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TfL

**Achievements to date and
future challenges**

MAYOR OF LONDON

Transport for London



Outline

- What is TfL and what are its responsibilities?
- What we have achieved?
- How this was achieved?
 - Congestion charging
 - Other key investments
- Looking ahead



Transport for London

- Created 3rd July 2000 under Greater London Authority Act
 - London Underground became part of TfL in July 2003
- One of GLA's 'Functional Bodies'
- Directly accountable to the elected Mayor



- Single body responsible for strategic planning for all transport in London, and much implementation
- Gross expenditure (with Underground) almost £6bn per year



GLA and boroughs

- 33 London Boroughs
- London Boroughs must implement the GLA statutory strategies e.g. London Plan and Mayor's Transport Strategy
- The Boroughs produce Local Implementation Plans to enable them to meet these requirements and agree funding



TfL's responsibilities

- 408km of London Underground
- 29km of Docklands Light Railway
- 28km of Tramlink
- London Overground
- 700 bus routes
- 580km of TfL Road Network (5% road network, 30% traffic volume)
- London's 4,700 traffic lights
- 8 piers by London River Services
- Promoting cycling
- Walking schemes
- Regulation of Taxis and Private Hire Vehicles
- Assisted Transport – Dial-a-Ride and Taxicard



Transport and travel in London

Since 1999:

- Bus travel increased by over 40%
- Tube (including DLR) travel increased by 7%
- Train travel increased by 14%
- Cycling has increased by over 82%
- Traffic has reduced by over 20% in central London
- Public transport's mode share increased by 4% and car's mode share has declined by 4%



How was this achieved?

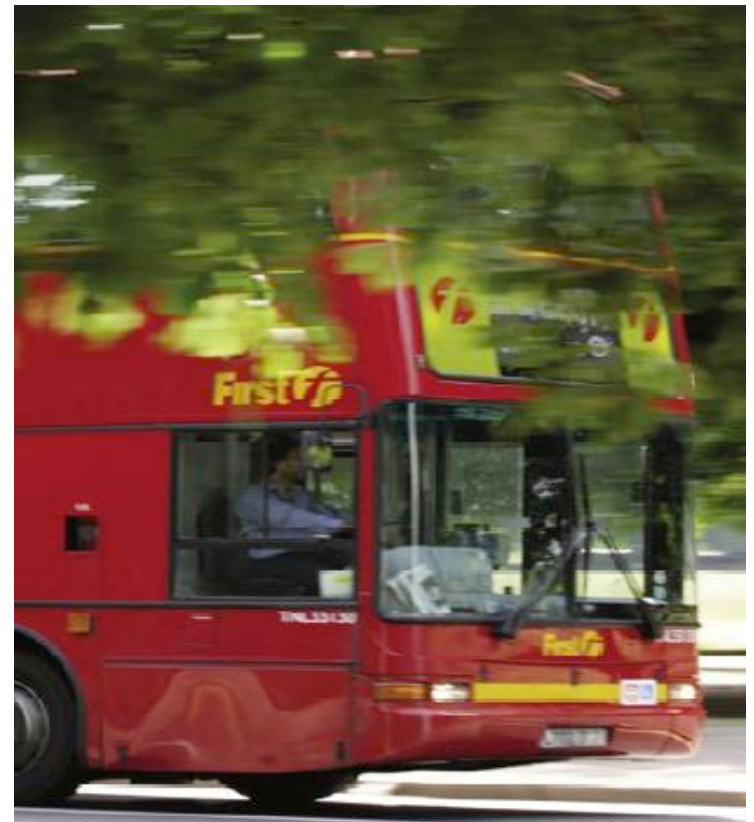
- Strong leadership – Mayor of London
- Radical Measures
- Increased funding – particularly for bus, walking and cycling
- Clear direction through Mayor's Transport Strategy (MTS) 2001
- Support for the Strategy through consultation and maturing relationships with stakeholders, especially local boroughs
- Ongoing effective marketing to promote more sustainable modes



Key Components

Key components:

- Major improvements to the bus service
 - 300 extra buses
 - Low floor accessible buses
 - Cashless fares
 - Bendy buses
- Congestion Charging
 - £5 charge in central area (later £8)
 - Western Extension
- London Traffic Control Centre
- Journey Planner
- Promotion of Walking and Cycling
 - London Cycle Network
 - Pedestrian phasing of traffic lights



