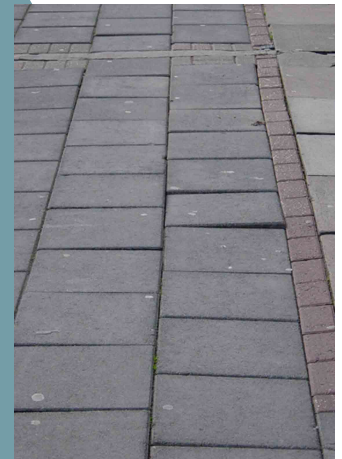


Highway Risk and Liability Claims

A practical guide to Appendix C of The UK Roads Board Report 'Well Maintained Highways: Code of Practice for Highway Maintenance Management'

**Second edition
July 2009**



Highway risk and liability claims

A Practical Guide to Appendix C of The UK Roads Board report
“Well Maintained Highways - Code of Practice for Highway
Maintenance Management”

2009 2nd Edition

London

July 2009

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Cover photographs – Ian Grierson

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www.ice.org.uk/knowledge/index.asp*

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Chairman's foreword

The Task Group brought together the UK Roads Board and the Institution of Civil Engineers Municipal Expert Panel with additional representatives from professions with an interest in highway liability claims. This included legal, local authority risk managers, Association of British Insurers, Association of Public Service Excellence, Government Departments and local authority representatives from across the United Kingdom.

At the time publication of the first edition of the guide in November 2005 it was acknowledged by the Task Group that it was essential to regularly update the Guidance contained in the Task Group Report.

The first edition has become the nationally recognised standard for guidance on dealing with highway liability claims and has resulted in a significant reduction in claims. The guide was summarised and incorporated as Appendix C in Well Maintained Highways Code of Practice for Highway Maintenance Management. It has also been the catalyst into the development of national Highway Inspector training scheme which is being developed by IHIE and CSS.

The first edition of the guide was summarised and incorporated into Manual for Streets, and the second edition with its development of the concept of Balanced Decisions has been reflected in the Scottish Government's draft Designing Streets.

This second edition incorporates significant additional information including recent legal cases, increased web links, changes in legislation, details of the national highway inspector training scheme and a significant update on design, innovation and balanced decision making.

The second edition will continue to raise the profile of highway liability claims by giving examples of good practice to reduce the significant amount of public funds currently being spent on claims by maintaining a strong link with Well Maintained Highways.

It is essential that local authority politicians are aware of the importance of following the Well Maintained Highways approach – if maintenance is cut back to below code standards then liability cases will be harder to defend, and economies on highway maintenance will be lost in expenditure on lawyers, and compensation.

Ian Grierson
Leicestershire County Council
Chairman of UK Highway Liability Joint Task Group
July 2009

Edited by
Ian Grierson and Robert Huxford

1 Introduction

This guide has been prepared in support of the Roads Board Report: “Well Maintained Highways - A Code of Practice on Highway Maintenance Management”. It is based on the Kindred Associations’ Guidance on Highway Liability Claims, first published in 1995 and revised in 1998.

Purpose of the guide

- to provide local authority engineers, transport planners, landscape architects, elected members, insurers, risk managers and anyone else with responsibility for providing and maintaining the roads and highway infrastructure, an overview of the current position on highways liability arising from maintenance and design, including latest philosophy and views on best practice and legislation.
- to set out the ground rules for good practice and prepare the foundation for a national claims trend and performance indicator database. Sharing highway related claims information will help participating Highway Authorities to monitor their performance against others and national trends
- to encourage all UK highway authorities to support a national highways claims initiative.

Using the guide

Although the task group have taken every care in the preparation of the guide, neither the authors nor their organisations can accept any legal liability for its contents, which do not necessarily reflect the views of the sponsoring organisations. Where possible this document refers to legislative practice in England, Wales, Scotland and Northern Ireland. Where specific reference is made to case law the implications of the legislation in force must be checked. The information is provided in good faith and on the condition that users will employ their own judgement in implementing any of the examples or suggestions contained in the guide.

Who produced the guide?

In November 2003 the UK Roads Board formed a sub group whose task was to provide a best practice document for roads and highway authorities to assist in their handling of highway liability claims. In parallel the Institution of Civil Engineers (ICE) tasked a working party of their Municipal Group to investigate similar issues to update earlier work on highways liability undertaken jointly between the CSS, and TAG. To avoid duplication of effort and to provide a common approach a decision was made for the two groups to work together. It was also decided that those involved in similar initiatives, the Association of Public Services Excellence (APSE), the Association of British Insurers (ABI) and the Association of Local Authority Risk Managers (ALARM) should also be invited onto the group.

The members of the first UK highway liability joint task group were:

Jim Valentine - ICE	Ian Holmes - DfT
Andrew Murray – DRDNI – Roads Service	Lorraine Bennett - APSE
Edward Bunting - DfT	Mark Rees-Williams - WATO
Chris Capps - CSS	Matthew Lugg - CSS
Fiona Easton - ALARM	Robert Huxford
Frank O’Dwyer - TAG	Sheila Boyce - ALARM
Ian Grierson - ICE	Stephen Murphy DRDNI
	Wayne Lord - ICE

The second edition has been produced by

Ian Grierson - ICE	Chris Capps – CSS
Robert Huxford, Urban Design Group, & Public realm information and advice network,	Jim Valentine – SCOTS, ICE
Lee Evans – CSS Wales	Fiona Easton – ALARM, Perth and Kinross
Bill Moss – Atkins Code of Practice Team	Andrew Murray - DRDNI
Edward Bunting – DfT	Stephen Murphy – DRDNI
Frank O’Dwyer - TAG	Lorraine Bennett - APSE
Sheila Boyce, Consultant	Simon Evans – Dolmans Solicitors
Matthew Lugg – CSS, UK Roads Board	We are also grateful for the input of Michael Orlik Solicitor
	Peppy Marshall Weightmans Solicitors

5 Design, innovation and Balanced Decisions

The first edition of this guide stressed the importance that Highway authorities, in the pursuit of their own and government policies on issues such as sustainability, health and liveability, should seek to produce or procure street and public realm schemes which meet high standards of design and address issues such as encouraging walking, cycling and the needs of disabled users, as well as enhancing the environment. Since that time there have been a number of important publications including:

- *Manual for Streets (2007)*
- *TRL Report No. 661. The Manual for Streets: Redefining Residential Street Design (2007)*
- *Local Transport Note 01/08 Traffic Management and Streetscene (2008)*
- *Designing Streets (2009)*

These reports have responded to calls to move UK street design practice in the direction of mainland European practice including Holland and Germany where pedestrian casualty rates and child pedestrian casualty rates have been lower.

