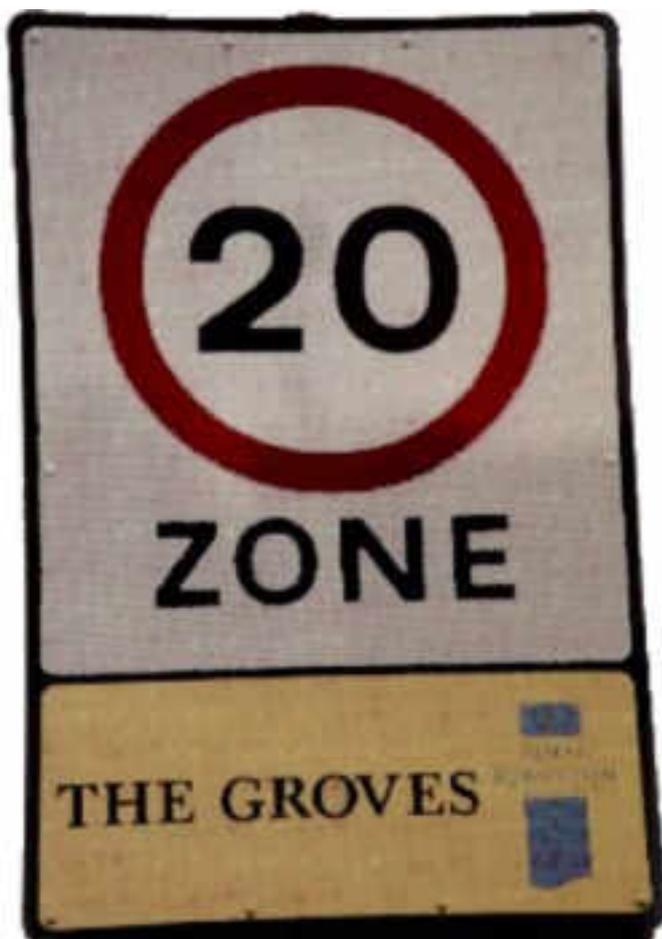




20mph Speed Limit Zones

Summary

This leaflet illustrates the main steps in the procedures for the implementation of 20mph zones. It provides brief details on: the approval process of 20mph zones; the signing for such zones; possible speed restraint features.



Introduction

Until recently it has been thought inappropriate for the Secretary of State for Transport to use his powers to permit the imposition of 20mph speed limits, because drivers have not been willing to obey them. However, experience in other countries has indicated that low speed limits coupled with self-enforcing speed restraint measures can reduce both the number of accidents and their severity.

In this country the Urban Safety Project on area wide safety management included self enforcing speed restraint measures. It produced encouraging results, with a 13% accident saving. Detailed guidance is now available in the Institution of Highway Engineers' Urban Safety Management Guidelines. Increased flexibility in the use of road humps has been provided by the Highway (Road Humps) Regulations 1990.

Following the strengthening of guidance and changes in the regulations, the Department of Transport issued Circular Roads 4/90 in December 1990. It sets out basic guidelines for the introduction of 20mph speed limit zones.

Appropriate areas

20mph zones are most appropriate in areas where an urban safety strategy has been developed, involving measures to discourage through traffic from using the proposed zone. The zone itself will normally

be residential in character, although other areas such as shopping streets may also be appropriate. The road network within the zone should generally consist of access roads, but the inclusion of some local distributor roads may be acceptable. In order that zones do not become too large, no road within the zone may be more than 1km from the boundary of the zone.

The greatest benefits are likely to be achieved in urban areas where there are accidents involving pedestrians particularly children. These areas should be given a higher priority than others in safety strategy plans.

Accidents in residential areas tend to be widely scattered, and justifying the zone on accident savings alone can be difficult. It may therefore be desirable to seek additional benefits by integrating the 20mph zones into environmental and housing improvement schemes. There is no reason why new residential developments should not be designed from the outset as an integral 20mph zone, providing the various requirements can be met.

Consultation

Highway authorities should consult widely. In the case of road humps, consultation is a requirement of the regulations. Those to be consulted should include local residents, local district councils, bus operators, the police, and fire and ambulance services. It is advisable to consult all these, and any other relevant bodies in the area, at a very early stage. This should be before the zone area has been determined, and at a stage when options for the type of speed restraint facilities that might be used are still open.

Advertising

There are statutory requirements to advertise speed limits (Regulation 6 of the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1989 (SI 1120 1989)) and road humps (section 90C of the Highways Act 1980).

These involve the posting of notices in the roads concerned, as well as advertising in newspapers.

Where road humps would not comply with the Highways (Road Humps) Regulations other than by reason of the 20mph zone, care will need to be taken that correct procedures are followed. Generally, consent from the Department of Transport for the 20mph zone will need to be obtained before advertising road humps.

Signing

Zone signs must be erected at every entrance to the zone. At exits, a zone sign indicating the speed limit of the adjoining road must be displayed.

Full details of the zone signs are given in Circular Roads 4/90. The sign consists of a speed limit roundel on a white ground with the word "zone" positioned beneath the roundel. Beneath the main part of the sign, a panel has been included so that the name of the District or Area can be added. The background to this lower area may be in any colour other than red, provided it contrasts with the letter colouring: the name may be in any typeface or alphabet. It is desirable to include the name, as this reinforces the message that the zones are places where people live.

