19. Effects on Government goals

19.1 Introduction

In this chapter, we briefly review the evidence on the contribution that large-scale Smarter Choice Programmes might make to the Government's high level goals, as originally defined in *Towards a Sustainable Transport System* (Department for Transport, 2008) and carried forward into *Delivering a Sustainable Transport System* (Department for Transport, 2009a). The high level goals were to:

- support national economic competitiveness and growth, by delivering reliable and efficient transport networks;
- reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change;
- contribute to better safety, security and health and longer life expectancy by reducing the risk of death, injury or illness arising from transport, and by promoting travel modes that are beneficial to health;
- promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society;
- improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.

We discuss below the evidence on the extent to which Smarter Choice Programmes might contribute towards achievement of these objectives. Some of our conclusions are inevitably qualitative and anecdotal in nature, being based on the judgements of officers in the three towns, while others are supported by data from the household surveys or other sources.

19.2 Supporting economic growth

Guidance to Regions on Delivering a Sustainable Transport System (Department for Transport, 2009b) identified various ways in which transport interventions might support economic growth. Of these, the most relevant for a large-scale Smarter Choice Programme are that it might be expected to:

- reduce lost productive time by improving the reliability and predictability of journey times for business, commuting and freight;
- support the sustainable provision of housing.

Our evidence suggests that the car driver mileage by residents of the Sustainable Travel Towns fell by about 5%~7% (on trips <50km) during the course of the programme. This is likely to have helped reduce congestion and improve journey reliability. This is particularly likely to have been the case in the inner areas, where traffic count data shows reductions of the order of 6-9%.

Interventions targeted at school and workplace travel are likely to have been particularly important, because of their effect on peak hour trips. Car use for the journey to school fell by between 9% and 17% in the three towns (as measured by school travel surveys)¹, and car driver distance for commuting fell amongst residents of two of the towns (as measured by the household survey, trips<50km).

In Darlington, officers identified that the primary impetus for their Smarter Choice Programme was an economic one. Efforts to attract new businesses to the town in recent years had been successful, but there was concern that prosperity would bring greater car ownership and use, and that the resulting congestion would undermine the high quality of life that had made the town attractive to businesses in the first place.

Worcester was the most congested of the three towns, and here the Smarter Choice Programme was seen as a politically and publicly acceptable way of tackling congestion.

In Peterborough, the Sustainable Travel Town work was seen as a way of enabling further housing growth without jeopardising the low levels of congestion in the town.

Peterborough officers also suggested that the introduction of travel plans had the potential to increase business efficiency and reduce operational costs, both as a result of reduced fuel costs for business travel and because travel planning was a lower-cost means of achieving business expansion than the construction of new car parking facilities.

19.3 Reducing carbon emissions

Our evidence on the effects of the Sustainable Travel Towns programme on carbon emissions is discussed in detail in Chapter 18. Estimations based on the household surveys suggest that the Sustainable Travel Towns programme resulted in annual per capita carbon savings of roundly 50kg of carbon dioxide in 2008, compared to 2004. Grossing this up to town-wide level and accounting for increases in population, there was a combined saving of 17,510 tonnes of carbon dioxide per annum in 2008. The per capita figure only reflects reductions in car driver distance on journeys of less than 50km, but it is equivalent to a reduction in annual per capita emissions from car driving of 4.6% for journeys of all lengths.

¹ The quoted range is between the mean of the results from the two calculation methods in Darlington (9.3%) and the mean of the results from the two calculation methods in Worcester (16.7%).

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19.4 Increasing safety, security and health

Of the challenges in relation to safety, security and health that are listed in the Government's *Guidance to Regions on Delivering a Sustainable Transport System*, it might be anticipated that a Smarter Choice Programme would have an effect on the following:

- Reducing deaths and serious injuries per kilometre travelled by each mode;
- Improving air quality emissions;
- Improving health by enabling more physically active travel.

We examine each of these challenges in turn below, with a particular focus on road safety.

19.4.1 Reducing deaths and serious injuries

Each of the three towns supplied data on casualties to pedestrians and cyclists from 1998-2008. This can be seen in Figures 19.1 to 19.3, which show, for each of these modes, both the overall number of casualties and the number of fatal and serious casualties, during this period. For comparison, Figure 19.4 shows national change over the same period in pedestrian and cyclist casualties on roads in urban areas of Great Britain with a population of 10,000 or more.

In addition to the high level goal of reducing deaths and injuries per kilometre travelled by each mode, all local authorities are tasked with achieving ongoing gains in road safety under the Government's Road Safety Strategy, which includes the target of a 40% reduction in the number of people killed or seriously injured in road accidents by 2010, as compared with the average for 1994-98.

