

SPECIFIC MEASURES

CATEGORIES

3.1 Specific traffic calming measures fall into two main categories:-

- (i) Those designed primarily to reduce vehicle speeds
- (ii) Those designed to help create an environment conducive to calm driving

3.2 It is important to stress that the best results in terms of safety and the creation of a “calm” atmosphere are achieved when various measures are used in combination. As an example, the use of road humps alone is unlikely to ensure a calm driving style, or to change the character of the street in favour of its “non-traffic” activities.

3.3 Specific measures can be designed to serve multiple functions. A round top hump, for example, is mainly for speed

reduction whereas a flat top hump can be integrated with the footway to provide a better pedestrian and wheelchair crossing facility.

3.4 Nineteen specific measures are described separately in the following paragraphs for ease of reference, but design teams should regard this section as a “palette” of measures which should be combined to meet scheme objectives in an attractive and effective way. Examples of the combination of various measures can be found in Section 4. The contribution of each measure and its suitability for each category of road is summarised in Table 2. Selected design guidelines or “rules of thumb” are shown in relation to each category of road in Table 3.

SUMMARY OF APPLICATIONS AND EFFECTS OF TRAFFIC CALMING MEASURES

	Speed Reduction Rating	Space Reallocation for Other Uses	Visual Enhancement of Street Scene	Suitability			
				L	C	M	T
SPEED REDUCTION MEASURES							
3.7 Vertical Shifts in the Carriageway	A	X	—	★	★	+	○
3.8 Lateral Shifts in the Carriageway	B	✓	—	★	★	+	○
3.9 Carriageway Constrictions	B	✓	✓	★	★	+	○
3.10 Roundabouts	B	X	X	+	+	+	+
3.11 Small Corner Radii	B	✓	—	★	★	★	○
3.12 Priority Management	B	X	X	+	+	○	○
3.13 Road Markings	C	X	X	○	○	+	★
3.14 Electronic Enforcement	C	X	X	○	+	+	+
SUPPORTING ENVIRONMENTAL AND SAFETY MEASURES							
3.15 Optical Width	C	X	✓	★	★	★	+
3.16 Narrow Carriageways	C	✓	✓	★	★	★	+
3.17 Occasional Strips	C	✓	✓	○	+	★	+
3.18 Surface Changes - type/colour/location	C	X	✓	★	★	+	○
3.19 Entrances and Gateways	C	X	✓	★	★	+	+
3.20 Central Islands	C	✓	✓	○	+	★	+
3.21 Shared Surfaces	C	✓	✓	★	○	○	○
3.22 Footway Extensions	C	✓	✓	★	★	★	+
3.23 Planting/Greenery	C	X	✓	★	★	★	★
3.24 Street Furniture and Lighting	C	X	✓	★	★	★	★
3.25 Regulations	C	X	X	+	+	★	★
KEY							

SPEED REDUCTION RATING:

- A Guarantees 85 percentile traffic speeds below desired maximum
- B Reduces speeds but does not guarantee 85 percentile level
- C Serves as a reminder or encouragement to drive slowly and calmly

SUITABILITY: (FOR DIFFERENT STREET/ROAD CLASSIFICATIONS)

- | | | |
|--------------------------|-------------------|-------------------|
| L Local streets | ✓ Positive effect | ★ Suitable |
| C Collector streets | X Negative effect | + Possible |
| M Mixed priority streets | — Neutral | ○ Not recommended |
| T Traffic priority roads | | |

TABLE 2

STREET CLASSIFICATION AND SELECTED DESIGN GUIDELINES

	Classification of road (see Table 1)			
	Local	Collector	Mixed Priority	Traffic Priority
Target 85 percentile traffic speed(mph) (1)	<20	20	20/30	30/40
Self-enforcing measures required (2)	YES	YES	YES	NO
Through traffic route (3)	NO	NO	YES	YES
Target maximum traffic flow(vph) (4)	250	500	1500	N/A
Signs and road markings required (5)	NO	NO	YES	YES
Separate cycleways required (6)	NO	NO	YES	YES
Footway to continue at same level across roads (7)	YES	YES	YES	NO
Turning lanes /traffic signals appropriate (8)	NO	NO	YES	YES
Zebra and signal crossings appropriate (9)	NO	NO	YES	YES
Special bus provision appropriate (10)	NO	YES	YES	YES