Congestion charging in central London



The Operation of the Scheme

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

T 123 ABC

- Flat charge of £8 (c\$15) per day (was £5 up to 4 July 2005)
- Monday - Friday 7am - 6.00pm (changed 19 Feb 2007)
- Can pay next day at a rate of £10 (\$20) (from June 2006)
- Range of exemptions and discounts including 90% discounts for residents in zone
- Enforcement procedures if non-payment

CCS Evidential Records

ColourContextual Image

Monochrome Image from ANPR camera

Number Plate image from ANPR camera, Lane 1

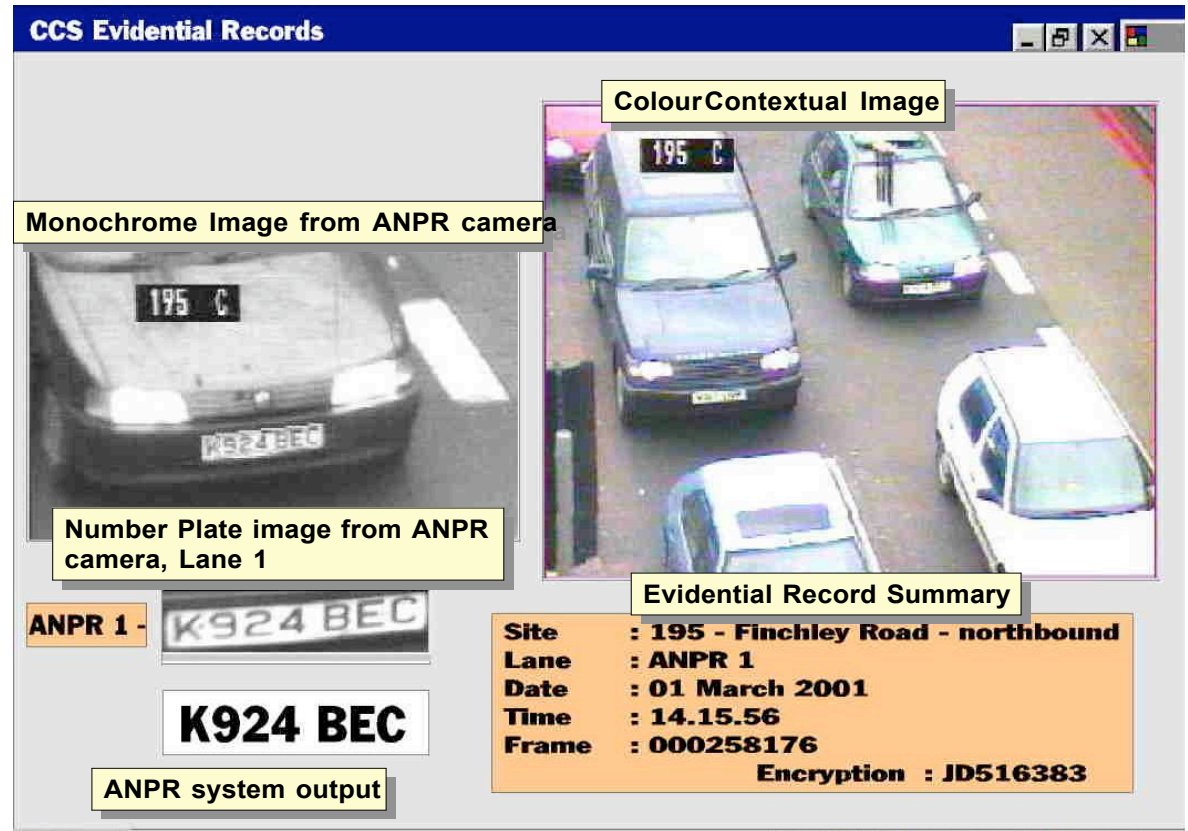
ANPR 1 - K924 BEC

ANPR system output

K924 BEC

Evidential Record Summary

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



Impacts of congestion charging

Traffic

- Traffic (4+ wheels) entering zone in 2006 21% lower
- Congestion reduced by average of 21% over lifetime of scheme
- Bus patronage up, bus services performing better
- Little change in trips to central area, 50-60% moved to public transport, cycling up 43%