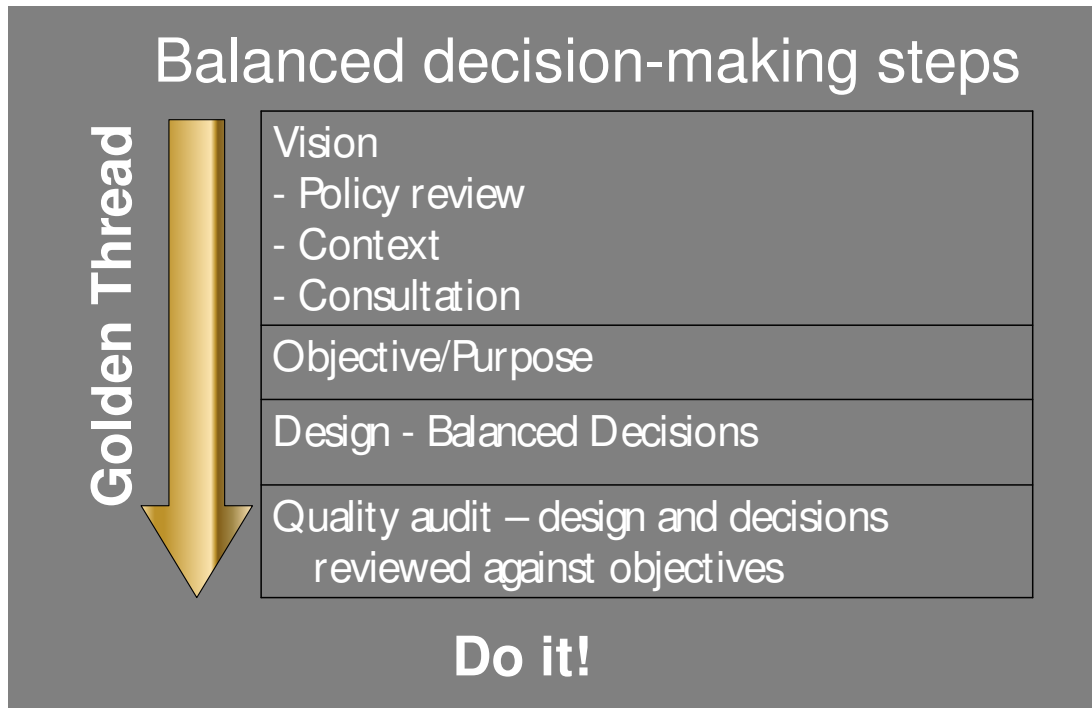
In addition an initiative in Evidence Based Road Safety has been developed at the University of Plymouth, and the Public Realm Information and Advice Network has worked to develop the following guidance in order to draw together the advice given by different documents support practitioners involved in design and to give them confidence. It covers:

- Establishing a “golden thread” that ensures decisions reflect appropriate government and community objectives
- Making decisions that are balanced decisions
- Evidence based design and guidance

Work in the development of the first and second edition of the guide identified a series of problems and opportunities, to which this latest edition responds:

1. The observation made in the DfT’s Manual for Streets on questionable or updated practices; concerns over the quality of the evidence upon which guidance is based and in some instances, the absence of evidence; or where the conclusions and advice drawn is not correct, or not sustained by evidence or logic. – ***Evidence based design and a better understanding of logical thinking.***
2. The worry some designers have of a grave risk of personal liability for the designs they produce; the growth of defensive design in response to a myth over the threat of litigation and liability, including a design conservatism and loss of opportunities to innovate and respond to changes in society and technology; design by precedent rather than first principles, design reduced to a mechanical exercise involving an inappropriate and rigid adherence to narrowly drawn codes, standards and guidance; team working damaged where individual specialists mistakenly believe that their own industry standards are obligatory and must take precedence over the policies of the council and the desires of the community; and the erosion of the role of the professional and Britain’s edge as a leader in the development of safe and attractive highway and public realm. – ***an understanding of the law based on what is written, rather than what is rumoured***
3. Designs being created that reflect the perspective of one specialism, rather than those of all the specialisms that should be involved, with some being brought in only at the end of the design process, when it is too late for their skills to be used effectively, or where the perspective of specialism dominates a design to the exclusion of wider policy objectives by government and local authorities and to the detriment of the community being served. – ***Balanced decisions and the use of a generic design processes advocated in Manual for Streets and LTN 01/08 to establish a “golden thread” that links high level policy with design and delivery.***

5.1 BALANCED DECISIONS AND THE GOLDEN THREAD



Notes:

Golden Thread – the aim is to align the design and the decisions made with national policy, the strategy and objectives of the council, and needs and wants of stakeholders.

Vision – both Manual for Streets, LTN 01/08 and Design Streets stress the importance of having an overall vision. This will often be about regeneration and job creation, improving health or inclusion, and sustainability. But the vision and the objectives and design that flow out of it will also be informed by an understanding of the character the place and its purpose:

Policy review – this is about being aware of the policies that affect an area, in their full breadth, including the council's corporate and community plans.

