1. Traffic Calming

Traffic calming is the most direct and effective way to influence vehicle speeds on particular roads. There are a range of possible techniques that can be used. Some of these are visually discordant with their surroundings and controversial because of the inconvenience they cause for residents and others. They can also be expensive to install and maintain.

Traffic calming can influence the choice of route taken by drivers, but in practice it has not proved a very effective tool in dealing with problems of "rat running" through residential areas. Nevertheless, where there are otherwise equally attractive routes, the introduction of traffic calming on one route may cause traffic to intensify on another, and the potential for this effect needs to be taken into account when considering any scheme.

The effects of traffic calming on noise and exhaust emissions is debatable and the relatively small environmental gains that may be made in this way are not sufficient in themselves to justify traffic calming measures.

2. Traffic Calming Methods

METHOD	EFFECT
	<u>Vertical Deflections</u>
Intrusive	Round topped humps
Intrusive	Flat topped humps
Intrusive	Speed cushions
Intrusive	Raised junctions
	Horizontal Deflections
Intrusive	Edge of carriageway build-outs (give- way working)
Intrusive	Chicanes (give- way working)
Non-intrusive	Chicanes (two way working maintained)
Non-intrusive	'Slug' parking - by traffic regulation order with no build-outs
	Horizontal Deflections at Bends and Junctions
Non-intrusive	In new development
Non-intrusive	On existing roads
	Changes to the 'Natural Speed' of the Road
	(Which do not exert a <u>direct</u> influence on the speed of every vehicle)
Non-intrusive	Gateway or other signing, including Vehicle Activated Signs
Non-intrusive	Width reductions at pinch points (two way working maintained)
Non-intrusive	Lane width reduction through marking
Non-intrusive Non-intrusive	Traffic islands and pedestrian islands
Non-intrusive	Planting or other features to change the visual characteristics Reduction in visibility
	Others
Intrusive	Rumble strips
Non-intrusive	Speed Cameras

3. Traffic Calming Policy

The Highways Act 1980 does not allow the use of <u>vertical</u> deflections on roads with a speed limit of over 30mph. There are also road safety arguments for not using any other intrusive traffic calming measures (for example a "build out" with give way working) on such roads, because of the conflict in traffic movements that they invoke. Therefore:

a. Vertical deflections and horizontal deflections shall not be used on roads with a speed limit in excess of 30mph.

Vertical deflections can reduce the response times of emergency vehicles and give problems for some injured people in transit in ambulances. They can also cause problems for some buses and their passengers. This is less so in the case of speed cushions. Therefore:

b. Vertical deflections (with the exception of speed cushions, and raised junctions in certain cases) shall not be used on primary emergency vehicle routes or roads which are currently used as bus routes.

Intrusive traffic calming methods, by their nature, inconvenience all motorists and passengers in order to curb the higher speeds of a minority of drivers. They are relatively expensive to construct and maintain, however, they can be the most effective means of speed control over a length of road. There is a difference between constructing intrusive measures on existing roads and incorporating them in new roads being built as part of development, for adoption as highway. In these situations they are included as part of the comprehensive means of ensuring appropriate vehicle speeds, along with other less intrusive forms, and they are more easily accepted by residents as integral part of the street scene. The Council approves the continued use of these measures, but where not forming an integral part of a new road:

c. Intrusive traffic calming methods shall only be used where there is a history of concentrated speed related injury accidents;

Or:

- c(i). Where the surveyed 85%ile speed within a 30mph limit, in either direction, is 38mph or above (see Note 1) and that the following factors apply:
- the road frontage is considered to be 'active', is subject to pedestrian activity and includes the presence of pedestrian generators, such as public amenities, facilities, establishments etc;
- the function of the road, including its contribution towards the general movement of traffic across the wider road network, will not be not unduly affected;
- any likely impact on traffic routing will not create/exacerbate problems on adjacent roads or junctions unless these can be practically addressed within the scheme;
- the issue cannot been satisfactorily remedied by other cost-effective engineering methods or targeted mobile speed enforcement.

Or:

- c(ii). Where used to form a 'School Safety Zone' in close proximity to a school site, and where the following factors apply:
- the function of the road, including its contribution towards the general movement of traffic across the wider road network, will not be not unduly affected;
- any likely impact on traffic routing will not create/exacerbate problems on adjacent roads or junctions unless these can be practically addressed within the scheme:
- the objective cannot be achieved by other cost-effective engineering methods;

Fixed speed cameras have been shown to be very effective in reducing speed related accidents concentrated at specific locations. However, their installation and on-going operation/support costs are currently funded by the Highway Authority and these are significantly higher than for other traffic calming measures. Therefore:

d. Fixed speed camera sites shall only be installed at locations where there is a history of concentrated speed related injury accidents and subject to site approval by Thames Valley Police.

Non-intrusive forms of traffic calming work generally on the basis of changing the 'natural' speed for a road as it occurs to a motorist, or by controlling the speed of a traffic flow to the speed of the slower motorist by reducing overtaking opportunities. They are less controversial with residents and motorists than intrusive forms. Therefore:

e. Non-intrusive forms of traffic calming may be used in any situation to influence vehicle speeds as part the Council's Speed Management Strategy and Traffic Management Code of Practice.

Some traffic calming measures necessarily involve significant amounts of signing or contrasting coloured materials, used to bring about the desired effect or for reasons of safety. These characteristics can detract from the local street scene. Therefore:

f. Traffic calming measures shall be selected and designed to accord with and, as far as possible, enhance their local environment.

Traffic calming measures may have an effect on traffic routing, although this is expected to be limited except in the case of the more extensive and intrusive schemes. Therefore:

g. The possible effect on route changes of traffic be considered before implementing any form of traffic calming measure.

Note 1

It is considered that the combined effects of speed enforcement and driver education, alongside conventional speed management measures, are an appropriate intervention for 30mph roads with recorded 85%ile speeds of below 38mph.

ACPO (the Association of Chief Police Officers) issues guidance to Police forces on the thresholds for speed enforcement. Current ACPO advice is that no enforcement action shall be take place unless a targeted vehicle is observed travelling at a speed in excess of 10% + 2mph of the actual speed limit. This places the enforcement threshold at 35mph, within a 30mph speed limit.

The scale of enforcement action taken against a driver exceeding this threshold varies across Police force areas. Within TVP currently, a further threshold is set at 38mph (within a 30mph limit) below which offenders receive the option of attending a speed awareness course, as an alternative to prosecution. Above this threshold, a Fixed Penalty Notice is issued, with drivers receiving a court summons for travelling at speeds above 49mph.