



Travelling to School Initiative Report on the Findings of the Initial Evaluation

Table of contents

- [1 Management Summary](#)
- [1.1 Background](#)
- [1.2 Introduction](#)
- [1.3 Methodology](#)
- [1.4 Results](#)
- [1.5 Conclusions and Recommendations](#)
- [2 Introduction](#)
- [2.1 Background to the Travelling to School Initiative](#)
- [2.2 Background to the Initial Evaluation Project](#)
- [3 Methodology](#)
- [3.1 Introduction](#)
- [3.2 Implementation of STPs pre- and post- April 2004](#)
- [3.3 Change in Modal Split in Schools with STPs](#)
- [3.4 Comparison of Modal Split in Schools With and Without STPs](#)
- [3.5 Case Studies](#)
- [4 Implementation of STPs pre- and post- April 2004](#)
- [4.1 Introduction](#)
- [4.2 Analysis](#)
- [5 Change in Modal Split in Schools with STPs](#)
- [5.1 Introduction](#)
- [5.2 Modal Shift in Schools, by Region](#)
- [5.3 Modal Shift in Schools, by Local Authority](#)
- [6 Comparison of Modal Split in Schools With and Without STPs](#)
- [6.1 Introduction](#)
- [6.2 Car Use Results](#)
- [6.3 Modal Split Results](#)
- [7 Case Studies](#)
- [7.1 Introduction](#)
- [7.2 Case Studies Showing the Wider Benefits of STPs](#)

- [7.3 Case Studies for Schools with Walking or Cycling Initiatives](#)
 - [8 Conclusions and Recommendations](#)
 - [8.1 Introduction](#)
 - [8.2 Key Findings](#)
 - [8.3 Issues Arising From the Initial Evaluation](#)
 - [8.4 Recommendations for a Final Evaluation](#)
-

1 Management Summary

1.1 Background

The Travelling to School Initiative is a joint Department for Transport (DfT) and Department for Education and Skills (DfES) initiative covering a series of measures to reduce congestion and increase the use of sustainable modes of transport for pupils' travel to and from school. The Initiative was announced in September 2003 and funding has been available to Local Authorities to appoint School Travel Advisers (STAs) since April 2004. The role of STAs is to work with schools to develop School Travel Plans (STPs), and carry out additional work that, whilst not resulting in an approved STP, does contribute to the Initiative's wider aims. In addition to making funding available for STAs, the Travelling to School Initiative allows schools who develop STPs that meet specific criteria to apply to DfES for capital grant funding.

Data from the National Travel Survey ¹ show that there has been a decrease in the proportion of pupils walking to school over the last decade, and a corresponding increase in the proportion travelling by car. Specifically, the proportion of primary aged children travelling to school by car increased by 10 percentage points (from 30% to 40%) between 1992/94 and 2002/03, whilst the proportion of secondary aged pupils increased by seven percentage points (from 16% to 23%). Given this, the aim of the Travelling to School Initiative is to reduce the proportion of children travelling to school by car, and increase the proportion walking, cycling or using public transport.

1.2 Introduction

The Department for Transport's Operational Research Unit (ORU) was commissioned to carry out an initial evaluation of the Travelling to School Initiative, after the first year of the Initiative. The aim of this work was to assess whether the formalisation of the STP process had led to a significant and widespread modal shift away from car use, and to investigate the additionality of STAs in helping schools develop approved travel plans.

There were four components of the initial evaluation:

- An investigation of the number of STPs implemented before and after the availability of funding for School Travel Advisers;
- Analysis of the extent to which there has been a statistically significant change in modal split in schools with an STP since the implementation of the STP, in particular looking at reductions in car use;
- A comparison of modal shift in schools with and schools without STPs;

- A series of case studies to illustrate the potential wider, non-modal shift benefits of STPs, and to give examples of successful walking or cycling initiatives in place in schools that do not have a full STP.

The data used for this analysis were collected by schools and Local Authorities (LAs), and submitted to the evaluation team through STAs and Regional STAs (RSTAs). The analysis carried out during this initial evaluation was severely constrained by data quality and coverage issues, and therefore the conclusions that can be drawn from this analysis are limited.

Throughout this evaluation, schools have been categorised into 'schools with an STP' and 'schools without an STP'. For the purposes of this analysis, a 'school with an STP' is considered to be a school that had completed a full STP by March 2004 and received a capital grant payment from DfES in June 2004, or a school that, whilst not being eligible for a DfES grant, would have met the criteria to be awarded one (i.e. independent schools). However, it should be noted that the date a school signed off its STP may not be in line with when the school began travel planning work. Therefore this categorisation does not distinguish between a school that had carried out travel planning work for many years prior to signing off its STP in March 2004 and a school that did not commence travel planning work until receipt of its DfES capital grant.

1.3 Methodology

To qualify for a capital grant, STPs submitted at the end of March 2004 had to meet laid down criteria including "a baseline survey of pupils' patterns of travel to school" and "an undertaking that the baseline survey will be updated regularly to measure the success of the plan". In order to inform the initial evaluation, schools were asked to complete these follow-up surveys between September 2004 and February 2005. These 'before' and 'after' data were analysed for each school to investigate whether schools had made a statistically significant change in modal split since implementing their STP, and in particular whether there had been a significant reduction in car use. These results were summarised, by phase, for each LA and region to show the number of schools where there had been a statistically significant reduction in car use, and which other modes had contributed to this reduction. The quality of the data available means the results from this analysis should be interpreted with caution.

It was also intended to compare modal shift in schools with and schools without STPs in a random selection of LAs to control for other area-wide initiatives in place, and to assess the extent to which STP schools have seen a modal shift different to that observed in non-STP schools over the same period. However, due to problems with data quality and coverage, this analysis was instead carried out for 10 LAs for which relatively robust data were available, and modal shift in these LAs was analysed. This analysis involved splitting schools with suitable data into 'STP schools' and 'non-STP schools' and then investigating whether there had been a statistically significant change in the proportion of pupils travelling by individual modes in each group of schools. Again, due to the quality of data available, the results should be interpreted with caution.

The change in number of STPs implemented before and after the introduction of funding for School Travel Advisers in April 2004 was investigated by comparing the number of STPs meeting the criteria for capital grant funding in place at the end of March 2004 with that meeting the criteria in place at the end of March 2005.

A series of case studies were carried out to show the wider benefits to schools of introducing an STP, and the range of non-modal shift benefits that can be achieved. Case studies were also selected to give examples of schools that have implemented successful walking or cycling initiatives that are not part of a full STP. Twenty four potential case studies were identified, with STAs providing a further three case studies on initiatives taking place more widely in their LAs. However, after initial investigation, not all case studies proved suitable for this initial evaluation.

1.4 Results

The evidence found by the initial evaluation is inconclusive, and it is not possible to say for certain from this work whether the Travelling to School Initiative is meeting its aims of reducing the proportion of children travelling to school by car, and increasing walking, cycling or use of public transport. There is little empirical evidence to suggest that a modal shift, above that which may have happened anyway, has occurred in schools with STPs. There are examples of schools and LAs where a considerable amount of good work is being carried out, and modal shift away from car use and towards walking, cycling or public transport has been achieved. However, from the analysis carried out in this initial evaluation, this does not appear to be a pattern that holds true in the majority of schools included in the analysis.

However, there are two important lessons to learn from this initial evaluation that must be considered further, particularly if a final evaluation is to be carried out at a later date. Firstly, the data that were available for this work were generally of poor quality and coverage. This means that **the analysis comparing modal split before and after implementation of an STP, and the comparison of modal shift in schools with and schools without STPs, is only valid for the pupils and schools for whom suitable data were available. It is not possible to extrapolate conclusions to all pupils or schools in the LA or region, or to draw conclusions from this analysis about the impact of the Travelling to School Initiative nationally.** In addition, some of the results presented in this report are based on small numbers of schools or LAs. Therefore, steps need to be taken to ensure that future data collection is more comprehensive and consistent.

Secondly, the distinction between an 'STP school' and a 'non-STP school' is largely artificial. This initial evaluation has found many examples of successful cross-LA schemes that are available to both categories of schools. In addition, in some schools initiatives are only implemented after the STP has been completed, whereas other schools implement initiatives prior to completing their STP, and the date of sign-off is therefore largely irrelevant.

The key findings from this analysis are:

- There has been a considerable increase in the number of STPs completed between 2003/04 and 2004/05, following the introduction of funding for School Travel Advisers. However, it is 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 fears about safety;
- In the majority of schools with STPs included in the analysis there does not appear to have been a significant reduction in car use (defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey, compared with pupils included in the 'before' survey) since the STP was implemented;
- Data were available for many more primary schools with STPs than secondary schools, and in some

cases the number of secondary schools with data suitable for analysis was particularly low. 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;

- For primary schools, results at regional level ranged from 4% of schools analysed achieving a significant decrease in car use in the North East to 28% of schools analysed in the North West;
- For secondary schools, results varied widely across regions from neither of the two London schools analysed seeing a significant decrease in car use to 80% of the schools analysed in the North West;
- For primary schools included in the analysis, schools with a significant increase in car use outnumbered schools achieving a significant decrease in car use in 27 out of 71 LAs analysed, whilst for secondary schools the same was true in 26 out of 50 LAs;
- At a regional level, negative modal shifts in primary schools included in the analysis outnumbered positive ones in four regions, whilst for secondary schools this was the case in seven regions;
- When comparing schools with and without STPs, there was one group (secondary schools in Redcar and Cleveland) where there was a reduction in car use among pupils surveyed in STP schools but not among pupils surveyed in schools without an STP;
- A further group of schools with STPs (primary schools in Shropshire for which data were available) achieved a significant decrease in the proportion of pupils travelling by car but this was also observed in schools without STPs in the area. Furthermore, among the secondary schools in Shropshire which were included in this analysis, those without STPs achieved a reduction in car use, whilst the schools with STPs did not;
- Four of the groups of schools with STPs included in the analysis, and seven of the groups of schools without STPs saw a significant increase in car use over the relevant periods;
- A number of case studies were selected for this initial evaluation to illustrate a range of non-modal shift benefits of STPs in individual schools, and to give examples of schools that have implemented successful walking or cycling initiatives that are not part of a full STP. 16 are included in this report; of these five illustrate successful walking or cycling initiatives, and the remaining 11 illustrate wider, non-modal shift benefits, as follows:
 - Increased independent travel for pupils with special educational needs;
 - Increased confidence in pupils with special educational needs;
 - Changes in educational attitudes;
 - Increased pupil involvement in travel planning work, and integrating this into the curriculum;
 - Health benefits of more active travel;
 - Opportunities for working with the local community;
 - Increased safety (on the roads, on school sites, on buses);
 - Engaging bus operators;
 - Improvements in pupils' behaviour
 - Engaging schools and pupils from deprived areas;
 - Building positive relationships with the Local Authority;
 - Reducing road casualties;
 - Increasing punctuality and attendance;
 - Raising environmental awareness.

1.5 Conclusions and Recommendations

The initial evaluation of the Travelling to School Initiative has found little evidence to suggest that there has been a widespread modal shift, above that which may have happened anyway, in schools with STPs. Whilst modal shift away from car use and towards walking or cycling has been achieved in some schools or LAs, from the analysis carried out in this initial evaluation, this does not appear to be a pattern that holds true in the majority of schools. However, due to the limitations of the data available, it is not possible to draw conclusions about the national impact of the Initiative.

There are several caveats to this analysis. Firstly, the Travelling to School Initiative had only been in place for around a year at the time of this initial evaluation, and much of this analysis is based on surveys carried out some months before the initial evaluation was undertaken; therefore there has been little time to see any benefit from the work of School Travel Advisers, for example. Secondly, throughout the initial evaluation, many issues with data quality and availability were encountered. It is hoped that many of these issues can be overcome before any final evaluation. However, it is essential that procedures are put in place to ensure that robust and reliable data can be collected in future, even if these take some years to feed through.

Data collection issues fall under two main headings: problems with *what* data are collected, and problems with *how* the data are collected. Throughout the initial evaluation it was clear that data were being collected through a variety of methods, and that even if guidance was available to those collecting data, it was not being consistently followed. Whilst the issuing of comprehensive guidance to schools, STAs and RSTAs could help resolve some of the issues identified in the future, guidance alone is not sufficient to ensure robust and reliable data are provided. It is vital that a clear message about the importance of data collection is communicated to all involved to ensure that this is not seen as an optional extra. One method of overcoming some of these problems could be the collection of mode of travel to school data through the Pupil Level Annual Schools' Census - a well established data collection exercise that results in comprehensive data coverage and robust data.

It has only been possible to carry out the majority of the analysis in the initial evaluation for a subset of pupils and schools for whom suitable data were available, and it is not possible from this analysis to draw conclusions about the impact of STPs at LA or national levels. However, it might be expected that if STPs had had a consistent and widespread impact (in terms of modal shift) some evidence of this would have been found. The lack of evidence could be due to one or more of the following:

- The definition of an 'STP school' and 'non-STP school' is artificial, and therefore it may be more appropriate to investigate modal shift since travel planning work began in the school, rather than using an arbitrary sign-off date to categorise schools;
- There has not been enough time for the effects of STPs to be seen in survey responses;
- STPs do not cause large enough modal shifts for this to be seen on top of the random changes that could be expected year-on-year;
- Problems with the data collection methodology, such as the use of different survey questions by different schools and/or LAs, are masking any effects;
- There is variation in the quality of STPs, and in how actively actions and initiatives from the STP are driven forward in schools.

If a final evaluation is to be carried out, further consideration will need to be given on how to classify schools according to whether or not they have implemented an STP. The initial evaluation used a fairly crude and artificial criterion, classing any school with an STP completed by 31 March 2004 as an 'STP school'. However, this ignores the fact that some schools implement 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 LAs have implemented cross-authority schemes that are available to both groups of schools.

During a final evaluation, it would also be of interest to follow up on some of the case studies carried out in this initial evaluation. This would allow an investigation of the ongoing impact of schools' initiatives, as well as assessing whether some of the expected wider benefits have been realised in schools where travel planning work has only recently begun.

¹ Data are taken from the Department for Transport publication 'Focus on Personal Travel', 2005 edition

2 Introduction

2.1 Background to the Travelling to School Initiative

The Travelling to School Initiative is a joint Department for Transport (DfT) and Department for Education and Skills (DfES) initiative covering a series of measures to reduce congestion and increase the use of sustainable modes of transport for pupils' travel to and from school. The Initiative was announced in September 2003 and funding has been available to Local Authorities to appoint School Travel Advisers (STAs) since April 2004. The role of STAs is to work with schools to develop School Travel Plans (STPs), and carry out additional work that, whilst not resulting in an approved STP, does contribute to the Initiative's wider aims. In addition to making funding available for STAs, the Travelling to School Initiative allows schools who develop STPs that meet specific criteria to apply to DfES for capital grant funding.

