

# **BIKE FOR THE FUTURE II**

A Funding Strategy for National Investment in Cycling to 2012

#### Introduction

Cycling England was formed in March 2005 by the Department for Transport to get 'more people cycling, more safely, more often'. Its creation was the result of recommendations made in August 2004 by the prior advisory body, the National Cycling Strategy Board (NCSB).

The NCSB, with significant contributions from the national cycling Non-Government Organisations (NGO's), had proposed, in a paper titled *Bike for the Future*, a large-scale £70m p.a. programme to increase levels of cycling, managed by an independent body. The objective of the proposal was to ensure that funds allocated specifically for cycling were spent exclusively on cycling – 'payment for results' – which the Local Transport Plan funding mechanism could not guarantee. In the event, the DfT formed Cycling England with a budget of £5m, which in July 2006 was increased to £10m p.a.

With its limited funds, Cycling England established two principal programmes – 'Cycling Demonstration Towns' (CDT's), and a 'Young People' programme. The results of this work are summarised in this new paper, *Bike for the Future II*, and provide reassurance and encouragement that funds carefully and cohesively invested in such programmes do result in more cycling trips. The value of cycling investment has also been established by an independent economic review carried out for Cycling England, which indicates that, even on a most conservative basis, the cost/benefit ratio of cycling schemes is between 1:3 and 1:4.5, delivering results across 7 current Public Service Agreement objectives including transport, health, education and the environment.

With such evidence, Cycling England is now placed to make recommendations for Government investment for the next 3-4 years. The DfT requested proposals for a programme, budget and recommendations on management structure and governance to come into force at the end of Cycling England's first 3-year remit. This paper, *Bike for the Future II*, is the result.

Bike for the Future II draws heavily on the recommendations of a wide range of stakeholders, particularly the major NGO's, Sustrans, CTC, British Cycling and the London Cycle Campaign, as well as Local Authority representatives. It has benefited from the experience of Transport for London (TfL) who have consistently increased investment in cycling in the London Boroughs to its present £38m p.a., and generated 450,000 cycle trips per day.

With the experience of successful projects, Cycling England is now recommending investment in two major nationwide programmes of significant impact and scale. Whereas in 2004, proposals were intellectually well-founded and, in the case of CDT's, based on the hypothesis of investment levels which had proved successful in Europe, Cycling England is now in 2007 able to put forward a programme the success of which has been demonstrated, and its economic and policy value established. Bike for the Future II proposes:

A *National START Cycling Programme* for children (School Travel & Active Recreation) which will provide the conditions such that every child can have the skills and confidence to cycle safely, both to school and for fun; boosting levels of cycling to school to reduce school run congestion and pollution, and increasing the physical activity levels of children to promote health and well-being.

The programme will achieve this by offering every child the chance to do their 'Bikeability' – the Cycling Proficiency for the 21st Century – before they leave primary school; by providing School Champions for every primary and secondary school in England within 7 years, and half of all schools by 2012, to quadruple levels of cycling to school; by working to ensure safe cycling routes to schools investing in new links and cycle parking; and by promoting cycling as 'active recreation' and sport, expanding the school clubs programmes and extended schools activities.

A *Cycle City, Cycling Towns* Programme, match-funding a major city (up to 1 million population) to create an exemplary cycling environment to match that of London; and match-funding 10 further cycling towns (in addition to the existing six) in every region across England. The programme will create a transformational change in both behaviour and local culture and includes measures to engage schools, colleges, universities, stations, Train Operating Companies, hospitals, Primary Care Trusts and major employers.

By 2012 investment in the Bike for the Future II programme will reduce the percentage of school trips by car by 5%; achieve 10% of regular school trips by bike in 10,000 schools (over 50% total); and increase cycle trips in the Cycle City and Cycling Towns by 100%. The aggregate of this, in national terms, will be a net increase in cycling levels in England of at least 20% by 2012. Bike for the Future II proposes this should be Cycling England's target.

It remains Cycling England's view that with long-term and consistent investment at the levels proposed for the next 4 years, the original NCSB national target of quadrupling cycle trips could still be achieved; TfL are on target for this by 2025.

Nevertheless there remains a more fundamental level on which the barriers to cycling may be addressed, which as yet Government has not tackled – that is, at the level of policy. There are several major policy changes which would have a profound impact on the growth of cycling. The Cycling England board reiterates recommendations made in the original *Bike for the Future* that a real change in the rate of increase in cycling requires some (or, ideally, all) of the following:

Cycle training to at least Bikeability level 2 to be placed on the school curriculum, as a requirement in parallel with swimming.

Greater deployment of 20 mph zones and home zones. Changes to the local streetscape to benefit accessibility for the whole community act as 'invisible infrastructure' which also serves to increase cycling. Speed of traffic is a major deterrent until reduced.

A clear requirement that all new planning applications must include proper provision for walking and cycling. The new 'eco-towns' proposed provide an important opportunity for Government to ensure that accessibility is 'designed in', not expensively retro-fitted. Over the next decade the new housing programme could transform the amount of local walking and cycling with rigorous requirements for its proper provision.

Beyond the level of well co-ordinated, consistent investment in cycling, and the introduction of policy measures to encourage it, cycling more than anything else needs determined and persistent high-level leadership. Cycling schemes work where an individual or small leadership group champion it; London, of course, is the outstanding example, but the Cycling Demonstration Towns bear this out. Likewise cycle training and Bikeability have flourished with the very visible support of DfT Ministers.

The recommendations in Bike for the Future II offer a significant political opportunity for Government to make a compelling commitment to both investment and to results, out of all proportion to their cost, in no less than 7 areas of concern to Government departments. It would be an ideal and appropriate moment for cycling to be formally adopted into transport policy on a long-term basis, with continuity of funding, removing it from the sphere of individual enthusiasm to a small but very positive contributor to overall Government policy.

#### Phillip Darnton

Chairman, Cycling England September, 2007

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#### SECTION A - Contexts

### 1. Purpose and context of Paper

- a. Bike for the Future II sets out a new funding strategy for national investment in cycling by Government to 2012; and a target for Cycling England to contribute to increased national levels of cycling;
- b. It is a submission from Cycling England (CE) to the Department for Transport (DfT) and is timed to coincide with the publication of the Comprehensive Spending Review, and a DfT review of Cycling England's progress at the end of its first 3 year remit (2005/6 – 2007/8);
- c. It is also a response to the DfT's request for a recommendation from Cycling England as to future national cycling funding. Whilst it has been prepared principally for the DfT, it has also been written with a wider Government audience in mind as increases in cycling benefit a wide range of Government agendas from health to the environment.
- d. Bike for the Future II sets out a case and programme for investment at £70m p.a. for 3 years, with an initial period required to scale-up from current funding levels requiring £40m. The time period for the proposed funding strategy is 2008 2012, with 2008/9 the scaling up year.
- e. The paper will discuss how this investment will create a transformational change in levels of cycling, and its impact on the transport, health, education and environment agendas.
- f. The proposed central funding of £70m p.a. for national programmes should be seen as an integral and vital component to overall investment in cycling which comes from other central and local Government sources. Cycling England sees the level of investment proposed for the period to 2012 as the central component of a progression towards higher and consistent funding for cycling of over £5 per head of population in the medium to long-term<sup>1</sup>.
- g. Cycling England's long-term view is that cycling trips in England can be quadrupled from current levels.
- h. BFTFII proposes a target for Cycling England's specific programmes to contribute an increase in national cycling levels of 20% by 2012.

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<sup>&</sup>lt;sup>1</sup> E.g. 20013 – 2025, Funding at >£5 (+ future inflation) per head

# 2. The Case for Cycling in Bike for the Future II:

### I) the Challenge

- a. Today's transport challenge is defined by the need to deliver efficient, cost effective mobility for ever greater volumes of people and goods while reducing the impact of transport on the environment. However:
  - Traffic will have grown by 20% by 2015 from 2003 levels
  - This means, without decisive actions, an extra 15 million more tonnes of CO2
  - Transport already accounts for 27% of UK greenhouse gases
  - Transport emissions already make up 70% of air pollution in towns and cities
  - Between 14,000 and 24,000 hospital admissions a year are linked to poor air quality and 37% of all deaths related to Coronary Heart Disease are due to inactivity
  - Congestion currently costs the UK economy £20bn a year.
- b. Over half of all car trips are less than five miles in distance 24% less than two miles. Five of every six trips begin and end at home.
- c. The average length of a cycle trip is 2.4 miles. This can be cycled comfortably in 20 minutes.
- d. The Department for Transport, through Cycling England's current programmes, can already show that investment does bring about increased levels of cycling, reductions in car trips and other associated environmental and health benefits.
- e. Cycling England has demonstrated that many people can and will cycle more often, given the right environment or incentives.
- f. Scaled up, focussed, and integrated, centrally funded national programmes to boost cycling can play a part in solving the transport challenge.

### II) A Strategic Role for Cycling:

- a. In order to make a significant contribution to meeting the transport challenge, cycling must be recognised as a central component within the 'transport mix'.
- b. There is now authoritative evidence to demonstrate that sustained investment in cycling can make a measurable impact. By investing £70m a year in established, proven programmes, allowing a 12 month period to scale up, Cycling England will:
  - Increase cycling by at least 20% by 2012
  - Save up to 50 million car journeys a year by 2012 mainly in congested areas and at peak times.
  - Save 35,000 tonnes of CO2 a year by 2012
  - Improve public health and local air quality
  - Reverse a generational decline in the numbers of children cycling to school
  - Cut the number of cars on the school run by 5%
  - Give a Rate of Return of at least 3:1
- c. This will be achieved by:
  - Giving every child in England the chance to prove their Bikeability

     the cycling proficiency for the 21st Century, before they leave
     primary school
  - Dedicating cycling champions to every primary and secondary school in England to boost cycling
  - Transforming a major English city by delivering a 100% increase in the number of people cycling there by 2012
  - Transforming towns in each English region by delivering increases of 100% in cycling by 2012
- d. Recognising cycling as part of the solution to the transport challenge is vital, however small a part of the total. £70m p.a. would represent only 1-2% of the total departmental transport budget, and yet its impact far outweighs this investment.

### III) The economic case for cycling as a solution:

a. Economic modelling commissioned from an independent economic institute and peer reviewed by health experts has quantified the benefits of cycling. On conservative estimates, excluding any benefit to children's health, a 20% increase in cycling by 2012 will release a cumulative saving of over £500m by 2015:

Policy Area	Saving (£millions)
Premature deaths (adult)	£107
NHS costs (adult)	£52
Absence from work (adult)	£87
Pollution (all)	£71
Congestion (all)	£207
Total	£523

Investment in the proposed cycling programmes will deliver a rate of return over 10 years of at least **3:1** in a medium success scenario **but up to 4.5:1** in a high success scenario

(See section B, 5 'Economic Value of BFTFII Programmes').

### IV) Cycling as part of the solution for wider Government policies

a. Cycling England's programme will directly contribute to 7 PSA targets that span 6 Government departments.

PSA	Departments Responsible
Reduce congestion in the largest urban areas	DfT
Improve air quality by reducing transport emissions	DfT, DEFRA
Reduce greenhouse gas emissions	DfT, DEFRA,
Reduce mortality rates and health inequalities	DH
Reduce levels of obesity	DfES (now DCSF), DCMS, DH
Reduce levels of child obesity	DH, DCMS, DfES
Increase levels of sporting activity	DCMS, DfES (now DCSF)
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 In addition, the proposed programme supports investments in cross-Government initiatives including Act on CO2, Every Child Matters and Staying Safe.

### 3. A National Target

- a. Targets are widely used as a quantitative challenge to the delivery of set objectives. Such a challenge is vital to increase cycling levels.
- b. The previous National Cycling Strategy target of quadrupling cycling by 2010 (set in 1996) was not nationally practical. As a national target it was meant to apply in every locality regardless of specific local circumstances and so did not present a relevant challenge to each local authority.
- c. Cycling England believes that national cycling levels could still be quadrupled in the longer-term from current levels with:
  - i. Increased and sustained investment in centrally funded national programmes;
  - ii. Continued investment from Local Transport Plans and the Big Lottery;
  - iii. Bringing investment to over £5 per head (as opposed to the current level of below £1).
- d. As part of this, the Bike for the Future II programme would directly contribute to an increase in national cycling levels of at least **20%** by 2012 compared to current levels.<sup>2</sup>
- e. This is proposed as a new National target for 2012 for Cycling England programmes given the levels of funding proposed. In comparison to the former NCS target, Cycling England would be held accountable for the target, not local authorities, and it can therefore be achieved by focussing investment in certain areas only.
- f. Cycling England will also make use of programme specific targets to ensure the National Target is met.

### **A National Target:**

Cycling England programmes to contribute to an increase in national cycling levels of at least 20% by 2012

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<sup>&</sup>lt;sup>2</sup> Taking the National travel Survey Statistics for 2005 as the baseline

### 4. Cycling England 2005-2008

### I) Summary

- a. Cycling England was set up by the Department for Transport in 2005 as their expert body charged with delivering programmes to get 'more people cycling, more safely, more often'.
- b. The 2004 Bike for the Future paper set out a £70m p.a. programme which targeted 'trips' which could be converted to cycling particularly trips to school and college, workplace, and personal business.
- c. In the event, Cycling England was allocated a budget of only £5m p.a.
- d. Given this funding, Cycling England designed a limited programme, directed particularly at young people and in 6 Cycling Demonstration Towns (CDTs). This was designed to show that focussed investment could generate the impact required to increase cycle trips.
- e. Over the past 2½ years, 2005/6 2007/8, Cycling England has demonstrated that investment will increase cycling, with all the associated benefits from reduced congestion and pollution, to better health and cleaner air.

### II) Cycling England's Approach

- a. Cycling England adopted the following guiding principles to develop its programme to get 'more people cycling, more safely, more often':
  - Leverage, i.e. ensuring match-funding
  - Focus, to create:
  - Impact
- b. Individual schemes and projects were combined into 'work programmes' under a number of 'big' themes. These relate to Government policy such as 'Every Child Matters', or reducing carbon emissions. Work programmes were devised which could be further subdivided into a series of 'joined-up', integrated projects.

### III) Current Programme

- a. The current Cycling England programme is divided into 5 areas:
  - i. The 'Young People' programme targeted children aged 9 12, focussing on the trip to school, with investment in developing cycle training, safe routes, and schools cycle champions;
  - ii. The 'Place' programme selected 6 'Cycling Demonstration Towns' to prove that levels of investment common in the best European 'cycling towns' (~£5 £20 per head), could lead to significant increases in cycling in England;
  - iii. The 'Local Support for Local Providers' programme sought to enhance current Local Transport Plan (LTP) investment in cycling, and help local authorities to deliver quality improvements for cycling.
  - iv. The Health programme to capitalise on the public health benefits of cycling, working with the Department of Health, and the NHS e.g. Primary Care Trusts
  - v. The Communications and Marketing programme to promote cycling nationally in particular supporting and leveraging the other four programmes.

