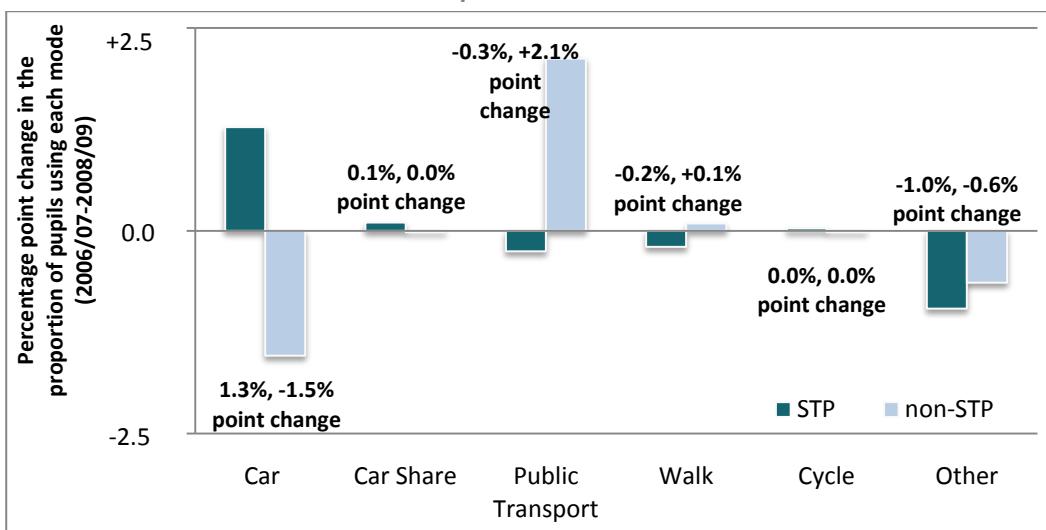
**Figure 4.2 – Overall change in mode use for travel to school - STP vs non-STP schools**  
**Primary schools**



**Secondary schools**



**Special schools**



Source: School Census Subset, 11,181 primary schools, 1,661 secondary schools, 586 special schools.

### Profile of mode share change

Figures 4.3 to 4.6 show the profile of change in car use, walking, cycling and public transport, for STP and non-STP schools to provide further depth to the aggregate level results. Both categories of schools include examples where large positive or negative changes in mode use have been experienced.

The distribution of reported changes across different sub-categories of school (including primary, secondary and special schools) by STP status is presented in **Appendix G (Tables G.5 to G.8)**.

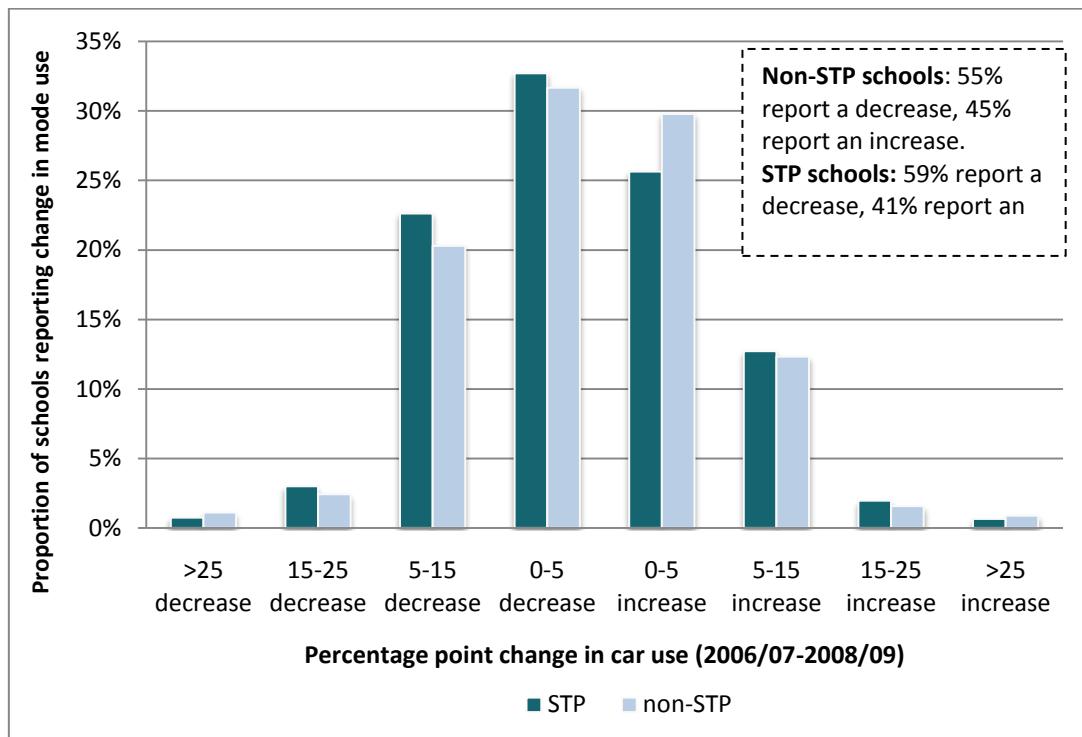
### Summary

Data from the School Census Subset provides little evidence to indicate that STPs have achieved a more positive change in travel behaviour, **at an aggregate level**, than that reported by non-STP schools.

The profile of change in mode share (i.e. the proportion of schools reporting a 0 – 5 percentage point decrease, the proportion reporting a 5 – 15 percentage point decrease, etc.) is also similar for both categories of school (i.e. those with and without a STP), and both groups include examples of schools where large positive and negative changes in mode share have been recorded.

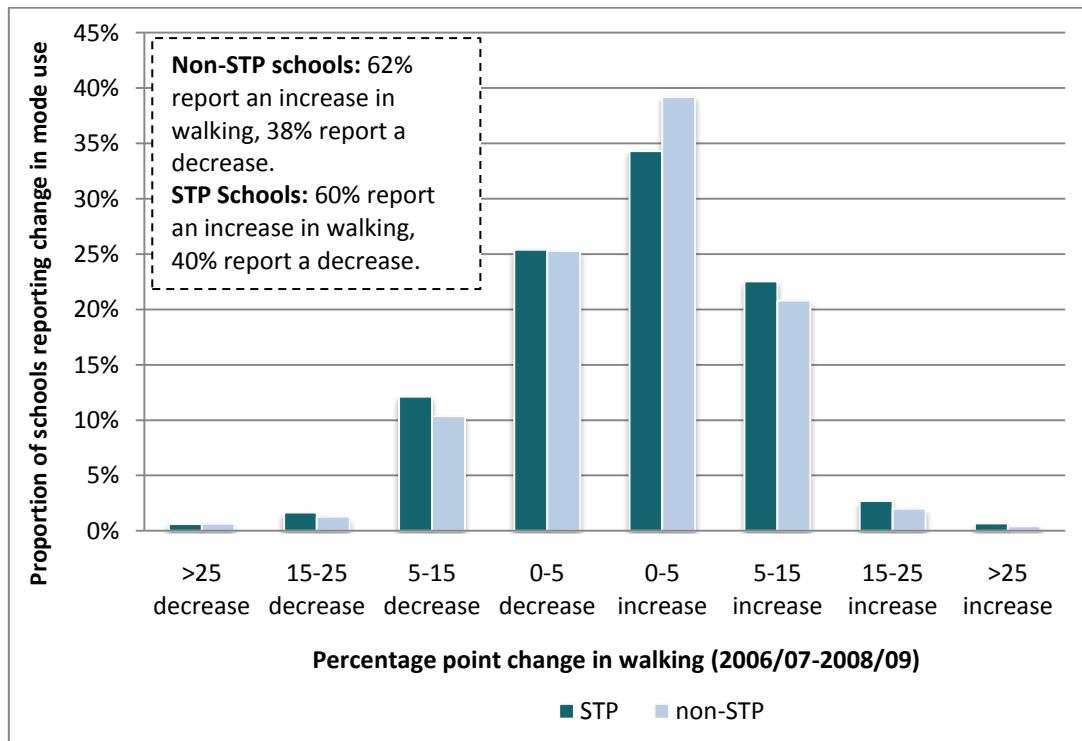
**As highlighted above, it is important to note that due to the caveats associated with the School Census Subset the analysis presented in this section may underestimate the effect of STPs on travel behaviour.**

**Figure 4.3 – Profile of change in car travel (car and car share), STP vs non-STP schools: all pupils**



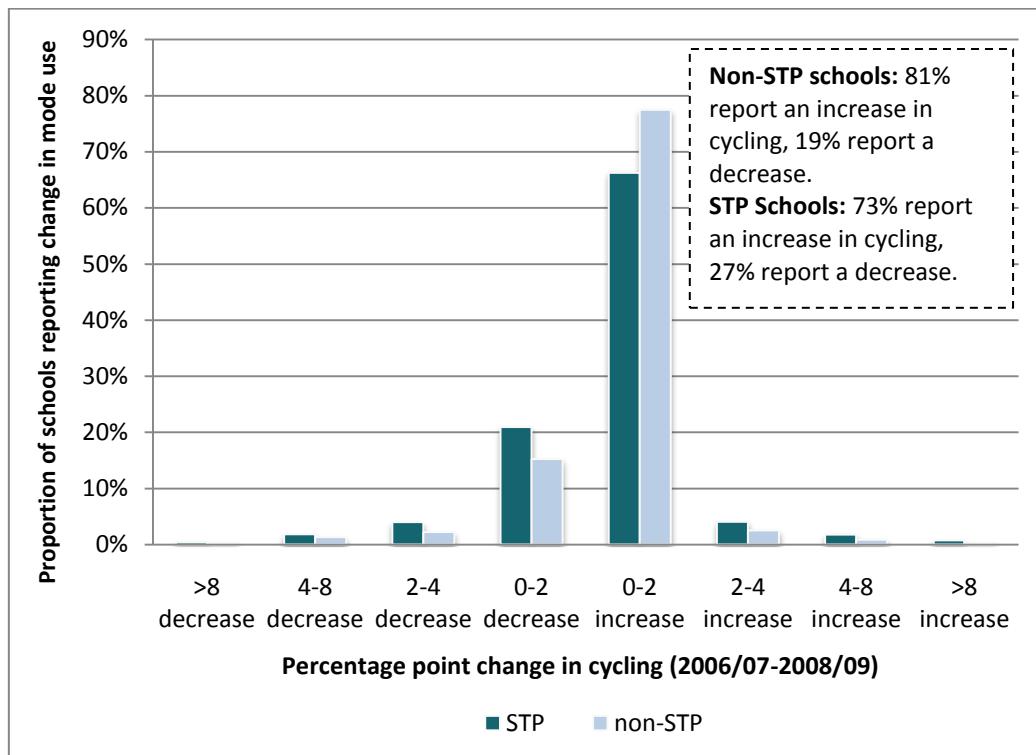
Source: School Census Subset, 13428 schools

**Figure 4.4 – Profile of change in walking, STP vs non-STP Schools: all pupils**



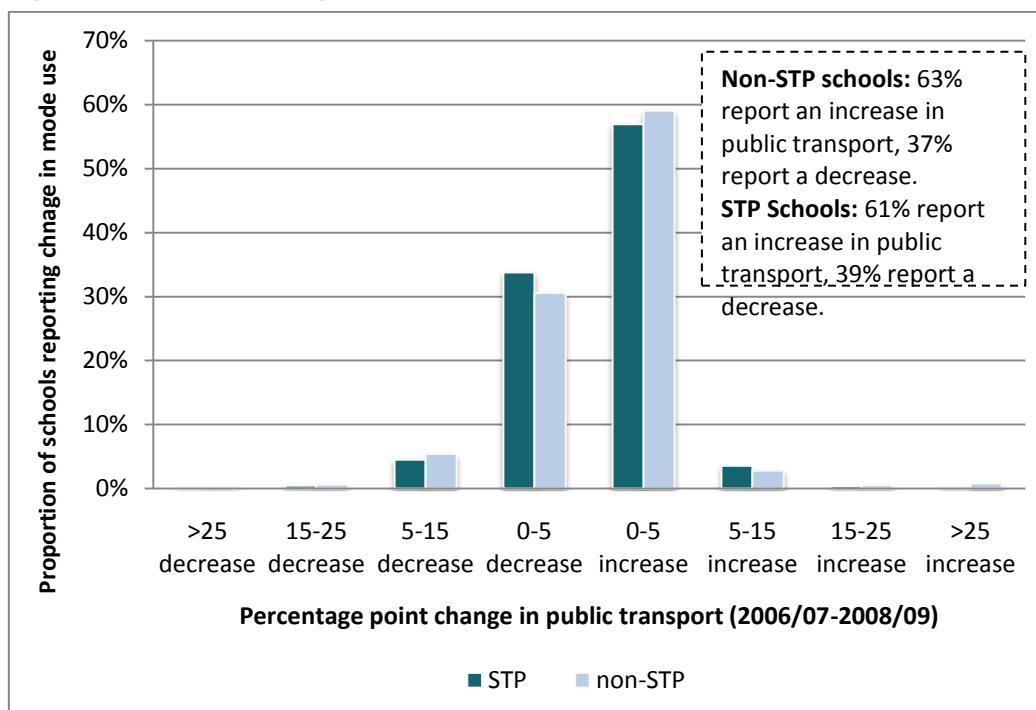
Source: School Census Subset, 13428 schools

**Figure 4.5 – Profile of change in cycling, STP vs non-STP Schools: all pupils**



Source: School Census Subset, 13428 schools

**Figure 4.6 – Profile of change in public transport use, STP vs non-STP Schools: all pupils**



Source: School Census Subset, 13428 schools

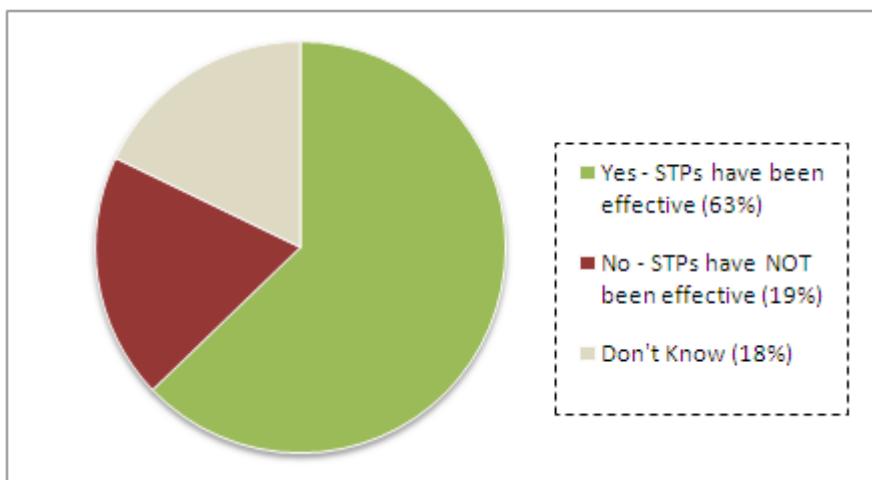
## 4.3.2 Other Evidence

### Survey evidence

While data from the School Census Subset provides little evidence to indicate that STPs have had a significant impact on mode share, **at an aggregate level**, respondents to the School and STA surveys were more positive about the impact of STPs:

- Just over two thirds (68%) of STAs stated that STPs had been very or moderately successful, and around 95% thought they had been successful to some extent at reducing car use (Appendix D, STA Survey, Q7);
- Around 63% of School Survey respondents believed STPs had been an effective way of encouraging sustainable journeys to school (Figure 4.7 and Appendix C, School Survey, Q13). Breaking this down by school type, 68% of primary school respondents, 58% of secondary school respondents, and 31% of respondents representing special schools agreed that STPs were an effective way of encouraging sustainable travel to school.

Figure 4.7 - Have STPs been effective in encouraging sustainable journeys to school?



Source: School Survey - Base: 476 respondents

- Around 35% of School Survey respondents identified 'encouraging walking/cycling' as the number one benefit of having a STP, and 11% identified 'reducing car use'. These were the first and third most popular response out of a list of nine stated transport and non-transport related benefits. The second most popular response was 'provision of appropriate safety measures' which was identified by 17% of respondents. (Appendix C, School Survey, Q12);
- Two thirds of School Survey respondents (67%) felt that having a STP in place had a positive impact on the effectiveness of walking, cycling and other initiatives. A fifth (22%) however, felt that a STP 'makes no difference' (Appendix C, School Survey, Q25).
- Around 69% of respondents to the school survey 'agreed' or 'strongly agreed' that STPs enable children to benefit from increased physical activity. Primary school respondents were more likely to 'strongly agree' or 'agree' (74%) compared to only 51% from secondary schools. On a regional level, the West Midlands had the lowest proportion of respondents that 'agreed' (20 respondents, 59%) in comparison to London, which had the highest proportion (138 respondents, 85%) (Appendix C, School Survey, Q17).

Factors identified as driving these benefits included the awareness raising role of STPs, the usefulness of having clear goals and an action plan as a focus for activity<sup>41</sup>.

<sup>41</sup> See responses to relevant open-ended questions in Appendix C e.g. Q14, Q26, etc.

It is recognised that the above results reflect the views of only a small proportion of all schools (<3%) and approximately three-quarters of STAs,

It is also recognised that these stakeholders may have a vested interest in promoting the positive outcomes of their roles, and may also be unintentionally biased in their perceptions of mode shift success, based on particular successes with groups of pupils and the influence of other positive aspects of STPs. However, the above evidence does suggest that STPs are viewed positively regarding travel behaviour change.

### Workshop evidence

Evidence from the workshops also suggests that STPs have been effective in changing travel behaviour in some cases, although again it is recognised that there may have been a bias in some of the views expressed.

STAs and local authority officers were generally positive about the impact of the TTSI programme on reducing car use; but they acknowledged that the benefits varied, for example between schools and also between seasons.

Some STAs were able to provide quantitative evidence of a reduction in car use across the authority (e.g. *"The most recent available figures show that STPs in our borough have reduced car usage by 12% over a three year period"*). Others, however, focused on a subset of schools or provided anecdotal evidence from individual schools (e.g. a reduction in congestion outside the school gate, greater use of walking / 'park and stride' initiatives, and increased numbers cycling to schools).

Some local authority officers reported a reduction in car use through their own surveys rather than use of School Census, and also anecdotally through observing transport initiatives in operation – for example walking buses, and park and stride schemes, that were not in place prior to TTSI.

Government Office (GO) officers reported that the success of STPs at reducing car use had been varied. It was noted that there were some examples where STPs had been very effective at reducing car use, however it was felt that there was more to be achieved. A cultural shift was felt to be needed to achieve substantial reductions in car use, and this cultural change would take a considerable time to achieve.

The most common responses across the different stakeholder workshops to the question *'How effective has the TTSI programme been in reducing car use for school journeys?'* are summarised below:

- There is a need for a new approach to monitoring mode of travel to school, as the School Census does not provide the most effective method. Many participants feel that it is conducted at the wrong time of year, is not flexible enough to give a true picture of change in travel behaviour, and is not always accurately completed by schools. (9 workshops)<sup>42</sup>
- Anecdotal evidence provides a better and more robust guide to the level of mode shift than the School Census. (4 workshops)
- STPs do have an impact on their own in reducing car use, but STPs are more effective alongside other measures. (8 workshops)
- Mode shift and a reduction in car use is expected to be more evident over the longer term. (7 workshops)
- A reduction in congestion outside of school gates, and an increase in walking and cycling is evident. (5 workshops)

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<sup>42</sup> Number of workshops where this factor was mentioned. Eleven STA workshops, one RTSTA workshop, nine local authority workshops and nine Government Office meetings were held in total. Note, individual workshops varied in terms of the amount of time spent discussing this issue and the comprehensiveness of the responses received.

## Case studies

The case studies provide further evidence to suggest that STPs can be effective in changing travel behaviour and demonstrate that substantial benefits have been achieved in terms of a reduction in car use, and an increase in sustainable travel (Table 4.4). As highlighted in Chapter 3, and at the request of the Project Board, the case studies were deliberately focused on those schools demonstrating good practice rather than representing all schools.

**Table 4.4 - Effectiveness of STPs at reducing car use: Case study evidence**

Case Study	School Type	Summary of Change in Travel Behaviour
<b>Primary Schools</b>		
Case Study 1 – West Midlands	Small Primary School, Rural	28 percentage point reduction in car use, between 2006/07 and 2008/09, from 49% to 21%. 14 percentage point increase in walking from 15% to 29%; and no change in cycling levels. Resulted in the award of 'Schools for Health' and Standards Quality Mark.
Case Study 2 – South West	Small Primary School, Rural	27 percentage point reduction in car use, between 2006/07 and 2008/09, from 74% to 47%. 9 percentage point increase in walking from 26% to 35%; and a 2 percentage point increase in cycling from 0% to 2%.
Case Study 4 – East of England	Large Urban Primary School	19 percentage point reduction in car use between 2006/07 and 2008/09, from 59% to 40%. 18 percentage point increase in walking from 41% to 59%; and no change in cycling levels,
Case Study 5 – Yorkshire and Humber	Small Rural Primary School; Located within deprived SOA	15 percentage point reduction in car use between 2006/07 and 2008/09, from 15% to 0%. 24 percentage point increase in walking, from 75% to 99%; and a 1 percentage point reduction in cycling from 1% to 0%. In 2009, the school had attained 99% of journeys to school by students on foot.
Case Study 7 – Yorkshire and Humber	Medium Urban Primary School; Located within deprived SOA..	19 percentage point reduction in car use between 2006/07 and 2008/09, from 21% to 2%. 20 percentage point increase in walking, from 78% of pupils to 98%; and a 6 percentage increase in cycling from 54% to 60%. Despite being located within a deprived area with high rate of road accidents, the school has considerably increased the proportion of students walking to school .
Case Study 8 – East Midlands	Large Urban Junior School	26 percentage point decrease in car use between 2006/07 and 2008/09, from 35% to 14%. 12 percentage point increase in walking, from 60% to 72%; and no change in cycling levels. Located within a cycle demonstration town, the school, leading a travel forum, saw considerable mode shift away from car use to more sustainable modes.
<b>Other Schools</b>		
Case Study 3 – East of England	Cluster of Urban Secondary/ Independent	Joint working between schools has enabled a reduction in car journeys to school, and an increase in bus travel, due to alterations to the local Park and Ride service to accommodate school journeys. In the 2007/08 school year, there were 16,400 journeys on the service, with the first three months of 2008/09 showing a 30 percentage point rise in 2007/08 figures.
Case Study 6 – South East	Large Urban Secondary School	High proportion of students travelling by sustainable modes, including 60% by cycling, and 13% walking, through the development of a travel forum headed by the school's Deputy Head.
Case Study 9 – Yorkshire and Humber	Urban School for Students with Learning Difficulties	Improvement in the coordination between the school and local authorities in transporting students through the TTSI programme. The programme has had wider benefits by increasing the awareness of environmental factors and physical activity, and has linked with the school curriculum.

### 4.3.3 Summary

Data from the School Census Subset provides little evidence to indicate that STPs have had a significant impact on mode share, **at an aggregate level**.

However, evidence from school representatives, STAs, RSTAs, local authorities and GOs provides a more positive picture, and the case studies show that some schools have achieved substantial mode shift following the introduction of their STP.

It is recognised that the above results reflect the views of only a small proportion of all schools (<3%) and approximately three-quarters of STAs,

It is also recognised that these stakeholders may have a vested interest in promoting the positive outcomes of their roles, and may also unintentionally be biased in their perceptions of mode shift success, based on particular successes with groups of pupils and the influence of other positive aspects of STPs. However, the evidence does suggest that STPs are viewed positively regarding travel behaviour change and that considerable changes have been achieved in some schools.

The apparent contradiction between the positive evidence from views of school representatives / STAs and the less positive evidence from the School Census Subset may, in part, reflect the extent to which the data can be used to monitor travel behaviour change resulting from the TTSI (see Chapter 2). This was an area of concern mentioned in at least 9 of the workshops. Many felt that weaknesses in the reporting of mode share within the School Census was under-estimating the changes being achieved. Although some local authorities did undertake their own monitoring there was little evidence provided, however, to contradict the reported School Census results.

A particular issue is the inability of the census to identify partial changes in travel behaviour which many STP-related initiatives seek to achieve. For example, WOW<sup>43</sup> participants walking less than 3 days a week will be recorded as car, those switching to 'park and stride' may still be recorded as car, and a child cycling 3 days a week in the summer may still be recorded as car.

*"We have some evidence that car use has declined slightly, mainly as a result of more car sharing and bus use, but overall School Census figures do not show any great change. However, in some individual schools there has been a major change due to the introduction of park and walk schemes, Walk on Wednesday schemes, engineering measures such as 20mph zones, school crossings, flashing warning lights etc (which have been installed as a direct result of the School Travel Plan) and a growing awareness of the benefits of sustainable transport among parents"*

STA

**It is important to recognise that behavioural change occurs over a long period, and in many cases the full benefits may not be seen for a number of years, however benefits could also evaporate over a short period of time.**

<sup>43</sup> Walk on Wednesday participants.

## 4.4 Other Wider Benefits of STPs

### Survey evidence

School representatives were asked to provide their views on the role of STPs in delivering health, environmental and safety benefits:

- **Health benefits** - 69% agreed or strongly agreed that STPs help raise awareness of the health benefits of active travel (Appendix C, School Survey, Q19); 69% also agreed or strongly agreed that STPs enable children to benefit from increased physical activity (Appendix C, School Survey, Q17).
- **Environmental benefits** - 70% agreed or strongly agreed that STPs help raise awareness regarding the environmental benefits of active travel (Appendix C, School Survey, Q21). 63% believe that STPs have been an effective way to encourage sustainable journeys to school (Appendix C, School Survey, Q13) and 61% believe that STPs will continue to be effective in future (Appendix C, School Survey, Q15).
- **Safety benefits** – Respondents were less clear about the effectiveness of STPs in addressing parents' safety concerns associated with walking and cycling. 55% agreed that STPs had addressed concerns, but 17% disagreed and 24% felt that impact of STPs had had a neutral impact (Appendix C, School Survey, Q23). Those agreeing that STPs had helped to address parental concerns mentioned that the STP had provided a forum for raising concerns (16%) raised awareness about safety issues (12%), provided reassurance to parents (12%) and enabled them to make informed decisions about how their children should travel to school (13%).

It is recognised that those responding to the survey may have included a higher than average proportion of 'STP supporters' providing a more positive picture than the national situation.

Evidence on the actual change in travel behaviour, presented above suggests that the health and environmental benefits associated with increased levels of walking / cycling and reduced levels of car use have been significant in some schools where a substantial change in travel behaviour has occurred. However, in most schools such benefits appear to be linked to small changes in travel behaviour on a minority of days or at certain times of the year, or to certain groups of pupils within the school. It should also be noted that a considerable proportion of schools without a STP reported a change in travel behaviour which would have led to health and environmental benefits.

School representatives were also asked to rank nine potential benefits of having a STP (Figure 4.8; and Appendix C, School Survey, Q12).

Benefits related to **health** (encouraging walking / cycling), **safety** (provision of appropriate safety measures) and **environment** (reducing car use) were seen as being most important or valuable; with health benefits clearly in first place.

These factors were followed by:

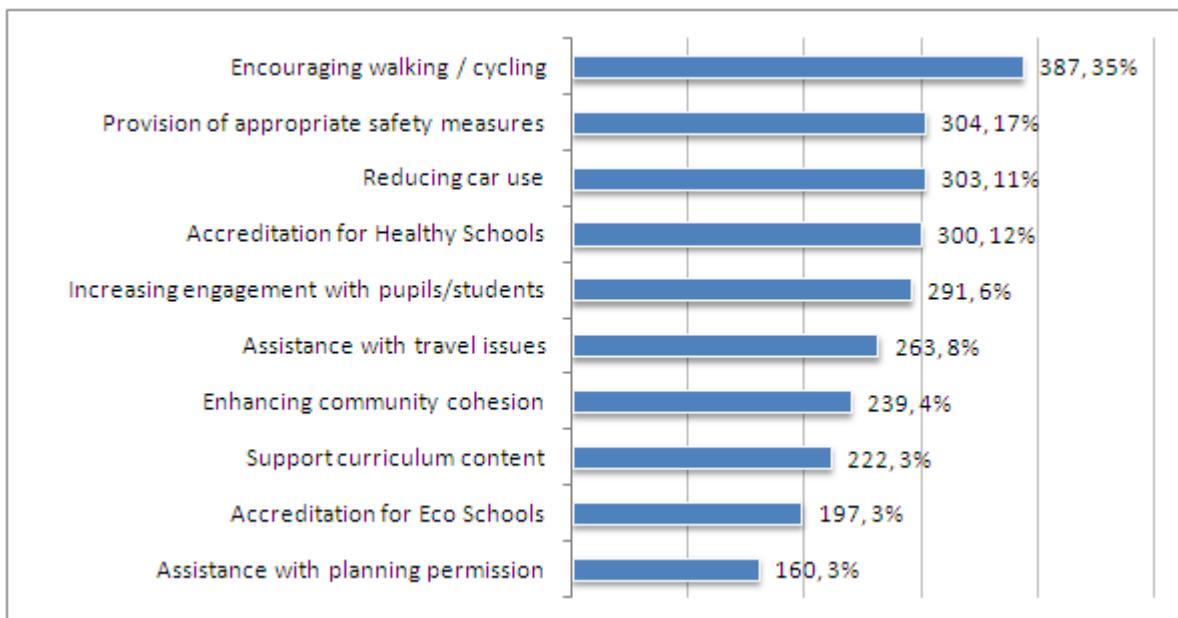
- enabling schools to secure Healthy Schools accreditation;
- increased levels of engagement with pupils / students; and
- assisting the school to address travel issues.

