

London congestion charging

Conference presentation
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Deloitte Consulting
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Agenda

Overview of London congestion charging

Impacts of the London scheme

Lessons learned

Questions

The case for road user charging

“Traffic speeds in London in Victorian times were faster than those in 2000 prior to the introduction of the congestion charge.”

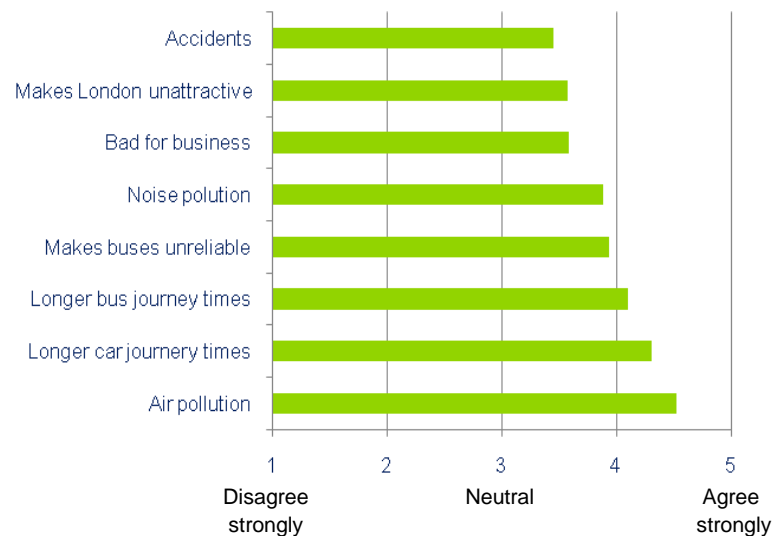
- Traffic congestion
 - A worldwide issue
 - Unpredictable travel times
 - Delays
 - Environmental damage and economic costs.
- Number of motor vehicles growing faster than growth in new roads – congestion will get worse.
- Charging seen as the most sustainable solution to match supply and demand. Many cities around the world have implemented or are now considering congestion charging:
 - Singapore
 - London
 - Stockholm
 - Hong Kong
 - Auckland
 - New York.



Case for change, London

- Public perception that traffic congestion and increasing journey times were impacting businesses.
- Journey times were seen as handicapping London's attractiveness to international companies looking to locate in Europe.
- London's public transport system needed improvement with much of the underground system and commuter rail network within Inner London overcrowded at peak times.
- High traffic volumes increasing pollution in and around London.
- A feasibility study had shown that a congestion charge offered a solution that could reduce traffic levels and congestion by a greater extent than most other feasible measures as well as provide extra funds to improve public transport.
- Seen by the public as the most acceptable way of raising funds for public transport investment.

Greater London residents' responses when shown a list of potential traffic problems (1999)



Motorists' views on road user charging in city and town centres (1997)

