

Steve Kearns – Transport for London European Parking Association – 17 May 2011

Kerbside Parking – Less Congestion



Responsibilities

Traffic management

- 580km of major roads (including bridges and tunnels)

• £1.5bn per round
Expenditure in 2009/10 = £9.0bn per day

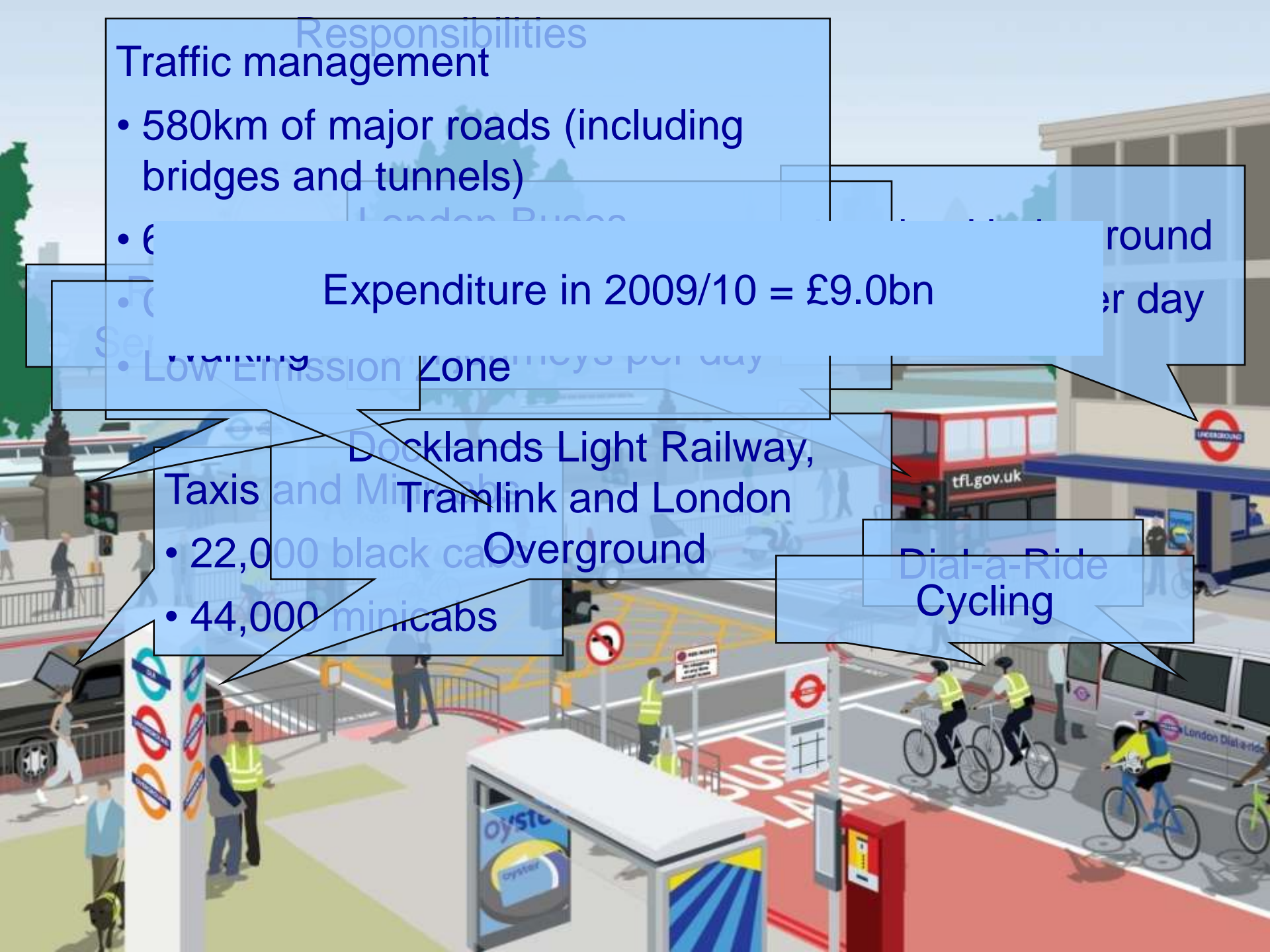
- Low Emission Zone

Docklands Light Railway,
Tramlink and London

Taxis

- 22,000 black cabs
- 44,000 minicabs


Dial-a-Ride
Cycling



May 2008

Mayor's Transport Strategy
Statement of Intent

Published for initial consultation with the London Assembly and the GLA Group




MAYOR OF LONDON



April 2008

A new plan for London
Proposals for the Mayor's London Plan

(The Spatial Development Strategy for Greater London)
published for initial consultation with the London Assembly and the GLA Group