Looking at the graphs a number of observations can be made.

In Darlington, all pedestrian casualties were falling steeply until 2002. After this they were fairly flat for two years and then rose in 2005, but subsequently showed an ongoing decline, so that in 2008 the annual casualty total was lower than in the 2002 to 2004 period. The pattern for fatal and serious pedestrian casualties between 2004 and 2008 is fairly similar with a slight rise followed by a gradual decline.

Looking at the figures for cyclist casualties in Darlington it appears that there was a slight rise in overall cyclist casualties after 2004. Fatal and serious cyclist casualties varied from year to year, so that no very evident upward or downward trend is clear from 1998 to 2008.

In Peterborough, all pedestrian casualties fell consistently between 1998 and 2001, but then rose again in 2002 and subsequently appear to have been broadly stable. The number of fatal and serious pedestrian casualties fell gradually between 1998 and 2004, but increased slightly between 2004 and 2008.

Looking at the figures for all cyclist casualties in Peterborough, these appear to have been generally lower from 2004 to 2008 than in the earlier period, 1998 to 2003. The number of

cyclists fatally or seriously injured appears to have been fairly stable across the whole tenyear period, though with a slight upturn between 2006 and 2008.

In Worcester, from 1998 to 2001, all pedestrian casualties fell. From 2002 to 2008 there was variation in overall pedestrian casualty numbers so that it is hard to detect either a clear upward or downward trend over this period. For fatal and serious pedestrian casualties there is variation over the whole period, but a possible overall downward trend.

Looking at the figures for all cyclist casualties in Worcester, it appears that there was a downward trend until around 2005, with no clear upward or downward trend after this. Across the whole 10 years there appears to have been a generally downward trend in the number of cyclists fatally or seriously injured, though with something of a plateau between 2002 and 2004.

Figure 19.4 shows that nationally, on urban roads in Great Britain, from 1998-2008 there was a sustained downward trend in the number of pedestrian casualties, both in terms of overall numbers and those fatally or seriously injured.

Meanwhile the total number of cyclist casualties nationally showed a strong downward trend between 1998 and 2002, reaching its lowest point in 2006, before showing an upturn in 2007 and 2008. The number of fatal and serious injuries to cyclists also showed a gradual decline from 1998 to 2004, but a gradual increase from 2005 onwards.

Analysis of casualty figures in the three towns and nationally is provided in Tables 19.1-3.

In Table 19.1 casualty figures for the years 1999 to 2003 (the five years before the Sustainable Travel Town initiative) are amalgamated, as are those for 2004 to 2008 (the five years during which the initiative took place). Comparing these two periods, the table shows the changes in all casualties and in fatal and serious casualties that were seen in each town and on urban roads in Great Britain nationally.

Table 19.2 helps to set the casualty figures in context by showing the changes in distance travelled by walking and cycling between 2004 and 2008, both in the three towns and nationally in urban areas of over 10,000. It should be noted that the national data set has been chosen to provide a good match with the national casualty data shown in Figure 19.4. Consequently it includes changes in metropolitan areas including London. This is not the same dataset as is used for benchmarking the changes in travel in the towns in Chapter 10, which provides a closer match in terms of the specific population size of the towns.²

Using the data in the first two tables, Table 19.3 shows the implied change in the casualty rate per kilometre in the three towns and nationally between 2004 and 2008. It should be noted that, whereas the figures for the change in casualties compare the five years before 2004 with the five years from 2004, figures for the change in kilometres walked or cycled are for change between 2004 and 2008. It was necessary to use this as a proxy for change between the two periods in question, as this was the only data available to indicate change in

² For example, the trends for distances cycled and walked in medium-sized urban areas of 25,000-250,000 appear to be less positive/more negative.

exposure to walking and cycling for the three towns. One further issue is that, since the changes in walking and cycling distances in Table 19.2 are per person, the implied risk per kilometre travelled shown here does not take account of any changes in population, meaning that where there has been a slight increase in population, the reduction in casualties per kilometre would, in practice, be slightly greater.