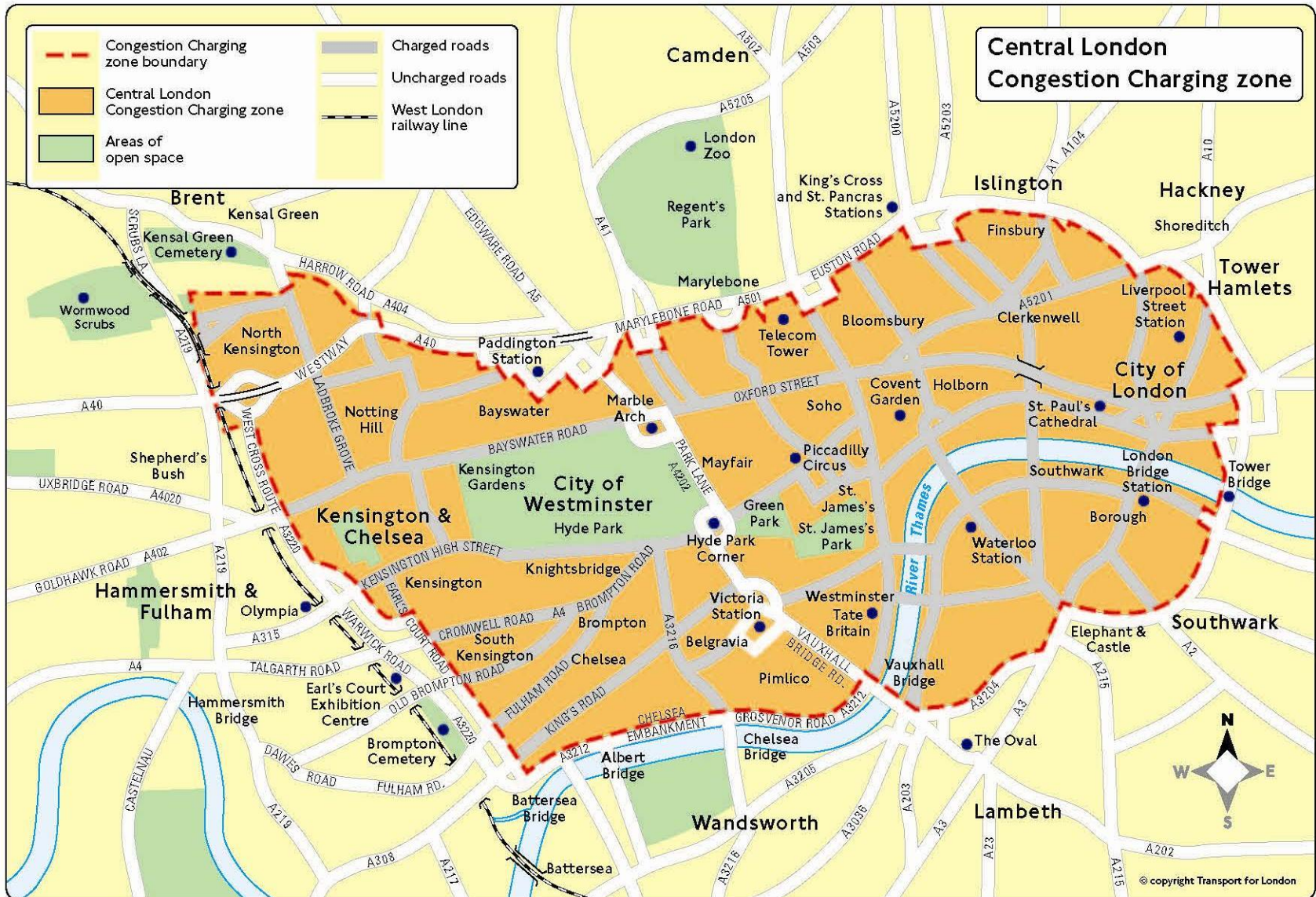
View	%
Totally oppose paying	38%
Understand need, but oppose paying	37%
Support idea of paying	23%
Don't know	2%

The central London CC zone is a relatively small area of London



London congestion charging zone

Including Western Extension (now removed)



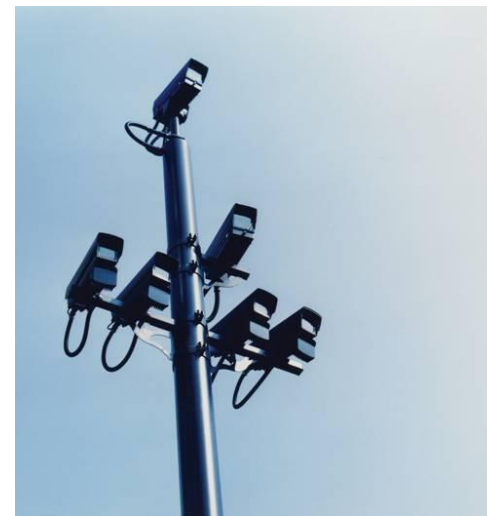
London congestion charge

- The Mayor of London made the commitment to implement the congestion charge a core part of his manifesto and it was part of a transport strategy.
- Transport for London (TfL) introduced congestion charging on 17 February 2003 in the central zone of London.
- This is the world's largest congestion charging scheme, involving:
 - A charge zone, which is 21 square km in size.
 - The daily monitoring and charging of approximately 200,000 vehicles
 - A £10 per day fee to enter the zone during charging hours (now from 7:00am to 6:00pm), reduced to £9 with automatic accounts.
 - Approximately 160,000 people pay the charge on a daily basis. Around 35% pay by internet, 17% by SMS and 22% by phone. The remainder pay in retail stores or in car parks.



How it works

- Vehicle enters zone.
- Licence plate captured by camera and stored on a database.
- Customer pays charge (various channels) and is recorded on a database.
- Database shows who has paid, who has not and who does not need to.
- Enforcement process for non-payers.



