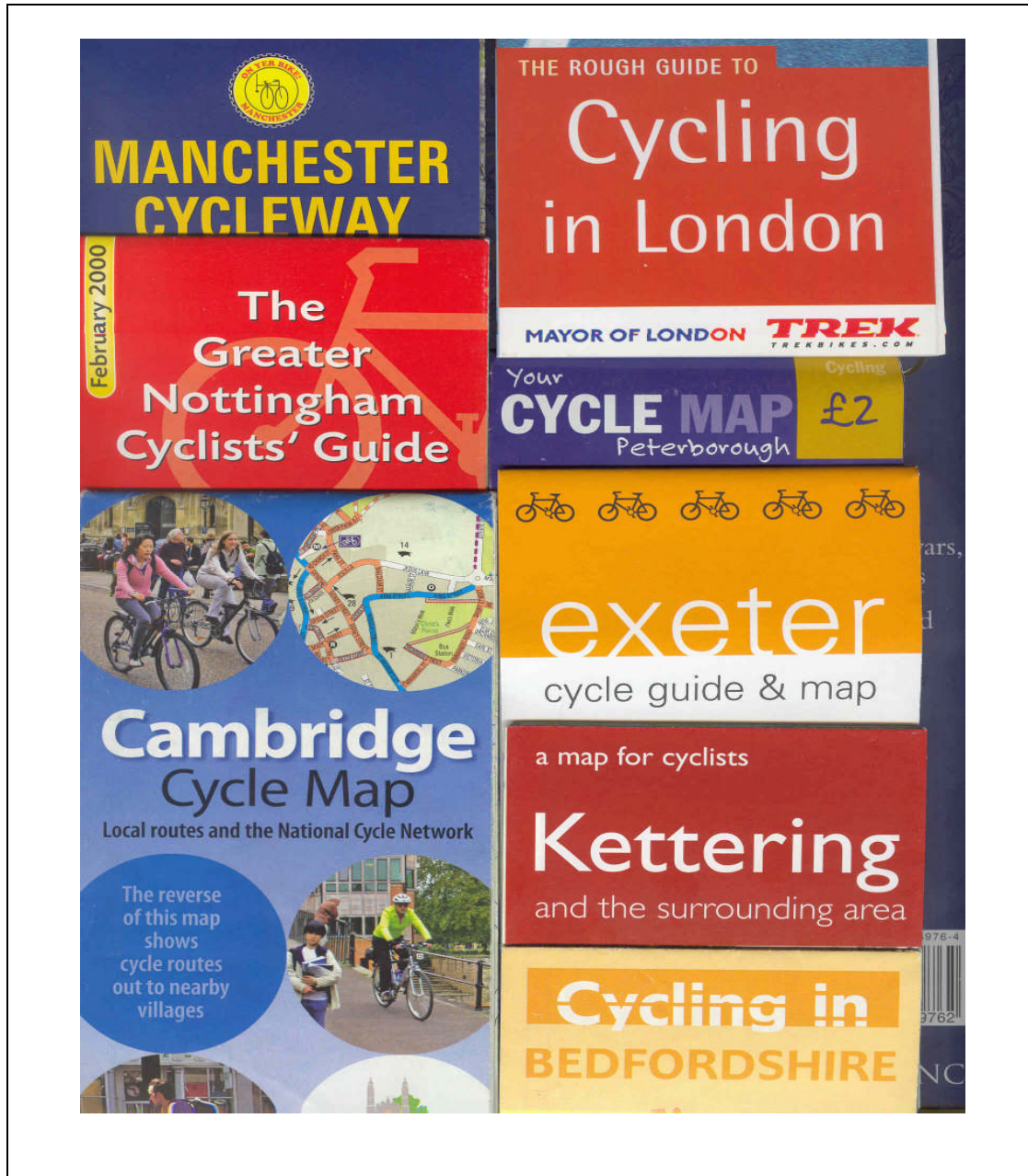


# SOMERSET COUNTY COUNCIL

## Cycle route maps



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## Summary

- some authorities have concerns about liability and other related issues and the development and distribution of authority-sponsored cycle route maps.
- the provision of a cycle route map should not lead to any additional exposure to liability or litigation.
- a prudent authority will have some form of simple, cost-effective, documented system in place for grading the cycle-friendliness of the local network, especially those links recommended as 'advisory routes' over others.
- well designed local cycle route maps are acknowledged as being a relatively cost-effective key marketing and promotional tool welcomed and used by cyclists.
- it is advisable to have some form of 'paper trail' that records what was done in deciding upon route grading or the choice of 'advisory routes'.
- providing information that enables informed route choices to be made by cyclists enhances the usefulness and effectiveness of cycle route maps – this may be in the form of 'advisory routes' or some other form of route grading.
- where possible, useful, non-highway routes should be included in published wider networks. Confirmation and agreement on the permissive right should also be sought before any such route is included on a map. Clear disclaimers or other information about the route should absolve the highway authority from liability.
- it is prudent for highway authorities to indicate where a link or junction requires more advanced cycling skills; either by grading the route for indication on a map or by use of an easily understood warning sign for maps.
- most roads are useable by cyclists with skills equivalent to Level III of the National Cycle Training Standard - good maps provide some form of 'cyclability' information that enables informed route choices to be made.
- some maps usefully categorise the local movement network according to the degree of skill and experience a cyclist has and relate this to the nature of the road.
- there is no standard checklist available, however, those reviewing on-road routes for 'advisory route' purposes should consider a basic range of audit criteria and keep appropriate assessment records.
- the categorisation of a road can be linked to levels of cycling competence so that both novice and experienced cyclists can make informed route choices.
- concentrating on provision for every-day, local cycling utility trips will usually provide the basis for a sound, urban cycle journey network.
- the Kettering 'map for cyclists' is based on the route grading and cycling skills approach and is included as an example of good practice.

## 1. Background

Somerset County Council contacted the Cycling England Local Authority Advisory Service with questions about the publication of cycle route maps. The Authority is well-advanced in the production and review of new maps. Some 'internal debate' has prompted a request for guidance on a range of issues including:

- exposure to liability and litigation by promoting cycling on 'advisory routes'
- implications for marking advisory routes on maps
- how best to minimise liability, assessment and skills needed
- what routes to show
- marking hazardous junctions and how

some authorities have concerns about liability and other related issues and the development and distribution of authority-sponsored cycle route maps

