

1.0

INTRODUCTION



- This guide is to be used by Nottinghamshire County Council staff and their agents and partners as an aid when designing cycle facilities. It also informs on how best to consider the needs of cyclists during the design of other *traffic/ transportation, development control and maintenance schemes*.
- The prime objective of the *Cycling Design Guide* is to draw together and to rationalise existing cycle design guidelines into a single comprehensive, coherent reference document which may be used as a source of technical advice. The guide was first issued in 2004; this is an updated version based upon local and national developments since.
- It is intended that the application of the principles put forward within this guide will enable a consistent level of cycling infrastructure to be implemented throughout the County, but at the same time, will not hinder innovative design solutions. The key aims are to increase the numbers of people cycling and to ensure that cycling is safer, without hindering pedestrian movement.
- Clearly, every scheme and location needs to be considered on its own merits, however this guidance should be followed when deciding on what form a cycle facility should take.
- A cycle route does not have to have specific cycle facilities implemented, as long as it is direct, safe, convenient and easy to use. However, it may be possible to reallocate road space to the cyclist as well as implementing specific infrastructure for cyclists.
- It must be remembered that first and foremost, cyclists will tend to use roads, and as such, roads should be improved for cyclist provision, or at the very least remain cycle neutral (do not inadvertently make conditions worse for cyclists).

