

## 7. Greener Darlington

### 7.1 Transport

The Greener Darlington themed group of the Darlington Partnership aims to develop an attractive and achievable local environment and contribute to tackling global environmental challenges.

Encouraging travel behaviour change through the development of high quality sustainable transport networks in parallel with travel marketing initiatives contributes to a greener Darlington as well as contributing to the health and wellbeing of the population. If more people are encouraged to incorporate regular physical activity into their lives.

In 2004, Darlington was selected by the Department for Transport to be one of three Sustainable Travel Development Towns. The programme included funding for a range of initiatives which promote the greater use of sustainable modes of transport. In 2005 Darlington was selected by Cycling England as a Cycling Demonstration Town. Using funding from Cycling England matched by capital investment from transport and other funding streams, the Council invested £3 Million in improving cycle infrastructure over the period August 2005 – August 2008. In 2008 funding from Cycling England was extended until March 2011, with an additional grant of £1.5 Million to the Council.

Since April 2006 Darlington has marketed all of its work to encourage sustainable travel under the brand name 'Local Motion'.

Measures implemented through the Local Motion programme have included:

- Providing the opportunity for urban residents (40,000 households in Darlington) to receive personal travel advice at their home, over the period 2005 /2007
- Launch of the Local Motion club in 2006 to keep residents up to date with the programme and its development
- Employment of a School Travel Plan Officer who has helped 38 schools to develop a travel plan, coordinated sustainable travel promotions in schools and facilitated the installation of cycle parking in 32 schools
- Supporting the Sustrans Bike It initiative, with a full time Bike It Officer working with 12 Darlington schools at a time to promote cycling
- Providing free pedestrian and cycle training to schools and adults – since 2005/06 around 2,700 pupils have received Bikeability level 2 on road cycle training, and 7,178 pupils received pedestrian training
- Help for local businesses on producing a travel plan, and facilitating measures to encourage sustainable travel to / from work
- Raising awareness of sustainable transport through events, via the internet, by marketing and through the publication of free information such as bus, cycle and walking route maps

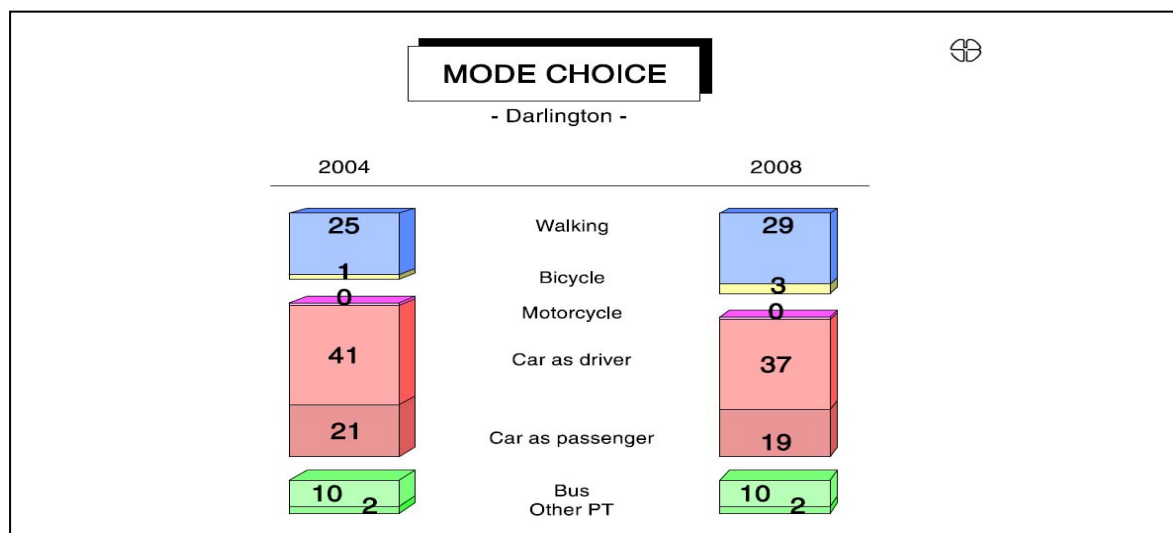
With funding through the sustainable travel demonstration town and cycling town programme Darlington has been able to collect detailed information on residents travel behaviour, attitudes to different travel modes and levels of every day physical activity. This has included before and after travel surveys<sup>1</sup> of more than 4000 residents, conducted during the same weeks of the year in 2004 and 2008.

