

Connect2 and Greenway Design Guide

Prepared by Sustrans as part of the support material for the Connect2 project

All material prepared by Sustrans.
Photographs are by Sustrans Staff
except where indicated,
The support of the CTC is gratefully
acknowledged for providing
photographs for Appendix B

Maps based on Ordnance Survey
Digital Data with permission of Her
Majesty's Stationary Office
© Crown Copyright.
Licence Number GD03181G0001

**Second Draft for use
by Connect2 schemes
May 2009**

Sustrans is the UK's leading sustainable transport charity, working on practical projects so people choose to travel in ways that benefit their health and the environment.

Sustrans
National Cycle Network Centre
2 Cathedral Square
Bristol
BS1 5DD
Tel: 0117 926 8893
www.sustrans.org.uk

Registered Charity No. 326550



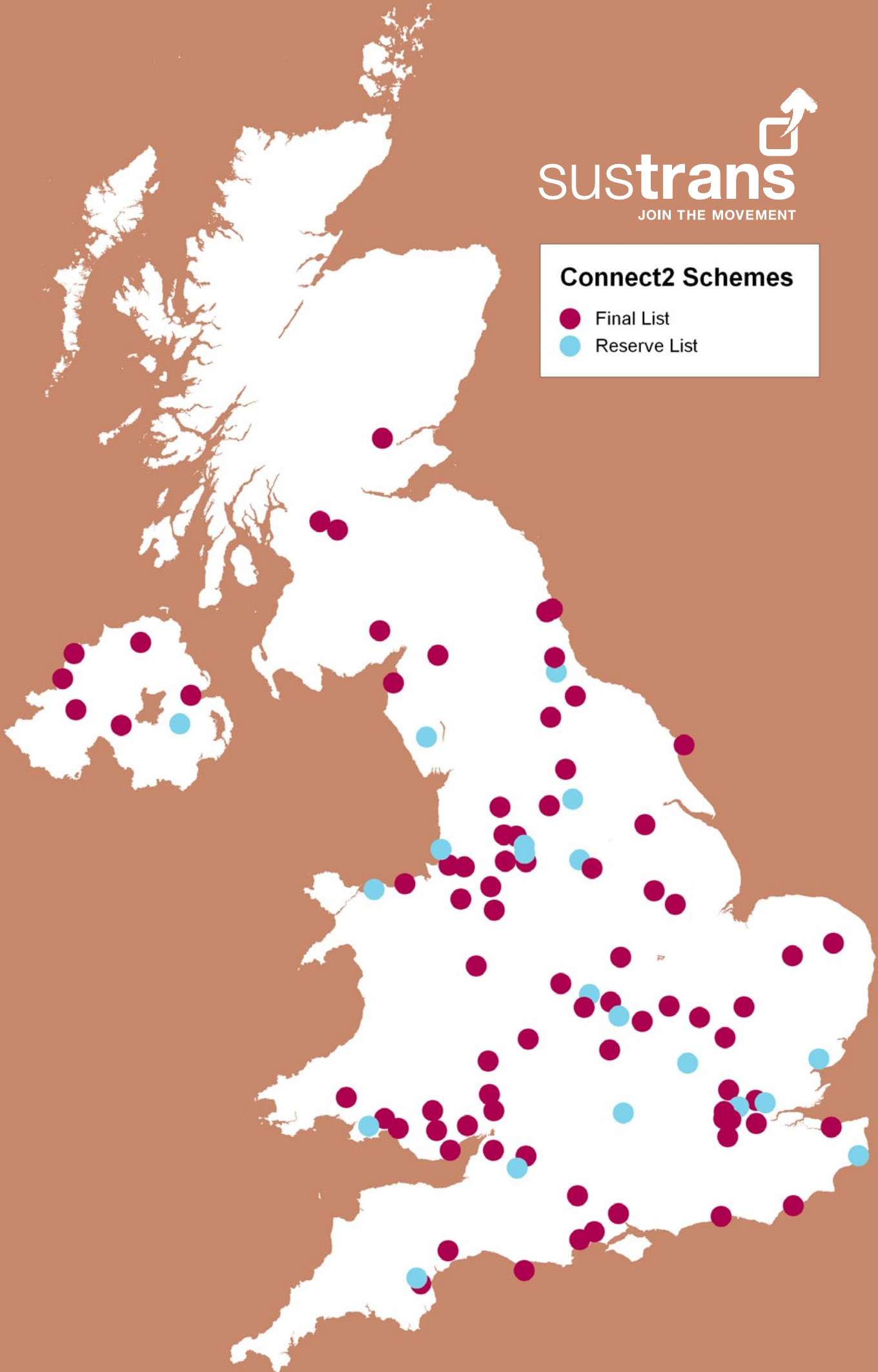
Supported by

The National Lottery[®]
through the Big Lottery Fund



Connect2 Schemes

- Final List
- Reserve List



Contents

- 1. Introduction**
- 2. The National Cycle Network, its Greenways and their Development**
 - 2.1 Definitions
 - 2.2 History
 - 2.3 The Conception, Evolution, Development and Planning of a Greenway Route
 - 2.3.1 Where do Greenway Projects come from?
 - 2.3.2 What are the Crucial Characteristics of a Successful Greenway?
 - 2.3.3 What are the Issues and Problems to be Overcome?
 - 2.3.4 Design Documents and Planning Procedures
- 3. The Connect2 Project**
- 4. The Importance of Increasing Walking and Cycling in the UK**
 - 4.1 Congestion
 - 4.2 CO₂ Reduction
 - 4.3 Public Health and Physical Activity
 - 4.4 Equal Access for All
 - 4.5 The Quality of Local Public Spaces
- 5. Increasing Walking and Cycling through Developing Greenways**
- 6. Different types of Greenways**
 - 6.1 Railway Paths
 - 6.2 Adjacent to Operational railways
 - 6.3 Riverside Paths
 - 6.4 Canal Paths
 - 6.5 Forest Roads
 - 6.6 Greenways and Farm Roads
 - 6.7 Footpaths
 - 6.8 Promenades
 - 6.9 Coastal and Beach Routes
 - 6.10 Parks
 - 6.11 Playing Fields and Golf Courses
 - 6.12 Wildlife Areas, SSSIs and Ramsar Sites
 - 6.13 Greenways Continuing on Roads
 - 6.14 Green Streets
 - 6.15 Town Centres
 - 6.15 Road Closures
- 7. The Design and Construction of 'Traffic Free' Sections**
 - 7.1 Alignments and Gradients
 - 7.2 Ramps and Earthworks
 - 7.3 Causeways
 - 7.4 Paths and Water
 - 7.5 Riverside Paths and Flooding
 - 7.6 Privacy Banks
 - 7.7 Noise Banks
 - 7.8 Viewing Mounds and Landscape Features
 - 7.9 Path Widths
 - 7.10 Preparation of the Sub-Base
 - 7.11 Edge Treatment and Kerbing
 - 7.12 Path Surfacing
 - 7.13 Verges
 - 7.14 Fences and Balustrades
 - 7.15 Access
