Central London Congestion Charging Scheme

Has it Achieved its Objectives?

Derek Turner
Principal, Derek Turner Consulting
The scheme has been very successful

“C is for calm: commuters stay away as London brings in congestion charge”

“The people who said it would never work were wrong”

– Alistair Darling, Secretary of State for Transport

“This is the best idea since the Underground. Like that was, charging is a bold vision that could help us rethink transport.”

Transport 2000
The scheme has been very successful

Around 110,000 people a day pay the congestion charge

60,000 fewer car movements per day enter the charging zone
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Derek Turner brings years of traffic management expertise

- Former Managing Director for Street Management
- Introduced congestion charging in London

“I brought Derek Turner in to deliver congestion charging and my confidence in him has been rewarded. He is one of the finest public servants I have ever worked with.”

Ken Livingstone, Mayor of London (May 2003)
Derek Turner Consulting

• Derek Turner Consulting (DTC) is a strategic consultancy specialising in:
  – road user charging schemes
  – transport policy
  – strategic project and organisational management

• DTC has formed operational alliances to provide greater scope of delivery

www.DerekTurnerConsulting.com

Suite 4
3 Catherine Place
London SW1E 6DX

Tel: +44 (0)20 7808 5541
Fax: +44 (0)20 7808 5542
Objectives of the scheme

• Reduce Central London traffic levels by 10-15%
• Cut road transport delays by 15-25%
• Increase speeds by 10-15% inside zone
• Improve conditions outside zone
• Improve bus operations
• Produce net revenue of £130m p.a.
• Achieve a modal shift
London was in severe need of a charging scheme

• “…transport has become the number one concern for businesses in London…” London Chamber of Commerce and Industry (1999)

• 90% Greater London residents said “there is too much traffic in London” ROCOL Group 1999

• 80% of motorists found congestion in London as “very serious” Lex Report (1999)

• Central London average traffic speeds of 16km/h during the working day
There were many possible methods of charging road users

- Cordon entry permit
  - Payment on passing through toll plaza
- Area License
  - Paper licenses for visual inspection, option of database
  - Virtual license with enforcement by digital camera
  - Electronic Road Pricing systems
- Workplace Parking Levy
Issues affecting scheme introduction

• Legal powers granted in 1999/2000 to introduce a scheme
• Road Charging Options for London (ROCOL) report published 2000

• *Political issues:*
  – Congestion charging key issue of first mayoral elections (2000)
  – Scheme required delivery within timescale of Mayor’s first term

• *Delivery Issues*
  – Project team assembly
  – Integration of in-house and management consultancy teams
  – Procurement for a £230m project:
    – World’s largest road user charging operation
The central London congestion charge scheme comprises …

- Virtual area license with complementary database
- Enforcement using Automatic Number Plate Recognition (ANPR)
- Cameras located on boundary of zone and within charging area

The advantages to this are:

- “Intermediate technology” scheme allowed rapid implementation
- Cameras enabled greater scope for enforcement
- Ability to discriminate by vehicle type
- Payment easier – can be made on day of travel
- Possibility of future development into tag and beacon system
Timescale for implementation was 2 years

- **2000**: Deloitte appointed as TFL adviser
- **2001**: Contact awarded to Capita
- **2002**: Pre Go-Live for Website, PR
- **2003**: Enquiries Go-Live, Retail Go-Live, 17th Feb 2003 – Scheme Go-Live

**Programme Management**
- 12/00

**Procurement**
- 12/01

**Advisory Services**
- 08/02
- 01/03

**Solution design, development and implementation**
- 10/02
- 02/03

The Scheme
The congestion charging zone is a small part of London as a whole, but covers a 21km² charging zone with around 200,000 vehicles a day on some of London’s most congested streets.
The zone is monitored by digital cameras.

...automatic number plate recognition technology enables information regarding capture and keeper to be identified.

1. Car enters zone

2. Camera captures VRM
…and is supported by a comprehensive communications network.

How it operates:

- Cameras
- TfL hub site
- Wide Area Network
- Data Centre
- Call Centre
Who is charged?
• £5 per day
• By vehicle registration mark
• Payment made daily, weekly, monthly or annually
• Weekdays, 7am - 6.30pm
• Those vehicles not exempt
• Payment in advance or until 12am of day zone entered
• Charge doubles after 10pm

How to pay
• www.cclondon.com
• SMS text messaging
• 200 PayPoint outlets in zone
• 9000 PayPoints nationwide
• Free standing machines in car parks in zone
• Post
• Phone
A major public information campaign resulted in trouble free use

- Leaflets to 3 million households
- Over 35,000 packs to businesses operating fleets of 25 or more vehicles
- Call centre (0845 900 1234)
- Advertising on TV, radio, newspapers
- www.cclondon.com
- Face to face activity in boroughs
- Emails to businesses in and around London

**Split of payment channels**
**Feb - Aug 2003**

- **Retail outlets** 35%
- **Internet** 25%
- **Call centre** 20%
- **SMS messaging** 19%
- **Post** 1%

How it operates
Strict enforcement…

- No Matching Payment found
- VRM sent to DVLA. Keeper details returned
- Penalty Charge Notice Issued
- No Payment received
- Bailiff Warrants issued
- Vehicle clamped or removed

- £80 penalty charge is reduced if paid within 14 days
- Representations received in response to PCNs may result from incorrect input of vehicle registration detail
…and a thorough monitoring strategy

• Scheme supported by comprehensive Impacts Monitoring Strategy

• Provides feedback on detailed operation and effects of the scheme

• Results published each year

• 5-year programme

• Covers impacts on: Traffic & Transport, Business, Economy, Social Groups and Environment
…enabled a successful launch and on-going performance

This is the world’s largest congestion charging scheme:

- Congestion has decreased by 30%
- Average weekday speeds in and around the zone increased by 10%-20%
- Public transport is coping well
- Buses are benefiting from reduced congestion
- Payment systems working satisfactorily
- PCNs issued at an average of 3% of payments received
- Public remains supportive of scheme

“We always thought we had to live with congestion in our city centres. London has shown this is no longer true.”

