



9. Traffic Calming and Homezones

9.1 Traffic Calming

The speed of vehicles is a major factor in improving road safety and minimising future potential accidents. There is a significant lowering in the severity of accidents involving pedestrians when the speed of the vehicles involved is less than 20mph. The City of York Council is determined to ensure speeds in residential areas are managed at a level consistent with road safety. There is sufficient evidence now available, based on years of study, to show that the use of speed restraint and traffic calming measures can be an effective tool in controlling the speed of vehicles.

The design of residential areas should incorporate the speed reducing features to ensure that vehicle speeds are moderated on all categories of road. With new development, the grouping and alignment of buildings, boundary treatment and landscaping should emphasise and complement any speed restraint measure. Any measures introduced should not be viewed as 'bolt on' features which can simply be added to the design, but rather they should form an integral part of the design itself, so that they fit comfortably in the overall environment. In historic areas, extra care must be taken as speed tables and particularly road humps can look out of place.

Short culs-de-sac, frequent junctions and sudden changes in direction will often be sufficient to achieve the desired vehicle speed; horizontal features are likely to be more acceptable to all road users, thus making the widespread use of road humps unnecessary. However, circumstances will arise where 'vertical shift' measures are either more flexible or desirable, for example at pedestrian crossing points or raised junctions.

A prerequisite of any design is to identify the potential points of conflict between pedestrians and vehicles. Speed restraint measures at these points can then be introduced to provide the focal point for a scheme of traffic restraint. There is a need to identify locations where pedestrians cross the road and particular attention needs to be given to areas near shops and public houses, community facilities and bus stops, playing fields and recreation areas. Where pedestrian and cycle networks form part of a development it is imperative that speed restraint measures are provided wherever they are intersected by roads.



Where a new development is likely to significantly increase the speed and volume of traffic past the entrance to a school, intercept, a “safe route to school” or a route frequently used by children and cyclists the Authority will require measures to be taken by the developer to protect these areas.

The spacing of speed control features should be related to the target speed and the guidance on the maximum distance between features for a given target speed, is:

Target Speed	Unrestrained Length of Road
up 30mph	80-120m
20mph	60m
below 20mph	40m

The measures that are available include;

Horizontal

- Gateways
- Speed Control Bends
- Road narrowing
- Chicanes
- Traffic islands
- False roundabouts
- Overrun areas

Vertical

- Round topped road humps
- Speed cushions
- Speed tables
- Raised junctions

Details of the above measures are indicated in Appendices 11 to 17.

The use of these speed control measures can give the designer an added degree of flexibility, promoting greater variety in layouts and encouraging



innovation. In the design of the appropriate measures the following guidelines need to be borne in mind.

Measures must be an integral part of the layout design and not appear as an afterthought, or as a means of making the unacceptable acceptable.

The selection of speed restraint measures for different roads in the road hierarchy on larger developments, can, with landscaping, be employed to emphasise the different junctions and roads, and appropriate safe speeds for each.

Landscaping and trees can often be used to complement and emphasise physical speed restraint measures at the road layout.

Rumble strips/areas can cause noise nuisance and are therefore not suitable close to housing, or other sensitive areas;

If speed restraint cannot be achieved by horizontal measures then road humps are an alternative, although not always welcomed by residents. Possible use by buses and the needs of emergency services and delivery vehicles must be given full consideration in the design of any speed restraint measures, speed cushions are more acceptable in these situations. (see the paragraph following) Speed control bends are only suitable on minor access roads or less, within developments;



Figure 22 – Traffic calming



The impact on the local community should be considered in terms of noise, vibration and air quality. If it is likely that there will be a significant adverse impact due to any of the above, a formal technical assessments are likely to be required.

Carefully planned layouts which ‘naturally’ indicate appropriate driver behaviour are the best measures of all. Speed cushions can be effective in reducing passenger discomfort on bus routes and emergency vehicle routes, however they are not effective in deterring the speed of motorcycles, large delivery vehicles or cars with a wide wheelbase so should be complemented with other features where possible.

All speed restraint measures must be constructed in accordance with the Department of Environment Transport and Regions, Regulations and Advice, and be correctly signed and carry the appropriate road markings.

9.2 Homezones

A Homezone is a residential street or a number of such streets in which the living environment clearly predominates over the provision of traffic. Spaces between homes and the carriageway are shared to provide more facilities such as areas for children to play, larger gardens, planting and seats etc, to engender a community feel. Traffic and car parking are not excluded but designed so that vehicles only travel a little faster than walking pace and parked cars are not intrusive. A typical layout for a homezone is shown in Appendix 18.

The objectives of a home zone are:

- a feeling of safety, because traffic is going slower and there are more people about;
- promote greater use of public space, diversity of activities and benefit children, the elderly and the less mobile;
- streets become visually more attractive with more space for landscaping and trees;
- because fast moving traffic is removed they should encourage other modes of travel;
- encourage greater care of the street by residents;
- and improve the quality of the environment and increase the attractiveness of urban living.
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Allocating less space for roads should provide more space for social areas; not additional housing.



These objectives can be achieved by including:

- attractive 'gateway' treatment to advise all road users of a change in the environment;
- traffic calming such as, road narrowing, chicanes etc. to slow down traffic, and provide areas for cycle and car parking;
- provide attractive landscaping and tree planting;
- provide seating areas and meeting spots not necessarily confined to the highway.
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Homezones appear to work well in culs-de-sac not exceeding 350 metres in length and be a destination for traffic. Additional benefits can be achieved if they form part of a pedestrian/cycle network, a safe route to schools, or part of a 20mph zone. In themselves they cannot be a solution to traffic problems, or unruly driver behaviour, particularly by the young, but coupled with other features of traffic calming they can create a greater level of safety, be more efficient in the use of space and provide a more attractive and diverse streetscene.