### IV) Learning from Success; Building on Successes

- a. It is vital to build on proven projects with a track record of success.
- b. Of its current programmes, the Young People and Place (Cycling Demonstration) Programmes supported by the Communications programme have so far seen the greatest impact and successes.
- c. Over its first 3 year period, Cycling England has learnt that the most successful projects have a majority of the following:
  - A focus on engaging *people* before targeting trips.
     I.e. effecting behaviour change before culture change.
  - Adequate start-up time for planning details and human resource recruitment
  - Detailed plans, focussed professional resources and senior commitment
  - Continuity, consistency, and security of funding
  - On-going central management/supervision and regular review
  - A focussed approach, for greatest impact
- d. Cycling England has also learned that there are a number of 'transferable approaches' in addition to the above successful models of delivery that work in a number of environments and target audiences.
- e. The most successful 'transferable approach' identified is the intervention of a 'champion' or team of champions. Whether this be at a school, in a cycling club, in the workplace or in the community, the champion has significant impact and success in meeting objectives.

### Young people programme

- f. In the Young People programme, the following has been achieved:
  - The schools champion project, currently funded and delivered as 'Bike it', and managed by the NGO Sustrans has <u>quadrupled</u> regular cycling levels in the schools within which it works.
  - At least half of all Local authorities now signed up to deliver cycle training to the National cycle training Standard;
  - Bikeability launched as the new 'Cycling Proficiency of the 21st Century' with over 180 million 'opportunities to see' across the 6 month period in which it was launched.
  - Over 20,000 children have received their Bikeability badge since the pilots began in September 2006.
  - Cycling England set up a £1m cycle training fund for local authorities, which
    was oversubscribed within 2 weeks by £0.5m. Grants will pay for an
    additional 35,000 children trained during 2007/8. The programme is on track
    to deliver 100,000 additional children trained per year by 2008/9.

### Place Programme

- g. Since October 2005, six towns in England have been investing at the rate of £10 per head in a range of measures (hard and soft) to promote cycling. This is the mid-range figure for spending by many European cycling towns. The Cycling England hypothesis is that this would lead to increased cycling.
- h. The six Cycling Demonstration Towns are developing an exemplary physical environment for cycling, supported by a comprehensive range of 'soft' measures to encourage more people to cycle. Aylesbury, Brighton and Hove, Darlington, Derby, Exeter and Lancaster and Morecambe were selected in October 2005 from more than 30 other towns to deliver a step-change in cycling levels. All six towns started from low or moderate cycling rates, and have different demographic profiles and topographies.
- i. The towns have all adopted different strategies to encourage more people onto their bikes and have already registered increases in cycle trips of up to 57%. It is estimated that around one-third of these new cycle trips will be motorists who have swapped their cars for bikes.

j. The table below shows increases in cycling so far, with comparative reductions in car journeys and cost per trip<sup>3</sup>.

Town	Population (000)	Increase in cycling in last 12 months	Additional cycle trips per year (000)	Reduction in car trips per year (000)	CE grant p.a. (£000)	Cost per additional annual cycle trip (pence)
Aylesbury	65	9%	211	70.5	300	142
Brighton	95					
Darlington	90	57%	562	187	500	89
Derby	233	11%	898	299	500	56
Exeter	113	21%	260	87	500	192
Lancaster	134	2%				
Total	730	-	1,931	644	1,800	93

- k. The full table analysing the effect of investment in the Cycling Demonstration Towns can be found at Section D, Annex C
- I. The tables suggest that the increase in cycling achieved in the CDTs so far has cost Cycling England just 93 pence per extra 'annual cycle trip' generated<sup>4</sup>

 <sup>&</sup>lt;sup>3</sup> Gaps indicate no comparative data available to date.
 <sup>4</sup> An 'annual trip' is the equivalent of 160 trips per year of an average 3.9km (SQW report assumptions)

### 5. Developing a 'Bike for the Future II' Strategy (2008 – 2012)

- a. The CE approach to Bike for the Future II must:
  - 1. Build on success, and use proven projects and programmes and learn from past successes *and* failures.
  - 2. Provide part of the solution to the transport challenges identified and offer good value for money for the investment.
  - 3. Start with identifying potential new <u>people</u>, *then* trips. I.e. more *people* cycling, more safely, more often
  - 4. Be realistic by recognising that many people do not know about cycling or simply do not want to cycle.

### Identifying potential people:

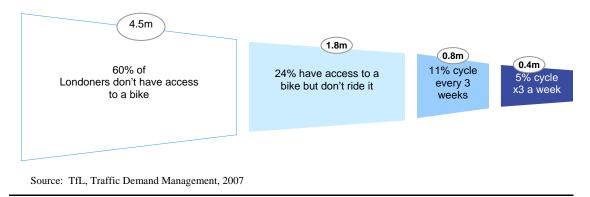
- b. The proposed programmes start by identifying the groups of people most likely to cycle, but are realistic in their assumptions of how easy behaviour change is in each. The programmes assume:
  - **People** will not cycle less than 1 mile or more than 5 miles
  - People will not switch from their car to a bike if the journey will take more than 20% longer
  - People will not start a cycling habit via 'difficult' regular trips
  - People have a variety of legitimate reasons not to cycle at all, or regularly, which must be identified and tackled.
- c. Such reasons not to cycle start with:
  - Not owning a bike
  - Distance
  - Age

- · Time of day
- Convenience / space
- Baggage

These are 'personal' reasons that accompany the well-understood 'wider' barriers such as the perception of danger, weather, and facilities required at trip beginning and end.

d. Considering this, the proportion of trips in aggregate 'available' for cycling may never exceed 5% in the next 10 years. However, this is still a very large number of trips, and it is certainly a large number of people. Increasing cycling can also benefit even those who will never cycle – by improving air quality and the environments in which we all live, and improving road safety. e. TfL have done similar analysis in London, to identify the proportion of people who might cycle once each of the major personal barriers to cycling is removed. The diagram below shows this pictorially given the London population and cycling mode-share in 2007 (1.9%). It has been called the 'life-cycle', in that people must be identified and moved through each stage which will inevitably be of smaller size than the last:

### Diagram 1:



- f. Targeting people first, *then* trips requires the following sequence of action:
  - i) Identify specific potential target group
     E.g. children want to cycle
  - ii) Understand their particular 'barriers' to behaviour change
  - iii) **Introduce** a range of projects specifically designed to overcome those barriers.
  - iv) Integrate projects: For any given target group, behaviour change will likely require more than one 'intervention'
    - E.g. Training + parking *or* training + maps + lanes.
- g. By applying the principles of the CE approach, learning from past successes and failures, and being realistic, programmes should therefore:
  - 1. Work ONLY with willing targets
  - 2. With an integrated package of interventions
  - 3. In a 'whole environment' i.e. community, town, school
- h. And the best targets are people who are likely to cycle because they:
  - have a bike
  - ride it already (at least for leisure, even if rarely)
  - recognise a benefit:
    - Health / fitness
    - o family-time
    - o speed / time-saving i.e. avoiding congestion

- o enjoyment / leisure
- o environmentally friendly

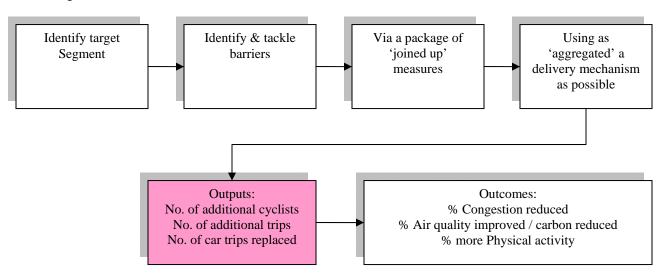
### This means starting with:

- Children
- Those under 35
- 'Family' members, especially Mums
- i. Followed by trips which start off 'easy':
  - school + colleges / universities
  - family rides / weekends / leisure
- j. This must happen before targeting other trip types offering good potential for cycling:
  - The commute e.g. trip to work, trip to the station
  - Personal business / shopping
- k. Finally, programmes must deliver tangible outputs and outcomes. The main outputs considered in Bike for the Future II are:
  - i. Number of additional cyclists;
  - ii. Number of additional cycling trips;
  - iii. Number of reduced car trips.
- I. These outputs must contribute to overall outcomes reduced congestion, pollution and better health.

#### Including Harder-to-reach groups and socially deprived areas:

- m. Targeting the willing does <u>not</u> mean not tackling harder-to-reach groups or socially deprived groups and areas. In fact the opposite is true. Once a target segment of people is identified, then <u>all</u> barriers to cycling uptake must be identified and tackled for that group.
- n. The groups identified above include children, those under 35 and family members of all backgrounds. By tackling the barriers to cycling for each group within a 'whole environment' such as a school, town or community, both areas of deprivation and areas of non-deprivation are tackled, although it should be noted that a proportionately greater cost may be incurred in engaging harder-to-reach groups.
- o. The main programmes outlined in Section B will tackle both harder-to-reach groups and areas of social deprivation. It is estimated that 20% 25% of the people that will be affected by the interventions will come from these groups or areas. Any increased costs of reaching these groups are averaged in the costs provided against those easier to engage groups or areas.

# Diagram 2



### Example:

Identify Target segment: children aged 7 - 12

Identify and tackle barriers:

Main Barrier	Tackled by package of measures:
School bans cycling	School Champion
Road Danger	Cycle Training / Bikeability / Bike 'crocodiles'
Safe route required	Build Links & Connections / Travel Planning / Signing / Maps
Bike theft	Secure Bike parking
Parents reluctant to allow child to cycle	Measures to involve Mums (and Dads) – Bike picnics / cycle training for parents

*Delivery mechanisms:* School Travel Planners, School Sports Partnerships (SSPs), teachers / curriculum, network of school champions, sports coaches.

Outputs: More children cycle to school, replacing car journeys on school run.

Outcomes: % reduction in School run congestion, pollution and % increase in children's physical activity levels (and reduction in overall levels of child obesity)

# **SECTION B - Programmes**

- The Bike for the Future II programmes require a 1 year lead in time (2008/9) with a £40m budget followed by £70m per year investment for 3 years 2009 2012.
- This investment is required in order to achieve the 20% increase in National Cycling Levels by 2012, and the other outcomes detailed in Section A, 'A Strategic Role for Cycling'.
- The outline of the programmes is for the fully funded years 2009 2012. A separate section sets out the lead-in and scaling up requirements during 2008/9.
- The programmes have been selected and developed using the rationale described in Section A: 'The Cycling England Approach' and 'Developing a Bike for the Future II Strategy'.
- They also include the numerous ideas and input from a wide range of cycling stakeholders whom Cycling England consulted during the summer of 2007. This process began at Cycling England's annual Cycle Forum in May, and has culminated in submissions from NGOs, Local authorities, Campaign groups and representative organisations such as the Local Authority Road Safety Officers Association (LARSOA) and Local Authority Cycling Association (LACA).
- Each programme has an introduction & rationale, overview, details of outputs & outcomes, summary of main programme elements, costs & resources required, and overall sustainability of the programme. Each section presents the projects to show how they integrate with each other the key to their ability to produce successful results.
- A table follows summarising the two principal programmes. The detailed proposals in the rest of Section B are divided as follows:
  - 1. Programme 1 National START cycling programme
  - 2. Programme 2 Cycle City, Cycling Towns
  - 3. Core Programmes
  - 4. Scaling Up
  - 5. Meeting the Objectives and Targets & Valuing the Benefits
  - 6. Programme Cost Summary Tables

# PROGRAMME SUMMARY

Aims	Outcomes			
PROGRAMME: Childre	en – National START cycling pro	ogramme		
		Project	Outputs	Costs (p.a.)
Promote and provide the environment for cycling to be a lifelong habit for children  Boost levels of cycling	life-skill of knowing how to ride their bike safely and well before they leave primary school.	Bikeability	By 2012, offer every child the opportunity to achieve their Bikeability – the cycling proficiency of the 21st Century – to Level 2 of the Government National Standards.	£12m
to school so reducing school run congestion and pollution, and increase the physical activity levels of children so promoting health and well-being.	achieve 10% of all regular school run journeys by bike by 2012  Cut the overall percentage of the school run regularly undertaken by car by 5% by 2012  Contribute to the overall increase	Schools Champions	Offer the opportunity of a dedicated champion for cycling to every primary and secondary school in England to boost cycling and tackle the school run. In the funding period - over half of all target schools – i.e. > 10,000	£10m
Every child who wants to will have the skills and confidence to cycle, safely, both to school, and at home.	of national cycling levels, providing around half of the trips confidence to e, safely, both to of national cycling levels, providing around half of the trips required to meet the proposed national target of 20% increase in	Safe Routes	Build 600 new safe links to school and provide 1000 additional parking facilities.	£10m
		Active Recreation & Sport	- Expand the network of schools cycle clubs doubling the number by 2012 Provide cycling as an option for 'extended schools' from 2008 Provide tools for schools to engage families in cycling activities from 2008.	£5m

Aims	Outcomes					
PROGRAMME: Cycle City, Cycling Towns						
Transform a major	Contribute to the overall increase	Place	Outputs	Costs (p.a.)		
English city into a cycling city; creating an exemplary cycling environment to match the achievements of London.  Transform 16 cycling towns across every English region; creating an exemplary	of national cycling levels, providing around half of the trips required to meet the proposed national target of 20% increase in cycling by 2012  Cut congestion and pollution in each city and town  Improve local journeys during peak hours in terms of time, air quality and journey ambience.	1 Cycle City  Population up to 1,000,000	Delivering a 100% increase in the number of people cycling in the city by 2012  It is estimated that 20% to 25% of the people that will be affected by the interventions will come from harder to reach groups or socially / economically deprived areas.	£10m		
cycling environment in each, working in larger and smaller towns or groups of towns in both urban and rural environments.  Attract at least 100% match-funding across the programme from local authorities and other partners.	Improve the public health of the city / town populations  Also to:  Work across areas of social / economic depravation and with harder to reach groups,  use cycling tourism as a means of boosting local economy in deprived rural areas	10 Cycling Towns 6 current Cycling Demonstration Towns Population av. 100,000 (ranging ~25,000 – 300,000)	Delivering increases of 100% in cycling in each town / area by 2012  In Demonstration Towns this will be from 2008/9 levels.  It is estimated that 20% to 25% of the people that will be affected by the interventions will come from harder to reach groups or socially / economically deprived areas.	£10m		

### **Programme 1 – Children: A National START Cycling Programme**

### I) Introduction & Rationale

1. Young people are vital to the future of cycling in this country. Cycling is a life-skill that every child deserves the opportunity to learn, giving them a rite of passage to independence in safety.

# 2. Why target children?

- a. Children want to cycle
- b. They are a willing audience, open to the benefits of cycling.
- c. Most have bikes.
- d. Research shows that at least 40% of children say they would cycle to school if they could. Only 1% do.

No audience fits Cycling England's target definition more fully. For this reason, children aged 7 - 12 are Cycling England's primary target audience.