Table 7.1 and figure 7.1 detail the modal share of the 12,685 trips (up to 100KM in distance<sup>2</sup>) reported by the 4,269 residents completing the household travel surveys in 2004 survey and the 12,265 recorded trips (up to 100KM in distance) reported by 4,178 residents in the 2008 survey.

**Table 7.1\*\*:** Travel mode share

Survey	Walk	Bicycle	M'cycle	Car as driver	Car as passenger	Bus	Other public transport
Mode share % 2004	25.3	1.4	0.2	40.6	20.5	10.2	1.7
Mode share % 2008	28.9	3.4	0.3	36.8	18.9	10.0	1.9
Relative change	+14.1	+118.9	+49.3 <sup>3</sup>	-9.6 <sup>4</sup>	-7.6	-2.4	+17.1

**Figure 7.1\*\*:** Summary of travel mode share



<sup>1</sup> Stratified random sampling techniques were used for each survey with households selected from the AFD names and numbers database. For the 2004 and 2008 surveys the specification required a minimum net sample of 200 residents from each of Darlington's 20 urban wards. Net samples of 4,269 and 4,178 residents completed the surveys in 2004 and 2008 respectively, with response rates of 59% and 60%.

<sup>2</sup> It is common practise to omit long distance trips from the analysis of travel surveys as these make up a very small percentage of recorded trips, but can skew the calculations of average distance / time.

<sup>3</sup> The very low percentages mean that a substantially larger sample size would be required to carry out statistical tests.

<sup>4</sup> Tested for statistical significance using a t-test for independent samples and found to be statistically significant at 99% confidence intervals. Like wise the changes in walking and cycling are statistically significant at 99% confidence intervals.

Tables 7.2 and 7.3 pick out some of the key findings relevant to the Council's policies with respect to improving health and reducing carbon omissions.

**Table 7.2\*\*: Changes in active travel time between 2004 and 2008**

	2004	2008	Change (hours)	Relative change
Hours per person per year	<b>126</b>	<b>143</b>	<b>+17</b>	<b>+13%</b>

**Table 7.3\*\*: Changes in levels of car ownership and distance travelled by car between 2004 and 2008**

- Darlington -		
2004		2008
<b>42,200</b>	(Private) Cars in total	<b>44,000</b>
<b>24.7</b>	Kilometres per car per day (everyday mobility)	<b>21.4</b>
	Relative reduction	<b>- 13%</b>
<b>355.4</b>	Total kilometres per year (everyday days) in mio	<b>321.1</b>
	Reduction (km per year)	<b>- 34.3 mio</b>

Using the data on car usage it is possible to estimate of the reduction in annual CO<sub>2</sub> emissions from personal car use among Darlington residents between 2004 and 2008. Based on a UK fleet average CO<sub>2</sub> emissions factor<sup>5</sup>, the reduction of approximately 34 million car kilometres per year would result in annual savings of around 7,000 tonnes of CO<sub>2</sub>.

The sample sizes of the household travel surveys make it possible to look at average travel behaviour by ward summarised below for 2004 and 2008 in figures 7.2 and 7.3 respectively.

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<sup>5</sup> Based on average emissions of 207.5 g CO<sub>2</sub> per vehicle km, from Defra's (2007) Guidelines to GHG Conversion Factors for Company Reporting.