Comparison in pedestrian casualties

As can be seen in Table 19.1, nationally, in all urban areas of 10,000 and more, during the period 2004-2008, there were substantially fewer pedestrian casualties than in the earlier period, 1999-2003, with a comparative reduction of -21.9% in fatal and serious pedestrian injuries and of -24% in all pedestrian injuries. The scale of this success must be slightly qualified by the fact that the national casualty reduction was accompanied by a reduction in walking. As shown in Table 19.2, between 2004 and 2008 the distance travelled by walking per person in urban or metropolitan areas with a population of more than 10,000 appears to have declined by 4.7%. Consequently a proportion of the casualty reduction may be attributable to the fact that the distance travelled on foot was reduced, rather than to real improvements in the safety of walking conditions. The National Travel Survey records that short trips were under-reported in 2007/8, meaning that the actual distance reduction that took place may have been smaller than it appears. In either event however, the casualty reduction was considerably greater than the reduction in walking, indicating that there were considerable real gains in pedestrian safety nationally over this period. This can be seen in Table 19.3, which shows an implied reduction of 20.2% in all pedestrian casualties per kilometre and of 18% in fatal and serious pedestrian casualties per kilometre.

The results of the three towns in relation to absolute numbers of pedestrian casualties are somewhat varied, with considerable reductions in some categories of casualty, but some increases in others.

In Darlington, comparing the period during the Sustainable Travel Town initiative with the period before it, there was a substantial reduction in all pedestrian casualties (-17.7%) but an increase in fatal and serious pedestrian casualties (+9.5%).

In Peterborough there was an increase all pedestrian casualties (+7.0%) and a small increase in fatal and serious pedestrian casualties (+4.8%). These increases could be partly attributable to the town's increase in population (slightly more than 6% in the course of the Sustainable Travel Town initiative).

In Worcester there was a small reduction in all pedestrian casualties (-4%) but a substantial reduction in fatal and serious pedestrian casualties, (-17.4%), which occurred despite the very substantial increase in walking that took place in the town.

However, as can be seen in Table 19.3, for all three towns, there were implied reductions in pedestrian casualties per kilometre walked (both for all casualties and for fatal and serious casualties), and in some cases these were very substantial. In Darlington and Worcester the implied reduction in all casualties per kilometre was greater than the implied national reduction, and in Worcester the implied reduction in fatal and serious casualties per kilometre was in the region of twice the implied national reduction. In contrast, there are

two instances where the implied reductions were lower than those achieved nationally – Darlington's reduction in fatal and serious pedestrian injuries and Peterborough's reduction in all pedestrian injuries.

Comparison in cycling casualties

As can be seen in Table 19.1, in relation to cycling, at a national level, comparing the earlier period and the later period there was a reduction in absolute casualty numbers (-6.5% for fatal and serious injuries and -13.5% for all injuries). Meanwhile, between 2004 and 2008 the distance travelled by bicycle per person grew by 9.6%, making these casualty reductions more impressive (though there could be some concern that between 2006 and 2008 the increase in cycling appears to have been accompanied by a slight upturn in casualty figures, as seen in Figure 19.4). Table 19.3 shows that nationally there was an implied reduction of 21.1% in all cycling casualties per kilometre and of 14.7% in fatal and serious casualties per kilometre.

Again, the picture in the three towns in relation to absolute numbers of casualties is a complex one, with considerable reductions in some categories but some increases in others.

In Darlington the town saw a reduction in the number of cyclists fatally or seriously injured (-11.8%) but an increase in overall cycling casualties (+9.9%).

In Peterborough there was a very slight increase in fatal and serious cycling casualties (+1.9%) and a fall in overall cycling casualties (-12.1%). Again the increase in the town's population means that even if there were no other changes, a comparable increase in casualties might be expected. The fall in overall cycling casualties is similar to the reduction achieved nationally, despite the town's probable increase in cycling between 2004 and 2008.

In Worcester, reductions in all cyclist casualties (-27.3%) and in fatal and serious cyclist casualties (-37%) are much higher than reductions achieved nationally. However, these results may have been partially achieved as a result of the town's possible overall reduction in cycling (between -14% and +2%).

In Table 19.3 however, it is apparent that all three towns achieved substantial implied reductions in cycle casualties per kilometre cycled (both for all casualties and for fatal and serious casualties). Darlington's implied reductions in both categories are particularly impressive. They achieved around twice the implied national reduction in all cycling casualties per kilometre and more than three times the implied national reduction in fatal and serious injuries per kilometre. In Peterborough implied reductions in all cyclist casualties per kilometre and in fatal and serious cyclist casualties per kilometre were larger than implied reductions achieved nationally. In Worcester implied reductions in fatal and serious injuries per kilometre cycled were in the region of twice those achieved nationally, while implied reductions in all injuries per kilometre cycled were comparable to those achieved nationally.