 - 7.16 Lighting
- 8. Bridges and Other Structures**
 - 8.1 Widths and Balustrade Heights
 - 8.2 Lead-in Railings
 - 8.3 Gradients and Approach Ramps
 - 8.4 Bridge Design
 - 8.5 Headroom and Low Bridges
 - 8.6 Subways
- 9. Continuity of the Traffic Free Greenway**
 - 9.1 Continuity
 - 9.2 The Interaction of the Greenway with Trafficked Roads
 - 9.3 Visibility
 - 9.4 Raised Zebra Crossings
 - 9.5 Flush Kerbs and Smooth Crossings
 - 9.6 Delays at Signals
- 10. Welcoming Gateways and Links to Destinations**
 - 10.1 Ramps
 - 10.2 Highlighting the Entrance
 - 10.3 Minimising Obstructions
 - 10.4 Length of Access Links
 - 10.5 Links to Schools, Town Centres, Stations and Parks

11. Green Streets and Urban Greenways	15.3.3 Agreements for Lease
11.1 Continuity of Passage for Pedestrians	15.3.4 Easements
11.2 The Attractiveness of Streets	15.3.5 Freeholds
11.3 Open Spaces on Green Routes	15.4 Planning and Consultation
11.4 Home Zones and Similar Treatments	15.5 Obtaining Planning Permission
11.5 Slow Speeds	15.5.1 Is it Necessary?
11.6 Raised Crossings	15.5.2 When to Apply
11.7 In Summary	15.5.3 The Application
11.8 Main Roads and Pedestrianised Town Centres	15.5.4 Environment Agency Consent: is it Necessary?
12. New Developments Must Build Greenways	16. Usage and Monitoring
12.1 Including Country Parks	16.1 How We Travel
12.2 Beyond Development Boundaries to the Town Centre	16.2 The Scope for Behavioral Change
13. The Travelling Landscape	16.3 The Purpose of Travelling
13.1 General Treatment of the Greenway Landscape	16.4 Existing Monitoring of Greenways
13.2 Views	16.5 Connect2 Networks
13.3 Green Streets and Trees	16.6 Promoting Usage
13.4 Seats	17. Costs and Sources of Funding
13.5 Sculpture and Site Specific Works	17.1 Examples of Construction Costs
13.6 Mileposts	17.2 Sources of Funding
13.7 Signing and Mapping	Appendices:
14. Maintenance Matters	A1 Two Tunnels Greenway Notes and Proposals
14.1 The Level of Resources for Maintenance	A2 Design and Access Statement for Planning Application
14.2 Quality and Priority of the Greenway Routes	B Examples and Facilities for Cyclists on Highways
14.3 Public Ownership and Public Involvement	C Details of the Routine Management and Maintenance of Greenways
14.4 Volunteer Rangers	D Street Trees
14.5 Utilities	E Guidelines and Sources of Information
14.6 Range of Annual Costs	F Biodiversity Action Plan for Sustrans
15. Ownership, Land Agreements, Status and Designation	
15.1 Negotiation	
15.2 Public Rights of Way	
15.3 Different Types of Land Agreements	
15.3.1 Licences	
15.3.2 Leases	

Note: These appendices are not part of this volume but are available at www.sustrans.org.uk