Factors influencing travel behaviour and reflected in differences between wards are likely to include local availability of facilities, goods and services, level of income and car ownership and transport infrastructure, for example bus services, cycle routes and quality of the street environment for pedestrians.

Figure 7.2\*\*: Mode choice by ward in 2004

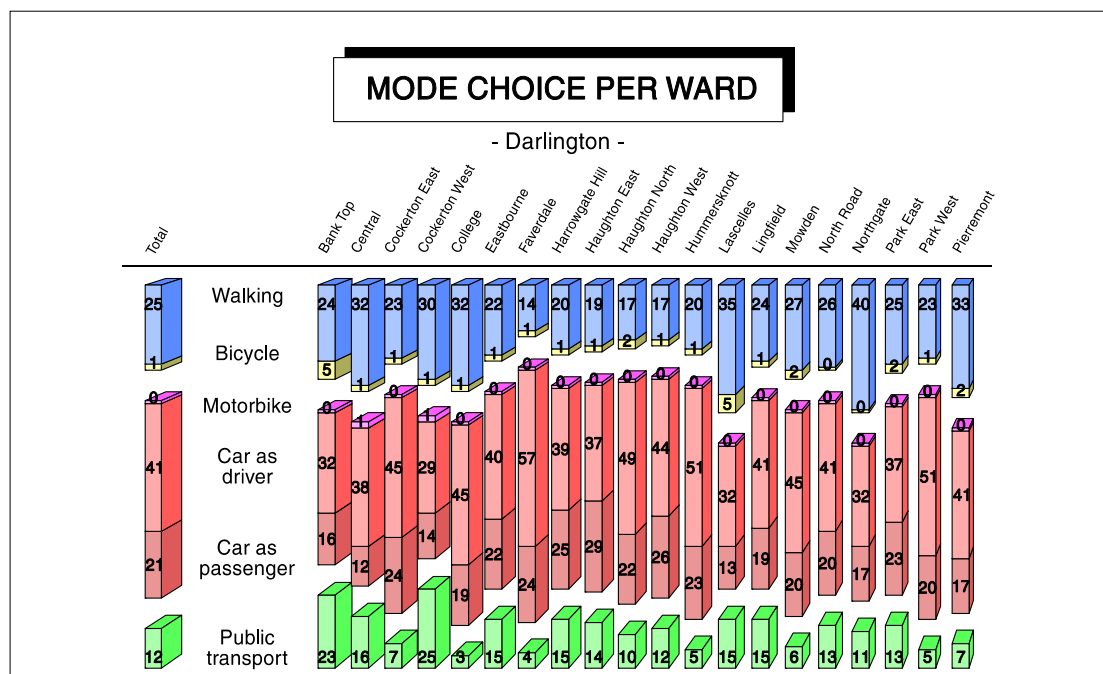
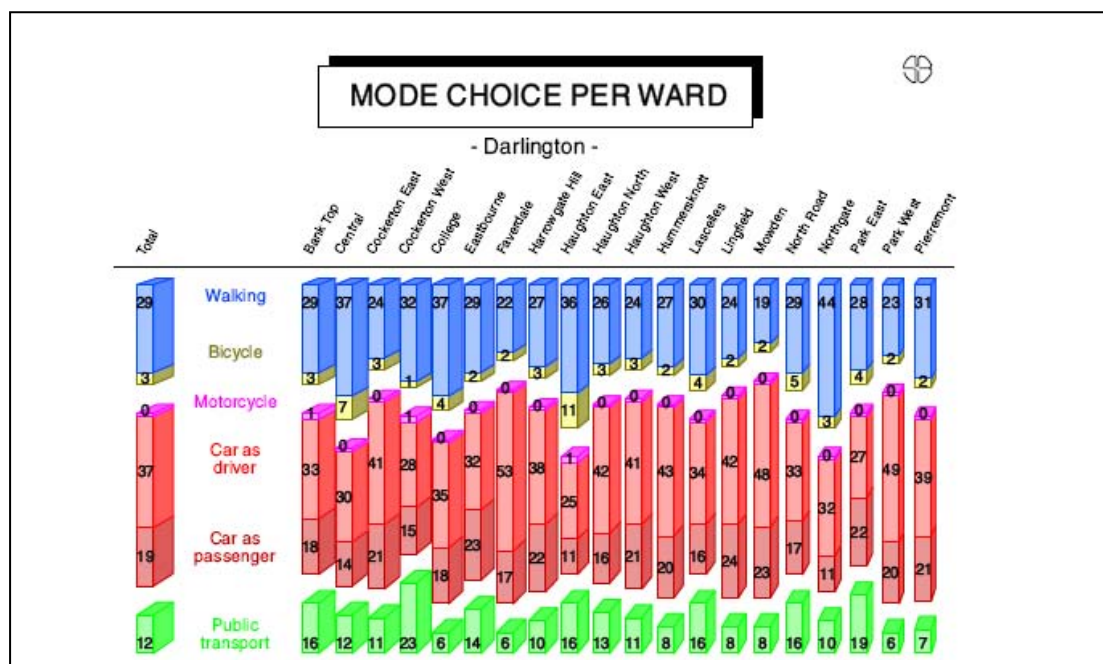