CCS Evidential Records

Colour Contextual Image

Monochrome Image from ANPR camera

Number Plate image from ANPR camera, Lane 1

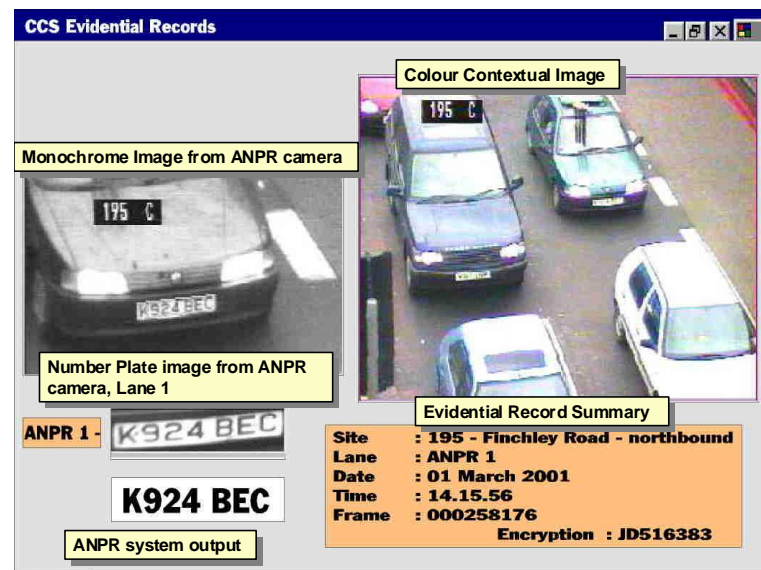
ANPR 1 - K924 BEC

K924 BEC

ANPR system output

Evidential Record Summary

Site : 195 - Finchley Road - northbound
Lane : ANPR 1
Date : 01 March 2001
Time : 14.15.56
Frame : 000258176
Encryption : JD516383



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Traffic impacts

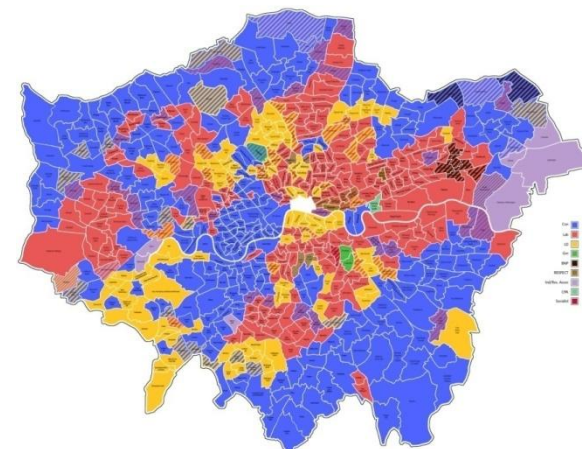
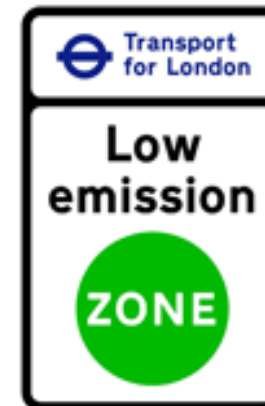
- Congestion in charging zone went down by 30% (but is now increasing again).
- Traffic entering the charging zone reduced by 18% – with cars down by 33%.
- Increased bus patronage and improved journey time and reliability. Large growth in cycling.
- Little or no change in number of trips to central area.
 - 50-60% moved to public transport
 - 20-30% divert around zone
 - 15-25% other adaptations.
- Increased congestion due to road works and road space reallocation.



Environmental impacts

Reduced emissions in the zone:

- Nitrogen oxides (NO_x) down by 16%.
 - 12% due to congestion charge
 - 4% due to engine improvements.
- Particulate matter (PM₁₀) down by 16%.
 - 12% due to congestion charge
 - 4% due to engine improvements.
- Carbon dioxide (CO₂) down by 19%.
- Further improvements achieved through London low emission zone and bus and taxi regulation.



Business impacts

- Broadly neutral impact on overall business performance in the charging zone.
- No overall impact on employment, number of businesses, turnover, commercial rents or profitability.
- Professional services benefitting from improved mobility.
- Retail sales declined around late 2002 and recovered by autumn 2003.
- Growth now slowing but this reflects wider economic factors.
- Retail sector remains concerned.



