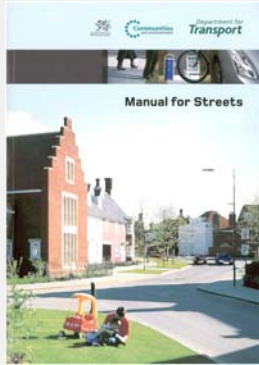


MfS vs DMRB

IHIE & UDG

20th January 2009

Alan Young



Issues to be discussed today

- Definitions in MfS
- The story continues
- Where does MfS apply?
- Risk Assessments
- SSD and the research behind it
- Case study
- Appeal decisions

Scope

Definition of a street:

*'A street is defined as a highway that has **important functions beyond** the movement of traffic.'*

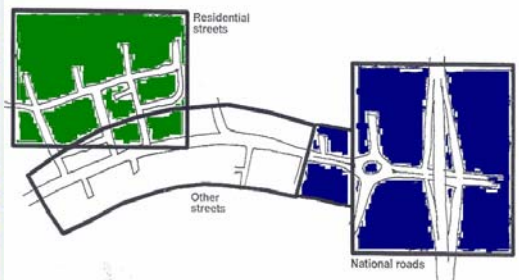
'Therefore most highways in built up areas can be considered as streets.'

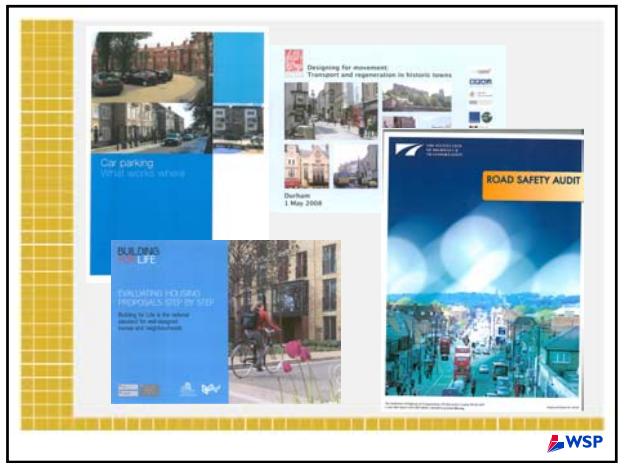
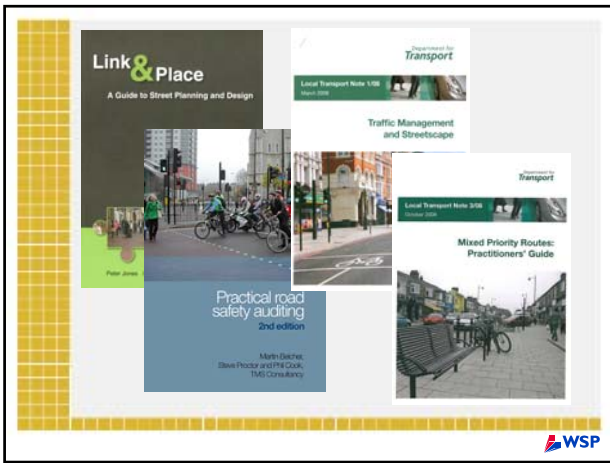
(Reference MfS paragraph 1.1.7)

Scope

- *'MfS focuses on lightly-trafficked residential streets, but many of its key principles may be applicable to other types of street, for example high streets and lightly-trafficked lanes in rural areas.'* (ref MfS Status and Application)
- *'DMRB is not an appropriate design standard for most streets.'* (ref MfS 1.4.4)

Scope





Where does MfS apply?

- **'MfS focuses on lightly-trafficked residential streets, but many of its key principles may be applicable to other types of streets.'** (ref MfS Status and Application)
- Any street where traffic flows are less than 200vph
- Junctions with the wider highway network
- Bus routes
- Local Distributor Roads / Strategic Network
- High Streets
- Mixed use streets
- 20mph speed limits

A typical Road Safety Auditor

IHT ROAD SAFETY AUDIT 2008 (page 049)

		Frequency of collision			
		more than one per year	one every 1-4 years	one every 5-10 years	less than one per 10 years
Severity	Fatal	Very high	High	High	Medium
	Serious	High	High	Medium	Medium
	Slight	High	Medium	Medium	Low
	Damage	Medium	Medium	Low	Low

Risk Assessments

Key considerations

"Safety Audits are about analysing the risks for different types of road users, but for a residential street this could be done by a more simple safe assessment."

