



sustrans

JOIN THE MOVEMENT

Demonstrating value for money in walking and cycling

Angela Wilson
Senior Project Officer
Research and Monitoring Unit



Structure of presentation

- Introduction
- Overview of methods
- Data gathering
- Generating outputs

Introduction

- The value for money of any sort of investment is critical in the current economic climate
- Economic appraisal/evaluation: demonstrates value of return on investment
- Guidance issued by relevant Government departments
- Walking and cycling: cheap to implement + lots of benefits = good value for money – but *how* good?

The benefits of walking and cycling

- Many and varied - including
 - Health benefits
 - Absenteeism benefits
 - Reduced congestion
 - Environmental benefits
 - Journey ambience benefits

Benefits to health

Assertion:	Impacts:	Valuation:
Schemes encouraging walking and cycling lead to increased levels of physical activity in the population	Increased physical activity → reduced mortality	Valued using HEAT assuming link between level of cycling/walking and reduced mortality
	Increased physical activity → reduced absenteeism	Valued using daily wage assuming link between activity and short term sickness

Benefits to the environment

Assertion:	Impacts:	Valuation:
Schemes encouraging walking and cycling lead to an increased proportion of journeys being made by sustainable modes	Reduction in car km → reduced congestion	Pence per km decongestion value
	Reduction in car km → reduced vehicle emissions	£ per tonne of carbon dioxide (DECC)