### 3. Why target the School Run?

- a. Before 9:00am 1 in 5 cars on the road is on the school run. It makes sense to focus on this journey. The average school journey to primary school is below 2 miles and to secondary school is below 3 miles.
- b. The number of children travelling to school by car has doubled in the last 20 years (NTS)
- c. 1 in 5 cars i.e. 20% of all cars on the road in our towns and cities are on the school run at 08:50am.
- d. 43% of all primary school children are taken to school by car that's 2 million extra car journeys at peak times just for primary schools, and 500 million trips per year, each an average of only 1.5 miles.
- e. A further 22% of all secondary school children come to school by car.
- f. There are 743 million school trips over 1 mile per year, of which 500 million are by car. (128 million walking, 94 million bus, 19million by cycling or other mode)

# 4. The Annual cost of the School Run is high<sup>5</sup>:

- a. 500 million litres of fuel burnt creating 2.1M tonnes of carbon
- b. 570 million lost hours for parents driving their children to school by car
- c. 130 million hours lost to commuters stuck in traffic jams

### 5. And contributes to:

a. 1 in 5 boys (21.8%) and over 1 in 4 girls (27.5%) either overweight or obese.

b. 30% of boys and 39% of girls not achieving the recommended level of physical activity<sup>6</sup>.

<sup>&</sup>lt;sup>5</sup> No More School Run – The Sutton Trust – June 2005

- 6. However in the coming years:
  - a. Every school to be a Healthy School by 2009
  - b. Every school to have a travel plan by 2010
  - c. Every school to become a sustainable school (acting as a model of sustainable travel) by 2020
  - d. Every local authority to report progress with reducing car use on school journeys
- 7. Current programmes show that integrated projects focussing on children, using schools as a hub for activities work extremely well. Through current projects we have shown that it is possible to quadruple levels of regular cycling to school, replacing congested car trips, reducing carbon emissions, and improving the health of our children.
- 8. Using schools as a focal point it is also possible to engage with harder to reach target groups such as women and the over 45s Mums and Grandparents. Simple local and community interventions focussing on leisure and active recreation for the family can introduce people to cycling in a way which is likely to be sustainable.

### II) Programme Overview

- 1. A National START Cycling Programme: (School Travel & Active RecreaTion) programme is proposed.
- 2. It is based on the most successful elements of Cycling England's current 'Young People' programme, but with national scale and ambitious objectives.
- 3. The START cycling programme will work with every primary and secondary school in England to:
  - a. promote and provide the environment for cycling to be a lifelong habit for children
  - b. boost levels of cycling to school so reducing school run congestion and pollution, and increase the physical activity levels of children so promoting health and well-being.
- 4. The ultimate aim is that every child who wants to will have the skills and confidence to cycle, safely, both to school, and for fun.
- 5. The programme will work in partnership with DfT and the Department for Children, Schools and Families (DCSF)

<sup>6</sup> Spronston K and Primatesta P (Eds) (2003) Health Survey for England 2002, Volume 1: The health of children and young people. London TSO

# III) Outputs & Outcomes

# 1. The programme will:

# **Outputs:**

- a. By 2012, offer every child the opportunity to achieve their Bikeability the cycling proficiency of the 21st Century – to Level 2 of the Government National Standards, before they leave primary school.
- b. Offer the opportunity of a dedicated champion for cycling to every primary and secondary school in England over 7 years to boost cycling and tackle the school run. In the funding period identified in this paper, this means over half of all primary and secondary approximately 10,000 schools.
- c. Build 600 new safe links to school and provide 1000 additional parking facilities.

### **Outcomes:**

- a. Provide all children with the vital life-skill of knowing how to ride their bike safely and well before they leave primary school.
- b. In each school worked with, achieve 10% of all regular school run journeys by bike by 2012
- c. Cut the overall percentage of the school run regularly undertaken by car by 5% by 2012
- d. Contribute to the overall increase of national cycling levels, providing around half of the trips required to meet the proposed national target of 20% increase in cycling by 2012
- e. Contribute to the cutting of overall percentages of congestion and pollution in built up and urban areas
- f. Contribute to the improvement of local journeys during peak hours in terms of time, air quality and journey ambience.

### IV) Main Elements

#### 1. BIKEABILITY

#### Overview

- a. Cycling England's aim is that no child should leave primary school without the opportunity to 'do their Bikeability'.
- b. Bikeability is the Cycling Proficiency of the 21st Century, offering a nationally recognised award scheme for the 3 levels of the Government's National Cycle Training Standard.
- c. It has already been launched to huge public and media interest in a 10 city tour covering every English region, and is generating an ever increasing demand for quality cycle training.

#### Testimonials:

- "It has provided a massive improvement. All kids said their parents had more confidence in their ability so let them ride without supervision – especially to school" (Teacher, Kingston)
- "We've seen a significant difference with local schools. A lot of schools didn't previously allow children to cycle to school as seen as unsafe but many head teachers have now approached us about Bikeability training" (Scheme Organiser, Merseyside)
- "Less able children academically were able to excel and it boosted their confidence" (Parent, Exeter)
  - d. The Cycle Training Standards Board (CTSB) estimates that the majority of children would have the necessary skills to cycle to school if taught to Bikeability level 2 (level 2 of the National Standards), as this prepares students to be able to cycle on less-busy roads. This assumes a degree of travel planning to identify safe routes, and possible accompaniment depending on age / distance etc.

#### **Target Audience**

e. Of the identified target audience of 7 – 12 year olds, Bikeability would focus on children aged 10 – 11 in their final year at primary school. There are approximately 500,000 children in year 6 of primary school.

#### **Prior Experience**

f. For the last 2 years Cycling England has been working on a programme to increase the numbers of National Standards trainers and training schemes. There are now over 1200 National Standards instructors accredited by the CTSB. A considerable scaling up exercise is still required. (This is detailed in Sections B, 3 'Core programme' and B,4 'Scaling Up')

- g. Cycling England has tested extensively the Bikeability materials and award scheme process, working in partnership with the CTSB and other national organisations such as CTC and British Cycling. Well over 20,000 children have already received their Bikeability awards since September 2006.
- h. Cycling England established a £1m cycle training fund for Local authorities to train additional children to Level 2. This was oversubscribed in 2 weeks by £0.5m. Experience shows that even were training has been small-scale in the past, funding can facilitate quick scale-up. Currently where training has been targeted at whole schools or groups of schools, with positive head teachers and proactive promotion, around 60% of primary school pupils have been trained.

### **Delivery**

- There are already two tested and successful funding mechanisms for Bikeability – via Local authorities and via School Sports Partnerships (SSPs). Around half of all Local authorities are signed up to the National Standards upon which Bikeability is based. Every school in England is in one of 450 SSPs managed by the Youth Sport Trust.
- j. Training is delivered either by in-house teams of instructors or contracted out to training companies / freelancers. All must be accredited National Standards instructors.
- k. Scaling up from current levels of training would require a mixed approach across the two funding mechanisms. It is estimated that equal proportion of training could be delivered between each of these two routes i.e. via local authorities and via School Sports Partnerships.
- I. Slightly increased investment will also be required to engage areas with no track record in cycle training; and harder-to-reach groups within the target audience such as those within deprived areas or with special needs. There may also be a requirement in very busy / congested urban areas to train a small proportion of children to Level 3. This would require delivery partners, probably organised on a regional or sub-regional basis. See Section B, 4 'Scaling up' for further details.

#### Costs

m. Current training shows that it costs an average of £34 per child to reach Bikeability level 2 (outside London). This average, derived from the £1m cycle training fund paid only for 'additional' training – i.e. Local authorities had to already have planned National Standards cycle training from local budgets. This average is likely to increase when penetrating areas with little track record in cycle training and when engaging with harder-to-reach groups. For the purposes of this paper an average of £40 per child to train to Level 2 has been used.

- n. It is proposed that rather than pay simply for 'additional' training places as before, that a proportion of match-funding is required in order to leverage funds. This ensures that current Local authority funding is not lost / replaced.
- o. To ensure this does not create a barrier to uptake, the requirement should be for 25% match-funding from local budgets. Those with a strong track-record in funding cycle training should be encouraged to continue investing at similar levels to those of previous years, even if this amounts to more than 25%. Such encouragement might include greater access to other parts / funds of the National START programme e.g. Links to schools (see below).
- p. With a 75% success rate across the whole of the Year 6 year group (estimate based on national promotion of scheme and current 60% trained rate in 'whole school' environment) providing the opportunity for every child who wants it, to do their Bikeability before leaving primary school would cost £15m p.a.
- q. Therefore with a stipulation of 25% match-funding, Cycling England funding required would be £11.25m, and with a small contingency margin, £12m p.a.
- r. Meeting the objective of offering the opportunity to do their Bikeability to every child requires a contribution therefore of around £3m from local budgets. This is roughly equivalent to current Local authority expenditure on cycle training<sup>7</sup> and is therefore reasonable and sustainable.

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<sup>&</sup>lt;sup>7</sup> Local funding per year 2005 – 2008. This includes non-National Standard cycle training such as cycling proficiency as well as National Standards Training.

#### 2. SCHOOLS CHAMPIONS FOR EVERY SCHOOL

#### Overview

- a. The current Schools champions project, 'Bike it' began as a partnership between Government, the bicycle industry and Sustrans to tackle all the barriers to cycling to school.
- b. It has a proven success rate of more than quadrupling regular cycling levels to school by instilling positive attitudes to cycling from head teacher to parent and tackling barriers such as lack of cycle parking, identifying safe routes, arranging cycle training, and promoting cycling as part of school activities in the classroom as well as out.
- c. A Schools Champions project has the potential to work with *every* primary and secondary school in England given funding for 7 years. In the funding period of this paper it can work with more than half of all primary and secondary schools around 10,000 schools.

#### Target Audience

d. The programme will work with a mix of primary and secondary schools from the pool of ~18,000 primary and ~3500 secondary schools. The project will take a 'whole school' approach but will also encompass children's parents and guardians, and tackle attitudes of Governors, head teachers and teachers.

#### Prior Experience

- e. Bike it has shown the advantage of a dedicated full-time person working with a specific focus on boosting cycling in schools, but working alongside the School Travel Adviser, bringing together school, children, parents, local transport and education teams to coordinate funds and activities and promote cycling as part of the school run.
- f. All the Cycling Demonstration Towns cite Bike it as invaluable to their programmes, and have recommended the scheme should be scaled up.

#### Delivery

- g. Bike it already has some experience of scaling up from 4 to 10 to 20 officers over the last 2 years and will be further increased to 30 by January 2008.
- h. The support and management requirements of a significant scale-up have already been identified by Sustrans who recommend clusters of teams organised by region.
- i. Each officer is based in the most appropriate place according to local circumstances e.g. some sit in the Local authority, others with an NGO.

#### Costs

- j. Each Bike it Officer currently costs £50k including all management and support overhead and a budget to promote cycling. Each Officer currently works with 12 schools per year.
- k. With a significant scale up the number of schools each Officer could work with will increase to 15. A cohort of 200 champions would work with 3000 schools per year. I.e. more than 10,000 schools in the funding period of this paper and all schools within 7 years. This would cost £10m p.a.

#### 3. SAFE ROUTES:

### <u>Overview</u>

- a. In order to cycle to school safely, safe routes must be identified. Alongside training children to cycle these routes and providing a champion for each school, providing safe routes is a key link to achieving more cycling on the school run.
- b. An integrated infrastructure programme is required providing key new links to schools from local communities where they are missing, supplementary cycle parking where it is needed and identifying safe routes for all schools and all children. This includes travel planning, signing and maps working with the local authority, school travel planner and schools champions.

### Prior Experience

c. The Department for Transport has supported building Links to Schools since 2004. Across the 15 links case studies published by the Department for Transport in 2007 it was estimated that these generated an additional 3 million cycling and walking trips replacing 1 million car journeys. Of the additional trips around 1 million were trips by children to and from school.

#### <u>Delivery</u>

- d. The links and cycle parking programme has to date been delivered for Government by Sustrans. Choice of which projects to fund has been selected based on match-funding from the local authority and its integration with other elements of Cycling England's current Young People programme e.g. Local authority signed up for National Standards cycle training, Cycling Demonstration Towns or presence of Bike it Officers. This should be a key part of future choices.
- e. The programme must be coordinated with the DCSF / DfT school travel plan initiative, and DCSF funding available for other cycle parking facilities.

#### Costs

- f. £10m p.a. will provide up to 160 links per year and 330 parking facilities. By 2012 including scaling up funding, this will fund 600 new links to schools and 1000 new cycle storage facilities.
- g. This is based on an average cost of ~£50k per link, and ~£10k per parking facility. This assumes an average degree of match-funding usually at least 33% for links and 65% for cycle parking.

### 4. ACTIVE RECREATION and Sport Programme

### <u>Overview</u>

- a. A fourth element to the START cycling programme is required to actively encourage cycling at school, extended school and after school clubs (as active recreation / participation in physical activity).
- b. This will also 'join up' the transport, sport, & physical activity / health agendas.
- c. Schools can also be used as a community hub to target harder to reach segments of our target audience such as women (Mums), and the over 45s (especially grandparents).

#### **Target Audience**

- d. Children aged 7 12 as part of the extended school day and after school clubs
- e. Mums and 'extended family' of target children using school as community hub.

#### **Delivery**

### f. Cycle Clubs

Cycle club schemes such as Go-Ride run by British Cycling integrate club development, coaching activities, youth participation and talent identification programmes for young people into one single programme. This builds a network of school and community based cycling clubs that are trained, resourced and skilled to meet the challenge of integrating young people into a recognised club structure. This can introduce young people to a range of cycling disciplines such as mountain biking, BMX and Track Riding. Such activities help make cycling a life-long habit, hobby or full-time sport.

British Cycling is currently being funded by Cycling England to develop an 'on-road' child training module for its Go-Ride programme such that Bikeability can be delivered by some of the 1000-strong network of British Cycling coaches through Go-Ride clubs.

It is proposed to now provide direct funding to expand the network of schools cycle clubs, such as Go-Ride schools clubs and <u>double</u> the reach of such programmes by 2012.

### g. Extended Schools

Providing the tools and facilities for those engaged in providing extended schools opportunities to children is vital if cycling is to be included in their menu of options. Cycling can be offered both as a physical activity / sport as well as a key means of transport to extended schools activities off-site. It is the latter opportunity that needs most exploitation and will require equipping those who accompany children or run extended schools activities with the necessary skills and knowledge to get children cycling to their activities, rather than using buses, mini-buses, or worse simply missing out. A project in partnership with DCSF must be instigated to pilot cycling as a mode of transport to off-site activities, offering bikes, training, accompanied journeys and anything else required.

### h. Extended Family

Mums hold the 'key to the bike-shed' and the current experience of the Bike it project shows how important it is to engage parents with their children's cycling activities. The focus for this project would be parents of target children, in particular Mums.

#### The project would:

- Address parental concerns around allowing the child to cycle to school (even once trained) by providing training, information and social opportunities such as family rides and other cycling activities.
- Provide an opportunity for parents to get active and encourage cycling as a life-long habit, sport or hobby.
- Provide tools for schools to engage with extended family to promote cycling.

#### Costs

i. Funding the expansion of a school clubs programme would cost £3m p.a., funding for extended schools activities would require around £1m p.a. and targeting the extended family would require around £1m p.a.

# V) Long-term Sustainability

- 1. The programmes proposed do require central Government funding in order to establish and embed them.
- 2. However in time most schemes could become either self-financing or managed by Local Authorities from their existing local funding.
- 3. The Bikeability award scheme where, given sufficient demand, the costs of badges and certificates can be met through the overall cost of training or, as in the case of swimming awards, passed on directly to parents.
- 4. Current Local Authority funding for cycle training will not be duplicated by Cycling England in order to ensure that it remains a local responsibility long-term. Swimming training provides a useful model: in the longer term cycle training would be funded in part by Local Authorities; part from Local Education Authorities; and also from individual demand (parents, schools, other organisations eg. Scouts).
- 5. Bike It, after its initial phase, now attracts significant match-funding and this should be an integral part of the School Champions project.