Data from the National Travel Survey ² show that there has been a decrease in the proportion of pupils walking to school over the last decade, and a corresponding increase in the proportion travelling by car. Specifically, the proportion of primary aged children travelling to school by car increased by 10 percentage points (from 30% to 40%) between 1992/94 and 2002/03, whilst the proportion of secondary aged pupils increased by seven percentage points (from 16% to 23%). Given this, the aim of the Travelling to School Initiative is to reduce the proportion of children travelling to school by car, and increase the proportion walking, cycling or using public transport.

2.2 Background to the Initial Evaluation Project

The Department for Transport's Operational Research Unit (ORU) was commissioned to carry out an initial evaluation of the Travelling to School Initiative, after the first year of the Initiative. The aim of this work was to assess whether the formalisation of the STP process had led to a significant and widespread modal shift away from car use, and to investigate the additionality of STAs in helping schools develop approved travel plans.

There were four components of the initial evaluation:

- An investigation of the number of STPs implemented before and after the availability of funding for School Travel Advisers;
- Analysis of the extent to which there has been a statistically significant change in modal split in schools with an STP since the implementation of the STP, in particular looking at reductions in car use;
- A comparison of modal shift in schools with and schools without STPs;
- A series of case studies to illustrate the potential wider, non-modal shift benefits of STPs, and to give examples of successful walking or cycling initiatives in place in schools that do not have a full STP.

The data used for this analysis were collected by schools and Local Authorities (LAs), and submitted to the evaluation team through STAs and Regional STAs (RSTAs). The analysis carried out during this initial evaluation was severely constrained by data quality and coverage issues, and therefore the conclusions that can be drawn from this analysis are limited.

Throughout this evaluation, schools have been categorised into 'schools with an STP' and 'schools without an STP'. For the purposes of this analysis, a 'school with an STP' is considered to be a school that had completed a full STP by March 2004 and received a capital grant payment from DfES in June 2004, or a school that, whilst not being eligible for a DfES grant, would have met the criteria to be awarded one (i.e. independent schools). However, it should be noted that the date a school signed off its STP may not be in line with when the school began travel planning work. Therefore this categorisation does not distinguish between a school that had carried out travel planning work for many years prior to signing off its STP in March 2004 and a school that did not commence travel planning work until receipt of its DfES capital grant.

It was hoped that this initial evaluation would provide evidence to support the extension of the funding of STAs as part of the Travelling to School programme beyond the original deadline of March 2006. However, the starting hypothesis for this evaluation, as with any rigorous evaluation, was that the initiative has had no impact. The following sections of this report will assess whether this hypothesis is true, or whether it can be rejected, thereby proving that the programme has had an impact.

During the initial evaluation, ORU worked with a Steering Group consisting of members of DfT and DfES, and a representative of the Regional School Travel Advisers. This ensured that the methodology for the evaluation met the needs of the policy area, whilst remaining analytically rigorous, and the burden on schools and Local Authorities was kept to a minimum.

² Data are taken from the Department for Transport publication 'Focus on Personal Travel', 2005 edition

3 Methodology

3.1 Introduction

The following sections describe the methodology used in the various components of the evaluation. Sections 3.2 to 3.4 focus on the quantitative strands of the project, and describe the data used, the manipulation required before these data could be analysed, and the analytical approach taken. Section 3.5 describes the aim of the case studies, the framework used to collect information from schools, and the

actions required to finalise the studies.

Throughout this evaluation, schools have been classified as either a 'school with an STP' or a 'school without an STP'. For the purposes of this analysis, a 'school with an STP' is considered to be a school that had completed a full STP by March 2004 and received a capital grant payment from DfES in June 2004, or a school that, whilst not being eligible for a DfES grant, would have met the criteria to be awarded one (i.e. independent schools). To qualify for a capital grant, STPs submitted at the end of March 2004 had to meet laid down criteria including "a baseline survey of pupils' patterns of travel to school" and "an undertaking that the baseline survey will be updated regularly to measure the success of the plan". In order to inform the initial evaluation, schools were asked to complete these follow-up surveys between September 2004 and February 2005.

Prior to carrying out the analysis detailed below, ORU investigated the proportion of all schools (excluding independent and nursery schools) with an STP completed and having received a DfES capital grant in June 2004 and June 2005, by region and by Local Authority. Tables showing these data are given in Annex A.

Throughout this evaluation, a number of data quality and coverage issues were identified. These are detailed in Annex B, where any limitations to the analysis are also described.

3.2 Implementation of STPs pre- and post- April 2004

The number of STPs receiving funding of a School Travel Plan capital grant from DfES in June 2004 and June 2005 was investigated to show the extent to which there has been a change in the number of full STPs implemented since April 2004, when funding became available for School Travel Advisers. Minimum standards for STPs were first set out in September 2003 in *Travelling to School: A good practice guide*. Slightly relaxed criteria were agreed prior to March 2004 when the first STPs were submitted for consideration of payment of grant, and these were firmed up prior to March 2005, before the second round of payment of grants.

The number of full STPs completed and submitted for payment of grant in March 2004 and March 2005 is shown in Section 4. Ideally these data would have been compared with the number of STPs that would have been expected to be completed over the same period if additional funding for STAs had not been available, to gain an idea of the impact of STAs on the number of STPs completed. However, no suitable data sources were available to assess this directly, and so Section 4 also presents background information from LAs' Annual Progress Reports. This information helps put capital grant data into context, by showing data provided by LAs prior to the introduction of the Travelling to School Initiative on the number of STPs in place in the financial years 2001/02 and 2002/03, and the number that LAs were planning to implement in 2003/04 and 2004/05. However, it is important to consider that APR data are not directly comparable to capital grant data, and are not available for all LAs (APRs do not cover London Boroughs, and LAs rated 'excellent' in the Audit Commission's Comprehensive Performance Assessment do not have to report progress). Section 4 also contains further contextual information from a UKLAST survey of schools asking how many would have implemented an STP without the help of their School Travel Adviser.

3.3 Change in Modal Split in Schools with STPs

3.3.1 Data

The aim of this analysis was to investigate whether schools with a full STP had made a statistically significant change in modal split since they implemented their STP, and in particular a significant decrease in car use.

To do this, data were collected by Regional School Travel Advisers (RSTAs) from schools that had completed an STP by the end of March 2004 and had received payment from DfES of a School Travel Plan capital grant, or who had completed a suitable STP but were not entitled to a capital grant (i.e. independent schools). The information collected from schools consisted of two modal split surveys, one of which was the baseline survey included in the school's STP (their 'before' data), and the other collected at some point during the period September 2004 - February 2005 (their 'after' data). Data took the form of the number of pupils in the schools travelling by the following modes:

- Walk
- Cycle
- Bus
- Car/van
- Rail
- Other
- Car share (defined as 'travel in a car with another child/other children also going to school but who does/do not live in the same house')

During the data collection process RSTAs encountered problems with some LAs, who were unable or unwilling to provide the required data. In addition, there were a number of data quality and coverage issues, detailed in Annex B, that meant that it was necessary to exclude some schools from this analysis.

Table 1 below shows the number of STP schools receiving a capital grant in June 2004 (therefore excluding independent schools) in each region, the number of STP schools that provided data (including some independent schools), and the number of these that were suitable for analysis. The table also shows the numbers of pupils within schools with suitable data that responded to the 'before' and 'after' surveys, and the total pupil headcount in *all* schools (with and without STPs) in the region. Therefore the columns in the table are not directly comparable.

Table 1

Region	Phase	NOT including independent schools		Including independent schools				Number of pupils in all primary and secondary maintained schools in region	Number of pupils in all special schools in region	Number of pupils in all independent schools in region
		Total grants paid	Grants paid to special schools	Number of schools providing 'before' and 'after' data	Number of schools with suitable data	Number of pupil responses - 'before' survey	Number of pupil responses - 'after' survey			
EE	Primary	234	3	162	148	31,035	26,661	450,530	8,975	65,535
	Secondary	49		37	26	5,896	5,549	388,020		
EM	Primary	187	0	170	97	35,737	34,310	370,745	6,014	34,358
	Secondary	26		10	9	19,869	15,004	301,961		
Lon	Primary	102	2	29	29	7,897	7,693	271,770	5,459	60,173
	Secondary	14		2	2	1,187	678	202,014		
NE	Primary	122	1	98	79	16,890	20,816	207,173	5,365	13,545
	Secondary	29		18	12	6,644	9,352	174,398		
NW	Primary	297	0	75	72	15,551	17,979	575,595	13,452	51,160
	Secondary	50		10	10	7,237	6,331	445,694		
SE	Primary	333	3	166	148	47,844	47,620	619,875	16,392	144,027
	Secondary	87		39	38	29,348	30,553	489,965		
SW	Primary	306	0	231	139	29,010	38,640	352,216	6,351	61,278
	Secondary	72		47	30	28,232	24,267	298,607		
WM	Primary	184	3	165	148	34,342	30,598	409,135	10,757	39,275
	Secondary	63		39	39	27,189	24,247	328,015		
YH	Primary	143	1	131	94	29,162	24,939	259,711	3,968	24,745
	Secondary	31		25	18	18,127	15,709	199,903		

Once schools with unsuitable data had been removed from the analysis, a final step was carried out to remove blanks from the remaining data. Following consultation with the Steering Group, it was agreed to treat blanks in modes other than car share as zeros. For car share, however, it is known that this mode was often included in travel by car in the 'before' surveys. Some schools represented this with, for example, an "n/a" entry for car share but in other cases, it was known that a zero had been entered for car share when in fact this mode was not asked about separately. Therefore, car share was grouped together with travel by car for all schools unless there was a non-zero entry in both the 'before' and 'after' data, thereby guaranteeing that car share had been asked about separately in both surveys, and that any changes in frequency observed were true ones. However, it is possible that by grouping car share with car some positive changes in modal split, such as a move from car use to car share, have been masked.

3.3.2 Analysis

A statistical test was carried out, for each individual school, to investigate whether a statistically significant change had been made in modal split between the 'before' and 'after' data.

The original intention was to use the chi-squared test, but this would require each school to have non-zero numbers of pupils travelling by each individual mode, and for no more than 20% of the modes across both the 'before' and 'after' data to have less than five pupils using them. As many schools failed this test (in many cases schools had no pupils travelling by some of the less common modes), an alternative test, Fisher's Exact test, was used, which allowed for mode counts of zero.

The test was carried out for each school to test whether there had been a significant change in the proportion of pupils travelling by the various modes, between the 'before' and 'after' surveys. These results were then summarised, by phase, for each LA and region, to show the number of schools where there had been a significant reduction in car use, and which other modes had contributed to this reduction. Throughout this report, a positive modal shift is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey, compared with pupils included in the 'before' survey.

Despite thorough data cleansing, there are inherent problems with the quality of data available and the results of this analysis should therefore be interpreted with caution. Although the number of pupils included in the analysis is reasonably large, the pupils included in the school surveys cannot be assumed to be representative of the schools or LAs as a whole. The results presented here are therefore only valid for the pupils who participated in the surveys and cannot be extrapolated to draw wider conclusions about changes in modal split. The findings should therefore be regarded as indicative only.

3.4 Comparison of Modal Split in Schools With and Without STPs

3.4.1 Data

As there was no obvious control group available to compare schools with STPs to, an attempt was made to compare modal shift in schools with STPs to modal shift in schools without STPs, within the same LA. The aim of this was to establish whether any changes in modal split may have occurred anyway, without the introduction of the STP, for example due to area-wide initiatives. Similarly, this would enable identification of examples where there had been no change in modal split in schools with STPs, against a background of increasing car use. The original intention was to carry out this analysis in a random selection of LAs, but as many did not collect suitable data, 10 LAs with reasonably robust and comprehensive data were selected for analysis. The criteria used to select LAs with suitable data are listed in Annex B.

To allow changes in modal split to be investigated, it was necessary to collect data from these 10 LAs from an area-wide survey carried out in 2004 or 2005, and at least one earlier survey, the timing of which depended on what data the LA had available. It was necessary to carry out extensive data cleaning prior to analysis, which resulted in some schools being removed from the available dataset. These checks are described in more detail in Annex B.

3.4.2 Analysis

Within each of the 10 LAs, data from schools suitable for analysis were split into two groups - pupils in schools with STPs, and pupils in schools without STPs. Charts were then produced showing the proportion of pupils travelling by individual modes and how this had changed over time, comparing pupils in schools with and schools without STPs. Significance tests were then carried out to test whether the

proportion of pupils travelling by each mode was significantly different in the latest survey to the first survey. A summary of these results is presented in Section 6, and detailed results and charts are in Annex D.

In some cases it was necessary to combine modes where small counts of pupils occurred. Generally, the modes used were as follows:

- Walk
- Car
- Cycle
- Bus
- Taxi
- Other

Again, the interpretation of these results is constrained by the quality of the data available. The results of this analysis are presented by LA, but are only valid for the pupils who responded to the survey, in the schools whose data were suitable for analysis. It is not possible to extend the results from each LA's sample of schools to the LA as a whole, nor is it possible to extrapolate from this analysis to draw more general conclusions about modal shift.

3.5 Case Studies

RSTAs were asked to identify schools that could be used as case studies to illustrate the potential benefits of STPs, that were wider than simply modal split benefits, and also to identify any schools with particularly successful walking or cycling initiatives that were not part of an implemented STP. In total 24 potential case studies were selected from those identified by RSTAs to illustrate a range of potential wider benefits of STPs, as well as successful walking and cycling initiatives. The wider benefits identified from the case studies included:

- A reduction in traffic congestion in the immediate vicinity of the school
- An improved perception of safety
- A reduction in casualties
- More alert and healthier students
- A reduction in truancy
- Engaging difficult children
- Improved quality of bus journeys
- Other benefits relating to deprivation and poorer families
- Benefits relating to children with Special Educational Needs

Of the potential 24 case studies, 15 related to the wider benefits listed above, and nine were examples of schools with successful walking or cycling initiatives.

ORU developed a case study framework that was sent to the selected schools, along with a letter of introduction, prior to carrying out telephone interviews with those responsible for school travel initiatives within the school. The framework set out the areas for discussion in the telephone interview, and the questions ORU were hoping to have answered. By sending this to schools in advance of the telephone interviews it was hoped that schools would have a chance to consider their answers prior to the interview.

The frameworks (one for schools with STPs and one for schools with walking or cycling initiatives) are given in Annex E.

