Congestion charging: lessons from London

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To Cambridgeshire County Council

16 November 2016
Overview

- London in context
- Transport for London
- The Congestion Charge
- Discussion
London in context

- 1,579km² with 8.6m residents
- 26 million journeys per day
- The charging zone covers the heart of UK Government, business, media and banking
- Designed to address the unique issues in central London
- Covers approx 19 km² or 1.3% of London
London is a city for residents, workers and visitors

1 million
- Total job growth 2004 - 2014

25%
- of employment in Knowledge Intensive Sectors – 43% of all growth in England since 2009

17.4 million
- Total tourists – more than any other city in the World

193
- Global headquarters – 3rd in world behind Tokyo and New York

1st place
- European City Monitor
Pressure on the transport network

- 75% of all UK rail journeys start or end in London or south east
- Population forecast will lead to an increase of 35-40% in the number of trips by 2050
- We will need a 70% increase in public transport capacity
Transport for London
London’s strategic transport planning is integrated with spatial and economic planning.
Transport for London

- TfL is responsible for planning and operating London’s transport system
- We must meet the rising expectations of customers and plan for a growing population
- TfL investment helps unlock economic growth and development to keep London working
TfL has increased public transport and cycling significantly since 2000

- 40% increase in bus usage
- c200% increase in cycling since 2000
- Highest ever Underground usage
- 20% reduction to traffic in central London (due mainly to congestion charging)
- 11% modal shift from car to public transport, walking and cycling (‘saving’ 2 million car driver trips / year)
...Less than a third of journeys are now by car
Responsible for 5% of the road network...carrying 1/3 traffic

• We manage the TfL Road Network (TLRN), the ‘red routes’ in London

• The 33 Local Authorities (Boroughs) maintain and operate their own roads and car parking

• TfL oversees traffic signals and network of improvements and large scale projects

• Congestion in London already costs £4bn each year and is forecast to increase by 15% in outer London by 2031
Congestion Charge
Case for charging had been built up over a number of years

1995

The general case established (Government sponsored London Congestion Charging Research Programme)

1999

Legal powers to charge given to Mayor and Local Authorities

March 2000

ROCOL* Report on system using vehicle registration and £5 daily charge – could have a ‘significant impact on traffic conditions’ in central London

May 2000

Mayor elected on manifesto commitment to consult on a potential charging scheme in central London

* The Road Charging Options for London
Initial policy was developed into a business design

- Following the election of Ken Livingstone, a comprehensive public consultation with stakeholder organisations and the publication of the Mayor’s Transport Strategy, a ‘Scheme Order’ was drafted to provide a legal definition of the scheme, setting out all aspects of its operation.

- Following feedback from these consultations, the initial proposals were refined and developed into a finalised Scheme Order.

- This produced a framework for the scheme and an overall business model, including the technical architecture and structure of the back-office functions.

- A more comprehensive functional and technical statement of requirements was developed, a cost and volume model was produced, and a detailed procurement strategy was identified.

- Culminating in the appointment of the Primary Service Provider to test and run the scheme.
A comprehensive public information campaign was essential prior to the launch

Had to overcome an initial poor public perception of the scheme with local papers predicting “traffic chaos” and “tube fears”

Major public information campaign launched to reduce concerns and inform public of key points

- Simple poster campaign
- TV & radio adverts
We successfully launched the scheme on 17 Feb 2003
How does the scheme work now?

- ‘Area Charging’ scheme – drivers are charged a single payment to drive within the defined area on a given day.

- Charges apply Monday – Friday, 7am – 6pm.

- Charge of £11.50 per day if paid online on the day or in advance. The charge can be paid the following day at a cost of £14.

- £10.50 for vehicle owners registered for CC Autopay – introduced January 2011.
Some drivers are exempt, making up about 30 per cent of the remaining traffic.

Residents receive a 90% discount, while the following do not pay anything:

- Buses, coaches and minibuses
- Taxis and licensed minicabs
- Motorbikes/mopeds
- Emergency services
- Greener vehicles
- Breakdown/recovery vehicles
- Certain health workers
- Military vehicles
How is the charge enforced?

