BACKGROUND

Access management in the U.K., as in many other countries, has been very closely tied with road safety. The latter has been a concern since the introduction of motorized vehicles, and became paramount with mass motorization from the 1950s onwards and the corresponding surge in traffic accidents (1965 was the year with the highest peace-time road fatalities). Of particular importance was the protection of pedestrians, who, being more vulnerable, faced greater risk of suffering injury or death. This was pursued by means of their segregation from vehicular traffic, which, dating back at least to the work of Le Corbusier in the 1930s, relied upon the design and implementation of structures including pedestrian subways and bridges, pedestrianized areas, as well as guardrails and walls separating pedestrian pathways from the road, which in turn was reserved for vehicles.

With the car gaining popularity and becoming the prevailing travel mode, and with pedestrians being safely kept away, access management in the U.K. was for many years considered only from the perspective of motorized traffic. The resulting “parallel universes” of vehicles and pedestrians had very few contact points, and hence access management challenges were only found with respect to ensuring unobstructed traffic flows to bring vehicles to these contact points. The concept is set out most lucidly in Buchanan’s Traffic in Towns report (25) of 1963, which served as a street design manual in the U.K. for many decades (Figure 44).

In recent years, however, there has been a trend away from traffic segregation, driven by developments in architecture and urban planning. Segregation has been deemed by some detrimental for urban environments due to its perception as resulting in “the domination of
vehicular traffic and associated noise and air pollution alongside street clutter and ugly surroundings” (26). Instead, road design has shifted gradually towards the concept of “shared space” as a means of creating a better public realm, mainly by asserting the function of streets as places rather than arteries and designing more to a scale aimed at easier pedestrian movement and lower vehicle speeds. This has introduced a new dimension to access management in the U.K., which has shifted from its traditional car-oriented focus and is now based on designing inclusively for all road users and particularly vulnerable ones (pedestrians and cyclists). New highway design guidance by the Department for Transport (DfT) supports this trend, particularly through the recently published two-part Manual for Streets (MfS) (27–29), and the Local Transport Note (LTN) 1/11 Shared Space (29).

Elaborating more on the term shared space, and conversely to popular belief, this is not used to characterize entire streets and places as shared or not shared, particularly given that streetscape design cannot be standardized and needs to be context-sensitive. Instead, shared space is used as an umbrella term to collectively refer to a range of streetscape treatments, aiming at creating a more inclusive public realm, which promotes place-making through effective access management to the surrounding land uses. These may range from the removal of obstructions (e.g., de-cluttering) and the introduction of informal (uncontrolled) pedestrian crossing facilities in a traditional kerbed street layout, through to layouts with a single surface and little or no delineation between pedestrian and vehicle areas (30–34).

While early examples of shared space included mainly home zones in residential areas, in analogy to the Dutch “woonerf” principle, more recent examples are not confined to residential environments and are gradually being introduced at several locations around the country. High-profile schemes have been implemented in London (notably Oxford Circus, Piccadilly Circus, Kensington High Street, and Exhibition Road, Figure 45), but also in other cities (such as Brighton, Bristol, and Ashford). These are also accompanied by numerous smaller-scale schemes involving more basic treatments, such as the removal of guardrails and the introduction of lower speed limits.

**FIGURE 45** Exhibition Road before (*left*) and after (*right*) redevelopment.
LEGAL FRAMEWORK

The level (national, regional, local) at which access management in the U.K. is undertaken depends on the authority managing the road or area in question. The underlying legal framework for controlling or managing access along various roads and areas consists mainly of so-called Traffic Regulation Orders (TROs) under the Road Traffic Regulations Act (RTRA) 1984 (35). TROs are introduced to manage access and traffic at specific locations or as part of larger traffic management programs, and relevant transport authorities are empowered under the RTRA 1984 to issue them so as to implement particular policies and schemes.

ROADWAY FUNCTIONAL CLASSIFICATION AND ACCESS

The traditional classification of roads in the U.K. includes M (motorway), A and B roads at the national level, and minor roads at the local level, which may be further classified into lower categories by the relevant local authority on an ad-hoc basis. Roads are also broadly designated as trunk or nontrunk. The former (also called primary route network) are the responsibility of the Highways Agency in England, Transport Scotland in Scotland, the Department of Economy and Transport in Wales, and Transport for London in the particular case of London; the latter are under the jurisdiction of local authorities (county councils or London boroughs).

It has been recently recognized, however, that the traditional classification is limited as to its consideration of only the function of movement for roads. As such, in the newly published MfS (27–28), a new classification complementing the traditional one has been introduced; this is based on what is termed the context of roads. Namely, a disambiguation between streets and roads is first made, where a street is defined as “a highway with important public realm functions beyond the movement of traffic, which has a sense of place,” whereas a road is defined as “a highway whose main function is to accommodate the movement of motor traffic.” Following that, the context of roads and streets is defined according to the relative importance of their movement and place functions. Road categories (or context types) are defined in Figure 46.

It is pointed out, however, that standard classifications are to be used with caution, as they fail to take account of the changing context of streets and roads.