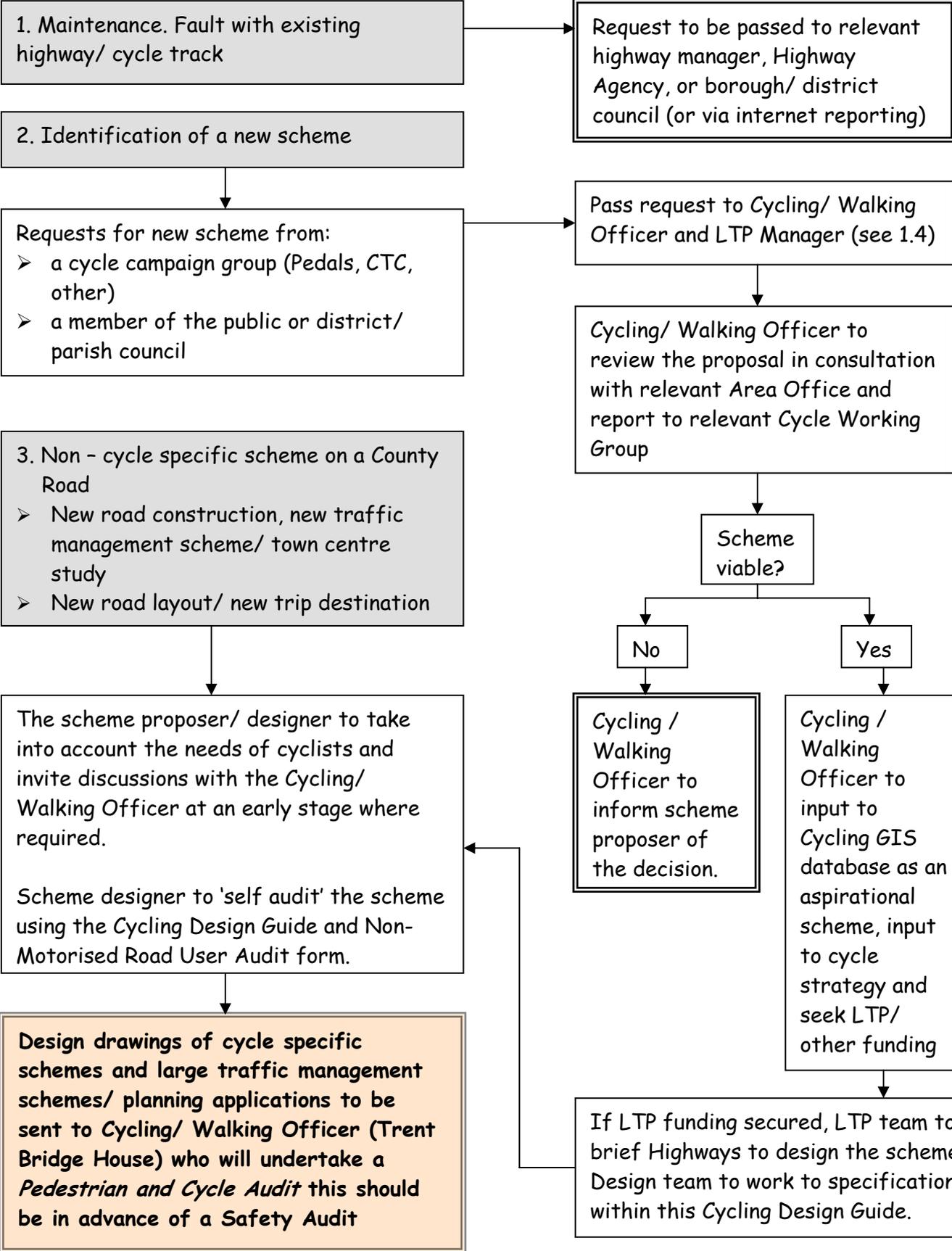
**Photo 1.1**

Cyclists do use well designed facilities!

- When developing new schemes for cyclists before and after surveys should be taken to assess what impact they have upon levels of cycling at the location.

For a quick reference guide to dimensions used for cycle infrastructure planning see 2.0

1.1 Procedures for Scheme Identification, Design and Audit



BEFORE A SCHEME IS IMPLEMENTED ENSURE THAT MAINTENANCE ARRANGEMENTS HAVE BEEN AGREED WITH THE RELEVANT AUTHORITY/ LANDOWNER - IDEALLY IN WRITING.

1.2 Consultation Procedures

- Cycling / Walking Officer should be supplied with plans of preliminary designs of cycle schemes so they can be inputted into the Council's GIS of cycle facilities.
- Statutory consultation is needed for schemes that require Traffic Regulation Orders such as mandatory cycle lanes and waiting/loading restrictions.
- For schemes where significant changes to the carriageway are intended or there is a proposal to convert a footway to shared use, it is good practice to consult affected frontages, emergency services and groups representing pedestrians or mobility/visually impaired people.
- Wider consultation is required to convert a footpath to a shared use cycle track under the Cycle Tracks Act - see Legal section.

1.3 Development Control Issues

As part of the development control process, it is necessary to take account of potential new trip makers to the site by cycle and to ensure that existing cycling trips on the highway network are either improved or at least not made worse.

1. Ensure that adequate cycle parking is provided as part of the development to cater for both staff and visitors (see 11.0).
2. Ensure that existing cycle routes within the area of the development are maintained, or where possible enhanced. Details of existing cycle routes are shown in the 'Cycling in Nottinghamshire' guide and the (Greater) 'Nottingham Cycle Map' North and South (available from the Cycling and Walking Officer).
3. Consider new crossing points to the new development (possibly toucan crossings).
4. Consider the movement of existing and proposed cyclists through any new or modified junctions (see 5.0, 6.0, 7.0 and 8.0). Pay particular attention to roundabouts.
5. Consider the provision of Advanced cycle Stop Lines (ASLs) at signal controlled junctions and/or provision for cyclists to cross with pedestrians.
6. Create new cycle tracks and accesses into development sites where possible. Remember that these must be well signed and preferably lit (high pressure sodium).
7. Consider new cycle links to the site in conjunction with the Cycling/ Walking Officer.

For substantial applications (large housing developments, large retail/ food stores, leisure complexes etc) contact the Cycling and Walking Officer for advice (see 1.4).

