

CONGESTION CHARGING IN CENTRAL LONDON

Key factors in successful delivery

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Abstract

Congestion charging in central London started on Monday 17 February 2003. It is generally regarded as a great success. The main purpose of the paper is to analyse how it was possible for a newly formed organisation, Transport for London, to successfully plan, design and implement a major charging scheme in a world city in less than 3 years.

The scheme has a key objective of reducing congestion. It is an area licence scheme for the centre of the city with a daily charge for vehicles enforced through camera and automatic number plate recognition technology. There are significant exemptions and discounts for many groups. It has been very successful with congestion in the zone reduced by 30%, traffic levels down by 15%, bus reliability improvements, public transport and diversion routes coping with displaced traffic, environmental and amenity benefits and net revenue of some £80M per annum.

Charging schemes are complex to implement with the key workstreams being policy formulation and consultation/powers, operations (inquiries, sales, registrations, dealing with violaters), systems (for charging, discount registrations and enforcement), public information and traffic management (diversion routes, complementary measures and public transport).

An analysis identifies the key factors and circumstances that were brought together to enable the timely and successful delivery of the scheme. Perhaps the most important was having a strong consistent champion, the Mayor of London, to promote and support the technical officers implementing the scheme. A general recognition that central London had a severe congestion problem with no other obvious solutions together with a very clear single objective of reducing congestion provided a strong focus for the planning of the scheme. The fact that the key necessary powers were under the Mayor's control and that the funds were available to plan and set up the scheme was vital. Another factor was the availability of alternatives to paying the charge in the form of a high quality public transport system and the Inner Ring Road as an alternative diversion route for road traffic. Public support is always important and this was enhanced by the guarantee that the revenue raised would be used for transport improvements for London and not be a general tax, by the extensive exemptions and discounts regime and by the considerable effort and attention devoted to public consultation and liaison with key stakeholders. Finally a team with strong project management skills and a wide range of technical skills was pulled together to ensure planning and implementation was kept on track.

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1. INTRODUCTION

Congestion charging in central London started on Monday 17 February 2003, less than 3 years after citywide governance was restored to London. Charging will have been operating for over 2 years by April 2005. It has generally been regarded as successful by transport professionals, by the London public and by the Mayor of London who introduced it.

The main purpose of this paper is to analyse how it was possible for a newly formed organisation, Transport for London, to successfully plan, design and implement a major charging scheme in a world city in less than 3 years. In particular a number of success factors are identified which were brought together in London and which it is argued were major contributory factors in “making it happen” and making it happen so quickly. It is hoped that those considering charging schemes in other urban areas may be able to learn lessons in relation to the presence or absence of these factors.

The paper includes

1. a brief description of the key features of the London scheme;
2. a brief description of the effects of the schemes;
3. a description of the major tasks in delivering the scheme;
4. an analysis of the factors that helped enable the scheme to be successfully delivered.

2. SCHEME DESCRIPTION

The central London congestion charging scheme is an integral and integrated part of the Mayor of London’s transport strategy for the city. It has a key objective which is to reduce traffic congestion. The scheme also aims to reduce through traffic, improve bus operations, improve journey time reliability and raise revenue to be spent on other transport schemes.

The scheme is an area licence scheme covering an area of 22 km² in the very centre of London including the main business, retail, commercial, tourist and entertainment areas, (the City and the West End) – and residential areas both north and south of the River Thames. The charging zone is bounded by the city’s Inner Ring Road which is not charged and hence acts as the main free diversion route. There is a daily charge per vehicle regardless of the number of trips made. Charges apply Mondays to Fridays excluding public holidays, 8am to 6.30pm. The standard charge is £5 per vehicle per day with private and goods vehicles charged the same. Over 500,000 charge payments are made per week.

There is a 90% discount for residents and numerous exemptions including buses, coaches, taxis, motor cycles, emergency vehicles, disabled persons’ vehicles and green vehicles. The scheme is enforced through cameras linked to Automatic Number Plate Recognition technology.