Figure 7.3\*\*: Mode choice by ward in 2008



Evidence from the cycling and physical activity surveys<sup>6</sup> conducted by ICM for Cycling England shows that the proportion of adults doing any cycling in a typical week had increased by 10% between 2006 and 2009, and the proportion of adults classed as inactive reduced by 8% over the same time period.

### **Potential for further reductions in car use, by increasing use of sustainable travel options**

The 2004 travel survey showed that in 2004, 56% of the 549 car trips per person/year within Darlington (28 Million car trips / year) could easily be made by other means (walking, cycling or public transport).

Despite increases in use of sustainable travel modes in 2008 this figure had increased to 59% of the car trips still taking place within Darlington. A reflection of the fact that people reported making slightly more local trips (for example a 13% increase in shopping trips to the town centre), thereby increasing the potential for these trips to be walked, cycled or made by bus.

### **Conclusions**

After four years the Local Motion sustainable travel and cycling demonstration town programmes have achieved reductions in car driver trips of around 9% (or 10,000 trips per day across the town), a 15% increase in walking journeys, a and doubled the number of cycling trips.

#### **Key Messages:**

- There has been a 9% reduction in car trips and 13% reduction in car mileage between 2004 and 2008
- There has been a 15% increase in walking trips in the urban area
- There has been a 119% increase in cycling trips in the urban area
- The transport network aims to reduce the environmental impact of transport, for example, by reducing the mode share of car driver trips
- Surveys in 2006 and 2009 indicate an increase of 6% in the proportion of adults doing any cycling in a typical week in the previous year (ICM Survey for Cycling for England)
- The Council is now preparing its third Local Transport Plan. This will be the key document determining how Darlington invests in delivering a sustainable transport system, which will support Darlington's economy, contribute to reduce carbon emissions, improving public health and reducing inequalities across the borough

**The Darlington Partnership has been good in encouraging and introducing environmentally friendly approaches to travel and transport.**

**Actions to lessen the impact of climate change from other activities are being taken including reducing energy consumption in public buildings and supporting people to reduce fuel costs**

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<sup>6</sup> The ICM Survey was a telephone survey of a representative sample of approximately 1500 people in each Cycling Demonstration Town, carried out in March 2006 and repeated in March 2009. ICM imposed quotas to ensure that the profile of the interviewed sample exactly matched that of the known population profile within each town (as per Census 2001). These same quota targets were also used to post-weight the data. This yields a representative sample by a host of demographic variables, including sex, age, work status, tenure and social class. The survey question was 'In a typical week during the past 12 months, how many hours did you spend on each of the following activities?'