Benefits seen as being of less importance or significance (but still identified as the primary benefit in a minority of schools), were:

- enhancing community cohesion;
- supporting curriculum content; and

- assisting schools to obtain planning permission (this factor is unlikely to have been relevant for the majority of schools).

**Figure 4.8 - What have you found / do you think are the benefits of having a STP?**  
(Importance Score, Proportion of respondents stating each benefit as the most beneficial)



Source: School Survey, 483 respondents. Importance score calculated as follows: [(10 points \* no. of respondents ranking benefit in first place) + (9 points \* no. of respondents ranking benefit in second place) + etc....] divided by 10.

### Workshop evidence

STAs, RSTAs, RSTCAs, local authority and GO officers were all asked to identify the wider benefits of STPs during the various workshop sessions. Those mentioned most frequently related to health and environment; reflecting the findings shown in Figure 4.8. Further details are summarised below:

- Improved health and fitness through increased levels of activity** (12 workshops<sup>44</sup>) - Due to both the role of the STP and associated complementary walking and cycling initiatives such as walking buses, park and stride initiatives, cycling facilities, etc. In general it is unclear what evidence these views are based on, however, earlier analysis suggests that actual benefits to date are likely to be focused on specific groups of pupils rather than schools as a whole.
- Increased awareness of obesity issues and health benefits associated with physical activity** (10 workshops) - The process of developing and implementing a STP helps raise awareness of these issues amongst pupils and parents and teachers, who may also change their behaviour and attitudes. These benefits may be **long term** in nature, affecting lifestyles later in life as well as, or rather than, now.
- Increased awareness of environmental issues amongst pupils, parents, and teachers** (9 workshops) – Again, these benefits may be long term in nature, affecting lifestyles and attitudes to a range of environmental issues later in life, as well as, or rather than, now. In some cases, schools and pupils have already become more proactive in related issues such as recycling and community working.

<sup>44</sup> 'Indicative' number of workshops where this factor was mentioned. Eleven STA workshops, one RSTA workshop, nine local authority workshops and nine Government Office meetings were held in total. Note, individual workshops varied in terms of the amount of time spent discussing this issue and the comprehensiveness of the responses received. In addition, other workshops often mentioned these issues, but in response to different questions. These occurrences have not been included in the figures presented, but were often quite substantial.

A wide range of other benefits were also identified.

'Other' benefits mentioned most frequently by a range of stakeholders are summarised below:

- **Increased awareness of road safety issues and casualty reduction** (6 workshops).

*"Road Safety seems to have achieved a higher profile in most STP schools..... I also feel that the TTSI agenda has, and will continue to have, a positive impact on the health and wellbeing of students with increased levels of physical activity...and has raised the profile of environmental and health education in many schools"*

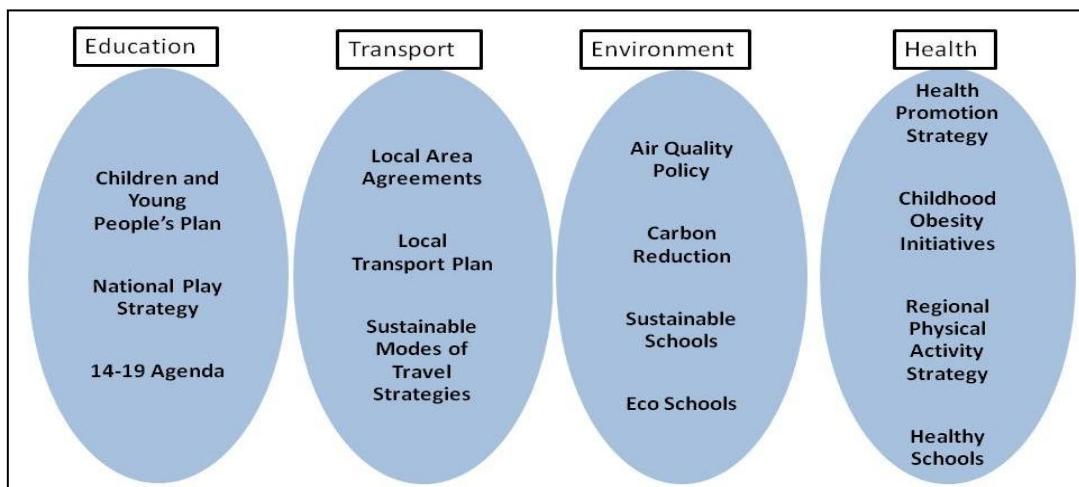
STA

- **Contribution to Healthy Schools, Eco-Schools, and Sustainable Schools Initiatives** (9 workshops) – Many stakeholders commented on the overlap between STPs (and the TTSI) and the above initiatives, and described how schools often try and integrate the initiatives. This helps raise the profile of health, travel and environmental issues within schools and provides more opportunities for these issues to be addressed in the curriculum. Having a STP in place and implementing it through initiatives such as walking buses, Walk to School weeks, etc. helps schools to promote these wider initiatives and secure accreditation. This leads to wider health and environmental benefits within the school, enables greater coverage to be given to transport issues, and helps in influencing the associated attitudes and behaviour of pupils, parents and teachers.
- **Stronger relationships between schools, local authorities, and the police** (7 workshops)
  - In many cases, the STP has provided the first opportunity for a direct relationship between the local authority and individual schools (supported by STAs). This has enabled:
    - schools to address transport-related concerns directly with local authorities (e.g. specific safety concerns, parking and speed issues, public transport availability, etc.);
    - schools to arrange visits from road safety officers, community police officers, etc. (through the STA);
    - local authorities to draw on schools' local knowledge of the transport environment when developing transport strategies or tackling specific transport problems. This might include discussions about the location of crossing facilities, routes to school, air quality issues, local accessibility issues and localised congestion problems; as well as seeking input from schools (often via the STA) at a more strategic level e.g. informing the Sustainable Community Strategy, the Local Area Agreement (including National Indicator 198<sup>45</sup> targets), the Local Transport Plan / Local Implementation Plan, Sustainable Modes of Travel Strategies, and other wider policies, strategies and initiatives (Figure 4.9). This provides local authorities with a level of input which would be difficult to achieve without the existence of School Travel Plans.
- **Increased community cohesion and neighbourhood pride** (8 workshops) – The process of developing and implementing a STP involves a large number of individuals. In particular, associated initiatives such as walking buses require considerable numbers of parental volunteers to make them work. As a result parents have become more involved in what is happening within the school, which has often resulted in benefits for other school activities. In addition, STPs involve and encourage increased engagement with and between parents, teachers, councillors, local authority officers, the police, etc; which is seen as creating a better community environment. Further benefits may be derived through the use of

<sup>45</sup> NI198: Children travelling to school - mode of transport usually used.  
<http://www.communities.gov.uk/publications/localgovernment/finalnationalindicators>

community facilities such as libraries, community centres, and through related publicity and awareness campaigns (e.g. road safety displays prepared local schools).

**Figure 4.9 – Links between STPs and other wider policies and initiatives**



Source: RSTA, STA Workshop Participants

- **Improved pupil behaviour, including increased attendance and punctuality** (4 workshops) – Group initiatives such as walking buses provide a controlled environment for the journey to school (compared with independent travel), encourage greater mixing of pupils (breaking down social barriers) and have resulted in new friendships. Pupils generally enjoy these new approaches to travelling to school and are more willing to be ready in time. STPs have also been credited with increasing attendance and punctuality, improving pupil discipline and enabling bullying, anti-social behaviour and graffiti issues to be addressed.
- **Increased levels of independence and confidence** – Although not identified as a considerable benefit across the board, this issue is seen as being particularly relevant in special schools. Where such schools have developed a STP, the benefits of pupil participation in travel initiatives which improve their confidence and independence (e.g. walking buses) are seen as an important benefit and a major reason for developing a STP.

*"Punctuality and attendance plus attainment all improved following introduction of the walking bus and school minibus system at [X] Community School" RSTA*

*"Independence training has been very effective in [special] schools; as has the 'call bus' programme, which educates children in how to catch a bus" LA officer*

*"[Special] schools take a different approach, focusing on developing 'skills for life' rather than purely travel planning." LA officer*

- **Ownership of travel to school issues by schools** – Schools themselves are starting to take greater ownership and responsibility for how their pupils travel to school, recognising the benefits identified above. As a result, many are becoming more proactive in arranging events such as 'Walk to School' week, rather than relying on STAs to drive and encourage participation.

## 4.5 Factors Determining the Effectiveness of STPs

This section identifies the various factors which are believed to have influenced the effectiveness of STPs, focusing on:

- ‘enablers’ or factors which have assisted in the achievement of travel behaviour and wider STP benefits, including the role of STAs, the importance of reviewing and revising STPs, local authority accreditation and reward schemes, and other enablers identified by workshop participants and case study representatives; and
- ‘barriers’ or factors which have prevented or limited the extent to which expected benefits have been achieved.

### 4.5.1 Enablers

#### Role of STAs

STAs are perceived to have played an important role in encouraging schools to develop and implement a STP and improving the quality of the plan produced:

- 29% of School Survey respondents with a STP in place stated that they would not have prepared it without the help of a STA. In particular, respondents appreciated the knowledge and advice which STAs provide (Appendix C, School Survey, Q48 and 49); and
- 69% of School Survey respondents agreed that the quality of their STP was ‘significantly better’ than it would have been without the help of a STA.

Further consideration of the role and benefits of STAs is provided in Chapter 5.

#### Importance of reviewing and revising STPs

Eighty-three percent of STAs advise schools to **review** their travel plans annually. Fifty percent recommend annual **revisions** to STPs, Most other STAs either do not specifically recommend that schools revise their STPs or advise less frequent revisions (Appendix D, STA Survey, Q9 and 10).

In practice, however, just over half of schools (55%) responding to the School Survey reviewed and/or revised their STP annually, with others adopting a less frequent approach (Figure 4.10).

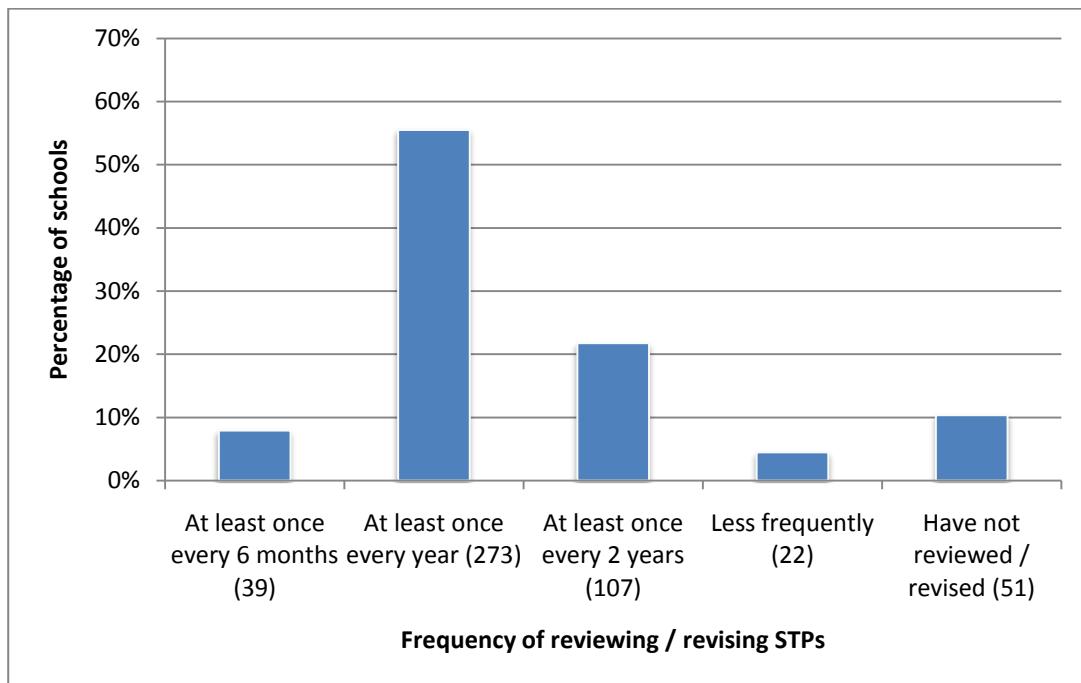
Figure 4.11 compares frequency of review with corresponding data from the School Census subset on change in car use.

The 30 schools stating they reviewed/revised their STP every six months report greater success in reducing car use than schools undertaking less frequent reviews - *more than four-fifths of these schools reported a reduction compared with fewer than three-fifths for all other categories.* Although the sample is fairly small, these results do suggest that **reviews at least yearly, are effective in ensuring on-going engagement with pupils and active promotion of alternative travel modes.** Note, 87% of respondents to the STA Survey also agreed that regular reviews of STPs help towards a continued reduction in car use for journeys to / from school (Appendix D, STA Survey, Q11).

There is no evidence of a negative correlation between frequency of review and reduction in car use, in the majority of schools which undertake less frequent reviews of the STPs<sup>46</sup>.

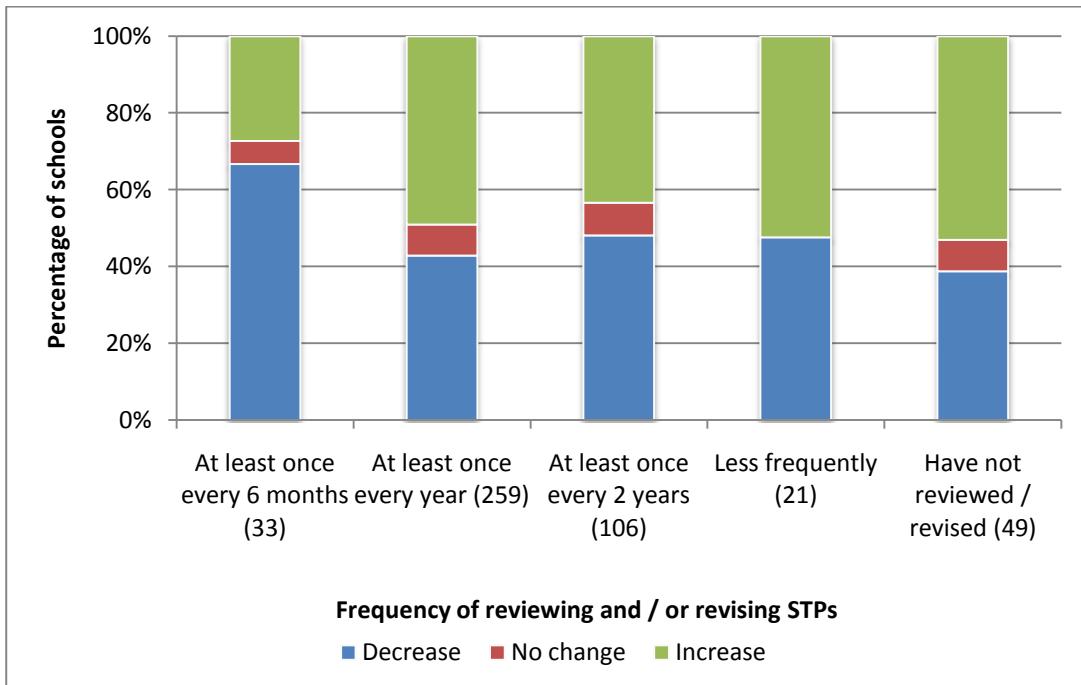
<sup>46</sup> No significance testing undertaken.

**Figure 4.10 – Schools stated frequency of reviewing and/or revising STPs**



Source: School Survey, 492 respondents

**Figure 4.11 – Relationship between frequency of STP reviews/revisions and change in car use (2006/07 to 2008/09)**



Source: School Survey, 417 respondents. Mode shift data for corresponding schools taken from School Census Subset.

## Reviewing role of RSTAs

Qualitative findings from the RSTA and STA workshops demonstrate that the majority of RSTAs provided advice when requested, but did not review all STPs as a matter of course. They tend to review a sample of STPs from each local authority and follow the 'STP Quality Assurance' requirements set out by the TTSI Project Board.

*"Our RSTA asks to see a selection of STPs each year for moderation. This is because we assess the STPs ourselves against the required criteria. Obviously, the RSTA needs to confirm that there is a consistent standard"*

STA

In general, STAs perceive RSTAs to provide an important quality assurance and critical friend role during STP development and implementation, thereby raising the overall standard of STPs.

## Local authority accreditation and reward schemes

Some local authorities have developed accreditation or reward schemes to encourage schools to produce high quality plans and encourage a long-term commitment to sustainable travel planning within schools. For example, some schemes have varying levels of awards (such as bronze, silver and gold) relating to different standards and length of time the STP has been maintained and actively implemented. Other schools require STPs to meet specific targets for mode shift.

An example of this is Transport for London (TfL), who have developed a scheme to ensure schools have a long term commitment to travel planning, and that they push past the minimum requirements to produce a STP. The accreditation framework (running since 2007) ensures schools actively commit to monitoring and evaluating the plan, and provides a commitment from the local authority to support schools and the sustainable travel programme. The accreditation scheme contains three levels of award:

- "*sustainable level*" – the bronze award. To achieve this, schools must meet some basic requirements in adopting a school travel plan, and link to some criteria within "*Every Child Matters*" accreditation;
- "*higher standards level*" – the silver award. Schools must meet the criteria of the "*sustainable level*" and this award, be at the review stage or beyond, and show a high level of participation in sustainable travel initiatives, together with an innovative approach to their travel plan; and,
- "*outstanding level*" – the gold award. Schools must meet the criteria for all three awards, and be able to demonstrate an exceptional commitment to sustainable travel.

These awards are valid for up to a period of three years, dependent on the accreditation level. In 2009, 473 schools had been awarded "*sustainable level*" accreditation, 72 schools achieved "*higher standards*" accreditation, and 9 schools were accredited with the "*outstanding level*" of award.

Accreditation and reward schemes are now widespread - half (50%) of the 170 STA Survey respondents were employed by a local authority that ran an accreditation or reward scheme. However, their presence varies by authority type and location:

- 70% of respondents from 'large urban' authorities reported that a local authority scheme was in place compared with 34% from 'significantly rural' authorities – this may reflect a greater perceived likelihood of achieving substantial mode shift in urban areas;
- accreditation and reward schemes appear to be widespread in London and the South East, and to a lesser extent the East of England; but less common in other regions (Table 4.5). No such schemes were reported in the East Midlands.

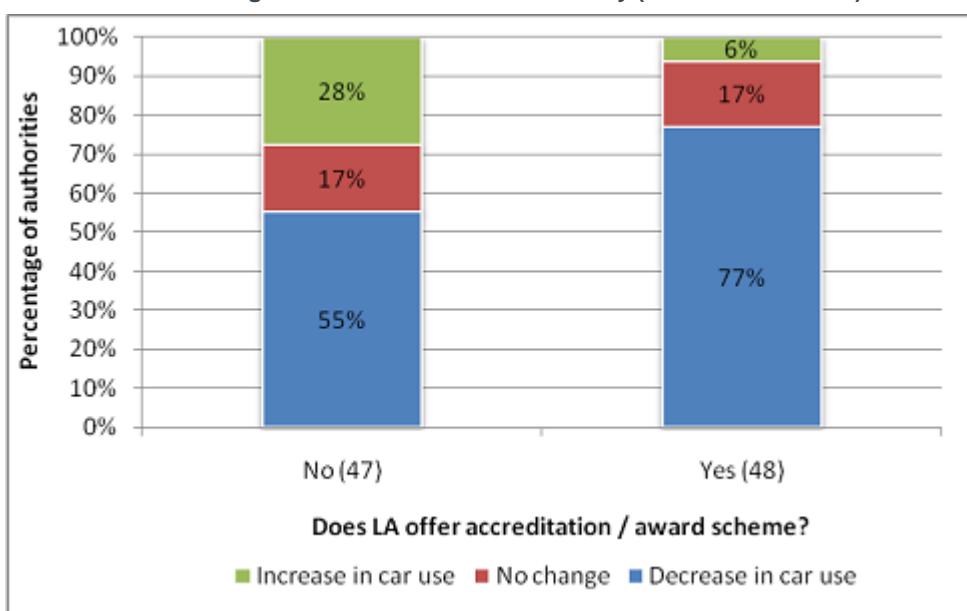
**Table 4.5 – Number of STAs who reported that their local authority did/did not have an accreditation/reward scheme, by region**

Region	Yes	No
East Midlands	0	12
East of England	12	6
London	25	3
North East	3	6
North West	4	13
South East	21	8
South West	5	15
West Midlands	9	10
Yorkshire & Humber	4	10
Total	83 (50%)	83 (50%)

Source: STA Survey, 166 respondents

Figure 4.12 suggests that the existence of a local authority accreditation or reward scheme is positively correlated with a reduction in car use. Seventy-seven percent of authorities known to have a scheme in place experienced an overall decrease in travel to school by car across the authority. This compares with 55% of authorities believed not to have a scheme in place. This correlation may indicate a causal relationship between accreditation schemes and reduction in car use, but equally may be a result of other underlying factor(s). For example, a local authority which has a particular commitment to sustainable travel may be more likely to have accreditation schemes and to demonstrate a reduction in car use, without the two outcomes being causally related.

**Figure 4.12 – Relationship between presence of a local authority reward / accreditation scheme and change in car use across the authority (2006/07 to 2008/09)**



Source: STA Survey used to determine which authorities do and do not have reward / accreditation schemes in place. Only those local authorities where a STA responded to the STA Survey are included in this analysis (95 in total). Local authority-wide mode share data from the School Census (2006/07 to 2008/09) was provided by the Department for Transport. T-test used to compare the average change in car use (on an authority by authority basis) for authorities with and without an accreditation / reward scheme. The difference was found to be statistically significant.

The majority of respondents to the STA Survey also perceive accreditation and reward schemes to be effective (Appendix D, STA Survey, Q16):

- 65 out of 159 respondents (41%) believe these schemes have made a 'significant (large) positive' difference;
- 55 out of 159 respondents (35%) believe these schemes have made a 'moderate positive' difference; and
- 35 out of 159 respondents (22%) believe these schemes have made a 'slight positive' difference.

### Why are schemes beneficial?

STAs view accreditation and reward schemes as successful because:

- they provide an additional opportunity and incentive for STAs to engage with schools;
- they provide schools with an added incentive to develop and implement a higher quality STP; and
- additional funding (e.g. for cycle shelters, lockers, etc.) can be used to provide immediate and tangible benefits, which can encourage further engagement and participation by staff pupils and parents.

A number of STAs suggested that a **national accreditation/reward scheme** would be beneficial in incentivising schools to participate. Similar national accreditation schemes are already in place for the Eco-Schools and Healthy Schools initiatives, and awards have been made to schools to highlight and recognise their achievements.

### Other enablers

In addition to those already described, other enablers were identified through a wider analysis of responses to workshop questions. Stakeholders were not specifically asked to identify enabling factors. The number of workshops where each factor was mentioned is provided, although this should be treated as an indicative measure of relative importance of the following issues:

- **Implementation of walking and cycling initiatives to support the STP**, e.g. walking buses, park and stride initiatives, on-site pedestrian facilities such as parental shelters, secure cycle parking, Bikelt, etc. (18 workshops)<sup>47</sup>
- **Sustainable travel improvements implemented by local authorities** for individual schools or as part of a wider programme of enhancements, e.g. footpath improvements, new cycle routes, road safety measures, etc. (15 workshops)
- **Good publicity** to promote awareness of the STP and related initiatives. (12 workshops)
- **A wide range of initiatives** aimed at all pupils and parents. (12 workshops)
- **Buy-in from parents** is seen as essential in changing travel behaviour. A number of workshop participants commented that changes in travel behaviour had been limited by continued reluctance on the part of parents to allow children to walk or cycle to school due to road safety concerns and 'stranger-danger' fears; or because the school run forms part of the parents' daily commute and has become an established part of the day. (12 workshops)
- **STP capital grant and funding secured from other sources (e.g. Sustrans)** to implement 'on-site' measures and initiatives which encourage sustainable travel. (13 workshops)

<sup>47</sup> 'Indicative' number of workshops where this factor was mentioned. Eleven STA workshops, one RTSTA workshop, nine local authority workshops and nine Government Office meetings were held in total.

- **Joint promotion of the STP alongside Healthy Schools, Sustainable Schools and Eco-Schools initiatives.** This helps raise the profile of transport issues and provides more opportunity for coverage in the curriculum. (15 workshops)

These factors were identified by STAs, RSTAs and local authority officers. There was no clear difference in the importance attached to the enablers between the different stakeholder groups.

In addition, a number of STAs highlighted the importance of encouraging and enabling schools to take ownership of their STP. In general, schools which had been most successful in achieving behavioural change were those where parents and/or governors have been particularly supportive, and there has been an enthusiastic head teacher or member of staff.

Although not frequently mentioned, the presence of someone in the school willing to 'champion' the development and implementation of the STP is believed to be an important factor.

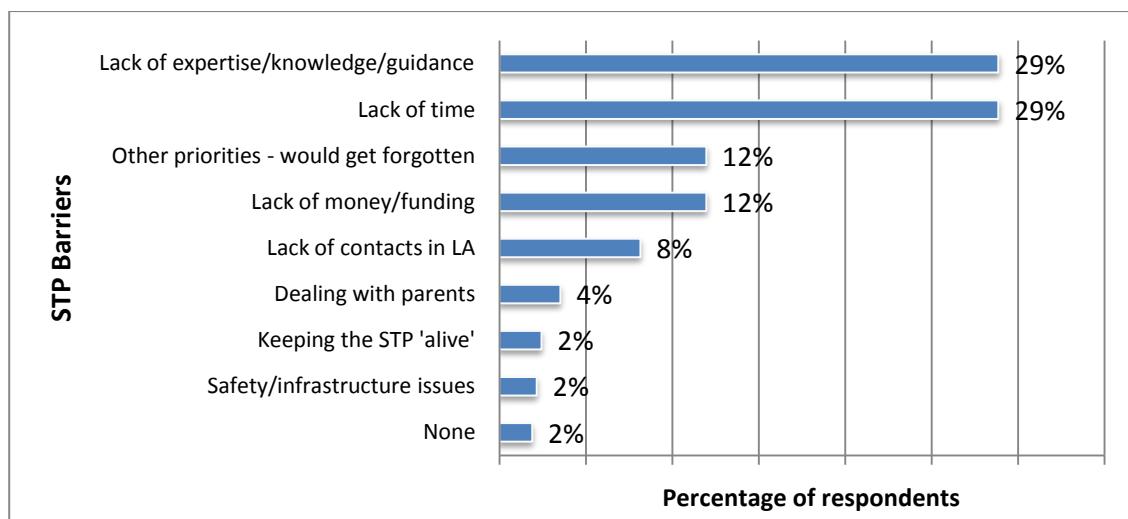
Similar factors were identified by representatives from the nine **case study** schools. These are summarised in Table 4.6 at the end of this section.

## 4.5.2 Barriers

Responses to the School Survey provide evidence on the perceived barriers to getting more children to walk or cycle to school (Appendix C, School Survey, Q41). The results show that parental attitudes and preference for driving their children to school are cited by over 50% of schools. The actual or perceived safety of routes to school is cited by over a third of schools and excessive distances by almost a fifth.

Schools were also asked what they saw as the main barriers to the development, implementation and delivery of their STP in the absence of STA support. The results are shown in Figure 4.13.

**Figure 4.13 - Main barriers to developing, implementing and delivering a STP in the absence of the STA Role**



Source: School Survey, 367 respondents.

Respondents were also asked what further help schools needed in order to encourage more children to walk and cycle. The most important areas cited included safer local roads (20.4%), walking and cycle paths (16.6%), cycle storage and changing facilities (13.3%), and increased levels of funding (8.9%).

The following barriers were identified by workshop participants, and are consistent with the above survey findings:

- **Reluctance on the part of parents to allow children to walk or cycle to school** due to road safety concerns and 'stranger-danger' fear; or because the school run forms part of the parents' daily commute and has become an established part of the day. (13 workshops, 10 involving local authority officers)<sup>48</sup>

On a related issue, some schools have liability concerns about children cycling to school, and fear being sued if cycles go missing or pupils are involved in a safety-related incident.
- **Lack of appropriate infrastructure**, both on and off site, to encourage use of sustainable modes (10 workshops, all involving STAs). See section below for further information.
- **Insufficient funding for supportive measures**, particularly those requiring **revenue support**. (8 workshops, 6 involving STAs)
- **Lack of staff resources and volunteers** to develop and implement the STP effectively. In addition, some schools felt that the level of input required to develop a STP or apply for related funding was high in comparison with the potential funding which would be secured and/or the expected STP benefits. This may reflect a lack of understanding of the importance of sustainable travel and the benefits which can be derived through a travel plan. (10 workshops, 9 involving STAs)
- **Distance from home to school** limits potential for sustainable travel. New schools may be built in locations with poor accessibility, public transport links may be poor, and parental choice in school selection can mean that children have long journeys to make. (8 workshops)

Similar factors were identified by representatives from the 9 **case study** schools. These are summarised in Table 4.6 at the end of this section.

### Changes to travel to school entitlements

As part of the School Survey, respondents were asked whether recent changes in entitlement to 'free home to school travel for children from low income families' had changed school children's' travel patterns and increased the distance travelled to school (Appendix C, School Survey, Q29):

- only 6% of schools felt that their schools had been affected in this way;
- **64% did not believe this had been a major issue within their school;** and
- 30% did not know.