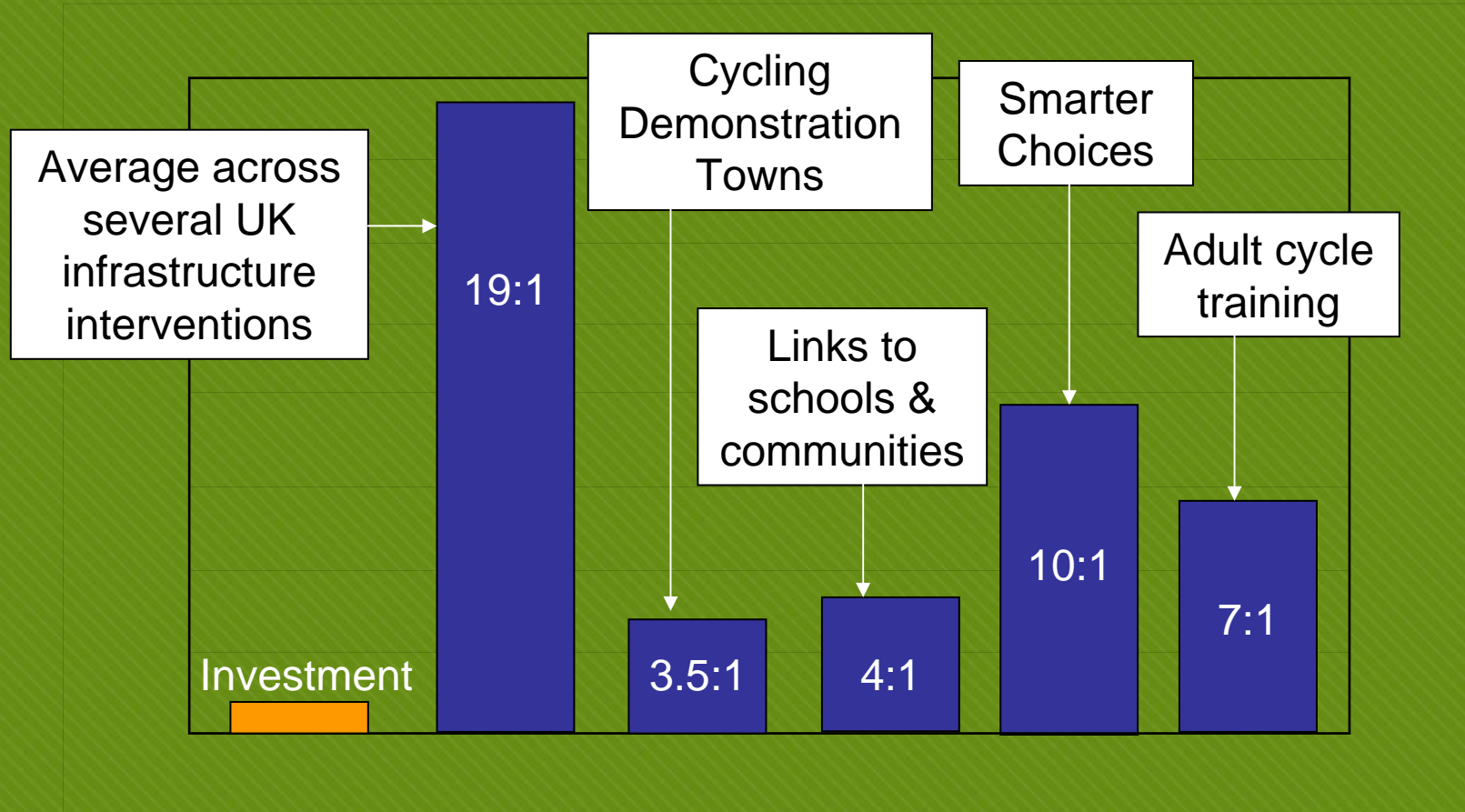
Journey benefits

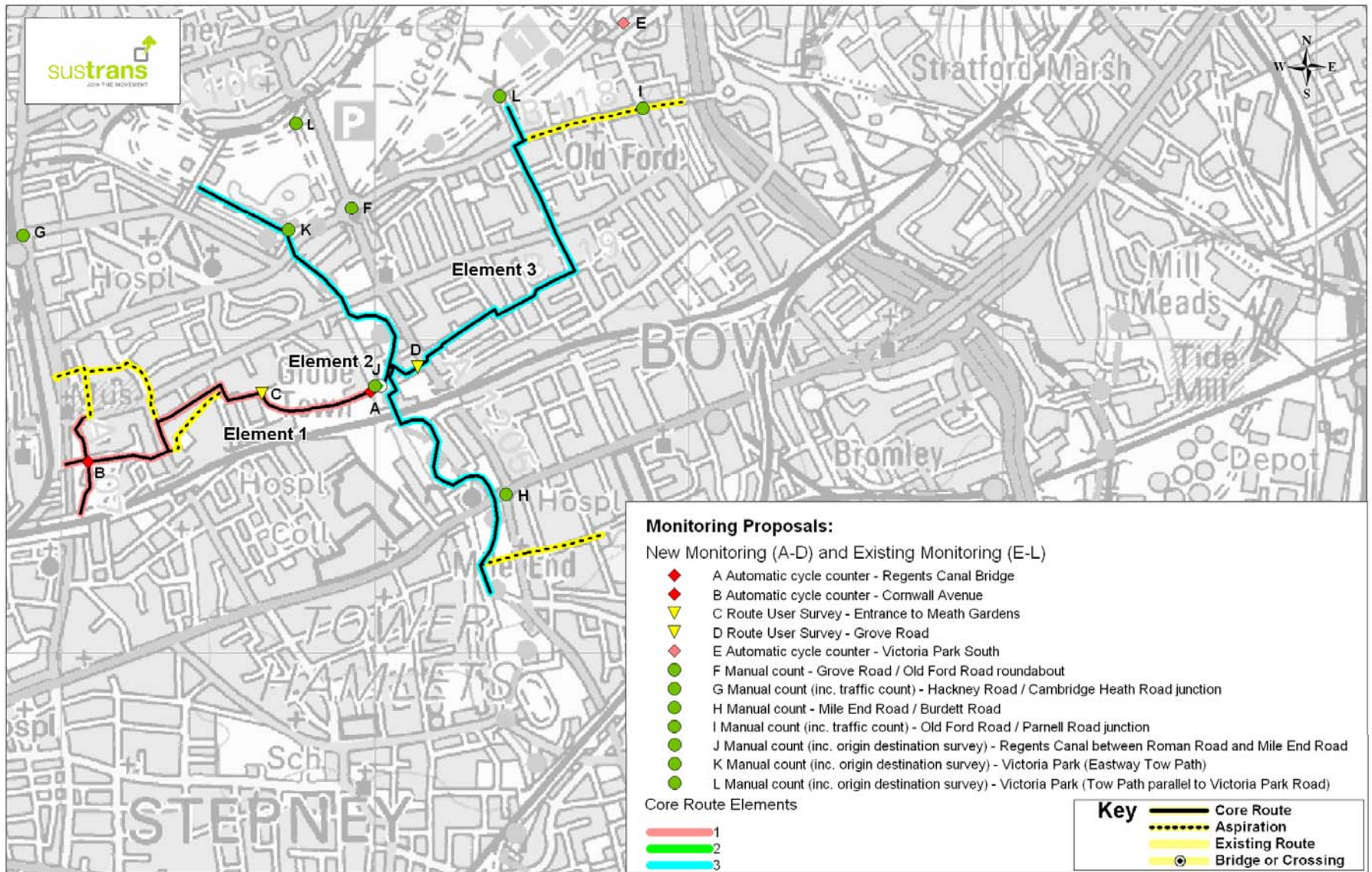
Assertion:	Impacts:	Valuation:
Schemes encouraging walking and cycling lead to enhanced journey ambience	Improvements to walking and cycling infrastructure → a more pleasant walking or cycling journey	Pence per km or pence per minute value for journeys made on improved infrastructure by new or existing users

