

Briefing

Civilised streets

There has been an important shift in thinking in recent years about urban street design. Where the car was king, now – according to the government’s *Manual for streets* at least – people must come first. In some places, we are seeing bold changes to street design, with the emergence of shared spaces which remove physical barriers and force drivers to consider pedestrians. But do these changes create safer, more civilised streets – or scarier streets? Do they help or hinder children, or people with impairments? We all want streets to work better for everyone – so does that make compromise inevitable? This briefing sets out the debate. It’s designed to prompt further discussion among design professionals and lobby groups in our search for civilised streets.



Introduction

A fundamental shift is under way in the way that streets are thought about and designed. For the last 60 years, most streets have been designed with the needs of drivers and motor traffic put first. According to this way of thinking, a 'good' street is one that helps make driving easier and vehicle journey times shorter. The needs of people who want to use streets in other ways – for instance for walking, shopping, cycling, pushing prams, using wheelchairs, playing, or sitting and watching the world go by – have been given relatively little consideration.

Now, however, this is changing. In countries all over the world, policymakers recognise that this traffic-centred conception of streets has led to the creation of dysfunctional places. The social and economic value of the pre-20th century role of streets, as places of community interaction, shared by all members of society – as well as conduits for traffic – is being rediscovered. New ways of designing streets are being tried out; new terms such as 'shared space' are becoming popular.

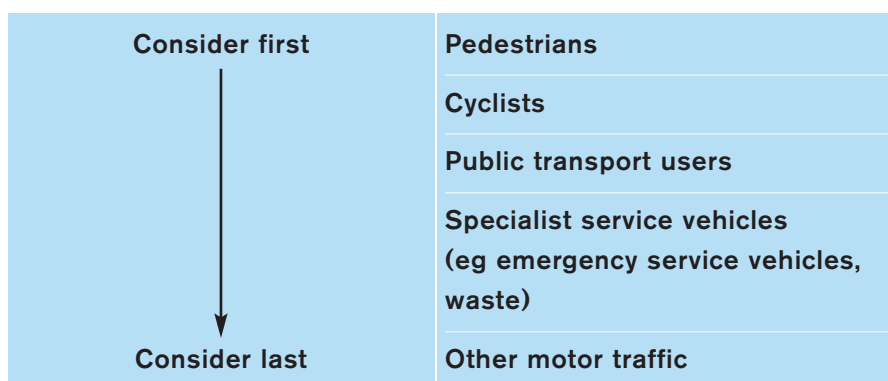
This change is generating debates about the nature of safety and acceptable risk. How should we design and manage streets to ensure that they are safe for all? Some of the latest design changes are controversial, with particular concern from some¹ about the effect that certain designs have on blind and partially sighted people. Many believe that better, more human spaces can happen only if spaces are shared. How well such shared spaces work will depend on how they are designed and implemented in practice. But the question still remains: is it actually possible to design a street that meets everyone's needs?

In England and Wales, these discussions have been given a new impetus by the publication in March 2007 of the *Manual for streets*², the government's updated guidelines for the design of residential streets. Although created for residential streets, the *Manual for streets* gives authority to this new philosophy of emphasising the value of streets as places and provides valuable practical advice. The manual represents the shift in emphasis from car to pedestrian. Disability legislation goes further, requiring that the needs of disabled people should be considered before any other road user.

This briefing is about the sort of streets that are – or are intended to be – used for a range of different purposes, such as walking, driving and shopping. It is not about motorways or trunk roads. It is about why, and how, we should be creating streets that are civilised – spaces that are designed and managed to ensure that everyone can get from A to B easily and enjoy using them and being in them. The fact remains that most of our streets are not civilised, enjoyable places to be. They are mainly noisy, polluted, hazardous and unpleasant – with serious social and environmental problems the result.

The ideas in this briefing have emerged as the result of extensive discussions and focus groups involving a wide range of people involved in thinking about the way streets are used and designed.³ Its aim is to clarify the debate; to explore the advantages, disadvantages and wider implications of new and different approaches to designing streets; and to set out CABE's views on these contentious subjects. It should be of use to policymakers and to all involved in the design or management of streets.