ORU carried out telephone interviews with 23 of the 24 selected schools during March and April 2005. Unfortunately it proved impossible to contact the relevant teacher at the last school, and this case study had to be abandoned. A further three case studies were provided by STAs.

Once ORU had completed a telephone interview, the teacher's responses were written up in a structured format. The relevant STA was then contacted to provide further background information on several of the case studies. Once the report on the case study had been finalised it was cleared for publication with the school. The findings from the case studies are summarised in Section 7, and individual reports are in Annexes F and G.

4 Implementation of STPs pre- and post- April 2004

4.1 Introduction

The number of STPs implemented pre- and post- April 2004, when funding for School Travel Advisers became available through the Travelling to School Initiative, have been analysed to investigate whether there were noticeably more STPs implemented in 2004/05 than there were in the previous year, before STAs were in post.

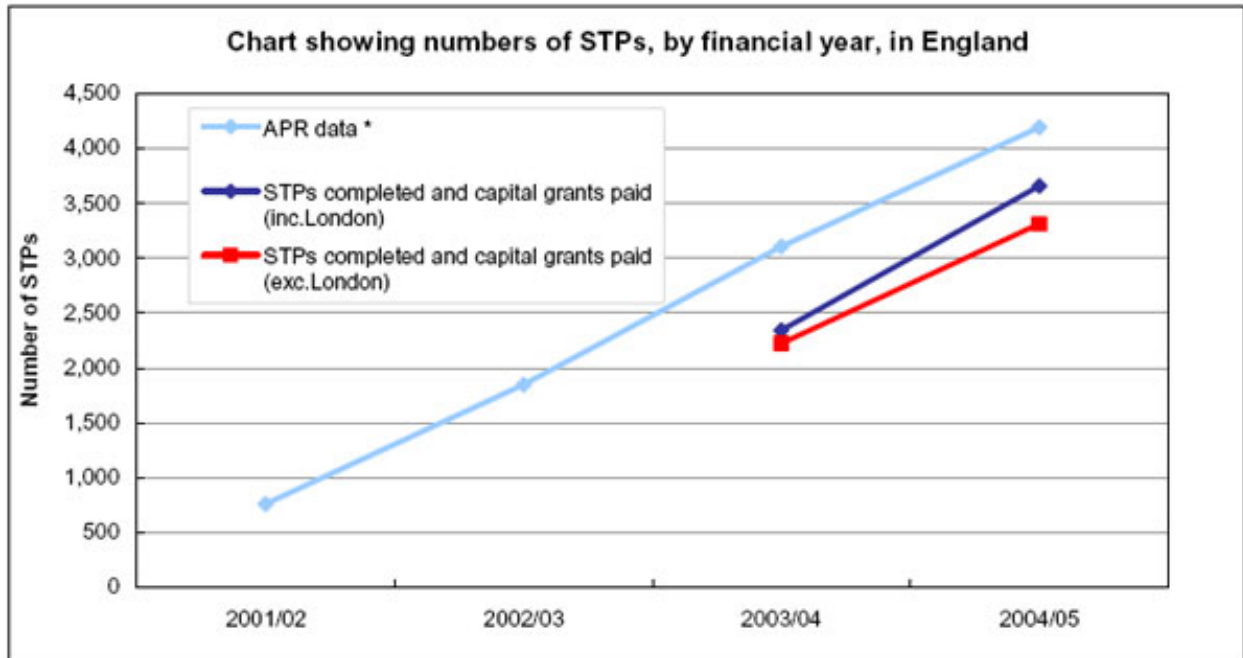
4.2 Analysis

Chart 1 below shows the number of schools that received DfES capital grant funding in June 2004 and June 2005, having met the criteria for completing an STP. However, these data do not include any schools that met the criteria for completing an STP, but were not eligible for the capital grant - i.e. independent schools.

Background data are also presented from LAs' Annual Progress Reports (APRs), showing the number of STPs implemented, or that LAs were planning on implementing before the Travelling to School Initiative was introduced. Data are taken from August 2003 APRs, and so 2001/02 and 2002/03 data are actual numbers of STPs implemented, whilst data for 2003/04 and 2004/05 are planned data. London Boroughs, and LAs rated 'excellent' through the Audit Commission's Comprehensive Performance Assessment do not have to complete an APR, and so these data do not include all LAs in England. Therefore to provide a fairer picture, the number of capital grants paid in June 2004 and June 2005 are presented including and excluding London Boroughs. It is not possible to exclude LAs rated 'excellent' from this data series as it is not known which of these did not submit an APR in August 2003.

In considering Chart 1 below it is important to be aware that there may be a considerable difference between what was considered to constitute an STP for APR purposes and what would be required currently for an STP to receive capital grant funding. Minimum standards for STPs were first set out in September 2003 in *Travelling to School: a good practice guide*, after the APR data shown in the chart were provided. Therefore, it is possible that the STPs that LAs stated were in place in 2001/02 and 2002/03 would not have met the current criteria.

Chart 1



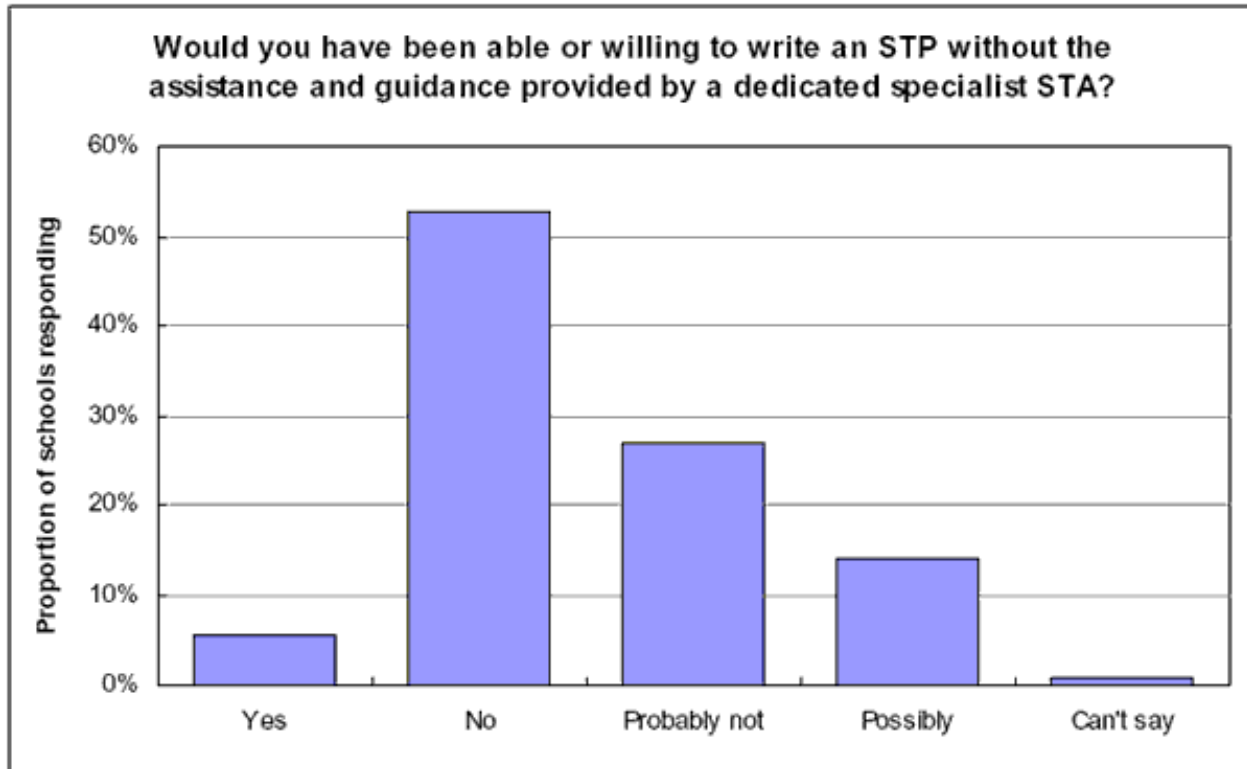
***APR data show the number of STPs implemented in 2001/02 and 2002/03, and the number of STPs that, in August 2003, LAs were planning on implementing during 2003/04 and 2004/05. These data are not directly comparable to the number of grants paid in June 2004 and June 2005.**

Chart 1 shows that there was a considerable increase in the number of STP grants paid between June 2004 and June 2005. The increase was slightly steeper in London Boroughs than in all LAs. It is also worth considering that the criteria for payment of a capital grant were applied more stringently in 2005 than in 2004, making this increase even more noteworthy.

In a separate exercise, a questionnaire was sent to all members of the UKLAST forum in April 2005, to gain a snapshot of a number of LAs' views on whether schools would have been able or willing to develop an STP without the assistance of a dedicated STA. The expectation of this questionnaire was that the head teacher, governor or travel plan champion from six selected schools within the LAs would fill in their thoughts on how their STA had collaborated with them and state (from one of five set categories) whether they would have been able to implement a full STP without the STA's assistance. This exercise did not form part of the initial evaluation, but the results of this questionnaire are included here to provide further background information.

Chart 2 below shows the answers received from the 129 selected schools. Some questionnaire returns from schools did not explicitly select one of the five answer categories, but comments provided were interpreted by UKLAST and schools allocated to one of the answer categories.

Chart 2



The chart shows that the majority (53% or 68) of the surveyed schools feel that they would not have been willing or able to write an STP without the assistance and guidance of their STA. Comments received from these schools on the survey form were very positive, and show that they feel it is invaluable to have an expert in school travel planning readily available to help them and provide advice. Conversely, only 5% (7 schools) felt they would have been able or willing to produce an STP without the support of their STA.

5 Change in Modal Split in Schools with STPs

5.1 Introduction

Analysis was undertaken on data provided by schools with STPs from two surveys - one before and one after the introduction of their STP - to determine whether there had been a significant decrease in the proportion of pupils travelling by car.

Whilst the introduction of the STP may have contributed to any modal shift, it should be noted that other factors may also have played a part, for example any area-wide initiatives. Section 6, which compares modal shift in schools with and without STPs, aims to control for the effects of area-wide initiatives. However, there could also have been external factors such as weather conditions - working in the same or opposite direction to the STP - which cannot be accounted for.

In some regions and/or Local Authorities, data were not provided by all schools. This problem was more prevalent for secondary schools than primary schools, and in some cases the number of secondary schools with data suitable for analysis was particularly low. A further issue was that the data that were provided included the number of pupils surveyed; however it was not known what proportion of the total school this represented or how the sample was selected. Therefore the data cannot be assumed to be representative of the whole school. As it is not known whether the same groups of pupils responded in both the 'before' and 'after' survey, the presence or absence of a modal shift could be due to sampling/response bias. For example, if in a primary school's 'before' survey, infant classes were surveyed, whereas in the 'after' survey, the sample consisted of junior classes, then an apparent modal shift could in fact be a reflection of the different ages of pupils surveyed. **The results in this section are therefore valid only for the pupils within the schools who responded to the surveys and should be interpreted with caution.**

The following sections present results at regional and LA level.

Section 5.2 looks at modal shifts in schools by region. Results are presented separately for primary and secondary schools. Tables show:

- The number of schools providing data;
- The number of these schools with data suitable for analysis;
- The number and proportion of these schools where a significant positive modal shift was observed between their 'before' and 'after' data, defined below:

Definition: Positive modal shift; A positive modal shift or reduction in car use is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey.

- For those schools with significant positive modal shift, any corresponding significant changes in each of the other modes, where again, a significant change is defined as a statistically significant difference between the proportion of pupils responding in the 'before' survey travelling by a given mode and the proportion of pupils responding in the 'after' survey travelling by that mode.

Corresponding tables for negative modal shifts (i.e. a significant increase in car use between 'before' and 'after' surveys) are also presented.

Section 5.3 looks at modal shifts in schools by LA within each region.

Many schools appear not to have collected data on car sharing both in their 'before' and 'after' surveys. Therefore, for consistency, data on travel by car and car sharing have been combined. However, it is possible that by grouping car share with car some positive changes in modal split, such as a move from car use to car share, have been masked.

5.2 Modal Shift in Schools, by Region

Chart 3 shows the proportion of primary schools included in the analysis with positive modal shift, by region, and compares this to the proportion of schools with negative modal shift. The numbers in brackets after region names indicate the number of schools with suitable data that were included in the analysis.

Note: results are for those schools with suitable data included in the analysis only and show the percentage of these schools with a significant reduction/increase in the proportion of pupils included in the 'after' survey travelling by car, compared with pupils included in the 'before' survey. It is not known whether pupils surveyed are representative of the whole school or that schools included in the analysis are representative of all schools in the region, and results should not be extrapolated for this purpose.

