

Managing Traffic in Town Centres  
Landor Conference  
Thursday 30<sup>th</sup> November 2000  
One Birdcage Walk, London SW1

## The evolution of town centre traffic management

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### Why traffic management?

Traffic has to be managed in town centres. This is because the activities taking place in the streets and spaces potentially conflict with one another. Priorities therefore have to be set, and action has to be taken to realise the best mix of competing interests.

Traffic management is the key to resolving what may be termed the “Three A” dilemma. There is potential conflict between:

- **Access** (the means of getting to and from and around the town centre)
- **Activities** (the many living, working, shopping, leisure, cultural and other activities that town centres provide for)
- **Amenity** (the public spaces, townscape, landscape and views that determine the quality and attractiveness of the town centre as a place to be)

Generally speaking there is no desire to compromise on the **Activities** or on **Amenity**, so it is the **Access** arrangements that need to be managed, so that a suitable level of service is provided without having a significant negative impact. Some cities made the mistake of giving access top priority and have lost their town centres as a result. North America offers many examples of city centres destroyed by too much access by car, and not enough priority given to the activities and environment. But even there, traffic management and restraint is now being used to revive city centres. Boston is a good example.

It is sometimes argued that we need to “reclaim” the city from the car. But there never was a golden age for town centres. They have in all ages suffered to some extent from the conflict just described. Julius Caesar banned wheeled traffic from central Rome during daylight hours; medieval cities were clogged with carts and

the less savoury smells from animals; twentieth century cities have suffered from the negative environmental impacts of various forms of motor traffic.

Today there are probably more examples of successful and delightful town centres that at any time in the past. Europe in particular offers some very good examples. Freiburg is one of the best known examples of where access has been managed to strengthen and enliven the city centre, but there are scores of cities that have taken a similar approach, especially in north west Europe.

This paper reviews some of the techniques used to manage town centre traffic, and how they have evolved over time. It concludes with some of the more tricky issues that remain.

## **Evolving objectives and techniques**

### **1. Pedestrian shopping streets**

Initial traffic management was designed to protect the most sensitive part of the town centre from the dangers and unpleasantness of traffic. Ancient Rome probably provides the earliest known example. In more recent times, the pedestrianisation of key shopping streets began before the last war in Essen, or Köln (they still argue over which was first!). The most famous example was Strøget in Copenhagen, fully pedestrianised in the early 1960s. The idea was first brought to Britain with London Street in Norwich. Now all self-respecting towns and cities have pedestrianised or pedestrian priority streets.

Traffic is taken out of the streets either permanently, or during certain times of the day. Sometimes certain vehicles are allowed access, usually where properties cannot be accessed from other streets. Some streets may share priority between pedestrians and public transport vehicles, enabling passengers to have direct access to the shop front doors. Good examples of such shared access can be found in the main shopping streets of Freiburg, Karlsruhe and Zürich. Sometimes public transport routes are kept close to the main shopping streets by crossing them at intervals. Croydon provides a recently developed example.

Traders in streets that are pedestrianised usually benefit from increased business, but this is not automatic and schemes have to be well designed, access for loading has to be well organised, and the area has to feel secure. Certain types of business are not well suited to pedestrian only access and sometimes need to be relocated. But there seems to be one rule that has emerged from half a century of practice: traders will oppose pedestrianisation schemes, but will also oppose any attempt to remove them!

## 2. Protecting whole centres from traffic impact

During the 1970s it was increasingly recognised that small “islands” of pedestrianisation had a limited effect in tackling the dangers and dominance of motor traffic in town centres. Traffic had been systematically crammed into town centres for more than a decade. A turn around in approach was needed. During the 1960s attempts had been made to increase car traffic in town centres, with road widening schemes, one-way and gyratory systems springing up in every town, as well as in the big cities. This was the period when London’s major traffic gyratories were imposed – Trafalgar Square, Tottenham Court Road/Gower Street, Camden High Street, Piccadilly/Pall Mall, Regent Street/Haymarket, and so on. Most of these schemes are still in place, and many of them still cause a lot of environmental damage. A review of their value is long overdue.

Many cities therefore wished to limit traffic from wider and wider areas. Nuremburg has the largest network of pedestrian priority streets (5 kilometres). There is nothing in Britain on the same scale, though York has a large proportion of central area streets with pedestrian priority. Many Italian cities have large areas where traffic is limited using a permit system to allow access for vehicles of residents, hotel guests, businesses and so on. These schemes are not always accompanied by pedestrianisation, however, and rely on lower volumes of traffic to provide the benefits. It is not always clear what the benefits are. Unless traffic is reduced sufficiently to reallocate roadspace to pedestrians the gains can be imperceptible.

Area-wide traffic limitation depends on comprehensive traffic management. The techniques used have included:

- The “cell” system whereby traffic seeking access to town centre properties can enter the centre but cannot cross it, and must leave by the same route. This leaves a core area without vehicles. Public transport vehicles may be allowed through, thus giving them priority compared to the private car.
- Ring road system with adjacent parking. This can be called the “park and walk” system. It is dependent on the centre being not too large. The size is limited by the reasonable walking distance between the car park and the main destinations. The system has proved popular in many towns and cities, especially those with a town centre less than one kilometre in diameter.
- Permit systems have been used to reduce or limit the volume of vehicles driven through or parked in the centre. These are ubiquitous in Italy (“zona traffico limitato”). They require considerable efforts of administration and enforcement to be effective.
- Charging and control systems are almost universal. Charges are mostly applied to parked vehicles, sometimes linked to permit systems, especially for

residents. The regulations and scale charges are often deliberately arranged to favour certain types of user or to discourage other types. For example, car commuters are discouraged by banning all-day parking, or by skewing the charges so that the hourly rate increases with length of stay. Residents and sometimes business users, and vehicles used by those with a disability are often provided with concessions. Nearly all systems of control are applied only to certain times of the day or week.