Conclusion

The challenge for any town setting out to promote walking and cycling is to increase the level of active travel, whilst also securing ongoing reductions in road casualties. In the three towns, there were some notable successes in reducing absolute numbers of casualties, as in

Worcester where substantial increases in walking were accompanied by reductions in all pedestrian casualties, including fatal and serious injuries; in Darlington, where a huge increase in cycling took place alongside a reduction in fatal and serious cycling injuries; and in Peterborough, where there was a reduction in overall cycle casualties that was not dissimilar to the national reduction, despite the town's growth in cycling in some areas. From such results, it is clear that increases in active modes need not inevitably be accompanied by increases in casualties. Moreover, in all three towns, the risk per kilometre walked or cycled reduced, in some cases very substantially. In most cases, though not all, the implied reductions per kilometre occurring nationally. However, two of the towns did see increases in absolute numbers for some types of casualty, which were not reflected nationally. This implies that authorities setting out to encourage walking and cycling should support their promotional efforts with a strong programme of measures to improve the safety of active travel, such as 20mph zones, safe cycling infrastructure and other highways safety measures.

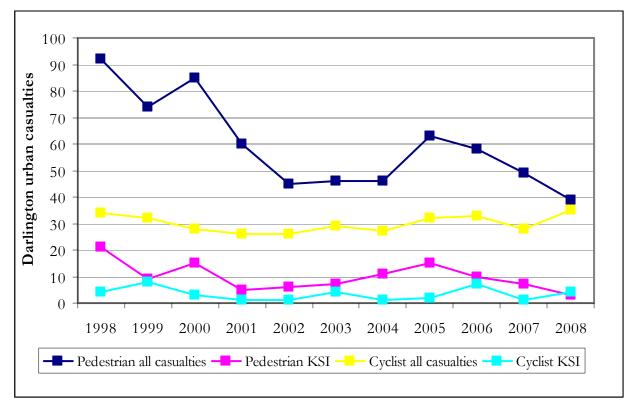
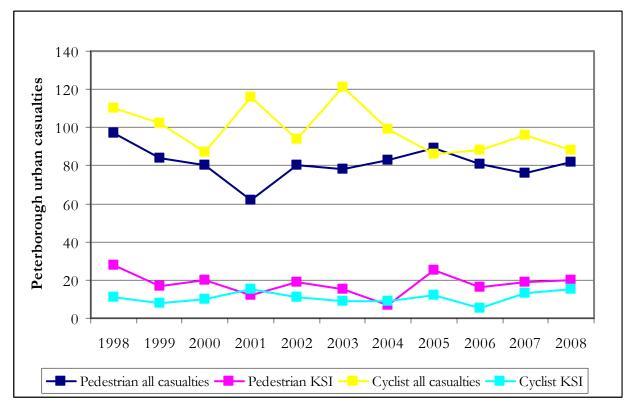


Figure 19.1: Urban Darlington pedestrian and cyclist road casualties 1998-2008

Figure 19.2: Urban Peterborough pedestrian and cyclist road casualties 1998-2008



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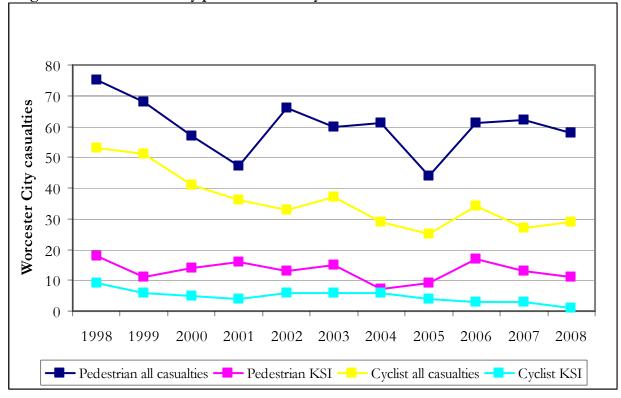
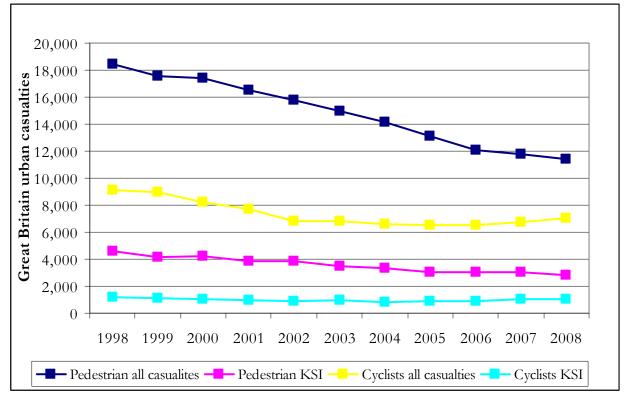