Where schools had been affected, the impacts were believed to be small, with less than 2% of pupils affected at 11 of the 28 schools, and between 2% and 10% of pupils affected at a further 10 schools. (Appendix C, School Survey, Q30)

### The role of on-site and off-site infrastructure

School Survey respondents were also asked whether they believed that the absence of appropriate on-site and off-site infrastructure impacted on the success of sustainable travel initiatives. Findings show that:

- 71% of respondents to the School Survey '*strongly agreed*' or '*agreed*' that the absence of appropriate on-site infrastructure, such as shelters/lockers, parent waiting shelters and shower facilities affects the success of active travel initiatives. In particular, the existence of secure cycling facilities was seen as particularly important in terms of promoting cycling

<sup>48</sup> 'Indicative' number of workshops where this factor was mentioned. Eleven STA workshops, one RTSTA workshop, nine local authority workshops and nine Government Office meetings were held in total. Note, individual workshops varied in terms of the amount of time spent discussing this issue and the comprehensiveness of the responses received. In addition, other workshops often mentioned these issues, but in response to different questions. These occurrences have not been included in the figures presented, but were often quite substantial.

(“*Security of possessions is a big issue and pupils will be more confident to cycle to school if they can safely lock up their bikes*”). (Appendix C, School Survey, Q37 and 38)

- 86% of respondents ‘strongly agreed’ or ‘agreed’ that the absence of appropriate off-site infrastructure such as pedestrian crossings, cycle paths, new bus stops/shelters affected the success of active travel initiatives. In particular, the role of cycle paths and road crossings in providing a safe environment for the journey to school was considered important. (Appendix C, School Survey, Q39 and 40).

STAs reported that supporting infrastructure makes a large difference to the success of some initiatives, for the above reasons. Without appropriate safety and security measures it can be difficult to persuade parents to let their children walk or cycle to school. Parental concerns regarding safety, however, are complex and infrastructure measures alone are often not sufficient to change perceptions.

**Table 4.6 – Barriers and Enablers to implementing effective STPs / reducing car use: Case study evidence**

Case Study	School Type and Classification	Barriers	Enablers
Case Study 1 – West Midlands	Small Primary School, Rural	<ul style="list-style-type: none"> <li>• Reluctance of parents not to bring students by car</li> <li>• Negative perception of road safety</li> <li>• Walking does not fit parents lifestyle</li> </ul>	<ul style="list-style-type: none"> <li>• Maintained regular contact with parents through weekly newsletter</li> <li>• Two large walking buses (30-40% take up)</li> <li>• Walk on Wednesday (WoW) scheme</li> <li>• Park and Stride scheme – parking at the Village Hall for parents</li> <li>• Shelters for Parents</li> <li>• Pedestrian and Cycle training</li> </ul>
Case Study 2 – South West	Small Primary School, Rural	<ul style="list-style-type: none"> <li>• Negative parental perceptions of road safety;</li> <li>• The school has a wide catchment area, with long journeys</li> </ul>	<ul style="list-style-type: none"> <li>• Walk on Wednesday (WOW) scheme</li> <li>• School crossing patrol</li> <li>• Road safety training for parents</li> <li>• Introduction of new road markings around the school</li> <li>• Parking restrictions around the school</li> </ul>
Case Study 3 – East of England	Cluster of Urban Secondary/ Independent	<ul style="list-style-type: none"> <li>• Distance of travel to school was seen as the key barrier</li> <li>• Negative parental attitude to sustainable modes</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction of Park and Ride scheme, with 50p single fare, and 1p chaperone tickets for parents</li> <li>• Cycle storage facility for staff</li> <li>• Encouraging car sharing</li> </ul>
Case Study 4 – East of England	Large Urban Primary School	<ul style="list-style-type: none"> <li>• Closure of school and public bus services within a narrow time band</li> <li>• Parents drop children to school in car as part of an onward commute to work</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction of two walking buses</li> <li>• A Park and Stride scheme</li> <li>• Introduction of new road markings around the school</li> <li>• New cycle shelters at the school</li> <li>• Incentives for children (prizes and certificates)</li> <li>• School expectations of walking all or part of the way within the School Prospectus</li> </ul>

<b>Case Study</b>	<b>School Type and Classification</b>	<b>Barriers</b>	<b>Enablers</b>
Case Study 5 – Yorkshire and Humber	Small Rural Primary School; Located within deprived SOA	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Parental shelter in the school playground</li> <li>• Training for students from Road Safety officers</li> <li>• Discussing with students and nearby residents of plans and suggestions</li> </ul>
Case Study 6 – South East	Large Urban Secondary School	<ul style="list-style-type: none"> <li>• Negative parental attitude to sustainable modes Cost of travel via public transport</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple cycle initiatives to encourage cycling, many of which have been over-subscribed</li> <li>• New cycling facilities including storage lockers, maintenance courses, cycle clubs, confidence training, provision of information and Velcro attachable lights</li> <li>• Bike scheme for staff to encourage cycling to work</li> <li>• Enthusiasm of staff in promoting sustainable travel</li> </ul>
Case Study 7 – Yorkshire and Humber	Medium Urban Primary School; Located within deprived SOA..	<ul style="list-style-type: none"> <li>• Low level of road safety with high risk to students and parents</li> <li>• High level of Asian students, with parents speaking limited English</li> </ul>	<ul style="list-style-type: none"> <li>• School participation in Walk on Wednesday, and Walk to School Week</li> <li>• New zebra crossing outside school, with new school gate increasing accessibility</li> </ul>
Case Study 8 – East Midlands	Large Urban Junior School	<ul style="list-style-type: none"> <li>• Negative parental perceptions of safety for children walking and cycling to work</li> <li>• Parents drop children to school in car as part of an onward commute to work</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction of cycling initiatives including 'Bike It', cycle training, cycle storage, and prizes for students</li> <li>• Involvement of students in implementing initiatives</li> <li>• Senior members of school staff enthusiastic about sustainable travel</li> </ul>
Case Study 9 – Yorkshire and Humber	Urban School for Students with Learning Difficulties	<ul style="list-style-type: none"> <li>• Large catchment area of school, with students travelling up to 20 miles, and crossing local authority boundaries</li> <li>• Distance of school to nearest train station, and close proximity of major roads act as a barrier</li> </ul>	<ul style="list-style-type: none"> <li>• Encouraging small numbers of pupils through Bikeability initiatives and road safety awareness training</li> <li>• Independent Travel Training (ITT) for students able to access public transport (or to enable students to access PT)</li> <li>• Lighting for cycle routes within school grounds and a new cycle shed</li> <li>• Staff actively started car sharing</li> </ul>

## 4.6 Overall Support for STPs – Now and in the Future

### 4.6.1 Now

The majority of school representatives view STPs as beneficial, for reasons identified in the previous sections of this chapter. Seventy-five percent 'strongly agree' or 'agree' that their school currently benefits or will benefit from having a STP (Appendix C, School Survey, Q11).

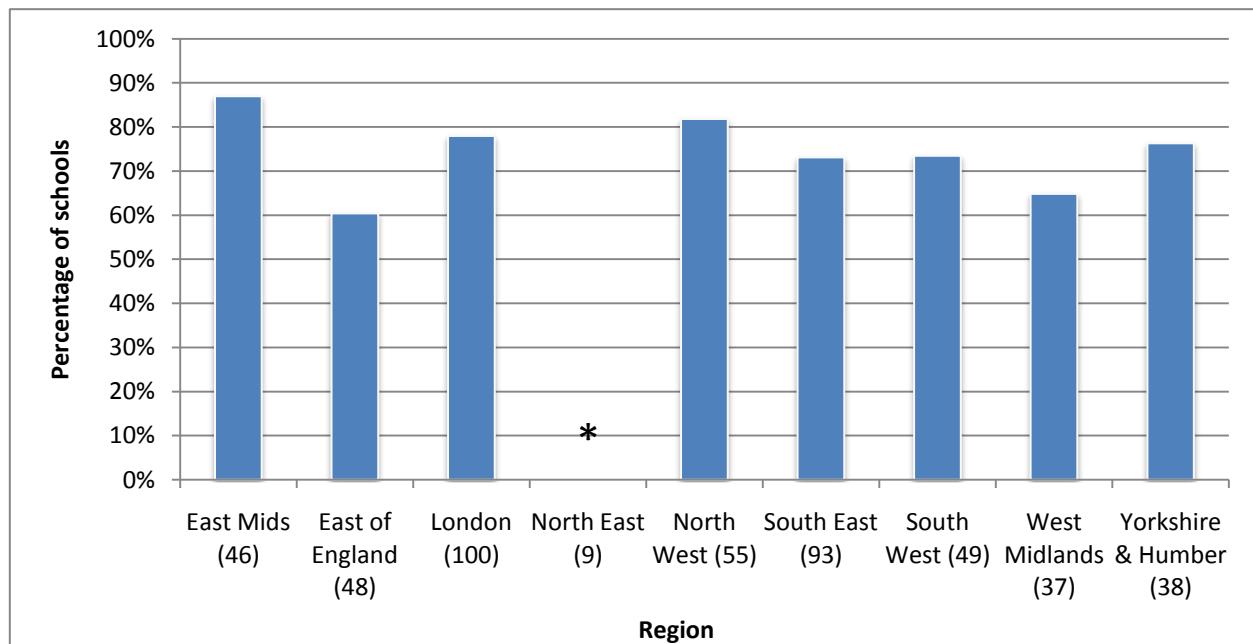
This is representative of the views of both primary and secondary school survey respondents, however, there was less certainty amongst respondents from special schools: 15 of the 36 respondents agreed that "*my school does / will benefit from having a STP*", but 12 neither 'agreed or disagreed', and 3 disagreed with this statement.

This is consistent with findings reported elsewhere which show that, in general, special schools can be more difficult to engage in the TTSI process because they perceive limited scope for changing travel behaviour due to the complex needs of some pupils (Section 4.2.1); and the limited success of special schools in changing behaviour (Figure 4.2).

"[Special] schools see the STP as solely getting pupils to walk to school which will rarely be an option for their children who not only travel from beyond the county but often spend 1-2 hours travelling." STA

Figure 4.14 illustrates the regional breakdown of responses to this question. Support appears to be lowest in the East of England and highest in the East Midlands<sup>49</sup>.

Figure 4.14 - My school does / will benefit from having a STP - % agreeing or strongly agreeing



Source: School Survey, 475 respondents. The sample size for each region is provided in brackets.

\* The results for the North East have not been shown due to the very small sample size obtained. Eight of the nine respondents in this region agreed or strongly agreed that their school does/would benefit from having an STP.

<sup>49</sup> The results for the North East are higher, but are based on responses from only nine schools.

## 4.6.2 In the Future

Almost two-thirds (61%) of schools responding to the School Survey believe that STPs will continue to support sustainable travel behaviour in schools in the future (Table 4.7 and Appendix C, School Survey, Q15).

**Table 4.7 – Will STPs be an effective way to encourage sustainable travel to school in the future?**

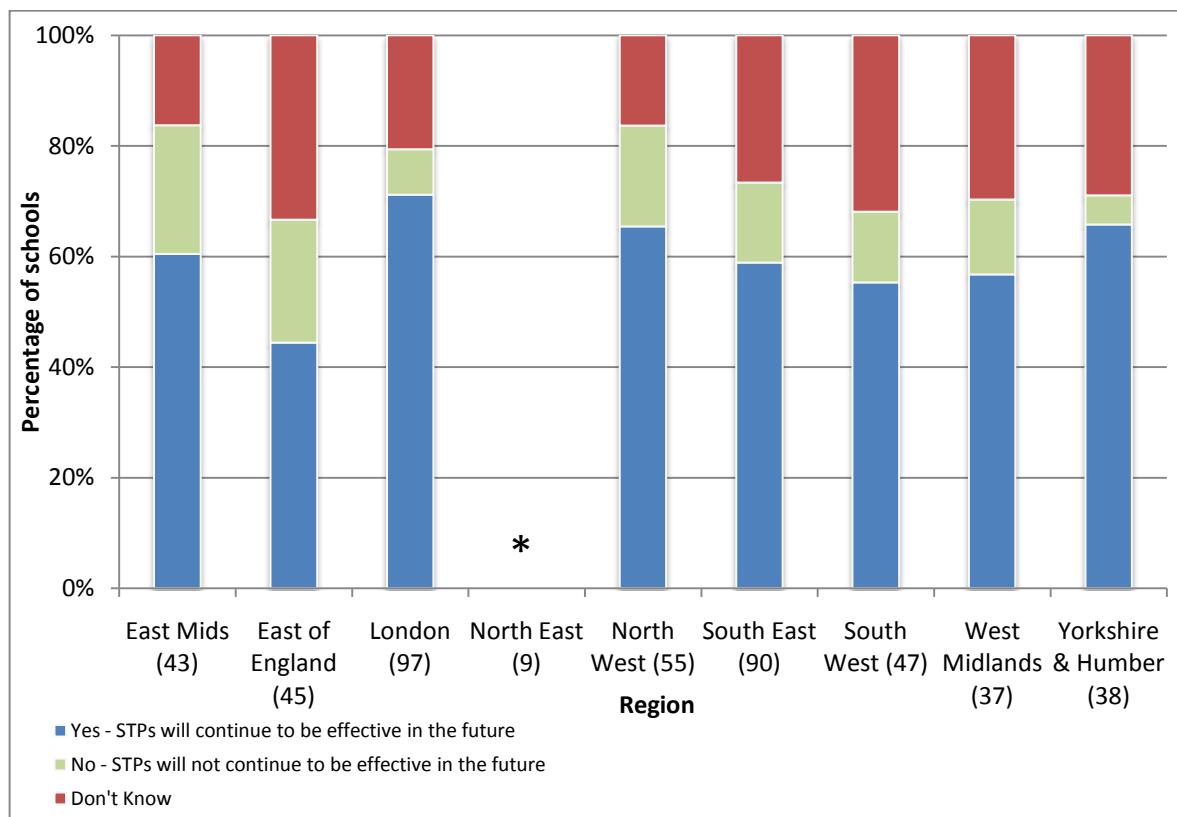
Response	Frequency	Percent
Yes	288	61%
No	66	14%
Don't Know	115	25%

Source: School Survey, 469 respondents

The largest proportion of 'yes' respondents came from primary schools (64%), compared with 59% in secondary schools and 49% in special schools. Examining the results by authority type suggests that more schools in urban authorities and London Boroughs believe STPs will be effective in future (72%) compared with those schools located in a County (53%).

Regional variation is shown in Figure 4.15. Schools in London are most supportive of the future role of STPs. This is consistent with this region achieving the highest proportion of schools experiencing a reduction in car use between 2006/07 and 2008/09.

**Figure 4.15 – Effectiveness of STPs in encouraging sustainable journeys in the future, by region and for all schools**



Source: School Survey, 461 respondents. The sample size for each region is provided in brackets.

\* The results for the North East have not been shown due to the very small sample size obtained. Of the nine respondents in this region, six felt that STPs would be effective, two stated STPs would not be effective, and the remaining respondent 'did not know'.

Those responding positively to this question highlighted the role of STPs in raising awareness of alternative travel options and encouraging change, and the usefulness of having clear goals and an action plan as a focus for activity. Those responding more negatively mentioned continued uncertainty about the impacts of STPs, the need for parental support and the requirement for external support in terms of funding and resources.

## 5. The Role of School Travel Advisers

### 5.1 Introduction

This chapter evaluates the extent to which the School Travel Adviser (STA) role has met the needs of the TTSI programme. Chapters 6 and 7 consider the roles of Regional School Travel Advisers (RSTAs) and Regional School Travel Curriculum Advisers (RSTCAs) respectively.

Section 5.2 provides an overview of the STA role and considers various process issues; Section 5.3 examines the effectiveness of the STA role in achieving TTSI outcomes; and Section 5.4 examines the future need for the STA role.

Evidence is drawn from the School and STA surveys, and workshops with STAs, RSTAs, RSTCAs, local authorities (LAs) and Government Offices (GOs). It is recognised that STAs may be biased in their views and have a vested interest in promoting the positive outcomes and importance of their roles. Where possible evidence from non-STAs has been considered to try and address this issue.

### 5.2 Overview of the STA Role

There were approximately 250 STAs in post in 2009.

The role of a STA as set out in [www.teachernet.gov.uk](http://www.teachernet.gov.uk)<sup>50</sup>, is to '*develop, promote and coordinate the delivery of STPs, and provide support to schools to assist the implementation of actions and initiatives resulting from them*'. A more detailed list of duties is provided in Table 5.1.

Table 5.1 - Key duties for School Travel Advisers

- To develop and coordinate support for school communities, creating and implementing school travel plans, and assisting schools to progress funding bids.
- To form and facilitate a group of relevant partners into a School Travel Strategy Group to support the development of a local strategy. To promote and implement school travel plans across the authority, linking to appropriate transportation, education, social inclusion, health and community strategies.
- To consider, develop and implement a promotion and publicity strategy for school travel plans which will ensure that schools are aware of and know how to access relevant and appropriate information and guidance. To disseminate information about school travel plans through presentations and existing publications, and through the identification of other opportunities.
- To review existing school travel plan guidelines (both locally and nationally), and consider and develop additional supporting information (e.g. case studies and funding guidance).
- To build upon and develop effective working relationships with a range of individuals, agencies and organisations (both internally and externally) to ensure that available resources, information and expertise are maximised to the benefit of school communities.
- To coordinate and support carefully planned and integrated work with partners from district councils, police and health authorities, parishes, schools, parents, local communities and other agencies in order to assist the development and implementation of school travel plans that will improve safety and reduce car dependence on the journey to school.
- To review existing monitoring and evaluation procedures, and develop and implement ways to accurately determine and record progress made by schools tackling and implementing school travel plans.
- To provide regular progress reports to the local School Travel Strategy Group and nationally via the Regional School Travel Advisers.

<sup>50</sup> <http://www.teachernet.gov.uk/wholeschool/sd/managers/travel/STAtoolkit/sta/>

## 5.2.1 Time in Post

Evidence from the STA Survey (based on responses from approximately three-quarters of STAs) suggest that about half have been in post for at least three years (Table 5.2), and have had considerable time to develop their skills and expertise. A fifth, however, have been in post for less than a year, and are likely to be less experienced.

Table 5.2 – Length of time STA respondent had been in current role

Time in Role	Number of STA Respondents	% of STA Respondents
Under 1 year	35	19%
1-2 years	29	16%
2-3 years	23	13%
Over 3 years	96	53%

Source: STA Survey, 183 respondents

## 5.2.2 Fit Within Authorities' Organisational Structures

Evidence from the STA Survey suggests that the majority of STAs (approximately two-thirds) sit within Transport departments (Table 5.3), where they can work closely with cycling officers, highway engineers, road safety officers and transport planners. This suggests that most local authorities perceive the TTSI as a transport-led initiative. Very few (6 out of 183 STA respondents) sit within Education departments, with most of the remainder located within Environment, Planning and Regeneration divisions.

Table 5.3 – Departmental location of STA<sup>51</sup>

Department	Number of Respondents	% of Respondents
Transport	123	67%
Environment	38	21%
Planning	8	4%
Regeneration	6	3%
Education	3	2%
Other (please specify)	5	3%

Source: STA Survey, 183 respondents.

However, formal and informal interaction with other departments is seen by STAs as an important element of their role.

Although good working relationships can be difficult to establish, the process is helped by the increasing need for cross-departmental working on a range of other initiatives such as the Building Schools for the Future (BSF)<sup>52</sup>, Healthy Schools, and Eco-schools programmes.

Other key factors include the personalities of the individuals involved, and the level of professional respect STAs receive from peers and managers. STAs who had been in post for a long time felt they were taken more seriously by other departments, due to the working relationships they had developed over time. This view was supported by those new to the post, who stated that

<sup>51</sup> Note, those responding 'in the Transport department of Environment', or similar, have been categorised as being in the Transport department. 'Other' includes a small number of miscellaneous responses including Civil Engineering, Community Safety and Accessibility & Policy, etc.

<sup>52</sup> Building Schools for the Future was terminated in July 2010

establishing contacts and networks took time to develop, and as a result the level of engagement they had had with other departments had been more limited.

### 5.2.3 Skills of STAs

STAs come from a range of backgrounds including teachers, transport officers, sustainability officers and health promotion specialists. This brings a range of skills to the role, which is valued by RSTAs and seen as beneficial for the delivery of the TTSI programme.

RSTAs report that STAs vary considerably in terms of their skill set and qualifications. This, in part, reflects the range of grades applied to STA posts within local authorities. In general, local authorities had to fit STA roles into existing teams and structures and set grades and salaries accordingly.

STAs undergo an induction when they begin their roles, and subsequently receive guidance and advice on a regular basis via their RSTAs, either individually or through regional meetings.

Most RSTAs report that the majority of STAs have a good understanding of the issues surrounding the promotion of sustainable travel, and that some of the more experienced ones are able to engage in informed discussions with schools on specific transport issues (e.g. different types of school crossing facilities or traffic calming measures) and education policy. However, RSTAs also agree that additional and regular formal training would be beneficial in ensuring all STAs have the necessary skills and up-to-date knowledge.

*"I think that the training sessions we receive through the regional meetings and the opportunity to regularly meet up and network with other regions' STAs has a beneficial impact on how I and the team deliver our work"*

STA

A large proportion of STAs attending the workshops also identified a need for further advice and training covering general skills (including database management to assist in the data monitoring process and presentational skills) and more specific areas (such as an introduction to traffic management and road safety issues, and transport, planning and education policy). Regional meetings were seen as providing a useful forum for this type of training.

Both RSTAs and local authority officers were keen to stress the enthusiasm, drive and passion which most STAs bring to the role, and a genuine desire to encourage pupils to make greater use of sustainable and active modes. Of particular importance is their ability to remain focussed on the aims of the TTSI programme, despite many initial rejections from schools.

### 5.2.4 Number of Schools STAs Are Responsible For

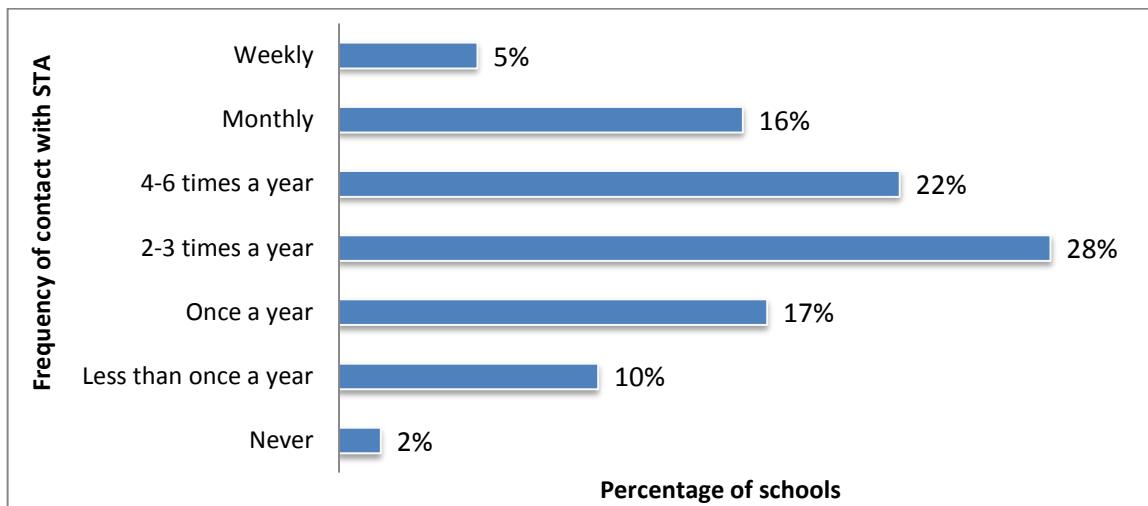
The average (or median) number of schools each STAs is responsible is about 182, however, this varies widely:

- 28% are responsible for less than 100 schools;
- a further 25% are responsible for between 100 and 200;
- another 25% are responsible for between 200 and 400; and
- 22% are responsible for more than 400 schools (Appendix D, STA Survey, Q6).

### 5.2.5 Frequency of Contact With Schools

School Survey respondents were asked on average how often they were in contact with their STA. Most schools (71%) are contacted at least twice a year and 43% stated that their STAs were in contact at least 4 times a year (Figure 5.1).

**Figure 5.1 – Frequency of school contact with the STA**



Source: School Survey, 422 respondents

There was little difference in the responses between regions, with the exception of respondents from schools in London who appear to be in contact with their STAs more frequently than other regions.

Only 19% of special schools were in contact with their STAs more than once a year, compared with 63% of primary schools and 54% of secondary schools, reinforcing reports by STAs that these schools have been more difficult to engage in the TTSI process (Table 5.4).

**Table 5.4 – Frequency of contact with STA, by school type**

Frequency	Primary	Secondary	Special
Weekly	2%	0%	0%
Monthly	11%	11%	3%
4-6 times a year	18%	16%	6%
2-3 times a year	31%	27%	9%
Once a year	26%	29%	41%
Less than once a year	22%	23%	19%
Never	16%	15%	16%
Total	297	86	32

Source: School Survey, 415 respondents.

STAs report that primary schools are generally easier to engage with than secondary schools for a number of reasons:

- a lot of initiatives, particularly those focused on walking, are considered to be more appropriate for primary school aged children;
- primary schools generally have a smaller number of pupils with whom to engage;
- staff numbers are typically smaller and it is easier to identify the appropriate individuals to liaise with;
- primary schools have less rigid lesson plans and timetables providing greater opportunity for pupils to get involved in the STP process; and

- parents of pupils from primary schools are often more actively engaged with the schools.

STAs also discussed that as primary schools were generally easier to engage with, and travel behaviour is established while children are young it is more likely to last a lifetime – children who habitually walk to school at primary age are expected to be more likely to choose healthy travel options while at secondary school.

*"Primary schools have greater potential for whole school initiatives and 'hearts and minds' type schemes especially as parents are more actively engaged with their children's education at this age"*  
STA

## 5.2.6 Amount of STA Time Spent in Schools

On average STAs report spending 7 hours per week in schools, but this can vary from less than 4 hours to over 20 a week:

- 24% typically spend less than 4 hours a week in schools;
- a further 34% spend between 4 and 8 hours each week;
- 27% spend between 8 and 12 hours; and
- 15% spend over 12 hours in schools (Appendix D, STA Survey, Q18).

At certain points in the development of STPs, however, STAs report spending all their time working in the school environment.

Whilst all schools are 'offered' the same level of support, the actual time spent within individual establishments depends on the level of motivation and 'buy in' within the school and the level of guidance and support required by the school in question.

*"I prioritise schools that are keen to make a change and implement schemes to reduce car usage and increase walking"*  
STA

STAs generally focus their time on those schools that do not have a STP in place (in order to progress towards 100% coverage of schools), and/or schools requiring most assistance. A few STAs prioritise those schools which they perceive to have the greatest potential for modal shift, but only in rare cases is there a clear process for identifying which schools have the most potential for change<sup>53</sup>.

STAs have mixed views about the benefits of spending more time in schools.

Many STAs claim that spending more time working with a school enables them to provide a better, more tailored service, which leads to better STPs and more success in changing travel behaviour. The majority of RSTA respondents also supported this view.

*"If we'd had more resources (time) we would have delivered better plans and complemented them with much more encouragement towards initiatives in schools"*  
STA

Some STAs would like to spend more time in schools but are constrained by time commitments; either their own (due to other local authority activities) or lack of available time on the part of schools. In contrast, STAs who had built up strong relationships with schools (based on a number of years working together) stated they did not always need face-to-face communication and were happy to communicate with schools via other methods such as the telephone or through electronic mail.

<sup>53</sup> Based on, for example, analysis of pupil postcode plots.

Statistical analysis shows no significant relationship between the amount of STA time spent in schools and the reduction in car use. These results, however, may demonstrate that schools that have taken full ownership of their STP and are achieving high level of reduction in car use do not require much input from their STAs.

## 5.2.7 Interaction with TTSI Partners

### Contact with TTSI Project Board

RSTAs provide the main point of contact for engagement between the TTSI Project Board and STAs. As a result the level of direct contact STAs have with the Board tends to be less than that of RSTAs and local authorities, but varies from STA to STA.

STAs stated that a positive relationship with the Board is essential to ensuring the successful delivery of the programme, and more direct contact with the Board would be beneficial.

### Contact with Regional School Travel Advisers (RSTAs)

All RSTAs stated they held quarterly regional meetings with their STAs and communicated more frequently through emails and phone calls.

STAs reported a similar level of contact (face to face or via telephone/electronic mail), with nearly three quarters (74%) of STA Survey respondents stating that they had contact with their RSTA at least once a month, and 34% stating that they were in contact at least once a week. A small proportion stated that they were in contact with their RSTA less than once every three months.

**Not surprisingly, these results vary by region, with different STAs receiving different levels of support from their RSTAs:** with 96% of STAs in London and 91% of those in the West Midlands in contact at least once a month compared with just 38% and 42% of STAs in the South East and East Midlands, where there were no RSTAs in post prior to and during the course of this Study.

### Contact with local authority Management Information System (MIS) officers

Each local authority has a Management Information System (MIS) officer responsible for collating the School Census data and providing a comprehensive set of data to the Department for Education.

Most STAs (98% STA Survey respondents) liaise with the relevant MIS officer to ensure the accuracy of the School Census, however, frequency of contact can vary from more than once a month to less than once a year to not all:

- 44% reported liaising with their MIS officer on an annual basis, and 19% do so monthly or termly; however,
- 5% do so less than once a year and 32% are not in contact at all (Appendix C, STA Survey, Q19).

Where STAs had liaised with their MIS officer to ensure the accuracy of data, 68% viewed this liaison as having been 'very successful' or 'successful'; 29% described it as 'neither successful or unsuccessful'; and 3% viewed it as 'unsuccessful'. The STA survey did not probe further into reasons for 'successful' or 'unsuccessful' contacts.

**These findings suggest that while there is some sense checking of mode share data by STAs, this is not done on a comprehensive basis.**

### Contact with local authority officers

RSTAs agreed that the interaction between STAs and local authority officers was often dependent on the individuals involved, and no common processes were evident within authorities to formalise such engagement.