## 2. Routes for cyclists

Maintaining the public highway and improving it where necessary is the normal 'business' of a local highway authority. Bicycles are vehicles and therefore cyclists have the same rights to use the highway network as the drivers of other vehicles except where prohibited. Consequently, all roads should be appropriate for cyclists to use.

The question of highlighting and promoting 'advisory routes' for cyclists (i.e. where there are no obvious facilities), and the implications about their safety and the minimisation of liability, should not, in theory, arise.

There is a fundamental presumption that highways are designed and constructed to be 'fit for purpose'. A combination of design guidance, staff cycle awareness, and safety/user audits, should ensure that a road or junction is inherently, reasonably safe for cyclists to use from the outset. There should be no question that a cyclist using the public highway should expose a highway authority to additional liability. This should cover use by 'reasonable' numbers of cyclists too, including any 'extra' cyclists that might be encouraged to use a route promoted on a cycle route map. Cycling England is not aware of instances where the publication of cycle route maps has led to any direct consequential claims from users of those maps that are based on public highway elements that have been designed and maintained to appropriate, reasonable standards.

The provision of a cycle route map should not lead to any additional exposure to liability or litigation.

However, some authorities do feel that it's worth undertaking extra checks and safeguards, and where this can be practically and cost-effectively done, this should be encouraged as good practice.

A prudent authority will have some form of simple, cost-effective, documented system in place for grading the cycle-friendliness of the local network, especially those links recommended as 'advisory routes' over others.

### 3. The importance of cycle maps and guides.

The very act of cycling, the physical provision for cycling through 'dedicated facilities', and the encouragement of more people to cycle, is acknowledged as an important element in any local transportation strategy. Consequently, and almost without exception, policies that seek to provide for and encourage cycling are included in Local Transport Plans and other transport related documents. The provision of a cycle-friendly network, supported by dedicated facilities where appropriate, is an important aspect of any local transport planning mix of measures and approaches. Equally important, however, are the 'softer', associated measures that promote awareness and information about cycling, particularly in a local context where cycling is acknowledged as one of the best modes of transport for short trips.

Cycle route maps and guides are amongst the traditional means of conveying useful, practical promotional information. They are usually produced and published by local authorities, ideally as part of a wider range of marketing and promotional measures. Most cyclists welcome the availability of cycle route maps and attest to the usefulness of the 'better designed' maps.

Well designed local cycle route maps are acknowledged as being a relatively cost-effective key marketing and promotional tool welcomed and used by cyclists

### 4. Concerns about liability

"Cycling is an inherently healthy activity. In overall terms, the accident risk of cycling is many times outweighed by the general health benefits. In this respect, it could be said that the only thing more dangerous than cycling is not cycling", 'Cycling towards Health and Safety' – British Medical Association 1992.