Figure 19.3: Worcester City pedestrian and cyclist road casualties 1998-2008

Figure 19.4: Pedestrian and cyclist road casualties on urban roads in Great Britain 1998-2008



Note: Data is for urban roads in Great Britain; these are major and minor roads within an urban area with a population of 10,000 or more, excluding motorways.

| | Darlington | | Peterl | borough | Worcester N | | | National urban areas of 10,000 or more | |
|-----------------|------------|------------------------------------|-----------|--------------|-------------|-----------|-----------|--|--|
| | 1999-2003 | 2004-2008 | 1999-2003 | 2004-2008 | 1999-2003 | 2004-2008 | 1999-2003 | 2004-2008 | |
| PEDESTRIANS | 5 | | | | | | | | |
| KSI | 42 | 46 | 83 | 87 | 69 | 57 | 19545 | 15271 | |
| All casualties | 310 | 255 | 384 | 411 | 298 | 286 | 82180 | 62496 | |
| % change in KSI | +9.5% | | +4.8% | +4.8% -17.4% | | -21.9% | | | |
| % change in all | -17.7% | -17.7% | | | -4.0% | | -24.0% | | |
| injuries | | | | | | | | | |
| CYCLISTS | | | | | | | | | |
| KSI | 17 | 15 | 53 | 54 | 27 | 17 | 4992 | 4666 | |
| All casualties | 141 | 155 | 520 | 457 | 198 | 144 | 38568 | 33365 | |
| % change in KSI | -11.8% | | +1.9% | | -37.0% | | -6.5% | | |
| % change in all | +9.9% | ⁰ / ₀ -12.1% | | -27.3% | | -13.5% | | | |
| injuries | | | | | | | | | |

Table 19.1: Comparison between casualties to pedestrians and cyclists in the three towns and nationally, 1999-2003 and 2004-2008

Note: Town data are for urban Darlington, urban Peterborough (i.e. not the rural hinterland of the unitary authority) and for Worcester City; national data is for urban roads in Great Britain. These are major and minor roads within an urban area with a population of 10,000 or more, excluding motorways.

| | Table 19.2: Changes in distance | per person for walking and | l cycling in the three towns an | d nationally from 2004 to 2008 |
|--|---------------------------------|----------------------------|---------------------------------|--------------------------------|
|--|---------------------------------|----------------------------|---------------------------------|--------------------------------|

| | Darlington | Peterborough | Worcester | National urban areas of more than 10,000 |
|----------|---------------|--------------|--------------|--|
| Walking: | +15% to +20% | +14% to +33% | +25% to +29% | -4.7% |
| Cycling | +76% to +112% | +23% to +38% | -14% to +2% | +9.6% |

Notes: Data from the three towns based on household travel surveys, trips < 50km, range shows difference between weighted and unweighted data. National data is from the National Travel Survey based on figures for urban and metropolitan areas in Great Britain with a population of more than 10,000, comparing 2004 to 2008. There is, however, an apparent under-recording of short trips in 2007/08 compared to other years. This national data set has been chosen for comparison to provide a close match with the road casualty data. Benchmarking data on walking and cycling used elsewhere in this report provides a closer match for the three towns.

| | Darlington | Peterborough | Worcester | National trend |
|-----------------|------------------|------------------|------------------|----------------|
| Walking | | | | |
| % change in | -4.8% to -8.7% | -8.1% to -21.2% | -33.9% to -36.0% | -18% |
| KSI per km | | | | |
| walked | | | | |
| % change in all | -28.5% to -31.5% | -6.1% to -19.5% | -23.2% to -25.6% | -20.2% |
| injuries per km | | | | |
| walked | | | | |
| Cycling | | | | |
| % change in | -49.9% to -58.4% | -17.2% to -26.2% | -26.8% to -38.3% | -14.7% |
| KSI per km | | | | |
| cycled | | | | |
| % change in all | -37.5% to -48.1% | -28.5% to -36.3% | -15.4% to -28.7% | -21.1% |
| injuries per km | | | | |
| cycled | | | | |

| Table 19.3: Implied changes in casualties | per kilometre walked or cycled in | the three towns and nationally, 2004 to 2008 |
|---|-----------------------------------|--|
| | I | ······································ |

Notes: Figures calculated from those in Tables 19.1 and 19.2. Whereas the figures for the change in casualties in Table 19.1 compare the five years before 2004 with the five years from 2004, figures for the change in kilometres walked or cycled in Table 19.2 are for change between 2004 and 2008. It was necessary to use this as a proxy for change between the two periods in question, as this was the only data available for changing exposure to walking and cycling for the three towns. Since the changes in walking and cycling distances in Table 19.2 are per person, the implied risk per kilometre travelled shown here does not take account of any changes in population, meaning that in places where there has been a slight increase in population, the reduction in casualties per kilometre would, in practice, be slightly greater. The range in casualty reductions per kilometre shown here for the three towns reflects the fact that changes in distance walked or cycled have been calculated as ranges for this study, as shown in Table 19.2.