Chart 3

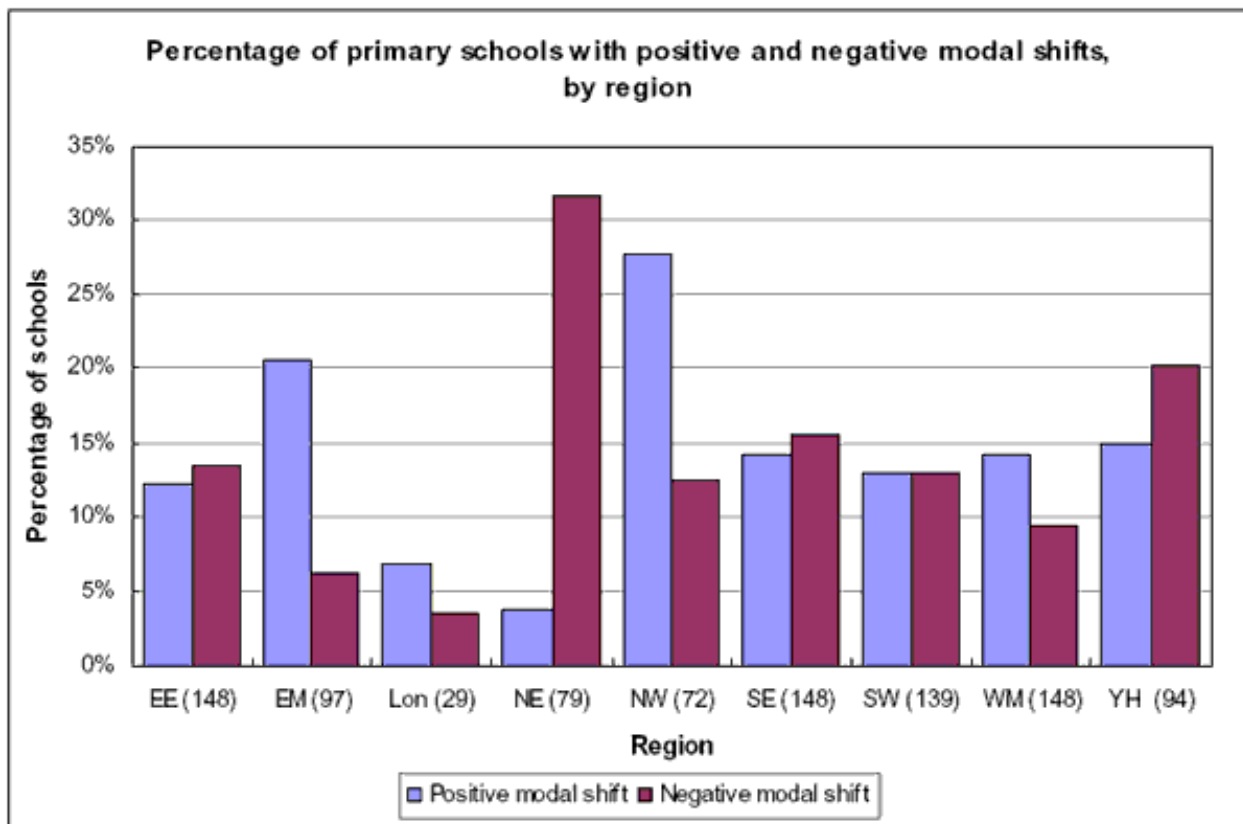
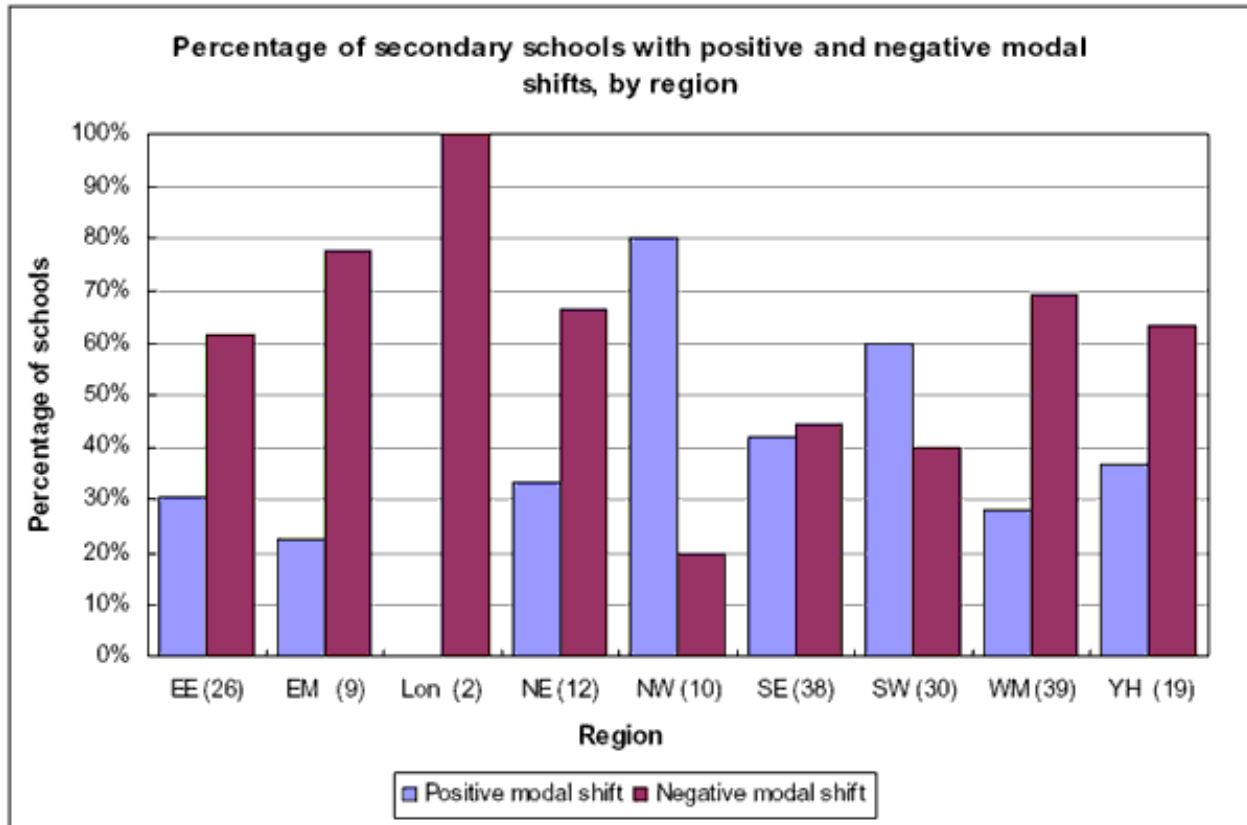


Chart 4 shows similar findings for secondary schools.

Chart 4



The main points to note are:

For primary schools, the proportion of schools included in the analysis with a positive modal shift, as defined in section 5.1, varied from 4% of schools in the North East to 28% of schools in the North West. The average across all regions was 14%, with examples of positive modal shift in each region. The average proportion of schools with negative modal shift was also 14%, with examples in all regions.

For secondary schools, the proportion of schools included in the analysis with a positive modal shift, as defined in section 5.1, varied even more widely from no schools in London to 80% of schools in the North West, although this could be due to the small number of schools analysed (only two in London). The average across all regions was 40%, with examples of positive modal shift in all regions except London. However, the average proportion of schools with significant negative modal shift was 56%, examples of which were observed in all regions.

Schools included in the analysis with significant increases in car use outnumbered schools with significant reductions in car use, as defined in section 5.1, in four regions for primary schools and seven regions for secondary schools.

Table 2 presents more detailed results by region including, for those schools with significant modal shift, any corresponding significant changes in each of the other modes. The table shows the number of schools with STPs who provided 'before' and 'after' data, the number of these whose data were suitable for analysis, and of these, the number and percentage who have experienced a significant modal shift.

Table 2

Note: results are only valid for the pupils who responded to the surveys, in the schools whose data were suitable for analysis. They do not represent schools in the region or LA as a whole and cannot be extrapolated for this purpose. A positive modal shift is defined as a significant reduction in the proportion of pupils responding in the 'after' survey travelling by car compared with the 'before' survey. Likewise a negative modal shift is defined as a significant increase in the proportion of respondents travelling by car 'before' and 'after'.

Primary schools with positive modal shift

	Number of schools providing data	Of which		Of which increase in proportion of pupils travelling by					Of which decrease in proportion of pupils travelling by					
		Number with valid data	Number with positive modal shift	Percentage with positive modal shift	walk	cycle	bus	rail	other	walk	cycle	bus	rail	other
EE	162	148	18	12%	13	3	3	-	1	-	1	-	-	1
EM	170	97	20	21%	16	1	-	-	1	-	1	-	-	-
Lon	29	29	2	7%	1	-	-	-	-	-	-	-	-	-
NE	98	79	3	4%	2	-	-	-	1	-	-	-	-	-
NW	75	72	20	28%	12	-	2	1	2	-	-	2	-	-
SE	166	148	21	14%	16	3	4	-	2	1	2	-	-	1
SW	231	139	18	13%	11	3	-	1	4	1	1	1	-	-
WM	165	148	21	14%	17	12	2	-	-	-	5	2	-	1
YH	131	94	14	15%	12	3	1	-	1	-	-	-	-	-
Overall	1,227	954	137	14%	100	25	12	2	12	2	10	5	-	3

Primary schools with negative modal shift

	Number of schools providing data	Of which		Of which increase in proportion of pupils travelling by					Of which decrease in proportion of pupils travelling by					
		Number with valid data	Number with negative modal shift	Percentage with negative modal shift	walk	cycle	bus	rail	other	walk	cycle	bus	rail	other
EE	162	148	20	14%	1	2	3	-	1	15	1	1	-	2
EM	170	97	6	6%	-	1	-	-	-	5	-	-	-	-
Lon	29	29	1	3%	-	-	-	-	-	1	-	1	-	-
NE	98	79	25	32%	-	-	2	-	5	19	-	1	-	4
NW	75	72	9	13%	-	-	1	-	2	7	-	-	-	-
SE	166	148	23	16%	1	2	2	1	4	16	1	2	-	-
SW	231	139	18	13%	-	4	-	-	4	11	-	2	-	2
WM	165	148	14	9%	-	7	1	-	-	8	1	-	-	-
YH	131	94	19	20%	-	2	-	-	1	15	-	1	-	-
Overall	1,227	954	135	14%	2	18	9	1	17	99	3	8	-	8

Secondary schools with positive modal shift

	Number of schools providing data	Of which		Of which increase in proportion of pupils travelling by					Of which decrease in proportion of pupils travelling by					
		Number with valid data	Number with positive modal shift	Percentage with positive modal shift	walk	cycle	bus	rail	other	walk	cycle	bus	rail	other
EE	37	26	8	31%	1	1	-	2	1	-	1	-	1	2
EM	10	9	2	22%	1	-	-	-	-	-	1	-	-	1
Lon	2	2	-	0%	-	-	-	-	-	-	-	-	-	-
NE	18	12	4	33%	1	1	-	-	1	-	-	-	-	-
NW	10	10	8	80%	4	3	2	2	1	1	-	3	-	1
SE	39	38	16	42%	8	2	3	4	1	-	4	3	-	-
SW	47	30	18	60%	4	3	1	1	2	-	2	3	-	1
WM	39	39	11	28%	3	-	3	-	1	1	1	3	-	2
YH	25	19	7	37%	1	1	-	-	-	-	-	1	-	-
Overall	227	185	74	40%	23	11	9	9	7	2	9	13	1	7

Secondary schools with negative modal shift

	Number of schools providing data	Of which		Of which increase in proportion of pupils travelling by					Of which decrease in proportion of pupils travelling by					
		Number with valid data	Number with positive modal shift	Percentage with positive modal shift	walk	cycle	bus	rail	other	walk	cycle	bus	rail	other
EE	37	26	16	62%	-	-	1	5	-	1	2	1	-	-
EM	10	9	7	78%	1	1	1	-	1	1	3	2	-	1
Lon	2	2	2	100%	-	1	-	-	1	1	-	1	-	-
NE	18	12	8	67%	2	1	-	-	-	-	1	2	-	-
NW	10	10	2	20%	1	1	-	-	-	-	-	2	-	-
SE	39	38	17	45%	1	4	1	4	2	4	4	7	-	1
SW	47	30	12	40%	3	-	-	3	-	1	2	2	-	2
WM	39	39	27	69%	1	4	1	-	5	4	1	12	-	1
YH	25	19	12	63%	-	-	1	1	4	4	1	4	-	1
Overall	227	185	103	56%	9	12	5	13	13	16	14	33	-	6

The main points to note are:

For primary schools included in the analysis, in all regions, where there was a significant reduction in car use this was coupled with a significant increase in walking in the majority of schools (ranging from half the schools in London to 86% of schools in Yorkshire and the Humber, with an average of 73%).

For the primary schools in the West Midlands, a positive modal shift, as defined in section 5.1, was coupled with a significant increase in cycling in over half the schools, although in nearly a quarter of schools there was a significant decrease in cycling despite a reduction in car use.

For the primary schools analysed in the North East, a positive modal shift was coupled with an increase in pupils travelling by other modes in a third of schools.

There was a less widespread increase in walking amongst schools with a reduction in car use for secondary schools analysed than for primary schools: on average a positive modal shift, as defined in section 5.1, was coupled with an increase in walking in around a third of secondary schools.

A positive modal shift was coupled with an increase in rail use in around an eighth of the secondary schools analysed compared to almost no primary schools.

In primary schools with a negative modal shift, this was coupled with a decrease in walking in the majority of schools, although in half the primary schools analysed in the West Midlands there was a significant increase in the proportion of pupils walking even though there was also a significant increase in car use.

In secondary schools with an increase in car use, this was most commonly coupled with a decrease in bus use (this was the case in around a third of the schools analysed, on average).

5.3 Modal Shift in Schools, by Local Authority

Annex C presents results at LA level for each region in the form of tables as in Table 2. The main points from this analysis are noted in the following sections.

5.3.1 East of England

The following results are only valid for the pupils who responded to the surveys, in the schools whose data were suitable for analysis. They cannot be assumed to be representative of schools in the region or LA as a whole and cannot be extrapolated for this purpose.

A positive modal shift/decrease in car use is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey.

5.3.1.1 For primary schools:

Nine LAs were analysed.

In two (Luton and Southend) none of the schools analysed saw a positive modal shift.

In the remaining seven, the proportion of schools analysed with a significant reduction in car use ranged from 7% in Suffolk to around a fifth in Norfolk.

A positive modal shift was most commonly coupled with an increase in walking in all LAs except Essex, where an increase in bus use was most common (although amongst only two of the schools analysed).

Negative modal shifts outnumbered positive ones for schools analysed in four of the nine LAs (Southend, Bedfordshire, Suffolk and Norfolk, despite having the highest proportion of positive modal shifts).

Negative modal shifts were most frequently coupled with a decrease in walking in all LAs.

5.3.1.2 For secondary schools:

The conclusions that can be drawn from this analysis are particularly limited, due to the small number of schools in each of the eight LAs with suitable data. However for those schools analysed, the following results were obtained:

None of the schools analysed in Luton, Norfolk or Suffolk saw a significant decrease in car use.

Of the five LAs with any positive modal shifts amongst schools analysed, these were outnumbered by negative ones in all but two LAs (Cambridgeshire and Essex).

In Cambridgeshire, in the one (out of one) school included in the analysis which observed a reduction in car use, this was not coupled with a significant increase in any particular mode.

In Essex, a positive modal shift amongst schools analysed was coupled with a significant increase in walking, rail use and/or "other" modes.

Negative modal shifts amongst schools analysed were coupled with a significant decrease in cycling in Norfolk, walking in Thurrock and bus use in Suffolk.

5.3.2 East Midlands

The following results are only valid for the pupils who responded to the surveys, in the schools whose data were suitable for analysis. They cannot be assumed to be representative of schools in the region or LA as a whole and cannot be extrapolated for this purpose.

A positive modal shift/decrease in car use is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey.

5.3.2.1 For primary schools:

Five LAs had suitable data.

In two (Leicester and Nottingham City), none of the schools analysed saw a significant reduction in car use.

In the remaining three LAs, the proportion of schools analysed achieving a reduction in car use ranged from 15% in Lincolnshire to almost a third in Nottinghamshire.

A positive modal shift was most commonly coupled with an increase in walking in all LAs.

Negative modal shifts outnumbered positive ones amongst the schools analysed in only one LA (Leicester).

Negative modal shifts were most commonly coupled with a decrease in walking.

