

# Central London Congestion Charging

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# What I will talk about today

- Background and context
- Operation of the scheme
- Projected impacts of the scheme
- Importance of monitoring
- Some early indicative results
- Lessons learnt and Next Steps



# **Background and Context**



# Central London

- Greater London - largest urban area in Europe, over 7 million population
- Central London - 1 million workers, heart of UK business, government, media, heritage
- Suffered worst traffic congestion in the UK
  - average traffic speeds 15km/hr
  - vehicles typically spent half their time in queues
- Congestion was increasing, costing people and business time and money
- General acceptance - 'something had to be done'



# Supporting Studies

- ROCOL report 2000, sponsored by Government, but seen as independent
- Aimed at candidates for London Mayor
- Considered implications of new legislation in London and future powers of Mayor
- Considered feasibility, effectiveness and acceptability of congestion charging
- In Mayor's first term, simple scheme for central London feasible; would significantly reduce traffic; and, if 'fair' would be supported





# Realistic Legislation

- Labour Government elected 1997
- Transport a key priority area
- Commitment in 1998 Transport White Paper that charging income not part of general taxation
- New legislation in 1999 & 2000
  - New powers for charging
  - Income to be retained for 10 years
- 'Additional' local transport expenditure - key element in gaining public acceptability





# Part of a wider strategy

- Congestion charging part of London-wide Strategy - No.1 priority 'tackling congestion'
- Integrated approach: public transport; parking & loading enforcement; congestion charging
- Extensive public consultation over 18 months
- Public transport improvements in advance
- Associated traffic management
- Commitment to monitoring and adjustments