1. Car enters zone and VRM is recorded by camera
   ![Camera](camera.png)
   VRM: T 123 ABC

2. VRM is checked against database of paid, exempt or 100% discounted vehicles
   ![Server](server.png)
   VRM: T 123 ABC

3. If VRM is matched with database, image is automatically deleted
   ![Checkmark](checkmark.png)
   ![No Action](no-action.png)

4. If no payment received, Penalty Charge Notice (PCN) is issued using keeper details from DVLA
   ![Keeper Data](keeper-data.png)
   ![PCN Issued](pcn-issued.png)
Average daily traffic entering charging zone*

- Pre Congestion Charging
  - **185,000** cars per day entering zone

* During charging hours (07.00-18.00)
Average daily traffic entering charging zone*

* During charging hours (07.00-18.00)

After Congestion Charge
Average of **124,000** cars per day
Average daily traffic entering charging zone*

* During charging hours (07.00-18.00)

2009 less than 106,000 cars per day (43% reduction)
Average daily traffic entering charging zone*

22% fall in vans and 17% fall in lorries entering central London between 2002 and 2009

* During charging hours (07.00-18.00)
Average daily traffic entering charging zone*

* During charging hours (07.00-18.00)

Increase in non-charge paying vehicles – buses and coaches and bicycles
Congestion was reduced, but then started to increase again

* Moving car observer surveys - during charging hours (07.00-18.00)
So why has congestion returned?

• Reflects a reduction in effective capacity of road network for general traffic

• Important to balance priorities – activity being undertaken to address congestion levels

• Clear that without charging, congestion would be much worse
What other impacts have there been?

Congestion Charging raised £149.2m in 2014

Neutral impact on businesses

Reductions of 8% of NO\textsubscript{x}, 7% of PM\textsubscript{10} and 16% of CO\textsubscript{2}

Reduced numbers of cars have led to less personal injury road accidents.
Keeping the scheme under review

- Charge increased from £5 to £8
- Charge increased to £10
- Charge increased to £11.50. Penalty charge increased from £120 to £130
- Alternative Fuel Discount replaced by Greener Vehicle Discount
- Greener Vehicle Discount replaced by Ultra Low Emission Discount

2005 2006 2007 2008 2009 2010 2011 2012 2013

2014

Extension of zone to include WEZ

Removal of WEZ
Lessons from the Congestion Charge

- Political commitment is key
- Effective research and clear policy objectives
- Extensive public consultation and stakeholder engagement
- Strong project management
- Need for effective contract management

- Adequate public transport alternatives
- Effective traffic management
- Strong public information campaign
- Don’t sit still: monitoring, engagement and improvements
Any questions?

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Annex
2014/15 Budget at a glance

TfL income 2014/2015

<table>
<thead>
<tr>
<th>Source: TfL</th>
<th>£bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total income</td>
<td>£10.9bn</td>
</tr>
</tbody>
</table>

- 25% Grant funding
- 15% Crossrail funding
- 40% Fares
- 7% Other income
- 13% Borrowing and cash movements

Capacity increase this year (2014/15)
Extra spaces every hour of the morning peak

<table>
<thead>
<tr>
<th>Increase on the Victoria line</th>
<th>+1,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase on the District line</td>
<td>+1,000</td>
</tr>
<tr>
<td>Increase on the Northern line</td>
<td>+9,500</td>
</tr>
</tbody>
</table>

TfL expenditure
We reinvest all our income to run and improve your services

- 39% is spent on improving your services
- 61% is spent on running the network

600 New Routemasters for London

<table>
<thead>
<tr>
<th>Delivered to date</th>
<th>200</th>
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<tbody>
<tr>
<td>In 2014/15</td>
<td>250</td>
</tr>
<tr>
<td>In 2015/16</td>
<td>150</td>
</tr>
</tbody>
</table>
- 10 Routes running New Routemasters

Source: TfL Budget 2014/2015
Roads need to fulfil different functions

- Moving
- Living
- Unlocking
- Functioning
- Protecting
- Sustaining
Parking policy is an important part of the supply and demand for the transport system in London

- London Plan sets maximum standards for new car parking in new developments

- TfL rarely collects revenue from parking (except at some station car parks)

- London Boroughs are responsible for:
  - Residential permits (number and price)
  - Local car parks and on-street pricing

- London Plan sets out “minimum standards” for cycle parking for different land uses
There is a clear positive relationship between households with access to cars and car trips rates.

Relationship between household car ownership and average car trip rate, by borough, LTDS 2011/12-2013/14.
Parking standards are set by land use – with extra provision for people with disabilities and electric vehicles

- Accessible parking - provision for employees who are disabled motorists

- Retail parking – for different types of development in areas with low, medium, high access to public transport

- Employment – spaces defined by office size for central, inner and outer London

- Residential maximum parking spaces:

<table>
<thead>
<tr>
<th>Number of beds</th>
<th>4 or more</th>
<th>3</th>
<th>1-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Spaces</td>
<td>Up to 2 per unit</td>
<td>Up to 1.5 per unit</td>
<td>Less than 1 per unit</td>
</tr>
</tbody>
</table>

- Areas with higher public transport connectivity should aim for less than the maximums