### **Programme 2 - CYCLE CITY, CYCLING TOWNS**

### I) Introduction & Rationale

- 1. Investment in its demonstration towns has brought about significant increases in cycling, with all the attendant health, congestion and environmental benefits.
- 2. Cycling Demonstration Towns show that a package of integrated measures, delivered in a 'whole environment' has a high rate of success in generating additional cyclists, additional cycle trips and reduced car trips.
- 3. Since October 2005, six towns Aylesbury, Brighton & Hove, Darlington, Derby, Exeter and Lancaster with Morecambe have received levels of investment in line with that of their European counterparts to test whether cycling levels can be significantly increased. These towns are already demonstrating such increases. In 12 months, Aylesbury has seen a 42% increase, Exeter 26% and Darlington 57% proving that dramatic progress is possible.
- 4. The 'Demonstration' aspect of Cycling England's initial Place (CDT) programme is therefore complete.

#### II) Programme Overview

- 1. Cycling England proposes the creation of a CYCLING CITY and 10 further CYCLING TOWNS across every region in the country.
- 2. The Cycling City would be a major English City with up to 1 million people e.g. Manchester, Birmingham, Liverpool
- 3. The average population across the 16 Cycling Towns would be ~100,000. This average could accommodate several much larger towns, and also smaller rural towns, or groups of towns.
- 4. The cycle city and each cycling town would deliver an integrated & coordinated series of interventions focussed on hard measures such as routes and connections and soft measures such as promotion, signage and maps; delivered through communities and other hubs such as schools, workplaces, stations and hospitals.
- 5. The objective would be to create a network of exemplary cycling environments in every region of England, and in a city to emulate the achievements of London.

### III) Outputs & Outcomes

The programme will:

### **Outputs:**

- a. Transform a major English city by delivering a 100% increase in the number of people cycling there by 2012
- b. Transform 10 additional towns, (i.e. 16 including the current CDTs) across every English region by delivering increases of 100% in cycling by 2012

### **Outcomes:**

- Contribute to the overall increase of national cycling levels, providing around half of the trips required to meet the proposed national target of 20% increase in cycling by 2012
- b. Cut congestion and pollution in each city and town
- c. Improve local journeys during peak hours in terms of time, air quality and journey ambience.
- d. Improve the public health of the city / town populations
- e. Work across areas of social / economic depravation and with harder to reach groups, e.g. use cycling tourism as a means of boosting local economy in deprived rural areas

#### IV) Main Elements

#### 1. Continued Support for current Demonstration Towns

It is proposed that investment should continue in all 6 of the current Cycling Demonstration Towns, however the investment should match the scale of each town's ambition i.e. investment may not continue at current levels but may be increased or diminished depending on current success and future plans. As in successful European counterparts, 'transformational' change in each town requires consistency of investment over an extended period. All 6 towns have been successful in different ways and future funding must recognise this success.

### 2. Role of Current Towns in Supporting Future Towns

The current CDT project teams have a vital role to play in helping future cities and towns prepare their plans and recruit their own project teams. The current CDT programme has shown that a period of planning and preparation of at least 6 – 9 months is required before full investment commences. Current CDT teams should be funded and resourced to provide the necessary support and advice to new project teams.

### 3. Selection of Cycle City

The Cycle City should be a major city with the political will and ambition to create a transformational change in the way that city residents travel, in particular replacing existing short urban car trips with cycle trips. Cycling England will wish to work at a 'conurbation' level so will require consortia bids from groups of authorities that make up the city.

Consideration should be given to cities with congestion issues, and in particular cities which have a desire to implement strong restrictions on cars in the city centre, implement wide-scale traffic calming measures or have applied to the Department for Transport's Transport Innovation Fund (TiF) for pilots such as congestion and road charging. The city should be selected such that the change will rival the success seen in London over the last 5 years.

# 4. Selection of Cycling Towns

Cycling Towns should be selected from each English region and also represent a greater diversity of town type, with some larger more urban towns and some smaller and more rural towns or groups of towns. Towns should be selected on the basis of their 'potential' for creating transformational change, in particular towns with a pedestrian heart that could be opened up to cyclists, and towns that plan / are prepared to implement wide-scale traffic calming / speed restriction measures.

Consideration should be given, in particular when selecting rural town(s), to levels or areas of deprivation, e.g. a seaside authority where cycle tourism could play a part in regenerating local economy.

Selection of both the city and towns should take place during 2008/9 allowing at least 6 – 9 months of preparation time.

### 5. Integrated measures in a 'Whole Environment'

Cities and towns will only be approved for funding on the basis of agreeing ambitious and comprehensive plans with Cycling England during 2008/9 and evidence of at least equal match-funding, a well led, strong project team and support of all local stakeholders.

These plans must include an integrated and coherent package of both hard and soft measures, and include support for all elements of Cycling England's other programmes including its National START cycling programme, and other core programmes (see below).

The project team must have both high level officer support within the Local authority and cabinet level political support. Plans and project team must have the support of local stakeholders such as schools, colleges, universities, stations, Primary Care trusts, hospitals and major employers.

#### 6. Monitoring

The monitoring taking place in the current CDTs will be expanded to cover the new city and towns to monitor progress and success and to ensure funding is providing good value for money.

Of equal importance will be the measurement of general levels of physical activity within each city and town. Cycling England recommends expanding the current health and physical activity study to encompass new towns to monitor the health outcomes of the programme.

#### IV Costs

- Estimated on the basis of population, the yearly programme would require £20m p.a. broadly split between cycle city and cycling towns. The scaling up / preparation time would require £11m during 2008/9 including the continued investment in current towns.
- 2. Cycling England estimates that its required investment in the new cycling towns would be a little over £6 per head (£6.25 used for the purposes of calculation) which would require match-funding from local budgets. This reflects the £5 per head investment in the current CDTs but includes a small increase representing the extra investment in the current CDTs from Cycling England from its Bikeability, Health, Local Authority Support and Bike it projects.
- 3. Cycling England proposes investment in the cycle city is required to be around £10 per head matched by local funds. This is because significantly increasing cycling in the City would require a large front-loaded infrastructure cost.

#### V) Long-term Sustainability

 The Cycle City, Cycling Towns programme proposed requires central Government funding in order to establish and embed it. It is intended that funded city and towns in the programme will serve as 'beacons' attracting further investment and encouraging other Local Authorities to follow suit.

# 3) CENTRAL Programmes

#### I) Introduction & Rationale

- 1. A series of central programmes are required to:
  - a. Support and maximise the investment in the main 2 programmes proposed;
  - b. Help maximise other types of investment that can benefit cycling. E.g. that from Local authorities, regional Government bodies, Train Operating Companies, the NHS, primary care trusts;
  - c. Continue to identify new solutions to boosting cycling, new potential target audiences and target trips and new ways to tackling barriers to cycling; Piloting new and experimental cycling initiatives in order to provide a continuing effort on successful pilot projects for future expansion and roll-out (BFTFII is now capitalising on the initial programmes for 2005/8; this sequence of pilot experimentation followed by roll-out must be continued)
  - d. Ensure programmes coordinate with each other, as well as internally to ensure maximum benefit:
  - e. Provide a central marketing and communications function;
  - f. Monitor and measure success.

### II) Programme Overview

- 1. The central programmes are divided into 6 elements:
  - a. To support Cycling England's objective to offer Bikeability to every child. Unlike other projects this requires continued investment and support in helping accredited instructors meet demand for child cycle training. I.e. investment to support more schemes, and more trainers, beyond even the scaling up year 2008/9 and throughout the funding period in this paper.
  - b. To work with Regional and Local Government organisations and networks in England and to continue to explore new funding and delivery routes. I.e. Local authorities, Regional Government Offices, Regional Development Agencies, and regional and local NHS units such as Primary Care Trusts.
  - c. To work to find new solutions to increasing cycling, in the 'second tier' of target audiences and trips. Thus, a programme investigating promoting cycling for adults such as the under 35s, and over 50s, targeting trips to the workplace, to the train station as part of the commute and for leisure.
  - d. To develop an innovative marketing and communications strategy to support programmes and continue to promote cycling nationally.

- e. To establish a robust and sensitive monitoring regime that works both at a programme level and at a national level.
- f. To provide a central support function to Cycling England including an executive and programme management core team.

#### III) Outputs & Outcomes

The programme will:

#### **Outputs:**

- a. Provide sufficient instructors to meet demand for cycle training and Bikeability.
- b. Provide support and advice to all Local authorities, and other regional and local organisations and network who require it, in accordance with Cycling England's overall objectives and targets
- c. Pilot new ways to encourage adults to cycle, particularly at work and for leisure. Deliver proposals to scale up to national levels for each successful pilot by 2012.
- d. Monitor the increase in cycling both in a national and programme specific context.

#### **Outcomes:**

a. Maximise the investment in the two main programmes such that they are able to contribute to overall increases in cycle trips and reductions in car journeys.

## IV) Main Elements

#### 1. Cycle Training Supply

This programme must ensure that there are enough instructors to meet the demand for child cycle training. This will include the recruitment and training of more instructors, the matching of instructors to those schools requiring cycle training and encouraging Local authorities, School Sports Partnerships and other possible providers of Bikeability training schemes.

#### 2. Regional and Local Government Support

- a. Supporting Government offices and other regional organisations such as the Regional Development Agencies (RDA's); investigating the delivery potential of other networks such as Chambers of Commerce, Sports Councils, Learning & Skills Councils
- b. Supporting Local Authorities support should be provided for keen / willing authorities to make effective use of LTP funds for cycling.
- c. Supporting Primary Care Trusts (PCTs) support for PCTs in their public health roles, health treatment roles and role as largest UK employer. Continuation of PCT Demonstration Pilot and roll-out as appropriate.
- d. Supporting Regional and Local Tourism initiatives that support cycling as a sustainable leisure and tourism activity.
- e. Working through Local Area Agreements Support to include cycling in these vital local delivery partnerships.
- f. Encouraging Leadership Supporting political and senior officer level leaders, 'movers and shakers' and decision-makers; arming them with the information, tools and resources to support cycling more effectively.
- g. *Professional Resources* –for those delivering for cycling in local Government and private engineering and planning consultancies.

#### 3. Finding New Solutions: Adults, Workplace & Leisure

The analysis in Section A: Developing a Bike for the Future II Strategy' sets out the rationale for the two principal programmes – understanding that the key target audience was children, and that the most successful interventions are those delivered 'in a whole environment' such as a town or city. This leads to the first programme designed to give every child the chance to cycle – the National START cycling programme, and the 2nd programme of Cycle City, Cycling Towns. The Section A analysis identifies a 2nd tier of targets – those under 35, and the extended family – e.g. Mums and grandparents as well as a further tier of target trips.

Given the need to continue to experiment to find new solutions to boosting cycling and in order to provide the basis of future national programmes, this 2nd target tier is proposed as the basis for a programme of pilot projects covering the following:

- a. Targeting the Under 35s through the workplace and by targeting the commuter trip. Projects and pilots should examine working with large employers and networks of employers such as large franchises and business / retail parks. Projects should pilot cycling champions in the workplace, adult cycle training and social or mass / large participation rides as a means of introducing cycling as an activity, hobby and sport.
- b. Targeting the Over 50s through social and leisure networks. A project sponsoring a network of 'family' cycling officers should be piloted, working through schools, and other community hubs to target the over 50s in particular to promote everyday cycling using leisure, social and mass / large participation rides as a means of introducing cycling as an activity, hobby and sport.
- c. The commuting trip In particular a national Bike & Rail programme working with Train Operating Companies (TOC's) through ATOC, providing best practice blueprints for stations, and other support and advice to boost levels of cycling to stations. To work to provide every station with tailored advice and resources by 2012
- d. The Leisure / Tourism Trip projects should examine the role of leisure trips in particular off-road and the role of cycling holidays to the tourism economy, in particular their potential in saving large amounts of carbon by not driving / flying.

#### 4. Marketing and Communications

A centralised marketing and communications strategy is required to support all programmes. This strategy should be coordinated with the Department for Transport, Department for Children, Schools & Families, Department of Health and Cycling England's delivery partners. This will include:

- · Bikeability brand building
- Bikeability materials design, production and marketing
- Promotion to key target audiences: schools, local authorities
- National Bikeability promotion including promotion to the general public, national media campaigns etc.
- Other promotion of START cycling programmes including encouraging demand for champions and links to schools, and promoting the setting up of clubs.

An innovative marketing and communications strategy designed to promote cycling through specific activities during the year including:

- Supporting Bike to School Week
- · Bike Week,
- Activities that promote a positive image of cycling in the media and public eye.

#### 5. Monitoring

It will not be sufficient to use National Travel Survey Statistics other than for a base-line figure as they do not measure key areas of potential for cycling growth. These include trips made to the station as part of a longer journey (a key area of focus for all 6 current CDTs for example) or cycling done off road, or for leisure and sport purposes.

Monitoring regimes will be put in place for each of the two main programmes and in aggregate across the whole Cycling England portfolio. Where possible other measures, surveys etc will be used to complement programme specific data.

# 6. Central Support and Project management

There is a core requirement for a small executive team (See Section C: Delivery).

This is an essential requirement for proper management of funds. Transparency of process and proper use of public funds are of the utmost importance to programme management. All work and services required should be fairly contracted using open and competitive tender methods. All grants should be fairly allocated, where possible through open competition.

#### IV Costs

 Central programmes require £13m p.a. which includes a budget for all core programmes, monitoring, central support and project management. A budget of £6m is required during the scaling up year 2008/9. See budget summary tables in Section B, 6 'Summary Tables & Costs'

#### 4) 2008/9 SCALING UP

#### **Scaling Up**

#### I) Overview

- 1. A 12 month period of scaling up is required in order to deliver the fully invested £70m p.a. programme from 2009 2012.
- 2. It is proposed that this 12 month period is funded during 2008/9 and requires a one off investment of £40m. This brings the total investment required to 2012 to £250m including the scaling up year and 3 years at £70m p.a.
- 3. There are a number of different preparatory and scaling up requirements for each programme:

#### II) Main Elements

#### National START cycling programme:

- 1. Bikeability Scale up Requires:
  - a. Capacity Building (£2m)

This programme must ensure that there are enough instructors to meet the demand for child cycle training that will be generated by the National START cycling programme. This will include the recruitment and training of more instructors and a requirement to help match instructors to children and schools requiring cycle training. Encouraging Local authorities, School Sports Partnerships and other possible providers of Bikeability training schemes will also be necessary.

#### b. Subsidising Training market (£1m)

This is required to support the burgeoning independent cycle training market as it becomes viable and self-sufficient. Having a professional market of independent training companies follows the successful model for swimming instructors.

#### c. Developing Delivery Partners (£1m)

In order to ensure that capacity is available to offer Bikeability to every child it is proposed that a number of delivery partners are selected, probably organised on a regional basis. They would help Cycling England with harder-to-reach groups such as those with special needs, or those that require level 3 training to cycle to school (e.g. in congested, urban areas) and children and schools with socially deprived background / in deprived areas. Each partner would operate as a regional business, supporting existing independent freelance instructors in the region. Each business would require start up funds and support in the initial phases with self-sufficiency possible after the first 12 months.