People first – the new hierarchy on street design



‘How should we design and manage streets to ensure that they are safe for all?’

Manual for streets, p28, table 3.2

Streets as places: new design approaches

In the middle of the 20th century, as motor vehicles became common, two ideas came to dominate thinking about the design of streets. The first was that their most important role was to facilitate vehicle journeys. The second was that mixing traffic and pedestrians was inherently dangerous and that ideally pedestrians should be kept completely separate from traffic⁴. The combination of these two ideas led to the widespread introduction of ring roads that cut through the historic street patterns in our towns; pedestrian underpasses; pedestrianised streets in town centres; and metal barriers along the edges of pavements to prevent people crossing roads when and where they want to.

Designing streets primarily for traffic movement, rather than as places in their own right, has reduced the richness and variety of public space and its uses. As the shortcomings of this approach have become apparent, thinking has shifted to focus on ways that design can

facilitate the many potential functions of the street.

One approach to street design that aims to rebalance the place and movement functions of streets is known as 'shared space'. Streets that are designed as shared spaces usually have far fewer street signs, road markings, or edge-of-pavement barriers. Pedestrians are given more space and freedom, such as the freedom to cross where they choose and are able to. The theory behind shared space is that drivers become more hesitant – and so drive more slowly – when there is a high chance of people crossing in front of them and it is generally less clear who has right of way. Users of the space, whether in vehicles or not, have to negotiate its use by an increased awareness of other users and their possible intentions.

One design strategy for achieving this rebalance between people and cars is to create 'shared surfaces'. As the phrase implies, a shared surface is one that is used by everyone: there is no physical distinction, such as a kerb or change of level, to keep traffic

in one place and the other users in another. 'Homezones', which have been created in some residential streets, often feature such shared surfaces. In these homezones, children can play – or residents sit outside their homes – on the same surface that cars use for driving or parking. The design of the space makes it clear that it can be used this way, rather than extensive signage.

Shared surfaces, designed as part of a shared space, remove the presumption that the car driver has the right of way. They are designed to influence how people understand and use them. This approach can be effective where vehicle flows and speeds are low. The extent to which the benefits of shared space can be delivered without shared surfaces, and the gradations between complete segregation of traffic and other users and complete sharing, remain to be fully explored. More research needs to be done into their impact, particularly into how applicable they are to busier spaces.

'Streets that are designed as shared spaces usually have far fewer street signs, road markings, or edge-of-pavement barriers'



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What is a 'safe' street?

Most people in England have grown up using streets that have been designed to separate motor traffic and other users. New forms of street design, such as shared space and shared surfaces, inevitably raise concerns about safety. However, road safety is not quite as straightforward as it seems.

There are two schools of thought: one approach is to focus on reducing casualties; the other approach is to focus on reducing danger. Both schools of thought want 'safer' streets, but their different ways of thinking about safety lead to very different conclusions about how streets should be designed.

The proponents of casualty reduction measure absolute numbers of casualties – ie deaths and casualties. They argue that any casualty is unacceptable and consider the UK to be a success story because it has one of the lowest rates of road death and injury per head of population in the world.

The danger reduction approach, alternatively, moves away from simply measuring casualties. It argues that improved design will force people to take each other and the potential dangers of a situation into account when moving through it in so far as they are able. Those who favour this approach argue that measuring casualties is absurd if no account is taken of the activity in the street. They point out that if the only factor you are concerned about is the number of casualties, then the 'safest' street would be one that is never used (if no-one used it, it would have no casualties). Advocates of the danger reduction approach also argue that it is possible to make roads appear to be safer by discouraging vulnerable users – and point out that, although

casualties are lower in the UK than elsewhere, so are levels of walking and cycling.

CABE favours the danger reduction approach. We think that streets that have no casualties simply because people have deserted them are actually failures in terms of their social function. We think it is vital that streets are designed and maintained in a way that attracts people and we support street design that encourages users to consider others. We know that this view does raise other questions. For instance, if safety is not paramount, but should be balanced against other considerations, how much risk is it acceptable to impose on the public? And where should safety be ranked in assessing design objectives?

Is your shared space my scary space?

