



CASE STUDY

Doing the seemingly impossible London, United Kingdom's congestion charge

Key points

- *The successful induction of the congestion charge in London, United Kingdom highlights the importance of strong political leadership with a clear vision in jump-starting the transition from motorized transport system towards eco-efficient public transport system.*
- *Although the charge was met with initial resistance from the public, London is now known for its high-quality bus networks, partly subsidized from the revenues raised from the congestion charge.*

There was a problem...

In 2002, London suffered the worst congestion in the United Kingdom, with average traffic speeds slower than 12 km per hour. The city lost between an estimated £2 million and £4 million every week in terms of time lost due to congestion.¹

What was done?

In February 2003, the London Congestion Charging Scheme was launched to address to reduce the volume of moving vehicles. The scheme covered a 22 square kilometre area initially, but had almost doubled in size in February 2007.

- Drivers pay a charge of £8 to enter the zone between 7 a.m. and 6 p.m., Monday to Friday.
- Drivers found to be evading the charge area are issued a penalty charge notice.
- Environment-friendly vehicles are exempted. A number of vehicles are exempt from the charge, including those that present positive environmental benefits compared with conventional vehicles (hybrid cars and those that run on alternative fuels, such as electric, hydrogen and liquid petroleum gas).

Results

By 2006, the congestion charging zone had reduced congestion in central London by 26 per cent, compared with the 2002 level.² The following highlights some of the broader economic, environmental and social benefits of the scheme.³

- **Reduced pollution:** Greenhouse gas emission reduced by 16 per cent from 2002 to 2003. NOX and PM10 within the congestion charging zone decreased by 18 per cent and 22 per cent, respectively, by 2004.
- **Increased modal share of buses during charging hours:** There was a 37 per cent increase in the number of passengers entering the congestion charging zone by bus during charging hours in the first year.
- **Increased pedestrian safety:** There have been between 40 and 70 per cent fewer accidents that resulted in personal injury within the zone.
- **Raised revenue:** The scheme generated £122 million net in fiscal year 2005/2006.⁴

¹ Transport for London website, "Congestion Charging" (2007). Available from www.cclondon.com/whatis.shtml (accessed 16 November 2011).

² European Environment Agency, *Success Stories within the Road Transport Sector on Reducing Greenhouse Gas Emission and Producing Ancillary Benefits* (Copenhagen, 2008). Available from www.eea.europa.eu/publications/technical_report_2008_2/at_download/file (accessed 16 November 2011).

³ *ibid.*

- **Cost savings:** Based on the £8 charge, the scheme is estimated to save £2.5 million per year as a result of a reduction in vehicle kilometres travelled, fuel consumption and CO₂ emissions. The scheme achieves a cost efficiency of £78 million when all costs and benefits are considered.
- **Increased sales of hybrid vehicle:** The congestion charge is boosting sales of hybrid cars – Honda and Toyota increased their supply of hybrid vehicles in 2007.

Lessons learned

Political leadership and commitment: Not surprisingly, there was a significant level of opposition to the introduction of the scheme – from the media, politicians and local residents and businesses. The mayor of London, Ken Livingstone, was heavily engaged in the project, setting out a clear vision and delivery plan and driving forward the introduction of the scheme using devolved powers.

Success factors

Communication strategy: Formal and informal public consultations were conducted throughout the development of the scheme, with feedback reports subsequently made public. Media campaigns explained the operation and implications of the scheme. A clear vision and delivery plan for the scheme helped to raise confidence in the long-term financial benefits, both in terms of the expected revenue generation and the cost savings as a result of reduced congestion, all of which helped to justify the initial costs (£162 million).

Clearly defined roles and responsibility of the Transport for London: Overall responsibility for managing the scheme was allocated to one agency, the Transport for London, which manages the whole of London's transport network. This move ensured sensible designs, implementing and ongoing management of the scheme and that it was integrated with the wider transport strategy for the city. The initial technology and infrastructure costs, at £162 million, were covered by the Transport for London's General Fund.⁵ The agency is subsequently responsible for issuing penalty notices and controlling penalty payments with mobile enforcement units.

Considerations for replicating

Research and extensive trials prior to the launch: In many cases, successful implementing depends on how to design the scheme. In the case of London's congestion charge, extensive research and trials were conducted prior to the actual launch. Findings from the research and trials had a critical role in providing convincing evidence to win over public acceptance.

How to recycle the revenue: The scheme was able to generate income that exceeded its operating costs, making a contribution of £303 million to the public purse between 2002 and 2006.⁶ Revenue from the scheme is used to fund major public transport improvements, including improving bus services and renovations to the London Underground.

Further reading

Congestion Charging, by Transport for London (London, 2007). Available from www.cclondon.com/whatis.shtml.

Impacts Monitoring: Fourth Annual Report, by Transport for London (London, 2006). Available from www.tfl.gov.uk/assets/downloads/FourthAnnualReportFinal.pdf

Success Stories Within the Road Transport Sector on Reducing Greenhouse Gas Emissions and Producing Ancillary Benefits, by European Environment Agency (Copenhagen, 2008).

⁴ Transport for London, *Central London Congestion Charging: Impacts Monitoring* (London, 2006). Available from www.tfl.gov.uk/assets/downloads/FourthAnnualReportFinal.pdf (accessed 16 November 2011).

⁵ European Environment Agency, *Success Stories within the Road Transport Sector on Reducing Greenhouse Gas Emission and Producing Ancillary Benefits* (Copenhagen, 2008). Available from www.eea.europa.eu/publications/technical_report_2008_2 (accessed 26 February 2012).

⁶ Ibid.