#### d. Cycle Training Delivery (£6m) – delivers to additional 200,000 children.

Cycling England proposes that 200,000 children (1/3 of all Year 6 pupils) should be trained during 2008/9. This requires a small increase in the number of Local authorities currently delivering national Standards cycle training, and a significant scale up of the current School Sports Partnership delivery model. Match-funding from local budgets would be required at 25% as in future years to ensure ongoing local funding and sustainability.

#### 2. Schools Champions project requires:

- a. Recruitment of 150 Champions at least 70 of which must be 'operational' by the Autumn term of 2008/9.
- b. Selection of schools
- c. Promotion

#### 3. The Active Recreation and Sport programme requires:

- a. Promotion and establishment of more clubs
- b. Investigations into Extended Schools activities and services
- c. Development of Extended Family projects.

#### 4. Other general requirements include:

- a. Providing resource and information packs to teachers
- b. Encouraging teachers to get more involved with cycling
- c. Also developing links with wider Government Initiatives healthy schools, extended schools, sustainable schools, every child matters.

#### Cycling Cities, Cycling Towns

This programme requires:

- 1. Selecting the next 10 towns
- 2. Select the CITY
- 3. Working with each to gear up for 2009- 2012 i.e. recruiting teams, drawing up plans, getting consultations started, working with current CDT's
- 4. Getting all stakeholders involved i.e. councillors, stations, hospitals, schools, LAAs.

#### Other Scaling up requirements

- 1. Central programmes scale up, and scoping of pilots required for the Finding New Solutions programme.
- 2. Re-structuring Cycling England see Section C, Structure & Governance.

#### III) Costs

The summary of costs required for scaling up are set out in Section B, Summary tables & Costs and total £40m, with £23m required for the National START cycling Programme, £13m for the Cycle City, Cycling Towns programme and £6m required for core activities.

# 5) Meeting the Objectives and Targets & Valuing the Benefit of Investing in Bike for the Future II

#### I) Overview

- Cycling offers tangible benefits for those who participate, but also for wider society.
  The relevance of cycling is shown by its potential to contribute to the policy priorities
  of six Government departments, embracing seven Public Service Agreements. No
  other single activity can simultaneously:
  - a. Improve general health and fitness
  - b. Reduce pollution and the emission of CO2
  - c. Help tackle congestion
- The recent economic study commissioned by Cycling England and undertaken by independent economic modellers SQW, allows a value to be calculated for the economic loss directly attributable to the decline in cycling over the last decade, which, according to the National Travel Survey (NTS 2005), has fallen by more than 25% since 1995.

# The cumulative cost in terms of health, pollution and congestion is £600 million.

- 3. Furthermore, the study quantifies the value generated by an increase in cycling in the future. If by 2015 the number of cycle trips returned to the level of 1995, the savings in health, pollution and congestion would be over £500 million.
- 4. At present only 1.5% of all trips on average are by cycle. An increase of 50% in this level far below the original 1996 target of quadrupling trips by 2012 would create total savings of more than £1.3 billion.
- 5. These are conservative values, comprising only those benefits which can be currently quantified. No account is taken of the contribution of cycling to:
  - Protecting children against obesity
  - Improvement in physical development
  - · Quality of life in communities
  - Wealth generation through tourism and leisure pursuits
  - Potential for a reduction in the rate of road accidents.
- Despite this the study clearly establishes the contribution cycling can make in helping to address some of the most pressing and complex problems facing contemporary society.

(The full executive summary of this report is Annexed in Section D, Annex B)

#### II) Meeting the Objectives and targets

- 1. In order to establish whether the objectives and targets set out in this paper can be achieved, and therefore establish what the value of the BFTFII investment is, two sets of data are required:
  - a. The first requirement is evidence to show the likelihood that the programmes proposed will successfully create new cyclists, and generate new cycling trips.
  - b. The second is data valuing the various aspects of benefit that a newly created cycling trip delivers these can broadly be divided between transport (congestion) benefits, pollution benefits and health benefits.
- For the first we must use monitoring data from current programmes that will form a key part of new programmes proposed, and then extrapolate to represent the increase in scale.

The current Cycling Demonstration Town programme data and the Bike it project monitoring results have been used for this purpose and extrapolated to represent the increase in scale. (Full tables of calculations can be found in Annex D Meeting BFTFII Targets – Calculations)

- 3. For the second set of data we can use the values determined in the SQW economic report for reductions in congestion, pollution and benefits to health.
- 4. Both the CDT data and the Bike It figures suggest that the cost to CE of each extra 'annual cycle trip' is roughly £1.50. That is to say, from the two elements of our programme where we have evaluated the data, the cost per unit of uplift in cycling is about the same. There is therefore justification in applying that cost pro rata to the overall budget.
- 5. Full tables of calculations can be found at Annex C: 'Meeting BFTFII Targets Calculations'. Extrapolation of the data strongly supports a claim that investing in Bike for the Future II via Cycling England can achieve:
  - a. A 10% increase in national cycling levels by 2012 from the £107 million invested in the Cycling City, Cycling Towns programme and Schools champions project (based on Bike It). 7% is from Cycling City / CDTs and 3% from Bike It.
  - b. A further increase in cycling levels of about another 10% 13% by 2012 from the other programmes (applying similar success pro rata).
  - c. Hence a target of a 20% increase in national cycling levels by 2012 is achievable.
  - d. A 100% increase in levels of cycling in the Cycling City and 16 CDTs by 2012
  - e. A saving of at least 27 million car journeys per year by 2012, mainly in congested areas and at peak times from the Cycling City, Cycling towns and

Schools Champions project – again, with further savings possible from other investments totalling up to 50 million car journeys saved per year by 2012.

f. A saving of 9000 tonnes of carbon per year by 2012. (The average petrol car emits 0.18 kg of CO2 per km or 0.29kg per mile. Diesel cars are around the same. 50 million saved car trips is the equivalent of around 195 million kilometres travelled. This equates to 35million kgs of CO2, 35,000 tonnes of CO2 or 9,000 tonnes of carbon.)

#### III) Establishing Value for Money (Benefit to Cost ratio)

 Tables applying the benefit values determined by the SQW research to the above data are found in Section D, Annex C 'Benefit to Cost ratio Data tables'. These show a high, medium and low effectiveness scenario for each (based on the CDT data scenarios). Cycling England has taken the conservative medium option for the purposes of this paper.

The Benefit to Cost ratio of investment in Bike for the Future II is at least 3:1

2. The Benefit to cost Ratio summary table is included below showing the totals for high, medium and low effectiveness scenarios of the £250m total investment proposed in BFTFII:

Table 7: Benefit to Cost Ratio Summary								
	ı	Low	Medium	Hig				
Discounted costs (10 years @								
3.5%) £m	£64.8		£64.8	£64.8				
Discounted benefits (10 years @								
3.5%) £m	£160.9	;	£207.4	£300.1				
Benefit cost ratio (10 years)		2.49	3.20	4.6				

3. Even with the lowest estimated effectiveness the return is at least 2.5 x every pound spent, and the investment breaks even, during the period of investment itself.

# 6) Summary Table and Costs:

Table 1: Budget for 2008/9

£40m Scaling Up Programme April 2008 – March 2009								
Programme	Projects	Cost						
	cycling Programme (£23m)							
	Bikeability Scale up Includes:  Capacity Building (£2m)  Subsidising Training market (£1m)  Developing Delivery Partners (£1m)  Cycle Training Delivery (£6m) – delivers to additional 200,000 children (including 25% match-funding)	£10m						
	<ul> <li>Schools Champions Scale Up Includes:</li> <li>Recruitment &amp; Management</li> <li>School selection</li> <li>Delivering to 1000 schools (requires 70 Champions)</li> </ul>	£5.5m						
	Safe Routes Programme building Links, cycle parking and signing safe routes	£7m						
	Active Recreation & Sport Programme Scale Up Includes:  Club champions e.g. Go-Ride (£300k)  Extended Schools (£100k)  Extended Family (£100k)	£0.5m						
Cycle Cities, Cycl	e Towns (£11m)							
,	Selection of Cycle City & 10 additional Cycling Towns - preparation, planning and recruitment	£1m						
	Continued funding of 6 current towns	£3m						
	Initial funding of new city / towns	£7m						
Central Programn	nes (£6m p.a.)							
	Regional & Local Government Support	£1m						
	Finding new solutions: Adults, Work, Leisure	£2.5m						
	Marketing & Communications	£2m						
	Central Support & monitoring	£0.5m						
TOTAL		£40m						

# 6) Summary Table and Costs:

Table 2: Budget for 2009 – 2012

	£70m p.a. Programme 2009 – 2012									
Programme	Projects	Cost p.a.								
National START	cycling Programme (£37m p.a.)									
	Bikeability for every child	£12m								
	200 Schools Champions to work with 15 schools per year for 7 years (covers all mainstream primary & secondary schools)	£10m								
	Safe Routes Programme building Links, cycle parking and signing safe routes	£10m								
	Active Recreation & Sport Programme	£5m								
Cycle Cities, Cycl	e Towns (£20m p.a.)									
•	Cycle City	£10m								
	16 Cycle Towns	£10m								
Central Programn	nes (£13m p.a.)									
	Ongoing training schemes & trainers	£1m								
	Regional & Local Government Support	£1.5m								
	Finding New Solutions: Adults, Work & Leisure	£4m								
	Marketing & Communications	£4m								
	Monitoring	£2m								
	Central Support	£0.5m								
TOTAL		£70m								

# SECTION C - Delivery

#### 1. Programme management

There are 3 levels of programme management required:

- a. Overall Programme Management. This requires a 'policy' level steering and reporting structure involving key Government Departments. It is proposed that the START programme has a steering group comprising: Cycling England, DfT, DCSF, and the delivery partners. The Cycling City, Cycling Towns programme requires a steering group comprising DfT and the political and senior leaders of each city / town. Each should meet at least twice a year.
- b. A central coordination role is required to ensure the integration of all projects within each programme, and that programmes complement each other. Cycling England would undertake this role through a comprehensive series of reporting and coordination measures with delivery partners. Local or project steering / management groups would also be required.
- c. Individual projects managed on a day to day basis by delivery partners, who understand the objectives of their project and its fits with the overall programme.

# 2. Central and Project specific Monitoring

A monitoring programme is required for each of the two main programmes, and smaller scale monitoring and reporting for individual projects.

- a. The National START cycling programme requires a monitoring programme to assess the impact of investment against the stated outcomes - i.e. measuring proportion of children cycling to school, numbers of children trained, proportion of car trips cut on the school run. This programme should partly use its own monitoring in a proportion of schools and partly national programmes such as the NTS.
- b. The successful towns and cities chosen to be part of the Cycle City, Cycling Towns programme will use a part of the budget for overall monitoring requirements. The will be an expansion of the current monitoring arrangements, and should include an expanded physical activity study.
- c. Individual projects will use a small budget to monitor and report on progress to give Cycling England a full picture for the purposes of programme management.

#### 3. Structure & Governance

- a. Cycling England as a Non-Departmental Public Body (NDPB) offers an effective delivery mechanism for cycling.
- b. It's present structure and governance is insufficient and inappropriate to manage Bike for the Future II.

#### c. Strengths of current Structure

- Small Board / staff leads to a highly dynamic, flexible organisation;
- Strong and close working relationship with the Department for Transport;
- 'Virtual' nature of organisation results in low central overheads (currently 0.7% of total budget as overhead);
- Innovative contractual relationships have allowed close partnership working;
- Board members, where appropriate have become actively involved in programme management (e.g. CDTs).

#### d. Weaknesses - Governance:

- An over-reliance on limited DfT Cycling policy unit resources to manage tendering processes and contractual issues. This has significantly slowed the rate of delivery in certain projects, and in some cases changed what can be delivered;
- Lack of clarity on advisory vs. executive body status in effect CE is advisory
  in terms of which projects should be funded and executive in ensuring that
  projects are successfully delivered;
- The CE Government Group has not been successful in 'joining up' crossdepartmental policies related to cycling, and in obtaining cross-departmental funding for cycling;
- Governance challenges have arisen from potential conflicts of interest for certain Board members with specific business interests in delivering aspects of agreed programmes:
- There are only a few national cycling organisations which have the resources to bid for contracts, and the Board requires their senior executives as CE members being the national experts in their fields;
- The Board has organised to divide executive from advisory duties where conflicts of interest arise; but the lack of clarity and potential conflict requires significant executive resource to manage.

#### e. Weaknesses - Structure:

Most are due to insufficient resource which:

- Requires difficult prioritisation in day-to-day management of projects
- Results in a heavier burden on DfT's cycling policy branch to support CE;
- Contains an inherent 'high risk' in programme management relying on a small number of personnel;
- Requires higher levels of input from consultants which may result in lower value for money;
- Leads to greater difficulty in managing day to day communications;
- At times results in unsatisfactory 'levels of service' expected by project stakeholders (and the public) e.g. information updates, response to queries;
- Innovative and exploratory work required to seek out new opportunities / partnerships does not happen.

#### 4) Proposed Structure & Governance for Cycling England from 2008

#### Governance

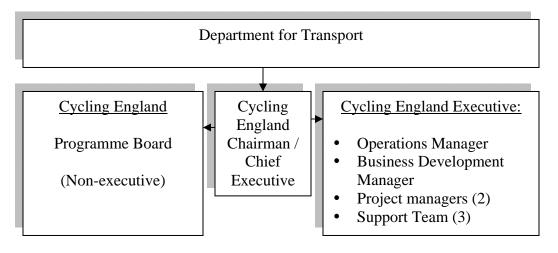
- 1. As a Non-Departmental Body for the Department for Transport. Cycling England should be the Department's 'independent expert body, charged with delivering programmes to promote cycling in England'. This allows the DfT to use Cycling England both in an advisory and executive capacity.
- 2. The CE Government Group in its present form should be discontinued as a steering group and as a model for managing cross-departmental cycling policy. Cross-departmental working should be led by the DfT cycling policy unit with CE contributing where required / appropriate. A series of regular high-level contacts between CE and other Government Departments should be scheduled.
- Other key Departments such as Health and DCSF should be encouraged to fund specific programme through bilateral meetings chaired by DfT and attended by CE as appropriate.
- 4. Cycling England should be responsible to and held accountable to the Department for Transport only.
- 5. In some ways this is a retrograde move since a Government group structure recognises the true cross-departmental benefit beyond transport and congestion which cycling represents. However, at present it does not work in practice. The potential of such a structure can be seen in the joint-messaging agreed by all Ministers of Cycling England's Government Group, annexed in Section D: Annex F.

- 6. Cycling England should develop work programmes to be submitted to the DfT for agreement.
- 7. There is a need to reduce the burden of contract letting on the DfT's cycling policy team. This can be achieved by one or more of the following:
  - a. Giving full independence to CE to let its own contracts (subject to normal rules governing the use of public money. E.g. CE uses a Government or 3rd party specialist.
  - b. Giving partial independence to CE to let its own contracts (e.g. all contracts not subject to be tendered via the Official Journal of the EU)
  - c. The Department's cycling policy team is given sufficient resource to handle CE's contractual requirements.
- 8. There needs to be a clear distinction between the Board and its strategic role on the one hand and the executive function of CE on the other. Executive functions should be removed from CE Board level and managed by a core executive team (see structure below).
- 9. The structure of the Board should be reviewed from time to time, however it should remain small, representing key skills and experience (not exceeding 10 members).