The majority of STAs are based in Transport departments where they can engage directly with road safety officers, transport planners, highway engineers, etc. These partnerships are seen as being of most importance in terms of delivering the TTSI objectives.

STAs report various levels of support and engagement from senior transport officers, but acknowledge that relationships have improved in recent years as their roles have become more established and relevant officers have become more aware of the various initiatives and outcomes being delivered by the TTSI.

*"Senior local authority officers know about the work we do as a lot of our work is fairly high profile. The whole team were recognised in the employees awards scheme last year"*

STA

As highlighted earlier, however, many STAs commented on the difficulties in engaging with senior officers from different departments, such as Education, although this too has improved over the course of the programme. Initial contact is often instigated by STAs with discussions focused on the benefits of joint working. Once a relationship has been established joint working with other officers in that Department becomes easier.

Increasingly, joint working is being instigated by non-STA officers, requesting the advice and involvement of STAs on a range of travel related issues, drawing on the detailed knowledge they have regarding specific schools and school locations. For example, some STAs are now routinely consulted on traffic calming schemes and road safety campaigns, and as part of the planning application process.

STAs also report that they provide varying levels of input and support to local authority policies including the Sustainable Communities Strategy, Public Rights of Way Improvement Plans, Cycling Strategy, Local Development Frameworks, the SMOTS and the development of Local Transport Plan 3 (LTP3).

The overall view expressed during the workshops was that the importance, profile and influence of the STA role within the local authority had increased in recent years, with some STAs now adopting a more strategic senior role (involved in wider initiatives) within the authority.

Local authority officers report that the interaction of the STA with other departments within the local authority has been a key benefit of the STA role in recent years (mentioned in 5 of the 9 local authority workshops).

*"STAs are the glue that fit all the other sections and departments together"* LA officer

## 5.3 Effectiveness of the STA Role

### Role of STAs in driving STP development

School Survey respondents were asked whether they would have developed and implemented a STP without the help of their STA. Twenty percent said they would have developed a STP regardless of whether assistance of a STA was available, a further 41% stated they would probably have developed one, while **28% of schools stated that they would not have developed and implemented their STP without the help and support of a STA**. This was primarily due to lack of time, other priorities, and a lack of knowledge of what is required to produce a STP and how to go about developing one (Appendix C, School Survey, Q50 and 51).

*"Life at school is too busy with too many initiatives and demands on staff time. [School Travel Advisers] are essential, in our view, to ensure that this initiative continues to grow and develop"*

School Survey respondent

*"If it wasn't for the STA school travel plans probably wouldn't have happened in some local authorities as it just wasn't a priority"*

GO officer

There was widespread consensus amongst the RSTAs, local authority and GOs attending the workshops regarding the importance of STA support in terms of progress against the target of 100% STP coverage. The face to face contact which they are able to offer schools and the dedicated resources they provide, is seen as having been vital in getting schools 'on board' and encouraging them to implement change.

A number of STAs, local authority and GO officers commented that it is unlikely that many schools would be aware of the TTSI without their involvement.

### Scope and quality of advice provided by STAs – when developing a STP

The School Survey respondents who had a STP in place were asked to rate the advice and help given by their STA **during the development** of their travel plan (Appendix C, School Survey, Q44):

- 81% rated the advice given as either '*very helpful*' or '*helpful*';
- 7% described it as '*neither helpful or unhelpful*', and
- only 1% considered that the advice had been '*unhelpful*' or '*very unhelpful*'.

London and the South West regions had the highest proportion of respondents stating that the advice received had been '*very helpful*'/'*helpful*', 91% and 86% respectively.

Eighty-seven percent of secondary school respondents stated that the advice received had been '*very helpful*'/'*helpful*', compared to 81% of primary school and 66% of special school respondents.

Respondents commented that STAs were readily available and provided support and advice when needed.

When asked to rank a list of 10 potential benefits of having STAs when **developing** a STP (Figure 5.2 and Appendix C, School Survey, Q46), the factor most commonly ranked top was:

- '*provision of information*' (ranked first by 31% of respondents); followed by,
  - '*assistance in securing funding*' (21%);
  - '*motivation provided to continue the programme*' (16%); and
  - '*provision of innovative ideas*' (10%).

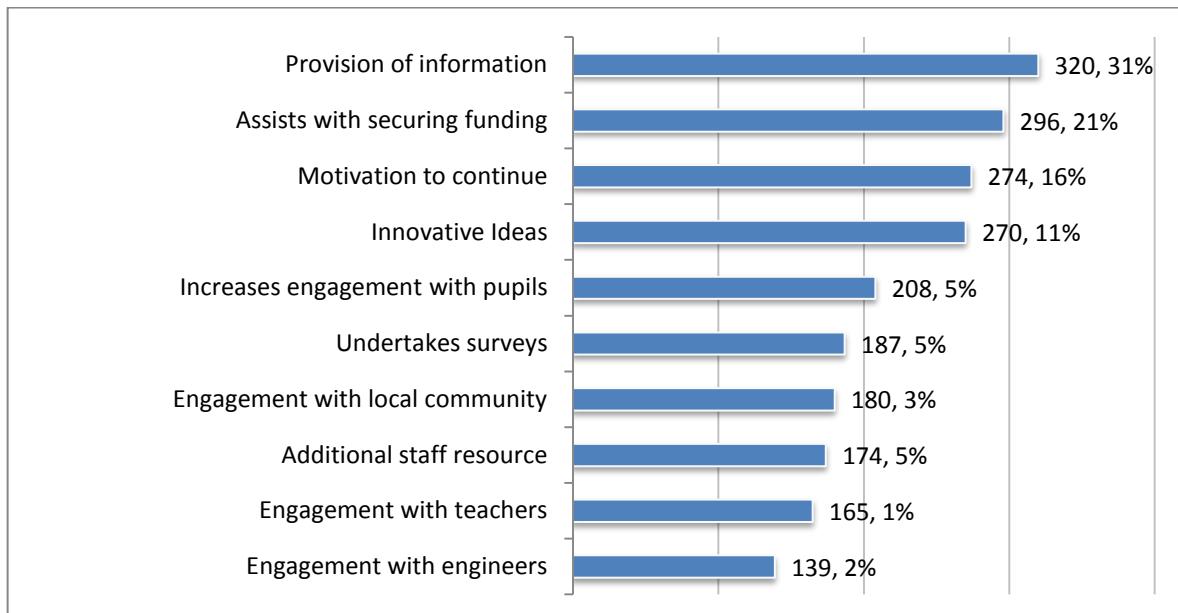
### Impact on quality of STPs

Most school respondents (69%) felt that advice and support provided by their STA meant that the quality of their STP was '*significantly better*' than it would have been without the help of a STA.

A further 25% considered their STP to be '*slightly better*', and only 7% believed there had been '*no noticeable difference*' (Appendix C, School Survey, Q48).

Note, however, that the School Survey may under-estimate the views of those who were less satisfied with the input provided by their STA and therefore less engaged in the TTSI (choosing not to respond to the School Survey). The above results may therefore exaggerate the benefits of the STA role to some extent.

**Figure 5.2 – Overall importance score and proportion of respondents ranking each benefit as the most beneficial aspect of STA support during the development of a STP  
 (Importance Score, Proportion of respondents stating each benefit as the most beneficial)**

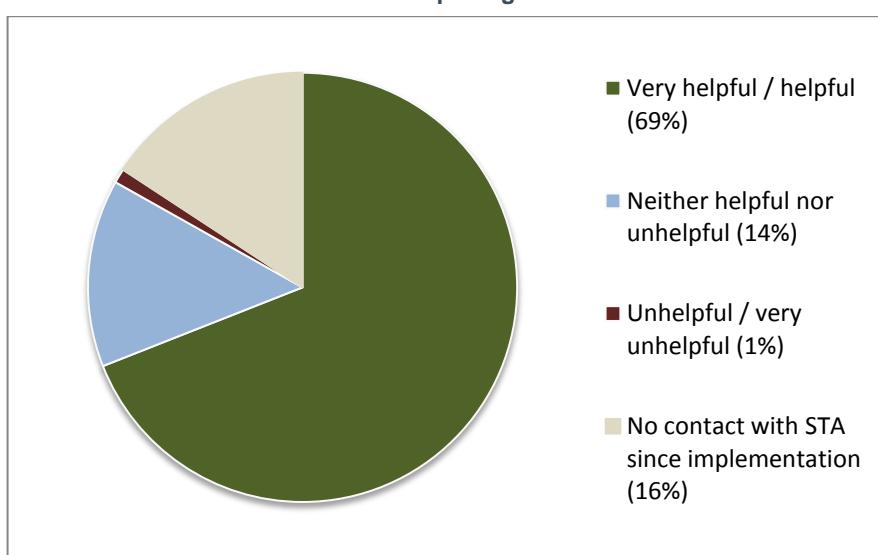


Source: School Survey – Base: 411 respondents. Importance score calculated as follows: [(10 points \* no. of respondents ranking benefit in first place) + (9 points \* no. of respondents ranking benefit in second place) + etc....] divided by 10.

### Scope and quality of advice provided by STAs – following completion of the STP

Figure 5.3 shows that schools were **less satisfied with the advice and help they had received since completing their STP** compared to that provided when developing their STP. Only 69% of respondents rated the input provided by their STA as either '*very helpful*' or '*helpful*', and 16% stated that they had not had any contact with their STA since implementation of their STP (Appendix C, School Survey, Q45).

**Figure 5.3 – How do schools rate the advice and help given by their STA since completing their STP?**



Source: School Survey, 368 respondents

These results are consistent with findings in Section 5.2 which showed that some STAs are responsible for more than 400 schools and have to spread their time thinly or prioritise their input, and that many STAs focus their time on those schools that do not have a STP in place (in order to progress towards 100% coverage of schools), and/or schools requiring most assistance.

Furthermore, schools are actively encouraged and expected to take ownership of their STP once it has been developed.

When asked to provide one main benefit of having a STA when implementing and maintaining their STP, school respondents the most commonly mention factors related to the role of the STA in providing:

- 'advice and guidance' or 'knowledge and expertise' (43%);
- 'support' or 'someone to go to for help' (20%);
- 'motivation and focus' (12%); and
- 'ideas' (8%) (Appendix C, School Survey, Q47).

**The role of a STA as an information provider, a motivator and support figure, and as a source of innovative ideas is seen by schools as being beneficial during both the development and implementation of STPs.** STAs are able to draw on their experiences from working with a wide range of schools and provide a mechanism for sharing good practice and lessons learnt between schools in their areas.

*"It was a totally new process to the school and the School Travel Adviser could utilise her past experience of previous STPs to assist with the information and format required for our Travel Plan"*

**School Survey respondent**

*"I'm amazed at the amount of work that they do and how they come up with the schemes that they do..... If it weren't for them keeping this whole thing going it [the TTSI] would collapse"*

**School Survey respondent**

*"Without STAs many of the initiatives schools are now involved in would not have taken place"* **GO officer**

STA input provided when schools are developing their STPs does appear to have improved the quality of many of these documents, and 28% of schools stated that they would not have developed and implemented their STP without the help and support of a STA.

### **Wider benefits of the STA role**

Respondents to the School Survey describe the wider benefits of the STA role as follows (Appendix C, School Survey, Q56):

- an advice / information source (88%);
- assistance in securing additional funding (73%);
- provision of a link to local authority departments (66%);
- provision of a link with other initiatives (61%); and,
- encouragement of community cohesion (45%)

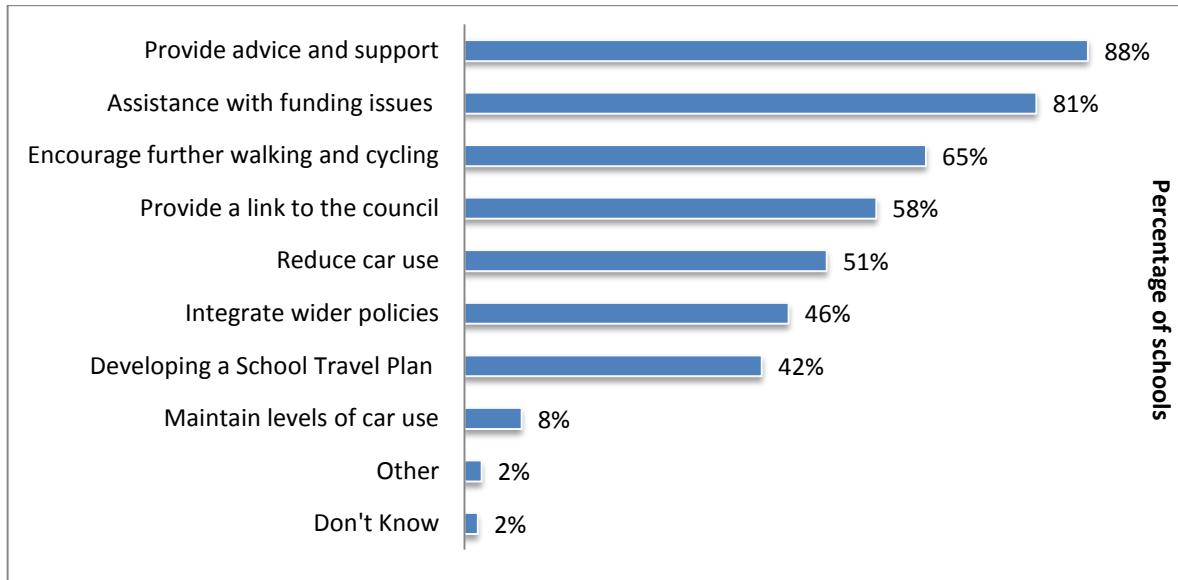
## **5.4 Future Need for STAs**

School Survey respondents were also asked whether they would require assistance from a STA in the future to review/review/develop STPs or aid in increasing the numbers of pupils who travel to/from school by sustainable and active modes.

Over 60% stated that they would definitely require assistance, and a further 29% stated that they may possibly require such support. Fewer than 10% of school respondents said that they would not require assistance with their STP in the future (Appendix C, School Survey, Q52).

Figure 5.4 illustrates the type of help and support required.

**Figure 5.4 – Type of help and support required from a STA in the future**



Source: School Survey, 372 respondents.

## 6. The Role of Regional School Travel Advisers

### 6.1 Introduction

This chapter evaluates the extent to which the Regional School Travel Adviser (RSTA) role has met the needs of the TTSI programme.

Section 6.2 provides an overview of the RSTA role and considers process issues and Section 6.3 examines the effectiveness of the RSTA role in achieving TTSI outcomes.

Evidence is primarily drawn from workshops with STAs, RSTAs, RSTCAs, local authorities (LAs) and Government Offices (GOs). It is recognised that RSTAs may be biased in their views and have a vested interest in promoting the positive outcomes and importance of their roles. Where possible evidence from non-RSTAs has been considered to try and address this issue.

### 6.2 Overview of the RSTA Role

RSTAs sit between the TTSI Project Board and the STAs. At a general level, their role is to provide support, guidance and advice to STAs, local authorities, GOs and partner agencies; and feedback to the Project Board on progress in delivering the TTSI objectives. A more detailed and formal explanation of the RSTA role is provided in Table 6.1.

There are currently 11 RSTA posts covering nine regions, with two RSTAs in both the North West and South East and one in each of the other regions. All RSTAs have been seconded from local authorities.

#### 6.2.1 Focus of RSTA Role

Evidence gained from the RSTA workshop identified a focus for RSTAs on the following activities:

- coordinating and supporting a regional network of STAs, and holding meetings and training events;
- interpreting and disseminating information and guidance from the TTSI Project Board to STAs, local authorities, GOs and other agencies;
- undertaking a moderation exercise on a sample of STPs to ensure quality in accordance with the National Standard;
- actively promoting effective liaison between STAs and a wide range of stakeholders at a local level; and
- contributing to the development and implementation of a wide range of strategic and operational plans to support the delivery and implementation of the TTSI.

As with the STA role, the RSTA role needs to be flexible in order to meet the specific needs of the region. In addition, different approaches by RSTAs are likely to have resulted in regional differences in how the TTSI is being delivered across the country.

The majority of RSTAs considered their role to have evolved during the course of the TTSI programme and that, over time, they have developed better skills and relationships to deliver the TTSI programme in their regions.

RSTAs working full-time reported that they were able to participate in wider issues related to sustainable travel, such as the health agenda, and disseminate examples of good practice and innovative ideas with other RSTAs.

Part time RSTAs felt they could do much more through a full-time role and provide more tailored advice and support to STAs on a wider range of issues. They also found that the part-time nature of their posts made it particularly challenging to undertake STP Quality Assurance assessments.

Table 6.1 – Key duties for RSTAs

- Actively promote effective liaison between STAs and a wide range of stakeholders at a local level, including other departments, schools, children and young people, parents, governors, councillors, the voluntary and community sector and other agencies.
- Prepare and present a detailed report each term, including examples of good practice to support school travel plan (STP) development and monitoring of regional progress against key performance indicators within an individual local authority's Local Transport Plans and Local Area Agreements.
- Attend the TTSI Project Board, Regional School Travel Adviser meetings, School Travel Expert Panel and other meetings nationally, regionally or locally as required.
- Coordinate and support a regional network of STAs, holding meetings ( minimum of three times per year) and training events as and when required.
- Interpret and disseminate information and guidance from the TTSI Project Board to STAs, local authorities, Government Office and other agencies.
- Undertake a moderation exercise on a sample of local authority STPs to ensure that the documents being produced are quality assured by the local authority-based STA in accordance with the National Standard.
- Collate information from each local authority on the Devolved Formula Capital (DFC) grant funding applications and forward this to the DCSF by the national deadline each year.
- Contribute to the development and implementation of a wide range of strategic and operational plans to support the delivery and implementation of the TTSI.
- Support the TTSI Project Board in policy development and the management of sustainable travel initiatives, including taking responsibility for leading the implementation of initiatives or projects, particularly where close working with other local authority based STAs is involved.
- Represent the TTSI as appropriate on working groups / committees, and in liaison with external agencies at both regional and national levels.
- Monitor and manage as appropriate the performance of STAs and authorities with regards to travelling to school indicators and targets including liaison with GO advisers, heads of service or Chief Executives where appropriate to assist with improved delivery and performance.
- Where the Project requests, coordinate regional press coverage and be available as a local contact to support the TTSI for specific or related news / PR or media features.
- Any other duties of a related nature which might reasonably be required and allocated by the nominated officers within the DCSF and DfT.

## 6.2.2 Interaction with TTSI Partners

### Contact with TTSI Project Board

The majority of RSTAs agree that the TTSI Project Board provides useful support and advice to TTSI practitioners. The role of the Board is perceived to have changed over the course of the programme and become less prescriptive regarding the process of delivering the TTSI objectives. It is now seen as taking a stronger role in disseminating information relating to national policies and providing more strategic advice and guidance.

RSTAs stated that they were in regular contact with the TTSI Project Board, and that this relationship is important to the successful delivery of the programme.

However, a common theme through all workshops was the continued need for support and guidance from the Project Board, with regard to improving engagement with strategic partners such as GOs and the Regional Field Force teams<sup>54</sup>. RSTAs felt there was a need to raise the profile of sustainable travel within these wider agendas and ensure that related Government policies are coordinated where appropriate.

### Contact with STAs

All RSTAs stated they hold quarterly regional meetings with their STAs and communicate more regularly through emails and phone calls.

The frequency of contact (face to face or via telephone/electronic mail) between these parties was also examined through the STA Survey, which showed that nearly three quarters (72%) of STA respondents have contact with their RSTA at least once a month, and 33% are in contact on at least a weekly basis (Appendix D, STA Survey, Q21).

### Contact with the Government Offices

RSTAs have only been required to engage and work with regional GOs since 2007, when Field Force Officers were seconded to GOs to provide support and challenge to local authorities and schools. This requirement was formalised in guidance issued by the Project Board in 2007 and again in 2008, in order to:

- encourage joint working in the development of National Indicator 198 (*Children travelling to school- mode of transport usually used*) targets; and
- to engage with regional programmes and initiatives that were likely to impact on school travel.

*"I have met with the Children's Services Advisers in Government Office who appeared to respect the RSTA role immediately"*

RSTA

The RSTAs report varying degrees of success in terms of engaging with and working with GO officers. Engagement tends to focus upon GO officers involved in transport, education and health. Like the STAs, RSTAs report that engagement is difficult to start with as officers often have a limited appreciation of the potential benefits of joint working to deliver the TTSI. However, relationships have improved overtime and partners are now more supportive of the TTSI programme. For example, RSTAs now attend quarterly meetings with officers in key teams and departments, e.g. Local Transport Plan officers, the Children and Learners team, Healthy School Coordinators and Children's Service Advisers. Others are represented on wider partnerships and groups such as the Regional Improvement & Efficiency Partnerships and Regional Physical Activity Plan.

### Contact with local authority officers

Feedback from the local authority workshops suggests that most local authority officers have little or no contact with the RSTAs (3 out of 9 workshops).

<sup>54</sup> The National Strategies Field Force sits within DCSF and has a wide remit for raising standards of achievement and rates of progression for children and young people in all phases of schools and early years settings. Its principal remit is to support both schools and local authorities to improve teaching and learning, and to develop strategies for whole school improvement. Some officers are located in GOs as secondees, and some are employed directly by DCSF or its non-departmental public bodies.

## 6.3 Effectiveness of the RSTA Role

Evidence from the workshops suggests that the role of RSTAs is valued by STAs, in terms of the support and guidance provided; and that GO officers recognise the role that RSTAs have had in terms of raising the profile of the TTSI programme and ensuring it is integrated into other transport, environmental and health programmes within the region. In addition, local authority officers perceive RSTAs to have provided useful support to STAs, based on discussions with STAs in their authorities.

In addition:

- regional meetings held by RSTAs are valued as a platform for sharing ideas and best practice with STAs, as well as providing a strong support mechanism for individual STAs;
- RSTAs have ensured that there is more joint working at a regional level on transport, environment, and health issues related to school travel;
- RSTAs have provided STAs with more guidance and direction from the TTSI Project Board, tailored to regional needs, than would have been possible without their role; and
- RSTAs have informed negotiations between local authorities and the GO regarding Local Area Agreement targets for National Indicator 198 - *Children travelling to school – mode of transport usually used*; providing an informed view regarding appropriate levels of change which should be sought.

*"Regional meetings are excellent platforms to share best practice, discuss problems and ask advice from colleagues. [They are] also used to brief us on developments and deliver workshops or presentations on key skills we might need such as social marketing strategies"*

STA

Going forward, some on-going (higher level) support role is likely to remain important in terms of retaining momentum on the TTSI. Without the input from the RSTAs, the TTSI Project Board would have to identify alternative resources.

## 7. The Role of Regional School Travel Curriculum Advisers

### 7.1 Introduction

This chapter evaluates the extent to which the Regional School Travel Curriculum Adviser (RSTCA) role has met the needs of the TTSI programme.

It should be noted that the lack of knowledge of the RSTCA role from the majority of workshop participants has resulted in limited evidence on the appropriateness of the RSTCA role. Evidence is primarily from RSTCAs themselves, and STAs and RSTAs in the region in which the two existing RSTCAs operate.

### 7.2 Overview of the RSTCA Role

Since April 2007, two part time Regional School Travel Curriculum Advisers (RSTCAs) have been funded as a pilot scheme in the Yorkshire & Humber region. These two advisers job share the role and have a series of key duties as outlined in the Yorkshire & Humber Sustainable Schools Partners' Network<sup>55</sup> to:

- support STAs as advisers to teachers on sustainable travel issues; and
- develop teaching resources relating to sustainable travel issues.

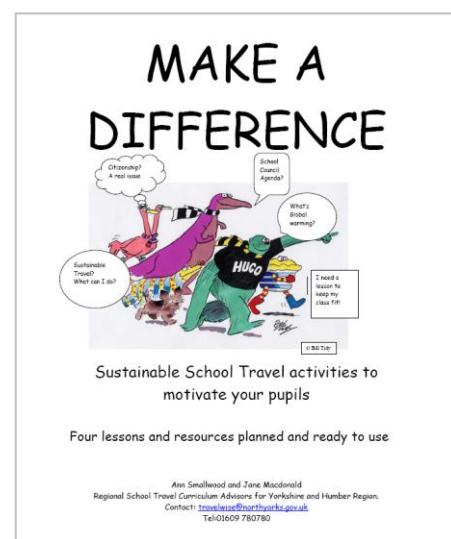
The role of the RSTCA originated from a formal approach to the TTSI Project Board from the RSTA requesting a remit to provide this role to the Yorkshire and Humber region. It followed the employment of school teachers as STAs in two local authorities in the Yorkshire & Humber region, which highlighted the potential for building upon the STA role by providing material and resources that mixed curriculum activities with STP initiatives.

Whilst they provided advice and support to teachers to help inform school children about adopting healthier lifestyles through walking and cycling initiatives, they also responded to specific requests from schools.

#### 'Make a difference' teaching pack

Initial discussions with teachers in the region, prior to the implementation of the RSTCA pilot, suggested that there was sufficient basic material available to allow teachers to create travel related lesson plans; however, there was a need for higher quality ('gold standard') lesson plans that would be effective with all types/abilities of class. These would require a subtle mix of materials, activities and engaging narratives.

The RSTCAs subsequently developed a teaching pack entitled '*Make a Difference*' which was distributed to primary schools in the region, and contained a series of lesson plans designed for primary aged children. The purpose of the pack was to educate children about sustainable issues, increase



<sup>55</sup> <http://www.yorkshireandhumber.net.esd/index.php>

the proportion of pupils travelling to school by sustainable means and to increase awareness about climate change.

An example of material used as part of a lesson plan involved pupils applying a mathematical approach to real life travel to school problems, using a *stepometre* game.

The RSTCAs held several workshops with STAs and teachers both in their region and in others to present their work and disseminate information about the teaching pack itself and programmes such as Healthy Schools and Sustainable Schools. The workshops also provided an opportunity to share ideas about promoting sustainable and good practice examples.

The resource pack was also sent to a number of RSTAs and STAs in other regions. Ad hoc requests for further information and advice were received from these recipients, suggesting that the packs had been well received.

The STAs in Yorkshire & Humber also send reports and ideas to the RSTCAs to update them on the new curriculum work that they have been involved in and the RSTCAs feedback advice and suggestions.

## 7.3 Effectiveness of the RSTCA Role

While the lesson plans and workshop events were praised, evidence from the workshops held for this study suggests that RSTAs and STAs have mixed views on the effectiveness of the role, with some implying that RSTCAs were not adding value to the programme as STAs already undertake a similar role.

Very few local authority officers in Yorkshire & Humber had heard about the RSTCAs. However, where contact had been made the work of the RSTCAs was praised. Suggestions included making the RSTCA role a national one and improving the promotion and branding of the resources produced to those outside the region.

The examination of levels of mode shift in schools within the Yorkshire & Humber region do not demonstrate any disproportional increases in mode shift compared with the other regions.

## 8. Walking to School Initiatives

### 8.1 Introduction

A key aim of the TTSI programme was to encourage more school children to use sustainable and active modes of travel. To assist in this aim, a number of separately funded and implemented walking and cycling initiatives were introduced and rolled out within schools to complement the TTSI programme and encourage children to use active modes of travel to/from school.

The following chapter provides evidence relating to the delivery, impact and effectiveness of walking-specific initiatives.

### 8.2 Delivering Walking to School Initiatives

#### 8.2.1 Take Up of Walking to School Initiatives, by Schools

The School Survey asked schools to state whether they had any walking initiatives in place which were separate from, but complementary to, TTSI. Overall 48% (208 school respondents) stated they had at least one initiative in place (Appendix C, School Survey, Q33). The key initiatives cited were:

- 'Walk to School Week' (139 schools);
- 'Walk on Wednesdays'<sup>56</sup> (78 schools);
- pedestrian training (68 schools);
- walking bus<sup>56</sup> (45 schools);
- incentive/reward schemes (20 schools); and
- other walking initiatives – including 'park and stride', 'star walker', walking to school diaries and 'Feet First' (23 schools).

Examination of the implementation of different walking initiatives by region indicates some noticeable differences:

- the highest proportion of schools with walking initiatives were in London and the West Midlands (56 out of 105, and 20 out of 43 schools respectively); and
- the lowest proportion was in the East of England (17 out of 63 schools).

Analysis of the specific initiatives showed that 'Walk to School Week' was the most popular initiative across all regions; 'Walk on Wednesdays' (WOW) was very popular in London, and pedestrian training most popular in East of England, West Midlands, and Yorkshire and Humber.