John Smart, IHT Deputy Chief Executive

Examples

- Length of cul-de-sacs
- Access for pantechinons and refuge vehicles
- Frontage access
- Visibility splays



Stopping Sight Distance

Application limited by traffic flow - 2000vpd

Table 4.1 TRL661
The Manual for Streets:
Evidence and Research

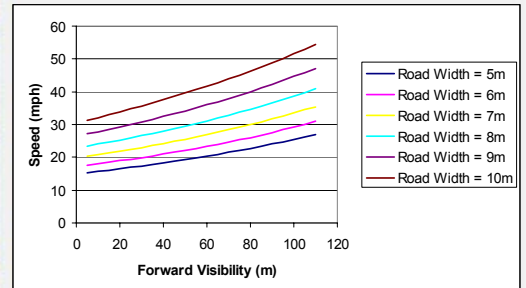
WSP

Table 4.1 Average flows and speeds

Site	Average daily flow	Average speed (mph)
Lower Easley	70.4	11.3
Guildford	481.9	18.2
New Town, Reading	242.6	14.4
Chichester	1372.8	19.4
Eastleigh	427.7	17.3
Belgravia	2029.5	25.7
Tower Hamlets	627.0	19.1
Ipswich	121.6	19.0
Lavenham	221.4	11.7
Newhall	482.9	15.6
Windley Tye	294.9	16.9
Beaulieu	83.8	10.2
Bloxham	112.3	12.5
Portsmouth	1161.1	15.8
Leicester	528.9	23.5
Manchester	1060.6	19.3
Lichfield	362.6	16.7
Glasgow	1575.4	10.3

Forward Visibility

(85th percentile speeds)



Stopping Sight Distance

- Research used to review SSDs is based on driver perception reaction time and rate of deceleration.
- Volume of traffic does not feature in the calculation for SSD and neither does the type of road, (MfS 7.5.3).

$$SSD = vt + v^2/2d$$

- Research behind driver perception/reaction time is found in TRL Report TRL332 (MfS para 7.5.6), which states that the research is;

'... based on a road of trunk road standard through undulating country, having a roundabout junction midway along its length and several side roads joining at various points...and by providing some sections with a simulated urban environment.' (TRL332 3.3.1)

Case Study



Case Study



Case Study Issues

- 99 houses
- Junction on Strategic Highway Network
- Lot of local amenities
- 1800vph
- Low side street flows, no capacity problem
- Visibility issues to north and south
- Narrow Victorian terraces, one-way + parking
- Safety, impact on vulnerable road users

MfS – Public Inquiries

Appeal

- Appeal decision – APP/V4250/A/08/2080757
- Hilton Park, Chadwick St, Leigh 99 dwellings, Nov 08

Issues:

- Access to the Strategic Route Network
- High Street
- Visibility could not meet adopted standards

Inspector:

■ 'Despite the volume of traffic carried by Leigh Road, to my mind the combination of land uses and their relationship with the highway results in this location being a place that is people based',

- It is therefore my view that it is the guidance within MfS that should be used in this case.

MfS – Public Inquiries

Appeal

- Appeal decision – APP/P4225/A/07/2040756/NWF
- Coral Mill, Rochdale, 87 dwellings, 5 Sept 07

Issues:

- A663 joining J21 of M62 1 km NW of site
- 85th percentile speeds 25mph and 27mph
- Vis at access could not meet adopted standards

Inspector:

- '...I accept the Appellant's approach to research based matter.'
- '...The classification of Shaw Road has no bearing on a driver's ability to stop if necessary, and I see no reason why in this location a 'Y' distance of the SSD should not be adopted.'

Manual for Streets
Rules
End of