The zone sign is only required to be erected on one side of the entry road where the road is less than 5 metres wide. However, it is recommended that even in these situations signs should be placed on both sides of the road. This helps to accentuate the gateway effect and the feeling for the driver of entering an area which is "different". 20mph repeater signs are not required within the zone. The Highways (Road Humps) Regulations permit all warning signs normally required for road humps to be omitted.

Gateways



Careful attention should be given to the creation of a "gateway effect" at all entrances to the zone. The erection of the zone signs will help to establish a gateway, but, by themselves, the signs will normally not be sufficient to create a gateway effect. A change in the surface texture of the carriageway at the immediate entrance is one way of complementing the signs. If speeds need to be reduced at this point, such a change may be not sufficient on its own. Narrowing the carriageway at the entry point can emphasise the fact that a driver is entering an area of special character, but again may not on its own reduce vehicle speeds.

To ensure a reduction of vehicle speeds at the entry point, a narrowing needs to be combined with a road hump. At such a location a flat top hump might be most appropriate, since it would serve as a guide to where pedestrians should cross. More elaborate architectural features, perhaps incorporating planting, could also be used. With such features, care must be taken to preserve adequate sight lines, and to avoid any structures or narrowing becoming obstructions or potential hazards because of their proximity to the carriageway.

Within the zone

A decision on whether to finally confirm a 20mph zone would be taken approximately 15 months after initial consent had been granted. The main requirement that has to be satisfied before permanent consent is granted is that average speeds, measured in accordance with Circular roads 4/90, do not exceed 20mph.

It is therefore important in the initial design to avoid long straight sections of roads, as this encourages higher speeds.

Arrangements such as mini-roundabouts, road closures, the incorporation of sharp bends, and staggered parking can be used to break up the driver's view of straight continuous stretches of road, and so influence the speed of vehicles. To ensure average speeds of 20mph are not

exceeded, in most cases vertical deflections in the form of road humps, including raised junctions and speed tables, will be necessary. Horizontal deflections, such as narrowings and chicanes, have also been used, both alone and in combination with vertical deflections. These features require close spacing, in the region of 40m to 60m, in order to sustain average speeds of 20mph throughout the zone.

Aesthetically it is preferable that a range of measures are used, rather than relying on one type of device. A change of material and colour of the road surface can be attractive, but unless provided in conjunction with a hump or chicane will seldom influence vehicle speeds. Planting can add to the impression that a street is not predominantly for the use of motorists, but care should be taken that acceptable sight distances are maintained. Using significantly restricted visibility to try to influence vehicle speeds is not recommended.

Visually impaired people

It is important that blind and partially sighted people are not placed at risk from the use of particular traffic calming measures. At raised junctions and where kerb to kerb flat topped road humps are used in conjunction with pedestrian crossing places, visually impaired people would be able to differentiate between the carriageway and the footway. Advice on the use of tactile paving at uncontrolled crossing places is available from the Department's Disability Unit, and is relevant to some situations arising in 20mph zones.



Procedures

Circular Roads 4/90 should be consulted for the precise procedures to be followed when making an application for a 20mph speed limit zone. However, the following points are particularly relevant:-

- Proposed schemes must be submitted to:

Road Safety Division
Department of Transport
Room C17/08
2 Marsham Street
LONDON, SW1P 3EB

- Schemes should indicate that with self-enforcing measures proposed, average speeds of 20mph or less measured in accordance with Circular Roads 4/90 will be achieved.
- Responses from the emergency services and if relevant, bus operators regarding the proposed scheme must be included in the application for consent.
- As far as possible, draft speed limit orders should follow the format recommended by the Department of Transport in a model order - available from the address above, Tel: 0171-276 6321.
- The scheme should be consistent with the highway authority's road safety strategy.
- Circular Roads 4/90 - 20mph Speed Limit Zones (Available from DTp, NGAM Division, Tel: 0171-276 2730)
- Traffic Advisory Leaflet 2/90 - Speed Control Humps
- Traffic Advisory Leaflet 3/90 - Urban Safety Measurement
- Model speed limit order (available from DTp, Road Safety Division, Tel: 0171-276 6321)
- "Guidelines on Urban Safety Management" - The Institution of Highways and Transportation
- The Highways (Road Humps) Regulations 1990 (SI 1990 No. 703 and SI No. 1500)
- The Highways Act 1980 - Sections 90A - F (see Schedule 10, Transport act 1981)
- The Traffic Signs (Speed Limits) Regulations and General Directions, 1969. SI No. 1487
- The Traffic Signs (Amendment) Regulations 1990 and the Traffic Signs (Amendment) General Directions 1990 (SI 1990 No. 704)

20mph zones implemented

The first 20mph zones were opened in Norwich, Kingston and Sheffield on 21 January 1991. Early indications suggest that the schemes are working satisfactorily. Further Traffic Advisory Leaflets describing schemes that have been implemented will be published in due course.

Further guidance

- Circular Roads 3/90 - Road Humps (Available from DTp, NGAM Division, Tel: 0171-276 2730)

Enquiries

Traffic Management Division
2/06 Great Minster House
76 Marsham Street
London
SW1P 4DR.

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Within England, enquiries should be made to: Traffic Management Division, Department for Transport, 2/07 Great Minster House, 76 Marsham Street, London, SW1P 4DR. Telephone 020 7944 2478. E-mail: tal@dft.gsi.gov.uk