Context – this is about the setting of the site in question; how the area functions in terms of movement and place; how and why has the area has developed? How the place is used now and the basis of the economy. What makes an area distinctive, including local materials or styles, and landscape? Where/what are the key buildings, open spaces, destinations etc? Who uses it and how, who doesn't use it and why?

Consultation – the vision of members of a community as to how they would like to see their area develop can be valuable contribution, and there will be instances where continued involvement of the community will be important.

Objectives and purpose – the objectives and purpose describes precisely what effect the scheme is required to produce in contributing towards the overall vision. In new development this can be included in the Design and Access statement.

Design / Decisions – this is where the flair of the professionals involved come to the fore. It is they who are in command of the full information about the site, and it is they who should make decisions rather than subordinating their judgement to guidance which inevitably will not have been prepared with that particular site in mind. Designs should be worked up where possible using simple 3D illustrations to help people visualise what is being entertained.

Quality Audit – there are a number of different types of audit that can be undertaken. The most important at the design stage is to assess whether the design is true to the vision and has fulfilled the objectives and purpose. Where safety audits are undertaken they are one consideration that go to making a balanced decision.

It is important not to become bogged down in a bureaucracy of self-justification. These steps should be kept as concise and productive as possible.

5.1.1 What is a balanced decision?

The term *balanced decision* describes decisions where a reasonable and reasoned attempt is made to cover the full range of interests involved in highways and the public realm. It is not an absolute definition: something that is either right or wrong; it is a matter of degree.

The legislation is rich with phrases such as “have regard to”, “so far as may be reasonably practicable”, “having regard to their other obligations, policies and objectives”, and “may”. Rarely does a piece of legislation lay down an exact course of action over which there is no discretion. It leaves people to make balanced decisions. Even in the case of the Traffic Signs Regulations and General Directions, while they specify the precise nature and design required of lines and signs if they are to have legal effect, the decision to introduce a sign or line in the first place is often at the discretion of the decision maker. There is both an opportunity and a responsibility for all practitioners to use their judgement in order to do their best for the communities on whose behalf they are working, and, it is to be hoped, help advance the practice of highways and the public realm.

The list below draws from many different sources that suggest a flavour of balanced decisions.

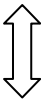
A balanced decision may be:

- **Reasoned, rational, logical** – (Bolitho v City and Hackney Health Authority 1997)
- **Balanced:**
 - Takes into account relevant design considerations (CDM regulations 2007)
 - Considers those issues which should be taken into account and excludes those issues which should not be taken into account. (Wednesbury unreasonableness)

Balances movement and place

Movement:

Reflecting the Hierarchy of users (from Manual for Streets)

Consider first  Consider last	Pedestrians
	Cyclists
	Public transport users
	Specialist service vehicles – e.g. emergency services, waste etc
	Other motor traffic

and the particular needs of women, people with disabilities, and children

Place

Reflecting the objectives of urban design (from By Design)

Diversity	Adaptability	Legibility
Ease of movement	Quality of the public realm	
Character	Continuity and enclosure	

Balances risk and opportunity

Balances capital cost and long-term maintenance, and other

Supports sustainability – balancing the needs of the present generation with those of future generations

- **Sustainable on the evidence;**
- **Moral** – reflects accepted moral standards
- **Legal** – interprets law or legal procedure correctly
- **Has regard to duties**

Acknowledges the difference between
general duties that place broad targets on a local authority and
private law duties that create a justiciable duty of care.

Examples include:

- Disability Discrimination Act 2005 – a general duty to have due regard to the need eliminate unlawful discrimination against, and promote equality of opportunity of, disabled persons, balanced against consideration of substantial extra cost for such provisions or actions and, the protection of rights and freedoms or safety of other persons
- Traffic Management Act 2004 – a general duty on traffic authorities to manage their road network with a view to achieving, so far as may be reasonably practicable having regard to their other obligations, policies and objectives, the following objectives, including
 - securing the expeditious movement of traffic
 - identifying and considering actions in response to causes of congestion and disruption of traffic (traffic including pedestrians)
- Roads Scotland Act / Highways Act - duty to repair the fabric of the highway; duty to assert rights to use highway
- **Has regard to rights**
 Examples include: Human Rights Act – right to family life and property;
 Common law rights to use the Highway both for movement and for any other purpose that does not amount to a public or private nuisance (DPP v Jones 1999)
- **Avoids foreseeable risks to individuals involved in or affected by the act of construction or maintenance;** (so far as is reasonably practicable, taking due account of other relevant design considerations) (CDM regulations 2007) (NB The CDM Regulations 2007 do not apply to the subsequent use of a public road)
- **Avoids trapping people into danger.** (Common law – Gorringe v Calderdale)

And is POSITIVE

It would be regrettable if the decisions of a local authority or designer place above the interests of serving the public, the desire to avoid an exaggerated risk of being successfully sued, especially where the legal basis for any action and a claims record is minimal or absent.

All principal local authorities in England and Wales have the power to do anything they consider likely to promote the economic, social and environmental well-being of their area unless explicitly prohibited elsewhere in legislation, having regard to regard to their Sustainable Community Strategy. (Local Government Act 2000),

Democratic decisions carry additional weight

Issues of priority in the allocation of resources are there to be resolved by the democratic process, national and local, rather than by the courts. (Southwark London Borough Council v Mills (1999) HL)

5.1.2 Policy review

Detailed below are examples of the range of different legislation, policies and guidance that bear on highways and the public realm