Economy

- Broadly neutral impact overall on business

Environment

- Improved vehicle technology & introduction of charging: led to reductions in Carbon Dioxide (CO₂), Oxides of Nitrogen (NO_x) and Particulate Matter (PM₁₀)

Road safety

- Reduced numbers of cars have led to 40-70 less personal injury road accidents a year



Congestion

- Initial impact on congestion high: 30% decline in first year and then averaging at 26%
- More recently, congestion has risen in the central zone but remains below levels before the scheme was initiated
- Congestion charging has increased roadspace available
- Helped support range of interventions that require roadspace
 - pedestrian phases at traffic signals
 - bus priority measures
 - public realm improvements
- Other interventions also reduce roadspace
 - street / road works by utilities companies



Public Realm

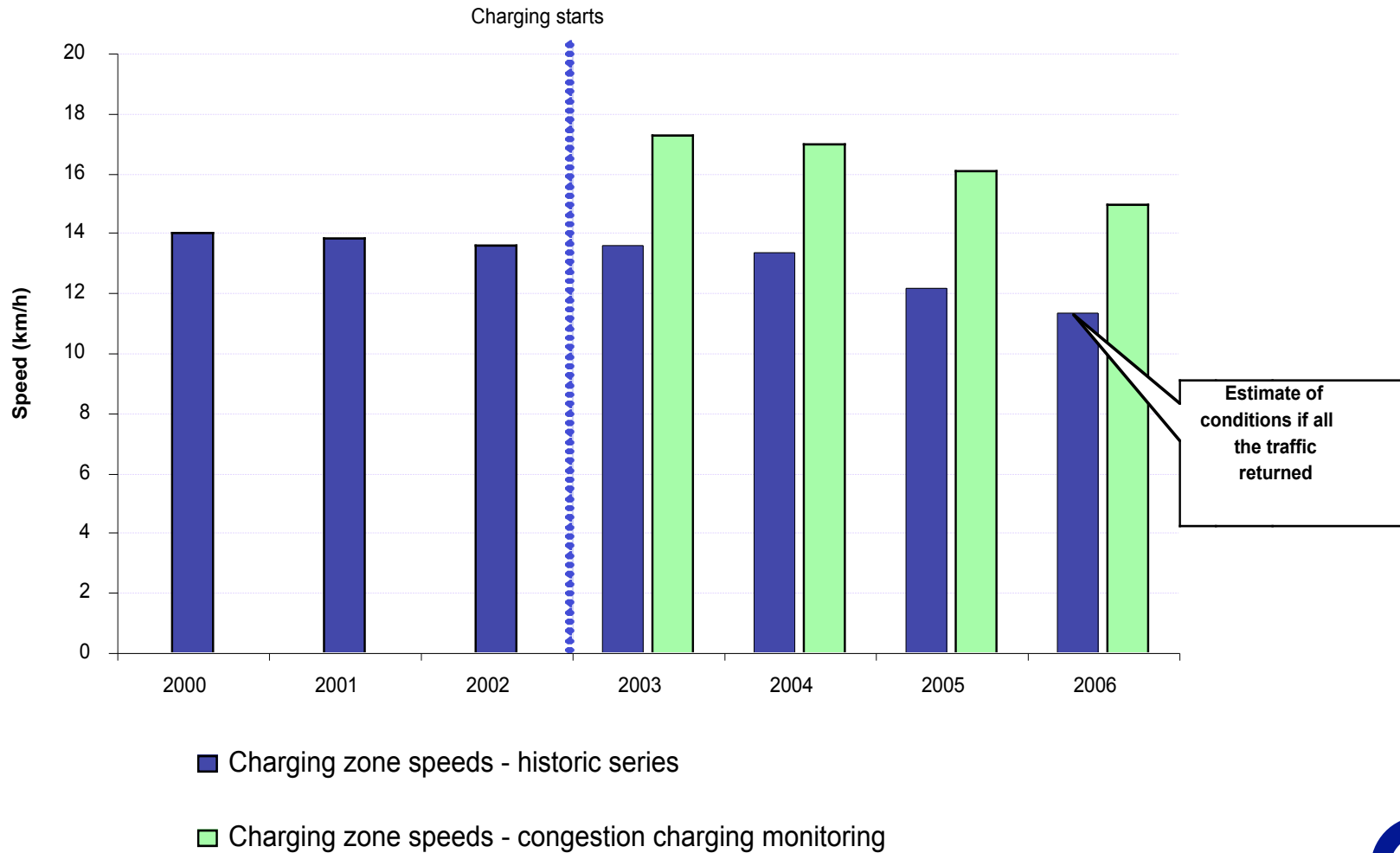


- Wider focus on improving public realm
- Also borough level initiatives eg City of London