This said, there remains some concern over the possibility of increasing exposure of highway authorities to claims following 'accidents' blamed on design, suitability and defects in infrastructure, including through the use of 'advisory routes'. Indeed, some map initiatives are affected by 'reality checks' (usually well-intentioned) from others with perhaps a different viewpoint or different internal local authority priorities. This can result in a 'safety first' approach which can stifle, obfuscate, devalue, over-complicate or even stop the production of useful cycle route maps and guides. What may have started out as a relatively cost-effective initiative can end up costing considerably more in terms of financial and staff resources, or worse still, no map being produced at all.

Many map producers (be they Local Authority staff, specialist consultants or voluntary groups) rely on informed advice and/or experience for route auditing. In most cases, the combination of awareness of cyclists' needs, an appreciation of hazards and danger from across the spectrum of road users, good local knowledge, and an audit process (hopefully done by someone on a bicycle), provides legally defensible (if necessary, but unlikely), informed choices.

This is not a criticism of more intuitive, less rigorous approaches. These are usually based on many years of experience, often working with local cyclists, and can produce useful, cost-effective and comprehensive cycle route maps such as the Kettering one.

It is advisable to have some form of 'paper trail' that records what was done in deciding upon route grading or the choice of 'advisory routes'.

## 5. 'Advisory routes' and route grading

Many cycle route maps include roads marked as 'advisory routes'. These roads often have no specific or dedicated measures for cyclists, though many may be 'traffic-calmed'. Most people see the value and need for this or some other way of conveying information about the area-wide opportunities. Not to do so would result in a map that merely highlights a range of unconnected facilities.

Many advisory routes prioritise perceptions about safety and cycling skills above directness and convenience. This gives rise to a network that is of little real value in practice since cyclists, particularly those cycling to work or to the shops (i.e. utility trips), will opt for directness. Inconvenient, indirect routes will not encourage more people to cycle. So, the choice of 'advisory routes', or other means of displaying route information, is vital to the usefulness and effectiveness of a cycle route map.

An alternative to the concept of 'advisory routes' is that of assessing and grading all of the available highway network in terms of its 'cycle-friendliness', or 'cyclability' (see Appendix 3). Using this approach, a road network is graded according to the degree of skill and experience needed to cycle each road. This approach results in a map that is not prescriptive, rather, the cyclist may decide which routes are likely to be appropriate.

Providing guidance on the use of the wider local road network presumes that there has been some attempt made at assessing a route's suitability for use by a range of cyclists.

Providing information that enables informed route choices to be made by cyclists enhances the usefulness and effectiveness of cycle route maps – this may be in the form of 'advisory routes' or some other form of route grading

## 6. Non-highway routes

There is no right to direct or encourage cyclists to use a privately owned street, road or track that is not publicly owned or maintained without the permission of the landowner. The inclusion, however, of such 'non-highway' routes on a cycle map, that are open to *lawful use* by cyclists (i.e. permission has been given by the landowner), is clearly of value to a network guide and those that seek to use it. This adds to the coherence, convenience and continuity of a network and gives map users better information about route selection and planning. The result is a better available network map.

It is acknowledged, however, that some non-highway route opportunities may not be designed and maintained to the standards expected of a public highway, but which, nevertheless, cyclists find useful and, indeed, may be currently using. It would be a missed opportunity if such routes were not shown as available where they exist and where the landowners are willing to permit public use or access.

To include and promote a non-highway route on a map guide, a prudent authority will undertake the same route audit as would be done for its own highway routes in order to satisfy itself that cyclists are not being encouraged to use a route that is inherently dangerous.

A local authority could seek to get agreement from non-highway route landowners that covers adequate maintenance or rectifies any identified design or safety shortcomings, though it is likely that such a request may be met with indifference or simply a lack of cooperation, even a withdrawal of use of the non-highway route. Where such routes represent a clear benefit to an authority's cycling network aspirations it would be desirable for it to negotiate with the landowner to improve the route and to secure or identify funding to ensure its on-going maintenance. In some circumstances the local authority may be prepared to contribute to these costs.

A judgement may have to be made on the value of including a substandard, non-highway route (for continuity and route coherence reasons) against the concerns about user convenience, safety and any ultimate liability on the part of the authority.

Many authorities include some form of 'disclaimer' or a clear statement on the map guide. This may highlight the non-highway status of the route, whether there is permission to use it, together with a caveat that the local authority cannot be held responsible for the level of service or ongoing maintenance.

It is understood that where a landowner permits access, and the facility is fit for purpose in terms of design and condition, then neither the promoting authority nor the landowner are liable for the outcome of any incident that arises from its use. Where these conditions are met and an accident occurs which gives rise to injury or damage the question of liability would be settled through a civil case between the parties involved. This is analogous to the general highway network where accidents are almost always settled by those involved without the involvement of the highway authority.

