Managing the traffic

The varied uses of a typical street or road may help provide interest, but may also be a source of potential conflict,especially between vehicles and other users. The resolution of these problems lies in using a combination of three approaches:

- the design of the overall block structure and layout, including the length of streets and the spacing of junctions. This aspect is discussed further in Chapter 5;
- the management of traffic flows through the street network;
- the control of traffic speed.

Most housing areas are designed to concentrate the main traffic flows onto main roads, but traffic can have an adverse effect on subsidiary streets and roads unless through routes are restricted. The issue is how to restrict traffic without disadvantaging the free movement of pedestrians and cyclists.

Canning Street, Liverpool illustrates how selective street closures in a historic layout achieves a balance between vehicles and other users passing through the area. The same technique is equally valid in new development. The barrier to vehicles does not constitute a dead end, but is a natural part of the street overlooked by buildings. If necessary, a barrier can be in the form of removable or retractable bollards, to allow emergency vehicles and disabled badge holders to get through, or rumble strips which can be crossed by a fire engine.

Speed restraint has usually involved the use of add-on measures such as speed humps and chicanes, as commonly used to traffic-calm existing roads. In new housing developments there is the opportunity to control speeds using the minimum number of such devices, by starting from first principles in how the area is to be laid out.

Traffic-calming added as an afterthought

Tight corners and pinch points in the street encourage drivers to drive cautiously. Poundbury, Dorset

Selective street closures direct traffic to the main streets while allowing pedestrians and cyclists a full choice of routes. Canning Street,Liverpool

The lesson from countless traditional towns is that the overall arrangement of buildings and spaces, by obstructing forward vision, induces drivers to go slowly. The same effect can be achieved in new developments by using the technique known as 'tracking', as described in *Places, Streets and Movement*[3]. This method gives priority to the arrangement of buildings and spaces, with the carriageway threaded through. As well as helping create a traffic-calmed environment, tracking has two major benefits:

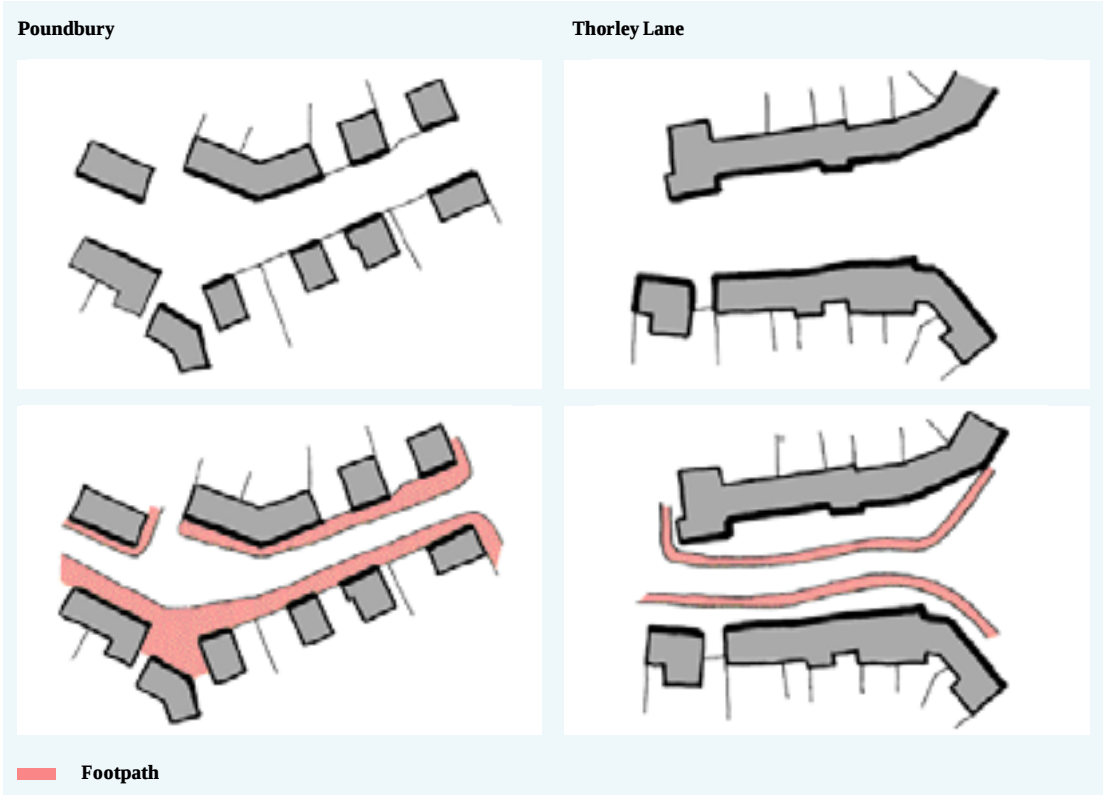
- it helps define the pattern of the spaces and enclosures which characterise a distinctive place;
- it allows a reduction in unsightly traffic signage and other highway clutter.