- Selective controls or bans are sometimes used. For example, New Orleans closes certain streets in the French quarter at popular times of the day, and almost the whole centre at Mardis Gras. Lübeck (north Germany) bans central area streets to general traffic at weekends. The aim here was to demonstrate to people how pleasant their city centre could become, without having to take all the actions necessary for a permanent ban.

### 3. Reviving town centre economies

Traffic management has been used a principal tool in staging town centre revival. This is partly aimed at helping established town centres to compete with neighbouring or out-of-town facilities, and partly aimed at improving the quality and attractiveness or expanding the range of facilities on offer. In some cities this has led to major efforts to increase the amount of access by building new light rail or other fixed track public transport systems. This has in some cases been combined with limitations on car access, with München being a good example. In other cases, especially smaller cities and towns, increased access has been sought through the provision of more access by car. This has led to solutions in some cases that resemble out-of-town centres, but which just happen to occupy a town centre location. This is particularly the case in Britain where food superstores and non-food “retail parks” occupy sites within or adjacent to traditional town centres.

Park and Ride is an increasingly popular way of enabling traditional town and city centres to be accessible to car users living in areas less well served by direct public transport. Big cities have had Park and Ride for many years. Probably the biggest park and ride operation is in London, where by the early 1970s more than 40,000 spaces had been provided at rail stations serving the capital. Larger German cities also have comprehensive rail-based Park and Ride. The concept has now extended to many smaller cities and towns, using buses rather than rail, especially those with historic cores where traffic and parking are limited (e.g. Cambridge, Canterbury, Oxford, Winchester, York). Park and Ride is often politically popular because it appears to offer a public transport solution that avoids confrontation with the issue of car access. In practice, however, it is economically feasible only where there are town centre parking charges and limited parking supply.

## Remaining issues

There are now well established and successful traffic management models that can be applied. There are a number of issues, however, to which there are no simple answers, and to which particular attention has to be paid on a case by case basis.

- How to reduce traffic in large city centres? The “park and walk” model does not work in large cities because the distance from the ring road or parking areas to the city centre is too great. In addition, the intensity of non-residential activity generates a large volume of service traffic, which is more difficult to restraint than private car traffic. These factors help to explain why London, Paris and New York have very few pedestrianised streets. Tougher decisions are needed, as witnessed over the Trafalgar square issue.
- Town centres success at the expense of district and neighbourhood centres? The revival of city centres may have created further difficulties for older district and neighbourhood centres in the suburbs. The latter have tended to lose out not only to food superstores and “retail parks”, but also to town centres. The repositioning of town centres as leisure and cultural centres rather than primarily employment and retail centres may also have played a part in reducing the attraction of suburban centres. Traffic management attention now needs to be given to improve such suburban centres as well. There are some good examples of this in Germany.
- Complete ring road needed? The complete ring road has often been pursued as providing the best answer to removing through traffic from town centres. Yet there are many towns which do not have a complete purpose built ring road, and which function as well as those that do. Complete rings can generate unnecessary traffic as drivers circuit the road to reach parking or access points on the far side of the town centre, rather than seeking the parking place nearest to their point of origin. Norwich is an example of where the ring road argument was fully played out, with the case for completing the ring eventually thrown out at public inquiry.
- Parking helps or hinders? Planning Policy Guidance Note 6 (dealing with retail and town centres) is ambiguous about the role of parking. Local authorities and chambers of commerce often believe that more parking is good for business, and will strive to increase parking supply, and fight against parking reductions or limitations. Yet there is evidence from Germany in particular that towns with higher rates of parking provision have a worse performance than those with limited car access and good public transport

alternatives. The key to this issue is the relative quality of environment that can be achieved. Cities with strong traffic limitation policies are often those with noticeably good quality centres and successful retail and other businesses. Copenhagen, Freiburg, Nuremburg, Oxford are examples.

- Buses in shopping streets? Public transport can mix with pedestrians, but not in every circumstance. Trams are better than buses in this respect, because their “path” through the street is more clearly defined. Buses can work, provided that there are not too many of them, and that their speed is limited to about 10 mph (as in Exeter). Each case has to be dealt with on its merits. A good answer when possible is to have the public transport routes crossing the main pedestrian shopping street rather than travelling along it. Croydon Tramlink follows this model.
- Park and Ride creating more traffic or reducing direct public transport? There has been much debate about the impact of Park and Ride. Its great success has been in enabling good levels of access to centres that on the one hand have no space to accommodate traffic and parking, and that on the other hand serve a wide catchment area that is largely without good public transport. Historic towns with a large rural catchment have thus been in the forefront of Park and Ride development. But extension of Park and Ride to other towns tends to be more problematic. There are also fears that P+R can lead to more car traffic overall, and reduce the prospects of public transport serving the catchment area directly. Certainly we need to avoid the north American concept of public transport being something that you drive to.

**Comments on this paper or the presentation would be welcome:**

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# Picture captions

Chester

Traffic free environments are pleasant for the user, and good for trade

Lincoln

Traffic free centres should not be at the expense of cutting off access from the rest of the town.

Dortmund

Here a dual 3-lane carriageway has been downgraded, and a wide pedestrian crossing provided to link with the traffic-free centre.

Lubeck

Traffic can be limited by time. Here general traffic is excluded at weekends "to show people the benefits of a better environment".

Lyngby

Traffic in district centres also need to be managed. Here a sign shows drivers clear directions, speed limits and where to park. Note that the speed is 20 kmph (about 13 mph).

Lyngby

Within the 20 kmph area, broad and attractive crossings are provided at junctions.