

## A.15 Audits and Risk Assessment

### Key Principle

All changes to the highway network, including maintenance schemes, should be the subject of a cycle audit. Where safety audits identify that normally recognised design standards cannot be met, projects should be the subject of a risk assessment that involves user representatives.

### Design Guidance

#### Background

Cyclists will often execute unconventional manoeuvres in order to minimise the distance travelled or to maintain their momentum, some of which may be illegal or draw criticism from other road users. There is no intention to condone such behaviour in this guidance, but observing how road users interact and use a junction or other feature may help the designer to create a facility that enables cycle users to perform their desired manoeuvre more safely and legally, with less potential for conflict with other modes. This, in turn, may reduce or remove altogether the tendency for cyclists to behave in an apparently irresponsible way.

#### Risk Assessment

A designer might find that a safety audit highlights that it is not possible to ensure that a proposed scheme meets every safety criterion but this is not necessarily grounds for rejecting the project outright. Instead, suitably trained and experienced staff should carry out a risk assessment. It can be very beneficial to involve representatives from user groups in this process. The assessment will determine if a perceived hazard is as much of a problem as it was originally thought to be, or even whether there is a problem in the first place. If safety problems are found to exist, ways should be considered to minimise them before any decisions are made on rejecting the scheme. The use of experimental Traffic Regulation Orders can be a key way of trialling innovative and unusual measures.

#### Manual for Streets:

##### 3.7 Stage 4: quality auditing

3.7.1 Properly documented design audit and sign-off systems are important. ...

3.7.3 Auditing should not be a box ticking exercise. It is an integral part of the design and implementation process.

The quality audit may include some or all of the following ... a cycle audit;

A typical example would be a one way street which cyclists are using in the wrong direction. A risk assessment might show that the route's legitimate alternative exposes cyclists to greater danger because of traffic conditions and the increased distance they would have to travel. In this case, introducing even a substandard

cycle contraflow facility could be expected to improve safety. It would almost certainly be safer than continuing with the status quo.

Some safety practitioners are not as well informed on cycling issues as they should be. This can result in the abandonment of pro-cycling schemes or attempts to force cyclists to conform to the existing arrangements when a better solution would be to continue with the original idea, possibly with amendments to the design. A lack of suitable knowledge may even lead to a scheme being put forward which is intended to improve conditions for cyclists but which in reality might be detrimental to them. For example, it is commonly believed that any cycle track situated away from the road is safer than its equivalent on-road route. This is not always true - if a cycle track is frequently interrupted by side roads, its accident record could be significantly worse.

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#### 1.4 DMRB and other standards

1.4.1 The Department for Transport does not set design standards for highways – these are set by the relevant highway authority.

1.4.4 The DMRB is not an appropriate design standard for most streets, particularly those in lightly-trafficked residential and mixed-use areas.

Each project should be judged on its merits and it is incumbent on the assessor to determine if the proposal will improve the existing situation or whether the risk is favourable when compared with alternative solutions. In assessing the safety of a scheme, it is imperative that the safety audit takes into consideration the risks involved in not taking the scheme ahead.

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#### 2.6 Risk and liability

2.6.1 A major concern expressed by some highway authorities when considering more innovative designs, or designs that are at variance with established practice, is whether they would incur a liability in the event of damage or injury.

2.6.2 This can lead to an over-cautious approach, where designers strictly comply with guidance regardless of its suitability, and to the detriment of innovation. This is not conducive to creating distinctive places that help to support thriving communities.

2.6.5 The most recent judgement of note was *Gorringe v. Calderdale MBC* (2004), where a case was brought against a highway authority for failing to maintain a 'SLOW' marking on the approach to a sharp crest. The judgement confirmed a number of important points:

- 🚲 the authority's duty to 'maintain' covers the fabric of a highway, but not signs and markings;
- 🚲 there is no requirement for the highway authority to 'give warning of obvious dangers'; and

 drivers are 'first and foremost responsible for their own safety'.

2.6.9 Advice to highway authorities on managing their risks associated with new designs is given in Chapter 5 of [Highway Risk and Liability Claims](#). In summary, this advises that authorities should put procedures in place that allow rational decisions to be made with the minimum of bureaucracy, and that create an audit trail that could subsequently be used as evidence in court.

There is another safety implication in removing cyclists from the road. It is generally accepted that as the number of cyclists on the road increases, the accident rate drops. As the numbers increase further, the overall accident numbers for all modes drop as well. Directing cyclists away from the road makes them invisible to motorists and therefore does nothing to encourage this trend.

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4.2.9 If road safety problems for pedestrians or cyclists are identified, conditions should be reviewed to see if they can be addressed, rather than segregating these users from motorised traffic.

Some designers specify the installation of 'Cyclists Dismount' signs as soon as they are confronted with a safety problem in their proposed layouts. This approach is inappropriate. In most cases, the safety problem can be designed out. 'Cyclists Dismount' signs are rarely justified and their intended use is for locations where a cycle facility terminates, for example at a pedestrian crossing that has not been converted for cycle use, or at the entry to a public transport interchange or pedestrian precinct. They should never be used in lieu of proper design.

### **References**

[LTN 2/08 Cycle Infrastructure Design](#) DfT 2008

[Manual for Streets](#) DfT, Communities & Local Government 2007

[HD 42/05 Non Motorised User Audit](#), Design Manual for Roads and Bridges, Highways Agency 2005

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

### **Other references**

*Guidelines for the Safety Audit of Highways* 1996 IHT

[Guidelines for Cycle Audit and Review](#) IHT 1998

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

[COPECAT – Concise Pedestrian and Cycle Audit](#) Greater Manchester Passenger Transport Authority