5.3.2.2 For secondary schools:

There are again limits to the conclusions that can be drawn due to the small number of schools in each LA with suitable data.

Suitable data were available for only three LAs (Nottinghamshire, Derby and Lincolnshire).

In Derby one of the two schools analysed achieved a significant reduction in car use although the remaining one saw a significant increase.

In Lincolnshire one of the three schools analysed saw a significant decrease in car use but this was outnumbered by the remaining two showing a significant increase.

In Nottinghamshire all four schools analysed saw a significant increase in car use. This was most frequently coupled with a decrease in cycling.

Derby was the only LA where any of the schools analysed saw their reduction in car use coupled with a significant increase in any other modes (an increase in walking in one school).

5.3.3 London

The following results are only valid for the pupils who responded to the surveys, in the schools whose data were suitable for analysis. They cannot be assumed to be representative of schools in the region or LA as a whole and cannot be extrapolated for this purpose.

A positive modal shift/decrease in car use is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey.

5.3.3.1 For primary schools:

Five LAs had suitable data.

Three of the five saw no significant reduction in car use amongst the schools analysed, although nor did they see a significant increase.

In Greenwich, one of the 18 schools analysed saw a positive modal shift, whilst one saw a significant negative shift.

A significant reduction in car use was also achieved by one of the five schools analysed in Wandsworth (coupled with an increase in walking), whilst no schools saw a significant increase.

5.3.3.2 For secondary schools:

Only Greenwich had any suitable data. Of the two schools in Greenwich analysed, both saw a significant increase in car use, coupled with decreases in walking and bus use.

5.3.4 North East

The following results are only valid for the pupils who responded to the surveys, in the schools whose data were suitable for analysis. They cannot be assumed to be representative of schools in the region or LA as a whole and cannot be extrapolated for this purpose.

A positive modal shift/decrease in car use is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey.

5.3.4.1 For primary schools:

Six LAs had suitable data.

In both of the two LAs with any positive modal shifts amongst schools analysed (Hartlepool and Northumberland), around a quarter of schools saw a significant reduction in car use.

In four of the six LAs analysed, no positive modal shifts were seen amongst schools included in the analysis, although in one of these LAs (Darlington) no negative shifts were seen either. In the remaining three LAs, between a fifth and a half of schools analysed saw negative modal shifts.

Positive modal shifts were most commonly coupled with significant increases in walking and "other" modes.

A negative modal shift was most commonly coupled with a decrease in walking in all LAs except Gateshead, where it was coupled with a decrease in "other" modes.

5.3.4.2 For secondary schools:

Only three LAs had any suitable data (Durham, Northumberland and Redcar & Cleveland).

In Northumberland, four of the seven schools analysed achieved a significant reduction in car use, although the remaining three saw a significant increase.

In both Durham and Redcar & Cleveland all schools analysed saw a significant increase in car use.

5.3.5 North West

The following results are only valid for the pupils who responded to the surveys, in the schools whose data were suitable for analysis. They cannot be assumed to be representative of schools in the region or LA as a whole and cannot be extrapolated for this purpose.

A positive modal shift/decrease in car use is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey.

5.3.5.1 For primary schools:

Twelve LAs had suitable data.

The proportion of schools included in the analysis with a significant reduction in car use ranged from no schools in Oldham to all schools in Rochdale (although in both these cases, as in others, only two schools were analysed).

A positive modal shift was most commonly coupled with an increase in walking except in Liverpool, where in the one school with a significant reduction in car use (of two analysed), this was coupled with an increase in bus use. However in three LAs positive modal shifts amongst the schools analysed were not coupled with increases in any particular mode.

Only three LAs saw any negative modal shifts amongst schools analysed, and negative modal shifts outnumbered positive ones in only one LA (Lancashire).

Negative modal shifts were most commonly coupled with a decrease in walking.

5.3.5.2 For secondary schools:

In one of the five LAs analysed, five of the six schools analysed saw a significant positive modal shift. In each of the other four LAs, data were available for only one school. In three of these LAs, the school achieved a significant reduction in car use, whilst in the fourth the school saw a significant increase.

5.3.6 South East

The following results are only valid for the pupils who responded to the surveys, in the schools whose data were suitable for analysis. They cannot be assumed to be representative of schools in the region or LA as a whole and cannot be extrapolated for this purpose.

A positive modal shift/decrease in car use is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey.

5.3.6.1 For primary schools:

Ten LAs had suitable data.

Five of the ten saw some positive modal shift in schools included in the analysis, although negative modal shifts outnumbered positive ones in two of these (Hampshire and West Sussex).

The proportion of schools analysed achieving a significant reduction in car use ranged from 10% in Hampshire to around a third in Buckinghamshire.

Of the five LAs with no significant reductions in car use amongst schools analysed, in two, no significant increase was seen either. In the remaining three, a significant increase was seen in around a third of schools analysed.

Positive modal shifts were most commonly coupled with an increase in walking in all relevant LAs.

A negative modal shift was most commonly coupled with a decrease in walking.

5.3.6.2 For secondary schools:

Again the small numbers of schools in some LAs make it difficult to draw conclusions.

Nine LAs had suitable data.

Positive modal shifts amongst schools analysed were seen in six of the nine LAs. The proportion of schools analysed with a significant reduction in car use ranged from a third in Kent (where negative modal shifts outnumbered positive ones) to two thirds in Buckinghamshire.

Of the three LAs with no positive modal shifts amongst schools analysed, in West Sussex, no schools analysed saw a significant increase in car use either, whilst in both Oxfordshire and Reading the one school analysed did see a significant increase.

In Hampshire, a significant reduction in car use was most frequently coupled with an increase in walking, in Buckinghamshire it was most frequently coupled with an increase in cycling and rail use, and in Kent with an increase in bus use.

Negative modal shifts were similarly varied, although overall they were most frequently coupled with a decrease in bus use.

5.3.7 South West

The following results are only valid for the pupils who responded to the surveys, in the schools whose data were suitable for analysis. They cannot be assumed to be representative of schools in the region or LA as a whole and cannot be extrapolated for this purpose.

A positive modal shift/decrease in car use is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey.

5.3.7.1 For primary schools:

Seven LAs had suitable data.

A significant reduction in car use amongst schools analysed was seen in five of the seven LAs, with the proportion of schools achieving a reduction ranging from 6% in Somerset to over half in Bristol.

Negative modal shifts outnumbered positive ones amongst schools analysed in five LAs (all except Bournemouth and Bristol). Bristol was the only LA with no significant increases in car use amongst schools analysed.

A positive modal shift was most frequently coupled with an increase in walking in all relevant LAs except Somerset, where it was coupled with an increase in cycling.

Negative modal shifts were most frequently coupled with a decrease in walking in all relevant LAs except Poole, where in the one school analysed which saw an increase in car use, this was coupled with a decrease in bus use, and Torbay where it was coupled with a decrease in other modes.

5.3.7.2 For secondary schools:

Five LAs had suitable data.

Positive modal shifts were observed amongst some schools analysed in all five LAs, although in one (Somerset) negative modal shifts outnumbered positive ones.

The proportion of schools analysed achieving a significant reduction in car use ranged from 40% in Somerset to 100% in Bristol and in Torbay, although there were only one and two schools respectively in Bristol and Torbay with suitable data.

Positive modal shifts were varied in terms of the modes that coupled a reduction in car use: in Devon it was cycling, in Gloucestershire it was other modes whilst overall it was walking.

Negative modal shifts were similarly varied in terms of the modes that coupled an increase in car use.

5.3.8 West Midlands

The following results are only valid for the pupils who responded to the surveys, in the schools whose data were suitable for analysis. They cannot be assumed to be representative of schools in the region or LA as a whole and cannot be extrapolated for this purpose.

A positive modal shift/decrease in car use is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey.

5.3.8.1 For primary schools:

Ten LAs had suitable data.

All but one (Stoke) of the ten LAs saw some positive modal shifts amongst schools analysed, with the proportion of schools achieving a significant reduction in car use ranging from 3% in Worcestershire to two thirds in Coventry.

However, negative modal shifts outnumbered positive ones amongst schools analysed in four LAs. Coventry and Staffordshire were the only LAs with no negative modal shifts amongst schools analysed.

A significant reduction in car use was most commonly coupled with increases in walking and/or cycling.

Negative modal shifts were most commonly coupled with a decrease in walking.

5.3.8.2 For secondary schools:

Nine LAs had suitable data.

Six of the nine LAs saw some positive modal shifts amongst schools analysed. The proportion of schools analysed achieving a significant reduction in car use ranged from a sixth in Staffordshire to two thirds in Coventry.

However, negative modal shifts outnumbered positive ones in all but two of these six (Coventry and Worcester).

Hereford, Shropshire and Telford saw no positive modal shifts amongst schools analysed, although Hereford saw no negative shifts either. In Hereford and Telford, however, only one school was analysed.

A significant reduction in car use was most commonly coupled with increases in walking and/or bus use.

Negative modal shifts were most commonly coupled with a decrease in bus use. This was consistent across LAs except Telford.

5.3.9 Yorkshire and The Humber

The following results are only valid for the pupils who responded to the surveys, in the schools whose data were suitable for analysis. They cannot be assumed to be representative of schools in the region or LA as a whole and cannot be extrapolated for this purpose.

A positive modal shift/decrease in car use is defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey.

5.3.9.1 For primary schools:

Seven LAs had suitable data.

Five of these LAs saw some significant reductions in car use, with the proportion of schools included in the analysis achieving a reduction ranging from 14% in Leeds to 29% in North Yorkshire.

However, negative modal shifts outnumbered positive ones amongst schools analysed in two of these five LAs. Only North Yorkshire saw no negative modal shifts.

In Calderdale and York, where there were no positive modal shifts amongst schools analysed, around a third of schools analysed in fact saw a negative modal shift.

A significant reduction in car use was most commonly coupled with increases in walking in all LAs except Barnsley, where it was most frequently coupled with an increase in cycling.

Negative modal shifts were consistently most commonly coupled with a decrease in walking.

5.3.9.2 For secondary schools:

Seven LAs had suitable data.

Four of the seven LAs saw some significant reductions in car use amongst schools analysed. In two, only one school was analysed; in the remaining two around a half of schools analysed saw a positive modal shift.

In the three LAs with no positive modal shifts amongst schools analysed, all the schools analysed in fact saw a significant increase in car use. Negative modal shifts amongst schools analysed also outnumbered positive ones in Calderdale.

Positive modal shifts were generally not coupled with significant increases in any particular mode (although walking did appear once in Barnsley, and cycling once in Calderdale).

Conversely, negative modal shifts were most frequently coupled with significant decreases in walking and/or bus use.

6 Comparison of Modal Split in Schools With and Without STPs

6.1 Introduction

Analysis has been undertaken on data from 10 LAs to investigate modal split changes in schools with and schools without an STP. Prior to the analysis, extensive data cleaning was undertaken (see section 3.4.1), which led to some schools being removed from the analysis, hence this section does not include all of the schools' data provided by LAs. Suitable data for analysis ranged from 16% to 88% of schools within each phase of education in the 10 LAs selected, the average within the 10 LAs being 46%.

Table 3 shows the number of schools in each phase within each of the 10 LAs selected for analysis. Both the number of schools potentially available for analysis, and the number whose data were suitable for analysis are broken down into schools with an STP and schools without an STP. The number of available schools is taken from data provided by DfES, and excludes independent schools, nurseries, special schools and pupil referral units. After cleaning, the data suitable for analysis did not contain any of these school types. Where there was insufficient data suitable for analysis, no figures have been provided in the 'Suitable for Analysis' columns of the table.

Table 3 Summary of Schools in Selected LAs

LA	Phase	Total Number of Schools in LA			Number Suitable for Analysis			TOTAL % Suitable
		With STP	Without STP	TOTAL	With STP	Without STP	TOTAL	
Bedfordshire	Lower	22	124	146	22	83	105	72%
	Middle	7	33	40	3	13	16	40%
	Upper	5	12	17				
Bracknell Forest	Primary	5	27	32	3	15	18	56%
	Secondary	2	4	6				
Hartlepool	Primary	5	25	30	3	8	11	37%
	Secondary	0	6	6				
Lancashire	Primary	33	459	492	17	205	222	45%
	Secondary	8	80	88	3	12	15	17%
Leeds	Primary	24	217	241	8	33	41	17%
	Secondary	3	40	43				
Redcar & Cleveland	Primary	10	40	50	10	34	44	88%
	Secondary	2	9	11	1	2	3	27%
Telford & Wrekin	Primary	13	53	66	8	21	29	44%
	Secondary	1	13	14				
Thurrock	Primary	21	26	47	19	16	35	74%
	Secondary	3	7	10				
Shropshire	Primary	28	115	143	14	60	74	52%
	Secondary	5	17	22	3	10	13	59%
Stockport	Primary	12	89	101	5	11	16	16%
	Secondary	0	14	14				

Total number of schools in LA: Excludes independent schools, nurseries, special schools and pupil referral units.

Number suitable for analysis: The number of schools that remained for analysis after data cleaning

Note: Not all phases were included within the analysis due to insufficient data.

The table shows that of the 10 LAs, 14 sub-sections of analysis were possible, as four of the LAs had suitable data for more than one phase of education.

The results presented in section 6 are only valid for the pupils who responded to the survey, in the schools whose data were suitable for analysis (see 3rd paragraph of section 3.4.2). Any conclusions drawn within this section are only valid for these specific pupils and no conclusions can be made for the schools or the LAs as a whole.

6.2 Car Use Results

6.2.1 Introduction

One of the main aims of this analysis was to investigate whether there have been positive modal shifts (defined as a statistically significant decrease in car use) in schools with and schools without STPs, and whether there are any differences in modal shift between the two groups of schools. Figure 1 below shows a summary of the results found in this analysis, showing changes in car use in both groups of schools for each of the 14 sub-sections of analysis.

Modal shift in schools with and schools without STPs is compared in Figure 1, to investigate which group of schools is performing better within each of the sub-sections of analysis. The group of schools performing better is defined as the group of schools which made either the greatest shift towards sustainable travel (i.e. the biggest decrease in car use), and/or the least shift towards less sustainable travel (i.e. the smallest increase in car use). This latter criterion has been included within this analysis to allow a comparison to be made between the two groups of schools. For example, where schools with an STP have observed no significant change in car use, but schools without an STP have observed a significant increase in car use, it remains valid to say that schools with an STP are performing better. Although they have not seen a positive modal shift, they have not seen the negative modal shift experienced by schools without an STP in the same area. Where one group of schools outperformed the other, the group which performed better are listed in the final column of Figure 1.

