

# Time for universal traffic calming



**Tim Pharoah is reader in transport and urban planning at South Bank university. He is advising on parking policy in London and Berlin and the EU on traffic reduction techniques.**

Our approach to road use should relate to the movement of people and goods, not traffic speeds, argues Tim Pharoah.

**Opposite page:** Düsseldorf where a public transport mall has been created by removing other traffic from a suburban shopping street. **Below:** Shepherd's Bush where buses and passengers fight for space with illegally parked cars.



#### References:

- MVA consultancy, *South Birmingham Environmental Traffic Management Study* (SOBETMA), for Birmingham City Council, August 1992.
- Ove Arup & Partners, Llewelyn-Davies Planning, *East London Assessment Study: Report on transport options* (ELAS), for Department of Transport, December 1989.
- Pharoah, T, *Less traffic, better towns*, Friends of the Earth, 1992.
- Pharoah, T, and others, *Traffic calming guidelines*, Devon County Council, 1991.
- Traffic Director for London, *Priority Network Plan*, 1993.

London, like all large cities, suffers from the damaging effects of road traffic. These include delays, unreliable journey times, accidents, and noise and air pollution. These problems are serious enough by themselves, but together they create a powerful negative feature of life in the city. Many people take themselves and their businesses to places away from the worst affected areas, and ultimately this process could destroy the vitality of London, as it has so many North American cities. The improvement of traffic and environmental conditions is thus is not an optional luxury, but an essential requirement to maintain London's competitive position. Given the popular perception of traffic congestion, it may seem odd to claim that London has too much carriageway space. Yet congestion is caused as much by poor design and undisciplined movement as by any shortage of space. Apart from certain bottlenecks, carriageway space is underused and poorly managed, and should be reclaimed for more useful purposes. Extra road space used to be regarded as 'a good thing' which could absorb traffic growth. Now it is clear that surplus space encourages

excessive speeds between bottlenecks, and creates dangers and nuisance without any tangible benefit. Traffic calming can reduce speeds, but the usual 'like it or hump it' approach does nothing to improve the useability or attractiveness of the street environment. With lower speeds, exciting design opportunities arise, but one still has to travel to mainland Europe to find the best examples of this.

The potential improvements to be gained from traffic calming are, however, inversely proportional to the volume of parked and moving vehicles. In many parts of London, especially the inner and central areas, traffic calming alone cannot provide the full solution; traffic reduction will also be necessary. Traffic calming is an important technique for delivering benefits at street and local community level. It is not a complete answer to London's transport problems, but equally the wider problem of London's competitiveness cannot be tackled without it.

The benefits of traffic calming are:

- Fewer accidents
- Safe and comfortable streets
- Less noise and fumes
- More space for non-traffic activities and uses
- Stronger economic and social communities.

Traffic calming is now an established part of transport policy and does not need further explanation here. Compared to many other cities in North West Europe, London was slow to develop the technique, but progress in the past few years has been rapid. Most boroughs have adopted some kind of policy or programme and have implemented local schemes. For most Londoners, traffic calming is probably associated with the speed hump. Other techniques (chicanes, optical narrowing etc) are less commonly found. Complete redesigns including reclaimed space, paving, street furniture, lighting, landscaping as well as speed reduction features are very rarely found in London. However, schemes predominantly have been aimed at reducing accidents, and other objectives have been secondary if not



absent. While not wishing to deny the accident reduction benefits, many of the measures taken have been poorly designed and poorly constructed. This is short-sighted, and is already creating a backlash against the whole concept.

Despite the progress made, traffic calming remains the exception rather than the rule. It is therefore appropriate to consider what direction future policy might take. Debate about future traffic calming strategy has occurred in London, but perhaps needs a wider hearing. The author was involved in the first area-wide examination of traffic calming possibilities in London, carried out for the Department of Transport with Llewelyn-Davies Planning and Ove Arup and Partners as part of the East London Assessment Study (ELAS) (Ove Arup, 1989). That work and its subsequent development (see Devon CC 1991 and MVA 1992) forms the basis of what follows.