Accidents

Assertion:	Impacts:	Valuation:
Changes in the numbers of cyclists and pedestrians through schemes to encourage cycling and walking have an impact on numbers of accidents involving these groups	More cyclists and pedestrians → fewer trips by car → fewer car accidents	Accident costs
	More cyclists and pedestrians → more accidents involving cyclists and pedestrians	

Typical benefit to cost ratios





Monitoring Proposals:

New Monitoring (A-D) and Existing Monitoring (E-L)

- ◆ A Automatic cycle counter - Regents Canal Bridge
- ◆ B Automatic cycle counter - Cornwall Avenue
- ▼ C Route User Survey - Entrance to Meath Gardens
- ▼ D Route User Survey - Grove Road
- ◆ E Automatic cycle counter - Victoria Park South
- F Manual count - Grove Road / Old Ford Road roundabout
- G Manual count (inc. traffic count) - Hackney Road / Cambridge Heath Road junction
- H Manual count - Mile End Road / Burdett Road
- I Manual count (inc. traffic count) - Old Ford Road / Parnell Road junction
- J Manual count (inc. origin destination survey) - Regents Canal between Roman Road and Mile End Road
- K Manual count (inc. origin destination survey) - Victoria Park (Eastway Tow Path)
- L Manual count (inc. origin destination survey) - Victoria Park (Tow Path parallel to Victoria Park Road)

Core Route Elements

- 1
- 2
- 3

Key

- Core Route
- ⋯ Aspiration
- Existing Route
- ⊙ Bridge or Crossing

Monitoring rationale

- Expectation that usage will increase along the core scheme routes among several distinct user groups, primarily recreational users and people accessing schools
 - Route user intercept surveys
 - Automated continuous counts
 - Manual occasional counts
 - Other data sources

Manual count data

All users counted at the site during four-day survey period

2009

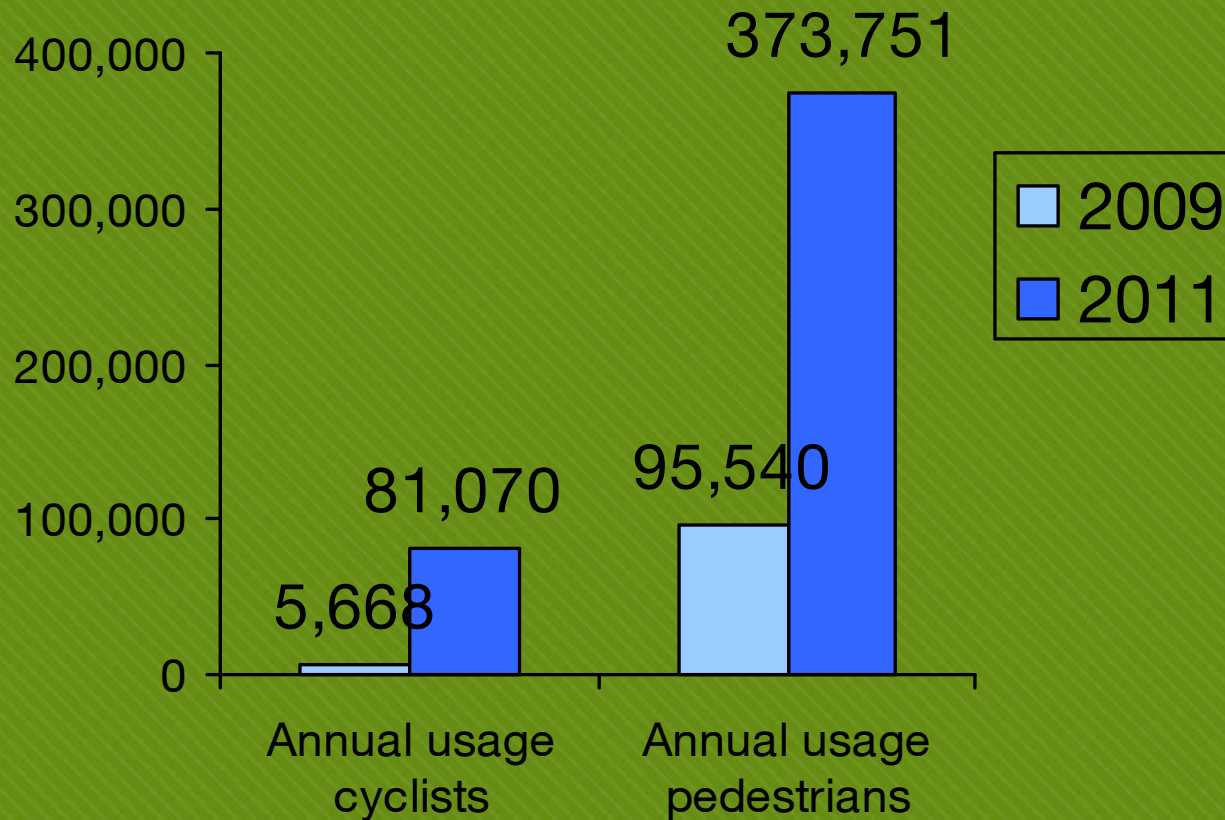
	Cycs	Peds	Other	All
Weekday term-time	14	224	20	258
Weekend term-time	9	303	15	327
Weekday school holidays	31	298	21	350
Weekend school holidays	26	252	30	308
Total	80	1,077	86	1,243
Percentage	6.4	86.6	6.9	100.0