1.4 Contact Details

1.4.1 County Council Contacts

General Cycling Issues (Urban Focus)

County Cycling and Walking Officer - (0115) 977 4585

Rural Cycling Issues

County Recreational Routes Officer - (01623) 825 491

Local Transport Plan (LTP) Issues

Greater Nottingham - (0115) 977 4866

North Nottinghamshire - (0115) 977 2087

School Travel Plans/ Safer Routes to School

Road Safety Team Manager - (0115) 977 4448

Accident Investigation Issues

AIU - (0115) 977 4487

Maintenance/ New Scheme Issues

Area South - (0115) 977 2833

Area North - (01636) 673 625

Travel Plans Officer - (0115) 977 4523

Development Control Issues - (0115) 977 3963

1.4.2 Nottingham City Council Contacts

General Cycling Issues

Sustainable Transport Officer - (0115) 915 6596

Local Transport Plan (LTP) Issues

Transport Strategy Team Leader - (0115) 915 5482

1.4.2 Highways Agency Contacts

AMScott (Area 7 Agents) - (01623) 676 555

Highways Agency (Direct) - 08457 504 030

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Bibliography

This guide collates, summarises and sifts all relevant guidance/advice notes and research and provides them in one simplified flow chart format. Links to further information sources are provided throughout the text.

The following documents/ sources have been used to develop the Cycling Design Guide:

Design Manuals

- Sustrans, (1997) 'National Cycle Network Guidelines and Practical Details'
- Institute of Highways and Transportation, (1996) 'Cycle-friendly Infrastructure. Guidelines for Planning and Design.'
- Institute of Highways and Transportation - 'Guidelines for Cycle Audit & Review'
- London Cycle Network, (1998) Design Manual
- The Scottish Executive - 'Cycling by Design' 1999
- Traffic Signs Regulations and General Directions 2002
- Traffic Signs Manual Chapter 5 (Road Markings) 2003
- DfT - Inclusive Mobility - 'A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure' 2002
- Lancashire County Council - 'Lancashire - the cyclists' county' Design Manual 2005
- Transport for London - 'London Cycling Design Standards' 2005
- Design Manual for Roads and Bridges, Volume 6 Section 3 Part 5 - TA 90/05 'The Geometric Design of Pedestrian, Cycle and Equestrian Routes'

Local Transport Notes

- LTN 2/86 (1986) 'Shared Use by Cyclists and Pedestrians'
- LTN 1/86 'Cyclists at Road Crossings and Junctions'
- LTN 2/95 'The Design of Pedestrian Crossings'
- LTN 1/95 'The Assessment of Pedestrian Crossings'
- LTN 9/97 'Cycling at Roundabouts'
- LTN 1/04 'Policy, Planning and Design for Walking and Cycling'
- LTN 2/04 'Adjacent and Shared Use Facilities for Pedestrians and Cyclists'

TRL Reports

- TRL Report 181 'Advanced stop lines for cyclists: The role of central cycle lane approaches and signal timings'. TJ Ryley.
- TRL Report 285 'Cyclists at roundabouts - the effects of 'Continental' design on predicted safety and capacity' DG Davies, MC Taylor, TJ Ryley, ME Halliday
- TRL Report 287 'Delineation for cyclists and visually impaired pedestrians on segregated, shared routes' TA Savill, C Gallon, G McHardy
- TRL Report 462 'Cycle Track Crossings of Minor Roads' A Pedler, DG Davies
- TRL Report 549 'Drivers' Perceptions of Cyclists' L Basford, S Reid, T Lester, J Thomson, A Tolmie
- TRL Report 583 'Cycling in Vehicle Restricted Areas' DG Davies, L Chinn, GS Buckle, SJ Reid
- TRL Report 585 'Capacity Implications of Advanced Stop Lines for Cyclists' GT Wall, DG Davies, M Crabtree

Traffic Advisory Leaflets

- TAL 10/93 Toucan Crossings
- TAL 7/95 Traffic Islands for Speed Control
- TAL 5/96 Further Development of Advanced Stop Lines
- TAL 1/97 Cyclists at Road Narrowings
- TAL 4/98 Toucan Crossing Development
- TAL 6/98 Contraflow Cycle Lanes
- TAL 6/99 Cycle Parking - Examples of Good Practice
- TAL 5/02 Key Elements of Cycle Parking Provision

Other sources

- Cycling Planning Group - National Cycle Forum. Comments and advice
- DfT have been contacted for specific advice on certain issues
- Nottinghamshire County Council - Highway Network Management Plan
- Cycling England - Checklist for Provision of Cycle Facilities
(www.cyclingengland.co.uk/engineering.php)