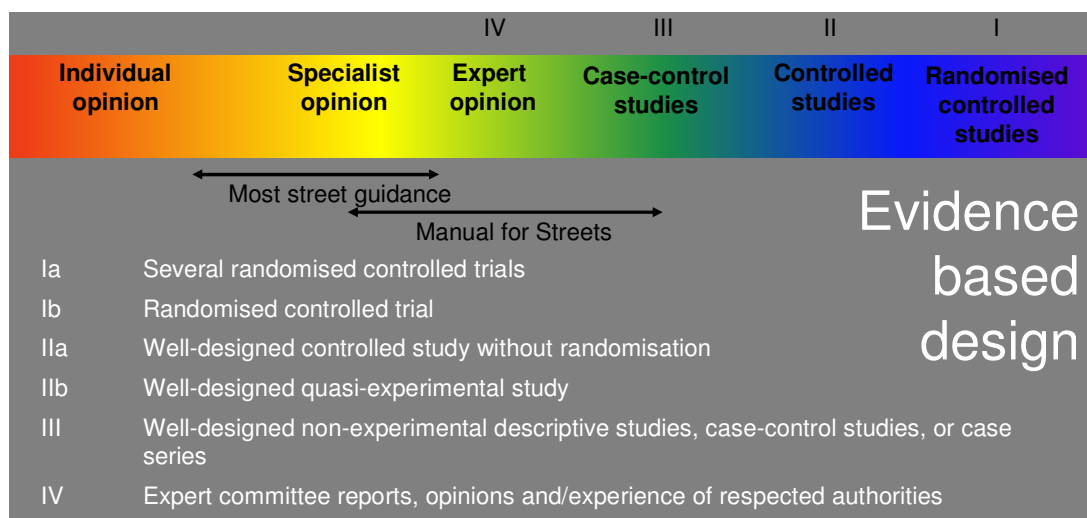
<p>EU level: Human Rights > Human Rights Act Air Quality > Air Quality Management Zones etc Environmental Noise Regulations Public Procurement</p> <p>National Level Common Law Responsibilities of the road user Responsibilities of the Highway authority Understanding of duty of care</p> <p>Acts and regulations e.g.</p> <p>Crime and Disorder Acts</p> <p>Disability Discrimination Acts</p> <p>Highways Act Road Traffic Acts Traffic Management Act Traffic Signs Regulations and general directions</p> <p>Local Government Acts - Best Value Duty - Power of Well-being</p> <p>Environmental legislation such as the Code of Practice on Litter and Refuse</p> <p>Sustainable Development Act</p> <p>Highway Code</p> <p>Government policy</p> <ul style="list-style-type: none"> • Strategies <ul style="list-style-type: none"> • Health • Economic Development • Sustainable Development • White papers • Planning Policies • Planning Policy Statements (around 10 of direct relevance) <p>Government guidance</p> <ul style="list-style-type: none"> • Circulars/Advice Notes • Inclusive Mobility – a Guide on Best Practice on Access to Pedestrian and Transport Infrastructure DfT 	<p>National organisations Audit Commission Performance indicators UK Roads Liaison Group: Well-maintained Highways – Code of Practice on Highways Maintenance Management</p> <p>At a regional level Regional transport plan Flood risk management plans Landscape character assessment</p> <p>At a local council level</p> <ul style="list-style-type: none"> • corporate plan • sustainable community plan • local transport plan • local development framework • travel to school plans <p>At a neighbourhood level conservation area urban character assessment travel to work plans design statements masterplans design codes</p> <p>Other guidance There is a range of other guidance, often relating to specific aspects, uses or users of highways and the public realm including;</p> <p>Royal Society for the Protection of Accidents Institution of Highway Incorporated Engineers Institution of Highways and Transportation English Heritage Commission for Architecture and the Built Environment Homes and Communities Academy (formerly English Partnerships) Environment Agency. And many others</p>
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A competent professional should be aware of the broad policy framework in which they, and other members of the design team, work.

5.2 THE EVIDENCE BASE – EVIDENCE BASED DESIGN

“Research carried out in the preparation of Manual for Streets indicated that many of the criteria routinely applied in street design across the UK are based on questionable or outdated practice.”

All criteria are questionable and should be questioned, along with guidance, practice and policy. Failure to do so allows what were once sound principles to degenerate into a doctrine that is out of step with changes in legislation, technology or public need. In order to make decisions that are in the best overall interest of society, practitioners need support from guidance that is up to date and where possible based on robust science and evidence. The medical profession has developed a system for rating research through the evidence based medicine movement. This system can be adapted and applied to the research that informs practice in highways and the public realm.



Controlled trials – are where the study is carefully designed to eliminate distortions such as selection bias and regression to the mean, experimental bias; and where there is a clear understanding of statistical significance.

Case-control studies – are where sites are chosen, some of which are given an experimental treatment (a speed camera for example) and left untreated. A comparison is made between measurements of the sites with the treatment and those without.

A randomised case-control study is where the sites are randomly selected.

Expert opinion / guidance – which addresses itself to the full range of functions, uses and users of highways and the public realm, the task faced by local authorities,

Specialist opinion / guidance - which addresses a specific aspect of the public realm, such as traffic signals, lighting or a specific user group, such as women, motorcyclists, or people who are blind.

Both expert and specialist guidance should represent a responsible, reasonable and respectable body of opinion.

Practitioners should give greatest weight to guidance that is based on sound research, and less to that based on poorly constructed studies or drawn to reflect only a narrow opinion.

5.2.1 Where local professional judgement should take precedence over guidance and standards

There have been concerns expressed over designers slavishly adhering to guidance. Local Transport Note 01/08 specifically advises:

Regulations and technical standards have a key role in the delivery of good design, but, if used as a starting point, they may serve to compromise the achievement of wider objectives. A standards-based template view of road junction design, for example, is inappropriate.. *LTN 01/08 3.2.1*

“In reality, highway and planning authorities may exercise considerable discretion in developing and applying their own local policies and standards.”

“Designers are expected to use their professional judgement when designing schemes, and should not be over-reliant on guidance.”

LTN 01/08 3.2.3

“Available guidance is just that, guidance, and cannot be expected to cover the precise conditions and circumstances applying at the site under examination.” *LTN 01/08 3.2.2*

The authors of guidance, how ever accomplished, will not be cognizant of the site and situation in question. It would be neither reasonable or rational to presume that anyone could produce an optimal design in abstract. The informed judgement of trained professionals on-site, should logically take precedence over guidance.