Social impacts

Surveys in 2003 relating to the Central London Zone suggested that the impact of the scheme on residents was generally less than expected by the same respondents prior to charging.

- Residents who commute into the charging zone reported significant changes in car use.
 - Those within the zone reported little change in car use.
- Residents within the charging zone were most positive about the scheme, relating in particular to:
 - Reduction in congestion
 - Air quality
 - Noise.
- Other Social impacts of concern:
 - Social inclusion
 - Workers in food markets
 - Cleaners/Hospital workers/Security guards.



Operating costs and revenue

Costs (2007/2008)	£ million
Scheme operational, publicity and enforcement costs	91
Other costs: TfL staff; traffic management; TfL central costs	40
Total costs	131
Revenues (2007/2008)	£ million
Standard daily vehicle charges (£8)	146
Fleet vehicle daily charges (£7)	37
Resident vehicles (£4 per week)	12
Enforcement income received	73
Total revenues	268
Net revenues	137
Allocation of revenues (2007/2008)	£ million
Bus network improvements	112
Borough plans	2
Roads and bridges	13
Road safety	4
Environment	2
Walking and cycling	4



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Why it worked

- Devolved government
- Highly integrated transport network
- Good public information
- Relatively simple technology
- Good project planning.

The mayor of London put his position at stake

- Ken Livingstone elected Mayor in May 2000.
- Commitment to implement congestion charging part of his manifesto.
- Transport strategy published in 2001.
- Congestion charging goes live February 2003.
- Mayor re-elected May 2004.
- Scheme extended to West London February 2007.
- London low emission zone February 2008.
- Mayoral election May 2008 – Boris Johnson elected
- August 2010 – cycle hire launched
- December 2010 – Western Extension removed
- Next election – May 2012

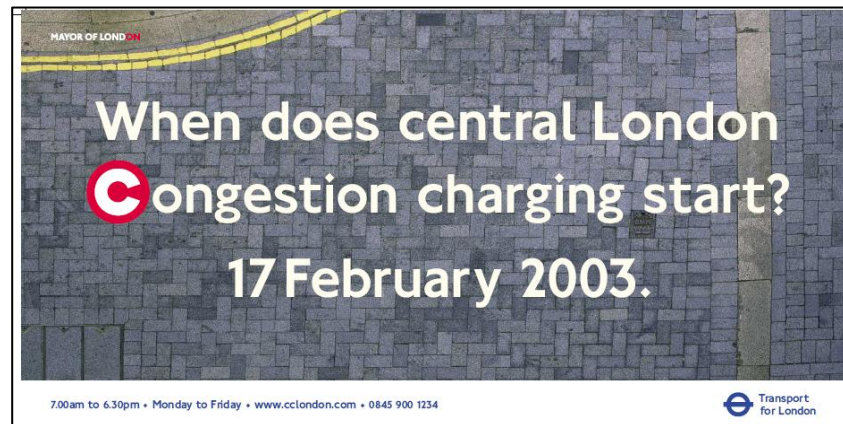
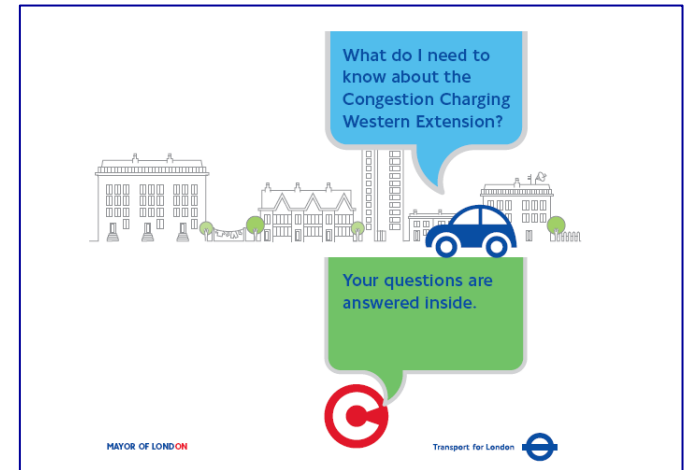


New buses were a critical part of the strategy



A comprehensive public information campaign was essential

- 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 the public of key points.
 - Simple poster campaign
 - TV and radio adverts.