In CABE's view, streets that are designed to give all users more freedom in the way they use them are more civilised. They also, quite intentionally, remove the presumption that drivers have right of way among users because of the unpredictability that this creates. Drivers, for instance, tend to drive more slowly because of the richer social context and the possibility that someone might step out in front of them.

The level of uncertainty that each user experiences depends on various factors. Some users of public spaces – such as people with visual impairments, people with learning difficulties, children and carers – will experience more uncertainty than others. This may be because the street is not designed for these users. But some of the designs that help make streets more civilised – including some shared space designs – can, if

poorly realised, cause such people a greater level of uncertainty than others, and may even cause them to fear for their safety. If this happens, they may decide not to use the street at all. This would mean that that, in effect, some people are excluded from the street.

In part, the high level of uncertainty experienced by some users may be caused by unfamiliarity with shared space designs. In 2007, the Disabled People's Transport Advisory Committee (DPTAC) reported on blind and partially sighted people's mobility in home zones. Among the findings, it identified the benefits of working with users to help them better understand and use streets.⁵ CABE agrees that such work is important. It is also possible that the widespread introduction of shared spaces may require changes to the way we do things, such as the way we teach children road safety. However, it should be recognised that, even with these sorts of changes, the potential for some people to be deterred from using streets that have been designed to be more civilised may remain. The real possibility of excluding some users cannot be ignored by practitioners when discussing the strategic role of particular streets, the way they are designed and managed, and ways of assessing their success.

Research by Guide Dogs⁶ has examined the difficulties experienced by blind and partially sighted people and people with physical disabilities in independently navigating shared space street designs. It explored how to delineate 'safe space' if a traditional kerb was not used and more recently investigated⁷ a range of potential delineators used or proposed in UK shared space schemes. The research found that none of the current designs, in the forms tested, met the needs of both blind and partially sighted people

and people with mobility impairments. However, two delineators warranted further research.

Good, thoughtful design will overcome many of these problems: designers are trained to find practical solutions to complex problems. However, even with good design and adequate resources, it will often be the case that what is welcomed by one set of public space users will be disliked, or avoided, by others. For those designing or commissioning streets in most public places, a judgement will need to be made that balances the needs of all users, while following the legal requirement to consider the needs of disabled people first of all. How a street is ultimately designed will of course also depend on the local physical context.

CABE is committed to inclusive design and supports the principle that streets should be accessible, and used by, as wide a range of people as possible. This is fundamental to the creation of civilised streets. We believe that, if principles of inclusive design⁹ are considered from the outset of a project, and written into the design brief, then shared spaces can work for all users, including visually impaired people. Good shared space, for instance, will use design clues that still help the visually impaired. And 'safe zones', which are demarcated areas located near building lines, can help visually impaired people navigate shared spaces without fear.

Designing inclusively is still a relatively new idea, and although many say that it is a principle they support, in practice it is very often overlooked. CABE believes that designing and managing spaces to be inclusive is both morally and legally⁹ the right thing to do, and should be considered throughout a project.

A commitment to inclusive design can raise concerns about possible extra costs. Genuinely inclusive design does not necessarily have to cost more in the long term – in fact it may cost less if considered from the start because it reduces the need for remedial work later on – but it may add to the initial cost. This should be taken into consideration when planning and budgeting for street design.

Safety and quality too

At the moment, the success of most streets is assessed in just one way, and that is by a safety audit. A safety audit, involving risk assessment, aims to identify potential road safety problems to eliminate or mitigate them, and minimise accident numbers and severity. Sometimes the contribution that a street makes to minimising journey times for motor traffic is also measured. Other factors are usually ignored, such as the total number of users, the range and type of users, the way they use and enjoy the space, and economic indicators such as customer 'footfall' in nearby shops and so on.

CABE has argued¹⁰ that over-sensitivity to risk can result in bland and standardised places, designed for the exception or the worst-case scenario, rather than the norm. The research highlights the fact that a safe place can still be interesting. *The Manual for streets* recognises this and suggests that a safety audit be considered as part of a wider *quality* audit, where wider objectives for streets are set and proposals evaluated against how they deliver on these.