5.2.2 Limitations to research include:

Reliability of the source data - As detailed earlier in the guide, the casualties reported in STATS 19 are subject to systematic under-reporting and miscoding, the statistics do not always coincide with the hospital data, and the data on accident causation is an initial opinion.

Statistical variation – accidents are infrequent and sometimes random events and observations of many sites over a long period of time may be required to draw statistically significant inferences. Nonetheless there is a tradition of carrying out three years before-three years after monitoring of accident records, which, unless the sample sizes are large, may prove little.

Regression to the mean / selection bias – the failure to acknowledge the random nature of events has featured in poorly designed research where safety measures have been applied to sites with an accident record. Sites are chosen because they have an accident record, safety measures are applied, and often the accident rate goes down, possibly due to the safety measure, but also possibly due to random variation. An example has been the data from speed camera sites: speed camera sites were chosen on the basis of there being a record of accidents (some of which may have been chance occurrences); a controlled experiment would have identified potential sites and randomly allocated speed cameras to some, recording the results.

Experimental bias – where people look for results that confirm their beliefs or hypotheses. A more robust approach is to set out to disprove a hypothesis.

Conclusions not sustained by evidence - sometimes mistakes are made in drawing conclusions from research, sometimes there is bias involved, in others instances the mechanical process of summarising research can turn qualified conclusions into statements of fact by omitting reference to the qualifications and uncertainties. This a particular trap in the subsequent reporting of conclusions in other documents or press releases. .

5.2.3 Defects and limitations with guidance and standards

The decision may refer to guidance, or a body of expert opinion, but that body of opinion must be logical, reasonable, have addressed itself to the comparative risks and benefits, and have reached defensible conclusions. (*derived from Bolan and Bolitho*)

Guidance lacking completeness – where guidance only addresses single issues. Whereas a body of specialists might come to one set of conclusions regarding their particular area and possibly quite logically; but a body of experts, who have in mind the full range of responsibilities, duties and constraints placed upon local authorities, authorities might come to a different set of conclusions. Practitioners in the field are then confronted with the challenge of using a library of specialist guidance which may not have addressed itself to the full breadth of real-world issues. Local authorities do not have the luxury of being able to provide highways for single users. Compromises have to be struck and decisions made that recognise the limited resources of the local authority and its broader responsibilities in the pursuance of the better overall interest of society. The courts have recognised this time and time again.

Quality – some guidance tends to be overlong, repetitive and contain relatively little useful information. This makes the job of the practitioner much more difficult.

Poor research basis – such as the use of case studies with no controls, poorly designed studies, before and after studies, and so on. This type of research may offer little to support meaningful conclusions. Sometimes guidance references research that is no more than a series of opinions. In doing so the guidance assumes a status that is not justified.

Conflicts of interest – where the authors or publishers of guidance stand to gain from the implementation of its recommendations, or where the guidance is more about campaigning.

Bias – where research used to support guidance and the conclusions drawn have from the outset sought to argue a particular case.

Illogical conclusions – where the conclusions are not sustained by the evidence or science available. There can be a tendency to fail to transmit the qualifications made when researchers make inferences and draw conclusions, so that tentative findings are subsequently reported as fact.

Misunderstandings over the law

Errors in summarising law and precedent – it is easy for an author unwittingly to change the meaning. And this guide is no exception. It is best to obtain direct quotes from law and precedent and to understand the context in which they were made.

Not being up to date in latest law and precedents – examples have included

- Lawyers citing the Nolan precedent, not appreciating that the case was determined under the Public Utilities and Streetworks Act, and that the current legislation which replaced it, that is the New Roads and Streetworks Act, provides different responsibilities;
- Guidance documents and opinions on highway law that do not reflect the Gorringe v Calderdale case, for example claiming that local authorities are at risk of litigation under the Road Traffic Act 1988, when the door was effectively closed by the case.
- Tomlinson v Congleton, a tragic case relating to occupiers liability, involving disabling injuries sustained by a young man who while on a visit to a municipal park and former sand pit, ran into a lake and then dived forward, hitting his head on the shelving sandy bottom. A number of local authorities were advised by consultants that the case had gone against Congleton and that actions (that fall under the description of defensive design and management) were needed to avoid the local authority being exposed to liability, when in fact the case had been won by the Congleton at the House of Lords some years earlier and the responsibilities of the individual for their own safety had been reiterated. There was nothing inherently out of repair with a sandy beach.

Wrongly claimed duties - it is for Parliament and the Courts to decide on duties and no one else. Sometimes guidance will claim accidentally claim there is a legal duty when it there is nothing more than a moral duty.

Claiming there is a legal requirement to comply with a standard when no such requirement exists – this is a common problem

Confusing guidance with regulation

Appeals to fear – there have been a instances where guidance and reports have statements backed with further warnings that unless their recommendations are observed the local authority could be liable, but based on an incorrect understanding of the law. In the interests of stemming the spectre of liability and defensive design, authors of technical guidance should either avoid offering an opinion, or ensure that their advice is robust by indicating clearly how a local authority could become liable and the likelihood, basing this on reference to precedent and legislation, rather than making unsupported and possibly speculative statements.

5.3 TEAM WORKING AND THE BALANCED DECISION

Achieving a balanced decision generally involves a number of people with different professional backgrounds. Manual for Streets and LTN 01/08 advise on forming a joint team from the outset. If specialists are excluded from these early stages and only brought in towards the end, the opportunities to produced balanced decisions will inevitably be reduced.

Using the balanced decision making approach with people allied to the common vision, objectives and purpose should greatly help harmonious and productive team working. But there are instances where practitioners abandon collective decision making and team working, and instead fall back to their particular professional silo and resort to logical fallacies in an attempt to hold sway or gain power and influence within the team.

Appeal to authority

Trust me, I'm a specialist.

A specialist's opinion should not be taken as an absolute. They should be prepared to justify their opinion.

