



This summary of key points in Manual for Streets has been produced by PRIAN, the Public Realm Information and Advice Network: a not for profit organisation supporting individuals, professional bodies and government in improving the public realm. The aim is for the reader to be able to get an impression of what the guidance is about in 60 seconds.

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People involved in street design in the UK are strongly encouraged to buy a copy.

What MfS seeks to stop

- The use of DMRB in residential areas.
- The use of Design Bulletin 32 and Places Streets and Movement: these are withdrawn.
- Residential streets designed on a post-war movement hierarchy – e.g. distributor and access roads.
- Developments that don't link to the surrounding network
- Carbon copy developments. Developments should respond to local context, be distinctive, improve the environment and offer residents a high quality of life.
- Streets designed around service vehicles. Place, pedestrians and cyclists should be upper most.

Background to MfS

Places and streets that have stood the test of time are those where traffic and other activities have been integrated successfully and where buildings, spaces and the needs of people, not just their vehicles shape the area. (Foreword)

MfS focuses on lightly trafficked residential streets, many of MfS key principles may be applicable to high streets (Status).

It challenges some established working practices and standards. Many of the criteria routinely applied in street design are based on questionable or outdated practices. (Preface)

Streets make up the greater part of the public realm. (1.1.2)

Standards and design guidance are not hard and fast rules

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

The Department for Transport does not set design standards – these are set by the relevant highway authority. (1.4.1) The Design Manual for Road and Bridges is not an appropriate design standard for most streets, particularly in lightly trafficked and mixed use streets. (1.4.4)

It is strongly recommended that local authorities review their standards & guidance to embrace the principles of MfS. (1.4.1)

Streets v Roads: a definition

Street: a highway with important public realm functions beyond the movement of traffic. Street should have a sense of place. They are typically lined with buildings and public spaces. Most highways in built-up areas are therefore streets. (1.1.7)

Road: a highway whose main function is to accommodate the movement of motor traffic. (2.2.1)

Thinking tools

Design process: 7 stages

- 1 Policy Review
- 2 Objective setting
- 3 Design
- 4 Quality auditing
- 5 Planning approval
- 6 Implementation
- 7 Monitoring

A collaborative process – people involved from the outset – including highway engineers, and road safety auditors where appropriate.

Agree the objectives

Streets have multiple functions: the most important are place and movement. Other functions include: access, parking, drainage, utilities and street lighting.

The objectives can be set out in the **Design and Access Statement**.

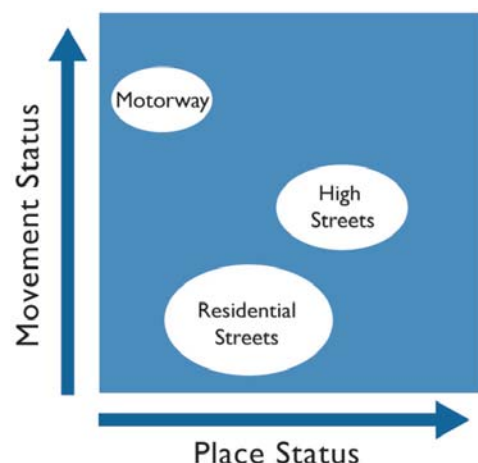
Understand the context

How does the area function in terms of movement and place?

- How and why has the area has developed?
- What makes an area distinctive? Where/what are the key buildings, open spaces, destinations etc?

Design for movement and place


Consideration should be given to the “place” function of streets. (2.1.2) Streets have a social function, and their design should be inclusive. Defining the relative importance of particular streets/roads in terms of place and movement functions should inform subsequent design choices. (2.4.9)



Design for movement

Objectives for movement: user hierarchy

(3.6.8)

	Pedestrians
	Cyclists
	Public transport users
	Specialist service vehicles – eg emergency services, waste etc
	Other motor traffic

Design for disabled persons

There is a duty to comply with the Disability Discrimination Act. *Inclusive Mobility* provides guidance.

Use a design speed of 20mph or below in residential areas.

Increased carriageway width and forward visibility lead to increased speed. Each metre of extra carriageway width adds at least 3 mph to the 85th percentile speed. (See TRL report 661) Examples given below:

Dimensions for 20mph 85 th percentile speed	
Width	Forward visibility
7 metres	8 metres
6 metres	40 metres
5 metres	70 metres

Stopping sight distances (SSD)

	MfS	DMRB	Highway Code
Reaction time	1.5 seconds	2 seconds	0.67 seconds
Deceleration rate / g	0.45g	0.25g	0.25g
/ m/s ²	4.41 m/s ²	2.45 m/s ²	6.57 m/s ²

For roads with an 85th percentile speed of over 60km/h it may be appropriate to use the DMRB values

$$SSD = vt + \frac{v^2}{2a} + 2.4metres$$

a = rate of deceleration

v = initial speed (new streets: design speed; existing streets 85th percentile wet weather speed)

t = reaction time

2.4 metres is the length of the typical bonnet
(NB this is covered in O level maths/GSCE Physics)

Junctions

Keep corner radii tight

Respect desire lines

Consider carrying the footway at grade across junctions.

Visibility splays

X distance 2.4 metres

Y distance – use the stopping sight distance calculated using the MfS values for deceleration rate and reaction time.

Design for place

Objectives of urban design

Character - a place should have its own identity

Continuity and enclosure - public and private spaces should be clearly distinguished

Quality of the public realm - a place should have attractive and successful outdoor areas

Ease of movement - a place should be easy to get to and move through

Legibility - a place should have a clear image and be easy to understand

Adaptability - a place should be able to change easily
From By-Design

Think about using **perimeter blocks** as a basis for residential areas: they use land efficiently and keep the backs of houses and rear gardens apart from public.

Street character types (eg boulevard, mews etc) can be developed out of the **objectives**. They should be locally distinctive, durable and adaptable.

Parking

Don't create car parks or car parking – but places with parked cars in them.

Security

Ensure the design provides over-looking

Waste

Make sure waste storage and collection is provided. Bins should not need to be left on street where they can block the footway.

Signs & Markings

- Keep street design features to a minimum
- Use Signing as a last resort

Case law has clarified that there is no duty to maintain signs and markings, no requirement of the highway authority to “Give warning of obvious dangers” and drivers are “first and foremost responsible for their own safety”. (see 2.6.5)

The design of individual signs must comply with the Traffic Signs Regulations and General Directions. But there is considerable flexibility in deciding whether and how a street should be signed or marked.

Audit

A quality audit is recommended to ensure the scheme has met its **objectives**. Road Safety Audits are not mandatory on residential streets. Where they are used they should aid design and not replace it. There are many other factors. (see 3.7.3)

Designers do not have to comply with the recommendations of a safety audit, although in such cases they would be expected to justify their reasoning in a written report. The Road Safety Audit recommendations can be ranked for risk (see.3.7.8).