ACCESS CONTROL SCHEMES

A number of access control schemes have been implemented in the U.K. Examples include many small-scale schemes, such as prohibiting certain vehicle types in certain locations by means of explicit (e.g., dedicated barriers, bollards, road width reductions) or implicit physical measures (e.g., creation of safe spaces through seating, plants, and other features), as well as by means of operational measures (e.g., traffic signals) measures. There are also some large-scale schemes, such as the London congestion charging scheme, and the London low-emission zone scheme.
Access control schemes are implemented primarily at the local level. Regulations are provided by means of guidance documents by relevant authorities, such as the DfT’s Traffic Advisory Leaflet (TAL) ITS 6/03 Access Control of 2003 (36).

LAND USE REGULATION

U.K. legislation regulates road abutting land uses and development through Sections 247, 248, 249, and 251 of the Town and County Planning Act (TCPA) 1990 (37). A zoning scheme is in place, such that the provision of access to different land uses is underwritten by relevant rules.

ENFORCEMENT SCHEMES

The regulations of the TROs under the RTRA 1984, and of the relevant sections of the TCPA 1990, provide adequate legal backing to transport authorities to enforce relevant access control and land use schemes.

POLICIES AND STANDARDS

Access management practice in the U.K. is supported by guidelines for highway design from the DfT. For trunk roads and motorways, the respective guidance is the Design Manual for Roads and Bridges (DMRB) of 1992 (38), and more specifically Volume 6 (Road Geometry), which is split in three sections (Links, Junctions, Highway Features). Access management is considered explicitly in Section 3 (Highway Features), where it is covered in a dedicated chapter, and where it is pointed out that accesses pose potential safety hazards, and that their number and frequency should be therefore kept to a minimum.
In the absence of any additional guidance, the DMRB was also used in the design of urban streets for many years, alongside Design Bulletin 32: Residential Roads and Footpaths—Layout Considerations (DB32) of 1992 (39) and its companion guide Places, Streets and Movement of 1998. Nevertheless, this guidance admittedly failed to capture the fact that urban streets differ from trunk roads, in what they additionally have other functions apart from movement. As such, following work commissioned by the DfT, the Department for Communities and Local Government, and the Commission for Architecture and the Built Environment, the MfS was published in 2007 (27). Its purpose was to provide guidance for the design and redevelopment of primarily residential streets, in order to make it more people-oriented. MfS was complemented in 2010 by MfS 2: Wider Application of the Principles (28), to bridge the gap between MfS and the DMRB, extending the principles of MfS to busier nonresidential nontrunk roads with an important public realm function. The relationship between MfS, MfS 2, and the DMRB is demonstrated in Figure 47.

The management of accesses is explicitly considered in a relevant chapter of MfS, and it is stated that, in contrast to the traditional approach of minimizing the number of junctions, crossings and accesses to accommodate more traffic, these should be now seen as “opportunities for place-making,” and should be encouraged. In particular, properties are encouraged to directly front on the street, as this links the street to its surroundings and contributes to the quality of the public realm.

In addition to the three main manuals, the DfT has published a number of further guidance documents in the form of LTNs. Of particular importance to access management is LTN 1/11 Shared Space (29), published in 2011, which provides a definition of shared space and extends the MfS principles to the design of shared space schemes.

FIGURE 47 Coverage of MfS, MfS 2, and the DMRB.
MODES ADDRESSED

Access management and control rules are in place for pedestrians and cyclists. These are documented in a number of DfT guideline documents, in addition to MfS and LTN 1/11, namely *Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure* of 2002 (40); TAL 5/05 *Pedestrian Facilities at Signal-Controlled Junctions* of 2005 (41); LTN 3/08 *Mixed Priority Routes: Practitioners’ Guide* of 2008 (42); LTN 2/09 *Pedestrian Guardrailing* of 2009 (43); and more recently LTN 1/12 *Shared Use Routes for Pedestrians and Cyclists* of 2012 (44).

Access management measures for pedestrians and cyclists are aligned with the recent trend of inclusive street design, which caters for the needs of all road users. Examples include the removal of guardrails, the provision of cycle lanes and paths, the implementation of mixed-use routes, and the application of lower speed limits for car traffic. Access to public transport facilities is also addressed, with a range of measures being recommended in multiple sections of the various guidance documents.

PERSPECTIVES

The new U.K. approach for street design, which addresses the issue of access management, has brought about two main changes.

- The first change is that the new approach has marked a shift in thinking. It has converted the issue of access management from an exclusively car traffic matter to an issue affecting all road users, and particularly the vulnerable ones. The new thinking does not assume that travelers reach destinations only by car, and hence does not focus only on how to ensure access for cars, but accounts for the needs of pedestrians and cyclists (e.g., soft modes), but also for the integration of public transport in design.
- The second change that the new approach has brought is the explicit consideration of the place function of roads, in addition to the traditional movement function. The approach now involves designing inclusively and creating better spaces that people would want to spend time at, rather than high-capacity roads to accommodate growing traffic demand.

A dedicated access management guidance document or manual, however, is still missing from the U.K. scene. The development of one in the near future would more comprehensively conceptualize the access management principles, thus offering a valuable tool to transport planning practitioners and authorities.