We have to do this, it says so in this ...Act, Regulations, Guidance, Code...

People have a tendency to interpret guidance as regulation; refer to the source and understand its true status and the flexibility it affords.

Special pleading

Prove this new approach will work

Special pleading is where we wittingly or unwittingly use double standards. An example would be the unquestioning acceptance of traditional highway practice as opposed to a highly circumspect approach to novel highway engineering. New and old practice should be judged on the same basis.

Appeal to fear

"If we did this and someone was injured and then the council might be held liable;"

"If someone died we could be investigated for a corporate manslaughter action."

It is a regrettable fact that there is the potential for people to die in most highways, but the primary responsibility lies with the road user and the driver. The highway authority is not under any obligation to take that responsibility upon itself.

The courts (such as in Tomlinson v Congleton) stress this point, that while death is a serious matter, this is a wholly different concept to a serious risk of dying

Appeal to emotion

Does someone have to die before action is taken?

"Someone could die"

A child could be killed

"This is discriminatory"

In the interests of making balanced decisions, it is important that specialists avoid taking entrenched positions. They should ensure their opinions are sustainable on evidence and based on sound reasoning, and maintain an open mind to the interests and aspirations of other specialists and the community at large.

5.4 QUALITY AND SAFETY AUDITS

Local authorities are expected to be under considerable resource pressures over future years, and will be seeking to ensure value for money is obtained from all parts of the highways and public realm service. The commissioning of audits should be a considered response to the needs of the situation. Audit needs to demonstrate that it adds value to the process, is cost effective and proportionate to the work being undertaken.

There might be a number of reasons why or why not to undertake audits.

As a thinking aid – making sure things have been taken into account
 As a means of feeding cutting edge practice into mainstream practice
 As a quality check

It is to be hoped that in the majority of instances properly trained practitioners who are in command of latest practice should have sufficient skills and knowledge to address the issues without the need for a range of supplementary advisers; this is especially the case where there is a multi-disciplinary design team. Which is the better answer to the question: “Have we thought about disability issues? “ Yes we have paid for an access audit; or “Yes, our design team is fully up-to-date in inclusive design.”?

Where practitioners have limited skills or knowledge, where there are new approaches to be incorporated into or where there is tension between elements of a design team then an audit can help.

As Manual for Streets states, auditing should not be a tick box exercise. (MfS 3.7.3) The providers of audit services should be able to provide up to date evidence (as detailed above) of the added value that they can bring to design and decision making. If they are unable to do this, the highway authority should feel under no pressure, moral or otherwise, to use their services.

There are two broad categories of audit that could be undertaken.

1. Audit against the vision, objectives and purpose – MfS Quality Audit.

This is the approach recommended in Manual for Streets. It is about answering the question, does the proposed design fulfil the vision? and does it achieve the objectives and purpose? The audit can be undertaken by the designer, or design team, or perhaps someone from outside. This type of audit strengthens the balanced decision approach, serving both as a thinking aid, and as a genuine check on the quality of the design.

2. Audit against external guidance, or norms, or the use of an external Audit system

These break down into two separate types

(a) Normative audits— where a design is compared with an external “norm”: a notion of good design or good practice, for example a guidance document, or a body of professional opinion

It is essential that the “norm”, the body of knowledge against which the scheme is being assessed should represent current best practice rather than old practice, should have acknowledged the broad responsibilities faced by local authorities, and should be science and evidence based.

The statement in LTN 01/08 should be borne in mind

“Designers are expected to use their professional judgement when designing schemes, and should not be over-reliant on guidance.”
LTN 01/08 3.2.3

Normative audits should not displace professional decision-making.

(b) Reminder audits – where the purpose is help people ensure that they have taken appropriate issues into consideration. Community consultation in effect assumes this role. By ensuring that the needs and ideas of stakeholders are recognised into the design process.

5.4.1 Safety Audits

Road safety auditing began around thirty years ago as a means of feeding back cutting edge knowledge on road safety into main stream highway design. Some 25 years later, Manual for Streets contained qualifications regarding some more recent activity:

“There can also be a tendency for auditors to encourage designs that achieve safety by segregating vulnerable road users from road traffic. Such designs can perform poorly in terms of streetscape quality, pedestrian amenity and security and, in some circumstances, can actually reduce safety levels.” MfS 3.7.11

These situations may have arisen where an individual auditor had not kept up to date with latest thinking and research on road safety. The value of the road safety audit is lost if all it achieves is a critique of a 21st century design against what was considered to be best practice in the 1980s. Where a safety auditor has a genuine interest in and knowledge of the latest research and innovations in road and street design and the wider duties placed on local authorities then they can perform an especially valuable role.

Road Safety Audits are not mandatory on residential streets. Where they are used they should aid design and not replace it.

The procedures set out in DMRB are a formal requirement only for trunk roads.
Manual for Streets 3.7.5

Road Safety Audits are not mandatory for local highway authorities. MfS 3.7.6

Manual for Streets goes on in 3.7.12 to advise of the value of RSAs including an assessment of the relative significance of any potential safety problems.

In order to mesh with the Balanced Decision approach, it is most helpful if the Road Safety Audit contains measured statements where the risk is assessed. The IHT Road Safety Audit Guidelines contains helpful guidance here on Risk Assessment.

Where a road safety audit is undertaken on roads that fall under the scope of Manual for Streets or Designing Streets, the Highway Authority should require that Auditors have a sound understanding of the principles and research involved. It is important that in the interests of the development of highway engineering that they play that role that was first envisaged, in bringing cutting-edge understanding of safety into mainstream highway engineering and public realm practice.

5.4.2 Modified road safety audit

The road safety audit as described in the DMRB standard is optimised for vehicle-based environments. Highway authorities may wish to consider following a modified procedure if they intended to seek a safety audit on a scheme in the complex environment of a street.

The key is to ensure the road safety audit is open, robust and objective so that its recommendations can easily be balanced by other design objectives.