Trends with/without charging in central zone

Figure 2. Long term trends in charging zone congestion showing recent post-charging values



Congestion charging costs & revenue

Costs and revenue 2006/2007:

Charge revenue	£158m
Enforcement revenue	<u>£ 55m</u>
Total revenue	£213m
Total operating cost	£ 90m
Net revenue	£123m

Application of net revenue 2006/2007:

Bus network improvements	£101m
Roads and bridges	£ 14m
Road safety	£ 5m
Walking and cycling	£ 3m
Total	£123m



Looking ahead

4.6 million jobs
+ 900,000 jobs
&
7.5 million people
+ 800,000 people



Key Challenges

Travel and movement

- a) Future job growth and population growth are not well located in same places
- b) Agglomeration needs high capacity public transport
- c) Diverse transport needs in outer London
- d) Managing the competing demands of the road network

Tackling global and local environmental issues

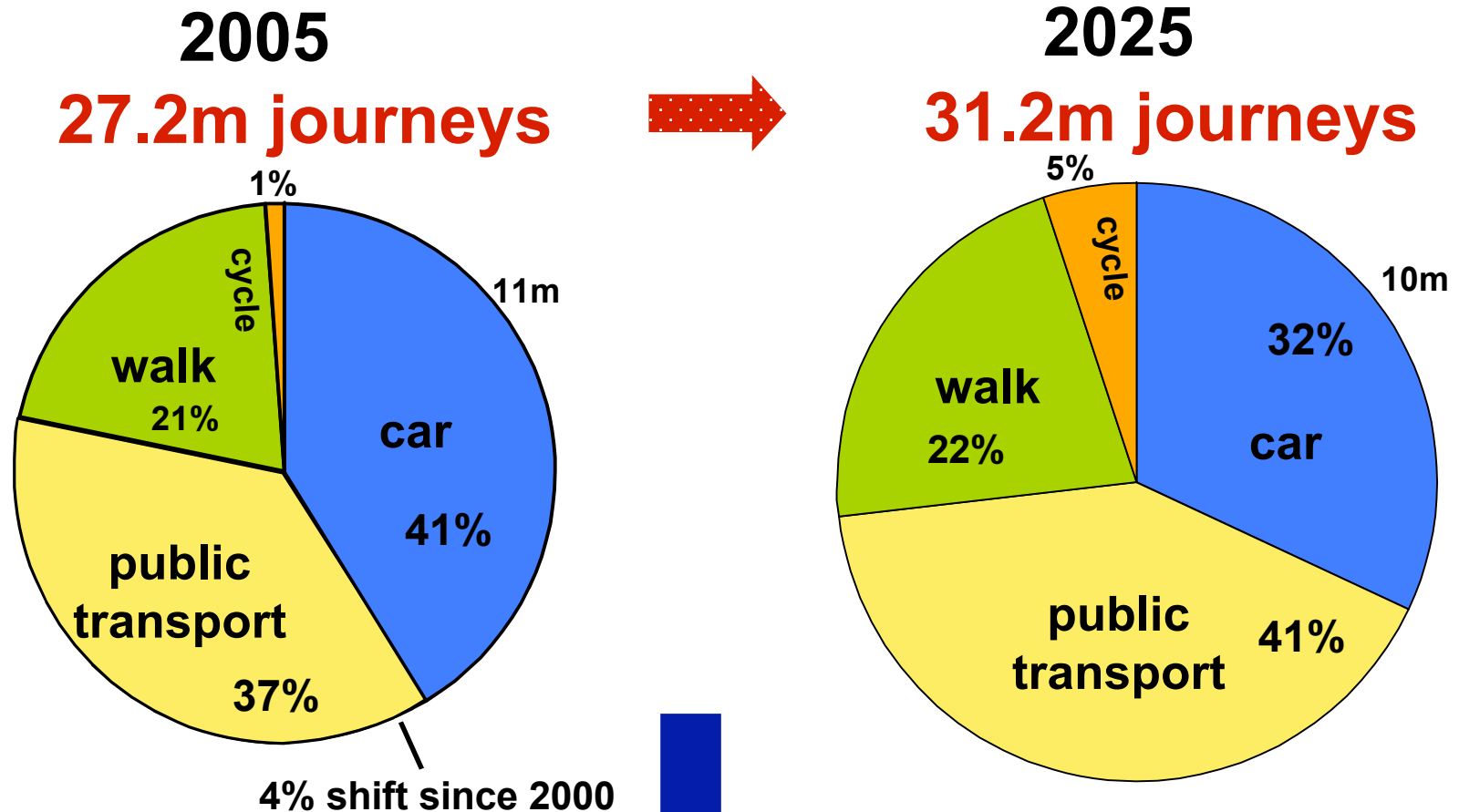
- a) Ground-based transport accounts for 22% of London's CO₂ emissions and emissions are forecast to grow
- b) New target to reduce all CO₂ emissions by 60% by 2026
- c) Congestion further increases emissions
- d) Local air quality is a key concern for Londoners