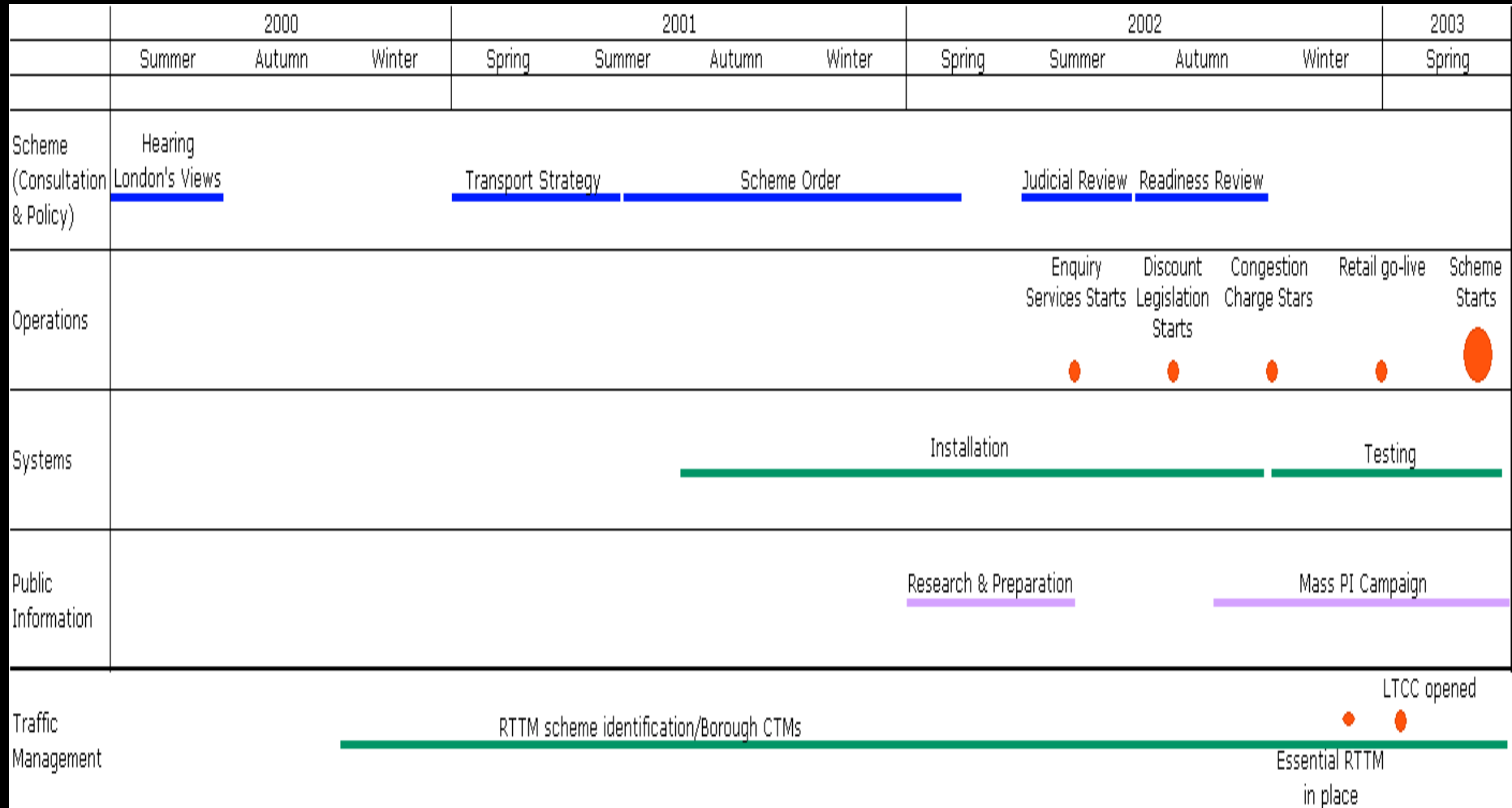
# Public Transport Improvements

- Substantial enhancements to bus capacity:
  - New routes
  - Frequency increases on existing routes
  - Introduction of larger buses
- New 24-hour services
- Bus fares frozen
- Better enforcement of bus lanes
- Better information & security
- Some improvements on Underground & Rail






# Project Plan

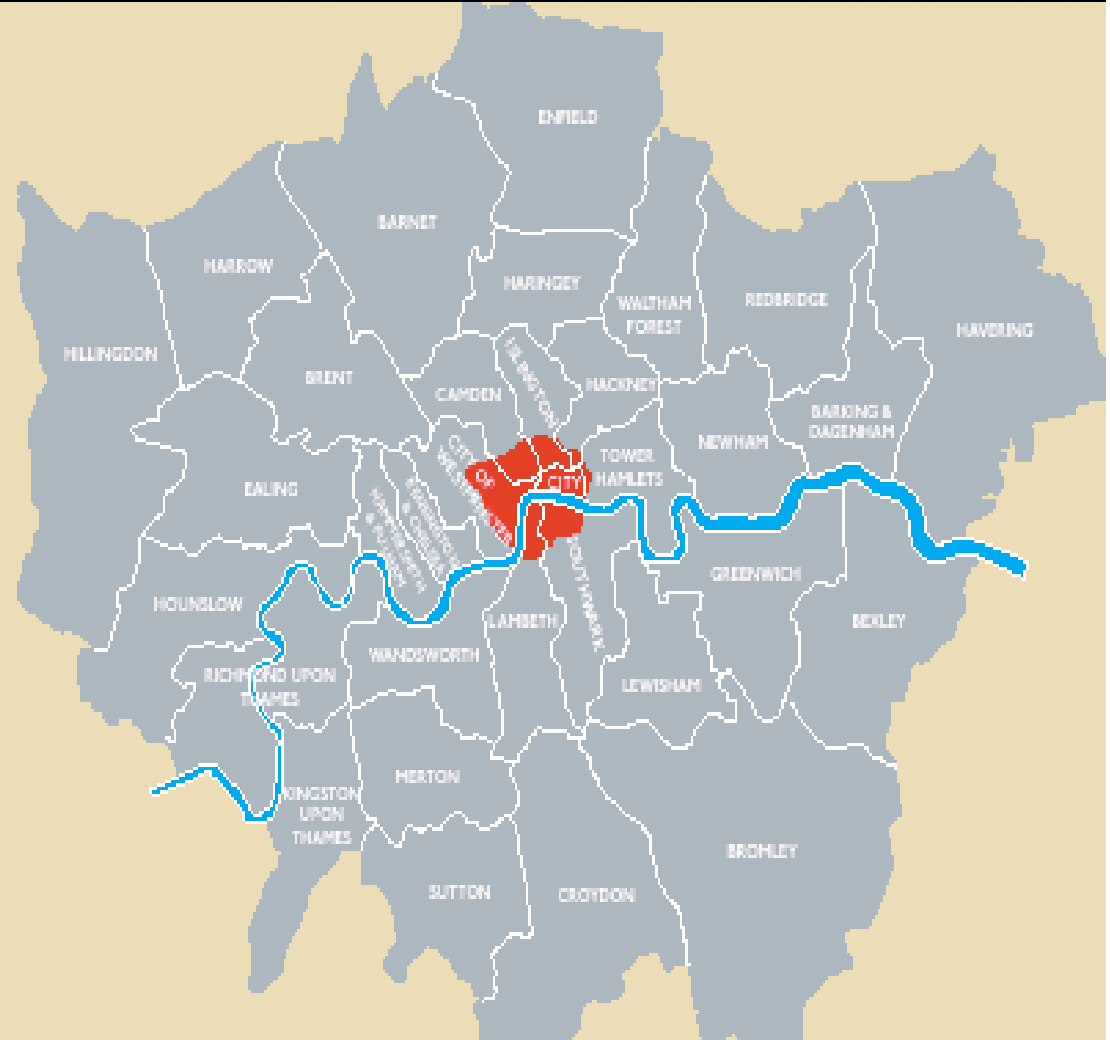


**So how does congestion  
charging work?**





Where exactly is  
the ongestion  
charging zone?  
Central London only.