#### Structure

- 1. Cycling England should remain an NDPB, but its legal status should be changed such that it is allowed to:
  - a. Recruit / hire its own core team of staff
  - b. Hold its own bank account
  - c. Seek funds from other sources (other Govt. Departments, sponsorship etc.)
  - d. Manage contracts as agreed with DfT
- 2. CE should build a small, flexible and dynamic executive team to manage its programmes, answering to the Board and working alongside the DfT's Cycling Policy unit.
- 3. The Board would agree programme objectives and results, and propose projects within each programme that might deliver these. The Executive would develop programme / project ideas and detail, manage the selection of appropriate contractors, and manage each project, ensuring delivery to standards agreed with the Board. The Chairman of the Board would also act as the Chief Executive of Cycling England and be directly responsible to the DfT.
- 4. The executive team of Cycling England would comprise:
  - a. A Chief Executive, who is also Chairman of the Board;
  - b. An Operations Manager in overall charge of developing and setting up projects, marketing and communications;

- c. A Bikeability Business Development Manager;
- d. Project managers to oversee the delivery of established programmes and their component projects.
- e. There should be at least 2 Programme managers with specific responsibility for the START programme and Cycle City, Cycling Towns programme; and 3 administration staff. (This might require further complementing with a Contracts Officer should CE need to let its own contracts.)
- 5. CE would rent low-cost accommodation in London for its team of staff. This should be separate and independent from the Department for Transport. Possibilities of sharing or renting space from existing partners should be explored.
- 6. The budget for staffing costs should be £500k p.a. (max £750k p.a.)
- 7. Cycling England would be responsible for ensuring that its organisation adheres to principles of equality, transparency, efficiency, and best value for money.



### **SECTION D**

#### **Annexes**

#### Contents:

- Annex A Analysis of Travel Behaviour
- Annex B Valuing the Benefits of Cycling (the SQW Executive Summary)
- Annex C Effect of Investing in Cycling Demonstration Towns
- Annex D Meeting BFTFII Targets Calculations.
- Annex E Benefit to Cost Ratio Data Tables
- Annex F CE Government Group 'Core Script'
- Further Information

#### ANNEX A - Analysis of travel behaviour

The following national trends in travel behaviour provide an important context for efforts to increase cycling and walking8:

- the number of trips per person has remained roughly constant over the past three decades, ranging between 1,026 and 1,097 per year
- distances travelled per person have increased over the same period by more than 50% to more than 7,200 miles per year
- in the last decade alone, the share of trips by car as driver has risen from 39% to nearly 42%
- this growth in car use is counter-balanced mainly by a decline in walking which has fallen from nearly 27% to 23.5% of all trips
- levels of cycling have declined over the same period from 1.6% of all trips to 1.3%.

These trends indicate that cycling levels can only be increased by shifting trips from other modes, and this has to be achieved against a backdrop of increasing distances travelled.

A number of characteristics of travel behaviour suggest the scale of the potential for increasing cycling, where this may lie and where best to intervene in order to influence people's travel choices:

- despite increasing distances travelled, around 40% of all trips and 24% of car trips<sup>9</sup> are less than two miles in length
- just 15% of trips are for commuting, while 20% are for shopping and more than a quarter are for leisure
- around five out of six trips begin or end at home<sup>10</sup>.

A review of average trip length by purpose (see figure 2.1) suggests that education, shopping and personal business trips (which together account for 37% of all trips) are most likely to be within range of cycling and walking (with average trip distances of 2.4 and 0.7 miles respectively).

<sup>8</sup> National Travel Survey (2005)

<sup>&</sup>lt;sup>9</sup> As driver or passenger

<sup>&</sup>lt;sup>10</sup> Sustrans/Socialdata (2005): Sustainable Travel Demonstration Towns - Travel Behaviour Research Baseline Survey

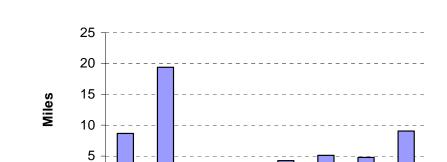


Figure A-1 Average trip distance by purpose (NTS, 2005)

Although local data are patchy, the results of local travel surveys show a wide variation in levels of cycling in different English towns and cities (see Table A-2).

Table A-2 Mode share of cycling in English towns and cities

City	Mode share (% of trips)	Source					
	( , ,						
London	2%	London Travel Report (2006)					
Manchester	1%	Greater Manchester Area Travel Survey (2005)					
Darlington	1%	Sustainable Travel Demonstration Towns - Baseline Survey (2004)					
Peterborough	5%	Sustainable Travel Demonstration Towns - Baseline Survey (2004)					
Worcester	3%	Sustainable Travel Demonstration Towns - Baseline Survey (2004)					
Nottingham	1%	Baseline survey for TravelSmart pilot project (2003)					
Sheffield	less than 0.5%	Baseline survey for TravelSmart pilot project (2003)					

Nationally, cycling levels in Britain are low by comparison with our European neighbours (see Table A-3)

Table A-3 Mode share of cycling in other European countries<sup>11</sup>

Country	National mode share	Picture at municipal level
The Netherlands	27%	Cities range between 15-40%
Denmark	19%	Some areas / cities 20-30%
Germany	10%	Several cities in west with 20-30%
Austria 9%		Highest levels in Salzburg (19%)
Switzerland	9%	Several cities with 15-20%
Belgium	8%	Highest levels in Bruges (20%)
Sweden	7%	Average mode share of 10% in cities
Italy	5%	Some cities with very high levels, e.g Parma (over 15%) and Ferrara (around 30%)
France	5%	Highest levels in Strasbourg (12%)
Ireland	3%	Dublin around 5%
Czech Republic	3%	A few cities with 5-10%

# Potential for change

The high share of short car trips nationally suggests a significant potential for increasing levels of cycling. The baseline research conducted in the three Sustainable Travel Demonstration Towns provides further insight into this potential:

- Figure A-4 shows that across the 3 STDTs, on average 36% of car trips are up to 3km in length and over 50% of these short, local car trips are for shopping, personal business or leisure (21% are for work)
- Cycling provides a viable alternative to 31% of all car trips within the Towns themselves, a greater potential than for walking or public transport (see Figure A-5).

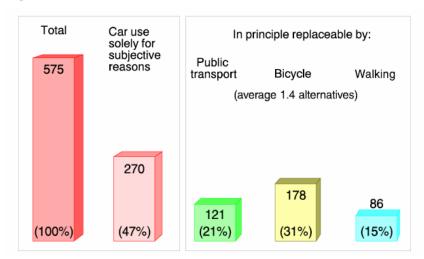
<sup>11</sup> Adapted from Cycling in the Netherlands, Ministerie van Verkeer en Waterstaat (2007)

60

Figure A-4 Private car trips per year in the STDTs

	All car tri	ps per year	r	825		
	Car trips	within towr	ו	575	i	
	Up to 1.0 km (Ø 0.7 km)	1.1 to 3.0 km (Ø 1.9 km)	3.1 to 5.0 km (Ø 4.0 km)	Over 5.0 km	Total	
Work	8	35	63	60	166	29
Shopping/ Pers. business	16	47	64	33	160	28
Laisure	14	35	49	35	133	23
Other	14	36	44	22	116	20
Total	52	153	220	150	575	
	9%	27%	38%	26%		_

Figure A-5 Car trips within town in the STDTs



The in-depth component of the STDT research revealed the reasons preventing people from cycling on occasions when they travel by car. This showed that while 37% of trips could not be cycled because of physical constraints (e.g. a need to carry a heavy load) or because cycling was not a viable alternative, a similar proportion (36%) were not cycled due to subjective reasons. The most important of these (affecting 17% of trips) was an incorrect estimation of the time needed to travel by bike. For a further 13% of trips, no objective or clear subjective barrier to cycling could be identified. These 'free of choice' trips are those most susceptible to change by soft measures, for instance by promoting a more positive cycling culture.

As a result it was concluded that soft measures alone (i.e. better information, education and motivation) should be capable of quadrupling the mode share of cycling for trips within the towns from its current average of 4% to 16%. This level could be achieved more quickly or significantly multiplied by associated environmental enhancements such as 20mph zones or cycle route networks.

**Table A-6** Outcomes of recent Personalised Travel Planning programmes – E.g. used - TravelSmart (Sustrans)

Location	Date	Target population (households)	Bicycle trips	Walking trips
Gloucester	2005	4,053	+16%	+18%
South Ribble	2006	10,713	+75%	+45%
Torrisholme	2006	8,500	+56%	+14%
Peterborough (Stage 1)	2005	6,500	+25%	+21%
Worcester (Stage 1)	2005	6,300	+36%	+17%
Worcester (Stage 2.1)	2006	4,775	+32%	+17%
Worcester (Stage 2.2)	2006	3,829	+29%	+22%

A transformation in travel will require a significant increase in levels of cycling for all types of travel. However the following types of trips might be expected to yield higher levels of growth in cycling:

- Trips with low levels of cycling in relation to their share of all trips
- Trips with an average trips length of less than 5 miles
- Trips with fewer intrinsic barriers to cycling.

It would be advantageous to target trips which, on conversion to cycling, will result in more positive policy outcomes in terms of carbon reduction, increasing physical activity and tackling congestion. The following table examines the characteristics of trips by purpose to identify those which should be targeted as a priority.

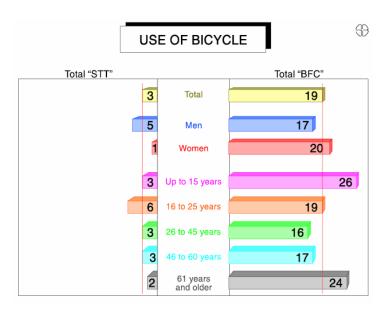
#### Target groups

In mature cycling cultures it is generally the case that:

- cycling is highest among young people under 16 years of age
- women cycle more than men
- there is a further peak in cycling levels among older people over the age of 60.

The difference to cycling patterns in England can be illustrated by a comparison of data from the STDTs and the German Bicycle-Friendly Cities (which during the late 1990s had an average mode share for cycling of 19%) – see figure A-8:

Figure A-8 Bicycle use in STDTs and BFCs



It is clear from the data that all groups will need to cycle more to achieve a transformation in cycling, but particular focus will need to be put on women, young people and older people.

According to DfT research, 40% of people say they currently cycle, and 13% say they cycle at least once a week<sup>12</sup>. In order to significantly increase cycling, more non-cyclists (currently around 60% of the population<sup>13</sup>) therefore need to cycle at least occasionally. Among non-cyclists, the 'warm' market for new cycling trips is likely to be among people who already own or have access to a bicycle, and who know how to ride it. Overall, 43% of households in England owned at least one bicycle in 1999/2001, and 90% of men and 67% of women say that they know how to ride a bike<sup>14</sup>.

1

<sup>&</sup>lt;sup>12</sup> Department for Transport (2003): Attitudes to walking and cycling

<sup>&</sup>lt;sup>13</sup> Department for Transport (2003): Attitudes to walking and cycling

<sup>&</sup>lt;sup>14</sup> Sharp I (1990): On Your Bike: Cycling Patterns, Benefits, Constraints and Recommendations, National Forum for Coronary Heart Disease Prevention, London.

Table A-7 Analysis by Trip type

 $\star$  = none  $\checkmark$   $\checkmark$  = medium  $\checkmark$   $\checkmark$  = high

Journey type	Share of all trips	Cycle trips (pppy)	Average trip length (miles)	Intrinsic barriers to active travel	Carbon	Health	Social Inclusion	Congestion
Commuting* Note absence of station travel	15.4%	6	8.7	М	<b>/ / /</b>	<b>√</b>	<b>*</b>	<b>**</b>
Business	3.6%	0	19.4	Н	$\checkmark\checkmark\checkmark$	✓	*	×
Education	6.3%	1	3.2	L	<b>/ / /</b>	<b>///</b>	✓	<b>///</b>
Escort education	4.6%	0	2.0	Н	<b>√</b> √	✓	✓	<b>///</b>
Other escort	9.3%	0	5.1	Н	✓	✓	✓	×
Shopping	19.8%	2	4.3	М	✓✓	✓	✓	✓
Personal business	10.5%	1	4.8	L	✓	✓	✓✓	✓
Visiting friends / family	16.3%	2	8.5	L	✓	✓	<b>√</b>	×
Sport / entertainment	6.6%	1	7.2	L	✓	<b>///</b>	√√	×
Holiday / day trip/ other	7.8%	2	11.7	L	<b>√</b> √	<b>*</b>	<b>√</b> √	×

This analysis suggests that the priorities for increasing walking and cycling trips by journey purpose should be:

- 1) **Education trips** which tend to be shorter and are important in terms of tackling obesity among young people, establishing long-term behavioural patterns and reducing peak-time traffic congestion; in mature cycling cultures, levels of cycling for education are higher than the average
- 2) Leisure trips (in particular visiting and sport/entertainment but including holiday/recreational cycling) – accounting for the largest share of all trips, the non-timebound nature of leisure trips makes them relatively 'easy' for people to consider switching to cycling; journey by bike may also become part of the leisure experience.
- 3) **Shopping trips** accounting for a large share of trips, the majority being within cycling range and many not involving the purchase of bulky items; will also have the benefit of improving the street environment and retail vitality in local shopping centres
- 4) Personal business share many of the characteristics of shopping trips with the added advantage of not involving heavy loads and the benefit of improving access to health care and other public services (especially for those without a car)
- 5) Commuting trips although quite long on average and already accounting for a higher than average share of cycling trips, there are significant benefits from continuing to target the journey to work in terms of access to employment, health and traffic congestion. If trips to stations (which are not currently included in the NTS) are taken into account, this further increases the potential for shifts to cycling.

It should be noted that the National Travel Survey under-records the true level of cycle trips as it excludes travel on traffic-free routes, trips made by those who are paid to do so, e.g. postmen, and trips by people not in households such as students living in halls of residences. It also excludes trips where cycling is not the longest component of the trip such as trips to and from stations. Recent investment in station parking shows that within a short period from the investment, parking is habitually full and continental examples show that the cycling/public transport intersection can play a major role in reducing congestion with thousands of vehicle trips per day taken out of peak travel times.

The other category of activity routinely excluded from trip data is the self contained recreational or sporting cycle ride without a specified destination, or included as part of another activity such as a holiday. This will include off-road cycling and children's play. While less significant in terms of trips these classes of cycling are vital to understanding development of cycling because they can provide the entry point for non-cyclists and children and make an important contribution to public health.

#### ANNEX B - Valuing the benefits of cycling

#### Overview

This Annex contains the Executive Summary of a study commissioned by Cycling England to examine the economic benefits of cycling, and the ways in which it can contribute to Government objectives. The report is a review of existing research, bringing together different sources of evidence that make it possible, for the first time, to quantify in monetary terms the contribution made by cycling.