Where possible, useful, non-highway routes should be included in published wider networks. Confirmation of the permissive right and an appropriate maintenance undertaking should be sought from the landowner before any such route is included on a map. Clear disclaimers or other information about the route will enable map users to consider using the route 'at their own risk'.

## 7. Signing hazards

There is no requirement for a highway authority to '*give warning of obvious dangers*' and road users are '*first and foremost themselves responsible for their own safety*'. There are those that firmly believe that marking hazards heightens a traveller's reliance upon guidance rather than using their common sense and judgement about a situation as it arises.

Under s39 of the Road Traffic Act, however, there is a duty to '*promote road safety*' on the part of highway authorities: '*in constructing new roads, must take such measures as appear to the authority to be appropriate to reduce the possibilities of such accidents when the*

*roads come into use*'. Although this clearly applies to physical measures such as signs and markings, it can possibly be extended to route guidance information, particularly that provided for 'vulnerable' road users. It is generally recognised that if there is a particular link or section that is likely to challenge novice or 'improving' cyclists then they ought to know in advance, rather than encouraging them to undertake a journey that exposes them to potential hazard. Route decisions can then be taken in advance to avoid highlighted hazards. Appropriate grading of routes would automatically convey this information.

Where route grading is not shown, a common way of depicting potentially hazardous locations is by using a printed representation of the 'red triangle containing an exclamation mark' sign (Diag 562 in TSRGD). The meaning is both visually obvious as well as being a universally accepted highway sign warning of the need to take care.

<p>It is prudent for highway authorities to indicate where a link or junction requires more advanced cycling skills; either by grading the route for indication on a map or by use of an easily understood warning sign for maps.</p>
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## APPENDIX 1: What makes a good cycle route map?

The more useful maps do not just give information about where cycling facilities are – i.e. cycle routes, cycle lanes, toucan crossings, cycle parking, etc. – they also include information on the nature of the wider local road network. For example, by distinguishing between quiet, lightly trafficked lanes, at one end of the scale, to busy, multi-lane, radial and orbital routes. Sadly, few UK towns and cities have what would be considered to be comprehensive, coherent, cycle networks that offer cyclists a level of service approaching that available to motorised traffic.

Drivers expect to be able to go virtually where they please if it is shown on their route maps. It does not matter too much if their route is uphill, includes diversions, one-ways, whether it is raining, or how good a driver he or she is. For a cyclist, however, the level of cycling experience, his or her confidence, the directness, design and condition of the infrastructure, is of much greater importance. Coherent, on-road signing and the availability of comprehensive, up-to date road maps is taken for granted and expected by drivers. This is not so for cyclists, many of whom do not have the confidence and skills to use the busier, usually more direct and convenient, on-road routes. Worse still, many novice or potential cyclists, including child cyclists (and, more importantly, their concerned parents), have a perception of danger and unpleasantness about cycling that is seldom borne out in reality.

The more useful cycle route maps not only show where there are dedicated cycling facilities, but additionally, include information that helps cyclists to decide which other routes to use in order to fill in the gaps in the developing local network. To confident cyclists (Level 3 National Cycle Training Standard and beyond), with local knowledge, the whole range of local road types is available to them and they will make use of these, as would any other vehicle. For the less confident cyclist, some sort of guidance on a road's cycle-friendliness or 'cyclability' is invaluable and is considered to be a desirable element, and therefore, good practice.

Other elements, such as the choice of an appropriate map base that shows all road and street names, scale, method of indicating a road's cycle-friendliness, 'safety advice' where appropriate, places of interest (attractions, refreshments, bike shops, lavatories, etc.), are also important. The better maps convey this information as an overlay that doesn't obscure the underlying base map.

Having cycle route maps freely available ('hard copy' and 'down-loadable' versions too), well promoted (as part of wider promotional initiatives) and regularly updated and reprinted, are further important aspects. Recent advances in hardware miniaturisation and mapping software linked to GPS location, should ensure that subsequent updating is relatively simple and cost-effective. The eventual folded size, ease of handling and the use of tear/water resistant materials are often forgotten.

Finally, the active participation and involvement of local cyclists in the development and preparation of local cycle route maps is likely to be essential in the production of good final results.

Most roads are useable by cyclists with skills equivalent to Level III of the National Cycle Training Standard - good maps provide some form of 'cyclability' information that enables informed route choices to be made.

Some maps usefully categorise the local movement network according to the degree of skill and experience a cyclist has and relate this to the nature of the road.