Social inclusion

- a) Ensure essential services and activities are located in accessible locations
- b) Improve the availability and physical accessibility of transport
- c) Reduce the cost of public transport for vulnerable groups
- d) Improving the safety and security of public transport and the public realm



The key transport challenge for London, and other growing cities, is achieving modal shift



5m extra journeys must be supported by public transport, walking & cycling



Tackling global and local environmental issues: climate change

- Tackling climate change is a key priority for the Mayor
- Stern Review (October 2006): the scientific evidence is now overwhelming: climate change presents very serious global risks, and it demands an urgent global response
- CO₂ is the most important of greenhouse gases contributing to climate change
- Climate Change Action Plan sets challenging targets with action required across all areas
- For TfL, a key focus is on reducing emissions from ground based transport:
 - Changing the way Londoners travel:** investment in public transport, walking & cycling; travel demand management; support carbon-pricing initiatives
 - Operating vehicles more efficiently:** promotion of eco-driving for private cars and on buses, underground, taxis; freight initiatives
 - Promoting uptake of lower-carbon alternatives:** all new buses will be hybrid when volumes sufficient; energy efficiency on underground; green procurement
- Congestion charging already helping to reduce emissions – but the Mayor wants to do more by further incentivising a switch to less polluting vehicles...



Tackling global and local environmental issues: Emissions Related Congestion Charging

- For those drivers who continue to use the charging zone, the congestion charge would be varied to promote the use of cars that emit less CO₂
- Technology neutral approach – based on tailpipe emissions
- Consultation on proposals: 10 August – 19 October 2007
- TfL due to report to Mayor late 2007 - Mayor will then decide whether to implement scheme as proposed, with modifications, or not at all

100 per cent low CO ₂ discount	£8 standard congestion charge	£25 higher charge
<ul style="list-style-type: none"> • 120g/km CO₂ or less and meet Euro 4 emission standard 	<ul style="list-style-type: none"> • 120g/km CO₂ or less but do not meet Euro 4 emission standard • 121-225g/km CO₂ • Pre-2001 registered with engine capacity up to and including 3,000cc 	<ul style="list-style-type: none"> • 226+g/km CO₂ • Pre-2001 registered with engine capacity over 3,000cc



Tackling global and local environmental issues: Emissions Related Congestion Charging

Potential impacts

Increased awareness:

- vehicle emissions
- impact of individual choice on environment



Behavioural change:

- modal switch, etc
- use / purchase of lower emitting vehicles by individuals
- change in fleet composition

Part of changing landscape influencing market:

- focus on both manufacturers and consumers
- eg mandatory European targets?

Influence on wider policy:

- eg local parking schemes



Tackling global and local environmental issues:

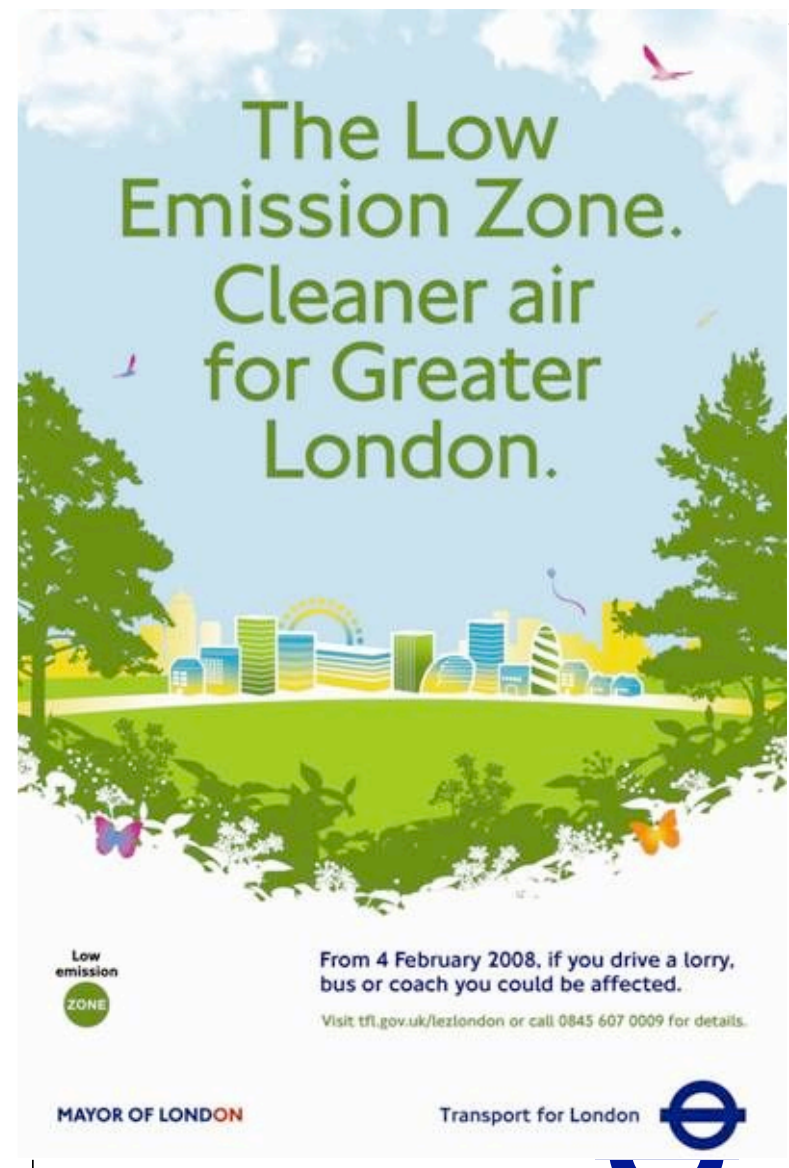
Local air quality

Improving Air Quality

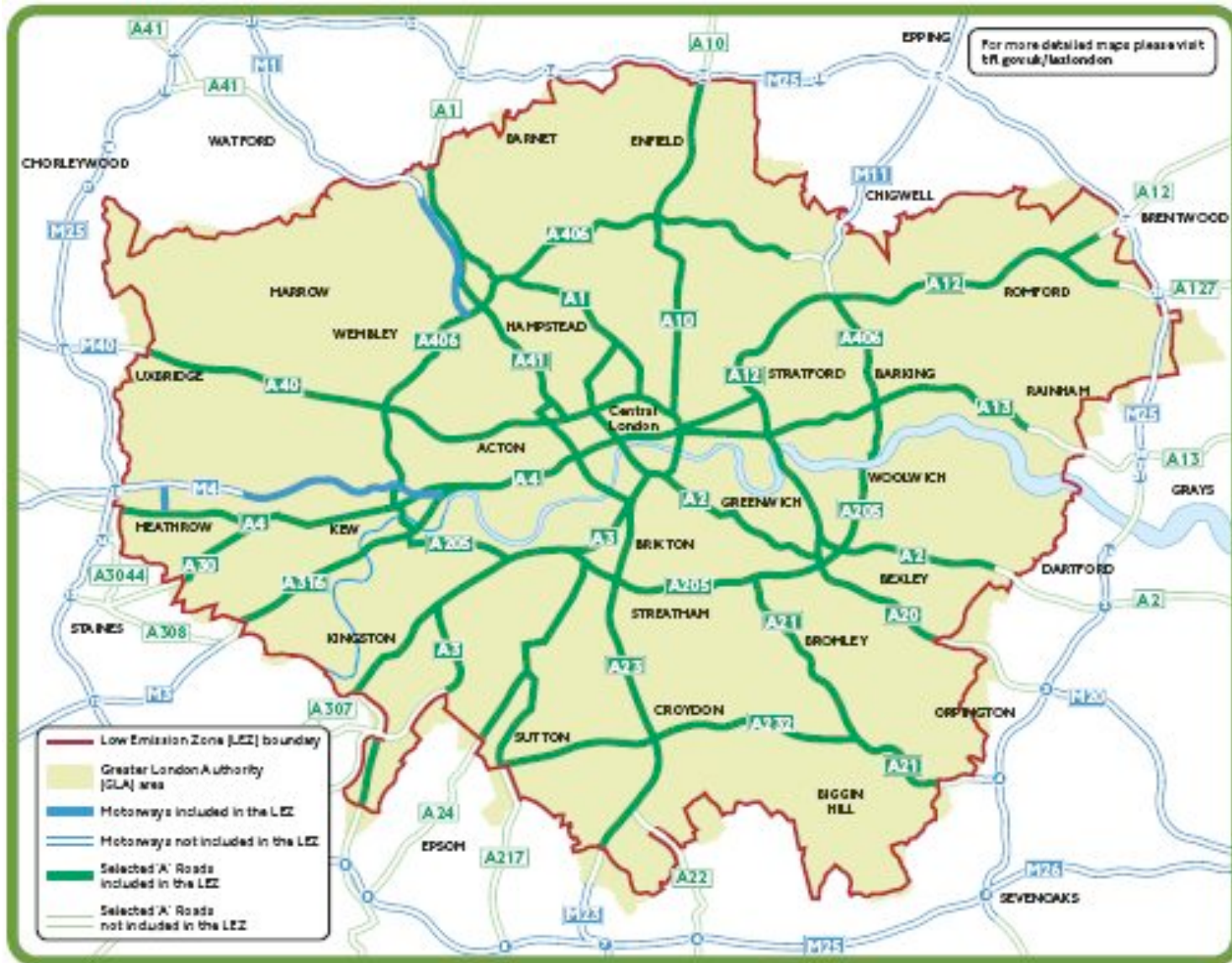
- Air pollution is a serious problem in London
- Affects most vulnerable parts of society
- Particular problems with emissions of:
 - particulate matter (PM10)
 - nitrogen oxides (NOx)
- Road traffic = major source of emissions

What is the Low Emission Zone?

- A specified area in Greater London in which the most polluting diesel-engine vehicles are required to meet specific emissions standards in order to improve air quality
- Will affect older diesel-engine lorries, buses, coaches, large vans and minibuses & specialist vehicles derived from lorries / vans, such as horseboxes or motor caravans
- Will operate 24 hours a day, 365 days a year from 4 February 2008 (phased implementation)
- £200 for non-compliant HGVs, buses and coaches, £100 heavier vans and minibuses
- In 2012, area of London exceeding daily PM10 limit reduced by around 15 per cent / area exceeding annual mean NO2 objective reduced by around 16 per cent



LEZ boundary



Looking forward

In looking forward for the RUC in the context of a national scheme could:

- **Reduce congestion by:**

- reducing vehicle kms
- encouraging a shift to other modes
- shift to less congested times of the day

- **Reduce emissions by:**

- reducing traffic kms and volumes
- improving traffic flow
- encouraging take up of less polluting vehicles
- providing for carbon offset arrangements



To meet future demand and encourage greater mode shift new public transport capacity is also needed

London needs significant extra public transport capacity (+40%)

Major public transport investment schemes:

- Crossrail - adds 10% to rail capacity
- Tube line upgrades increase capacity on the Underground by 28.5% from 2006
- Bus expansion - 40% extra bus capacity will be needed by 2025
- DLR and light transit schemes will support local growth and regeneration



Other key investments

- Walking and cycling need investment and improvements in the urban environment – increasing mode share
- Interchanges, surface access to airports, international links, freight and river services are other important elements
- Urban realm – 100 public spaces project
- TDM program – intense program of school, work, and personal travel plans to encourage more sustainable modes – major pilot in Sutton



Conclusion

- Much has been achieved in the last seven years with a marked change in travel behaviour
- But...more needs to be done to further develop London's transport system
 - Enabling growth
 - Reducing the impact on the environment and
 - Promoting social inclusion
- Working to revise the Mayor's Transport Strategy and deliver through effective implementation





Thank you

www.tfl.gov.uk/t2025