MAYOR OF LONDON

May 2009

Rising to the Challenge
Proposals for the Mayor's Economic Development Strategy
for Greater London

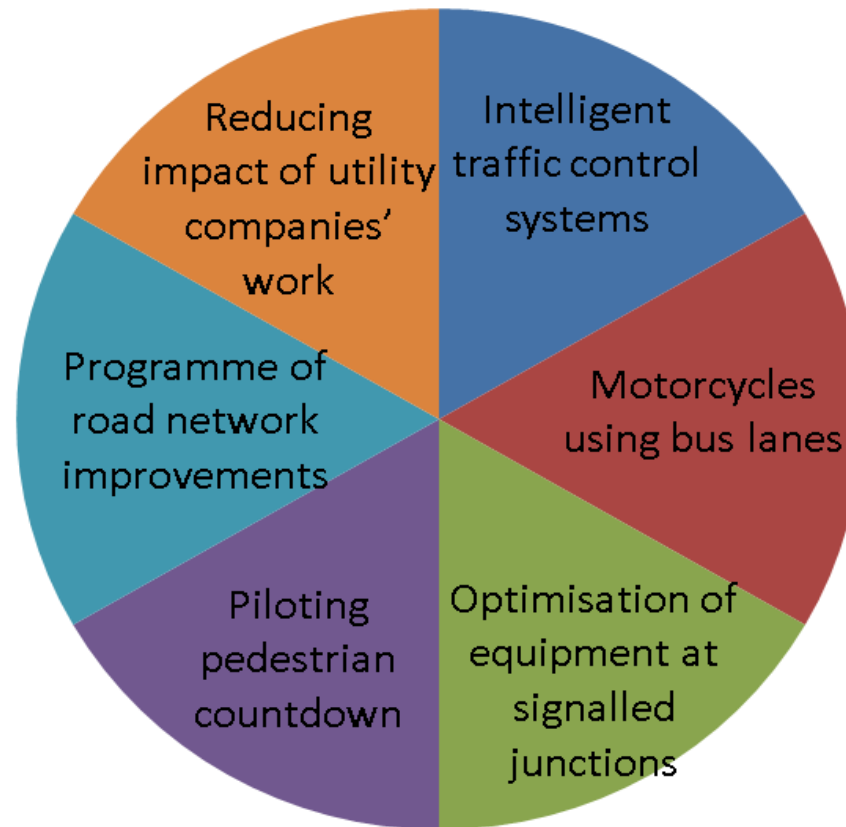
published for initial consultation with the London Assembly and the GLA Group