## APPENDIX 2: Checklist for convenient, safer cycle routes.

Given pressure to try to minimise liability it may be tempting to some authorities to use or develop a rigorous, comprehensive route assessment pro-forma checklist, perhaps along the lines of the IHT Cycle Audit and Review. The problem is, however, and as is the case with the latter, it is likely to be too onerous, time-consuming and resource-hungry to undertake in reality for the purposes of a cycle route map. This is not to say that if an exhaustive review is being undertaken for the purposes of investment and improvement, that an additional advantage could be to assist with route assessments for map purposes.

What is required is a more simple, cost-effective way in which to identify, review and classify, a network of routes likely to meet the preferences or expectations of the range of cyclists – from novice to experienced.

Clearly, for highway authorities concerned with liability and safety issues and the need for a formal documented assessment procedure, it should suffice to undertake a review of the road network to establish its suitability for use by cyclists. Breaking this down into more specific elements, a documented audit process should consider as a minimum the following 6 aspects when looking at on-road ‘advisory routes’:

- traffic volumes \*
- traffic speeds \*
- HGV content \*\*
- good specification (e.g. 1.5m minimum) cycle lane provision \*\*\*
- best practice measures at/across junctions
- accident history \*\*\*\*

\* guidance on appropriate speed and traffic flow combinations can be found in the ‘link specification criteria’ table in the ‘Guidelines and Practical Details, Issue 2’ publication (Figure 4.1, p.36, adapted from the CROW document). TfL in the latest ‘London Cycling Design Standards’ guidance (3.1.5, p.45) suggest that a ‘quiet route’ would have vehicle flows of less than 3000 vehs/24 hours and 85 percentile vehicle speeds of less than 30mph. However, figures of 1500 vehs/24 hours and speeds below 20mph are desirable for child and inexperienced cyclists.

\*\* although HGVs are involved in 2% of accidents with cyclists, their unfortunate meeting results in 22% of deaths of cyclists. Flows that include 15% or more HGV content are likely to be unsuitable for most cyclists – ‘Cycling by Design’, SE (5.12 (ii)). The lower the HGV content the better.

\*\*\* it must not be assumed that the provision of substandard width and/or discontinuous cycle lanes offers cyclists a safer, more convenient cycling environment.

\*\*\*\* notwithstanding the acknowledged under-reporting of accidents involving cyclists, accident data may provide useful information on locations where there is a problem for cyclists.

Additionally, for more thorough audits, the following aspects could also be considered:

- carriageway/lane space
- presence of narrowings (e.g. refuges and the negative effect of centre-hatching)

- unlawful vehicle parking
- availability of shared-use bus/cycle lanes
- on-road, kerb-edge ride quality
- maintenance frequency and standards
- cycle-friendly traffic calming measures
- cycle-friendly road closures
- winter gritting and sweeping arrangements

This will require data, measures and judgements based on site/route reviews carried out by competent staff or other individuals who have appropriate experience and acquired skills.. Arguably, staff involved in elements of safety audit, or who have had some form of road safety awareness training, balanced by an appreciation of practical cycling experience and an appreciation of cyclists' needs would be appropriate people to undertake the assessment. Ideally, there should be a 'second opinion' mechanism that ensures that not just one person has audited the route. It also goes without saying that any assessment should be undertaken by cycling the route. Whatever form or assessment is undertaken, it is advisable that the methodology and results are recorded formally and retained for future reference.

Local knowledge and experience of actually cycling a route over a long period of time, and particularly an appreciation of its cycle-friendliness during peak traffic periods, will be of considerable value. It might be argued that the 'experience factor' and input of a local cyclist or specialist cycling consultant may be just as valid and valuable as the output from an 'objective' in-house assessment. Indeed, many good cycle route maps have been developed based on experience and innate cycle awareness rather than a set of objective grading criteria.

One established and respected commercial map maker adds: "surveying of advisory routes, as opposed to facilities, is subjective. We try to minimise the subjectivity by operating a consistent set of criteria to judge routes by. The aim is to provide routes suitable for adult novice cyclists. As such, they are mainly on the minor road network, but also take into account such items as vehicle speed, road width, traffic volumes and the existence of problem areas like waste recycling depots with larger than expected heavy goods vehicle movements on otherwise quiet roads." Their team of surveyors have been carrying out cycle route surveys for 10 years and they train their staff in-house. They acknowledge that there are no formal qualifications for the staff involved.

It is for the authority to consider how adequate any assessment procedure is and whether it reasonably discharges their duty of care as they see it.

There is no standard checklist available, however, those reviewing on-road routes for 'advisory route' purposes should consider a basic range of audit criteria and keep appropriate assessment records.