There is broad consensus that cycling offers tangible benefits for those who participate, but also for society as a whole. The positive contribution to individuals' health, to the environment, and to mitigating the problems of congestion is evident. But cycling also plays a role in providing more independence to children; improving the quality of life for communities and, in many areas, supporting tourism. This value accrues from the unique combination of the benefits offered by increased levels of cycling. No other single activity can simultaneously:

- Improve general health and fitness
- Reduce pollution and the emission of CO2
- Help tackle congestion

These challenges represent three of the most pressing problems faced by Government and society. The relevance of cycling is shown by its potential to contribute to the policy priorities of six Government departments, embracing seven Public Service Agreements.

This study allows a value to be calculated for the <u>economic</u> loss directly attributable to the decline in cycling over the last decade, which, according to the National Travel Survey (NTS 2005), has fallen by more than 25% since 1995.

The cumulative cost in terms of health, pollution and congestion is £600 million.

Furthermore, the study quantifies the value generated by an increase in cycling in the future. If by 2015 the number of cycle trips returned to the level of 1995, the savings in health, pollution and congestion would be over £500 million.

At present only 1.5% of all trips on average are by cycle. An increase of 50% in this level – far below the original 1996 target of quadrupling trips by 2012 – would create total savings of more than £1.3 billion.

These are conservative values, comprising only (by definition) those benefits which can be quantified. No account is taken of the contribution of cycling to:

- Protecting children against obesity
- Improvement in physical development
- Quality of life in communities
- Wealth generation through tourism and leisure pursuits
- Potential for a reduction in the rate of road accidents

Despite these omissions, the economics in this study make a compelling case for sustained investment in cycling. The study clearly establishes the contribution cycling

can make in helping to address some of the most pressing and complex problems facing contemporary society.

#### Placing a value on cycling

The study concludes that the value for each additional cyclist varies to a maximum of £382 a year pa.

The value varies depending on the profile of new cyclists, in terms of their age and current activity level, as well as the distance and frequency of their cycling trips.

Thus, investment which increases the number of new cyclists (rather than encouraging more cycling by existing cyclists) is likely to offer greatest benefits. Encouraging more older cyclists and cycle trips that replace car trips, particularly in urban areas, are also likely to generate the greater returns on investment.

These figures are an aggregate of the benefits generated from:

- Improving health and fitness
- Reducing pollution
- Tackling congestion

They are drawn from desktop analysis of established data, acknowledged and widely used by Government.

Throughout the report it has been assumed that a cyclist travels an average of 3.9km per trip and makes 160 trips a year – the equivalent of 3 trips a week. However, to achieve health benefits the report excludes cyclists that cycle too infrequently (less than once a week) and uses an average of 286 trips a year, based on the London Area Travel Survey, to estimate the number of cyclists that benefit from the additional physical exercise.

#### **Health and Fitness outcomes**

In 2002, the cost of physical inactivity in England was estimated to be £8.2 billion a year. Greater physical activity is linked to the prevention of a range of chronic diseases including heart disease, stroke and colon cancer.

Physical activity also improves physical and mental health and reduces absence from work. The value of cycling to health increases with age. Physical activity has a greater effect in reducing deaths from Coronary Heart Disease, the older the participant.

The health benefit generated by cycling is drawn from three areas; valuation of loss of life; possible savings to the NHS by greater levels of physical activity; productivity gains through reduced absence from work.

Health benefit	Value per year
Value of loss of life	£11.16 for 16 – 44 year olds
	£99.53 for 45 -64 year olds
	£242.07 for 65 year olds and over
	£83.50 average
NHS savings	£28.30 for each cyclist
Productivity gains	£47.68 for each cyclist
Total health benefits	£87.06 for 16 – 44 year olds
	£175.51 for 45 – 64 year olds

One of the most striking trends over the past twenty years is the growing threat of widespread obesity. In 2004, 22.1% of men and 22.8% of women in England were classed as clinically obese. The benefits gained from "regular" cycling outweigh the loss of life years through cycling fatalities by a factor of around 20 to one.

These values do NOT include the contribution cycling can make to child health and obesity, due to lack of data. However, cycling can play a role in not only improving childhood fitness but in giving young people both the skills and an exercise habit essential to living an active adult life.

In 2003, 32% of boys and 28% of girls aged 2-15 years were overweight and 17% of boys and 16% girls were obese. Based on current trends, 12 million adults and 1 million children will be obese by 2010.

There is often an assumption that increasing the amount of cycling will increase the number of accidents and it is often perceptions about safety that discourage cycling. This must be considered in context. Data for London over the past ten years show that as the number of cycle trips has grown, the number of cyclists killed or injured has fallen. Similar results have been found in other countries suggesting that increased cycling does not necessarily increase the number of fatal or serious injuries and may actually contribute to a reduction.

#### **Pollution reduction outcomes**

Road transport contributes to about 70% of the air pollution in UK towns and cities. Traffic pollution damages bio-diversity, local climate and degrades the built environment. But its greatest impact is on health. Evidence from the Department of Health suggests air pollution is responsible for 14-24,000 hospital admissions each year and the premature deaths of between 12-24,000 vulnerable people.

In addition, road traffic is responsible for 22% of the UK's total CO2 emissions. The Stern Review on the Economics of Climate Change provided the first measure of the economic costs of global warming and the damage of continuing current levels of pollution. It followed the 2003 Energy White Paper, in which the Government set its own target of reducing carbon dioxide emissions by 60% by 2050.

This study indicates that an adult in an urban area switching from a car to a bicycle for a commuting journey of 3.9km each way, on 80 days a year, will create a value of £69.14. This is generated by quantifying the benefits to protecting health as well as the value of reducing greenhouse gas emissions.

Note that more than half of all car trips (56%) are less than five miles long and 23% are less than two miles – approximately the same distance as the average cycle trip.

#### **Congestion/Transport Outcomes**

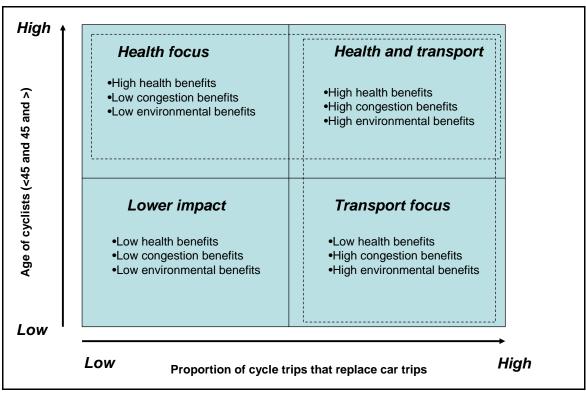
The study concludes that an adult switching from a car to a bicycle for a return journey of 3.9 km (the average cycle trip) each way, on 80 days a year in an urban area, will generate annual savings of £137.28 through reduced congestion. The value of substituting car with cycle trips is higher in areas of greater congestion, creating greater savings for cycling investment in cities than in rural areas.

In particular there is a significant opportunity to make an impact on traffic congestion at school time, when one in five of all cars on the road are on a school run.

Encouraging cycling to school or work reduces traffic at peak times, lessens the strain on other forms of transport and cuts travel times for other road users. This would require the reversal of a trend which between 1990 and 2004 saw a 40% fall in the number of 11 to 15 year olds cycling to school.

#### **Evaluating the impact of cycling**

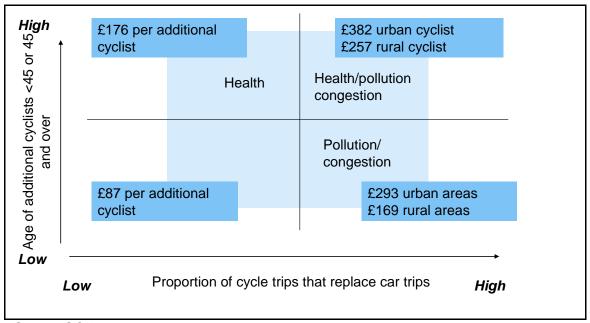
This study has been used to develop a matrix whereby the benefit of increasing cycling can be better understood and quantified. The matrix brings together two of the key variables; age which has a major bearing on the potential health benefits and switching from car use:



Source:SQW

This represents only a static and short-term interpretation of the impacts, and does not model any habit of cycling built-up among younger people and carried through to later life.

Using the value of the benefits calculated in the study, for health, pollution and congestion, the matrix provides a framework through which the value of specific investments in cycling can be evaluated. It shows the maximum annual benefit depending on whether new cycle trips replace car trips and the scale of the health benefit depending on age.



Source:SQW

Thus, the value/benefit of cycling is higher where:

- Inactive people become active
- Older people are persuaded to cycle
- Where cycling replaces a car trip, particularly in urban areas
- Where the journey is a regular trip.

These estimates show only part of the picture. There is no allowance for reductions in obesity, and health benefits are limited to reductions in premature deaths. There is no value for children cycling, or for the many other social benefits that would result from more cycling.

Given the potentially very significant unquantifiable benefits, it is important that the values outlined in this study are treated conservatively when used to appraise or evaluate cycling projects.

#### The potential for cycling to create future value

The economic modelling makes it possible to project the potential for cycling to generate future value. The study examined savings that might be achieved if the number of cycle trips were to increase by 20%, 30% and 50%.

These are far more modest levels than were proposed in the 1996 National Cycling Strategy which outlined a plan for a 400% increase in cycling by 2012. Indeed a 20% increase requires only that the number of adult trips reverts to its level of 10 years ago.

Across three scenarios the cumulative results range from £500 million to more than £1.3 billion.

	20% increase in cycling (£ millions)	30% increase in cycling (£ millions)	50% increase in cycling (£ millions)
Premature deaths (adult)	£107	£160	£267
NHS costs (adult)	£52	£77	£129
Absence from work (adult)	£87	£130	£217
Pollution (all)	£71	£107	£178
Congestion (all)	£207	£310	£517
Totals	£523	£785	£1,308

The economic analysis of values generated by cycling makes it possible to apply a benefit to cost ratio for cycling projects. To this end, the report examines four examples of cycling intervention. Each is shown to produce positive returns to investment.

The benefit to cost ratio ranges from 7.4 in the case of a cycle training programme to 1.4 for Bike It, an initiative that funds cycling officers who work with selected schools to encourage cycling. The two physical infrastructure projects show returns of between two and four. These values exclude any potential benefits to children's health or contribution to preventing or reducing obesity.

#### Summary Benefits, costs and ratios for intervention examples

-				£ millions
	Links to Schools	Bike It <sup>15</sup>	LCN+	Training
Appraisal period	30 years	4 years	30 years	5 years
Benefits	£4.80	£0.33	£794	£0.79
Costs	£2.22	£0.24	£201	£0.11
Net Present Value	£2.58	£0.09	£592.50	£0.68
Benefit cost ratio	2.17	1.36	3.94	7.44

Source: SQW estimates

#### **Conclusion**

Increases in cycling trips could make a worthwhile contribution to tackling some of the intractable public policy challenges faced by contemporary society.

It is uniquely placed to help reduce health service costs, alleviate congestion, and reduce pollution.

For the first time, the study attributes a monetary value to that contribution, and provides a conservative indication of the scale of benefit that could be achieved in the next decade – up to £1.3 billion.

The economic value of cycling rests principally on:

- · Improvements to health and
- The benefits of substituting for short car trips

The study indicates that where investment in cycling provision leads to a reduction in short trips by car, in the majority of cases the combined benefits of improved general health and reduction in pollution and congestion is more likely to justify investment. In particular; investment schemes which targeted new cyclists in urban areas would generate disproportional economic benefit.

Indeed, the analysis of existing cycling interventions demonstrates the potentially significant returns to investment for a range of projects being undertaken today.

The economic case for cycling will become only stronger, as the costs of inactivity, obesity, pollution and congestion continue to grow.

<sup>15</sup> Benefits for Bike It are lower than other interventions because the health (and safety) related benefits for children cannot be quantified.

ANNEX C - E	Effect of i	nvestment i	n cycling in	the CDTs								
Town	Trips per person per day (a)	Population	Before bike mode share	Increase in cycling in last 12 months (b,d)	Before total cycle trips per day	After total cycle trips per day	Additional cycle trips per year	Reduction in car trips per year (c)	CE grant (12 months) £	Cost per additional annual cycle trip (pence) (e)	Cost per annual car journey avoided (pence)	Cost per annual car kilometre avoided (pence) (f)
Aylesbury	3	65,000	3.3%	9%	6435	7014	211390	70463	300,000	142	426	109
Brighton	3	95,000	2.5%									
Darlington	3	90,000	1.0%	57%	2700	4239	561735	187245	500,000	89	267	68
Derby	3	233,000	3.2%	11%	22368	24828	898075	299358	500,000	56	167	43
Exeter	3	113,000	1.0%	21%	3390	4102	259844	86615	500,000	192	577	148
Lancaster	3	134,000		2%								
Total		730000			34893	40184	1931043	643681	1,800,000	93	280	72
ANYTOWN (g)	3	100,000	2%	20%	6000	7200	438000	146000	500,000	114	342	88
ANYTOWN (g)	3	100,000	2%	15%	6000	6900	328500	109500	500,000	152	457	117
ANYTOWN (g)	3	100,000	2%	10%	6000	6600	219000	73000	500,000	228	685	176

#### Notes

- (a) Figure for trips per person per day is from Darlington Travel Behaviour Baseline Survey in 2004. This is consistent with National Travel Survey data showing national average number of trips per day of 2.9
- (b) Figure for Aylesbury includes poor results for April, May, June (because of bad weather in May and June). Figures for other towns are based on Jan-March
- (c) Reduction in car trips per year assumes one-third of new bike trips are ex-car (which is similar to the proportion of new bus trips which are ex-car following investment in bus services)
- (d) We do not yet have monitoring data for Brighton
- (e) 'Annual cycle trip' means an extra cycle trip per year;
- (f) Assuming average trip length avoided is 3.9 km
- (g) ANYTOWN is a notional 'typical' town based on what has been achieved in the CDTs. Figures show range in cost per additional annual cycle trip, depending on what growth rate is achieved

The table above suggests that the increase in cycling achieved in the CDTs so far has cost Cycling England 93 pence per extra 'annual cycle trip' generated (with a range from 56 pence in Derby to £1.92 in Exeter). The 'Anytown' calculation provides a sensitivity test, and suggests that the cost per extra 'annual cycle trip' generated might be expected to lie somewhere in the range from £1 to £2, with £1.50 as a mid-range value. Note that an 'annual cycle trip' means an extra cycle trip which will take place every year (up to an arbitrary cut off point) in the future.