MAYOR OF LONDON



Smoothing Traffic Flow – 6 Major Elements



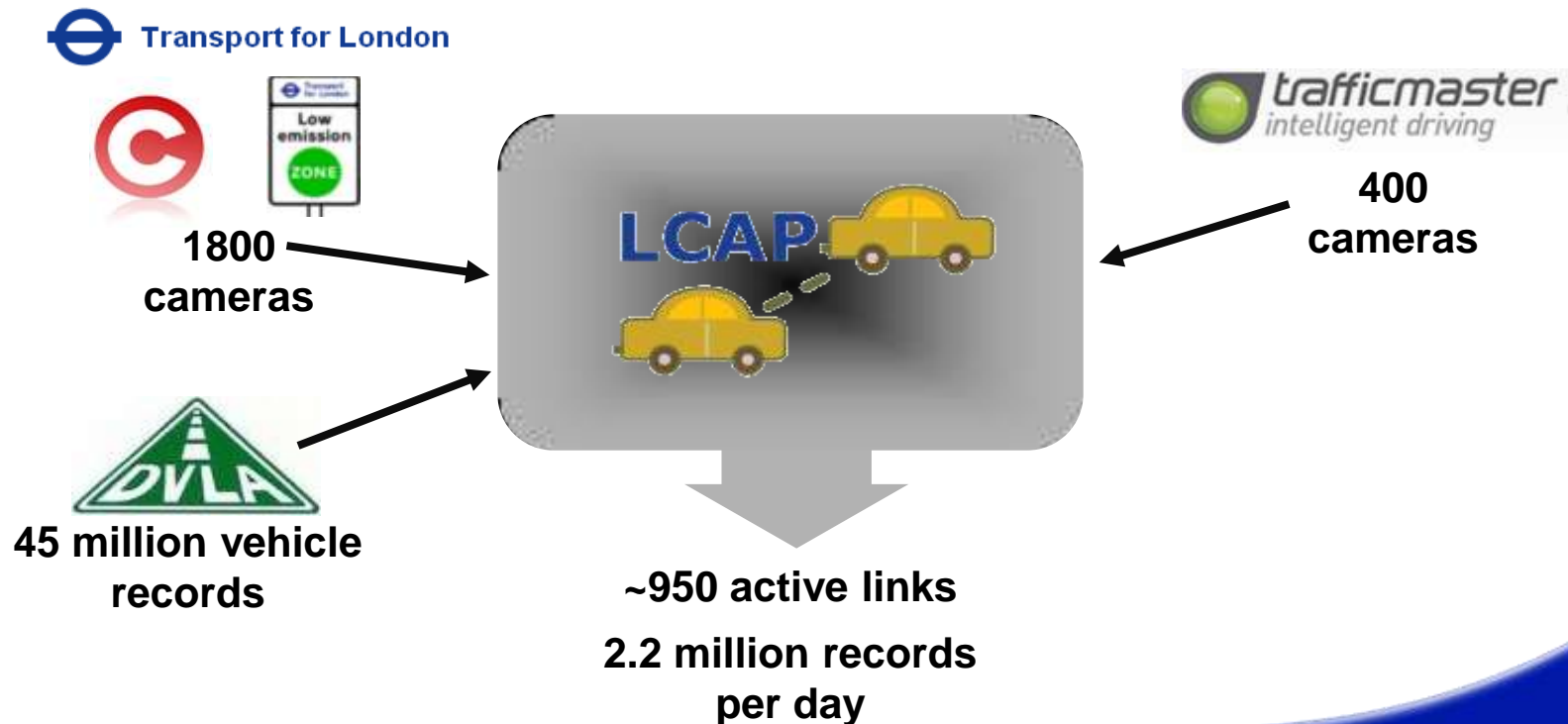
London Surface Transport Control Centre



What is LCAP?

London Congestion Analysis Project

A system that takes raw data from available sources of Automatic Number Plate Recognition (ANPR) cameras and turns it into valuable journey time information



Freight – loading and parking

Loading bay reservation system

- Cooperative Vehicle Infrastructure Systems (CVIS) trial of booking system for a freight loading bay

Freight specific sat-nav information

- Exploring how size / weight and stopping / loading restrictions can be made available through sat-nav databases
- Improve availability of dynamic data such as congestion and journey time



CVIS London Test Site

London Trial of CVIS aims to establish whether innovative roadside to vehicle communications can be used to facilitate freight operation.

Evaluation of deployment of
CVIS in a mixed-use urban
street with real fleet operators
and real street operations



