

Scotland Facts and Figures for School Travel Initiatives

Information for parents and schools



Key facts

- when asked 48% of children would like to cycle to school yet only 2.8% do
- in Scotland 49.3% of children travel to school actively
- on average cyclists live two years longer than non-cyclists
- more children are involved in car accidents than are killed by strangers.

Introduction

School travel initiatives encourage children to walk and cycle to school through practical and educational measures. These facts and figures provide evidence to support school travel projects in Scotland and inspire staff, pupils, parents and the local community to work together to make the school journey safer, healthier and more enjoyable for everyone.

For helpful organisations see the accompanying information sheet FS26 Scotland Resource List for School Travel Initiatives available at www.sustrans.org.uk/schooltravel

The journeys we make

Road traffic is high volume and costs have fallen, comparatively

- the estimated total volume of traffic on Scotland's roads in 2010, was over 43 billion vehicle kilometres¹
- in 2011 bus fares have risen by 24% and rail fares 17% since 1997, compared to a fall of 7% in the overall cost of motoring over the same period².

We are travelling further

- average trip lengths are between 6.9 and 7.0 miles in 2010 this shows an increase from 5.2 miles in 1985/86³.

We are walking and cycling less

- walking trips in 2010 fell 8% compared with 2009, making 2010 the lowest level recorded to date at 210 trips per person per year³
- in the UK 42% of people own one or more bicycles, but only 2% of all journeys are made by bicycle⁴
- in Scotland 34% of households had access to at least one bicycle for adult use in 2010 (a similar figure to 2000)¹
- on average in 2010 people in the UK made 15 stages* by bicycle compared to 19 per person per year in 1995/97³
- two-thirds (66%) of respondents to the National Transport Survey (UK) said they use a bicycle less than once a year or never³.

*for cycling and walking, the number of stages is a better measure than the number of trips as frequently these modes tend not to be the main mode when there is a multi-stage trip, so a count of cycling or walking trips would be lower.

We are using cars more

- trips by car (as driver or passenger) accounted for 64% of all trips made and 78% of distance travelled in 2010³
- average annual car mileage was estimated to be 8,430 miles in 2010³.

Yet most journeys could be cycled or walked

- of all trips made in 2010, 20% were less than one mile in length³
- in 2010, 77% of all trips less than one mile in length were made on foot, with 20% made by car³
- the average car or van journey in 2009 was only 8.4 miles⁵
At a leisurely pace you can cycle one mile in five minutes (which is twice the speed of a car in rush hour traffic)⁶ and on average people walk between two and four miles per hour⁷.

Travelling to school

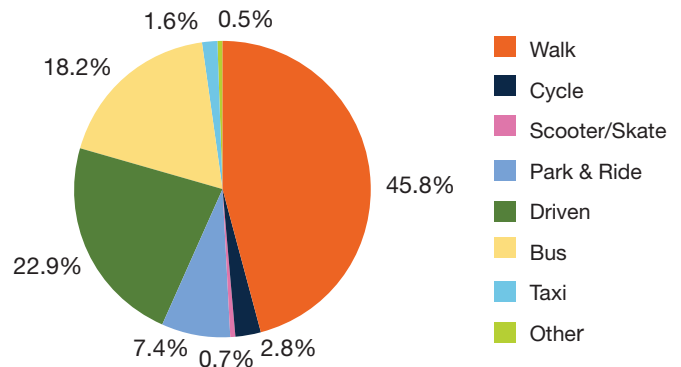
School journeys are getting longer

- the average length of a trip to school in the UK increased from 2.1 miles in 1995/97 to 2.6 miles in 2010³
- the average annual cost of the school run by car per primary school child is £367³.

More children go by car and fewer walk

- in 2010 45.8% of children in Scotland walk to school which is down from 47.0% in 2009 and 48.3% in 2008/9. In 2010 2.8% travel by bike which is up from 2.3% in 2009. The proportion of children walking and cycling to school is down from 55% in 2000¹. The proportion of children driven to school in Scotland in 2010 is 22.9%, down from 23.3% in 2009 but up from 22% in 2008⁹.