- Susan Kramer (board member for Transport for London and previous Liberal Democrat mayoral candidate)
Vehicle data capture allowed new traffic management procedures

- Working with London boroughs
- Successful accommodation of traffic diverting to the boundary route around the congestion zone
- Managing “knock-on effects” such as:
  - traffic calming
  - parking management
- Improved enforcement of parking and loading restrictions
- Improved co-ordination of street works
Substantial advantages for London’s transport can be seen:

- Time spent stationary or <10km/h: 25%
- Traffic delays: 30%
- Journey times to, from and across charging zone: 14%
- Excess bus waiting times on routes serving charging zone: 33%

...as well as:
- Reduction in road accidents within zone
- Expected net revenue for 2003/04 of £68million
…as well as good public reaction

- The scheme processes large volumes of payments on a daily basis
  
  | Payments per day | 108,000 |
  | Fleets           | 12,000  |

- Driver responses to the scheme have settled
- Enquiries or payments at call centres have fallen from an average of 167,000 per week to 70,000
- Payment rates for PCNs (Penalty Charge Notices) have steadily increased
- Representations received in response to PCNs has decreased from 62% to 16% since early weeks of scheme
...and a generation of net economic benefits

<table>
<thead>
<tr>
<th>Costs</th>
<th>£ million</th>
<th>Annual Benefits</th>
<th>£ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tfl admin &amp; other</td>
<td>5</td>
<td>Time saving</td>
<td>155</td>
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<tr>
<td>Scheme operation</td>
<td>90</td>
<td>Reliability benefits</td>
<td>20</td>
</tr>
<tr>
<td>Additional bus costs</td>
<td>20</td>
<td>Vehicle fuel &amp;</td>
<td></td>
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<tr>
<td>Chargepayer compliance</td>
<td>15</td>
<td>operating savings</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accident saving</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disbenefit to former</td>
<td>-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>car-users</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>Total</td>
<td>180</td>
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These benefits are exclusive of the forecast net revenues of the scheme:

- £ 68 million in 2003/04
- £ 80 – 100 million per year thereafter
Prior to go-live, public support for the scheme was significant…

56% think congestion charging will cut traffic in central London*

Two thirds of Londoners believe congestion charging will deliver some benefits*

One third will use their car less in central London*

Opinion poll$ shows support for charging:
46% for charging
43% against charging

93% of respondents want action on congestion

* RAC “Making the most of Britain’s Roads Report 2003
$ Evening Standard 2002

Performance Overview
… though many local and national organisations were sceptical

- “It will be many years before the plans will come into effect - if at all.”
  - Evening Standard

- “It’s going too far too fast.”
  - The Automobile Association

- “Something needs to be done but we are not convinced this is the answer”
  - Westminster City Council
Reduction in inbound traffic flow is significant and enduring.
...with the most evident reduction observed on cars

**Total traffic entering the charging zone during charging hours**

- **Cars**
- **Vans**
- **Lorries & Others**
- **Taxis**
- **Bus & Coach**
- **Motorcycles**
- **Pedal cycles**

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Impact on retail business performance

- It is far too early to draw any firm conclusion

- There does appear to be a slowdown in central London’s retail and leisure activity during the first half of 2003 compared to the previous year, indicating a reduction in sales in and immediately around the charging area of 2%

- However, business owners and managers in the area perceive Congestion Charging to account only for 12% of the influences they reported

- More reliable longer term trend analysis is being undertaken
Impact on retail business performance

- Economic factors: 46%
- Seasonal factors: 15%
- Congestion charge: 12%
- Other: 4%
- Central line: 3%
- Company factors: 10%
- Tourism factors: 10%
- Others: 4%

Public Transport
Delays due to traffic disruption have almost halved

% scheduled kilometres not operated due to traffic delays
Mon - Fri

% kilometres not operated

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<thead>
<tr>
<th></th>
<th>Charging Zone</th>
<th>Inner Ring Road</th>
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</thead>
<tbody>
<tr>
<td>Last year</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td>This year</td>
<td>1.5</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Bus reliability has increased by over 25%
Peak hour bus speeds have increased by almost 20%.

Bus Speeds Mon - Fri AM peak

<table>
<thead>
<tr>
<th>Charging Zone</th>
<th>Last Year</th>
<th>This Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Ring Road</td>
<td>12</td>
<td>16</td>
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Trafalgar Square Pedestrianisation
Lessons Learnt

- Political commitment mandatory
- Strong project management required
- Integrated team and partnership essential
- Clear procurement strategy is a must
- Presenting congestion charging as part of an overall transport strategy
- Importance of public information campaign
Expect the Unexpected …

“Houston - we have a problem.”
Enthusiasm and “can do” attitude can deliver an “impossible” project
www.DerekTurnerConsulting.com

Suite 4
3 Catherine Place
London SW1E 6DX

Tel: +44 (0)20 7808 5541
Fax: +44 (0)20 7808 5542
Email: Derek@DerekTurnerConsulting.com