**Central London congestion charging zone**



# Paying the Charge

- Daily, weekly, monthly or annual payment, for individual vehicle registration number

T 123 ABC

- Flat charge of £5 per day (Monday - Friday 7am - 6.30pm) for all vehicles
- Payment by post, telephone, internet, SMS, or at self service machines, retail outlets and some petrol stations
- Payment available up until midnight, but charge rises to £10 after 10pm





# Enforcement

- Vehicle registration numbers observed by fixed and mobile cameras and compared with payment database
- Cameras linked to automatic number plate recognition technology
- If no record of payment by midnight, £80 penalty charge sent to registered keeper of vehicle
- Vehicles of persistent evaders clamped and / or removed





# An overview of the infrastructure



TfL Hub Site

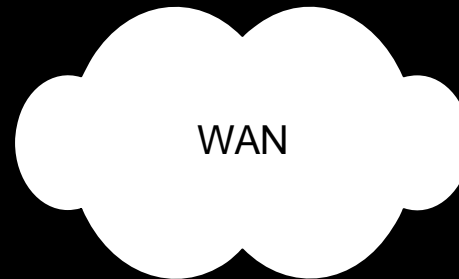


## Cameras

On & inside Inner Ring Road  
London



Call Centre



WAN



Capita Data Centre

# Camera Locations





# Fixed cameras



# Camera enforcement

CCS Evidential Records

Colour Contextual Image



Monochrome Image from ANPR camera



Number Plate image from ANPR camera, Lane 1

ANPR 1 - 

**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**



# Key Exemptions and Discounts

- Motorbikes/mopeds
- Military vehicles
- Emergency services
- Taxis and licensed minicabs
- Disabled persons
- Buses, coaches and minibuses
- Certain alternative fuel vehicles
- Breakdown & recovery vehicles
- Certain health service workers
- 90% discount for residents of zone





# Projected Impacts of the Scheme



# Projected impacts

- Reduce traffic inside charging zone by 10-15% and 2-3% in Inner London
- Cut traffic delays by 20-30% inside charging zone and 5-10% outside
- Traffic speeds increase by 10-15% inside charging zone and 2-4% immediately outside
- Help bus operations
- Improve journey times and reliability





# Monitoring the impacts

- Comprehensive 5 year monitoring programme
- Traffic patterns and traffic conditions
- Public transport operations and passenger levels
- Social impacts, including vulnerable groups
- Business and economic effects
- Environmental impacts, particularly air quality
- Case studies
- Results published every year
- First Annual Report published 3 June 2003