Breakdown of Scotland's national travel to school modes 2010⁹



Trend for independent travel may be changing

- since 1995/97, cars taking children to school have increased as a proportion of all car driver trips in the morning peak hour (8-9am) from 10% to 16%. The "school run" now accounts for nearly a quarter (24%) of car driver trips by residents of urban areas during term time³
- in 1971 80% of seven to eight year olds walked to school independently¹⁰, whereas in 2009 only 11% of seven to 10-year-olds and 60% of 11-13-year-olds were usually unaccompanied by an adult⁵
- in all age groups the main reasons given for accompanying children to school were traffic danger and fear of assault⁵
- the National Society for the Prevention of Cruelty to Children (NSPCC) estimates that on average 11 children a year are killed by strangers, whereas 49 were killed travelling as passengers in cars in 2008¹².

Journeys to School

Please note that the differences in the way the statistics below were collated each year mean that they are not directly comparable^{5,9}.

	1985/86 ⁵		1995/97 ⁵		2010/11 ⁹	
	5-10 year olds	11-16 year olds	5-10 year olds	11-16 year olds	5-10 year olds	11-16 year olds
walk	63%	46%	53%	42%	48.7%	41.9%
cycle	1%	6%	0%	2%	3.7%	1.2%
car	26%	13%	38%	20%	27.3%	14.8%
bus	9%	33%	7%	33%	8%	36%
other	1%	2%	2%	3%	12.2%	6.1%

Pollution and climate change

Transport is a significant contributor to pollution and greenhouse gas emissions

- since 1990 emissions from transport (excluding international aviation and shipping) have increased by 2%¹³
- carbon dioxide is the main greenhouse gas accounting for around 77% of Scottish greenhouse gas emissions in 2009. Since 1990, emissions of carbon dioxide have fallen by 25% and emissions of the other greenhouse gases have fallen by 39%¹³
- in 2009 21% of greenhouse gas emissions were from transport¹³
- in 2009 Scottish total emissions of carbon dioxide were estimated to be 39.3 million tonnes of CO₂¹³
- the Climate Change (Scotland) Act 2009 creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting an interim target of at least a 42% reduction for 2020, and at least 80% reduction target for 2050¹³.

Road casualties

Road accidents cause many child injuries

- in 2010 there were 13,324 reported casualties from personal injury road accidents across Scotland, 1,375 (10%) of these were children¹⁴
- on Scotland's roads 67% of children killed or seriously injured in 2010 were pedestrians, 18% were car passengers and 11% were cyclists¹⁴
- there is a morning peak in reported child casualties between 8am and 9am and another peak from 3pm onwards, coinciding with school travel⁵.

Our child road safety record is improving

- in Scotland, the number of children reported killed or seriously injured due to road accidents in 2010 was 73% lower than the 1994/98 average¹⁴
- an increase in cycling often leads to a reduction in cyclist casualties. A doubling of cycling would lead to a reduction in the risks of cycling by around a third¹⁵.

Children need to develop road safety skills

- children who walk to primary school develop road safety awareness and are less vulnerable when they walk independently to secondary school¹⁶
- an 11-year-old starting secondary school is almost twice as likely as a 10-year-old at primary school to be killed or seriously injured in road collisions¹⁶
- young children perceive the world differently to adults, for example they have difficulty judging the speed and distance of vehicles and so need to be taught how to negotiate traffic¹⁶

- children who walk to school are actively engaged with their local community, have wider social networks, and have great spatial awareness and road sense¹⁶.

Speeding is the biggest problem

- a pedestrian struck by a car driven at 20 mph has a 95% chance of survival. This reduces to 80% if driven at 30 mph and 10% at 40 mph¹⁷
- seven out of ten mothers admit to regularly breaking the speed limit, while half admit to using a mobile phone when driving with their children in the car²⁹
- a London survey showed that the introduction of 20 mph zones was associated with a 42% reduction in road casualties between 1986 and 2006. The percentage reduction was greatest in younger children¹⁷.



Health

Car fumes are bad for us

- children living near roads with heavy-duty vehicle traffic have twice the risk of respiratory problems as those living near less congested streets¹⁸
- car passengers in slow-moving traffic face pollution levels two to three times higher than those experienced by pedestrians¹⁹
- the catalytic converter, which can destroy many polluting chemicals in a car's exhaust gases, only works well when it is hot. The "school run" is usually too short to allow the catalytic converter to reach the necessary temperature. As more children are driven to school, the air near the school becomes more polluted²⁰.