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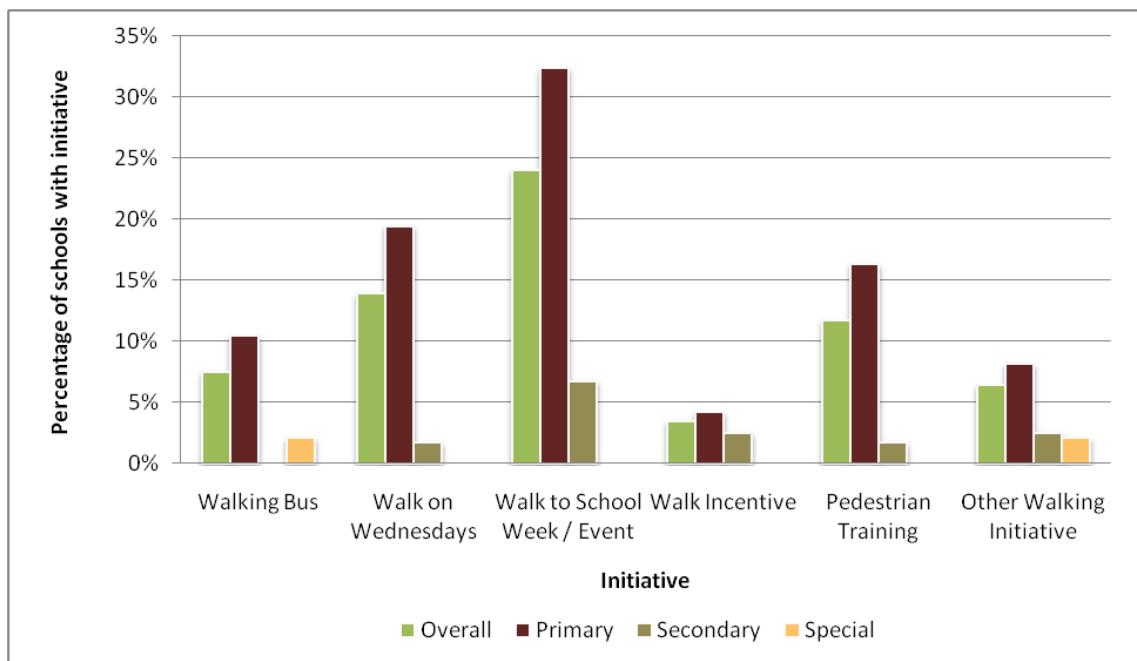
<sup>56</sup> Walk on Wednesdays and Walking Bus schemes form part of the Walking to School Initiative Grant Scheme

Further analysis of this data by school type (Figure 8.1), suggests the following:

- a considerably higher proportion of primary schools (61%) are implementing walking initiatives compared to secondary (15%) and special schools (6%);
- 'Walk to School Week' is the most common initiative in secondary schools, but participation is still low with only 7% of schools taking part; and
- participation by special schools is limited to walking buses (2%) and 'other' initiatives (2%).

These results reflect the fact that walking initiatives, by their nature, are more suited to primary school pupils. In secondary schools, pupils are likely to be less willing to take part in escorted walking initiatives and / or pedestrian training, while in special schools less than 3% of pupils walk to school (see Figure 3.5).

**Figure 8.1 – Percentage of schools implementing walking initiatives, by school type**

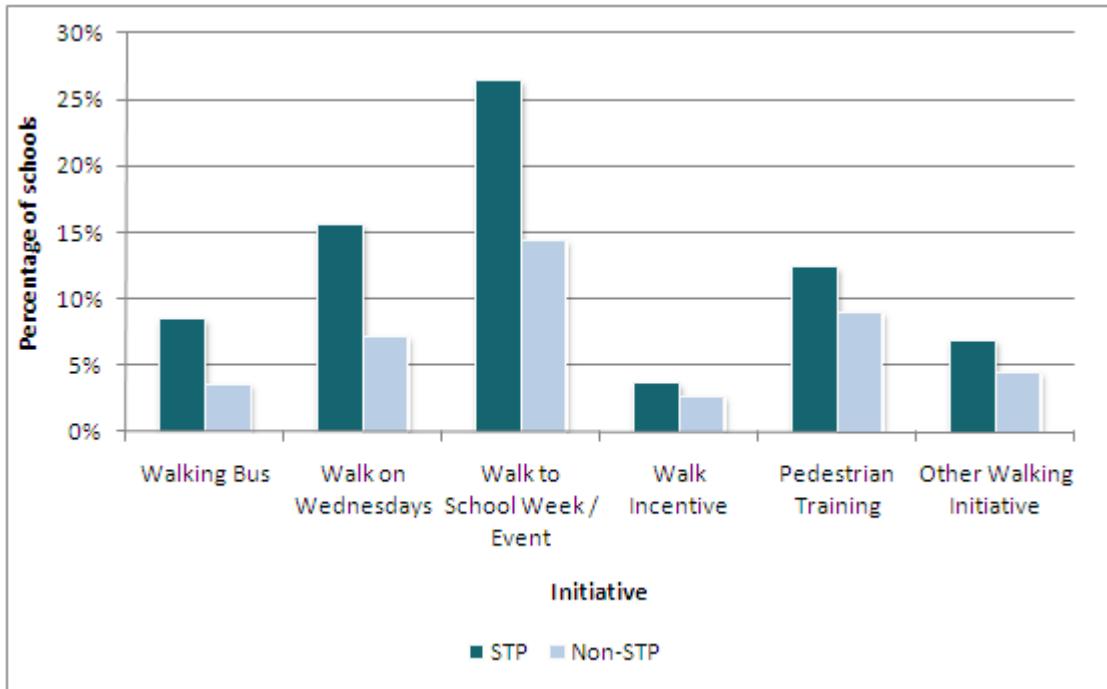


Source: School Survey, 546 respondents

An examination of the take up of initiatives by STP status (Figure 8.2) indicates:

- a higher proportion of schools with a STP in place (52%) had implemented walking initiatives compared to non-STP schools (29%); and
- Walk to School Week was the most popular initiative, regardless of STP status (with 25% of STP schools and 14% of non-STP schools taking part).

Figure 8.2 – Percentage of schools implementing walking initiatives, by STP status



Source: School Survey, 546 respondents

## 8.2.2 Funding Sources

These initiatives have been funded via:

- the TTSI Capital Grant (a typical qualifying primary school received £5,000 capital funding for the provision or upgrade of infrastructure and equipment and a typical qualifying secondary school received £10,000);
- the Walking to School Initiative Grant (primary schools were able to apply for £1,000 a year, for up to 3 years, to set up a new 'walking bus' or expand an existing one; and £500 a year to set up a new alternative walking initiative or expand an existing one);
- local authorities (e.g. through the LTP process); and,
- other initiatives such as Links to Schools, Healthy Schools and Eco-Schools.

See Section 4.2.2 for further information on funding sources.

## 8.3 Impact of Walking to School Initiatives

### Participation in initiatives

School Survey respondents whose school had a walking initiative were asked to estimate the proportion of pupils participating in such initiatives and whether these initiatives formed part of their STP (School Survey, Q34).

Table 8.1 - Participation in walking initiatives and whether this forms part of STPs, all schools

	Walk to School Week	Walk on Wednesday	Pedestrian Safety Training	Walking Bus	Walking Incentive Scheme	Other Walking Initiative
Number of schools with initiative(s) in place	139	78	68	45	20	23
% of schools with more than 50% pupil participation	68%	59%	50%	2%	50%	35%
Number (and %) of schools where initiative is part of a STP	123 (89%)	71 (91%)	52 (77%)	38 (84%)	16 (80%)	16 (70%)

Source: School Survey, 208 respondents with at least one walking initiative in place at their school..

Note that participation levels for 'other' walking initiatives varied significantly between each of the schemes. The 'Other Walking Initiative' includes Feet First (3 respondents), park and stride initiatives (9 respondents) and Golden Boot (2 respondents). It also includes other individual initiatives schools have such as Walk Around the World, Star Walkers and Walking Mentors.

Table 8.1 demonstrates that:

- 'Walk to School Week' was the most popular initiative in terms of pupil participation, and inclusion within the STP;
- 'Walk on Wednesday', pedestrian training and incentive/reward schemes were also popular initiatives in terms of participation levels, with half or more schools with these initiatives stating that more than 50% of pupils participate; and
- pedestrian training had the lowest percentage of schools implementing the initiative as part of a STP (excluding 'other' initiatives). This suggests that in other schools, pedestrian training is mainstreamed as part of more general road safety campaigns.

### Impact on travel behaviour

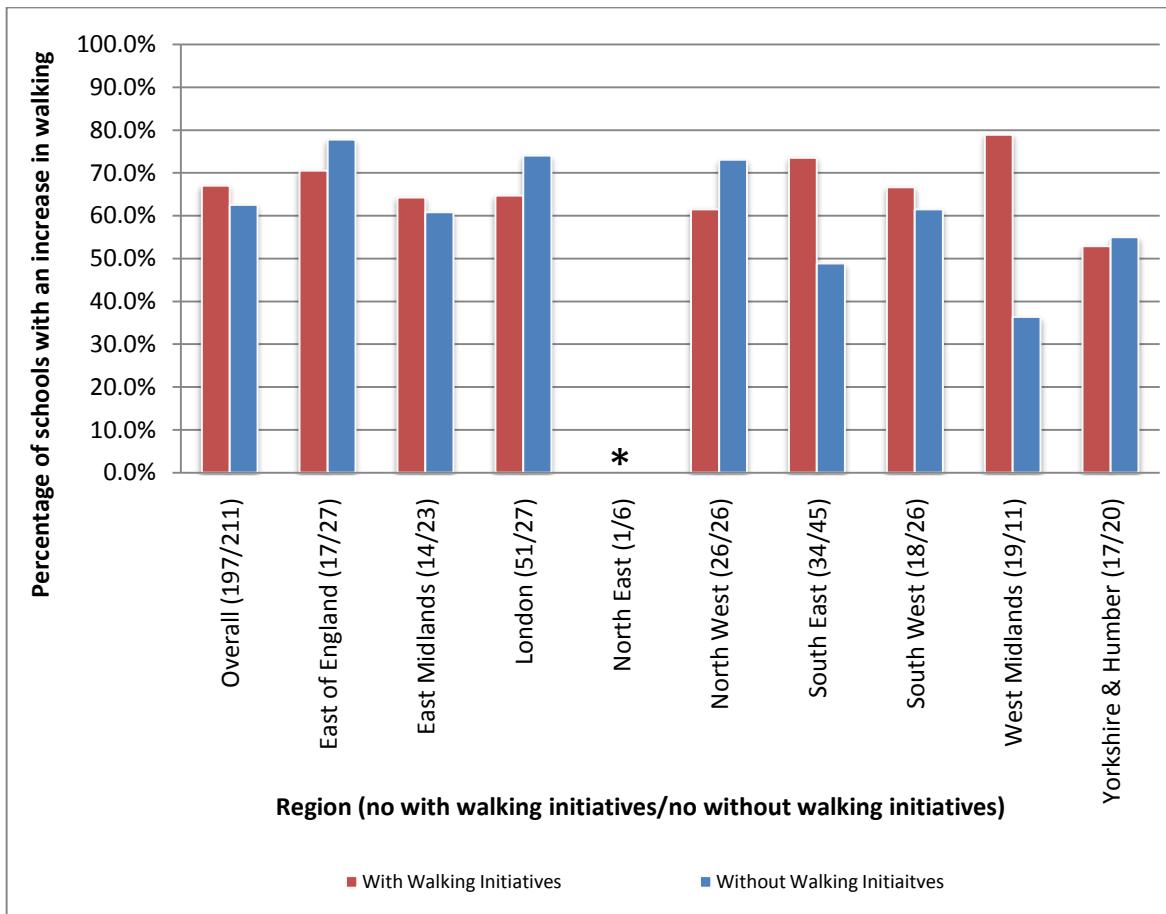
As discussed in Chapter 3, there has been a 0.8 percentage point increase in the proportion of all pupils within the School Census Subset walking to school between 2006/07 and 2008/09, and a 1.5 percentage point increase in primary schools. In addition there has been a significant increase in the school-based mean for both these categories when this data is analysed on a school by school basis

However, no statistically significant differences were found between STP and non-STP schools, and an examination of the profile of change for walking between 2006/07 and 2008/09 shows similar results for STP and non-STP schools (Chapter 4).

Examination of the level of increase in walking also shows no statistically significant difference regarding the change in the school-based mean for schools with and without at least one walking initiative in place. Schools with at least one walking initiative, reported an average increase of 7.9 percentage points and those without any initiatives reported an average increase of 5.9 percentage points.

Figure 8.3 compares results for the two sets of schools in terms of the proportion reporting an overall increase in walking, nationally and at a regional level.

**Figure 8.3 – Percentage of schools that experienced an increase in walking between 2006/07 and 2008/09, by region and walking initiative status**



Source: School Survey and School Census subset. Percentages calculated on each category. Data excludes those that did not answer or stated 'don't know' to having walking initiatives in place.

\* The results for the North East have not been shown due to the very small sample size obtained. The one school with a walking initiative, experienced an increase in walking. Five of the six schools that did not have walking initiatives in place also saw an increase in walking.

### Effectiveness of different initiatives

Examination of the change in walking reported at schools implementing different types of walking initiatives shows no obvious pattern in terms of relative effectiveness of different initiatives. The average change in the school-based mean was:

- 9 percentage points across all schools taking part in 'Walk to School Week';
- 8 percentage points for schools with walking buses;
- 7 percentage for those providing pedestrian training; and
- 6 percentage for those participating in 'Walk on Wednesdays' events.

As described above, this compares with an increase of 7.9 percentage points across all schools with at least one walking initiative, and an increase in 5.9 percentage points across schools with no initiatives.

Evidence from the STA and local authority workshops regarding the effectiveness of different walking initiatives is mixed (Table 8.2). For example walking buses were felt to be effective in 6 STA workshops and 4 local workshops, but ineffective in 9 STA workshops and 7 local authority

workshops. In contrast, incentive / reward schemes designed to encourage children to walk to school (such as rewards for class groups depending on the number of pupils walking to school in a given week) were generally felt to be effective.

**Table 8.2 – Most common selection of the most and least effective initiatives within TTSI programme**

Category	Initiative / Responses (Most frequent responses shown in bold)	Identified by the following groups		
		STAs	RSTAs	LAs
Most effective	<b>Walking buses</b>	Y (6)		Y (4)
	<b>Other walking initiatives such as Walk to School Week, Walk on Wednesdays and park and stride</b>	Y (10)	Y	Y (6)
	Incentivised schemes for children, such as sticker rewards	Y (5)	Y	Y (2)
	Initiatives built into the schooling curriculum	Y (2)	Y	Y (3)
	Use of Yellow buses	Y (1)		Y (3)
	Walking / cycling training schemes	Y (5)	Y	
Least effective	Walking buses	Y (9)	Y	Y (7)
	Other walking initiatives such as Walk to School Week, Walk on Wednesdays and park and stride	Y (5)		Y (1)
	<b>Walking Bus Grant and other funding grants/capital programmes</b>	Y (4)	Y	Y (6)
Other	Schemes which were tailored to individual schools, or schools taking the lead in customising schemes to their needs, rather than centrally imposed initiatives.	Y (4)		Y (2)

### Characteristics of most successful schools

Examination of School Census Subset data to identify the top 100 most successful schools in terms of increases in walking levels between 2006/07 and 2008/09 (with and without a formal STP) shows a reasonably even spread across all nine English regions, with the exception of the South East and South West which have nearly double the number (18 & 19 schools respectively) of schools listed in the top 100 compared with other regions. These top performing schools reside in a variety of different local authorities, with 35% of these schools based in rural authorities with the remaining 65% in urban authorities. Notably, 86% of the top 100 performing schools are primary schools with only 14% being secondary schools.

## 8.4 Factors Determining the Effectiveness of Walking to School Initiatives

This section presents findings from the workshops, STA Survey and School Survey, to provide evidence on the support required by schools to implement walking initiatives and to identify the barriers surrounding implementation.

### 8.4.1 Success Factors

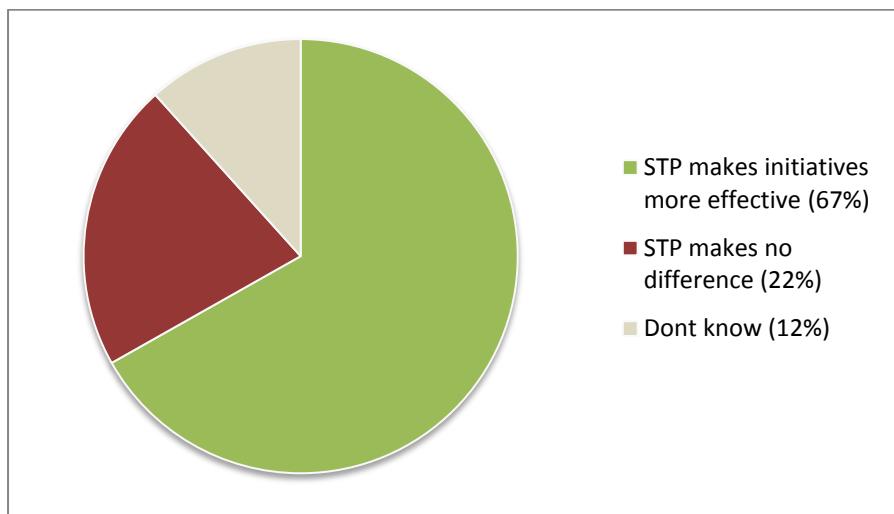
#### Overview

As discussed above, the School Survey results show that a higher proportion of STP schools implemented walking initiatives, compared to non-STP schools (52% and 29% respectively).

The majority of respondents (67%) stated that having a STP in place makes walking initiatives more effective (Figure 8.4, and Appendix C, School Survey, Q25), primarily because the STP provides a supportive structure and ensures the initiative is given greater priority. However, just over a fifth of respondents stated that a STP makes no difference to the effectiveness of initiatives.

Evidence from workshops and case studies suggests that the process of developing a STP helps to identify existing school travel issues and enables practical solutions to be targeted in the right areas. This is likely to have resulted in more effective walking initiatives.

Figure 8.4 – Does having a STP in place make initiatives<sup>57</sup> more effective?



Source: School Survey, 437 respondents

Other factors enabling the successful implementation and outcomes of walking initiatives have been sought from the evaluation workshops and case studies. These include:

- STA support – in terms of attendance at launch days, help with publicity, support in coordinating packages of measures and encouraging local authorities to fund complementary off-site infrastructure, pedestrian training, etc; and
- Parental 'buy in' – many schemes require permission from parents to allow their children to participate in walking initiatives, and volunteers to ensure they run effectively. Parents or grandparents can provide valuable day-to-day support and provide a long term commitment to participation.

### The role of on-site and off-site infrastructure

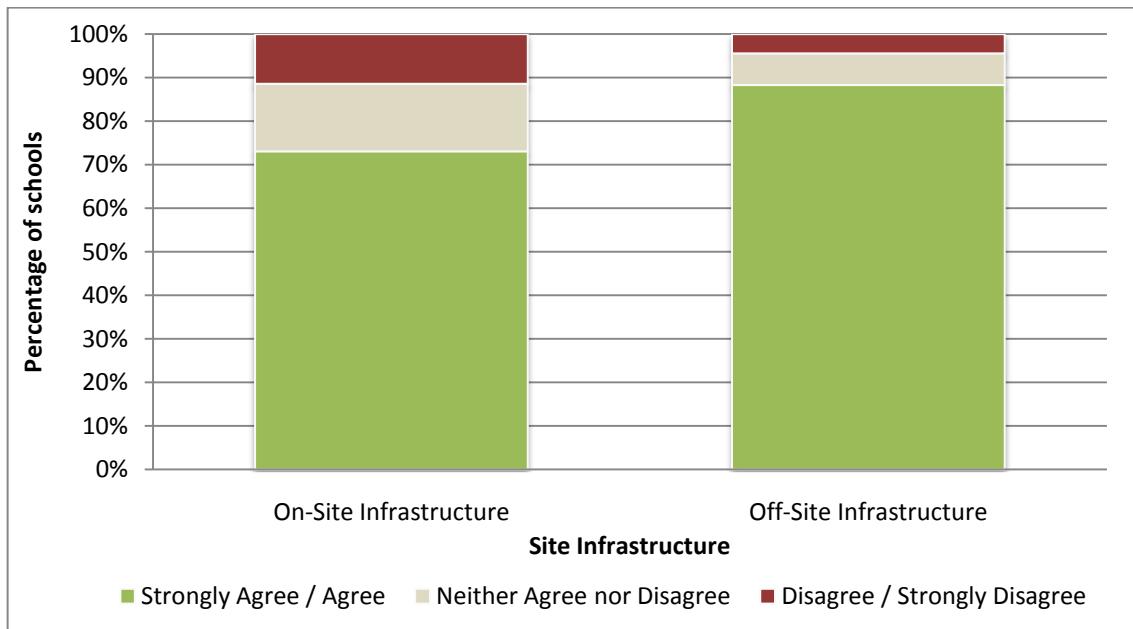
School Survey respondents were asked to report the extent to which they believed the absence of appropriate on-site and off-site infrastructure had impacted on the success of sustainable travel initiatives (Figure 8.4). Findings show that:

- 71% of respondents '*strongly agreed*' or '*agreed*' that the absence of appropriate on-site infrastructure, such as shelters/lockers, parent waiting shelters and shower facilities affects the success of active travel initiatives; and
- 86% of respondents '*strongly agreed*' or '*agreed*' that the absence of appropriate off-site infrastructure, such as pedestrian crossings, affected the success of active travel initiatives. (Appendix C, School Survey, Q37, 38, 39, 40)<sup>58</sup>

<sup>57</sup> Note, this question was asked about 'walking and cycling' together

<sup>58</sup> Note, this question was asked about 'walking and cycling' together.

**Figure 8.5 – The extent respondents believe that the absence of on-site / off-site infrastructure impacts on the success of active travel initiatives**



Source: School Survey, 429 respondents

These results are reinforced by evidence from the STA and local authority workshops. Overall, lack of on-site infrastructure was seen as often discouraging walking to school and its provision was perceived to make a large difference to the success of some walking initiatives. The provision of pedestrian crossings at strategic locations was seen to be a particularly important contributor (mentioned in 7 out of 9 STA workshops, and 4 out of 9 local authority workshops); as was a comprehensive network of 'safer routes to schools'.

*"Often lack of road crossings is cited by parents as a prohibitive factor in allowing their children to walk or cycle to school"*

STA

In general, a mix of on-site and off-site infrastructure is considered desirable at most schools, although the specific requirements of individual schools depends on site-specific issues. The role of STAs in providing a link between individual schools and local authorities is seen as valuable in ensuring schools secure appropriate infrastructure.

However, improving infrastructure alone is not sufficient to secure a substantial increase in walking, as there are often other external factors (see below) which influence travel behaviour decisions.

### External factors

*"The issues are much more to do with time, distance, safety, weather and level of effort required – in that order"*

STA

In general, the success of specific initiatives was viewed as being dependent on a number of external factors, including time available to organise / promote initiatives, take up by pupils, school location, catchment area, enthusiasm of staff/parents to get involved in initiatives, and perceived safety issues associated with the initiative.

## 8.4.2 Barriers

The School Survey asked participants to state the main barrier to encouraging more pupils to walk/cycle to school (Appendix C, School Survey, Q41)<sup>59</sup>. The most common walking-related responses were:

- a perception that local roads are too unsafe for children to walk to school and lack of pedestrian crossings to address such concerns (37% of respondents);
- parental attitudes – a reluctance to allow children to travel independently due to perceived safety or personal security issues (27% of respondents);
- parental routines - including parents driving children to school as part of their daily car-based journey to work (26% of respondents); and
- distance travelled to get to school – wide catchment areas and parental choice of school location often restricts the choice of travel to school mode (18% of respondents).

*"Parents' anxiety at allowing children to manoeuvre their way through a busy junction to get to school"*  
**School Survey respondent**

School Survey respondents were also asked what further help their school would need to encourage more children to walk and cycle to school (Appendix C, School Survey, Q42). Common responses referred to safety measures (e.g. walk and cycle paths, cycle training and safer walking routes) and greater parental 'buy-in' by engaging them fully in the STP process and increasing awareness of the benefits of walking to school.

STAs suggested similar solutions, including:

- further funding to implement more walking initiatives;
- implementation of complementary road safety engineering measures (20mph zones, 'keep clear' markings); and
- continued targeted promotion of walking to parents.

<sup>59</sup> Note, this question was asked about 'walking and cycling' together.

## 9. Cycling to School Initiatives

### 9.1 Introduction

A number of cycling initiatives have been separately funded and implemented to encourage school aged children to cycle to and from school and to improve their level of physical fitness. These initiatives have been implemented in conjunction with the TTSI programme and are intended to assist in encouraging sustainable travel to and from schools.

This chapter provides evidence relating to the delivery, impact and effectiveness of walking-specific initiatives.

### 9.2 Delivering Cycling to School Initiatives

#### 9.2.1 Take Up of Cycling to School Initiatives, by Schools

The School Survey asked respondents to state whether their school had any cycling initiatives in place, regardless of whether they formed part of a STP or were part of the TTSI. The responses showed that 58% (249 respondents) had at least one cycling initiative in place (Appendix C, School Survey, Q35). The most popular initiatives were:

- cycle training (187 schools);
- cycle storage facilities (134 schools);
- Bike It initiative (22 schools); and
- other cycling (14 schools).

Other cycling initiatives that were implemented by schools included 'park and ride', cycling clubs and Bike to School Week.

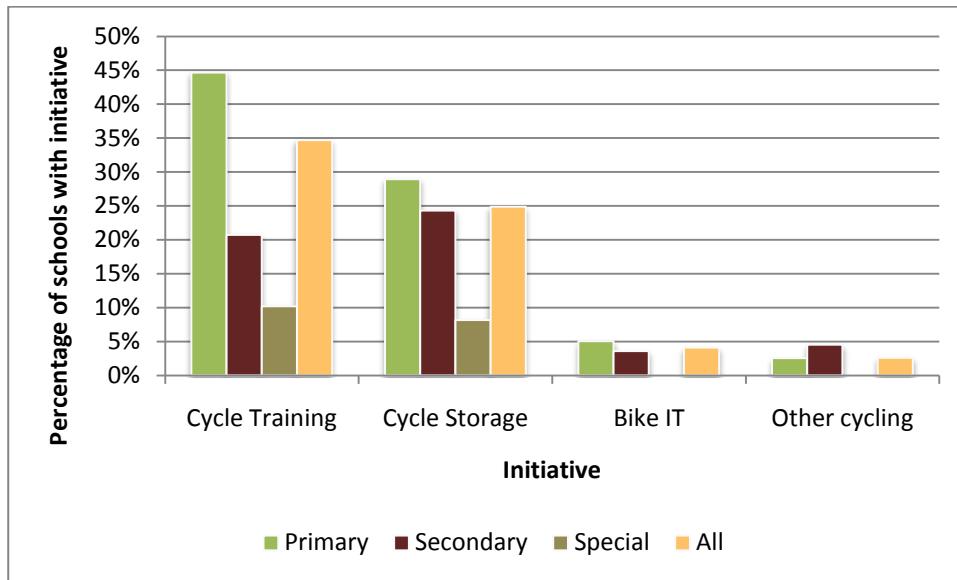
Examination of the implementation of cycling initiatives by region shows that:

- cycle training and storage are the most popular initiatives across all regions;
- the highest proportion of schools with complementary cycling initiatives are in the East Midlands (25 out of 46 schools had cycling initiatives); and
- the South West, Yorkshire & Humber, London and North West regions have the highest proportion of schools with Bike It initiatives (varying from 6% to 10% of schools).

Further analysis of the data by school type (Figure 9.1), suggests the following:

- a higher proportion of primary schools (65%) are implementing cycling initiatives compared to secondary (47%) and special schools (22%);
- a higher proportion of secondary schools have implemented cycling initiatives compared to walking initiatives;
- in primary and special schools the focus is on the provision of cycle training, and in special schools this is aimed at encouraging independent travel. In secondary schools, the provision of cycle storage facilities is the most common initiative.

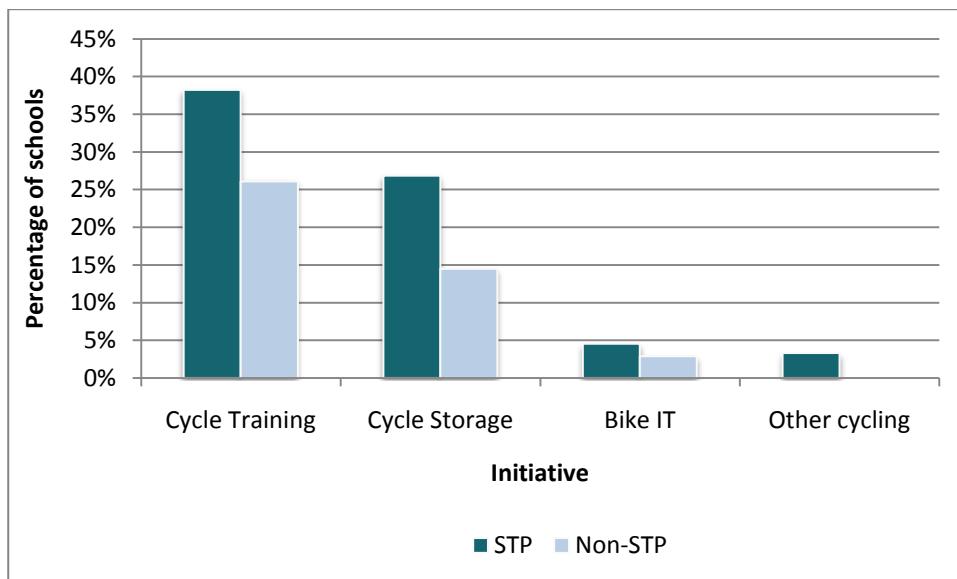
Figure 9.1 – Percentage of schools implementing cycling initiatives, by school type



Source: School Survey, 546 respondents. 'Other' cycling initiatives include 'park and ride', cycling clubs and Bike to School Week.

An examination of the take up of initiatives by STP status (Figure 9.2) shows that schools with a STP in place are more likely to have implemented complementary cycling initiatives than those without a STP.

Figure 9.2 – Percentage of schools implementing cycling initiatives, by STP status



Source: School Survey, 546 respondents. 'Other' cycling initiatives that were implemented by schools included Park and Ride, Cycling Clubs and Bike to School Week.

## 9.2.2 Funding Sources

These initiatives have been funded using the TTSI Capital Grant; DfT funding (through Cycling England) for cycling initiatives such as Bikeability training, Links to Schools and Bike It; local authorities(e.g. through the LTP process); and other initiatives such as Healthy Schools and Eco-Schools.