Figure 1 Car Change Diagram

	Car [1]		Performing Better [2]
	STP	Non	
Bedfordshire Lower	+	+	
Bedfordshire Middle	+	+	STP
Bracknell Forest Primary	-	+	
Hartlepool Primary	-	-	
Lancashire Primary	+	+	
Lancashire Secondary	-	+	STP
Leeds Primary	-	-	
Redcar & Cleveland Primary	+	+	
Redcar & Cleveland Secondary	-	-	STP
Telford & Wrekin Primary	-	+	STP
Thurrock Primary	+	+	
Shropshire Primary	-	-	
Shropshire Secondary	-	-	Non-STP
Stockport Primary	-	+	

Key

+	Increase over time
-	Decrease over time
	Significant increase or decrease at the 95% level
	Significant increase or decrease at the 99% level

[1] Car results include 'Car' and 'Taxi' in both Lancashire sections, as these modes were grouped in the survey.

[2] Performing Better: Shows the group of schools which has EITHER made the biggest decrease in car use OR the smallest increase in car use.

Note: These results are only valid for the pupils who responded to the survey in the schools whose data were suitable for analysis. They do not represent all schools within each LA phase and cannot be extrapolated for this purpose.

Each row of Figure 1 shows results for one phase in each of the 10 LAs analysed. Each box in the diagram represents the overall change in car use between the first survey and the most recent, for either schools with or schools without STPs. The symbols depict the direction of change, so + shows an increase in car use and - shows a decrease over time.

The pale green shading shows that the change was found to be statistically significant at the 95% level, i.e. that we can be 95% certain that the change in modal split in the schools analysed could not have happened by chance. Similarly, the darker green shading shows that the change is statistically significant at the 99% level - we can be 99% certain that the change in the proportion of pupils travelling by that mode in the schools analysed was not due to chance. Where the result is not shaded it means that the change could have happened by chance and so it is not possible to draw conclusions about these changes.

The results presented in this section are only valid for the pupils who responded to the survey, in the schools whose data were suitable for analysis. They do not represent all pupils or schools in the LA and cannot be extrapolated for this purpose (see 3rd paragraph of section 3.4.2).

6.2.2 Overview

Table 4 below shows the numbers of sub-sections of analysis where positive and negative significant changes have been observed.

Table 4 Number of Sub-Sections where Car Use has Changed Significantly

		STP	Non-STP
Significant Increase	+	4	7
Significant Decrease	-	2	2

NOTE: These results are only valid for the pupils who responded to the survey in the schools whose data were suitable for analysis. They do not represent all schools within each LA phase and cannot be extrapolated for this purpose.

In the schools with an STP analysed, a significant change in the proportion of pupils travelling by car was observed in six of the 14 sub-sections. Four of these changes were significant increases in car use and two significant decreases, or a positive modal shift.

In the schools without an STP analysed, nine significant changes were observed (three more than for schools with an STP), but seven of these were increases in car use, and just two were significant decreases or positive modal shifts.

Considering both school groups together, the schools with an STP in place have observed fewer negative shifts (increases in car use) and the same number of positive shifts (decreases in car use) as schools without an STP.

6.2.3 Local Authority Results

The following paragraphs consider whether the group of schools analysed with STPs, or the group without, has performed best in each of the 14 sub-sections analysed (see Figure 1 and the second paragraph of section 6.2.1). This considers the similarities and differences in the changes observed in car use between schools with and schools without an STP.

As shown in Figure 1, in four of the sub-sections of schools available for analysis (Bedfordshire Middle Schools, Lancashire Secondary Schools, Redcar & Cleveland Secondary Schools and Telford & Wrekin Primary Schools), the schools with an STP performed better than the schools without an STP.

In one of the sub-sections of schools available for analysis (Shropshire Secondary Schools), schools without an STP have performed better.

In the remaining nine sub-sections, the two groups of schools analysed have observed similar changes in the proportion of pupils travelling to school by car, and therefore it is not possible to say which group of schools is performing better in this respect.

6.3 Modal Split Results

6.3.1 Introduction

The results presented in this section are only valid for the pupils who responded to the survey, in the schools whose data were suitable for analysis. They do not represent all pupils or schools in the LA and cannot be extrapolated for this purpose (see 3rd paragraph of section 3.4.2).

Figure 2 below summarises the changes in the proportion of pupils travelling by each mode, in each of the 14 sub-sections analysed. It presents a high-level overview of the results found. A full description of how to interpret the diagram is given in section 6.2.1.

Each LA's survey gave different options for mode of travel to school, and so there are some areas in the diagram which remain blank. These are cases where the relevant mode was not given in the LA's survey data.

Figure 2 Change Diagram: All Authorities

	Walk		Car [1]		Cycle		Bus		Taxi		Car Share		Misc		Misc Specified
	STP	Non	STP	Non	STP	Non	STP	Non	STP	Non	STP	Non	STP	Non	
Bedfordshire Lower	-	-	+	+	+	-	+	+			-	+	+	+	Train, Motorbike, Other
Bedfordshire Middle	-	-	+	+	-	+	-	-			-	-	+	+	Train, Motorbike, Other
Bracknell Forest Primary	-	-	-	+	+	-							+	+	Motorbike, Taxi, Train, Other
Hartlepool Primary	+	+	-	-	-	+	-	+					+	-	Taxi, Rail
Lancashire Primary	-	-	+	+	-	+	-	-					+	+	Train, Other
Lancashire Secondary	-	+	-	+	+	-	+	-					+	-	Train, Other
Leeds Primary	+	+	-	-	+	+	-	-					+	+	Other
Redcar & Cleveland Primary	-	-	+	+	+	+	+	-					-	-	Other
Redcar & Cleveland Secondary	+	+	-	-	+	+	-	-					+	+	Other
Telford & Wrekin Primary	+	-	-	+	+	+	+	+					-	-	Taxi, Train
Thurrock Primary	-	-	+	+	+	+	-	-	-	+			+	+	Train, Other
Shropshire Primary	+	+	-	-	+	+	-	-			+	+	-	-	Taxi, Other
Shropshire Secondary	-	+	-	-	+	-	-	-			+	+	-	-	Taxi, Other
Stockport Primary	+	-	-	+	+	+	-	-					+	+	Metrolink, Train, Other

Key

+	Increase over time
-	Decrease over time
	Significant increase or decrease at the 95% level
	Significant increase or decrease at the 99% level

[1] Car results include 'Car' and 'Taxi' in both Lancashire sections, as these modes were grouped in the survey.

Note: These results are only valid for the pupils who responded to the survey, in the schools whose data were suitable for analysis. They do not represent all schools in each LA phase as a whole and cannot be extrapolated for this purpose.

In most LAs, the column labelled 'Misc' contains responses for a number of modes. These are listed in the right hand column of the table. Generally, where an LA's survey included responses for 'other' modes of travel, these are included in the 'Misc' column.

6.3.2 Overview

Figure 2 shows that the majority of the groups of schools analysed saw a similar number of significant changes. The greatest number of significant changes in any one LA occurred in the selected primary schools in Redcar & Cleveland. The group of schools available for analysis included 88% (see Table 3) of the total primary schools in the LA, which was the largest proportion of schools suitable for analysis.

The mode with the greatest number of significant changes was car, with more than half of the groups of schools analysed experiencing a significant change in the proportion of pupils travelling by car. However, more than two thirds of these significant changes are increases in car use between the earlier and the later surveys. These results are discussed in detail in section 6.2.

6.3.3 Examples of Positive Modal Shift

Positive modal shift has been defined for the purposes of this report as a statistically significant decrease in the proportion of pupils travelling to school by car. This analysis compares schools with and schools without an STP, and therefore this section focuses on areas where one group of schools has observed a positive modal shift (significant decrease in car use) and the other group of schools has not.

In this section, cases where one group of schools has made a significant move towards sustainable travel are considered. This differs from the results described in section 6.2, where schools were considered to be performing better if they had *either* made the greatest move towards sustainable travel *and/or* the least movement towards less sustainable travel.

In two of the 14 sub-sections - those Redcar & Cleveland Secondary Schools and Shropshire Secondary Schools that were suitable for analysis - one group of schools has seen a significant decrease in car use, while the other group of schools has not. These two cases are described in more detail in the following paragraphs.

Although a decrease in car use, combined with an increase in walking or cycling, could be considered as the preferred modal shift, this may not be achievable for all schools due to the needs of their pupils, or the distance they have to travel. It is also important to consider that whilst an increase in bus or rail use might not be considered to be as positive as an increase in walking or cycling, this is still preferable to pupils travelling to school by car. Therefore the following paragraphs discuss the changes that have been observed in all modes of travel.

The secondary schools in Redcar & Cleveland that were analysed provide an example of schools with an STP that have made a positive move towards sustainable travel, whilst the opposite shift has occurred in schools without an STP. In the schools with an STP analysed, car use significantly decreased from 35.0% (443 pupils) to 30.0% (385 pupils). These schools have also seen a significant increase in cycling from 0.3% (4 pupils) to 2.2% (28 pupils), suggesting that there has been a modal shift from car to cycling. Conversely, there was no significant change in car use amongst pupils in the schools without an STP analysed. However, these schools saw a significant decrease from 25.5% (401 pupils) to 21.0% (344 pupils) in bus use and a significant increase from 4.7% (74 pupils) to 8.3% (137 pupils) in cycling, indicating a modal shift from bus travel to cycling.

The Shropshire Secondary Schools that were analysed have observed a positive modal shift in schools without STPs. Significant changes were observed in five of the six modes included in their survey; three of these were significant decreases (car use from 9.1% (613 pupils) to 7.0% (443 pupils), bus use from 49.4% (3,318 pupils) to 46.5% (2,946 pupils) and cycling from 3.2% (217 pupils) to 2.5% (158 pupils)). Two modes saw a significant increase - car share from 7.0% (469 pupils) to 10.2% (643 pupils), and walking from 30.3% (2,036 pupils) to 32.8% (2,079 pupils). These changes suggest an overall shift from car, bus and cycling to either car share or walking.

The Shropshire Secondary Schools with an STP analysed have observed significant increases in both car share (from 14.6% (399 pupils) to 18.9% (510 pupils)) and cycling (from 2.7% (74 pupils) to 4.0% (109 pupils)). Bus use significantly decreased from 35.1% (962 pupils) to 32.6% (877 pupils), providing evidence of modal shift from pupils travelling by bus to either car share or cycling.

Further detailed results for each of the 14 sub-sections can be found in Annexes D1 to D10. For each LA, the details of the survey are provided, before the results are summarised in a diagram similar to Figure 2. The proportions of pupils travelling by each mode in the earlier and later surveys, in those schools suitable for analysis, are given, to show changes in modal split. The numbers provided in brackets after each percentage refer to the number of pupils who responded in the schools analysed - these should be treated with caution as in all LAs the two surveys do not contain the same number of pupils.

All results presented in Annex D are only valid for the pupils who responded to the survey, in the schools whose data were suitable for analysis. They do not represent all pupils or schools in the LA, and cannot be extrapolated for this purpose (see the 3rd paragraph of section 3.4.2).

STAs in each of the LAs and the Head of Transportation in some LAs (where contact details could be found) were asked to comment on the results presented to contextualise the findings. For LAs where the STA or Head of Transportation was able to provide background information on initiatives taking place in the LA, or further information that might help explain the changes shown, their comments are included at the end of the section.

7 Case Studies

7.1 Introduction

A number of case studies were carried out to illustrate the range of benefits of School Travel Plans, distinct from modal split benefits, and the potential impact of walking or cycling initiatives in schools that do not have a full STP. Whilst the majority of these case studies focused on individual schools, two described walking initiatives developed by Local Authorities and in place in several schools.

These case studies were selected to illustrate the range of wider benefits seen by schools with STPs, or the success of walking or cycling initiatives in schools without full STPs. However, after having carried out some telephone interviews, it became apparent that some schools had only just put in place some of their initiatives, and the expected wider benefits had not yet been realised. Alternatively, the school had only just completed their STP, and were waiting for their DfES grant before starting work on some of their initiatives. In these cases, the case study is not included in this report. This left 16 case studies; the detailed reports from these are in Annexes F and G.

Table 5 below lists the schools for which case studies were completed, and are included in this evaluation. The table states the wider benefits experienced by the school, as identified by the case study, or the walking or cycling initiative in place in those schools that do not have an STP.

Table 5 Case Studies Showing the Wider Benefits of STPs and Schools with Walking or Cycling Initiatives

School Name	Local Authority	Region	Wider Benefit / Walking or Cycling Initiative
Moselle Upper School	Haringey	London	SEN Independent travel; increased confidence; changes in educational attitudes

The Wakeman School	Shropshire	West Midlands	Pupil involvement; health benefits of more active travel; opportunities for working with local community
Sharnbrook Upper School & Community College	Beds	East of England	Pupil involvement; safety (on site and on buses); engaging bus operators
Samuel Pepys School	Cambs	East of England	SEN Independent travel; improved health and fitness; increased awareness of road safety issues; improvements in behaviour
Swanwick Primary School	Derbyshire	East Midlands	Integrating school travel awareness into curriculum; opportunity to improve relations with local community
Streetfield Middle School	Beds	East of England	Engaging school and pupils from deprived area; building positive relationship with Local Authority; drive to reduce casualties
St Andrew's CE Primary School	Devon	South West	Healthier pupils; engaging pupils in a deprived area
Barrs Court School	Herefordshire	West Midlands	SEN Independent travel
King Edward VI High School	Staffs	West Midlands	Incorporating sustainable travel into curriculum; engaging pupils
Chace Primary School	Coventry	West Midlands	Working with pupils in deprived area to increase punctuality and attendance, leading to improved exam results
Ravenstone Primary School	Wandsworth	London	Road safety; engaging external partners; raising environmental awareness
Broad Oak Primary School	Manchester	North West	Walking initiative
High Tunstall Comprehensive School	Hartlepool	North East	Cycling initiative
Weetwood Primary School	Leeds	Yorkshire & The Humber	Walking initiative
Various	Nottingham City	East Midlands	Walking initiative
Various	Bucks	South East	Walking initiative

7.2 Case Studies Showing the Wider Benefits of STPs

7.2.1 Introduction

Annex F gives the reports from 11 case studies investigating the potential wider benefits experienced by schools that have developed and implemented STPs. The wider benefits identified range from increased road safety, to healthier and more alert and engaged pupils, to increasingly independent travel for pupils with special educational needs. All case study reports have been cleared by the school. The following paragraphs summarise the main points of each case study.