### APPENDIX 3: Cyclability

There are many ways of assessing the suitability of a network of routes, ranging from informal, undocumented, ‘desk-top’ choices using a map and some scant local knowledge through to fully site-audited and recorded methodologies (e.g. using an exhaustive, pro-forma checklist) to determine a road or route’s cyclability. The concept of ‘cyclability’ was first formally used in ‘Cyclists’ assessments of road traffic conditions: the development of a cyclability index’, TRL Report 490 (2001), N Guthrie, D G Davies & G Gardner. The work on cyclability was confined to links only, so further work is needed on junctions to apply a similar methodology.

When determining a road’s cyclability, it’s important to bear in mind that route preferences can be affected by a range of factors:

- level of cycling experience (e.g. novice or experienced)
- trip purpose (e.g. commuting or recreational)
- road and route characteristics (e.g. directness, amount of traffic)

Using ‘cyclability’ is one method of assessing a road’s suitability.

#### Determining the level of cycling experience

In terms of a printed, ‘one-map-suits-all’ cycle route map, it will be impossible to ascertain a cyclist’s ability and then create a specific route map (although ‘Personalised Travel Planning’ initiatives seek to do this). In determining advisory routes based on ‘cyclability’ an awareness of levels of cyclist ability will better inform route choices.

NCTS Level	National Cycle Training Scheme cycling criteria
0	Can ride a bicycle without falling off.
1	Can start and stop safely. Can use gears and be in the right gear for speed and can change up or down without wobbling. Can cycle one-handed while giving an arm signal, and look behind. Can do all this in a protected area away from traffic, but do not feel confident to ride unaccompanied on roads where there is any significant traffic.
2	Can ride confidently on lightly-trafficked roads, cycletracks and cycle paths. Know how to turn left and right safely, looking behind and giving the right signals to other road users. Does not feel confident on roads with fast moving motor traffic, large vehicles or complicated junctions and roundabouts.
3	Using training and experience, can cycle confidently in traffic, including riding through signal controlled junctions and roundabouts and the selection and positioning in the appropriate lane.

Beyond level 3, and with the benefit of years of cycling, common sense and defensive cycling techniques, many experienced, adult, cyclists will be confident at tackling the more challenging, traffic-dominated routes, including dual carriageways and large, complicated gyratories.

The categorisation of a road can be linked to levels of cycling competence so that both novice and experienced cyclists can make informed route choices.

### Trip purpose and route characteristics

Someone making a regular commuting journey is likely to prefer a route that is, above all, direct, comfortable (i.e. few hills and good, smooth surfaces) and relatively safe. Conversely, if a trip is for exercise or recreation, directness and the absence of gradients may be less important. Safety and attractiveness are more likely route choice criteria. Most trips, however, in the context of a local authority wanting to market and promote cycling as a real modal alternative choice, should be considered as ‘utility trips’ where directness, relative safety and comfort are very important factors.

Determining the trip purpose and likely use of a route will better inform cyclability decisions. Urban networks will support all types of journey purpose, particularly utility trips, so it follows that directness, safety, comfort, coherence and attractiveness are key considerations. So, from a cyclist’s viewpoint, what is meant by these five criteria? The table below sets out which criteria elements cyclists may expect to satisfy their expectations.

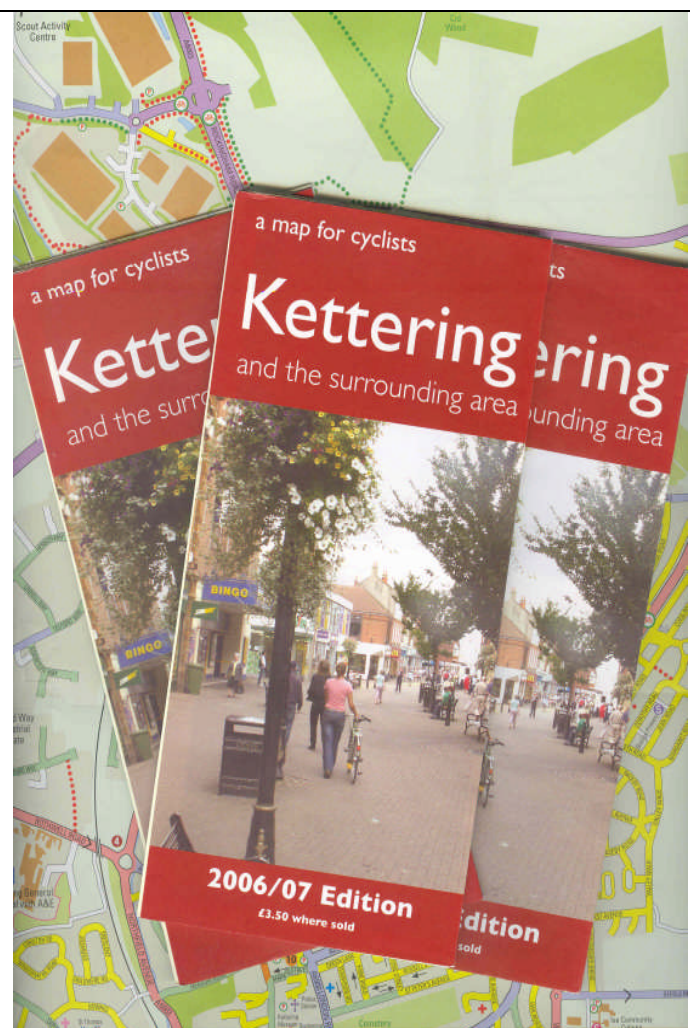
User criteria	Typical elements
Direct	Shortest distance between origin and destination (often along established vehicular radial and orbital routes). Connects home, workplace and retail areas. Least delays. Advantage over vehicular traffic (ASLs, contra-flows, cycle slips, lawful 24 hour routes through pedestrian areas, advance detection at signals, ‘free turns’, etc.).
Safe	Low levels of motor traffic. Sub-20mph vehicle speeds. Wide roads with best practice, continuous, on-road cycling measures along links and across and at junctions. Well designed cycletracks (with priority side road crossings and other crossing facilities). Protection from parked vehicles (opening doors). Positive perceptions about personal security (e.g. other travellers are about, good visibility and lighting).
Comfortable	Gentle gradients. Smooth, wide surfaces. Minimal conflict with pedestrians. No barriers. Well maintained.
Coherent	Cycling infrastructure should form a coherent entity, linking all trip origins and destinations – just like the road network expected by drivers; routes should be continuous and to a consistent standard.
Attractive	Lighting, personal safety, aesthetics, noise and integration with the surrounding areas are important. The presence of trees, water, local views and public art. Absence of traffic.