A highway authority may wish to consider requiring the following additional information to be provided with each recommendation resulting from a road safety audit:

- A risk factor
- Quantification of risk
- Evidence/justification

The recommendations should then be reviewed by the designer against the overall scheme objectives. This should be set down in a short Design Review Report, which evaluates how each recommendation of the audit balances in relation to other scheme objectives (liveability, sustainability, etc), and states what course of action will be taken to the overall benefit of the public.

(a) Risk Assessments/Risk Factor

The first edition of this guide that recommended that a Safety Audit should embody the approach adopted in “Well Maintained Highways – a code of practice on highway maintenance management”, for assessing the likelihood of risk and the expected severity. The IHT 2008 Guidance on Road Safety Audit guidance includes a section on Risk Assessment.

Risk Assessment / Risk Factor

Frequency	Frequent	Probable	Occasional	Remote
Severity				
Catastrophic	Very High	High	High	Medium
Critical	High	High	Medium	Medium
Marginal	High	Medium	Medium	Low
Negligible	Medium	Medium	Low	Low

It should be within the capabilities of a competent road safety auditor to provide some quantification of the risk, and the reasoning why the recommendation is made.

This approach gives the designer a clear indication as to the importance of particular issues and problems raised, and an auditable trail.

The highway authority may establish a standing policy on the extent of a designer’s discretion in responding to a recommendation in a Road Safety Audit. For example:

Very High	Recommendation must be heeded unless redesign avoids problem
High	Implementation of recommendation strongly recommended unless redesign avoids problem
Medium	Implementation of recommendation discretionary
Low	Implementation of recommendation not critical to reasonable safety

(b) Quantification

It may be possible to quantify some Road Safety Audit Recommendations using predictive tools. For example, TRL’s Safenet2 could be used to provide an overall assessment of risk for a scheme and help to identify the consequences of alternatives. However individuals using prediction systems should have adequate training. They must be able to understand the underlying models, assumptions and evidence base used in making the predictions, in

order to judge whether the predictions are valid for a particular street or element of the public realm.

(c) Evidence

Safety audit recommendations may include or refer to evidence or underlying science that justifies the conclusions and recommendations being drawn.

5.5 INNOVATION, LIABILITY AND DEFENSIVE DESIGN

Over the past twenty to thirty years there have been significant innovations in highway and public realm design. Some people take the view that the change has been progressive and others, that the change has been slow. While the primary role of the local authority is to serve the public, some commentators have observed that risk avoidance seems to weigh highly.

“In my view, regulation and safety standards in this country are not designed on the basis of evidence as to road user conduct and what is needed to reduce risk given observable behaviour and events. They are designed rather as abstract engineering exercises with the principal purpose of making it harder for road accident victims to bring successful litigation against highway authorities (and engineers).”

Councillor Daniel Moylan 2003

In an era where there are significant levels of fraudulent claims, together with companies that specialise in compensation claims, and talk of corporate manslaughter, it is entirely understandable that professionals and politicians in local authorities might seek refuge in defensive design, adhering only to that which has been done in the past. This is both unfortunate and unnecessary. Firstly the concern over liability is misplaced. The survey work conducted for this second edition report finds that the claims that are made against local authorities are almost exclusively to do with highways maintenance. Design related claims are extremely rare, and successful claims rarer still. And secondly, this strategy of defensive design has hampered innovation, improvement and necessary change, being both against the spirit of Best Value and the interests of the public,

A defensive design mentality can lead to guidance being treated as regulation, and standards to be regarded as compulsory. Manual for Streets stresses the freedom of designers to innovate.

- Some designers treat guidance as hard and fast rules, in the mistaken assumption that to do otherwise would be illegal or counter to policy, concerned that they would incur liability in the event of damage or injury. (Manual for Streets 2.5.1 & 2.6.1)

It can lead to highway authorities not fulfilling the role and opportunity given to them by Government to develop highway design.

- The Department for Transport does not set design standards – these are set by the relevant highway authority. (Manual for Streets 1.4.1)

There have been instances where the Design Manual for Roads and Bridges has been used as default guidance for the design of streets, even though the approach may lead to higher vehicle speeds that expose pedestrian and cyclists to greater risk of death or serious injury in the event of a collision. Manual for Streets states:

- The Design Manual for Road and Bridges is not an appropriate design standard for most streets, particularly in lightly trafficked and mixed use streets. (Manual for Streets 1.4.4)

- It is strongly recommended that local authorities review their standards and guidance to embrace the principles of Manual for Streets. (Manual for Streets 1.4.1)

5.5.1 Reconciling the approaches in Manual for Streets with that in Design Manual for Roads and Bridges

Even with the publication of Manual for Streets, there are practitioners who are uneasy about its recommendations. It is important that practitioners are convinced by the science, the statistics and the supporting evidence, and do not feel brow-beaten into following a doctrine.

The Design Manual for Roads and Bridges follows in a tradition that dates back to at least the 1930s where safety is sought by reducing the demands on road users, and trying to design out conflict, such as by:

- increasing visibility,
- improving sight lines, and allowing generous stopping sight distances,
- providing gentle radius of curvature, and broad carriageways.
- segregating of pedestrians and vehicular traffic
- avoiding of complex vehicle movements by using staggered T junctions as oppose to cross-roads
- discouraging of through traffic by the use of loop and cul-de-sac street patterns

Speed of impact is the dominant factor in determining the severity of injuries in a collision; this is well established by evidence and physics. In terms of causation increased speed is predicted by physics to increase the likelihood of a collision by reducing the time available for a driver to react, and increasing the distance necessary to bring a vehicle to a halt. The Department for Transport has empirical data.

The research report TRL 661 which was used to inform Manual for Streets, found that drivers choice of speed was influenced forward visibility and carriageway width. These relationships had been observed by Smeed in the 1950s, and by Chapman in the 1930s, and no doubt by many other engineers at the period. The Manual for Streets and Designing Streets focuses on measures that lead to the driver to drive at a lower speed: following on from conclusive evidence that speed of impact in a collision largely determines the severity of injuries suffered.