#### Annex D - Meeting BFTFII Targets - Calculations.

#### Cycling Demonstration Town Data:

1. Using the average success rates of the current programme (see Annex C, Effect of Investment in CDTs), an expanded CDT programme of £11 million in year 1 and £20 million per year in years 2,3 and 4 would deliver the following:

Table 2: Scaling up from the CDTs to an expanded programme													
		Addi	tional cycling	trips	Annual car journeys avoided								
	CE					Medium							
	annual	High	Medium	Low	High	effective-	Low						
	spend	effectivenes	effectivenes	effectivenes	effectivenes	ness	effectivenes						
	(£m)	s scenario	s scenario	s scenario	s scenario	scenario	s scenario						
year 1	11	11000000	7333333	5500000	3666667	244444	1833333						
year 2	20	31000000	20666667	15500000	10333333	6888889	5166667						
year 3	20	51000000	34000000	25500000	17000000	11333333	8500000						
year 4	20	71000000	47333333	35500000	23666667	15777778	11833333						

#### 2. This equates to:

- a. An extra 47 million cycle trips by the end of year 4 taking the conservative medium effectiveness scenario. This compares to total cycling trips in England of 686 million (14 trips per person per year, population 49 million). Thus an expanded CDT programme would deliver a 7% increase in national cycling levels by 2012 (but this could be between 5% and 10%, depending on the effectiveness of the programme).
- b. 16 million fewer car journeys per year by the end of year 4 (equivalent to 0.08% of total car trips in England, assuming 435 car driver trips per person per year and population of 49 million)
- 3. Scaling up in 2008/9 and delivering a £20m p.a. programme between 2009 2012 the following table (3) shows that a 100% increase in cycling is possible across the programme:

Table 3: Effect of the expanded CDT programme on levels of cycling in the Cycling City and 16 Cycling Demonstration Towns												
total population targeted	trips per person per day (all modes)	CE spend in year 4	CE spend per head of population in year 4	baseline cycle mode share	additional cycle trips in year 4	percentage increase in cycling by year 4						
2,100,000	3	20,000,000	~£10	2%	47333333	103%						

4. The proposal to concentrate the CDT investment in one city and 16 smaller towns (total population across all between 1,500,000 to 2,000,000) means a CE spend per head of a little under £10. Taking the medium effectiveness scenario this implies a 100% increase (i.e. doubling) in levels of cycling in the city and 16 towns by the end of year 4.

#### **Bike it Data**

5. The following table uses data from the 2003 National Travel Survey as a model. Bike it data assumes that 10% of children cycle 'regularly' in successful Bike it Schools (Sustrans figure). For the purposes of extrapolation 'regularly' means at least 50% of the time, and we assume half of the additional cycle trips in Bike It schools are ex-car, and half ex-walk:

Table 4: Assumed effect of Bike It programme on mode share for travel to school									
	Typical primary school (%)	Bike It school (%)							
walk	53	51							
bike	1	5							
car	39	37							
bus	6	6							
rail	0	0							
other	1	1							

6. The following table looks at the likely effect of Bike it for primary schools:

Table 5: Cost of Bike It programme per additional 'annual cycle trip' created	
Number of children of primary school age in England (Census)	3600000
Number of primary schools in England (DfES 1999)	18000
Average number of pupils per primary school	200
Total annual trips to and from one average school by all pupils	80000
Extra annual bike trips per average school if bike mode share rises from 1% to 5%	3200
Saving in car trips per year per average school (50% assumed)	1600
Cost per school	£5,000
Cost per extra bike trip	£1.56

7. And so scaling up:

Table 6: Scaling up to an expanded Bike It programme											
	CE annual spend (£)	Additional cycling trips	Annual car journeys avoided								
year 1	£5,700,000	3648000	1824000								
year 2	£10,000,000	10048000	5024000								
year 3	£10,000,000	16448000	8224000								
year 4	£10,000,000	22848000	11424000								

- 8. An expanded Bike It programme of £5.7 million in year 1 and £10 million per year in years 2,3 and 4 would deliver the following:
  - a. An extra 23 million cycle trips by the end of year 4. This compares to total cycling trips in England of 686 million (14 trips per person per year, population 49 million). Thus an expanded Bike It programme would deliver a 3% increase in national cycling levels by 2012.
  - b. 11 million fewer car journeys per year by the end of year 4 (equivalent to 0.05% of total car trips in England, assuming 435 car driver trips per person per year and population of 49 million)

# **ANNEX E – Benefit to Cost Ratio data Tables**

Based on LOW effectiveness scenario

Assumes that level of cycling achieved in Year 5 continues to year 10
Assumes that CE funding is only funding responsible for change in cycling levels

	Notes	Values	year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10	Total
CE annual spend (£)			£ 11,000,000	£ 20,000,000	£ 20,000,000	£ 20,000,000	£ -	£ -	£ -	£ -	£ -	£ -	£ 71,000,000
Additional trips			5,500,000	15,500,000	25,500,000	35,500,000	35,500,000	35,500,000	35,500,000	35,500,000	35,500,000	47,333,333	
Car trips reduced	% switched from car	33%	1,815,000	5,115,000	8,415,000	11,715,000	11,715,000	11,715,000	11,715,000	11,715,000	11,715,000	15,620,000	
Car kms reduced	Average trip km	3.9	7,078,500	19,948,500	32,818,500	45,688,500	45,688,500	45,688,500	45,688,500	45,688,500	45,688,500	60,918,000	
Estimate no. of people cycling sufficently to have health impact		93.5%											
Number of trips made a year by this group % adults in population (for health/NHS/absence benefits)		286 80.5%											
70 addits in population (for nearly wine/absence benefits)		00.070											
Number of cyclists relevant for health benefits	From above factors		14,475	40,792	67,109	,	93,426	93,426	93,426		93,426	124,569	
Premature death (per additional cyclist)	From SQW report	per year	£ 58.77										
NHS (per additional cyclist)	From SQW report	per year	£ 28.30										
Reduced absence (per additional cyclist)	From SQW report	per year	£ 47.68	£ 47.68	£ 47.68			£ 47.68	£ 47.68		47.68	£ 47.68	
Health related values			£ 1,950,441	£ 5,496,699	£ 9,042,956	£ 12,589,213	£ 12,589,213	£ 12,589,213	£ 12,589,213	£ 12,589,213 £	12,589,213	£ 16,785,617	
Congestion (assumes equal urban/rural split )	value per km	£ 0.066	£ 467,181	£ 1,316,601	£ 2,166,021	£ 3,015,441	£ 3,015,441	£ 3,015,441	£ 3,015,441	£ 3,015,441 £	3,015,441	£ 4,020,588	
Pollution (assumes equal urban/rural split )	value per km	£ 0.165	£ 1,167,953	£ 3,291,503	£ 5,415,053	£ 7,538,603	£ 7,538,603	£ 7,538,603	£ 7,538,603	£ 7,538,603 £	7,538,603	£ 10,051,470	
Total values			£ 3,585,575	£ 10,104,802	£ 16,624,029	£ 23,143,257	£ 23,143,257	£ 23,143,257	£ 23,143,257	£ 23,143,257 £	23,143,257	£ 30,857,675	£ 200,031,622
Discounted costs (10 years @ 3.5%)	£ 64,765,932	!											
Discounted benefits (10 years @ 3.5%)	£ 160,994,411												
Benefit cost ratio (10 years)	2.	5											

#### Based on MEDIUM effectiveness scenario

# Assumes that level of cycling achieved in Year 5 continues to year 10 Assumes that CE funding is only funding responsible for change in cycling levels

	Notes	Values	year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10	Total
CE annual spend (£)			£ 11,000,000	£ 20,000,000	£ 20,000,000	£ 20,000,000	£ -	£ -	£ -	£ -	£ -		£ 71,000,000
Additional trips			7,333,333	20,666,667	34,000,000	47,333,333	47,333,333	47,333,333	47,333,333	47,333,333	47,333,333	47,333,333	
Car trips reduced	% switched from car	33%	2,420,000	6,820,000	11,220,000	15,620,000	15,620,000	15,620,000	15,620,000	15,620,000	15,620,000	15,620,000	
Car kms reduced	Average trip km	3.9	9,438,000	26,598,000	43,758,000	60,918,000	60,918,000	60,918,000	60,918,000	60,918,000	60,918,000	60,918,000	
Estimate no. of people cycling sufficently to have health impact		93.5%											
Number of trips made a year by this group		286											
% adults in population (for health/NHS/absence benefits)		80.5%											
Number of cyclists relevant for health benefits	From above factors		19,299	54,389	89,479	124,569	124,569	124,569	124,569	124,569	124,569	124,569	
Premature death (per additional cyclist)	From SQW report	per year	£ 58.77	£ 58.77	£ 58.77	£ 58.77	£ 58.77	£ 58.77	£ 58.77	£ 58.77 £	58.77	£ 58.77	
NHS (per additional cyclist)	From SQW report	per year	£ 28.30	£ 28.30	£ 28.30	£ 28.30	£ 28.30	£ 28.30	£ 28.30	£ 28.30 £	28.30	£ 28.30	
Reduced absence (per additional cyclist)	From SQW report	per year	£ 47.68	£ 47.68	£ 47.68	£ 47.68	£ 47.68	£ 47.68	£ 47.68	£ 47.68 £	47.68	£ 47.68	
Health related values	·		£ 2,600,589	£ 7,328,932	£ 12,057,275	£ 16,785,617	£ 16,785,617	£ 16,785,617	£ 16,785,617	£ 16,785,617 £	16,785,617	£ 16,785,617	
Congestion (assumes equal urban/rural split )	value per km	£ 0.066	£ 622,908	£ 1,755,468	£ 2,888,028	£ 4,020,588	£ 4,020,588	£ 4,020,588	£ 4,020,588	£ 4,020,588 £	4,020,588	£ 4,020,588	
Pollution (assumes equal urban/rural split )	value per km	£ 0.165	£ 1,557,270	£ 4,388,670	£ 7,220,070	£ 10,051,470	£ 10,051,470	£ 10,051,470	£ 10,051,470	£ 10,051,470 £	10,051,470	£ 10,051,470	
Total values	,		£ 4,780,767	£ 13,473,070	£ 22,165,373	£ 30,857,675	£ 30,857,675	£ 30,857,675	£ 30,857,675	£ 30,857,675 £	30,857,675	£ 30,857,675	£ 256,422,937
Discounted costs (10 years @ 3.5%)	£ 64,765,932												
Discounted benefits (10 years @ 3.5%)	£ 207,367,352												
Benefit cost ratio (10 years)	3.2												

#### Based on HIGH effectiveness scenario

# Assumes that level of cycling achieved in Year 5 continues to year 10 Assumes that CE funding is only funding responsible for change in cycling levels

	Notes		Values	year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10	Total
CE annual spend (£)				£ 11,000,000	£ 20,000,000	£ 20,000,000	£ 20,000,000	£ -	£ -	£ -	£ -	£ -	£ -	£ 71,000,000
Additional trips				11,000,000	31,000,000	51,000,000	71,000,000	71,000,000	71,000,000	71,000,000	71,000,000	71,000,000	47,333,333	
Car trips reduced	% switched from car		33%	3,630,000	10,230,000	16,830,000	23,430,000	23,430,000	23,430,000	23,430,000	23,430,000	23,430,000	15,620,000	
Car kms reduced	Average trip km		3.9	14,157,000	39,897,000	65,637,000	91,377,000	91,377,000	91,377,000	91,377,000	91,377,000	91,377,000	60,918,000	
Estimate no. of people cycling sufficently to have health impact			93.5%											
Number of trips made a year by this group			286											
% adults in population (for health/NHS/absence benefits)			80.5%											
Number of cyclists relevant for health benefits	From above factors			28,949	81,584	134,218	186,853	186,853	186,853	186,853	186,853	186,853	124,569	
Premature death (per additional cyclist)	From SQW report	per year		£ 58.77	£ 58.77	£ 58.77	£ 58.77	£ 58.77	£ 58.77	£ 58.77	£ 58.77	£ 58.77	£ 58.77	
NHS (per additional cyclist)	From SQW report	per year		£ 28.30	£ 28.30	£ 28.30	£ 28.30	£ 28.30	£ 28.30	£ 28.30	£ 28.30	£ 28.30	£ 28.30	
Reduced absence (per additional cyclist)	From SQW report	per year		£ 47.68	£ 47.68	£ 47.68	£ 47.68	£ 47.68	£ 47.68	£ 47.68	£ 47.68	£ 47.68	£ 47.68	
Health related values		, , , ,		£ 3,900,883	£ 10,993,397	£ 18,085,912	£ 25,178,426	£ 25,178,426	£ 25,178,426	£ 25,178,426	£ 25,178,426	£ 25,178,426	£ 16,785,617	
Congestion (assumes equal urban/rural split )	value per km	£	0.066	£ 934,362	£ 2,633,202	£ 4,332,042	£ 6,030,882	£ 6,030,882	£ 6,030,882	£ 6,030,882	£ 6,030,882	£ 6,030,882	£ 4,020,588	
Pollution (assumes equal urban/rural split )	value per km	£	0.165	£ 2,335,905	£ 6,583,005	£ 10,830,105	£ 15,077,205	£ 15,077,205	£ 15,077,205	£ 15,077,205	£ 15,077,205	£ 15,077,205	£ 10,051,470	
Total values				£ 7,171,150	£ 20,209,604	£ 33,248,059	£ 46,286,513	£ 46,286,513	£ 46,286,513	£ 46,286,513	£ 46,286,513	£ 46,286,513	£ 30,857,675	£ 369,205,568
Discounted costs (10 years @ 3.5%)	£ 64,765,932	2												
Discounted benefits (10 years @ 3.5%)	£ 300,113,235													
Benefit cost ratio (10 years)	4.													

# Annex F: CE Government Group Core-Script

- Cycling can help tackle some of the biggest challenges facing society today, from health and obesity (especially in children), to traffic congestion and car-related pollution.
- What's more cycling is great fun and open to a broad range of people. Around half
  of us already have access to a bike.
- The benefits of cycling far outweigh the risks.

#### Health-specific message

Cycling is an easy, convenient form of exercise that people of many ages can build into their everyday lives and routines to significantly improve their health

#### Transport-specific message

Cycling plays a key role within an integrated transport strategy, alongside public transport and walking, especially for shorter journeys to work, school and the station.

#### Environment-specific message

Cycling is as good for the environment, especially the air quality of our towns and cities, as it is for our health.

#### Education-specific message

Cycling to school is one of the easiest ways for our children to lead more active and healthier lives. Supported by the right training and infrastructure, cycling helps children develop a sense of responsibility and independence.

#### Sport-specific

Cycling is an "everyday sport" for many. It's an easy way to create a fitter, healthier nation, and with more people cycling, we'll discover more future champions.

#### The Vision for Cycling

- More people cycling, more safely, more often it's a vision shared across Government departments.
- We want everyone to consider the bicycle as an option for the 50% of car journeys we make that are currently under 5 miles:
  - It will be better for our health
  - Better for the environment
  - Save us money
  - & probably be quicker
- Central and local government will continue to invest in better road design, cyclist training, cycle parking and improved cycle facilities to make cycling safer for us all.
   The evidence shows that with the right levels of investment, technical expertise and determination, we can dramatically increase the number of people cycling.

# **Further Information**

Further information on this proposal and all Cycling England programmes can be obtained from:

Cycling England Project Office PO Box 54810 London SW1P 4XX info@cyclingengland.co.uk

More information on Cycling England can be found at: <a href="https://www.cyclingengland.co.uk">www.cyclingengland.co.uk</a>

More information on Bikeability can be found at: <a href="https://www.bikeability.org.uk">www.bikeability.org.uk</a>

## Programme partners:

LACA

Department for Transport
Department for Children, Schools & Families
Youth Sports Trust
Schools Sports Partnerships
Transport for London
Local Highways Authorities
CTC
Sustrans
British Cycling
LARSOA

www.dft.gov.uk www.dfes.gov.uk www.youthsporttrust.org

www.tfl.gov.uk

www.ctc.org.uk www.sustrans.org.uk www.britishcycling.org.uk www.larsoa.org.uk www.localauthoritycycling.org.uk