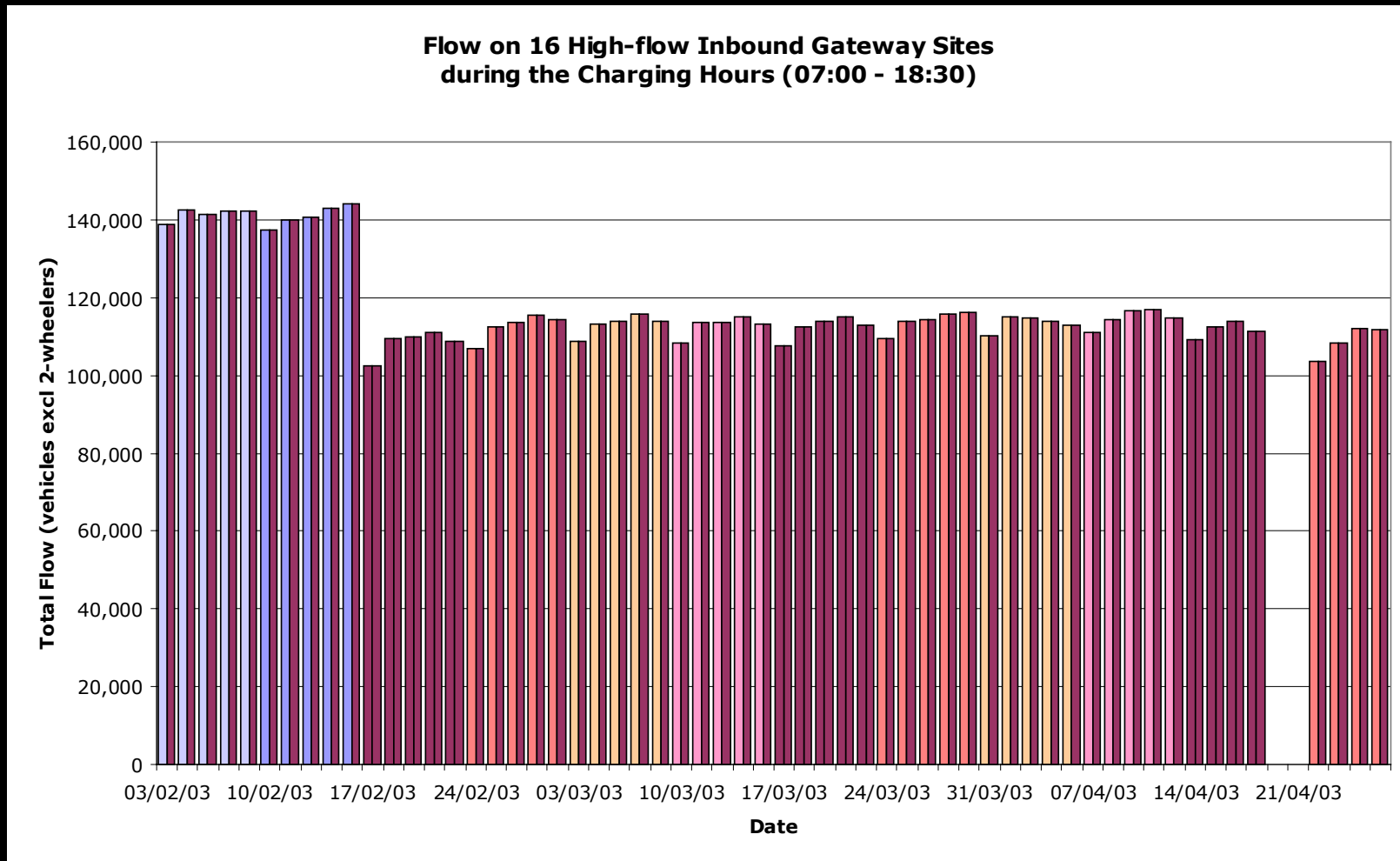
# **Some early indicative results**

**Congestion charging  
three months on**

# Charging is delivering more than expected reduction in traffic

- An overall reduction of vehicles coming into the zone of around 20%
- Actual traffic inside the zone has fallen 16%
  - based on sample traffic counts in the weeks following the introduction of charging
  - compared with equivalent data from last year

# Traffic entering the congestion charging zone





# Charging is delivering more than expected reduction in congestion

- Average speed of 17km/hour
  - up from 13km/hour for the same time last year
- Congestion during charging hours reduced by 32%
  - from the same time last year
  - TfL prediction was a congestion reduction of 20-30%
- results received from a full bi-monthly survey of journey times on 70km of road inside zone
- carried out during March and April 2003

## **Car Journeys to and from the zone are quicker and more reliable**

- Time taken for journeys to central London has reduced by 14%
- Time taken for return journeys has reduced by 13%
  - across a basket of about 5,000 journeys
  - survey compares the times taken for journeys two months before charging against same journeys one month after charging

## **Majority of ex-cars users have transferred to public transport**

- 150,000 fewer car trips are being made into, out of and through the zone
- 10%-20% of the reduction - car journeys diverting around the zone
- 50-70% of the reduction - transferred to public transport
  - this adds around 90,000-130,000 passengers across the charging day
  - a 3% increase in daily activity



# Public transport is coping well

- Increase in patronage on buses of 14% between 8-9am since Autumn 2002
- Level of disruption caused by traffic congestion fallen around half
- Bus journey speeds rising
- Excess waiting time fell by around one third
  - for routes into the charging zone and up to or along the inner ring road

# Enforcement

- 250,000 Penalty Charge Notices issued
- Representations made on 20% of PCNs
- Appeals are currently being made on 2% of PCNs
- Clamping and removal of persistent evaders recently commenced

# Three-month report on the Internet

- Report can be found at:
  - <http://www.tfl.gov.uk>
  - initiatives and projects
  - congestion charging background
  - factsheets
  - No.7 Central London congestion charging scheme - three months on
    - [http://www.tfl.gov.uk/tfl/pdfdocs/congestion\\_charging/cc-three-month-report.pdf](http://www.tfl.gov.uk/tfl/pdfdocs/congestion_charging/cc-three-month-report.pdf)

# Lessons Learnt (1)

- Political commitment of Mayor
- Effective research and traffic modelling
- Early development of Transport Strategy
- Presenting charging as part of a Strategy
- Clear policy objectives
- Extensive public consultation and stakeholder engagement
- Clear procurement strategy
- Intelligent client



## Lessons Learnt (2)

- Use of proven technology
- Strong project management
- Integrated team and partnership working
- Engagement with third party providers and decision makers
- Early development of traffic management measures and programme
- Delivery of bus improvements
- Importance of PI campaign

***Enthusiasm and 'can do' attitude  
can deliver an 'impossible' project***

# Next Steps - Future Developments

- Following early indications of traffic conditions settling down, TfL is undertaking initial feasibility work on:
  - Geographical extension
  - Migration to more sophisticated charging technology

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