What would London be like if it were fully traffic-calmed? Roads and streets would be graded not only by their traffic significance, but also by the other activities which take place in them. This grading would be expressed in terms of the priority accorded to different street users, and the maximum speed of motor vehicles.

The whole road network would be classified as follows:

- Living priority: 20 mph streets where priority is given to residential or other street activity.
- Mixed priority: 20 - 30 mph sections of main traffic roads with shopping or other important non-traffic activity.
- Traffic priority: 30 mph roads where traffic movement has priority, but where vulnerable road users are protected.

The great majority of the network (over 80 per cent of London's 13,000 kilometres of road) would fall into the first category. Physical measures would be needed at frequent intervals to ensure self-enforced slow and steady driving compatible with pedestrian and other activity. Environmental enhancement would be important to reinforce the change of priority and to gain its acceptance by all road users. Much existing carriageway space would be converted for more environmentally and socially useful purposes, for example:

- extended footways, especially at junctions
- trees and shrub planting
- areas for sitting, meeting, waiting, playing, etc.
- parking and loading bays.

The main traffic routes for most of their



length would be 'traffic priority', but provision would be made to protect pedestrians and cyclists. Buses and perhaps goods vehicles could be accorded priority in the flow of traffic. Some examples can be found on the Red Routes. The usual 30 mph speed limit would apply.

Those sections of main road with intense frontage activity, mostly shopping centres astride the main road (eg Camden, Chiswick, Streatham), would become 'mixed priority' areas. Speeds would be lower and vehicles passing through would have to give way to pedestrians, cyclists, turning traffic, buses, vehicles loading and parking, and so on. The ELAS study indicated that about 10 per cent of main roads would deserve this kind of "mixed priority" status, and Upper Street, Islington was explored as a case study of what this would mean in design terms.

**E**ven on such important main roads, much carriageway space is currently wasted, and could be reclaimed to provide benefits for all road users. A basic principle would be the provision of 'two lanes plus turns', whereby traffic has a guaranteed single running lane in each direction, plus extra lanes for (right) turning traffic at important junctions, and for buses or cycles only. Such a design releases considerable space for parking and loading, for landscaping, and for those on foot. Some examples can already be found, such as St John's Hill in Wandsworth.

Experience from several countries (including 20 mph zones in England) leads us to expect a reduction of serious and fatal road injuries of at least 50 per cent. Quite apart from other benefits, this alone would be likely to produce an economic return on traffic calming investment. The total cost of comprehensive traffic calming on the model outlined above could be in the order of £300-500 per head, depending on the quality. Spread over

an implementation period of 10 or 15 years, this seems a reasonable investment.

The main road strategy outlined above is entirely consistent with the need to make more effective use of London's Priority Network Plan (Traffic Director for London, 1993). The term 'effective', however, must be taken to mean effective especially for the most valuable categories of road user, if necessary at the expense of the individual vehicle user. Mostly, benefits can be achieved for all categories of traffic and activity, by the intelligent re-ordering of the space between the buildings. But the current rule, whereby schemes are blocked if they cause disbenefits to general traffic, must be scrapped. Schemes should be advanced to meet environmental objectives as well as traffic objectives, and efficiency should be measures in terms of people and goods, not vehicles.

If the Red Routes and associated traffic calming measures in adjacent areas are done on the cheap, an important opportunity in London will have been missed. Progress so far has not been encouraging in this respect.

London has too much carriageway space, perhaps 50 per cent more than necessary for efficient movement. Much of this space is provided simply to allow traffic to travel at 30 mph or more. Lower speeds require less space, so traffic calming has a vital role to play in reclaiming the highway. The benefits of traffic calming are now widely accepted, but schemes should be planned as part of a wider strategy which includes less car travel, promotion of environment-friendly modes, and environmental improvements. Such a strategy is not an expensive luxury, but a necessity in the fight to retain the vitality and appeal of city life.

London, after all, offers a 'travelstyle' that is more environmentally sustainable than that attainable by the car-dependent residents of lesser towns. Let us make the most of it.