19.4.2 Improving air quality emissions

The available data were not sufficient to assess air quality impacts of the Sustainable Travel Towns programme. None of the towns had a traffic-related Air Quality Management Area, and hence none had an air quality dispersion model that might have enabled an assessment to be made of the effect of lower traffic levels on air quality. It is clear that there are likely to have been particular places where roadside levels of traffic pollution would have reduced, with localised benefits. However, the overall impact on air pollution in the three towns would depend upon background levels, and the overall significance of local traffic to ambient air quality. In principle, it would be possible to apply the town-wide traffic reductions observed in Darlington, Peterborough and Worcester to a town with an air quality dispersion model, in order to assess the effect on air quality of a reduction in traffic of the level observed in the three towns.

19.4.3 Improving health by enabling more physically active travel

All three towns achieved increases in active travel, which are likely to have resulted in benefits to health. The household travel survey suggests, overall, there were significant increases in walking and cycling. Looking at distance rather than number of trips (since this is likely to provide a better indicator of physical activity), the combined household survey data for the three towns suggests that the average distance walked increased by 18% (unweighted) or 27% (weighted). The average length of individual walking trips also increased – that is, people began walking for longer trips than in the past. The increase in cycling levels was most marked in Darlington and Peterborough, and less clear in Worcester (where cycle trips rose, but distance cycled fell slightly). Looking at the combined dataset for all three towns, the distance cycled increased by 33% (unweighted) or 36% (weighted).

However, assessing the health benefits from these increases in walking and cycling is not straightforward. For example, the health benefit may have been limited, if the reported increases were the result of already-active people simply walking or cycling slightly more. We therefore examined data from the household travel surveys on frequency of walking or cycling. The baseline and final surveys asked each respondent whether they walked 'almost daily', 'several times per month' or 'almost never', and the same for cycling (Table 19.4). Between 2004 and 2008, the proportion of respondents across all three towns who reported that they 'almost never' walked *or* cycled fell by 11% (from 25% to 22%, unweighted; or from 23% to 21%, weighted).

Data from Darlington, collected as part of the Cycling Demonstration Towns project, suggest that the increase in active travel in that town was accompanied by a general reduction in sedentary behaviour (Cavill, 2009). A quota-sample telephone survey of approximately 1,500 individuals carried out in 2006 and again in 2009 found that the proportion of Darlington adults (over 16) who were inactive fell from 30.8% to 26.9% (a fall of 3.9%-points). Over the same time period, the proportion of adults who did not do any cycling in a typical week fell from 78.7% to 77.5% (a fall of 1.2%-points)³.

³ For comparison, the proportion of Darlington residents who reported they almost never cycled in the Sustrans / Socialdata household travel survey fell from 85% in 2004 to 83% in 2008 (unweighted).

| | | | %-point | % |
|-----------------------------------|-------|-------|---------|--------|
| | 2004 | 2008 | change | change |
| unweighted | | | | |
| walk or cycle almost daily | 45.1% | 47.5% | +2% | +5% |
| walk or cycle several times/month | 30.1% | 30.5% | 0% | +1% |
| almost never walk or cycle | 24.8% | 22.0% | -3% | -11% |
| weighted | | | | |
| walk or cycle almost daily | 46.6% | 49.4% | +3% | +6% |
| walk or cycle several times/month | 30.1% | 29.6% | 0% | -1% |
| almost never walk or cycle | 23.4% | 20.9% | -2% | -11% |

Table 19.4: Frequency of active travel (walking and cycling) amongst household travel survey respondents, combined data for all towns

Notes: See Chapter 13 for explanation of use of weighted and unweighted data. 'Weighted' results are based on analysis supplied by Socialdata. Respondents who did not state how often they walked or cycled; or who said they never walked and did not state how often they cycled; or who said they never cycled and did not state how often they walked, are excluded. These constituted 2% of responses in 2004 and 1% in 2008. Figures may not add exactly due to rounding.

As well as many of the initiatives in all three towns being intended to encourage walking and cycling, there were several specific instances where the towns had worked with the local Primary Care Trust to encourage active travel. Darlington had run a '10,000 Steps Challenge' in conjunction with the Primary Care Trust as part of a health improvement programme, and Peterborough's *Travelchoice* team had promoted health walks run by the Primary Care Trust.