CABE supports the quality audit approach and recommends a strategic approach to the design and management of public spaces, underpinned by robust research and evaluation. Principles and objectives for streets should be set out in a

public realm framework, design guide or masterplan and supported by policy, as described in *Manual for streets*. Objectives articulating the full range of uses of the street will vary from place to place, but will usually include:

- enabling local children (and others) to walk and cycle unaccompanied from all parts of a development to a school, local park or open space
- promoting and enhancing the vitality and viability of a local retail centre
- ensuring that a development will be served by public transport that is viable in the long term
- keeping traffic speeds at 20mph or less in all streets in a development.¹¹

This process allows for balanced decisions to be made. Engagement with a range of street users helps to ensure that their needs are understood are represented in the objectives for a street and satisfied by its design and management. DPTAC research into homezones and CABE's *Living with risk*¹² identify the importance of engaging users in the process, to establish a positive dialogue and to influence design decisions.

Achieving all of this will depend on cross-departmental working within the local authority – something that is also recommended by the *Manual for streets*. It is essential that the objectives for a street are shared, and incorporated into the relevant policy and practice of all concerned. This should ensure that when streets do succeed, all those involved are able to take the credit.

'Genuinely inclusive design does not necessarily have to cost more in the long term'

The benefits of civilising our streets

This debate is not an abstract one about design. Civilised streets are places where the needs of people are prioritised over cars. Streets designed to be civilised can deliver many benefits for communities. These benefits include some of the objectives that local authorities are now trying to achieve.¹³ For instance:

- stronger communities – by offering places for social interaction
- safer communities – by addressing perceptions of how people treat one another
- health and wellbeing – by encouraging play and active travel in daily routine
- stronger economy – by increasing footfall and time spent in the street/retail environment
- environmental sustainability – by encouraging cycling and walking.

Manual for streets, Planning policy statement 1 (PPG1)¹⁴ and Planning policy guidance 13 (PPG13)¹⁵ provide further advice on how these objectives can be achieved.

Because improved street design can help meet these aims, local government money – say through local area agreements – can be harnessed to help meet the cost.

CABE research¹⁶ finds that the economic benefits of creating better streets can be significant. Civilised streets can enhance the image of an area, can lead to increased footfall in local shops, boosting existing businesses, and can help attract new businesses to an area. With the government now taking a more flexible approach to local public finance, encouraging business improvement districts and other innovative ways of raising money at local level, the potential for finding funding to pay for transformations of the public realm is increasing.

Conclusion

Most of our streets remain badly designed. The car still dominates. Improving streets throughout our towns and cities, to ensure that all users benefit and that better places result, will take considerable time and effort. It will require new ways of working within local authorities. It will usually be a complex process, involving a balancing of priorities between street users. However, the benefits of getting it right can be very great, both economically and socially. If we succeed, all of our towns and cities will have streets that are safe, practical and enjoyable for everyone. To see civilised streets as the norm rather than the exception has to be our ultimate goal.



‘If we succeed, all of our towns and cities will have streets that are safe, practical and enjoyable for everyone’

Glossary

Civilised streets

Streets that successfully manage place and movement functions so that all people can enjoy using them and being in them.

Homezones

Residential streets in which the road space is shared between drivers of motor vehicles and other road users, with the wider needs of residents (including people who walk and cycle, and children) in mind. The aim is to use design and layout to change the way that streets are used and to improve the quality of life in residential streets by making them places for people, not just for traffic.

Inclusive design

Based on the social model of disability – that people are disabled or disadvantaged by society's failure to recognise and meet their needs, not an inherent lack of capability – inclusive design aims to remove the barriers that create undue effort and separation. It enables physical, intellectual and emotional access by everyone to buildings, spaces or services. Inclusive design places people at the heart of the design process, acknowledges diversity and difference, offers a choice where a single design solution cannot accommodate all users, provides for flexibility in use – and provides buildings and environments that are convenient and enjoyable to use for everyone.

Shared space

Space in which different street users have equal entitlement and priority to the space. Shared space strives to combine rather than separate the functions of streets. It seeks to improve the living environment for people, without needing to restrict or banish motorised traffic, by reducing traffic speeds through design.