Car fumes can trigger asthma

- in 2011 14% of all children in Scotland are currently diagnosed with asthma²¹
- environmental pollution can make asthma symptoms worse and may play a part in causing some asthma²²
- 66% of people with asthma say that traffic fumes trigger their symptoms²³.

We are getting more overweight

- in 2010 almost a third of children in Scotland (29.9%) were obese or overweight (31.1% of boys and 28.5% of girls)²¹
- in 2010 in Scotland 32.5% of children had a mass index (BMI) out of the healthy range²¹
- by 2050 it is predicted that 70% of girls and 55% of boys in the UK will be overweight or obese²⁴
- obesity is known to lead to both chronic and severe medical problems, for example cancer, diabetes and heart disease²⁴
- the Scottish Government predict that the total cost to Scottish society of obesity in 2007/8 was in excess of £457 million and it is likely that this is an underestimate. It is estimated that the direct NHS Scotland costs of obesity will almost double by 2030²⁵
- estimates from the Organisation for Economic Co-operation and Development (OECD) show a continued increase in obesity rates across the world. Extrapolating from trend data from the USA, we predict that by 2030 adult obesity in Scotland could reach over 40% even with current health improvement efforts, an increase of more than 50% over 2008 levels²⁵.

Physical activity

- in 2010 72% of children in Scotland (75% of boys and 70% of girls) met the World Health Organisation's (WHO) physical activity recommendations (at least 60 minutes daily)²¹
- the proportion of girls in Scotland meeting the the World Health Organisation's (WHO) recommendations appears to have increased from 64% in 2008²¹
- the health benefits of cycling greatly outweigh any risks involved – on average cyclists live two years longer than non-cyclists¹⁵

- a study showed that Year 8 pupils walking the school journey each day used more calories in a week than during the two hours of PE they receive²⁶
- the reduction in levels of physical activity due to increased car use affects children's stamina, alertness at school and academic performance²⁷
- by achieving the recommended levels of physical activity children can maintain a healthy body weight, develop healthy bones, muscles and cardiovascular system and improve coordination and movement control²⁸
- physical activity has also been associated with psychological benefits in young people by improving their control over symptoms of anxiety and depression²⁸.

Context in Scotland

Key policies

Overall Scotland has a relatively poor record for health and physical activity and this is reflected in comparatively low levels of active travel. A significant proportion of Scotland's greenhouse gas emissions also come from transport. The Scottish Government would like to encourage more of Scotland's population to make more of its everyday journeys by bike or by foot. Achieving this would both improve Scotland's health and decrease carbon emissions.

The Scottish Government has produced several key policies that outline how to make Scotland more active, with more people at a healthy weight and smaller carbon footprint for transport. These key policies are described overleaf.



Physical Activity Strategy

www.scotland.gov.uk/Publications/2003/02/16324/17895

This is the Scottish Government's 20-year plan of objectives and priorities for the development of physical activity in Scotland, published in 2003 and reviewed in 2008. It outlines actions to get more people in Scotland achieving the daily recommended levels of physical activity and active travel plays a significant role in the strategy.

A Route Map Towards Healthy Weight

www.scotland.gov.uk/Publications/2010/02/17140721/0

A Scottish Government plan for tackling the obesity epidemic in Scotland. It highlights the current and projected costs of the obesity issue, both monetary and social, and sets out key preventative actions to avoid the predicted consequences becoming a reality. Making more local journeys actively plays a key role in the Route Map Towards Healthy Weight.

Cycling Action Plan for Scotland

www.scotland.gov.uk/Publications/2010/06/25103912/0

A Scottish Government action plan to get more people in Scotland cycling more often and sets the target of 10% of journeys to be made by bicycle by 2020.



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Further information

Visit the School Travel website www.sustrans.org.uk/schooltravel for:

- latest news and information on Safe Routes to Schools
- specific information and events for each of the UK regions
- downloadable resources including other information sheets
- case studies, curriculum materials and newsletters

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About Sustrans

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

It's time we all began making smarter travel choices. Make your move and support Sustrans today. www.sustrans.org.uk

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