## 9.3 Impact of Cycling to School Initiatives

### Participation in initiatives

School Survey respondents whose school had cycling initiatives were asked to estimate the proportion of pupils participating in such initiatives and provide information on whether it formed part of their STP. Table 9.1 provides a summary of this information.

Table 9.1 – Participation of cycling initiatives and whether this forms part of STP

	Cycle Training	Cycle Storage	Bike It	Other Cycling
Number of schools with initiative(s) in place	187	134	22	14
% of schools with more than 50% pupil participation	12%	3%	23%	7%
Number (and %) of schools where initiative is part of a STP	146 (78%)	116 (87%)	14 (64%)	9 (64%)

Source: School Survey, 546 respondents. Note: Results were collated by schools completing the School Survey, and therefore depict the initiative names entered as part of this survey. 'Other' cycling initiatives that were implemented by schools included 'park and ride', cycling clubs and Bike to School Week.

Table 9.1 shows that:

- cycle training is the most popular initiative across all schools, implemented by 187 schools represented in the School Survey;
- Bike It had the highest pupil participation amongst those schools with a Bike It officer (with 23% of schools stating that 50% or more of their pupils were involved in the initiative), although the total number of pupils involved in this initiative was low; and
- cycle storage was the most common initiative implemented as part of a STP, with 87% of schools stating that new storage facilities had been provided through their STP.

### Impact on travel behaviour

Chapter 3 shows that there has been a very small increase (of 0.1 percentage points) in the proportion of all pupils within the School Census Subset cycling to school between 2006/07 and 2008/09; with little variation across primary, secondary and special schools. Analysis of data on a school by school basis shows no (statistically) significant difference in the school-based mean over this period, for each of these categories of schools.

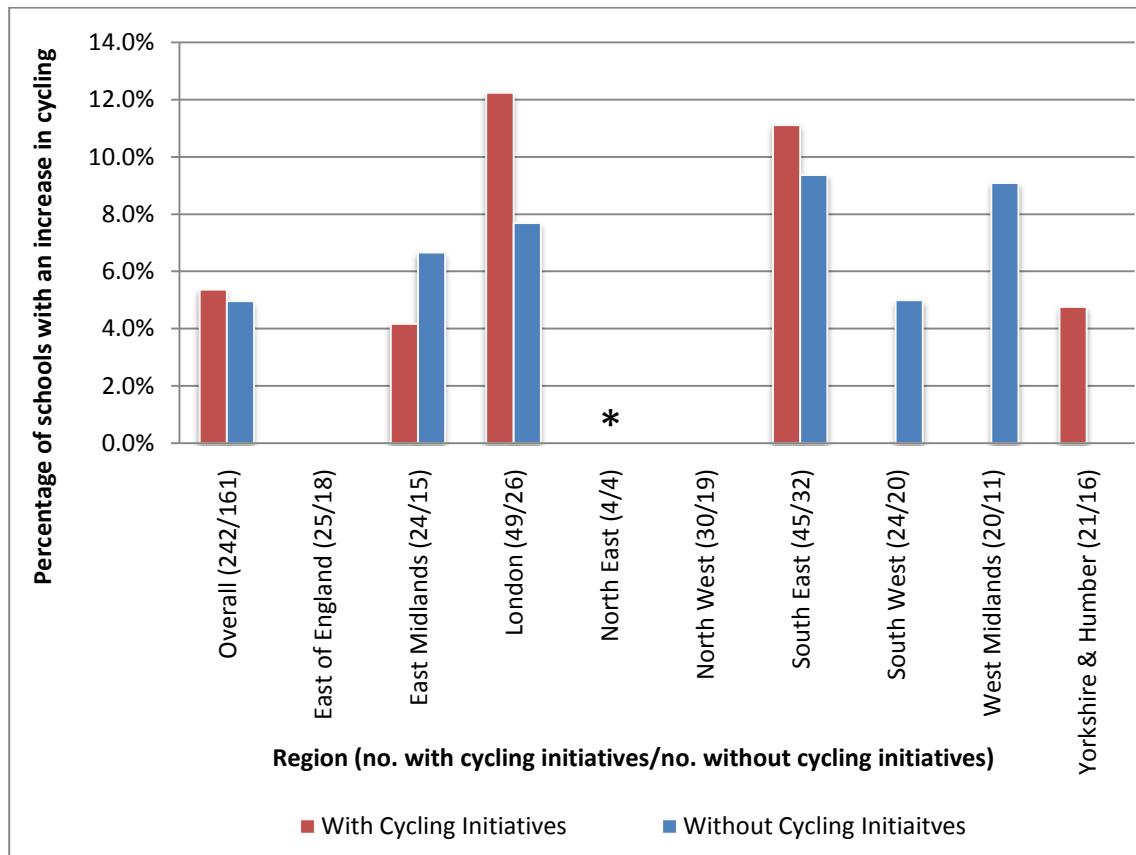
In addition, no statistically significant differences have been found between between STP and non-STP schools, and an examination of the profile of change reported by schools shows similar results for STP and non-STP schools (Chapter 4).

Examination of the level of increase in cycling, by cycle initiative status, suggests that a higher proportion of schools with cycling initiatives in place experienced an increase in cycling between 2006/07 and 2008/09 (Figure 9.3). Regionally, a similar trend was reported in the East Midlands, London, the North West, the South East and the South West (Figure 9.3).

Analysis of the data by school type shows that:

- 65% of primary schools have implemented cycling initiatives, but only 25% have reported an increase in cycling;
- 47% of secondary schools have implemented cycling initiatives, of which 50% have reported an increase in cycling.

**Figure 9.3 – Proportion of schools that experienced an increase in cycling between 2006/07 and 2008/09, by region and cycling initiative status**



Source: School Survey – Base: 546 respondents and School Census subset. Percentages calculated on each category.  
 Data excludes those that did not answer or stated 'don't know' to having cycling initiatives in place

\* The results for the North East have not been shown due to the very small sample size obtained. One out of the four schools responding with cycling initiatives saw an increase in cycling levels in their school. The four schools without a cycling initiative also reported an increase.

The relatively poor results within primary schools may reflect the age of pupils concerned and the willingness of parents to let younger children cycle to school. Nevertheless, cycle training received at primary school age should be seen as a good foundation for the future and may increase the likelihood of pupils cycling when they move to secondary schools.

### Effectiveness of different initiatives

STAs were asked which initiatives were most and least successful in their areas. Their responses can be summarised as follows:

- Bike It and 'other' cycling initiatives were identified most frequently to be the most effective cycling initiatives (stated in 16 workshops<sup>60</sup>);
- incentive / reward schemes for children (e.g. sticker-based rewards dependent on how frequently children travel to school each day / week) (8 workshops);
- off-site cycling / pedestrian infrastructure improvements (7 workshops);
- individual school schemes, rather than centrally imposed initiatives (6 workshops);
- initiatives which have been built into the school curriculum (6 workshops);
- on and off-site cycle parking (6 workshops); and
- cycling / walking training schemes (5 workshops).

<sup>60</sup> Over all workshops undertaken – i.e. noted in 5 STA workshops, 9 local authority workshops, and the RSTA and RSTCA workshops.

## 9.4 Factors Determining the Effectiveness of Cycling to School Initiatives

This section presents findings from the workshops, STA Survey and School Survey, relating to the success factors and barriers surrounding implementation and changes in cycling levels.

### 9.4.1 Success Factors

#### Overview

As discussed in the walking initiatives section, the majority of schools responding to the School Survey (67%) stated that having a STP in place made initiatives more effective (Appendix C, School Survey, Q25), because the STP provided a supportive structure and ensures complementary initiatives are given greater priority. Evidence from workshops suggests that the process of developing a STP helps to identify existing school travel issues and enables effective solutions to be identified.

Other success factors include support from STAs in coordinating implementation of measures and launching events; and parental buy in.

#### The role of on-site and off-site infrastructure

As discussed in Chapter 8, evidence from School Survey respondents and workshop attendees suggests that the provision of appropriate on-site and off-site infrastructure is perceived to make a large difference to the success of walking / cycling initiatives. The following two measures were identified most frequently as being important in a cycling context:

- on-site – safe, secure and covered cycle and scooter parking (14 workshops); and
- off-site – cycle facilities such as segregated cycle lanes and safe crossings (11 workshops) - The lack of cycle lanes was seen to be a key barrier in encouraging cycle use by STAs, due to concerns regarding safety on routes to and from schools.

*"Surveys indicate that a lack of cycle parking is a significant barrier to cycling. Some cycle parking remains under-used and better co-ordination of promotion and training at the time of installation would probably help."*

STA

### 9.4.2 Barriers

The School Survey asked participants to state the main barrier they perceived to encouraging more children to cycle to school (Appendix C, School Survey, Q41)<sup>61</sup>. The most common cycling-related barriers identified were:

- a perception that local roads are too unsafe (37% of respondents), and a lack of safe cycle routes and crossing points; and
- parental attitudes – a reluctance to allow children to travel independently due to perceived safety or personal security issues (27% of respondents); and
- and difficulty changing parental routines where children are 'dropped' at school on the way to work (26% of respondents).

*"More help to make parents realise that cycling can be a healthy and safe way to travel to school"*

School Survey respondent

<sup>61</sup> Note, this question was asked about 'walking and cycling' together.

Targeting parents by increasing their awareness of the benefits of cycling and finding ways to engage them fully into the STP process is seen as key to addressing these issues.

School Survey respondents were also asked what further help would be necessary at their school to encourage more children to cycle. The most common response was more road safety measures – i.e. crossings, safer routes to schools and cycle routes. STAs were also asked the same question. Their responses focused on further funding to implement more cycling initiatives, the implementation of road safety measures (cycle lanes, 20mph zones), and the continued promotion of cycling to parents.

# 10. Value for Money of the TTSI Programme

## 10.1 Introduction

The evaluation in previous chapters has focussed on the extent to which the TTSI programme and the separately funded walking and cycling initiatives have reduced car use and encouraged sustainable travel, key intended outcomes from the programme. However, these outcomes are not ends in their own right. Their achievement is identified as a programme goal because they have the potential to generate benefits for school pupils, their parents, local residents, people travelling on the local transport network and the wider environment.

This chapter considers the benefits generated by the TTSI programme in terms of contribution to national goals and objectives and assesses the available evidence on the extent to which the programme provides value for money. Later sections also outline why a number of uncertainties in the available data mean that it is not currently possible to produce a comprehensive quantitative value for money assessment of the programme summarised as a Benefit Cost Ratio (BCR). Instead an indicative range of partial BCRs is presented, estimated on the basis of a range of assumptions about the scale of a subset of the benefits of the programme for which evidence is available.

## 10.2 Programme Benefits

Chapter 4 summarises the identified wider benefits of the TTSI programme, highlighting the fact that they include impacts in the policy areas of education, health, environmental and transport.

The core impacts on car use and sustainable travel fall within the transport policy area and, although the TTSI is cross departmental, the DfT approach to appraising the benefits generated by a transport measure provides a useful structure for considering the main impacts of the programme.

The DfT advise that the appraisal of the benefits generated by a transport measure should be undertaken by assessing its performance against a series of Government transport goals and underlying challenges<sup>62</sup>. On this basis, Table 10.1 provides a simple high level qualitative assessment of the ways in which the impacts of TTSI on car use and sustainable travel could contribute to the challenges identified by the DfT.

The table shows that the programme outcomes could potentially contribute to several of the challenges, particularly by reducing the detrimental side effects of car use and increasing physical activity as described in more detail below.

### 10.2.1 Benefits of Reduced Car Use

Reducing the number of trips made by car to school reduces some of the negative side effects of car travel. As highlighted in Table 10.1, negative impacts of traffic include emissions of carbon dioxide (CO<sub>2</sub>) and local air pollutants, noise pollution, severance, accident risk and contribution to congestion and the associated delays and reduced journey time reliability for other drivers.

As school journeys are typically short, the level of traffic reduction achieved by changing mode share is relatively limited. However the trips are often focussed on busy urban roads at peak morning times, increasing the scale of their impact in terms of the locally specific impacts of air pollution, noise pollution and congestion.

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<sup>62</sup> Set out on [www.webtag.org.uk](http://www.webtag.org.uk)

**Table 10.1 – High level qualitative Appraisal Summary Table for TTSI programme**

Goal	Challenge	Qualitative Assessment
Tackle Climate Change	Reduce Greenhouse Gas Emissions	<b>Positive</b> - Reduction in car travel and congestion around schools reduces associated greenhouse gas emissions.
Support Economic Growth	Improve Reliability	<b>Potentially positive</b> - Alleviation of particular congestion hotspots around schools has the potential to improve journey time reliability, particularly in the morning peak.
	Improve Connectivity	<b>Potentially positive</b> - Alleviation of particular congestion hotspots around schools has the potential to reduce journey times for others, particularly in the morning peak.
	Support the Delivery of Housing	<b>Neutral</b>
	Enhance Resilience	<b>Neutral</b>
	Wider Economic Impacts	<b>Neutral</b>
Promote Equality of Opportunity	Improve Accessibility	<b>Potentially positive</b> - STPs and associated measures and knowledge can improve and extend options for travel to school.
	Improve Affordability	<b>Unclear without further analysis</b> - Switching from car travel to walking and cycling would reduce travel costs but switching to bus could increase costs.
	Reduce Severance	<b>Potentially positive</b> - Reduced traffic and congestion around school entrances could reduce localised severance, complemented by the implementation of any specific crossing improvements funded by the STP grants.
	Enhance Regeneration	<b>Neutral</b>
	Reduce Regional Economic Imbalance	<b>Neutral</b>
Improve Quality of Life & Promote a Healthy Natural Environment	Reduce Exposure to Noise	<b>Potentially positive</b> - School traffic and associated congestion are concentrated in residential areas. Reduced travel by car could alleviate exposure to noise although the scale and nature of impact would be highly dependent on local conditions (e.g. levels of existing noise and no of residents).
	Minimise Impact on Biodiversity	<b>Neutral</b>
	Minimise Impact on the Water Environment	<b>Neutral</b>
	Minimise Impact on Heritage	<b>Neutral</b>
	Minimise Impact on Landscape	<b>Neutral</b>
	Improve Experience of Travel	<b>Potentially positive</b> - Evidence suggests that children benefit from travelling to school with their peers and parents experience a potential reduction in the stress caused by driving in congested conditions around the school. Any improvement in facilities (such as crossings and storage) funded by the grant may also bring amenity improvements.
	Improve the Urban Environment	<b>Neutral</b> - Reductions in traffic are unlikely to be sufficiently large to cause a noticeable improvement in the urban environment.
	Improve Access to Leisure	<b>Neutral</b>
Better Safety, Security & Health	Reduce the Risk of Death or Injury	<b>Positive</b> - Reduction in traffic and congestion around schools could reduce road traffic accidents. An increase in walking and cycling journeys could potentially have the opposite effect but safety improvements are a key driving force behind STPs. The net balance would depend on detailed local conditions.
	Improve Health through Physical Activity	<b>Positive</b> - Increases in number of walking and cycling trips to school would increase physical activity of children and potentially their parents.
	Reduce Air Quality Health Costs	<b>Potentially positive</b> - School run traffic and associated congestion are concentrated in residential areas. Consequently reduced travel by car could alleviate exposure local air pollution and associated health costs although the scale and nature of impact will be highly dependent on local conditions
	Reduce Vulnerability to Terrorism	<b>Neutral</b>
	Reduce Crime	<b>Neutral</b>
Impact on Public Accounts	Broad Transport Budget	<b>Cost</b> - Central public sector costs associated with providing the grants and ongoing support of staff costs. Additional costs to local authorities and schools to supplement programme funding.
	Wider Public Finance Impacts	<b>Minor impact</b> - Reduced indirect tax to Government as a result of reduced car mileage and associated fuel purchase and fuel duty.

## 10.2.2 Benefits of Physical Activity

It is widely recognised that regular moderately intense physical activity is an important element in the development of children and young people. Physical activity, including walking, has a range of benefits during childhood, including healthy growth and development, maintenance of energy balance, psychological well-being and social interaction. Using active travel for the journey to and from school provides a good opportunity to build activity into daily life, help meet the recommended levels of physical activity and also reduce risk factors for developing life threatening diseases in adult life.

Cycling England also assumes in its research that a percentage of children converted to cycling in early life will continue on to become adult cyclists and this may then be used as a main mode for trips in adult life. This type of behavioural change will further increase the health benefits to individuals. Parents may also accrue health benefits from the behavioural change of their children, potentially increasing their levels of walking and cycling alongside their children, with associated benefits for health.

It is noted that increased levels of walking and cycling could increase exposure to accident risk. However, this effect should be offset by the fact that safety improvements and awareness are a core component of STPs.

## 10.2.3 Other Benefits

Other more minor benefits identified in Table 10.1 include potential improvements in accessibility offered through broader travel options and information, and potential greater journey ambience and amenity resulting from reduced driving stress for parents and in some cases new walking and cycling facilities.

Chapter 4 also detailed a range of wider benefits of the programme identified by stakeholders during the study which fall beyond the coverage of transport goals and challenges. Example impacts on the wider community include enhanced environmental awareness, stronger relationships between schools, local authorities and the police and enhanced community cohesion and a greater level of pride in the community. Wider pupil related benefits include improved behaviour and to a lesser extent increased confidence and independence.

## 10.3 Data Availability for Quantification

Full DfT appraisals of the impacts of transport measures involve allocating monetary values to benefits where possible to allow a comparison against costs and the calculation of a BCR for the scheme. This is essentially an indication of the value of benefits generated for each pound of Government investment.

The calculation of a comprehensive BCR for the TTSI programme would require:

- accurate information on the impacts of the programme over a number of years, particularly in terms of the reduction in car vehicle kilometres and increase in walking and cycling trips;
- information on the local conditions (such as traffic levels and residential density) in which the changes in traffic levels occur;
- a means of attributing a monetary value to each impact achieved; and
- details of the costs associated with implementing the plans and initiatives that achieved the changes identified.

The data required is not fully available for the TTSI programme for a number of reasons:

- It is not possible to fully identify the impacts of the TTSI expenditure. Although it is possible to identify how travel behaviour changes between years before and after the implementation of

STPs using the School Census data, the changes are relatively small and it is not possible to identify the extent to which they are due solely to expenditure from the TTSI programme rather than other factors. For instance, the statistical analysis presented in Chapter 4 was unable to identify a statistically significant difference between the changes in car use between 2006/07 and 2008/09 in those schools with and without STPs. The lack of clarity reflects a number of issues:

- TTSI is a cross departmental programme which is closely interrelated to a number of other programmes and initiatives (such as the Healthy Schools programme and Bikeability). The analysis presented in Chapter 4 suggests that schools implementing STPs are also more likely to be involved in complementary activities. Therefore, the effects of these activities (each with their own costs), along with any top up investment made by the school or local authority to supplement TTSI funding could have contributed to any changes in travel behaviour observed over the period of implementation of the STP, along with the STP itself. Their impacts should therefore not be included in an assessment of the value for money of the TTSI programme;
  - As outlined in earlier chapters, the data included in the School Census has limitations in terms of both the way in which it is collected and the fact that it is intended to reflect the 'usual' mode of transport and therefore does not capture the impacts of changes in behaviour that only apply for some days of the week or in some seasons (such as the Walk on Wednesdays initiative or a child cycling in the summer only); and
  - External factors such as differences in weather might also have influenced changes in behaviour between years.
- The monetary values of the benefits of reductions in car vehicle kilometres are highly dependent on the characteristics of the location in which they occur (in terms of details such as congestion levels and numbers of local residents). The information required to identify relevant characteristics is very detailed and would require considerable research.
  - It is not possible to attribute a monetary value to several of the areas of benefit identified. A particular omission is the value of the health impacts of increased physical activity through walking and cycling. As discussed above, the potential for increased walking and cycling to tackle issues such as childhood obesity is a key identified benefit of the programme. However, no guidance currently exists on the quantification of such benefits for children. Current appraisal methods for measuring health benefits<sup>63</sup> are based on adult users, using evidence on reduced mortality levels as a result of increased cycling levels. However, as morbidity levels and obesity levels are not considered and childhood mortality varies so greatly from adult levels, Sustrans suggest that this approach is not directly relevant for estimation of child related health benefits<sup>64</sup>. As described below the approach has not been used in the main estimation of benefits, but has been used instead simply to illustrate of the potential order of magnitude of health benefits.
  - No evidence is available on the length of time for which benefits from a STP are sustained without further significant investment and update. Since BCR calculations depend on comparing costs and benefits accrued over an identified time period, without this evidence it is difficult to identify an appropriate time period for appraisal.
  - It is difficult to identify the proportion of TTSI costs related to the implementation of individual STPs. Whilst grant costs can be attributed relatively accurately to schools implementing

<sup>63</sup> SQW (May 2007) - Valuing the benefits of cycling: A report to Cycling England; WHO (2008) - Health Economic Assessment Tool for Cycling (HEAT for cycling); DfT (2009) TAG unit 3.3.12

<sup>64</sup> Sustrans (December 2009) - Valuing increased cycling in the Cycling Demonstration Towns

STPs in a certain year, it is not possible to accurately allocate the TTSI staff costs to schools implementing plans, although reasonable assumptions can be made.

## 10.4 Indicative Range of Benefit Cost Ratios

### 10.4.1 Introduction

Despite the difficulties outlined above, the available data on the TTSI programme's potential impacts can be combined with a number of assumptions to identify a range of BCRs for elements of the programme's output. This provides some evidence on the potential of the programme investment to provide value for money and the scale of impact of key influences on that potential.

To control for the uncertainties outlined above as far as possible, the BCR analysis was based on:

- those schools from the School Census subset identified as having implemented a STP during 2007/08 (i.e. schools identified as not having a STP in 2006/07 but recorded as having one in 2007/08 and 2008/09). This provided a sample of 1,984 schools.
- benefits directly related to the reduction in car vehicle kilometres only,<sup>65</sup> i.e. excluding health related benefits and the further non quantified benefits described in section 10.2, although an indication of the potential scale of health benefits (based on the approach to calculating adult health benefits) is provided as outlined below

This approach meant that it was possible to identify mode shares for the selected schools in the years immediately before and after STP implementation and to identify relevant associated TTSI grant and staff costs as described below, helping to reduce some identified areas of uncertainty.

The following sections provide more detail on the calculation approach adopted.

### 10.4.2 Calculation Approach

#### **Vehicle kilometres saved**

In order to estimate the number of car vehicle kilometres saved on trips to the sample schools in 2007/2008 and 2008/2009, a calculation was undertaken to forecast the likely level of car use if the school travel modal share for each school in the sample had remained at the 2006/07 baseline level. This provides a base comparison for the actual results from the School Census data<sup>66</sup>.

The estimated number of car school journeys assuming no change in average travel behaviour from 2006/07 was calculated for each school in the sample for 2007/08 and 2008/09, using the 2006/07 School Census car and car sharing modal share as a baseline proportion to apply to pupil numbers in the later years.

The actual car school journeys were calculated for the sample schools using the School Census data on pupil's usual mode of travel to school, taking into account both pupils that travelled to school by car and those that travelled by car share for 2007/08 and 2008/09.

The difference between these calculated totals provided information on the estimated number of car journeys saved for each school, potentially as a result of the TTSI programme in the years 2007/08 and 2008/09. It was assumed that an equivalent number of trips would be removed in the morning and afternoon for each school, giving a total reduction of over 1.9 million trips per annum.

<sup>65</sup> TAG Unit 3.9.5 - MSA - Road Decongestion Benefits

<sup>66</sup> It is noted that using the 2006/07 data as a baseline might provide a slightly conservative assessment of benefits as NTS data discussed in previous sections suggests a slight steady increase in car travel to school. However this approach was judged to be the most appropriate way to obtain a consistent baseline between schools

The change in car journeys was converted into car vehicle kilometres saved using the average length of a trip to school from the National Travel Survey<sup>67</sup>. Regional average figures for 5-11 year olds (ranging from 1.7 to 3.1 kms) and 11-16 year olds (ranging from 3.6 to 6.0 kms) were extracted and applied as appropriate to primary and secondary schools in the sample. NTS data<sup>68</sup> suggests that escort return trips to school (i.e. where parents drive their children to school and return home) account for 73% of school trips, whereas the remaining 27% of school journeys involve trip chaining as part of another journey. These proportions were applied to both the morning and afternoon journeys (assuming escort trips involve a total trip length of twice the average trip to school whilst the remaining trips involve a single trip only). This allowed total vehicle kilometres (both estimated and actual) to be calculated for each year.

The results of this calculation are shown in Table 10.2 which shows that there are over 8 million fewer vehicle kilometres annually across the sample schools when observed School Census mode shares are applied for 2008/09 rather than an assumed continuation of 2006/07 behaviour.

Table 10.2 – Vehicle kilometres saved by year

Vehicle kms per year	2006/07 - Baseline	2007/08	2008/09
Estimated from 2006/07 data		306,763,720	304,789,849
Actual using Census data	306,345,207	301,467,835	296,529,780
Difference (Veh kms saved)		-5,295,885	-8,260,069

### Decongestion benefits

The calculation of the direct benefits of reducing traffic levels (termed 'decongestion benefits') was based on DfT's appraisal guidance for small changes in vehicle kilometres<sup>69</sup>.

The guidance attributes a monetary value to each vehicle kilometre removed from the road network to reflect the reduction achieved in the negative side-effects of traffic (including congestion, air pollution and noise). A monetary value for carbon dioxide emission reductions is also provided but this was excluded and replaced with an approach based on more recent advice, as described below. The guidance also includes an estimate of the impact of each vehicle kilometre removed in terms of indirect tax (primarily fuel duty) lost by the Government. This was offset against the benefits for each vehicle kilometre removed<sup>70</sup>.

The guidance provides a range for the monetary value of each vehicle kilometre of traffic removed, differentiated by road type (defined in terms of level of congestion, area type and road classification - A roads, motorways and other). The range of values is wide, reflecting the fact that the value of each vehicle kilometre removed varies considerably according to local conditions, particularly the level of traffic on the road and therefore the extent to which the vehicle kilometre contributes to congestion and delays for other drivers.

It was assumed that the school traffic would largely use 'other roads' and consequently the decongestion values used were a traffic weighted average across 'other roads' in all area types, reflecting the fact that the TTSI programme applies nationwide. However, the identification of an appropriate assumption to adopt on the most relevant road type in terms of congestion level was less clear as conditions would vary considerably between schools, according to their location. In general the impact of removing morning journeys to school would be likely to be more valuable

<sup>67</sup> National Travel Survey 2008, DfT

<sup>68</sup> National Travel Survey (NTS) Travel to School Personal travel Factsheet – March 2008

<sup>69</sup> TAG Unit 3.9.5 - Road Decongestion Benefits

<sup>70</sup> In line with the current draft WebTAG guidance (Unit 3), rather than being added to the costs of the scheme as per previous WebTAG guidance.

than removing afternoon trips as a high proportion travel on busy, urban roads in the morning peak whereas many of the afternoon journeys occur before the main evening peak of traffic.

The TAG unit identifies levels of congestion on roads in terms of a ratio of traffic volume on the road to the capacity of the road; identifying bands of 0%-25%, 25%-50%, 50%-75%, 75%-100% and over 100%. There is very little detailed evidence on the level of congestion on roads from which school traffic is removed. However, broad indications can be derived from available data on traffic patterns at the national scale which suggests that the fourth band (75%-100%) might be the most representative band to reflect typical morning peak conditions for school journeys and the third band (50%-75%) might be most applicable for the afternoon journeys<sup>71</sup>.

However, given the uncertainty on this issue, the BCRs presented below reflect a range of assumptions on congestion levels, using different combinations of potential congestion bands for each time period. Values vary considerably, with the value of benefits if morning traffic is assumed to be removed from roads falling in the fourth band (75%-100%) being over five times as great as the value of benefits if the assumption is that traffic is removed from roads falling in the third band (50%-75%).

### Carbon dioxide benefits

Carbon dioxide benefits were calculated separately, also on the basis of the estimated reduction in vehicle kilometres. DEFRA's average assumed car emissions rate of 204g CO<sub>2</sub>/km<sup>72</sup> was used to convert vehicle kilometre reductions in 2008 to estimated CO<sub>2</sub> reductions. The emissions rate was reduced for subsequent years in line with TAG assumptions on the proportionate impact on emissions of biofuel use and improved vehicle efficiency<sup>73</sup>. The estimated CO<sub>2</sub> reductions were in turn converted into a monetary value using the central, non traded CO<sub>2</sub> value for 2008 (and subsequent years) provided by DECC<sup>74</sup> of £51 per tonne in 2009 in 2009 prices.

On the basis of these assumptions, the reduction in vehicle kilometres in 2008/09 was calculated to be equivalent to a reduction of 1,650 tonnes of CO<sub>2</sub>, worth £85,000 (2009 prices).

### Illustrative health benefits

TAG<sup>75</sup> provides guidance on an approach to partially estimating the monetary value of the health benefits of increased physical fitness associated with increased levels of walking and cycling. The approach considers impacts on rates of mortality only, not morbidity or issues such as obesity and is considered to be evolving and developmental. The guidance therefore states that it should be used for sensitivity testing only. It is also intended for use for changes in physical activity in adults and, as it is based on rates of adult mortality, is not directly applicable for children.

The TAG approach was therefore applied to the estimated changes in levels of walking and cycling by children at the sample schools only to provide an estimate of the valuation of the scale of benefits for the equivalent change in activity in adults. The values were not included in the core BCRs set out below, but were calculated to provide an indication of the potential order of magnitude of health benefits.