Mayor's Transport Agenda

One of the areas that the Mayor wishes to prioritise is smoothing traffic flow

– **How does Parking fit in with this?**





Key CVIS partners

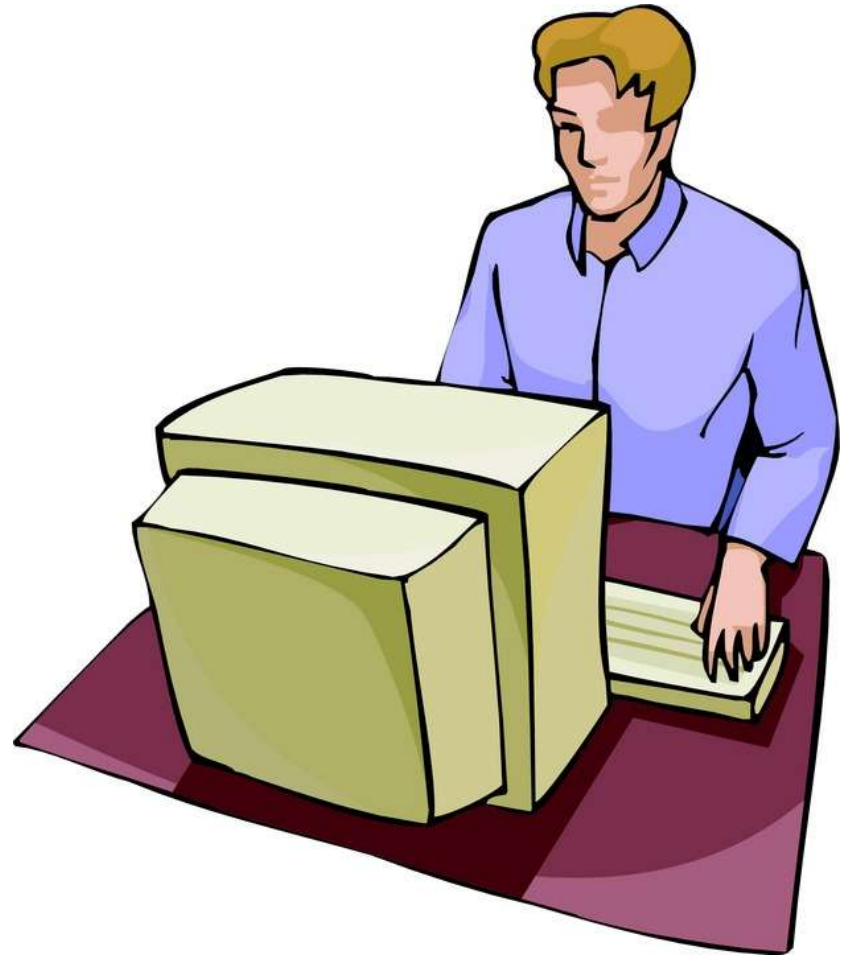


- **Transport for London (TfL)** – London Test site Leader
- **Volvo Sweden** – Application development & Freight Operator booking tool
- **Thetis** – Parking Zone Operator Server
- **PTV** – ETA data
- **Logica** – IPV6 tunnel
- **Efkon** – IR components
- **Imperial College** - Validation



Operation

Freight operators
make a reservation
via the web interface.





Operation



London
Streets



Reservation is
downloaded via
3G





Operation



Vehicle approaches loading bay

GPS provides location details

Estimated time of arrival (ETA) is displayed on touch screen.





Operation



Vehicle approaches loading bay

GPS provides location details

Estimated time of arrival (ETA) is displayed on touch screen.



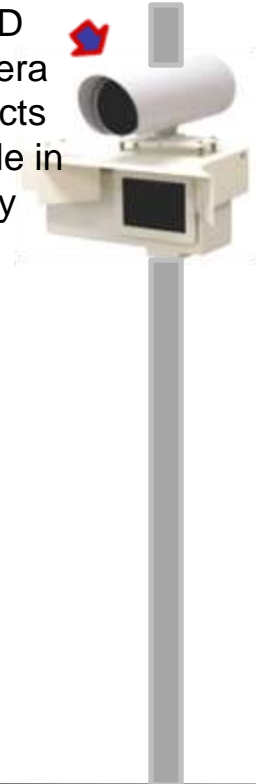


Operation



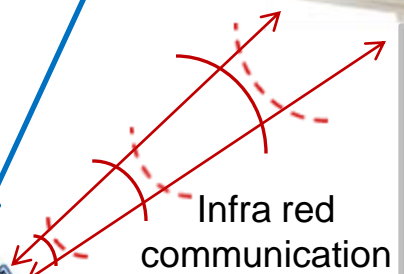
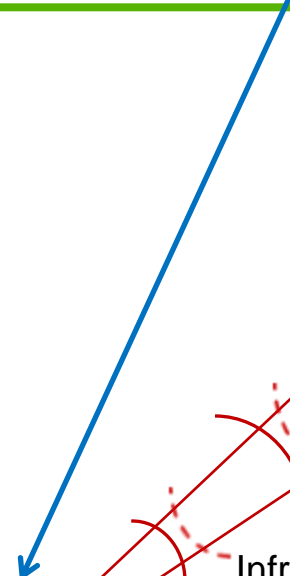
Vehicle arrives
in the loading
bay