19.5 Promoting equality of opportunity

Of the challenges in relation to equality of opportunity that are listed in the Government's *Guidance to Regions on Delivering a Sustainable Transport System*, the one that is most relevant to a Smarter Choice Programme is to 'Enhance social inclusionby enabling disadvantaged people to connect with employment opportunities, key local services, social networks and goods'.

The three towns identified several respects in which their initiatives promoted equality of opportunity. These are outlined below.

Reducing health inequality by encouraging active travel

Darlington officers noted that this was a significant impetus for their programme, in particular because the town had a 13-year life expectancy differential between the most and least affluent areas.

Widening employment opportunities by making it easier for potential employees to reach workplaces without a car

Peterborough officers noted that a number of businesses in the city employed people on fairly low wages, for example in the distribution sector, and that travel plans implemented by

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Sloman L, Cairns S, Newson C, Anable J, Pridmore A & Goodwin P (2010) The Effects of Smarter Choice Programmes in the Sustainable Travel Towns: Research Report such companies had particular benefits in terms of widening access to work. This was also identified as a benefit in Darlington. Worcester officers noted that the cycle loan scheme potentially enabled people to gain access to work, and that videoconferencing facilities being considered by the city council could offer benefits in terms of easier access for people with mobility problems.

Improving pupil attendance at school

Darlington officers commented that certain aspects of their school travel work (notably *Medal Motion* and walking buses) had led to improved school attendance and had helped children to engage more fully with their classmates. In Worcester, an informal walking bus had been used to tackle truancy issues.

Offering information about travel options to people with mobility difficulties

The personal travel planning programme and the increased resources for production of travel awareness materials led the towns to produce a range of information that was specifically aimed at people with mobility difficulties. Examples included information about taxi vouchers and a *Keeping in Motion* booklet for the mobility-impaired in Darlington; and an 'easy read' guide to public transport, a *Transport to Healthcare* booklet, and information about Shopmobility, concessionary fares and young persons' railcards in Peterborough.

Working with disadvantaged communities to improve bus services and public transport information

Peterborough officers identified instances where it had worked closely with disadvantaged communities and the bus operator to introduce or reintroduce bus services, and to display public transport information in community centres. Worcester felt that bus improvements coupled with promotional activities had the potential to reduce social inclusion, even if not specifically targeted at excluded groups.

Offering specific services for people at risk of social exclusion

In Peterborough, the authority ran a 'travel training' project, which showed vulnerable young people how to use public transport.

Offering inexpensive travel options to people who cannot afford to run a car

Worcester interviewees noted that both their cycle loan scheme and their car club provided additional travel options to people who did not own a car.

Sustaining bus markets

In both Worcester and Peterborough, the increase in bus use must have helped to sustain and expand the provision of bus services, which often provide a vital service for those without personal transport.

19.6 Improving quality of life

Guidance to regions on delivering a sustainable transport system lists a large number of challenges under the heading of improving quality of life and promoting a healthy natural environment. The challenges most relevant in the Sustainable Travel Towns are:

- enabling access to a range of goods, services, people and places;
- reducing exposure to road noise;
- minimising impact on the natural environment, heritage and landscape;
- improving the experience of end-to-end journeys for transport users;
- improving integration of transport into streetscapes and enabling better connections between neighbourhoods and better access to the natural environment.

In addition to these aspects of quality of life, the evidence from the towns suggested that Smarter Choice Programmes also had the potential to achieve:

- better work/life balance;
- increased sense of community or social capital;
- public satisfaction with the services and information offered.

The contributions of the Sustainable Travel Town project to each of these aspects of quality of life are outlined below.

Enabling access to a range of destinations

Although difficult to demonstrate, the Smarter Choice Programmes in the three towns are likely to have made it easier for people to access a range of destinations, both by providing information about the travel options, and by improving the travel options that were on offer (for example, by offering bikes for loan, and improving bus services). Worcester officers pointed out that, in telephone surveys conducted after the first three stages of personal travel planning, 70% of residents felt that the information materials they had been offered through the personal travel planning initiative had been 'helpful and useful'.

Reducing exposure to road noise

The success of the Smarter Choice Programmes in reducing traffic volumes may have had a small benefit in terms of reduced traffic noise, although it is again not possible to demonstrate this. However, Darlington officers commented that consultation with residents (as part of preparation for the Local Transport Plan) had identified a desire for a 'less intrusive transport network', meaning a reduction in traffic disturbance, including noise. The Sustainable Travel Town work appears to have been seen by the council as one way of helping to achieve this.

