

Making spaces accessible for everybody

More thought needs to be given to the needs of disabled members of society when streets and other public places are being designed, says Mark Steventon

An accessible built environment is a core element of an inclusive society because it provides personal autonomy and the means to pursue an active social and economic life, suggests Mark Steventon, a senior road safety consultant at accessibility auditing company TMS Consultancy. Street design should be inclusive, he says, providing a facility for all people, regardless of age or ability.

UK highway authorities are required by the Disability Discrimination Acts to promote equality and to ensure that disabled people are able to contribute to and benefit from a fully inclusive built environment, Steventon points out. Highway authorities should be proactive in ensuring that disabled people are treated fairly, including taking reasonable steps to rectify pre-existing examples of non-compliance, the Acts say, and authorities that fail to observe these requirements could be at risk of civil litigation.

So where are the problem areas? "New streets and public places can be designed with accessibility issues in mind," Steventon says. "It is pre-existing sites that present particular challenges to authorities. Historically, the needs of the disabled have been a low priority and many of our established towns and city centres contain labyrinths of ancient narrow

streets, with cobbled surfaces, steep gradients and uneven steps. Designers and town planners need to be innovative in order to provide universal access to these sites, whilst still preserving their authenticity and aesthetic value."

People with mobility difficulties, such as the elderly and wheelchair users, are often foremost in a designer's mind when considering accessibility issues, the consultant goes on to say. "However, it is important not to overlook the needs of people with sensory or cognitive impairment," he adds. "Design features which make it easier for people to work out where they are and where they are going are especially helpful to disabled people and, for some, make it possible to contemplate setting off on a journey in the first place."

Whereas good design can eliminate or minimise access problems for disabled people, poor design can of course often make things worse. Homogeneous colour schemes across level changes, for example, can result in trip hazards for sight-impaired pedestrians, Steventon points out. "Block-paved surfaces, whilst they can be very attractive, can also become slippery when wet, presenting a particular hazard to those who might already



Even a modest kerb upstand can present a barrier to a wheelchair user, TMS Consultancy's Mark Steventon points out

be unsteady on their feet," he says.

Sharing space thoughts

'Shared space' is an especially controversial design philosophy with polarised views on either side, Steventon acknowledges. "The integration of motorised and pedestrian traffic, to reduce the dominance of vehicles and make streets more 'people-friendly', seems to work well in many European towns and villages," he concedes. "But where it has been introduced in places like Ashford, Brighton and Kensington, however, it has received a mixed reception, including some vehement opposition and even legal challenges, especially from organisations representing blind or partially sighted people. Indeed, some authorities, like Leeds City Council, have decided to limit their use of shared surfaces until safety and accessibility issues have been properly explored."

To be successful, shared surfaces rely on low speeds and negotiation of priority through eye contact, Steventon explains. "People with cognitive difficulties are clearly at a disadvantage in such an environment. Conventional raised kerbs are typically absent from such spaces, which can pose problems for blind or partially-sighted people, who often rely on kerbs and other physical cues as navigational aids. Disabled people can find these environments difficult to interpret: they may be intimidated by them, or just less confident and therefore unwilling to venture into such spaces alone, creating an obstacle to



The alignment of the tactile paving should guide a blind person safely across to the other side: in this case, however, it misdirects a pedestrian towards traffic on the main road

their independent mobility.”

Although initial fears of increased accidents appear not to have been realised, Steventon admits, he adds that it could be argued that pioneering shared space schemes such as the one in Ashford have yet to be fully tested in truly mixed-use conditions. “It is clear, however that, in order for such schemes to fully inclusive, consultation with disabled user groups at an early stage is essential.”

Accessibility auditing is an important element of the design process, he points out. “The purpose of the audit is to establish how well a particular environment performs in terms of access and ease of use by a wide range of potential users, including people with disabilities, and to recommend improvements, where necessary,” Steventon says. “The scheme can be audited at an early stage of the design to ensure that accessibility issues have been considered, and also on completion of the scheme, to check that the implementation is consistent with current guidelines and best practice.”

Deja vu all over again

TMS Consultancy’s experience of accessibility auditing has shown that the same issues are encountered by auditors with monotonous regularity, particularly in the course of audits of established street systems.

“One of the most frequent hazards identified by auditors is the absence of flush dropped kerbs,” Steventon says. “A level transition from footway to carriageway at crossing points is essential for the majority of wheelchair users and will assist people pushing prams or buggies.”

“It is essential that flush kerbs and other specific hazards should have the appropriate



A new lighting column and pedestrian barrier combine to make the footway impassible

tactile warning surface to alert visually impaired pedestrians,” he adds. “Most designers are now coming to terms with the correct use of tactile paving but this has clearly not always been the case and accessibility auditors still identify many examples of incorrect and misleading tactile surfaces at crossings, steps, shared footway/cycle-tracks, and so on.”

Narrow footways can also be a problem to mobility and sight impaired pedestrians, Steventon adds, but this can be made much worse by the presence of additional

obstructions, such as lighting columns, litter bins and other street furniture. Wherever possible, therefore, the consultant suggests that unnecessary obstructions should be removed altogether from the pedestrian route or, at least, guarded or conspicuously marked.

Steep gradients and abrupt level changes are also often encountered, especially in older towns. “Sometimes, little can be done to overcome the natural topography but often some measures are possible to improve accessibility for disabled people,” Steventon says. “For example, a footpath could be re-graded or an alternative route identified. Tactile warning surfaces can be provided at steps.”

As well as identifying hazards and obstructions, the competent auditor should also look for opportunities to improve facilities for disabled people, TMS says. For example, appropriate seating should be provided at frequent intervals along pedestrian routes, picnic tables should be suitable for wheelchair users, disabled car parking spaces should be provided in convenient locations.

“The list of potential accessibility issues is endless and the most effective auditors are those who are imaginative and open-minded, as well as fully conversant with the latest research and guidelines,” Steventon concludes. “Much of the skill of a good accessibility auditor is acquired from experience and common sense. Nevertheless, auditors, as well as designers and engineers, benefit from professional training, which provides the necessary background information and technical knowledge to recognise potential accessibility issues and identify appropriate solutions.”



A maze of redundant bollards create an obstacle course near to a crossing