Some examples from public information campaigns

MAYOR OF LONDON

When does central London
Congestion charging start?
17 February 2003.

7.00am to 6.30pm • Monday to Friday • www.cclondon.com • 0845 900 1234

Transport for London

More people using
public **C**ongestion transport

The Charge is helping it happen

MAYOR OF LONDON

Transport for London

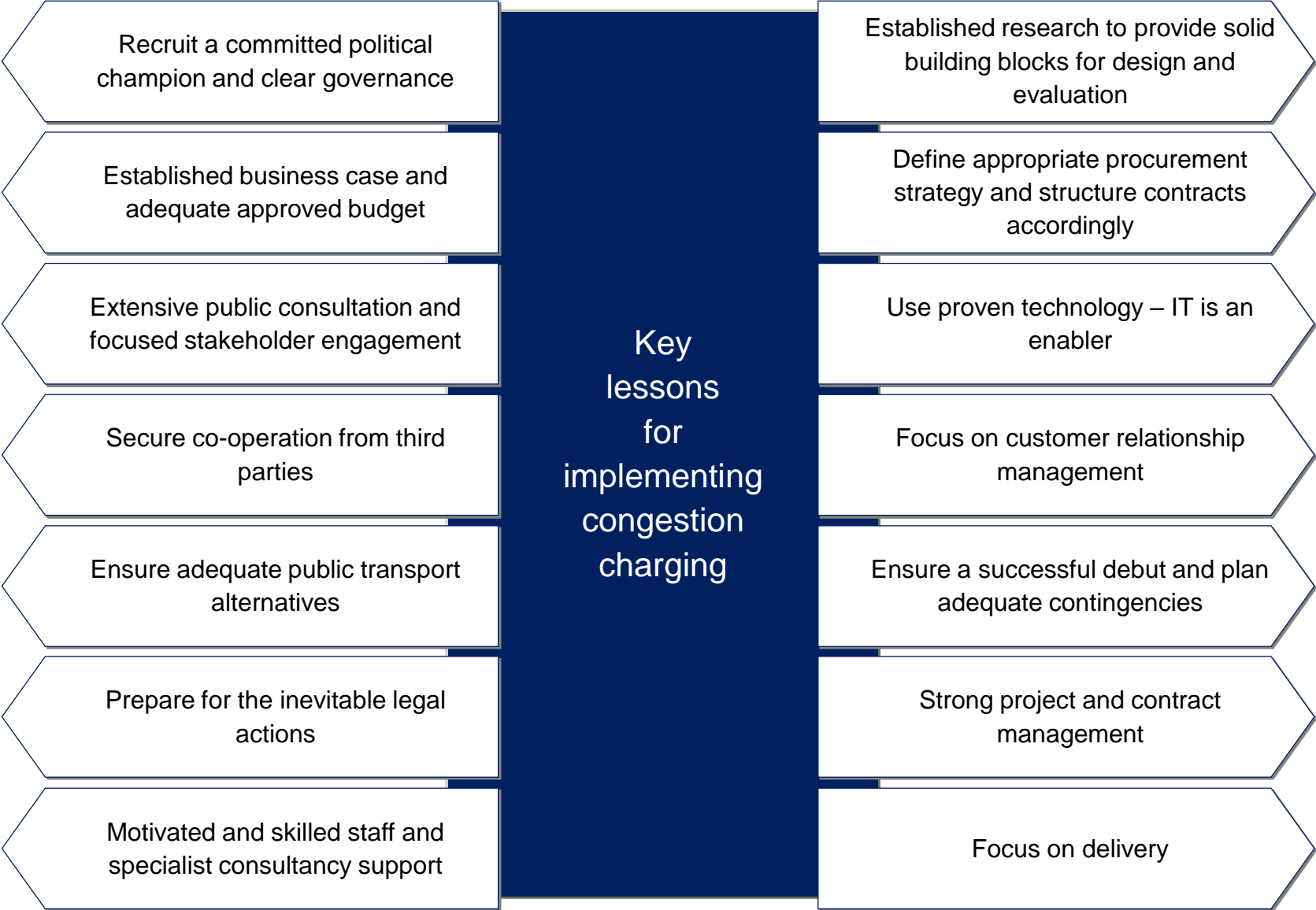
Less **C**ongestion

The Charge is helping it happen

MAYOR OF LONDON

Transport for London

Lessons learned



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Questions?

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