A shared space that does not feature shared surfaces (see below) may retain elements such as kerbs. A well-designed shared space will remove unnecessary clutter, while at the same time retaining navigational clues for visually impaired people. This could involve demarcating 'safe zones' normally near the building line, where blind and partially sighted people and other vulnerable pedestrians know it is safe to walk.

Shared surface

A design feature which can be used in shared spaces. A shared surface features no demarcation of users by level. It may be uniform or differentiated by texture, colour or the placement of street furniture. In a street with a shared surface, demarcation is absent and pedestrians and vehicles share the same surface. There are no kerbs. Shared surface schemes aim to encourage low vehicle speeds, create an environment in which pedestrians can walk or stop and chat without feeling intimidated by motor traffic, make it easier for people to move around and promote social interaction.¹⁷

Simplified street

A street in which signing, road markings for motor traffic and street furniture is consciously limited by designers. Simplified streets feature deliberately ambiguous environments to control driver behaviour and restrain speed by requiring users to interpret the environment, decide on the appropriate behaviour, and negotiate priority.¹⁸

Acknowledgement

This briefing is based on original material by Stuart Reid formerly of Transport Research Laboratories, one of the chief contributors to the *Manual for Streets*, and incorporates discussions on access and equality through CABI's inclusive environments group. Julia Thrift was the editor.

Footnotes

1 In 2007, a joint statement was issued by more than 20 disability organisations expressing concern about shared surfaces. These groups represented blind and partially sighted people, people with learning difficulties and deaf and hard of hearing people.

2 *Manual for streets*, Department for Transport 2007. Available at www.dft.gov.uk/pgr/sustainable/manforstreets

3 Although the views expressed in this paper are CABI's, they have been informed by consultation meetings attended by a wide range of people and organisations including: Communities and Local Government; Department for Transport; Guide Dogs; English Heritage; Inclusive Environments Group; Living Streets; London Development Agency; Oxford Brookes; Sustrans; Transport for London; University College London; and David Bonnett Associates. We also surveyed professionals. Respondents included members of the Urban Design Group, academics, local government, lobby groups and independent consultants.

4 See, for example, *Traffic in towns: a study of the long-term problems of traffic in urban areas*. HMSO, 1963.

5 *Designing for disabled people in home zones*, JMU Access Partnership, 2007. Available from www.tinyurl.com/32zrpo

6 *Shared space – safe space*, Ramboll Nyvig for Guide Dogs, 2007.

7 *Testing proposed delineators to demarcate pedestrian paths in a shared space environment: report of design trials conducted at University of London*, Guide Dogs, 2008.

8 *The principles of inclusive design (they include you)*, CABI, 2006. Available at www.cabi.org.uk/publications

9 The Disability and Discrimination Act 2005 introduced the disability equality duty. This came into effect in December 2006 and it obliges those who design, manage and maintain buildings and public spaces to ensure that disabled people play a full part in benefiting from, and shaping, an inclusive built environment.

10 *Living with risk* CABI 2007. Available from www.cabi.org.uk/publications

11 *Manual for streets*, Department for Transport 2007.

12 See *Living with risk*, above.

13 *The new performance framework for local authorities and local authority partnerships*.

14 *Planning policy statement 1: delivering sustainable development*. Available from www.communities.gov.uk/planningandbuilding

15 *Planning policy guidance 13: transport*. Available from www.communities.gov.uk/planningandbuilding

16 *Paved with gold: the real value of street design*, CABI 2007. Available from www.cabi.org.uk/publications

17 *Manual for streets*, section 7.2.8.

18 In a residential context the simplified streets approach has been validated in the UK provided that traffic speeds can be kept sufficiently low. In British homezones studied as part of the Department for Transport's homezones pilot project, the mean vehicle speed, averaged across the seven home zones, was 14.5 mph after implementation and the 85th percentile was 18.4 mph. *Pilot home zone scheme: summary evaluation of the schemes*, 2006.

This briefing is designed to stimulate the debate on new street design. It looks at different design approaches and at notions of street safety. It explores recent discussions on shared space and explains the many benefits of the recent change in thinking away from the car and towards the pedestrian. And it presents a common agenda for the future that is about removing the dominance of the car – creating civilised streets that work for all.

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