2011

	Cycs	Peds	Other	All
Weekday term-time	347	1,518	133	1,998
Weekend term-time	233	1,223	48	1,504
Weekday school holidays	228	1,024	66	1,318
Weekend school holidays	109	902	35	1,046
Total	917	4,667	282	5,866
Percentage	15.6	79.6	4.8	100.0

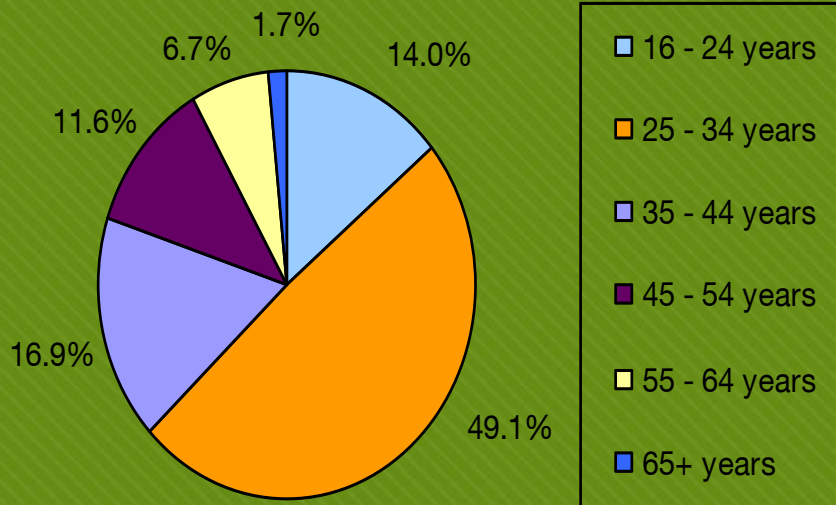
Differences in estimated annual usage

Cyclists and pedestrians

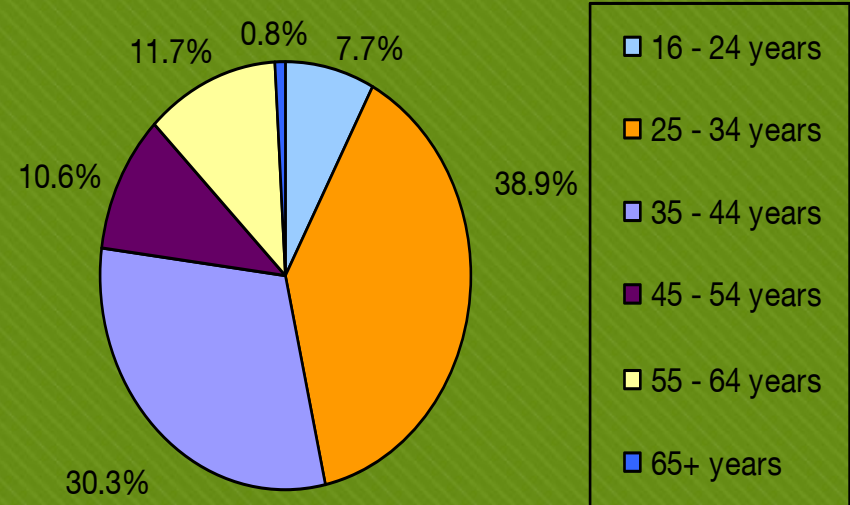


Survey data - All Age

2009

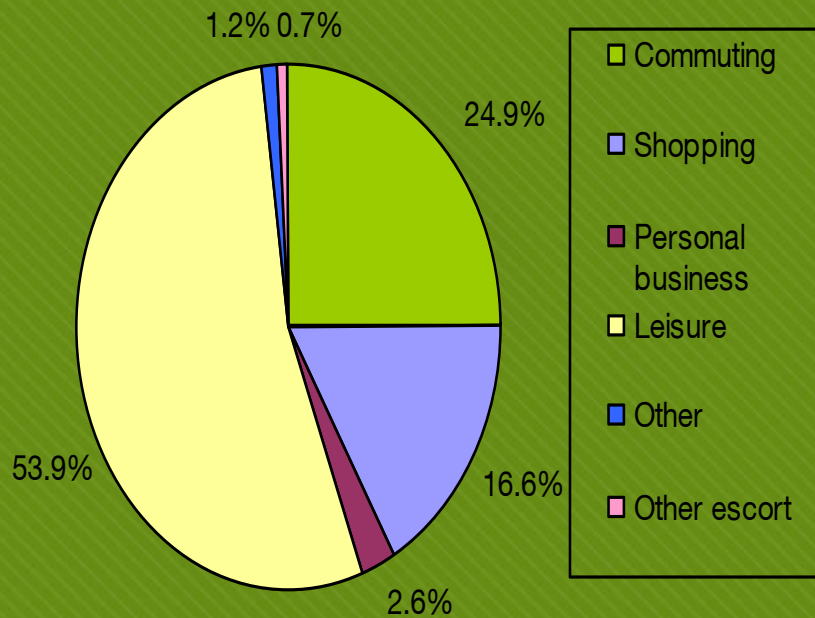


2011

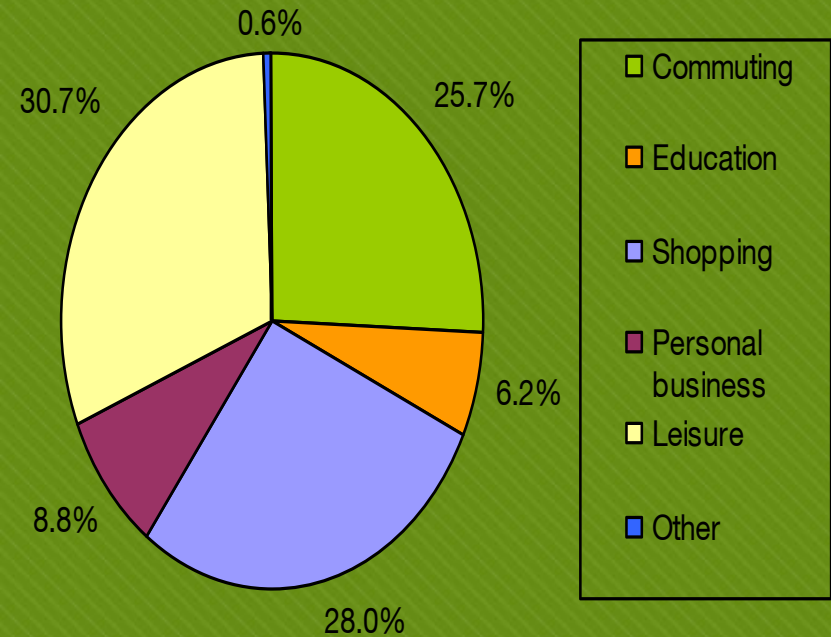


Survey data - All Journey purpose

2009



2011



Ongoing work

- Current data collection better attenuated to data needs for economic evaluation
- Numerous relevant threads in Transport Business Case
- HEAT for walking is launched
- Actively seeking to learn more about other examples where similar approaches for cycling and/or walking have been used
- Keen to identify any sources that can eliminate uncertainties and add to evidence base

angela.wilson@sustrans.org.uk

A photograph of two young girls riding bicycles on a paved path in a park. The girl in the foreground is wearing a colorful striped shirt and a pink helmet, riding a purple and white bicycle. The girl behind her is wearing a brown jacket and a purple helmet, riding a blue bicycle. The path is surrounded by green grass and trees, with a large tree on the right side. The scene is brightly lit, suggesting a sunny day.

collect
fresh
air
miles

The Sustrans logo, which consists of a stylized white arrow pointing upwards and to the right, enclosed within a square frame.

SUstrans
JOIN THE MOVEMENT