7.2.2 Moselle Upper School (Special School)

Moselle Upper School's STP work has resulted in an increase in independent travel amongst their pupils, who have moderate or severe learning difficulties, and/or autism. In addition, there is an increased confidence amongst the pupils and their parents in their ability to travel independently. Educational attitudes have changed, with staff more focused on providing greater opportunities for students. The main aim of Moselle's STP is to promote independent travel for their students, and this is achieved through an 'Independent Travel Training' course, and cycle training for pupils that are physically able.

7.2.3 The Wakeman School (Secondary School)

There have been many benefits realised by The Wakeman School from the work they have undertaken to develop and implement their STP. These include: pupil involvement in travel planning work and in developing the STP, therefore empowering the pupils and allowing them to see the impact of their ideas, health benefits from more active travel and opportunities for working with the local community. The school has set up a School Travel Group, with representatives from each year group, to discuss travelling to school issues. The school has held several events to promote cycling to school, for example Bike to School Week, with a free bikers' breakfast, bike workshops where a local cycle shop checked pupils' bikes for safety, and an after school bike ride. Shropshire County Council's Road Safety Section has chosen the school to pilot an advanced cycle training course for a small group of Year 7 students who cycle to school. Drama workshops have also been run, focusing on road safety issues. The school is trying to involve the whole school and parents.

7.2.4 Sharnbrook Upper School

Sharnbrook Upper School's STP was developed with the active involvement of the student population. Pupil involvement is just one of the benefits seen by the school since developing their STP; other benefits include improved safety (on site and on buses) and engaging bus operators. The school has a catchment area of around 400 square miles, and the majority of pupils travel to school via school buses or coaches. As the school is expanding, and pupils now travel from outside the traditional catchment area, there are no coaches laid on and so pupils come by car. There are also several hundred sixth formers at the school, many of whom come by car, as do the staff. The school is concerned with the safety of pupils on site when embarking and disembarking the buses and coaches, as well as having concerns about behaviour on the buses where there is no adult supervision. The school's student parliament researched school transport issues, carried out a questionnaire, and developed an action plan to remedy concerns. The school's STP was then developed to indicate the current situation and consequential remedial objectives, in addition to demonstrating the school's commitment to a safer journey and raising student awareness of the impact of

their behaviour. The school has put several road safety measures in place on and around the school site and has engaged bus operators to work with them to overcome some of the problems associated with bus travel. The school has also been promoting car sharing.

7.2.5 Samuel Pepys School (Special School)

The main benefit from the development of Samuel Pepys School's STP is increased independent travel for their pupils, who have learning difficulties. Further benefits have been realised, with improved health and fitness, increased awareness of road safety issues and improvements in behaviour. The main aim of the school's STP is to develop an awareness of road safety and encourage independent travel, as part of promoting independent life skills for their pupils. As the majority of pupils require hands-on experience to learn, a go-karting/cycling track was developed in the school grounds, allowing pupils to gain experience of a road network. Pupils have access to the road network at least once a week, and are trained by community police officers in road safety. All have received a road safety certificate, beating the 50% target. The school also has a target to improve pupils' fitness and has specific actions to ensure that all pupils participate in an activity in the local community once a term that will allow them to be more active. Football clubs and special fitness programmes have also been initiated, and pupils have been observed to be more active in their break time. Behavioural improvements are also evident as pupils are learning that they must share and co-operate with each other on the go-karting/cycle track, and must obey the rules of the road.

7.2.6 Swanwick Primary School

Swanwick Primary School has developed and implemented its STP over the last year, and has seen the benefit of this through the integration of school travel awareness into the curriculum, and the opportunity to improve relations with the local community. The school has around 450 pupils, with 180-200 of these arriving at school each day by car. The school has several initiatives in place to reduce car use, such as Walk to School Week and is hoping to start cycle training soon. Road safety is included in the school's Personal, Social and Health Education programme. The school was approached by the Local Education Authority to participate in an art competition to produce artwork in the style of a given artist on a road safety/transport theme to be included within a calendar. The calendar was distributed to all schools in the county, inspiring others to include similar art teaching. This also had the benefit of integrating school travel awareness into the curriculum. As well as modal split targets, the school's STP also has a fitness and safety angle. Wider aims include environmental and community issues, improved road safety, and decreasing the volume of traffic around the school by encouraging pupils to be dropped off further from school. This has also been beneficial in improving relations with the local community, who have suffered from the congestion around the school gates, and are supportive of the school's attempts to deal with this.

7.2.7 Streetfield Middle School

Streetfield Middle School has seen several benefits through its work on its STP. The work to develop the STP has engaged the school and pupils from a deprived area, has helped build more positive relationships with the Local Authority, and has begun a drive to reduce casualties. There are two pedestrian entrances to the campus on which Streetfield Middle School is located. One of these is through a deprived estate, which has been acknowledged as having a high level of child pedestrian casualties, falling into the age range of Streetfield's pupils. In order to promote a working relationship with the Local Authority, Global Action Plan, an environmental charity, were employed to work with the school to develop an STP and

facilitate building a positive relationship with the LA. The main aim of the STP is to engage pupils in the investigation of the high child pedestrian casualty rate, and involve them in a comprehensive approach to reducing casualties. Pupils visited accident locations as part of a 'danger spotters' exercise, and were involved in making recommendations for improvements that will be implemented as part of the LA's Safer Routes programme. The STP is also aiming to improve personal and travel safety, and pupils' fitness. The main successes of this work have been in raising awareness of safety issues and engaging the people most vulnerable to accidents, as well as improving relations with the LA.

7.2.8 St Andrew's CE Primary School

Two key benefits have been achieved through the work undertaken in Devon, and in particular in St Andrew's school, to produce an STP. The work has managed to engage pupils from a deprived area, and pupils are now healthier. The Devon Healthy School 'Be Safe, Be Healthy' project aims to work with schools in areas of deprivation to develop travel plans, and to engage children who show signs of early vulnerability in the development of the plan. Five schools in areas of high deprivation were identified and agreed to work with the Local Authority, and in each of these schools a group of children of mixed ages, who had been showing signs of vulnerability, were selected to participate in the project.

23 pupils at St Andrew's Primary School were selected to participate in the development of their STP. The group was trained in issues of road safety and healthy travel. This included a walkabout where the pupils identified road safety issues on common routes to school. The pupils then carried out a questionnaire, developed a road safety play, and designed posters and competitions which were presented to the school in Walk to School Week. This helped build the self-esteem of the pupils as their ideas were listened to and used. They performed a road safety play in front of OFSTED inspectors, and the rest of the school in assembly - a major achievement for pupils with low self-esteem. The pupils participating enjoyed the work, and said that they concentrated well. There has been a modal shift in the school towards walking and away from car use, and stronger links have been forged with the local community.

7.2.9 Barrs Court School (Special School)

Barrs Court School is a special needs school, catering for pupils with a full range of special needs. The work carried out as part of the school's STP has resulted in an increase in independent travel amongst their pupils. The school has achieved this through a School Travel Trainer who works with 6-7 pupils at a time, to train them in how to travel independently. This includes half a day in the classroom, learning about maps, how to use a mobile telephone, and other communication skills, before the training moves on to taking pupils out of the classroom and trying out a range of travel situations. This includes learning road safety skills, how to use railway timetables, finding the correct platform at the station and taking bus journeys. Progress is at a speed the pupil feels comfortable with, and when they are ready the trainer will make some journeys to and from school with them. Once the pupil is ready, they travel to school alone, and the frequency of travelling alone is gradually increased. The school is also hoping to introduce some safety features in the school grounds, which are particularly important with blind and wheelchair-bound pupils. So far, six pupils have been trained, and four are now able to travel independently. The training hugely increases pupils' self-confidence, and they are now able to travel in a range of situations, such as for leisure or to college or work.

7.2.10 King Edward VI High School

King Edward VI High School's STP was developed in consultation with pupils, parents and staff, thereby having the benefit of engaging pupils and incorporating sustainable travel into the school curriculum. Pupils, parents and staff were asked what they would like to see in the STP, and school council members volunteered to develop the plan. Research showed that the main desired outcome from the STP was increased cycling through safe cycle storage and safer pathways. The STP team have also written bus and cycling codes of conducts to encourage good behaviour on school buses and safe cycling to school and on the school site. The development of the STP has enabled the school council to do something effective with real actions, rather than just discussing issues. It is hoped that the initiatives in the STP will also deliver safety benefits and allay concerns some pupils have when starting at secondary school about travelling on school buses.

7.2.11 Chace Primary School

Chace Primary School has seen many benefits since it began travel planning work. These include working with pupils in a deprived area to increase punctuality and attendance, leading to improved exam results. Since 2001, the school has put in place several initiatives to meet targets of increasing attendance from 85% to 94%, and removing lateness altogether. The school organised a minibus to collect several pupils who were regular absentees, and when funding for this was no longer available organised 'learning mentors' to collect pupils who still needed a high level of supervision. The school has also introduced a walking bus, where bad behaviour is not tolerated. An 'early bird' scheme is run, where pupils are telephoned if they do not turn up for school, and if the call is not answered a member of staff will visit the pupil's home to investigate the reason behind the pupil not attending school, and collect them if necessary. The school has met its targets - attendance is now (March 2005) at 98% and lateness has been sustained at 0% since 2004. An additional benefit that the school has seen is improved Key Stage 2 results. It is likely that increased attendance and punctuality, along with other changes and events ongoing in the school, has helped with this.

7.2.12 Ravenstone Primary School

Ravenstone Primary School has seen a range of benefits since it developed its STP, including improved road safety, engaging external partners, and raising environmental awareness. The school carried out surveys to seek parents' and staffs' views on travel to school, safety issues, and potential improvements that could be made. Parents' main concerns focussed on road safety issues. Parents also carried out observations on local roads, and found that there were problems with safety and timing of pedestrian crossings near the school. The school has also undertaken several classroom initiatives, focussing on areas such as health and safety, and cycle training. The school has engaged the Local Authority, police and other external organisations, and has demonstrated through their work developing a School Travel Plan that there is a need for the Local Authority to tailor their engineering plan to improve safety around the school. There is also now a greater police presence around the school to deter dangerous driving habits.

7.3 Case Studies for Schools with Walking or Cycling Initiatives

7.3.1 Introduction

Annex G gives the reports from five case studies to illustrate the potential benefits of walking or cycling initiatives in place in schools that do not have a full STP. These case study reports have been cleared by the school. The following paragraphs summarise the main points of each case study.

7.3.2 Broad Oak Primary School

Broad Oak Primary continuously encourages walking and cycling through a range of initiatives, such as praising children in the weekly newsletter. Every Wednesday a 'hands-up' survey is carried out to see who has come to school by walking / cycling / scooter, and low-cost rewards are offered, such as an ice-cream party for the best class, which motivates pupils. There is also a voluntary exclusion zone around the school, and the school also seeks out and takes up cycle safety classes. Broad Oak Primary participates in Manchester's Green Miles competition, where classes make their way around a map of Britain by walking, cycling, taking the bus or 'park and striding' to school. The school is extremely positive about the Green Miles competition, and as well as modal split benefits (85% travelled sustainably over the two week period compared to 58% in the school's 2004 whole school survey), the competition has wider curriculum benefits for geography. The school's initiatives have been successful at reducing congestion in the mornings (although not in the afternoons) and pupils are now more aware of the health benefits of walking or cycling to school.

7.3.3 High Tunstall Comprehensive School

Although a high proportion of High Tunstall Comprehensive's pupils already walk or cycle to school, the school was keen to increase this and in particular to encourage cycling for pupils who go to college a few afternoons a week. The school built a new cycle cage four years ago to replace the existing basic bike stands. This was supplied by a local metal firm, who also met half the cost. The school is currently developing an STP, and intends to extend and build a cover for the bike cage, and to build a covered entrance to a separate building for pupils with special needs who arrive at the school by minibus. The school also actively participates in the Local Authority's Bus Behaviour Initiative, and the school has taught a module on 'Improving Behaviour on Home to School Transport'. Numbers of pupils cycling to school has increased considerably since the bike cage was built, and there is now greater awareness of cycling as an option for travelling to school. The school also believes that the number of reported instances of bad behaviour on the buses has fallen considerably - prior to the introduction of the module, Year Leaders were receiving daily complaints from younger students, but complaints have now reduced to one or two per month.

7.3.4 Weetwood Primary School

Weetwood Primary has recently implemented an STP, but has had a walking initiative in place for many years. The school has four walking buses, three of which have been in place for two years. In addition to this, the school is in the process of developing a Park and Stride scheme. Work has also been carried out recently to make the school grounds more suitable for cycling, and the school is hoping to provide free cycling proficiency lessons for pupils. The school has also taken part in a Sustrans video on walking buses, as they have been successful with theirs. As a result of the walking buses, significant modal shift

from car use to walking has been achieved - 160 out of 215 pupils participate in the buses. Other benefits that have been realised from this work include pupils arriving at school fresh and alert, the development of new friendships on the walking buses, improved safety from there being fewer cars on site, and better punctuality amongst previously regular latecomers.

7.3.5 Nottingham City 'Eggs on Legs'

Funding was provided through the Neighbourhood Renewal Fund for the period March 2004 to March 2006 to support the provision of walking buses and other walking initiatives, and the development of school travel plans for schools in certain deprived, inner city areas of Nottingham City. However, there was significant reluctance shown towards the idea of walking buses. The LA decided to develop a walking initiative that was fun, simple and user friendly. The concept of 'Eggs on Legs' was developed, to fit into the curriculum, and be more attractive to schools. This aimed to improve health through regular walking, increase road safety and reduce congestion around schools. The initiative was originally rolled out around Easter time in four schools.

Each child that walked to school on a designated day or week received a hard boiled egg. As a reward for walking, pupils were given time to decorate their eggs, and additional decorative items. Once the eggs were complete, a race was held where the eggs were rolled along the ground and not allowed to be broken - reinforcing the message of walking and arriving safely. Due to this initiative, the four schools experienced an increase in walking of 21%. The initiative was very well received, and there were requests to make this an annual event.

7.3.6 Buckinghamshire 'Go for Gold'

Go for Gold is an informal, county-wide walking scheme, where pupils are offered rewards of stamps in their 'gold card' or 'passport' whenever they walk to school. The target audience was originally primary schools, and pupils are offered a variety of incentives, including stickers, swimming concessions, collectors' badges, pencils and pencil cases. An exclusion zone is identified around the school, and pupils must walk from outside this area to qualify for a stamp in their passport. Around 74 schools now participate in Go for Gold, contributing to Buckinghamshire County Council's car reduction target for schools. The council's home to school car use reduction target of 35% in 2004 has been met. In addition, Go for Gold won the first international IWALK Award in 2004. Go for Gold is a sustainable initiative that can be adapted by schools or other Local Authorities to suit their circumstances, and as rewards can vary there is no need for the scheme to cost anything.