Manual for Streets encourages

- aiming at a design speed of 20 mph or less by introducing narrower carriageways and shorter sightlines, with an evidence base provided in TRL report 661.
- encouraging the mixing of traffic and pedestrians to improve permeability and natural surveillance
- the introduction of cross-roads, with the addition of small or mini roundabouts where necessary.
- the avoidance of guardrails (which LTN 01/09 has subsequently gone on to describe as having no statistically significant impact on safety)

Core to the philosophy of Manual for Streets is the implicit acknowledgement of the concept of “Risk Compensation”. The notion that people take more care when they perceive themselves to be in danger. The relationship found between driver’s speed choice, and carriageway width and sightlines is an example. And here lies the difficulty that some people may have: that a street environment that might be considered less safe by the conventions of the DMRB is safer in practice owing to the reduced vehicle speeds.

This guide hopes to encourage Highway Authorities to take a far more robust stance in developing innovative highway designs that have the interest of the public at their heart. Rather than being held back by some vague fear of liability or prosecution.

5.6 A REMINDER ABOUT THE BASIS FOR LIABILITY

The law is neither foolish nor arbitrary. In allowing people freedoms it confers upon them responsibilities for safety. Three principles that have been established by Court judgements are worth bearing in mind:

<p>1. road users are responsible for their own safety and have a duty to take the road as they find it.</p>	<p>The first principle treats the road user as an intelligent being, able and expected to exercise their own judgment. It is not necessary for the design of a scheme to take that independence of judgment out of the hands of the road user.</p>
<p>2. a highway authority should avoid trapping reasonable road users into danger, for example by introducing hidden danger.</p>	<p>This principle is self evident.</p>
<p>3. a highway authority should not act irrationality.</p>	<p>On this third principle, where a highway authority has made Balanced Decisions, it would be difficult to claim that it had acted irrationally.</p>

There have been very few successful claims against local authorities on the basis of design. And it seems likely that it would take an exceptional degree of negligence to trap a reasonable user into danger.

5.6.1 Watching for defensive design

Look out for “appeals to fear”

- if we did this we could be sued
- we could be liable for corporate manslaughter

The questions to ask are

1. Under what circumstances could the council be successfully sued, and how likely would that be? – What would be the basis in law for the claimant mounting an action
2. Under what circumstances would the council become liable for corporate manslaughter
3. Are we making a Balanced Decision that reflects the interests of society and reflects national and local policy, or one that is more about guarding some possible risk of litigation?

(a) Legal opinion

There are instances where decision makers have received legal advice on the lines of:

In the event of an accident occurring the council could be sued, and might become liable for damages.

If a fatality occurred an action of corporate manslaughter could be brought.

This is a type of generic legal advice is a statement of the obvious. It is essentially saying that there is a legal system which enables one party to bring a legal action against another. It gives the decision maker no useful information on which to make a balanced decision, and under some circumstances may be again be an appeal to fear, where the person giving the advice is attempting to sway a decision, or trying to avoid committing themselves and taking responsibility for advice given.

Highway authorities should ensure their legal advisers give measured advice that is relevant to the circumstances at hand, and is backed by evidence. Mindful that a court will judge each case on its own merits:

- Whether there are circumstances in which a local authority could become liable.
- The likelihood of winning or losing a case and the likely extent of that liability.
- The circumstances in which a local authority might face an action of corporate manslaughter, and the likelihood of success.

Legal advice made available to councils will often be accessible on the web. Legal advisers should ensure they are up to date with current precedents and legislation. It is understandable that errors will occur from time to time, and it is important that legal advice should be challenged and justified to ensure that errors are identified and corrected.

The law should not be regarded by design professionals as a black art, that is arbitrary and inconsistent. It is important that designers feel that they know where they stand.

5.6.2 On the role of public authorities and the public good

There are precedents that support the role of public authorities in pursuing the public good:

"the [Housing] Act [1985] is a scheme of social welfare, intended to confer benefits at the public expense on grounds of public policy. Public money is spent on housing the homeless not merely for the private benefit of people who find themselves homeless but on grounds of general public interest: because, for example, proper housing means that people will be less likely to suffer illness, turn to crime or require the attention of other social services. The expenditure interacts with expenditure on other public services such as education, the National Health Service and even the police. It is not simply a private matter between the claimant and the housing authority. Accordingly, the fact that Parliament has provided for the expenditure of public money on benefits in kind such as housing the homeless does not necessarily mean that it intended cash payments to be made by way of damages to persons who, in breach of the housing authority's statutory duty, have unfortunately not received the benefits which they should have done."

Lord Hoffman, in *O'Rourke v Camden London Borough Council* [1998] AC 188

This should reinforce in the minds of highway authorities and designers the importance of providing a service that provides safe movement, but also recognises the profound role highways and the public realm have in making normal life possible in its full breadth and diversity: of exercise and public health; of human interaction and social inclusion; of efficient communication and of the support of economies and employment. It also acts as a warning against focusing too narrowly on one issue to the exclusion of others.

Finally there are the provisions of the Compensation Act, 2006:

S1. A court considering a claim in negligence or breach of statutory duty may, in determining whether the defendant should have taken particular steps to meet a standard of care (whether by taking precautions against a risk or otherwise), have regard to whether a requirement to take those steps might-

- (a) prevent a desirable activity from being undertaken at all, to a particular extent or in a particular way, or
- (b) discourage persons from undertaking functions in connection with a desirable activity.

This is Parliamentary backing for those who would wish to take an approach where risks are balanced with "desirable activity". Highway authorities should be able to make a strong

case that “desirable activity” includes the design and creation of highways and the public realm that follow the broader policy set by Government, local authorities and the vision for the continuing improvement of social, economic and environmental wellbeing.