But even with the best layout based on the principle of tracking, features such as raised crossings and raised junctions may be necessary. These help indicate that the pedestrian should have priority, as well as helping break up the street layout.

Tracking is an essential tool in the placemaking process. The most comprehensive example of the use of tracking in a housing layout is at Poundbury, where it has been successfully adopted in the design since the inception of the scheme in 1990. Other more recent developments, such as Thorley Lane illustrated here, have followed the lead but with modifications.

Layout of buildings and spaces has a traffic-calming effect. Friars Quay, Norwich

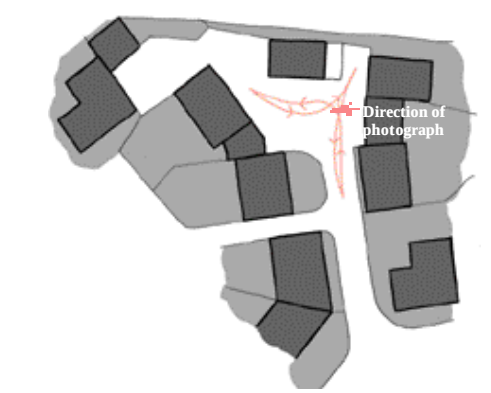
At both Poundbury and Thorley Lane the principle of tracking has been used to create good street enclosure and interesting spaces. At Poundbury the footpaths are laid out to follow the building line.This has a traffic-calming effect. At Thorley Lane the footpaths follow the carriageway, creating a greater emphasis on the roadspace



Servicing the home

Modern houses are more heavily serviced than their predecessors. Some of these services have a visual impact on development, especially the arrangements for refuse vehicle access.

In some places it is possible to bring refuse vehicles to the rear of the house, but generally they use the road at the front. Where that happens it is important that their requirements are met, but are not allowed to dictate the layout. In particular, it is possible to accommodate the turning space at the end of a closed-off street as part of the arrangement of buildings, rather than as a piece of severe road geometry.



Turning circle for bin lorry

Turning places at the end of closed offstreets are defined by the arrangement of buildings.Thorley Lane, Bishops Stortford

Some key points

In appraising the movement aspects of any new development,the following key points should be considered:

Streets and spaces

- Is the development based on a high quality network of streets and spaces catering for all residents and their visitors, or does it give primacy to the movement of vehicles?
- Is traffic-calming an integral part of the layout design?

Connections

- Will the development be well-connected to existing routes,and will it allow links to be made for future developments?

Travel choices

- Does the development provide for all forms of travel, including walking, cycling and public transport?
- Is the density sufficient to support an efficient bus service?

End notes:

1 Shared surface streets raise particular issues for disabled people. Further advice will be forthcoming on this issue as a result of an ongoing project being taken forward by DTLR to provide good practice guidance on catering for the needs of disabled people through the planning system.

2 Towards an Urban Renaissance: The Report of the Urban Task Force page 61.

3 See page 55.