Minimising impact on the natural environment, heritage and landscape

No examples were cited of smarter choice measures having had any effect on the natural environment, heritage or the landscape. However, by reducing traffic, it is likely that any effects of the Sustainable Travel Town initiative will have been positive.

Improving the experience of end-to-end journeys

Residents' satisfaction with local bus services and local transport information increased over the period of the Sustainable Travel Town project in some but not all of the three towns.

In Peterborough, citizens' panel (Best Value Performance Indicator) surveys indicated that the proportion of people who were very or fairly satisfied with the local bus service rose from 44% in 2003 to 62% in 2008 ('very satisfied' up from 7% to 13%). The proportion who were very or fairly satisfied with public transport information increased from 43% in 2003 to 61% in 2008 ('very satisfied' up from 6% to 11%)⁴. There was also evidence from Peterborough that the introduction of real-time passenger information had improved the experience of bus passengers. Following introduction of real-time information on two bus routes, a survey of bus users found that 59% of interviewees agreed that the real-time information screens had improved their experience and satisfaction with using the bus; while 27% of interviewees agreed that the screens had encouraged them to use the bus more often.

In Worcester, the data is reported for the entire county, and it is not possible to disaggregate the effects for the city. For the county as a whole, the proportion of people who were satisfied with the local bus service rose from 37% in 2003/04 to 48% in 2006/07. The proportion satisfied with public transport information increased from 24% to 44% over the same period (separate figures for the number who were 'very satisfied' were not available).

The picture in Darlington was less positive, as might be expected given the difficulties that were encountered in improving and promoting the bus services there during the course of the Sustainable Travel Town work. Overall satisfaction with bus services declined from 62% (2003/04) to 42% (2008). The proportion satisfied with public transport information fell from 57% (2003/04) to 40% (2008).

Improving integration of transport into streetscapes

Workplace travel planning initiatives had helped tackle the overspill of car parking into surrounding streets, hence improving the quality of the street environment. In this context, Peterborough officers commented that a travel plan was one way that a business could be seen to be demonstrating corporate responsibility and being a 'good neighbour'.

Enabling better access to the natural environment

The towns gave several examples of their work having encouraged people to access the natural environment. In Darlington, part of the walking and cycling promotional activity involved organised leisure walks or cycle rides. In Peterborough, the *Travelchoice* team promoted 'bus walks' (i.e. leisure walks with start and end points accessed by public transport) which were organised by the Ramblers' Association.

Improving work/life balance

Officers in Worcester suggested that the introduction of flexitime as part of the county's own travel plan may have been beneficial to work/life balance for local authority employees.

⁴ Satisfaction with the local bus service overall is reported as BVPI104; satisfaction with public transport information overall is reported as BVPI103. Figures reported here were supplied by the local authorities and checked for consistency against the Audit Commission returns.

Increasing social capital

Comments by several officers in the towns suggest that smarter choice measures may help build 'neighbourliness', a sense of community or social capital. Increasing social capital is not one of the 'challenges' identified under the *Delivering a Sustainable Transport System* quality of life objective, but, perhaps uniquely amongst transport interventions, smarter choice measures seem to be an area where there is repeated, albeit anecdotal, evidence of a social capital benefit. Officers in all three towns suggested that school travel planning had a positive effect on community relationships, or that it had led to greater interaction between parents, or positive interactions between parents and children (e.g. walking to school together). In Peterborough, examples were cited of local residents being involved in identifying solutions to car parking problems outside a school, and of a joint council/school/community initiative as a result of which the council installed road safety measures and the local community organised a litter pick-up.

Officers noted that personal travel planning offered social contact, and that this might be especially beneficial for older people or people who were isolated. It was felt that local travel guides (offered to all residents through personal travel planning) encouraged people to discover the facilities in their local community. This was also felt to be a benefit of the *Passport to Travel* guide sent to all new residents in Peterborough.

Finally, Darlington officers commented that the social element of the cycling events and rides they had organised had resulted in people developing new contacts or friendships.

Public satisfaction with the services and information offered

Quantitative and qualitative surveys in all the towns repeatedly demonstrated high satisfaction levels with the interventions: for example, customer satisfaction surveys in Worcester found that 70% of residents receiving personal travel planning information had found it 'helpful and useful'; and brand awareness surveys in Peterborough found individual information materials and services were rated as 'helpful' or 'very helpful' by between 54% and 96% of respondents.

19.7 References

Cavill N (2009) Cycling Demonstration Towns: Surveys of cycling and physical activity 2006 to 2009 Report for Cycling England.

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