Concentrating on provision for every-day, local cycling utility trips will usually provide the basis for a sound, urban cycle journey network.

## APPENDIX 4: The Kettering ‘map for cyclists’ (2006/07 Edition).

**Origination:** the maps were conceived, developed and financed largely through the efforts of local cyclists (Cycle Northants community group), who were inspired by what they’d seen of a Cheltenham Cycle Route Map, highlighted at a conference. Kettering had no cycle route map and because there was little dedicated infrastructure to publicise, the possibility of a cycle route map was dismissed by the local highway and planning authorities. This reflects the traditional perceptions about what a cycle route map is seeking to achieve – there were few lanes and cycletracks so a cycle route map would be out of the question.

Those in the cycling world will be aware of how profound this is and how well it demonstrates the general lack of cycle awareness on the part of many authorities and their well-intentioned politicians and management.



**Format:** a folded 100 x 210mm publication opening to a relatively large 630 x 790mm double-sided map. It uses very clear, colour, OS base mapping produced by Cycle-City Guides. Although not tear or water resistant, good quality paper is used. The map is free though it may cost “£3.50 where sold” as per the note on the front cover.

**Maps:** there is an overview map of the Kettering area on one side with a more detailed Kettering town map plus larger scale town centre map on the other.

**Approach:** unlike most ‘facilities-based’ maps, the approach for the Kettering map has been to grade the available (mainly road) network according to the degree of skill and experience needed to cycle each road. Beginners are advised to “build up basic confidence and skills on the yellow roads” and goes on to recommend the green and blue routes “as your cycling skills increase”. “Only if you are a confident and experienced road user should you venture onto the red or purple routes”.

### Kettering map key

**Route gradings:** the resultant map classifies the local road network (colour-coded routes) under the following headings:

- roads that are normally hazardous for cyclists but experienced adult highway users may find them useful in quiet periods
- busy principle roads with high speeds, HGVs and complex junctions. Suitable for highly skilled commuting cyclists
- busy roads but lower speeds, some complicated traffic movements. A medium to high level of skill required for trouble free cycling
- through routes with moderate traffic and low speeds but also turning and parking movements. Well trained schoolchildren should cope
- quiet roads with low traffic speed and volume. Suitable for all cyclists behaving responsibly if they have some training

In addition, the following route information is also provided on the Kettering map:

- cycletrack, shared path or bridleway with tarmac or stone all weather surface
- bridleways or other permitted path with soft surface. May be unsuitable for cycling especially on a road bike in wet weather
- footpath or private road where cycling may not be allowed without permission

## Key

	Roads that are normally hazardous for cyclists but experienced adult highway users may find them useful in quiet periods.
	Busy principal roads with high speeds, HGVs, and complex junctions. Suitable for highly skilled commuting cyclists.
	Busy roads but lower speeds, some complicated traffic movements. A medium to high level of skill required for trouble free cycling.
	Through routes with moderate traffic and low speeds but also turning and parking movements. Well trained school children should cope.
	Quiet roads with low traffic speed and volume. Suitable for all cyclists behaving responsibly if they have some training.
	Pedestrianised street. No cycling Monday to Saturday.