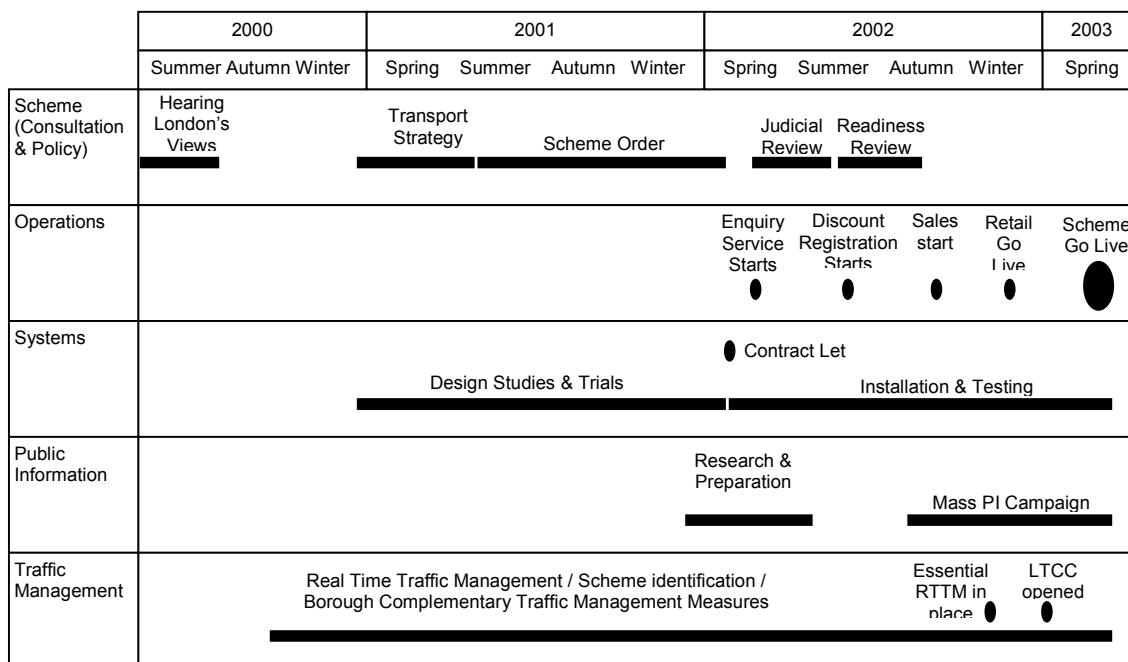
3. SCHEME IMPACTS

There has been major investment in monitoring systems and post implementation studies that have been vital to understanding the impacts of the scheme.

The key effects of the scheme according to TfL have been

- traffic congestion within the charging zone has reduced by 30 percent during charging hours;
- traffic congestion on main roads into and out of the charging zone has reduced by up to 20%;
- reliability has improved and the amount of time spent in queues or slow moving traffic has reduced by one third;
- the volume of traffic in the charging zone has reduced by 15 percent;
- there has been no increase in congestion along the main diversion route, the Inner Ring Road, where increases in traffic are being successfully managed;
- of the 65,000 or so car trips that are no longer being made to the charging zone during charging hours, 50-60% have transferred to public transport, 20-30% divert around the charging zone and 15-25% have made other adaptations such as changing the timing of journeys;
- there have been significant improvements to bus services in the zone and beyond to complement congestion charging and bus patronage has increased significantly in the zone and throughout London;
- public transport is successfully accommodating displaced car users;
- comparative analysis of the many influences on the central London economy throughout 2003 and 2004 suggest that the direct impact of congestion charging on business activity has been small (although some retailers dispute this);
- there have been gains in environmental amenity, fewer road traffic emissions (e.g. 20% less CO₂) and a 20% reduction in fossil fuel consumption within the zone;
- net revenues of £80M per annum are being generated, lower than originally estimated ;
- accidents within the charging zone are continuing to decrease ; and
- amenity benefits for central London recognised by visitors, workers and residents.

4. SCHEME DELIVERY



Delivery timetable

The above diagram shows the five main workstreams and the key deliverables that had to be completed in order to deliver the whole scheme.

Scheme (Consultation and Policy) - Legal powers for the scheme were put in place through the Transport Strategy and a legal order. Public and stakeholder consultation was an important and continuing activity right up to and beyond the start date. The scheme had to withstand a legal challenge brought by, amongst others, the local borough council in the heart of the zone.

Operations – setting up and operating an inquiry service, an exemptions and discount registration scheme, sales channels and dealing with violations were key to making the scheme operate successfully.

Systems – planning, designing and implementing the systems necessary for discount registration, paying charges and enforcing the scheme.

Public information – a mass public information campaign, to make sure people knew about the scheme, how it affected them and how to register and pay the charge, was an important factor.

Traffic management – crucial to the success of the scheme was the early development of traffic management measures and programmes to manage the traffic particularly on the Inner Ring Road (which was not subject to major capacity enhancements), cope with altered traffic patterns, prevent rat running and improve bus operations. Improving bus services was also key as there was no time to introduce major rail or underground schemes.

5. SUCCESS FACTORS

Congestion charging is likely to be somewhat controversial and attract opposition, in some cases very determined opposition. It is also typically very complex and implementation is unlikely to be straightforward. London had a clear and very visible political **champion**, Ken Livingstone, the Mayor of London with the powers, personal and political skills and single minded determination and commitment to drive the scheme forward, backed up by the fact that charging had featured in his election manifesto. He helped overcome the obstacles, sold and argued for the scheme in public, countered objections and provided consistent backing for the technical officers implementing the scheme. The Mayor was supported by a determined, committed and enthusiastic team of can do staff.