<sup>71</sup> DfT National Traffic Statistics (Road Traffic Statistics 2009: Traffic, Speeds and Congestion) suggest that the peak morning school travel hour of 8 am to 9 am (on weekdays) is the third busiest hour in terms of traffic across the week, with only about 12% of traffic falling in the two busiest hours (4 pm to 6 pm, weekdays). As further National Travel Survey evidence suggests that school traffic is focussed on the peak periods of the hour between 8 am and 9 am (accounting for 19% of traffic on urban roads at the peak time of 08.35) (National Travel Survey, 2008, Table 5.4) the likelihood is that a large proportion of morning school traffic travels on roads that fall in the 75%-100% congestion band or the 50-75% band, which between them account for 30% of traffic. In contrast, the weekday hour of 3 pm to 4 pm is only the fifth busiest of the week with 23% of traffic occurring in busier hours so the third and fourth congestion bands (V/C ratio of 50%-75% or 25%-50%) are more likely to be appropriate for considering the impacts of afternoon school trip reductions

<sup>72</sup> Taken from <http://www.defra.gov.uk/environment/business/reporting/pdf/passenger-transport.pdf>

<sup>73</sup> TAG Unit 3.5.6D - Values of Time and Operating Costs

<sup>74</sup> DECC (i.e. Carbon Appraisal in UK Policy Appraisal: A revised Approach A brief guide to the new carbon values and their use in economic appraisal1 )

<sup>75</sup> TAG Unit 3.14 - Walking and Cycling Schemes

The benefits calculated using the above approach were significant, equivalent to the combined value of decongestion and carbon dioxide reduction benefits calculated using the upper level assumptions on the levels of congestion (and therefore worth over five times the value of the combined decongestion and carbon benefits calculated with assumptions of lower levels of congestion).

The calculation approach identified new walking and cycling trips in the sample schools using the equivalent methodology to that used to identify changes in car trips, as outlined in Section 10.4.2. It was assumed that each new walking trip was 50% of the length of the average trip length for the relevant school type and each new cycling trip was 85% (reflecting information on relative trip length in NTS<sup>76</sup>). Information on adult mortality levels, the impact of increased activity on mortality and the value of reducing mortality was taken from TAG (Units 3.14 and 3.4<sup>77</sup>) No allowance was made for the further benefits associated with any increase in physical activity amongst parents as a result of changes in their child's travel behaviour.

### Number of years of benefits

There is little evidence on the length of time for which benefits from STP implementation can be assumed to be sustained without further major investment (beyond the assumed ongoing annual TTSI staff time for monitoring, reviews and update). From one point of view, the passage of time from the implementation of a plan might weaken its impacts as habits revert to old patterns and staff and pupils change. From another perspective, increased time might increase the extent to which travel behaviours and assumptions become established in school behaviour.

As described above, this is a key area of uncertainty in the calculation of the BCR and therefore a range of assumptions were tested; from the assumption that benefits are only accrued in the year of implementation and two subsequent years to the upper case of benefits occurring in year of implementation and five subsequent years, broadly representing the time for a complete turnover of pupils in a school.

The benefits for any years after 2008/09 included were assumed to be equivalent to those in 2008/09 (uplifted for real growth in GDP) and an allowance for additional TTSI staff time was included in the cost for each year added (calculated assuming time allocated for non STP implementation years as described below).

### Proportion of benefits attributable to TTSI

It has already been noted that TTSI expenditure will not have been the only influence on changes in travel behaviour between 2006/07 and 2008/09 in the sample schools. The schools involved may also have implemented other initiatives and measures with their own costs and have been affected by external factors. The overall observed change in travel behaviour will therefore be the net result of each of these influences with some schools showing a reduction in car use, others showing an increase and others showing little change which may in reality reflect the net effect of opposing influences acting to increase and decrease car use.

As already indicated, the available data does not provide sufficient information so that varying influences can be differentiated to allow the direct impact of TTSI expenditure to be identified clearly (from, for instance, the impacts of expenditure on other complementary measures). Although the statistical analysis presented in Chapter 4 suggested that the net reduction in car (and car sharing) mode share between 2006/07 and 2008/09 was approximately a third larger in schools with STPs than those without (0.8 rather than 0.6 percentage points), the variability in the datasets means that this difference is not statistically significant.

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<sup>76</sup> National Travel Survey (NTS), 2008

<sup>77</sup> TAG Unit 3.4 - Accidents Sub-objective

The BCR estimates presented below were therefore calculated on the basis of a range of assumptions on the proportion of the estimated decongestion and carbon benefits that are assumed to be directly attributable to the TTSI programme and associated expenditure. This proportion is likely to vary considerably between schools and given the lack of available evidence, a wide range of assumptions was tested (that between 25% and 100% of the benefits associated with changes in travel behaviour across the STP implementation period in the sample schools was directly associated with the TTSI expenditure).

### Programme costs

The cost estimates used focussed solely on the programme implementation costs for central Government. Any costs to schools or local authorities or other agencies such as staff time or top up expenditure for measures were excluded, in line with the approach to benefit estimation described above.

The central Government programme costs fall into two main categories; the cost of grant allocations to schools setting up STPs and staff costs for STAs and RSTAs.

Relevant grant costs were calculated by identifying an average grant per primary, secondary and special school for each region (on the basis of 2008 data) and allocating the relevant value to each school of each type in the sample. This gave a total cost of £10.7 million in 2007/08 (2009 prices).

Indicative TTSI staff costs were calculated by assuming that staff split their time between schools with an existing STP, those implementing one in that year and the group of schools intending to implement a plan in the following year. A further assumption was made that the staff allocate five times as much of their time to each of the schools implementing a STP that year than to each of the schools in the other two categories.

The staff costs for the sample schools were therefore estimated on the basis of the cost of the relevant proportion of total staff time for each year. In the implementation year of 2007/08 this gave a total of £2.3 million for the 1984 sample schools (2009 prices). For subsequent years when it was assumed that the staff allocated the lower level of time to each of the sample schools (i.e. each receiving approximately one fifth of the time it received in year of implementation), total staff time equated to £0.5 million across all the sample schools (2009 prices).

Costs were converted to a 2002 price base and market values for inclusion in the BCR calculation.

### 10.4.3 Range of Indicative BCRs and Summary of Benefits

Estimated BCRs were calculated by combining estimated decongestion benefits and carbon dioxide benefits only, excluding health and wider impacts. Each value was converted to a 2002 price base and discounted to 2002 values (using a 3.5% discount rate in line with DfT guidance). The combined total was then divided by the total calculated cost of the programme for the identified schools (also in 2002 prices and discounted).

However, rather than calculating a single BCR value, the calculation was repeated a number of times to produce a range of values, reflecting varying possible assumptions on the three key areas of uncertainty in the level of benefit generated by the programme i.e.:

- The appropriate value of the benefits from each car vehicle kilometre removed (to reflect local conditions in terms of congestion etc);
- The number of years of ongoing benefit to include in the appraisal; and
- The proportion of change in travel by car and associated benefit that is directly attributable to TTSI.

Table 10.3 outlines a range of BCRs based on a number of different assumptions for each of these input values. The values range quite significantly from less than 0.1 for the least optimistic

combination of assumptions to 1.2<sup>78</sup> for the most optimistic combination. These values are equivalent to DfT's thresholds for poor and low value for money.

**Table 10.3 – Illustrative range of partial BCRs based on direct traffic reduction benefits only**

Congestion Assumption <sup>a</sup>	Proportion of Benefit Attributable to TTSI <sup>b</sup>	Number of years for which STP benefits sustained <sup>c</sup>			
		2	3	4	5
1 <i>AM V/C<sup>d</sup> = 75%-100%</i> <i>PM V/C = 25%-50%</i>	25%	0.1	0.2	0.2	0.3
	50%	0.3	0.4	0.5	0.5
	75%	0.4	0.6	0.7	0.8
	100%	0.6	0.7	0.9	1.1
2 <i>AM V/C = 50%-75%</i> <i>PM V/C = 25%-50%</i>	25%	0.0	0.0	0.1	0.1
	50%	0.1	0.1	0.1	0.1
	75%	0.1	0.1	0.2	0.2
	100%	0.1	0.2	0.2	0.2
3 <i>AM V/C = 75%-100%</i> <i>PM V/C = 50%-75%</i>	25%	0.2	0.2	0.3	0.3
	50%	0.3	0.4	0.5	0.6
	75%	0.5	0.6	0.8	0.9
	100%	0.6	0.8	1.0	1.2

*a-Assumption on the level of congestion on the roads from which car traffic is removed - affecting the assumed value of decongestion benefits*

*b-Proportion of the change in travel behaviour (and therefore car vehicle km reduction) between 2006/07 and 2008/09 attributable to TTSI initiatives*

*c-Number of years for which benefits are assumed to be sustained without further major investment (i.e. only requiring annual TTSI staff time for review and update)*

*d-V/C = Volume/Capacity i.e. the ratio between the level of traffic on the road and the road's capacity for traffic - an indicator of the level of congestion*

The figures suggest that, when considering the benefits of reducing car traffic only, the benefits of the TTSI programme would cover the implementation costs to central Government if the benefits were sustained for a number of years (with limited ongoing staff time costs for updates and review), the TTSI programme was directly responsible for a large proportion of the net behaviour change typically seen across all schools implementing the plans, and a high proportion of the lost morning car trips were removed from congested roads. The presumption of traffic being removed from congested roads is particularly influential.

It is stressed however that these ratios are partial. In particular they exclude the important effect of improving the health of school children and potentially their parents. A quantification of these benefits, if possible, would add substantially to each BCR. For example, the simple sensitivity test described above of assuming the TAG indicative adult based health benefit estimates apply to children generates estimated benefits that approximately double the BCRs for congestion options 1 and 3 and increase those for congestion option 2 more than fivefold. The resultant BCRs range from a minimum of 0.2 to a maximum of over 2.3. The latter falls above the DfT's threshold for high value for money.

Table 10.4 presents more detail on the composition of the monetised benefits for the single year of 2008/09 (the first full year after implementation). The figures highlight the fact that the time

<sup>78</sup> Unless the non-monetised impacts are sufficiently significant relative to the costs to shift the value for money categorisation

savings associated with congestion relief dominate the quantified benefits under all three sets of assumptions about congestion levels on the roads from which school car trips are removed.

The final row in the table shows the value of the indicative health benefits calculated in the sensitivity test described above, for illustrative purposes only. The figure shown is very close to the largest estimate of the value of the direct benefits of traffic reduction (i.e. the total in part 2 of the table for congestion assumption A). This suggests that if the value of the health impacts for children of increased activity is similar to the impact of an equivalent increase in activity amongst adults, the associated benefits would at least double the quantified benefits of the programme (compared to the value based on the direct impacts of traffic reduction alone).

Table 10.4 – Summary of benefits in 2008/09 (£000s, 2009 prices, undiscounted)

Component	Congestion Assumption <sup>a</sup>	Value of Benefits (£000s)	
		100% of Benefits Attributable to TTSI <sup>b</sup>	25% of Benefits Attributable to TTSI
<b>1) Direct Traffic Reduction Benefits by Component</b>			
Congestion	A (AM V/C <sup>c</sup> = 75%-100%, PM V/C = 50%)	£4083	£1021
	B (AM V/C = 75%-100%, PM V/C = 50%)	£784	£196
	C (AM V/C = 75%-100%, PM V/C = 50%-75%)	£3678	£920
Accident Reduction	All	£287	£72
CO <sub>2</sub> Reduction	All	£84	£21
Other Benefits <sup>d</sup>	All	£77	£19
Indirect Tax Loss <sup>e</sup>	All	-£423	-£106
<b>2) Total Direct Traffic Reduction Benefits (sum of individual components in 1)</b>			
All	A	£4108	£1027
	B	£808	£202
	C	£3703	£926
<b>3) Indicative Health Benefits (sensitivity test for illustrative purposes only)<sup>f</sup></b>			
All - Sensitivity Test	All	£4106	£1026

a - Assumption on the level of congestion on the roads from which car traffic is removed - affecting the assumed value of decongestion benefits

b - Proportion of the change in travel behaviour (and therefore car vehicle km reduction) between 2006/07 and 2008/09 attributable to TTSI initiatives

c - V/C = Volume/Capacity i.e. the ratio between the level of traffic on the road and the road's capacity for traffic - an indicator of the level of congestion

d - Other benefits of traffic reduction identified in TAG including improvements in local air quality and reductions in noise

e - Losses in indirect taxation (primarily fuel duty) to central Government as a result of reduced traffic

f - Illustrative representation of potential scale of health benefits only - as described above, in the absence of evidence on the value of the impacts of physical fitness on children's health these values are based on the TAG methodology for adult benefits for the equivalent physical activity - they should therefore be seen as an indication of scale only.

The BCRs and benefits presented above reflect the estimated average impact of the TTSI programme expenditure in 2007/08 and will mask the considerably higher ratios and benefits likely to be associated with the most successful implementation of STPs in individual schools, where programme investment has been used effectively to support substantial changes in behaviour. The overall programme results suggest these examples are offset by other examples where car use and sustainable travel patterns improve little or deteriorate despite TTSI investment.

## 10.5 Conclusions on Value for Money

The intended outcomes from the TTSI programme of reducing car travel and increasing physical activity contribute to a number of the transport goals and challenges set out by the DfT as well as a number of wider social benefits. In particular, they bring health benefits to pupils and potentially their parents and reduce the negative impacts of car travel, including congestion, local air pollution, noise and carbon dioxide emissions.

However, it is not possible to allocate a full monetary valuation to the benefits because of a number of limitations in available data. These relate in particular to the level of change in travel behaviour that is directly attributable to TTSI and the length of time for which it is sustained, local conditions in the areas in which changes occur and evidence on the value of the health benefits and wider social and longer term benefits associated with the programme.

The limited available evidence suggests that TTSI benefits relating to car traffic reduction alone could potentially cover the cost to central Government of the programme if the programme is responsible for a relatively high proportion of behaviour change observed, the changes are sustained for a number of years (with limited additional costs) and a relatively high proportion of traffic reduction achieved occurs on congested urban roads. Less optimistic assumptions on any or all of these issues considerably reduce the value of the TTSI impacts and therefore the indicative BCR for the programme. However, if the additional benefits relating to health improvements could be quantified, they would add significantly to the BCR in each case, as illustrated by the sensitivity test considering the estimated value of the equivalent change in physical activity for adults.

The figures presented in this Chapter reflect the net impact of the programme across all 1,984 schools in the sample, masking considerably higher BCRs in some schools where programme expenditure has been used effectively to support substantial changes in behaviour and lower ratios in others where expenditure has had little or no impact.

Possible approaches for improving the evidence available on the value for money of the programme would include additional research into the length of time for which benefits are sustained and the value of associated health benefits for children.

It would also be valuable to consider a sample of schools in detail, gathering detailed information on travel behaviour before and after STP implementation, the detailed local conditions (in terms of issues such as congestion levels) and the impact and cost of other complementary initiatives.

# 11. Conclusions

## 11.1 Overview

This final chapter combines evidence from Chapters 3 to 10 in order to address the six research questions which form the basis for this evaluation:

### **Overall Research Questions:**

- 1) What are the strengths and weaknesses of the TTSI?
- 2) Has the TTSI help tackle childhood obesity and reduce carbon emissions?
- 3) Has value for money been achieved by the TTSI to date, specifically relating to changes in travel patterns and subsequent modal shift towards sustainable travel?
- 4) Will schools be able to maintain active school travel plans without the funding and support provided by the STAs?
- 5) Does evidence support the ongoing role of STAs and RSTAs?
- 6) What decisions does the evidence support for the future of the TTSI?

In addressing these questions we have sought to identify a range of view points and alternative explanations, and 'weight' the evidence available; whilst also recognising the limitations associated with the various data sources in terms of sample sizes, positive reporting bias, and the extent to which the School Census data can be used to assess travel behaviour change associated with the TTSI programme.

### **Achievements**

This evaluation has been informed by the theoretical framework set out in Figure 2.1 which sets out the logical process which should occur if the TTSI is operating as intended. In this context, the main achievements of the TTSI can be described as follows:

**Inputs** - The Government has provided extensive capital and revenue funding to support the TTSI. By March 2010 this included approximately £120 million of capital investment to local authorities and schools to help implement STPs, and £35 million of revenue funding, principally for TTSI staffing roles.

**Outputs** – This has funded approximately 250 STAs (including 68 in London Boroughs), 11 RSTAs, two RSTCAs and a range of supporting measures<sup>79</sup>; and has resulted in more than 90% of independent and state-funded schools with STPs<sup>80</sup> by March 2010, the deadline by which the Government was aiming to have achieved 100% coverage (see Section 4.2). The opportunity to apply for TTSI-related funding and the role of STPs in helping schools to secure 'Healthy Schools' accreditation have been important motivational factors.

**Outcomes** – This is believed to have delivered a small change in travel behaviour, in terms of less car use and more active travel (i.e. walking and cycling).

Evidence from a subset of the School Census data for the period 2006/07 to 2008/09 identifies the following small, but statistically significant, changes across all schools (with and without a STP):

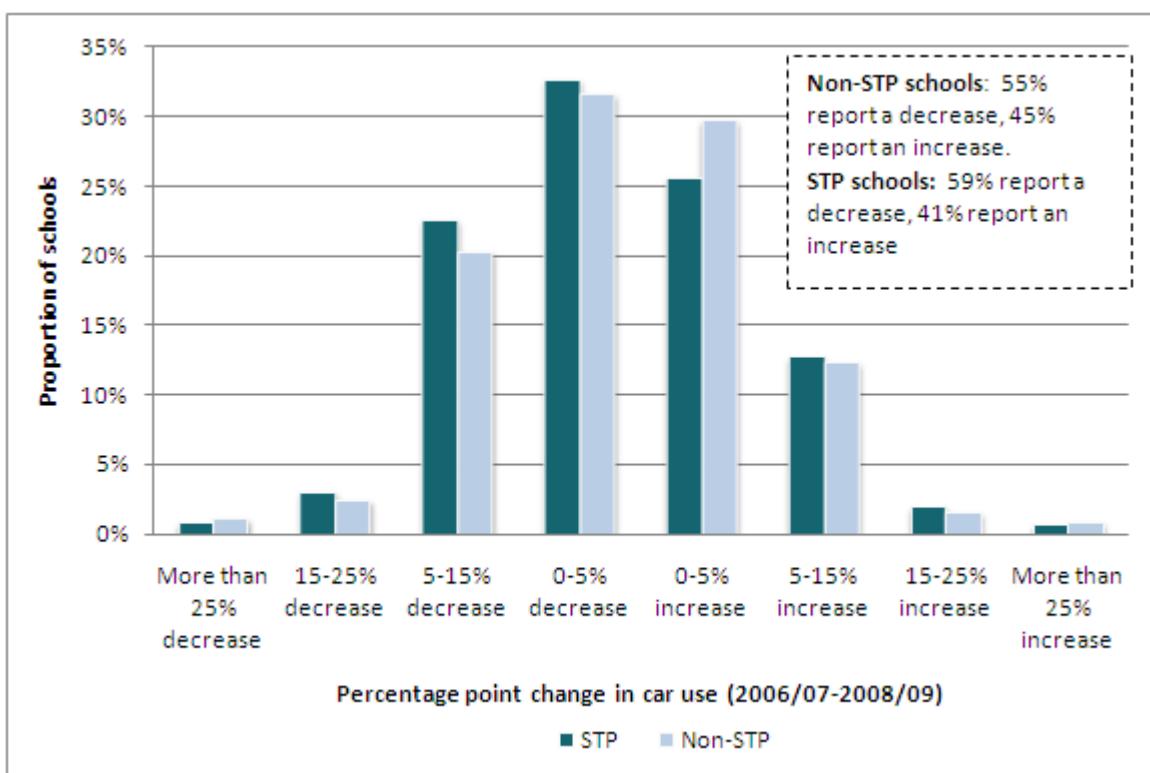
<sup>79</sup> Such as cycle storage facilities, parent waiting shelters, traffic calming measures, cycle training initiatives, and safety equipment such as high visibility jackets and helmets.

<sup>80</sup> By end March 2009, the latest year for which figures were available, 81% of schools in England had a STP in place. Evidence from the School Survey suggests that 79% of schools that did not have a STP in place in September/October 2009 were planning on having one in place within the year. This suggests that STP coverage is likely to have increased further in the period to March 2010.

- a 1.0 percentage point reduction in the proportion of all pupils within the subset travelling by car (from 29.8% of all pupils in 2006/07 to 28.8% of pupils in 2008/09);
- a 0.8 percentage point increase in walking (from 49.2% to 49.9%); and,
- a 0.5 percentage point increase in car share (from 2.5% to 3%).

A comparison of data for schools with and without a STP, however, suggests that **STPs have not had a significant impact on average (school-based) mode share figures at an aggregate level to date**. The profile of change in mode use (i.e. the proportion of schools reporting a 0 – 5 percentage point decrease, the proportion reporting a 5 – 15 percentage point decrease, etc.) is also similar for both categories of school (i.e. those with and without a STP) and both groups include examples of schools where large positive and negative changes in mode share have been recorded (Figure 11.1).

Figure 11.1 – Profile of change in car use, STP v non-STP schools: all pupils



It is important to note, however, that this dataset may under-estimate the effect of STPs on travel behaviour, since it only looks at trends since 2006/07, more than two years after the launch of TTSI<sup>81</sup>. In addition, there may be a potential positive bias in data reported by non-STP schools which are not obliged to provide mode share information; there are limitations regarding the extent to which the data can be used to monitor travel behaviour change resulting from the TTSI (including small behaviour changes on one or two days a week, at certain times of the year, or for part of the school journey); and there is uncertainty regarding the extent to which individual schools have implemented travel initiatives prior to having a STP<sup>82</sup>. Further analysis of the data in 2010/11 may identify a more significant change in average mode share following STP implementation.

<sup>81</sup> By 2007, 56% of schools had a STP in place, compared with less than 9% at the start of the Initiative (see Table 4.1).

<sup>82</sup> Evidence from the Travelling to School Initiative Report on the Findings of the Initial Evaluation (DfT, 2005) suggests that many schools do implement initiatives before they have a STP.

Evidence from other sources, however, provides a more positive picture. The case studies show that some schools have recorded considerable mode shift following the introduction of their STP<sup>83</sup> (up to a 28 percentage point reduction in car use, from 49% to 21%)<sup>84</sup>. Feedback from school representatives, STAs, RSTAs, local authorities and GOs, via the STA/School Survey and the various workshops, also provides a more positive picture. For example:

- around 63% of STA Survey respondents believed STPs had been very or moderately successful at reducing car use;
- around 63% of School Survey respondents (68% for primary schools, 58% for secondary schools, but only 31% for special schools) believed STPs had been an effective way to encourage sustainable journeys to school;
- workshop participants provided anecdotal evidence of a reduction in congestion outside the school gate; greater use of walking / park and stride initiatives, increased numbers cycling to school, etc., often focused on a subset of school or individual schools; and
- officers from the GOs reported that there are examples where STPs have been very effective at reducing car use, but also felt that there was more to be done to achieve the cultural shift required.

Although it is recognised that these stakeholders may have a vested interest in promoting the positive outcomes of their roles<sup>85</sup>, this evidence suggest that **STPs have resulted in positive mode shift, but that this is focused on: individual schools; specific groups of pupils; or partial changes in travel behaviour on one or two days of the week, at certain times of the year or for part of the journey, linked to STP-related initiatives<sup>86</sup>; and is not, at this stage, sufficient to influence average mode use across all schools.**

It is also important to note that behavioural change occurs over a long period, and the full benefits of the TTSI may not be seen for a number of years. Alternatively, however, the change in travel behaviour which has been achieved may evaporate after a short period of time. Further research is required to understand the long term impacts of STPs on travel behaviour.

Further evidence on travel behaviour benefits is presented in Section 4.3.

## 11.2 What are the Strengths and Weaknesses of the TTSI?

### 11.2.1 Strengths

The main strengths of the TTSI can be described as follows:

- **The availability of funding to support the TTSI** – The Government has provided extensive capital and revenue funding to support the TTSI. This has been as powerful motivator and important factor for the development of STPs (see Section 4.2).
- **Wider benefits** – In addition, to the small change in travel behaviour described above, the TTSI has also delivered a range of other wider benefits associated with development and implementation of STPs. Those mentioned most frequently at the various workshops

<sup>83</sup> At the request of the Project Board, the case studies were deliberately focused on demonstrating good practice rather than being representative of all schools.

<sup>84</sup> Nationally, 26% of schools with an STP have reported a reduction in car use of more than 5% (based on evidence from the School Census Subset), however, it has not been possible to identify the role of STPs or the wider TTSI in delivering this change.

<sup>85</sup> And may also be unintentionally biased in their perceptions of mode shift success, based on particular successes with groups of pupils and the influence of other positive aspects of STPs.

<sup>86</sup> E.g. Walk on Wednesday events, Walk to School Week, Bikelt initiatives, Park and Stride promotion etc.

attended by STAs, RSTAs, local authorities and officers from the GOs are summarised below (see Section 4.4 for further detail):

- **Increased awareness of obesity issues and health benefits associated with physical activity<sup>87</sup>** – The process of developing and implementing a STP helps raise awareness of these issues amongst pupils and parents and teachers, who may also change their behaviour and attitudes. These benefits may be long term in nature, affecting lifestyles later in life as well as, or rather than, now.
- **Increased awareness of environmental issues amongst pupils, parents, and teachers** – Again, these benefits may be long term in nature, affecting lifestyles and attitudes to a range of environmental issues later in life, as well as, or rather than, now. In some cases, schools and pupils have already become more proactive in related issues such as recycling and community working.
- **Contribution to Healthy Schools, Eco-Schools, and Sustainable Schools Initiatives** – STPs can help raise the profile of other Government initiatives and assist schools in achieving accreditation. Integration of transport, health and environment issues within schools provides more opportunities for all these issues to be covered in the curriculum.
- **Stronger relationships between schools, local authorities and the police** – This enables schools to address transport-related concerns directly with local authorities and the police. In addition, local authorities are able to draw on schools' local knowledge of the transport environment to address transport problems in the locality and to inform policies such as the Sustainable Community Strategy, the Local Area Agreement, the Local Transport Plan/Local Implementation Plan, etc. In many cases, the STP has provided the first opportunity for a direct relationship between the local authority and individual schools (supported by STAs).
- The majority of STAs are based in local authority Transport departments where they can engage directly with road safety officers, transport planners, highway engineers, etc. STAs report various levels of support and engagement with senior officers in relevant departments (Transport, Environment, Education, etc.), but acknowledge that relationships have improved in recent years as their roles have become more established and relevant officers have become more aware of the various initiatives and outcomes being delivered by the TTSI.
- **Increased community cohesion and neighbourhood pride** – The process of developing and implementing a STP encourages parents to become more involved in what is happening within the school (resulting in benefits for other school activities), and encourages increased levels of engagement with and between parents, teachers, councillors, local authority officers and the police.
- **Increased awareness of road safety issues and casualty reduction.**
- **Improved pupil behaviour, including increased attendance and punctuality** – STPs have also been credited with increasing attendance and punctuality, improving pupil discipline and enabling bullying, anti-social behaviour and graffiti issues to be addressed.
- **Increased levels of independence and confidence** – Although not identified as a considerable benefit across the board, this issue is seen as being particularly relevant in special schools and a major reason for developing a STP.

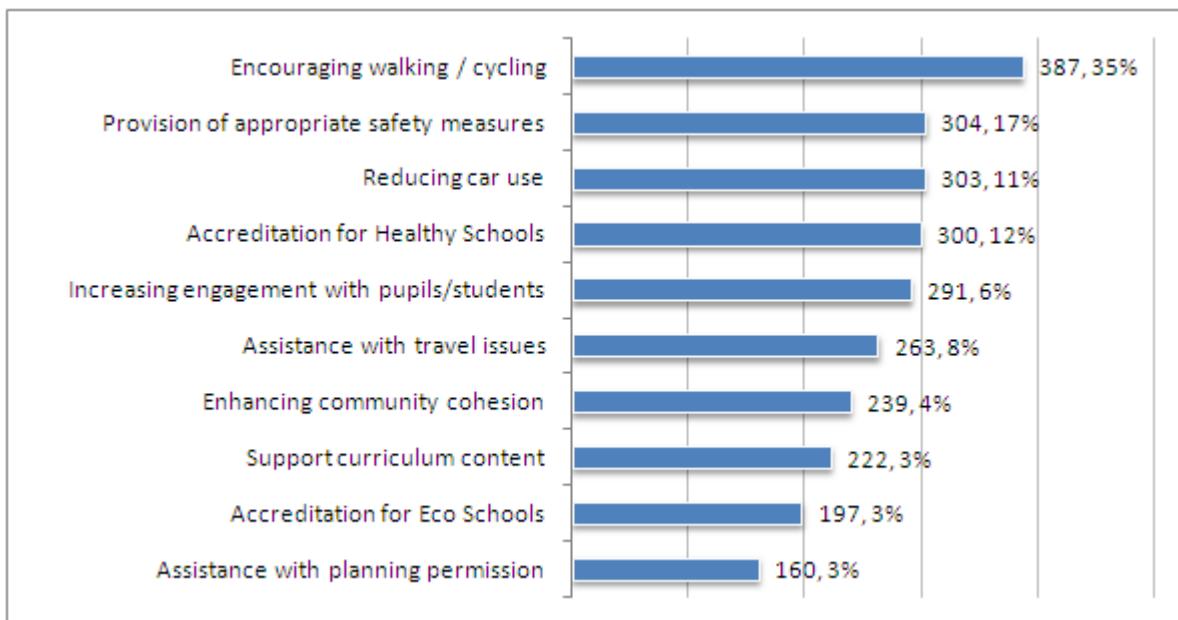
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<sup>87</sup> 'Indicative' number of workshops where this factor was mentioned. Eleven STA workshops, one RTSTA workshop, nine local authority workshops and nine Government Office meetings were held in total. Note, individual workshops varied in terms of the amount of time spent discussing this issue and the comprehensiveness of the responses received. In addition, other workshops often mentioned these issues, but in response to different questions. These occurrences have not been included in the figures presented, but were often quite substantial.

