

C.06 Maintenance

Key Principles

All new cycle infrastructure should be delivered in a manner that will minimise whole-life costs.

Maintenance programmes should reflect the importance of cycling as a mode that is to be encouraged and authorities should ensure that non-highway sections of cycle networks are the subject of an adequately funded maintenance regime.

Highway authorities should consider using highway maintenance funding for all projects created to deliver their LTP and other objectives.

On-road, attention should be focused on the condition of the strip of carriageway within 1.5 – 2m of the kerb. Off-road, both construction and landscaping should aim to minimise maintenance costs.

Design Guidance

Poor route maintenance has a bigger impact on cyclists than other road users. On-road they can be put into potential conflict with motor vehicles by having to avoid sunken road gullies or badly re-instated trenches, etc. Poor surfaces on off-road cycle routes can create an unpleasant and hazardous riding experience. For example, pot holes full of water may hide serious hazards and ruts or upstands that most pedestrians would simply step over can cause cyclists to lose control. Proper and timely maintenance is essential if these problems are to be avoided.

Adequate maintenance is not simply about rectifying physical defects - it is equally important that cycle routes are adequately swept. Un-cleared debris in a cyclist's path may cause a cyclist to lose control or veer into the path of a motorist while avoiding it. It is also a common source of punctures.

Guidance on the maintenance and construction of cycle routes, both on and off road may be found in Application Guide AG26 (Version 2) UK Roads Board 2003. This document can be used as a starting point for the setting of local maintenance standards. Local authorities should aim to set standards in excess of these guidelines whilst taking into account local circumstances.

When drawing up a maintenance policy, the following points should be taken into account;-

- Cycle routes have an important role to play in helping local authorities meet a broad range of policy objectives. Poor maintenance can deter cyclists, thus making these objectives harder to achieve.
- Inspection frequency and intervention levels may need to be made more onerous than suggested in AG26 in order to meet the needs of cyclists in any given situation. It is worth considering consultation with local user groups on proposed maintenance standards.

- Routine and safety inspections may best be carried out from a bicycle. It reduces the amount of local motor traffic, and helps ensure that the inspector has a better understanding of how even small defects can affect cyclists.
- Identified problems should be rectified as quickly as is practicable. This process can be helped by, for example, implementing a fault reporting hot-line.
- Various works required within the highway should be properly coordinated to minimise inconvenience generally, and to avoid putting vulnerable road users in particular at risk or disadvantage. Reinstatements carried out by the authority and statutory undertakers should be in accordance with best practice.
- The 2m strip of carriageway next to the kerb is where most on-road cycle movements take place so this part of the road should be given particular attention.
- Regular sweeping regimes are required to cycle lanes and bypasses clear of accumulated debris, especially where glass is known to accumulate, e.g. outside pubs and clubs etc;
- Trees, hedges and grass growing alongside cycle facilities should be regularly cut back during the growing season (and slow growing thorn-free varieties should be specified in new-build schemes). The debris should be promptly cleared from the track to minimise the risk of punctures from thorns etc. (see also [C07 Cycling and New developments](#))
- If there is a need for maintenance vehicles to use off-road cycle routes, the geometric and structural design of the track should allow for this.
- Mechanisms should be provided and publicised for members of the public to report maintenance issues on cycle routes.

Maintenance of cycle tracks away from the highway should not be neglected simply because they may be relatively remote. Maintenance should be considered at the outset, including provision for maintenance vehicles to gain access to the route as required.

If the condition of a route is allowed to deteriorate, people may stop using it and the funds which were used to provide it in the first place will have been wasted. To address this issue a costed maintenance programme could be established with long-term funding secured as part of the project's development and approval processes. A typical maintenance programme is attached at Appendix A.

The day-to-day costs of inspecting cycle facilities and low-level maintenance may be reduced through the use of suitably trained volunteer staff where they are legally able to do so. One such example of this is the partnership scheme operated by some local authorities with Sustrans' Rangers on sections of the National Cycle Network and other off road routes.

References

[Cycle Infrastructure Design](#) - Local transport Note 2/08, DfT 2008

[Application Guide AG26 \(Version 2\)](#) (pdf -1539kb) UK Roads Board, 2003

[Whole life value of footways and cycle tracks](#) (pdf – 172kb) Footway and Cycletrack Management Group, 2006

[New Roads and Street Works Act](#) 1991

[The Street Works \(Maintenance\) Regulations](#) 1992

[Cycling England Gallery](#) pictorial examples

[London Cycling Design Standards – A guide to the design of a better cycling environment](#) (Sections 3.4, 3.5, and 3.6) TfL 2005

Lancashire - The Cyclists' County ([part 1](#), [part 2](#)) – creating pleasant road conditions Lancashire County Council, 2005

[CTC Benchmarking](#) – Best practice case studies

[National Cycle Network – Guidelines and Practical details](#), Issue 2 Sustrans 1997

Other references

[Cycle Friendly Infrastructure - Guidelines for Planning and Design](#) Bicycle Association et al 1996

Maintenance - Appendix A

Typical maintenance programme suggested for off-road routes *

Issue	Activity	Notes	Frequency	Time of year
Cycle track surface	Winter maintenance	Consider importance as utility route	As necessary	Winter
	Inspection	Staff undertaking maintenance works to inspect site (except structures – see below) whenever possible to avoid need for extra visits to remote sections	Every time site visited. Minimum of 4 visits per year.	Early spring, mid summer, early and late autumn (before and after leaf fall)
	Repairs to potholes etc	Reactive maintenance as a result of calls from public plus programmed inspections		
	Sweeping to clear leaf litter and debris	Combine with other activities if possible	Site specific	
	Cut back encroaching verges and sweep		Once a year	November – also combine with sweeping.
	Programmed maintenance	The need for resurfacing will depend upon the initial condition of the cycle path (to allow for new build or conversion) and the nature of the wearing course	Depends on surface type and condition	
Drainage	Clear gullies and drainage channels etc	Determined by nature of surface water drainage arrangements (if any)	Twice a year	April, November

Issue	Activity	Notes	Frequency	Time of year
Vegetation	Verges - mow, flail or strim	To include forward and junction visibility splays		May, July and September
	Grassed amenity areas - include with verge maintenance			
	Control of ragwort, thistles and docks etc	See Weeds Act and Countryside Act. Hand pull, cut or spot treat as necessary	Before seeding	July or as appropriate
	Cut back trees and herbaceous shrubs and trim trees	If necessary allow for annual inspection of trees depending on number, type and condition Maintain min. 1m clearance and as required for visibility purposes	As necessary	July
Signs	Repair/replace as necessary	Base on local vandalism problems and location		
Access barriers	Repair/replace as necessary	Base on local vandalism problems and location		
Fences	Repair/replace as necessary	Dependent on licence arrangements with landowner		
Structures including culverts	Inspections	Visual inspection every 2 years and detailed structural inspection every 6 years		
Seating sculptures etc	Maintain or repair	If present		
Other		Scheme specific issues such as sites of sites of special scientific interest, interpretation and information measures, disability access etc		

* This programme may also serve as a checklist for schemes built within, or adopted as, public highway in order to bring to the attention of maintenance teams the work to be added to the general highway maintenance programme on completion of the project.