One way street	Gradient significant for most cyclists. Arrow points downhill.
Cycle Parking	Signalled cycle crossing.
Church	Primary School     Secondary School
Doctor	Dentist
Nursing Home	Post Office
Libraries	FS Fire Station
VH Village Hall	PC Public Convenience
PH Public House	Special cycle turn facility

**Off road paths and ways**

	Cycle track, shared path or bridleway with tarmac or stone all weather surface.
	Bridleway or other permitted path with soft surface. May be unsuitable for cycling, especially on a road bike, in wet weather.
	Footpath or private road where cycling may not be allowed without permission.

**Bridleways where cycling is impractical because of rough surfaces are not shown. The representation on this map of any road, track or path is not evidence of a right of way or of its legal status.**

**Green Spaces**

	Parks and nature conservation areas where there is public access.
	Wildlife sites with no access without permission.

Bridleways where cycling is impractical (because of rough surfaces) or that are discontinuous, are not shown. There is also a caveat: “the representation on this map of any road, track or path is not evidence of a right of way or of its legal status”.



**Other useful information** includes:

- direction of one-way streets
- significant gradients (indicating which direction is downhill)
- cycle parking
- signalled crossings
- special cycle turn facility
- schools
- doctors
- dentists
- public convenience
- public houses
- special local information (e.g. “no cycling on school grounds”)
- the usual contacts (CTC, Cycling Clubs, LA contacts, etc.) and cycle training
- bike shops, and high visibility clothing outlets
- cycle hire
- places for light refreshment (map location, address, phone, opening times)

**Safety:** in contrast with so many cycle route maps, there is no great emphasis with safety. There are photographs of normal people on a bicycle, most therefore, not wearing helmets. The overall feel is one of cycling being an every day, easily undertaken activity - no more, no less. Interesting and noteworthy about the guide, where safety is alluded to, the map text includes the following statements:

“Children especially should be aware that there are dangers associated with using special cycling facilities. The most common accident causing serious injury to child cyclists is to be hit by a car when cycling off a path onto the carriageway. Joining or crossing the road can be more dangerous than keeping to the carriageway all the time. Do not feel obliged to ride in a green stripe if it is too near a T-junction or parked cars”.

These sage words point up the all too common situation where, well-intentioned, but poorly designed and compromised cycling facilities, are part of the problem rather than part of the solution. It is for this very reason that ramped continuity over side-roads on cycletracks and 1.5m minimum width cycle lanes must be the default specification for such measures where authorities decide to provide them. The reality, however, is that this is the exception.

There is both irony and dilemma here for map producers and local authorities – why is it acceptable to encourage cyclists to use substandard cycling facilities (which are usually included without question on most cycle route maps), and to question and sometimes exclude much of the available road network where it’s suggested as being ‘advisory’ and therefore possibly unsafe?

**Grading the roads:** the map was initiated, developed and routes assessed by local experienced cyclists and was not based on a prescriptive checklist of parameters presided over by local authority staff. Although a formal methodology was considered it was felt that, *“it would lead into a tangle of difficult issues and it is unlikely that the final result would be more reliable than the judgement of experienced local cyclists familiar with the roads. Using five grades, the easiest level is fairly obvious, i.e. roads where there is not really much to worry about. The top level is the roads that have been designed for fast and heavy traffic and on which few cyclists feel comfortable. That leaves three levels in between to decide on. There is the further consideration of the difference in conditions at different times of day that would tend to confound a pseudo-scientific approach.”* (John Cutler, Cycle Northants community group).

It is evident and not unexpected that during the initial map and route grading process that the local authorities were unconvinced about with the approach. It's also evident that the map would not have been published had the local authorities insisted on strict editorial control:

*“We made no attempt to agree the route gradings with the councils. They would not have understood what we were talking about and it would have simply caused delay. In the early stages, in refusing to support the project, the highway authority said at various times: a) they were worried about recommending that people cycle on some roads in case they were injured and sued; and b) that they were worried that the map implied that some roads were dangerous and therefore people could sue them on that account.”*

To the Borough and County Council's credit, they did eventually sign up to the map project, evidently convinced, after initial misgivings, that their caution about liability should not override the production of an extremely useful guide to local cycling.

The final word goes to Cycle Northants: *“It is often by worrying too much about such matters that councils are prevented from being imaginative and innovative and from addressing the real issues in cycling matters, not least of which is how to manage and reduce risk and balance it against other considerations.”*

the Kettering 'map for cyclists' is based on the route grading and cycling skills approach and is included as an example of good practice