- **Ownership of travel to school issues by schools** – Schools themselves are starting to take greater ownership and responsibility for how their pupils travel to school, recognising the benefits identified above.

Figure 11.2 shows that similar benefits were identified by schools responding to the School Survey. Benefits related to health (encouraging walking / cycling), safety (provision of appropriate safety measures) and environment (reducing car use) are seen as being most important or valuable; with health benefits clearly in first place.

**Figure 11.2 - What have you found / do you think are the benefits of having a STP?**  
(Importance Score, Proportion of respondents stating each benefit as the most beneficial)



Source: School Survey - Base: 483 respondents

Importance score calculated as follows:  $[(10 \text{ points} * \text{no. of respondents ranking benefit in first place}) + (9 \text{ points} * \text{no. of respondents ranking benefit in second place}) + \text{etc....}] \text{ divided by } 10$ .

- **Role of STAs** – The enthusiasm and commitment of these individuals to engage with schools and wider partners to promote the benefits of the TTSI has attracted widespread praise from all parties involved in the evaluation. The majority of schools responding to the School Survey value the input that they have provided, and perceive this to have improved the quality of their STPs; and 28% stated that they would not have developed and implemented their STP without the help and support of a STA. A number of STAs, local authorities, and officers from the GOs commented that it is unlikely that many schools would be aware of the TTSI without their involvement, suggesting that in the absence of other 'sticks' their role has been vital in introducing STPs within schools and ensuring good progress towards the Government's target of 100% of schools with a STP has been made. Further detail is provided in Section 5.3 and in Sections 11.5 and 11.6.

In addition, the TTSI has resulted in supporting processes (outside of the formal TTSI) relating to implementation and monitoring:

- **Local authority accreditation and reward schemes** – Half (50%) of the respondents to the STA Survey reported that their local authority ran such a scheme in order to encourage schools to produce high quality plans and encourage a long term commitment to sustainable travel. The majority (76%) of STAs perceive these schemes to have made a positive difference to the success of STPs in achieving modal shift away from car use. Analysis of a subset of data from the School Census also suggests that the existence of a local authority accreditation or reward scheme is positively correlated with a reduction in car use, although it

is not possible to identify a causal relationship. Seventy-seven percent of authorities known to have an accreditation / reward scheme in place experienced an overall reduction in travel to school by car across the authority, compared with 55% of those without. See Section 4.5 for further information.

- **Availability of School Census data** – Although various limitations relating to this data are highlighted throughout this report, the availability of a comprehensive mode share dataset covering virtually all state-funded schools, is of great value. As information is collected for more years and becomes more robust, the dataset it will become increasingly useful in monitoring school-related travel behaviour change, quantifying and demonstrating the benefits of investment in school travel initiatives, and informing future spending decisions.

## 11.2.2 Weaknesses

The main weaknesses of the TTSI are as follows:

- **STP coverage** – It is unlikely that the Government will have achieved its target of 100% of schools with STPs in place by March 2010, with the actual figure estimated at between 90 and 100%<sup>88</sup> (see above). Reasons identified (during STA workshops) for not preparing a STP focus on:
  - resource/time constraints and lack of appropriate leadership within the school; and
  - a lack of recognition of the benefits and/or relevance of a STP in the local context.In particular, there has been a lower level of take up by special schools - only 52% of those included in the School Census subset having a STP in place compared with 85-86% for primary and secondary schools – due, in part, to the specialist travel needs of some pupils attending these schools. Take up by independent schools is also expected to be low<sup>89</sup> compared with state-funded schools, because these schools are not entitled to apply for the TTSI grant and also have more complex travel requirements. STAs report that independent schools are the most difficult group to engage with, but once 'on-board' can be very proactive (see Section 4.2).
- **Varied amount of STA contact with schools** – The average number of schools each STA is responsible for is about 182. This varies widely however, with 22% responsible for more than 400 schools; in spite of the fact that funding was allocated to local authorities based on the number of schools in the area. These STAs have to spread their time more thinly, and as a result, the frequency of contact schools have with their STA varies. Most schools (73%) are contacted twice a year (and 43% stated that their STAs were in contact at least 4 times a year), but 27% received less attention. All STAs have to prioritise their time, and most report focusing on those schools that do not have a STP in place, alongside those requiring most assistance and/or those who are more motivated. As a result, respondents to the School Survey were less satisfied with the advice and help they had received since completing their STP compared with that provided during development of the plan (with 69%, rather than 81%, describing STA input as '*very helpful*' or '*helpful*'). This may, perhaps, not be surprising as schools are encouraged and expected to take ownership of their STP once it has been developed. Fifty-two percent of school respondents stated that they would like to see STAs undertake 'more visits to schools'. These respondents may include those from schools that are more reluctant to take ownership of their Plan.
- **Need for additional training** - Most RSTAs report that the majority of STAs have a good understanding of the issues surrounding the promotion of sustainable travel, but agreed that additional and regular formal training would be beneficial in ensuring all STAs have the

<sup>88</sup> Final audited data on the number of schools with STPs was unavailable at the time of writing.

<sup>89</sup> Although figures are not available to confirm this.

necessary skills and up-to-date knowledge. A large proportion of STAs attending the workshops also identified a need for further advice and training covering general administrative skills and more specific areas of transport and education. Regional meetings were seen as providing a useful forum for this type of training. Further information is provided in Section 5.2.

- **Parental concerns about road safety issues** – Only 55% of schools responding to the School Survey agreed that STPs had been effective at addressing parents' safety concerns associated with walking and cycling. In addition, actual or perceived safety of routes to school was cited by over a third of schools as a barrier to getting more children to walk and cycle to school. This was also the most frequently mentioned barrier at the various workshops (see Section 4.4).

Although not strictly part of the TTSI, a number of STAs/RSTAs raised concerns about the extent to which mode share data collected via the **School Census** can be used to **monitor travel behaviour change resulting from the TTSI**:

- Success in encouraging small changes in travel behaviour may not be picked up. For example, those switching from car to 'park and stride' and walking at least part of the way to school will continue to be recorded as coming by car; as will WOW<sup>90</sup> participants walking less than 3 days a week and a child cycling 3 days a week during the summer months but coming by car the rest of the year. *It could be argued that these types of travel behaviour change are unlikely to have a significant impact in terms of reducing congestion / pollution and improving health (in some cases 'park and stride' participants only walk for 100 – 200 metres), and are more likely to be short term in nature compared to those pupils who completely change their mode.*
- Time and resource pressures may mean that some schools do not undertake a robust survey of pupils' mode of travel.
- Primary school pupils may find it difficult to identify their usual main mode, as opposed to the last leg of their journey that day or what they perceive to have been the main mode.

In addition, Independent Schools, General Hospital Schools, and Pupil Referral Units have not been asked to provide information for the School Census to date<sup>91</sup>.

Evidence from the STA Survey suggests that while there is some liaison between the STAs and local authorities' MIS officers to 'sense check' mode share data provided by schools, this is not done on a comprehensive basis, in spite of DfT/DCSF having emphasised the importance of doing this. Forty-four percent of STAs liaise with their MIS officers on an annual basis, and 19% do so monthly or termly; however, 32% are not in contact at all. Further detail is provided in Sections 3.2, 4.2, and 5.2.

This evaluation (Chapter 10) has also identified difficulties in **quantifying and monetising the benefits associated with the TTSI**, and demonstrating the value for money which investment in travel to school initiatives can deliver.

A particular challenge is the estimation of the **health impacts** of increased physical activity through walking and cycling. The potential for increased walking and cycling to tackle issues such as childhood obesity has been identified as a key benefit of the programme. However, no guidance currently exists on the quantification of such benefits for children. Current appraisal methods for measuring health benefits<sup>92</sup> are based on adult users, using evidence on reduced

<sup>90</sup> Walk on Wednesday.

<sup>91</sup> However, from January 2010, School Census data will also be collected from Pupil Referral Units.

<sup>92</sup> SQW (May 2007) - Valuing the benefits of cycling: A report to Cycling England; WHO (2008) - Health Economic Assessment Tool for Cycling (HEAT for cycling); DfT (2009) TAG unit 3.3.12

mortality levels as a result of increased cycling levels. However, as morbidity levels and obesity levels are not considered and childhood mortality varies so greatly from adult levels, Sustrans suggest that this approach is not directly relevant for estimation of child related health benefits<sup>93</sup>. **Decongestion benefits** are also difficult to estimate as they are very depend on the length of time over which travel behaviour change is sustained and local conditions in the areas in which changes occur.

## 11.3 Has the TTSI Helped to Tackle Childhood Obesity and Reduce Carbon Emissions?

### Childhood obesity

The TTSI has been effective in increasing awareness of childhood obesity issues amongst pupils, parents and teachers. 'Increased awareness of obesity issues and the health benefits associated with physical activity' was the second most common wider benefit identified by workshop participants. In addition, 69% of respondents<sup>94</sup> to the School Survey agreed or strongly agreed that STPs help raise awareness of the health benefits of active travel, and 69%<sup>95</sup> also agreed or strongly agreed that STPs enable children to benefit from increased physical activity.

It is less clear, however, to what extent increased awareness has resulted in actual reduced obesity levels. This study has not obtained information on levels of childhood obesity within schools, and therefore a full assessment of the extent to which obesity levels have changed cannot be undertaken.

Evidence from a subset of the School Census data shows that there has been a 0.8 percentage point increase in the proportion of all pupils within the subset walking to school between 2006/07 and 2008/09, and a 1.5 percentage point increase in primary schools. In addition there has been a significant increase in the school-based mean for both these categories when this data is analysed on a school by school basis<sup>96</sup>. There is, however, no significant difference in the average results for STP and non-STP schools, so this change cannot be linked to the TTSI programme. There has been a very small increase (of 0.1 percentage points) in the proportion of all pupils within the subset cycling to school; but the change on a school by school basis is not significant and there is also no significant difference between STP and non-STP schools. As discussed elsewhere, limitations associated with the School Census data may under-estimate the change in mode use associated with the TTSI.

Evidence from the case studies, however, shows that some schools have achieved substantial increases in walking levels: the best performing case study school reported a 24 percentage point increase in walking, for example (see Table 4.4). There is less evidence of substantial increases in cycling however. In addition, workshop participants identified 'improved health and fitness through increased levels of activity' as the most significant wider benefit of the TTSI programme (identified at 12 workshops). This view appears to be based on 'local' knowledge of success in promoting walking and cycling in individual schools, amongst specific groups of pupils, or partial changes<sup>97</sup> linked to specific walking initiatives such as 'Walk on Wednesdays', park and stride initiatives and walking bus schemes.

This suggests that some pupils will have benefited from health improvements, however, the actual impact on obesity levels will depend on whether or not those most 'at risk' have changed their

<sup>93</sup> Sustrans (December 2009) - Valuing increased cycling in the Cycling Demonstration Towns

<sup>94</sup> 72% in primary schools, 63% in secondary schools and 67% in special schools.

<sup>95</sup> 74% in primary schools, 51% in secondary schools and 67% in special schools.

<sup>96</sup> No significant change was observed in secondary and special schools, where walking is a less dominant mode.

<sup>97</sup> On one or two days a week, at certain times of the year, or for part of the journey.

behaviour, the frequency with which they are now walking to school, and the length of the journey, among other factors.

### Carbon emissions

Evidence from a subset of the School Census data shows that there has been a 0.8 percentage point decrease in the proportion of all pupils within the subset travelling by car (combining car i.e. one pupil per car, and car share) between 2006/07 and 2008/09; and a 1.5 percentage point decrease in primary schools (Table 3.2). In addition there has been a significant increase in the school-based mean for both these categories when this data is analysed on a school by school basis<sup>98</sup>. Again, there is no significant difference in the average results for STP and non-STP schools, so this change cannot be linked to the TTSI programme. However, as discussed elsewhere, limitations associated with the School Census data may under-estimate the change in mode use associated with the TTSI.

Evidence from the case studies, however, shows that some schools have achieved substantial decreases in car use (of up to 28 percentage points) and workshop participants report examples of reduced congestion at the school gate. This suggests that some reduction in carbon emissions is likely to have occurred as a result of the TTSI programme<sup>99</sup>, but this is likely to be very small in the context of overall emissions associated with the 'school run'.

There is evidence, however, that the TTSI has been effective in increasing awareness of environmental issues amongst pupils, parents and teachers. Seventy percent of respondents to the School Survey agreed or strongly agreed that STPs help raise awareness regarding the environmental benefits of active travel, and 'increased awareness of environmental issues amongst pupils, parents and teachers' was commonly identified as a wider benefit (at 9 workshops). This may have an impact on how pupils and parents use the car for other non-school trips, and may also influence future travel behaviour patterns.

## 11.4 Has Value for Money Been Achieved by the TTSI to Date?

The Government has provided extensive capital and revenue funding to support the TTSI. By March 2010 this included approximately £120 million of capital investment to local authorities and schools to help implement STPs, and £35 million of revenue funding, principally for TTSI staffing roles.

This study has attempted to estimate an indicative range of partial Benefit Cost Ratios (BCRs) to provide an estimate of the 'value for money' associated with the TTSI in terms of its contribution to national goals and objectives.

The methodology follows the approach outlined in the Department's Transport Appraisal Guidance<sup>100</sup> and is based on a subset of the School Census data consisting of 1,984 schools that didn't have a STP in 2006/07 but did have one in 2007/08 and 2008/09 (providing a before and after comparison).

An assessment of the qualitative benefits associated with the TTSI is presented in an Appraisal Summary Table in Chapter 10 (Table 10.1).

The BCRs that have been estimated are partial and presented as a range. It is not possible to allocate a full monetary valuation to the benefits due to a number of limitations in the available

<sup>98</sup> No significant change was observed in secondary and special schools.

<sup>99</sup> Providing that this reduction has not been offset by an increase in journey lengths amongst those still travelling by car or use of the car for other longer trips now that it is no longer needed for the journey to school.

<sup>100</sup> [www.webtag.org.uk](http://www.webtag.org.uk).

data. These relate in particular to the level of change in travel behaviour that is directly attributable to TTSI and the length of time for which it is sustained, local conditions in the areas in which changes occur and evidence on the value of the health benefits and wider social and longer term benefits associated with the programme.

The BCRs presented were calculated by combining estimated decongestion benefits and carbon dioxide benefits only (excluding health and wider social benefits) and range from less than 0.1 to 1.2 for the most optimistic combination. These values represent 'poor' to 'low' value for money according to Government guidance<sup>101</sup>.

This analysis is limited by the extent to which mode share data collected via the School Census can be used to monitor travel behaviour change resulting from the TTSI. As highlighted elsewhere, STAs and others involved in administrating the TTSI have pointed out that it does not identify reduction in car use for part-journeys or for only one or two days a week.

This limited evidence suggests that TTSI benefits relating to car traffic reduction alone could potentially cover the cost to central Government of the programme *if* the programme is responsible for a relatively high proportion of behaviour change observed<sup>102</sup>, the changes are sustained for a number of years (with limited additional costs) and a relatively high proportion of traffic reduction achieved occurs on congested urban roads. Less optimistic assumptions on any or all of these issues considerably reduce the value of the benefits and therefore the indicative BCR for the programme.

However it is important to remember that the BCRs are partial, omitting in particular the value of health benefits, as current evidence is limited and restricted to the valuation of health improvements for adults. If these additional benefits could be quantified, they would be likely to add significantly to the BCR in each case.

The figures presented in this report reflect the net impact of the programme across all 1,984 schools in the sample, masking considerably higher BCRs in some schools where programme expenditure has been used effectively to support substantial changes in behaviour and lower ratios in others where expenditure has had little or no impact.

Possible approaches for improving the evidence available on the value for money of the programme include additional research into the length of time for which benefits are sustained and the value of associated health benefits for children. It would also be valuable to consider a sample of schools in detail, gathering detailed information on travel behaviour before and after STP implementation, the detailed local conditions (in terms of issues such as congestion levels) and the impact and cost of other complementary initiatives.

## 11.5 Will Schools be Able to Maintain Active School Travel Plans Without the Funding and Support Provided by the STAs?

There is strong support amongst schools for the STPs. Seventy-five percent of School Survey respondents 'strongly agree' or 'agree' that their school currently does or will benefit from having a STP<sup>103</sup>, and two-thirds (61%) of respondents believe that STPs will continue to support sustainable travel behaviour in the future.

<sup>101</sup> Guidance on Value for Money (DfT, 2006).

<sup>102</sup> As highlighted above, it has not been possible to identify a statistically significant difference between STP and non-STP schools.

<sup>103</sup> This is representative of the views of both primary and secondary school respondents, but only 15 of the 36 respondents from special schools agreed that '*my school does / will benefit from having an STP*'.

However, in our view, many schools will not have the motivation, skills or capacity needed to maintain and implement their STP, without the funding and support provided by the STAs (or an equivalent individual), unless there is a specific requirement by central or local Government for them to do so.

The availability of funding has been a powerful motivator and an important factor for the development of STPs. Funding of the TTSI Capital Grant is due to finish in March 2011, and concern was raised by a number of workshop participants regarding whether and how many of the TTSI related schemes and initiatives will be funded in future. This issue has become even more pertinent in the current public spending climate.

In addition, more than nine out of ten respondents to the School Survey state that they may or will require support from a STA in future (60% stated that they would definitely require help and support and a further 29% may 'possibly' require such support).

The type of support which they say they will require includes:

- assistance with funding issues (81%);
- help with encouraging further walking and cycling e.g. innovative ideas (65%); and
- providing a link to the council (58%).

When schools were asked what they saw as the main barriers in developing, implementing and delivering a STP and other sustainable travel to school initiatives, in the absence of a STA role, 29% replied 'lack of time', 29% replied 'lack of expertise and knowledge', 12% replied 'lack of money or funding', and 12% replied 'other priorities'.

It is anticipated that, in the absence of the funding and support provided by the STAs, the number of schools who choose to continue to maintain their STPs is likely to consist of:

- schools which recognise the wider benefits of encouraging sustainable travel and reducing car use;
- schools experiencing specific travel problems that need to be addressed either through walking and cycling initiatives or traffic engineering or road safety solutions;
- those active in other initiatives such as 'Healthy Schools' and 'Eco-School' who have integrated the promotion of health, education and health issues in their school curriculum;
- those in a local authority with an effective accreditation / reward scheme; and
- those needing to have a STP in order to secure planning permission.

It is also suggested that primary schools will be more likely to continue to maintain their STP than other school types. STAs report that primary schools have generally been easier to engage due to their smaller size and because a lot of initiatives, particularly those focused on walking, are considered to be more appropriate for primary school aged children; primary schools have less rigid lesson plans and timetables providing greater opportunity for pupils to get involved in the STP process; parents of pupils from primary schools are often more actively engaged with the schools; and travel behaviour established while children are young and likely to last a lifetime.

Special schools have been particularly difficult to engage, to date. They are often smaller schools and can find it difficult to identify an appropriate member of staff with the time and drive to address travel to school issues. Pupils often have very specific travel requirements and initiatives (which may be targeted at increasing independent mobility rather than sustainable travel) need to be tailored to the specific needs of the pupils concerned. Special schools are therefore expected to be least likely to maintain their STP.

Schools could be encouraged to maintain their STP by strengthening the consideration of travel issues in the OFSTED assessment process, however, it is recognised that this approach may not

be consistent with current Government policy which is seeking to provide greater local flexibility and fewer reporting burdens in favour of delivery of frontline services..

Local authorities could also encourage future involvement through local accreditation and reward schemes which have found to be effective in producing high quality plans which result in positive travel behaviour changes.

## 11.6 Does Evidence Support the Ongoing Role of STAs & RSTAs?

The role of a STA as an information provider, a motivator and supportive figure, and as a source of innovative ideas is seen by schools responding to the School Survey as being beneficial during both the development and implementation of STPs (see Section 5.3). STAs are able to draw on their experiences from working with a wide range of schools and provide a mechanism for sharing good practice and lessons learnt between schools in their areas.

STA input provided when schools are developing their STP does appear to have improved the quality of many of these documents (69% of school respondents felt that the advice provided meant the quality of their STP was 'significantly better')<sup>104</sup>; and 28% of respondents stated that they would not have developed and implemented their STP without the help and support of a STA.

The role of STAs in encouraging schools to undertake regular reviews of STPs is also recognised as important in ensuring on-going engagement with pupils and travel behaviour change (see Section 4.5).

Furthermore, STAs provide a direct link between individual schools and local authorities. This has enabled schools to address transport-related concerns directly with their local authorities, and secure appropriate on- and off-site walking and cycling infrastructure improvements. It has also enabled local authorities to draw on schools' local knowledge of the transport environment to address transport problems in the locality. This in turn has informed policies such as the Sustainable Community Strategy, the Local Area Agreement, the Local Transport Plan and Local Implementation Plan. In the absence of a STA (or similar) role, this type of joint working might become more difficult.

In addition, STAs have raised the profile of travel to school issues within local authorities and have ensured that greater consideration is given to these issues by those departments and organisations relating to transport, environment, education and health.

**This suggests that there is a case for the ongoing role of STAs, however, this role will need to adapt to a new environment where most schools have STPs.** This will require a greater focus on reviewing STPs, administering local authority incentive and reward schemes, helping to incorporate transport issues into the school curriculum (taking on the role performed by RSTCAs in Yorkshire and Humber), liaising with MIS officers to improve the robustness of School Census data, and maximising mode shift where there is greatest potential.

The TTSI Project Board has already advised local authorities (in November 2009) that STAs may wish to focus on a number of key areas:

- STPs - working with those schools still without a STP; reviewing and revising existing STPs to widen the scope of STPs to cover staff travel and after school activities and to maximise outcomes of existing STPs;

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<sup>104</sup> Note, however, that the School Survey may under-estimate the views of those who were less satisfied with the input provided by their STA and therefore less engaged in the TTSI (choosing not to respond to the School Survey). The above results may therefore exaggerate the benefits of the STA role to some extent.

- integration with wider policies – considering linkages with wider strategies and programmes such as Healthy Schools, Sustainable Schools and the 14 – 19 year old agenda;
- data collection – enhancing the processes for schools to collate accurate mode of travel data and improve impact monitoring; and
- implementing practical solutions – assisting schools in the identification and implementation of feasible solutions to school travel issues such as road safety, walking, cycling and public transport measures.

It could be questioned, however, given the issues around engaging with schools identified in this report, whether 100% STP coverage is achievable and necessarily, represents good use of resources compared to maximising the mode shift from the majority of schools already signed up to an STP.

The **case for an on-going RSTA role funded by central Government** is less clear, from the evidence collated for this evaluation. As RSTAs do not engage directly with schools, views can only be drawn from the workshops with STAs, RSTAs, local authorities and GOs. In addition, because RSTAs are less focused on frontline delivery (than STAs), the benefits of their roles are more difficult to identify.

Evidence from the workshops identifies three areas of focus regarding the RSTA role.

Firstly, RSTAs are recognised (by STAs and local authorities) as important in providing a link between the TTSI Project Board and STAs, providing a mechanism for engagement between the TTSI Project Board and STAs and providing STAs with a greater level of guidance and support than would otherwise be possible. Regional meetings held by RSTAs are valued as a platform for sharing ideas and best practice with STAs, as well as providing a strong support mechanism for individual STAs. It is likely that this role would have been particularly important at the start of the TTSI, when most STAs had little experience of travel to school issues. However, some on-going (higher level) support is likely to remain important going forward, and the TTSI Project Board may struggle to provide the necessary capacity and level of interaction if the RSTA role was no longer funded.

Second, GO officers report that RSTAs have played a useful role in terms of raising the profile of the TTSI and ensured that there has been more joint working across regions on transport, environment, and health issues related to school travel. Not surprisingly, RSTAs report various levels of success in terms of engagement with officers from related policy teams / departments (e.g. Healthy School Coordinators, Children's Services Advisers, etc.), with full-time RSTAs reporting that they have more time to engage in wider policy issues than part-time RSTAs. Relatively few of the local authority officers attending the workshops had engaged directly with the RSTAs, suggesting that RSTAs have generally focused on raising the profile of the TTSI at a regional rather than local authority level (probably seeing this as more of a STA role).

Thirdly, RSTAs review a sample of STPs to ensure that the documents are being quality assured by the STAs, in accordance with the National Standard. Section 4.5 reports that the role of STAs in encouraging schools to undertake regular reviews of STPs is recognised as important in ensuring on-going engagement with pupils and travel behaviour change. However, the precise role of RSTAs in ensuring this role is undertaken is unclear. RSTAs vary in terms of the proportion of STPs reviewed and part-time RSTAs report that they find this element of their role challenging, given the limited time they have available. Going forward this role will need to evolve, as virtually all schools will have a STP in place, with more focus placed on checking that STAs are ensuring schools review and update their STPs appropriately. Again, the TTSI Project Board may struggle to provide the necessary capacity to undertake this type of activity if the RSTA role was no longer funded.

Going forward, some on-going (higher level) support role is likely to remain important in terms of retaining momentum on the TTSI. Without the input from the RSTAs the TTSI Project Board would have to identify alternative resources.

## 11.7 What Decisions does the Evidence Support for the Future of the TTSI?

The issues summarised in Sections 11.2 to 11.6 suggests the following final questions and decisions regarding the future of TTSI:

### i) Should TTSI continue, either in its current or an adapted form?

The evidence present here suggests that the programme should be continued, but will need to be adapted to a new environment where most schools have STPs:

- **TTSI Project Board** – The TTSI Project Board should be retained but develop a stronger role around understanding what works in achieving modal shift and wider benefits around STPs and in sharing best practice.
- **STA role** – As noted above, the STA role should be retained but requires a shift away from securing the target of 100% of schools having STPs towards a greater focus on reviewing STPs, administering local authority incentive and reward schemes, helping to incorporate transport issues into the school curriculum (taking on the role performed by RSTCAs in Yorkshire and Humber), liaising with MIS officers to improve the robustness of School Census data, and maximising mode shift where there is greatest potential. Government funding for STAs is due to finish in March 2011.
- **RSTA role** – The case for an on-going RSTA role funded by central Government is less clear from the evidence collated for this evaluation. However, RSTAs are recognised as important in providing a mechanism for providing STAs with a greater level of guidance and support than would otherwise be possible, raising the profile of the TTSI, and overseeing the STP review role of STAs. Going forward, some on-going (higher level) support role is likely to remain important in terms of retaining momentum on the TTSI, and the TTSI Project Board may struggle to provide the necessary capacity and level of interaction if the RSTA role was no longer funded.
- **RSTCA role** - STAs should be encouraged to take on the role performed by RSTCAs to date, in terms of ensuring sustainable travel issues are incorporated into the curriculum.

### ii) If the TTSI is to continue, what decisions should be made regarding future funding?

The availability of capital grants has been a powerful motivator for STP development and implementation. Assuming the TTSI continues, funding will need to be identified for the period beyond March 2011, either from central Government or from local authorities themselves.

Decisions about funding need to reflect evidence on the value for money provided by the outcomes, which at present, for the TTSI, are inconclusive (in quantitative BCR terms). As recommended in Chapter 10 further evidence is required on the health benefits of increased walking and cycling for children, as well as the length of time over which travel behaviour is sustained.

We note also that funding decisions will need to reflect the current climate relating to public spending and the evolving relationship between central and local Government which, at present, points to a focus on local decision making.

### iii) What needs to be done to secure better outcomes for school travel at an aggregate level?

A focus on the following areas is required in order to secure better outcomes at an aggregate level. Decisions are required as to how best to implement some of these recommendations in practice:

- **STP Guidance** – This should be updated to emphasise the importance of frequent updates in ensuring pupils and parents remain engaged in the process and to focus attention on maximising mode shift;
- **Accreditation / reward schemes** – These should be used to encourage schools to implement and develop high quality and effective STPs, recognising the positive impact local authority-based schemes have had to date. This will ensure that school travel planning is given a similar status within schools as the Eco-Schools and Healthy Schools initiatives, which both already have their own accreditation and recognition schemes;
- **Addressing parental concerns** – The effectiveness of on and off-site infrastructure is likely to be limited unless parental concerns regarding road safety issues are addressed. Schools and local authorities should provide parents with up to date information regarding any improvements to the transport environment affecting their child's school, to enable parents to make informed decisions on an on-going basis;
- **Prioritising effort to maximise benefits** - Local authorities should assess the potential for travel behaviour change across their areas, based on, for example, existing mode share data, pupil postcode plots and data on the availability of public transport services. This will enable scarce resources to be focused on those schools where there is greatest potential for change; and
- **Sharing best practice** – Evidence from the case studies demonstrates that some schools have achieved large changes in travel behaviour following the development of their STP. Sharing of best practise from this experience will ensure other schools benefit from the lessons learnt.

#### iv) How can future outcomes be monitored?

There is a need for further consideration regarding the collection of travel to school data via the School Census to ensure sufficient quality checks are in place (e.g. are there significant differences or similarities between data reported for previous years), in order to address concerns raised by STAs, RSTAs, and local authority officers. Consideration also needs to be given as to how partial changes in travel behaviour (e.g. on 1 or 2 days of the week, for part of the journey only, or during particularly times of the year) can be monitored. This will enable the impact of initiatives such as Walk on Wednesdays, park and stride schemes and Walk to School week to be recorded more robustly.

As recommended in Chapter 10, further evidence is required on the health benefits of increased walking and cycling for children, as well as the length of time over which travel behaviour is sustained. Further research is also required to understand the long term impacts of STPs on travel behaviour.

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