EXPLANATION

1. Target speed: 85%of vehicles should travel below this speed
2. Self-enforcing measures should be taken to achieve 85 percentile level
3. Through traffic route, probably signposted
4. Target maximum flow of traffic (approximate)
5. Signs, markings, etc. are appropriate
6. Separate cycleways to be provided where possible
7. Footways preferably at continuous level in direction of main flow
8. Turning lanes and traffic light control are appropriate at key junctions
9. Zebra and light controlled pedestrian crossings are appropriate
10. Special provision may be required for buses

TABLE 3

3.5 Speed reduction measures are described in paragraphs 3.7 to 3.14 and supporting environmental and safety measures in paragraphs 3.15 to 3.25. The information for each measure is given under the following sub-headings:

- Objectives
- Speed Reduction Rating
- Design Features
- Application
- Dimensions
- Supporting Measures
- Positive Factors
- Negative Factors

SPEED REDUCTION MEASURES

3.6 Certain measures are designed primarily for speed reduction, though in most cases their application will help to meet other objectives. Speed reduction measures are rated A, B or C according to their speed reduction effectiveness (see Table 2). The rating is given on the assumption that the measure is properly designed and constructed. Faults in the design or construction of schemes may reduce their effectiveness.

Speed reduction ratings:-

- A - Guarantees 85 percentile traffic speeds below desired maximum
- B - Reduces speeds but does not guarantee 85 percentile level
- C - Serves as a reminder or encouragement to drive slowly and calmly

Diagram 3.6.1 illustrates the expected speed reduction effects which may be achieved from measures rated A, B and C.

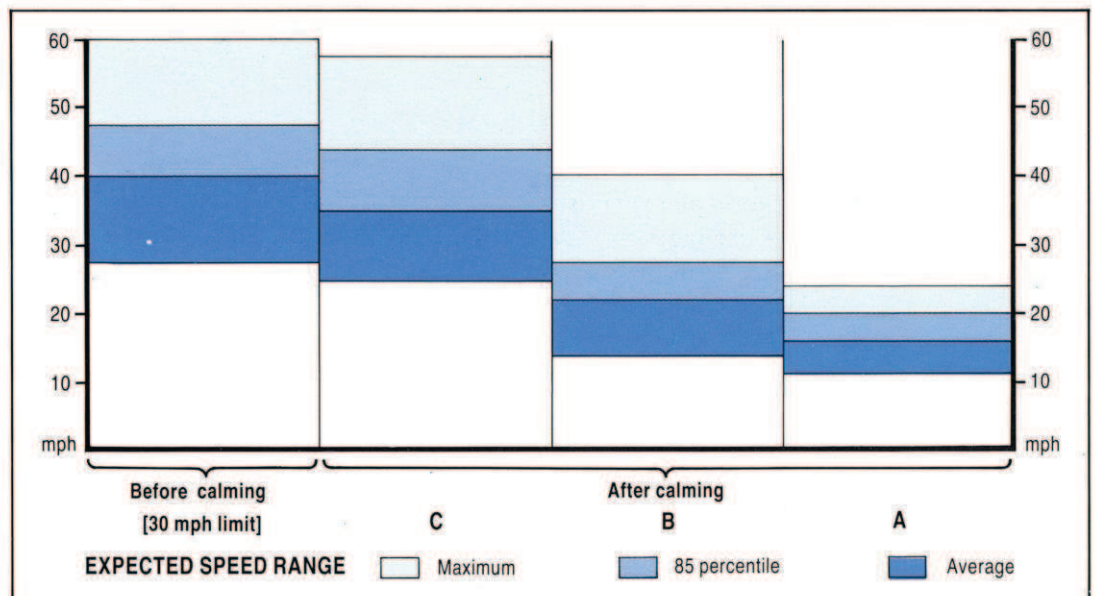


DIAGRAM 3.6.1 EXPECTED SPEED REDUCTION FROM MEASURES RATED A, B AND C.