The scheme development benefited from having a very clear **objective**, namely to reduce congestion and the fact that it was part of an overall transport strategy. Other aspects such as raising revenue or reducing travel and encouraging transfer to public transport whilst important were secondary to the focus on congestion reduction. The scheme was also a part of an overall package of measures to reduce congestion including enforcement of traffic and parking regulations and controlling roadworks. Having a clear unambiguous focus helps with decision making during the scheme planning stage.

Although charging schemes raise revenue in the medium to long term, they can be costly to set up in the first place and therefore **money** needs to be available to cover this set up phase. London was fortunate in that the national Government had provided adequate funds for this scheme development and implementation. London also benefited from the fact that the traffic and revenue forecasts showed that the scheme had a healthy positive cost benefit ratio. A common statement during scheme planning was that the scheme would raise some £4m a week in revenue and generate some £2m a week in positive economic benefits for London.

Although charging was controversial and attracted significant opposition, virtually no one disputed that central London had a severe traffic congestion **problem** and that “something had to be done”. Doing nothing was not seen as an option and this provided some favourable impetus for the scheme particularly as no other options (e.g. parking restraint) would be as effective in reducing through traffic. Where the problems are less severe or not recognised, implementation of charging is likely to be more difficult. The severity of an existing problem and the lack of other solutions help encourage charging.

In London, the Mayor had virtually all the **powers** required to enable him to implement the scheme with relatively little need for central Government or other approvals. This compares favourably for example with the situation in other areas of the UK where central Government has a more important approvals role. This was particularly important for the central London scheme as it was generally felt that at times during the planning process, central Government’s commitment to the scheme was somewhat half hearted in comparison with the Mayor’s full support.

Charging is generally accepted as more justified where there are reasonable **alternatives**. London featured well in this respect in different ways. Firstly there was a reasonable alternative traffic route, the Inner Ring Road, for those vehicle drivers who did not have an origin or destination in the charging zone. The traffic management strategy was geared

towards ensuring conditions and journey times on the IRR did not get any worse and this outcome has been achieved. Secondly and notwithstanding its operational difficulties, central London has an almost unsurpassed level of public transport accessibility. Given that over 85% of travellers into central London use public transport, the impact of transfer from private cars to public transport on overcrowding for example is limited. This differs from other UK cities where the proportion of commuters using car is much higher and so the capacity of public transport to cope with transfer is problematic. One argument used by freight interests is that there is no alternative for vehicles delivering goods and services in the zone and therefore goods vehicles should be exempt. Although the charge for heavy goods vehicle was reduced from £15 originally to £5, the arguments for exemption were not accepted.

Public **support** and acceptability for the central London charge was another key success factor. Typically support was around the 50% level. Three key factors maintained and enhanced the level of public support for the scheme. It has been recognised for some time that support for charging is higher when the revenues are spent on improving transport rather than the charge being a general tax. In London the revenues were hypothecated to be spent on improving transport in London for the first ten years of the scheme. Secondly the large number of exemptions and discounts reduced or removed potential strong opposition from a number of specific groups including zone residents, taxi drivers, motor cyclists, groups representing disabled persons, public transport operators and the emergency services. Thirdly much time and effort was spent on public consultation and liaison and engagement with stakeholders.

A wide variety of technical and management **skills** were brought together in London to create an integrated team with genuine partnership working. London benefited from the considerable amount of high quality research that had been carried out prior to TfL being created through the Government's RCOL (**R**oad **C**harging **O**ptions for **L**ondon) programme, many of whose recommendations were part of the eventual scheme. In London strong project management provided by both permanent TfL staff and external management consultants were a key factor in ensuring scheme progress together with technical skills brought together from a wide variety of sources including transport and engineering consultants, management consultants, specialist consultancies, TfL staff and new recruits.

Other factors such as the use of proven technology, a clear procurement strategy and an enthusiastic team with a can do attitude were also important.

6. CONCLUSIONS

The central London road pricing scheme has shown that such schemes can be planned and implemented successfully in relatively short timescales and can achieve significant transport benefits and a high level of public acceptability.

In London however a particular set of circumstances came together to allow the scheme to proceed. These may be summarised by the acronym COMPASS

- C Champion
- O Objective
- M Money
- P Problem and Powers
- A Alternatives
- S Support
- S Skills

Consideration of these factors may help provide some direction and increase the chances of successful implementation of other charging schemes. Other factors such as the development of improved and cheaper technology will also be influential. Perhaps however ultimately the most significant success factor which may assist the development of future charging schemes is the very fact that the London scheme was implemented, is working successfully and the Mayor who implemented it has been re-elected.