8 Conclusions and Recommendations

8.1 Introduction

Based on the analysis carried out in the initial evaluation of the Travelling to School Initiative, there is little evidence to suggest that since the Initiative was introduced there has been a significant change in modal split of journeys to school. It is known that the implementation of School Travel Plans can lead to a marked change in modal split in individual schools ³, but this evaluation has not found empirical evidence of a widespread modal shift.

However, there are two important lessons to learn from this initial evaluation that must be considered further, particularly if a final evaluation is to be carried out at a later date. Firstly, the data that were available for this work were generally of poor quality and coverage (these issues are described in detail in Annex B). This means that **the analysis comparing modal split before and after implementation of an STP, and the comparison of modal shift in schools with and schools without STPS, is only valid for the pupils and schools for whom suitable data were available. It is not possible to extrapolate conclusions to all pupils or schools in the LA or region, or to draw conclusions from this analysis about the impact of the Travelling to School Initiative nationally.** In addition, some of the results presented in this report are based on small numbers of schools or LAs. Therefore, steps need to be taken to ensure that future data collection is more comprehensive and consistent.

Secondly, the distinction between an 'STP school' and a 'non-STP school' is largely artificial. This initial evaluation has found many examples of successful cross-LA schemes that are available to both categories of schools. In addition, in some schools initiatives are only implemented after the STP has been completed, whereas other schools implement initiatives prior to completing their STP, and the date of sign-off is therefore largely irrelevant.

There are several factors that may help explain why this initial evaluation has not found any evidence of a national impact by the Initiative. Firstly, this initial evaluation has been carried out relatively early in the life of the Initiative - it has only been in place for around a year, since April 2004, and it is possible that this is too soon for significant changes in modal split to show up in schools' surveys. Secondly, this initial evaluation has encountered many issues with data quality and quantity, and much of the analysis presented in this report is subject to a number of caveats. It is also worth noting that whilst there may have been instances where changes in modal split were not statistically significant, nevertheless, the school or Local Authority has made moves towards reducing car use and increasing travel by sustainable modes.

8.2 Key Findings

The main conclusions that can be drawn from the various strands of the evaluation are summarised in the following paragraphs.

There has been a considerable increase in the number of STPs completed between 2003/04 and 2004/05, following the introduction of funding for School Travel Advisers. However, it is 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 fears about safety.

However, a survey carried out by UKLAST on a selection of schools suggests that the vast majority of schools would not have been willing or able to write an STP without the assistance and guidance of a dedicated and specialist School Travel Adviser.

Analysis of 'before' and 'after' data provided by schools with STPs was carried out to investigate whether there was a statistically significant reduction in the proportion of pupils travelling by car, following the introduction of their STP. In the majority of schools with STPs included in the analysis there does not appear to have been a statistically significant reduction in car use (defined as a statistically significant decrease in the proportion of pupils travelling to school by car among pupils included in the school's 'after' survey compared with pupils included in the 'before' survey) since the STP was implemented.

Only 14% of primary and 40% of secondary schools included in the analysis saw a significant reduction in car use. At the same time, 14% of the primary and 56% of the secondary schools analysed saw a significant increase in car use.

For primary schools, results at regional level ranged from 4% of the schools analysed achieving a significant decrease in car use in the North East to 28% of schools analysed in the North West. For secondary schools, results varied widely across regions from none of the schools analysed in London seeing a significant decrease in car use to 80% of the schools analysed in the North West.

For primary schools included in the analysis, schools with a significant increase in car use outnumbered schools achieving a significant decrease in car use in 27 out of 71 LAs analysed, whilst for secondary schools the same was true in 26 out of 50 LAs.

At a regional level, negative modal shifts in primary schools included in the analysis outnumbered positive ones in four regions, whilst for secondary schools this was the case in seven regions.

Analysis of 10 LAs' area-wide modal split surveys was carried out, to investigate whether there has been a significantly different modal shift in schools with STPs and schools without STPs. As each LA provided different data (for example from different years, or with different modes asked in the survey), it is difficult to compare the results from different LAs.

When comparing schools with and without STPs, there was one group (those secondary schools in Redcar & Cleveland who provided data suitable for analysis) where there was a reduction in car use among pupils surveyed in STP schools but not among pupils surveyed in schools without an STP.

A further group of schools with STPs (primary schools in Shropshire for which data were available) achieved a significant decrease in the proportion of pupils travelling by car but this was also observed in schools without STPs in the area. Furthermore, among the secondary schools in Shropshire which were included in this analysis, those without STPs achieved a reduction in car use, whilst the schools with STPs did not.

At the same time, four of the groups of schools with STPs included in the analysis, and seven of the groups of schools without STPs saw a significant increase in car use over the relevant periods.

The case studies carried out for this evaluation show that the development and implementation of a School Travel Plan can potentially lead to a school experiencing a range of wider benefits in addition to those relating to modal shift. More than 20 case studies were undertaken, and these illustrated the following benefits experienced by schools:

- Increased independent travel for pupils with special educational needs;
- Increased confidence in pupils with special educational needs;
- Changes in educational attitudes;
- Increased pupil involvement in travel planning work, and integrating this into the curriculum;
- Health benefits of more active travel;
- Opportunities for working with the local community;
- Increased safety (on the roads, on school sites, on buses);
- Engaging bus operators;
- Improvements in pupils' behaviour

- Engaging schools and pupils from deprived areas;
- Building positive relationships with the Local Authority;
- Reducing road casualties;
- Increasing punctuality and attendance;
- Raising environmental awareness.

In addition to this, the case studies illustrate that there are successful walking or cycling initiatives in place in schools that do not have a full STP. These initiatives contribute to the wider aims of the Travelling to School Initiative, reducing car use and increasing travel by sustainable modes.

8.3 Issues Arising From the Initial Evaluation

8.3.1 General Issues

Many issues have been encountered during this initial evaluation, largely relating to data quality or availability. Data quality and coverage problems are summarised below, and described in detail in Annex B.

For much of the analysis, data were not available for all pupils in a school, or all schools in an LA, and the data were not necessarily representative at pupil, school and LA level. Therefore the analysis is only valid for the pupils in those schools for whom data were available. Pupil level results cannot be used to make inferences about their school, and school level results cannot be extrapolated to LA level.

Further issues were identified surrounding the classification of schools as with or without STPs. For the purposes of this initial evaluation, any school with an STP fully implemented by 31 March 2004 was classed as a school with an STP. It is not possible to know exactly when initiatives are implemented in each school, and so some may have had initiatives in place for some time prior to implementing their STP, whilst others did not implement any initiatives until after they received their capital grant funding. Conversely, schools classed as 'Schools without STPs' may have had school travel initiatives underway despite not having implemented a full STP. Therefore the distinction between schools with an STP and schools without an STP is largely artificial.

8.3.2 Issues with Data on Modal Split in Schools with STPs

The following problems were identified with the data provided by schools with STPs:

- Once individual schools' modal split data from before and after implementation of their STP were submitted to DfES it became apparent that there were many gaps in the data as LAs were unable or unwilling to provide the required information.
- Upon analysing the data, problems were identified with individual school responses. This largely related to schools where the total number of pupil responses (calculated by summing the number of pupils travelling by each mode) did not equal the given total number of pupils surveyed.
- During analysis questions arose over unused modes of travel. It was not always clear from the data whether certain modes had been asked in the survey and no pupils responded for these modes, or whether the mode had not been asked at all. Because of this it was difficult to know whether surveys from different years, or from different schools, were comparable.
- There were specific uncertainties over the use of the car share option on the data collection template.

Schools are now advised to ask pupils about car sharing as a specific option on their modal split surveys. However, in some cases, car share may not have been given as an option in the earlier survey. As it was not known whether car share was asked in each survey, this was only analysed as a separate mode if non-zero entries were available for schools in both the 'before' and 'after' data.

8.3.3 Issues with Data on Modal Split in Schools With and Without STPs

Several problems were also identified with data provided by LAs for analysis comparing modal split in schools with and without STPs. These included:

- Data were provided in the form of proportions of pupils rather than numbers;
- Different modes of travel being asked in different years' surveys (this also varied considerably from authority to authority);
- A different question being used in different years' surveys (for example, asking 'how did you travel today?' in one year and 'how do you usually travel?' in another year);
- Surveys were carried out at different times of the year in different years. This was particularly problematic if the survey question used was 'how did you travel to school today?'. If the survey was asked (for example) in March one year and May the next, differences in modal split may have been due to different weather conditions on the day of the survey. This could be true even if the survey was carried out at the same time of year, and a more accurate picture of modal split can be gained by asking how pupils usually travel to school;
- Not all schools responded to each survey, and it was only possible to use data from those schools who had responded in each year under consideration, so that changes in modal split could be ascertained;
- Response rates within schools also varied considerably. In line with survey good practice, only schools with more than 50% of pupils responding were included. This ensured that only surveys where the number of respondents was greater than the number of non-respondents were analysed.

8.3.4 Case Studies

The main issue identified with the case studies was the fact that, after interviewing the relevant schools, many were not able to demonstrate the wider benefits expected from them. Case studies were picked based on information provided by RSTAs, and the wider benefits identified from this information often did not match up with the detail provided by the school. RSTAs also did not always provide details of when the STP was implemented, or how long the walking or cycling initiative had been in place, meaning several case studies had to be discarded because the initiatives had not been in place long enough for the wider benefits to be recognised, or for the initiatives to have had an impact.

8.4 Recommendations for a Final Evaluation

8.4.1 Introduction

To carry out a robust and effective final evaluation of the Travelling to School Initiative, it will be necessary to ensure that the issues identified above and in Annex B, regarding data quality and coverage, are resolved. The following sections explore data requirements, and make suggestions as to how the final evaluation could be approached to ensure it is as reliable and robust as possible.

8.4.2 Data Requirements

Many of the problems identified with the analysis of modal split in schools with STPs could have been avoided if the data collection template had been completed as intended. As this did not happen on many occasions, it would appear that the guidance may not always have been followed. In addition to providing simple and detailed guidance, it is important that the importance of robust and consistent data collection is effectively conveyed to all involved in the process, and it is not just seen as another bureaucratic burden.

Increased buy-in from LAs and schools on collecting modal split survey data, and in completing data collection forms could also have avoided some of the problems identified. Whilst it is not possible to change the quality of historic area-wide modal split data, if the data requirements set out below are met (whenever possible), many of the issues identified in the initial evaluation will be avoided in the future.

- When providing modal split data from schools with STPs, RSTAs should provide data on individual schools, rather than LA totals. This means that the maximum data possible are available for analysis;
- Modal split data should be provided from all schools with STPs. To ensure this happens, it may be necessary to develop some means of obliging schools to carry out modal split surveys, and STAs to collate and return data. It may simply be that more time needs to be provided for this work;
- Set modes of travel to school should be used, so that data on the same modes and mode groupings are provided by all schools;
- The specific definition of car share must be used by all schools;
- All pupils in the school must be surveyed wherever possible, and specific year groups or classes should not be excluded from the survey;
- The total of the number of pupils responding under each mode in the modal split survey should be exactly equal to the number of pupils responding; i.e. each pupil should be entered once, and only once, on the survey form, under one specific mode of travel;
- Schools should provide the total number of pupils on roll in the school at the time of the survey, to allow accurate response rates to be calculated;
- When Local Authorities collate area-wide modal split data, schools' unique DfES establishment numbers should be included on survey forms as well as the school name. This makes matching schools' data over years much easier than relying just on names, which can be very similar or even identical if the schools are in different towns in the LA. Names can also be entered in different formats in different years which makes matching more difficult;
- Schools should be encouraged to participate in area-wide modal split surveys every year, with LAs explaining the importance of being able to track changes in modal split;
- Area-wide modal split surveys should be carried out at the same time each year, to remove the possibility of changes in modal split being influenced by the weather conditions.
- Schools should ask pupils how they usually travel to school, as this question is less weather-dependent than asking pupils how they travelled on one particular day.

Many of the problems identified above could be overcome through the use of the Pupil Level Annual Schools' Census to collect mode of travel to school data. This is a robust and well established data collection exercise that results in comprehensive coverage and data. It would also ensure consistency between schools and LAs, and already has buy-in from those involved.

8.4.3 Methodological Suggestions

A more accurate method needs to be developed for comparing schools, rather than simply classifying schools as either with or without an STP. For the purposes of the initial evaluation schools were classed as a 'school with STP' if they had implemented an STP by 31st March 2004, and otherwise as a 'school without STP'. This distinction proved to be largely artificial, as the date the school signed-off their STP does not necessarily correspond with the time the school began travel planning activity. Before a final evaluation is carried out, further thought will need to be given to how schools are distinguished. It may be more appropriate to classify schools as 'schools carrying out travel planning work' and 'schools not carrying out travel planning work', although in practice it may be hard to identify whether such work is actually being carried out in individual schools.

When carrying out analysis comparing modal split in different groups of schools over a period of time, it may be more appropriate to classify schools each year, rather than classify them once and use the same categories throughout the analysis. So, for example, if survey data were available from 2001, only schools that had an STP in place in 2001, or were carrying out travel planning work at that time, would be classed as schools with STPs that year. This would ensure that schools were not classed as having an STP in 2001 if they did not implement it until 2004. Schools would only be classed as having an STP, or carrying out travel planning work, in the years that this was actually the case.

When investigating the number of STPs implemented each year since April 2004 it would be appropriate to also include independent schools in the total, rather than just counting schools that had received a capital grant payment in that year.

Before picking case studies for the final evaluation, more detail on the initiatives in place in schools will be needed. It will also be useful if RSTAs are able to provide details on how long the initiatives have been in place and when the STP was implemented (if appropriate). If schools or initiatives are identified as being good examples of specific benefits being realised in schools, evidence to support this would be useful. It may also be useful for the STA to identify what work the Local Authority has done with the school in developing the initiatives in question, to provide further detail and background.

For the final evaluation, it may also be of interest to follow up on some of the case studies carried out in the initial evaluation, particularly those where wider benefits, or the impact of initiatives, could not be identified due to the short timescale since these were introduced. This would allow a review of whether the expected benefits have been seen, and an assessment of the impact of initiatives in schools that have been observed to be doing good work in developing their STP.

In the initial evaluation case studies were picked to illustrate the potential wider benefits of STPs, and the success of walking or cycling initiatives in schools without a full STP. If the final evaluation were to involve an independent assessment of whether these benefits were being seen more consistently, it would be necessary to pick a random selection of schools to study further.

³ *Smarter Choices - Changing the Way We Travel* Published October 2004. Carried out for DfT by Sally Cairns, Lynn Sloman, Carey Newson, Jillian Anable, Alistair Kirkbride and Phil Goodwin.