IRID
camera
detects
vehicle in
bay





Operation



Infra red communication





Thetis Back Office



Validate booking



London Streets

3G link sends information to server

Roadside Unit





Thetis Back Office



Validate booking

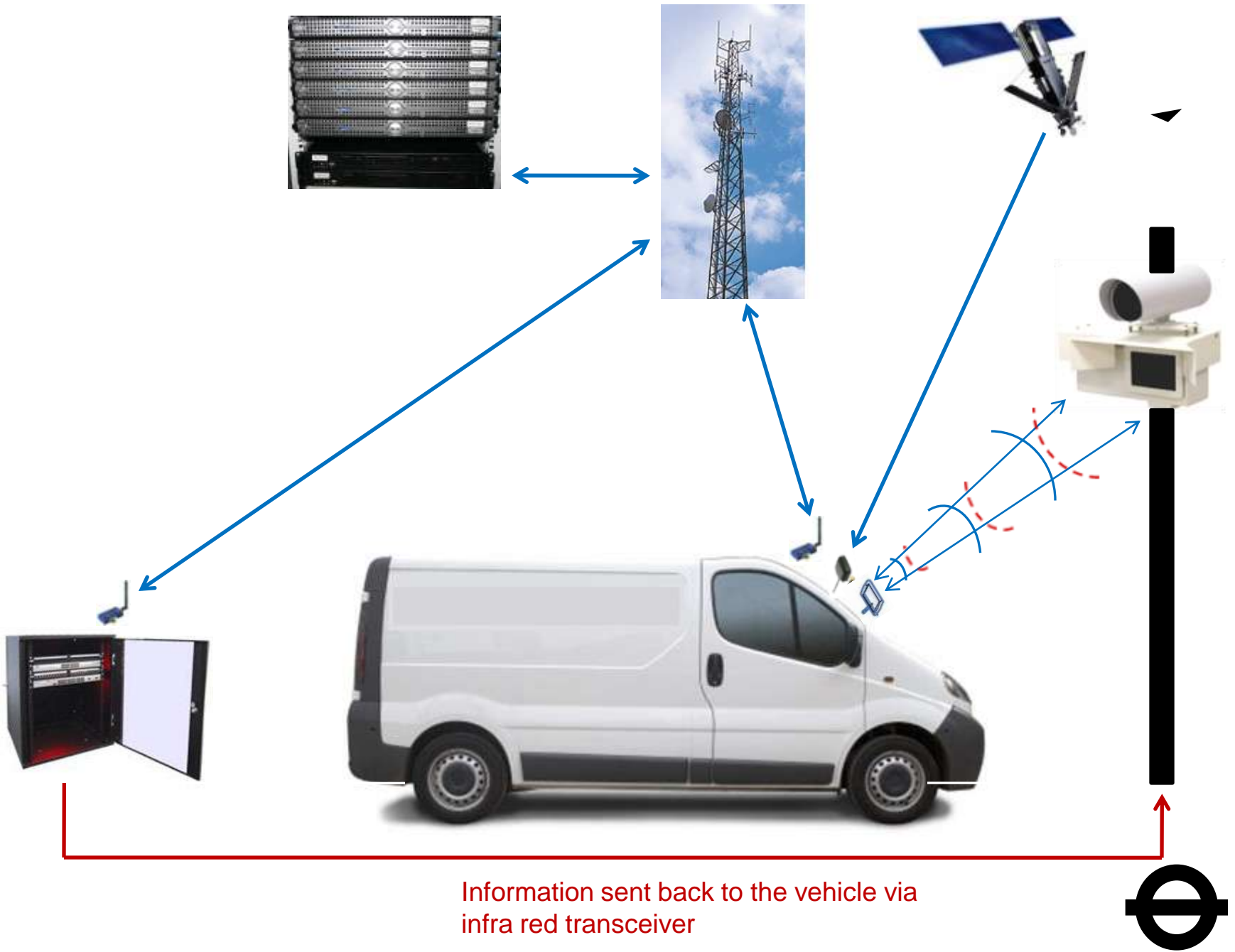


London Streets

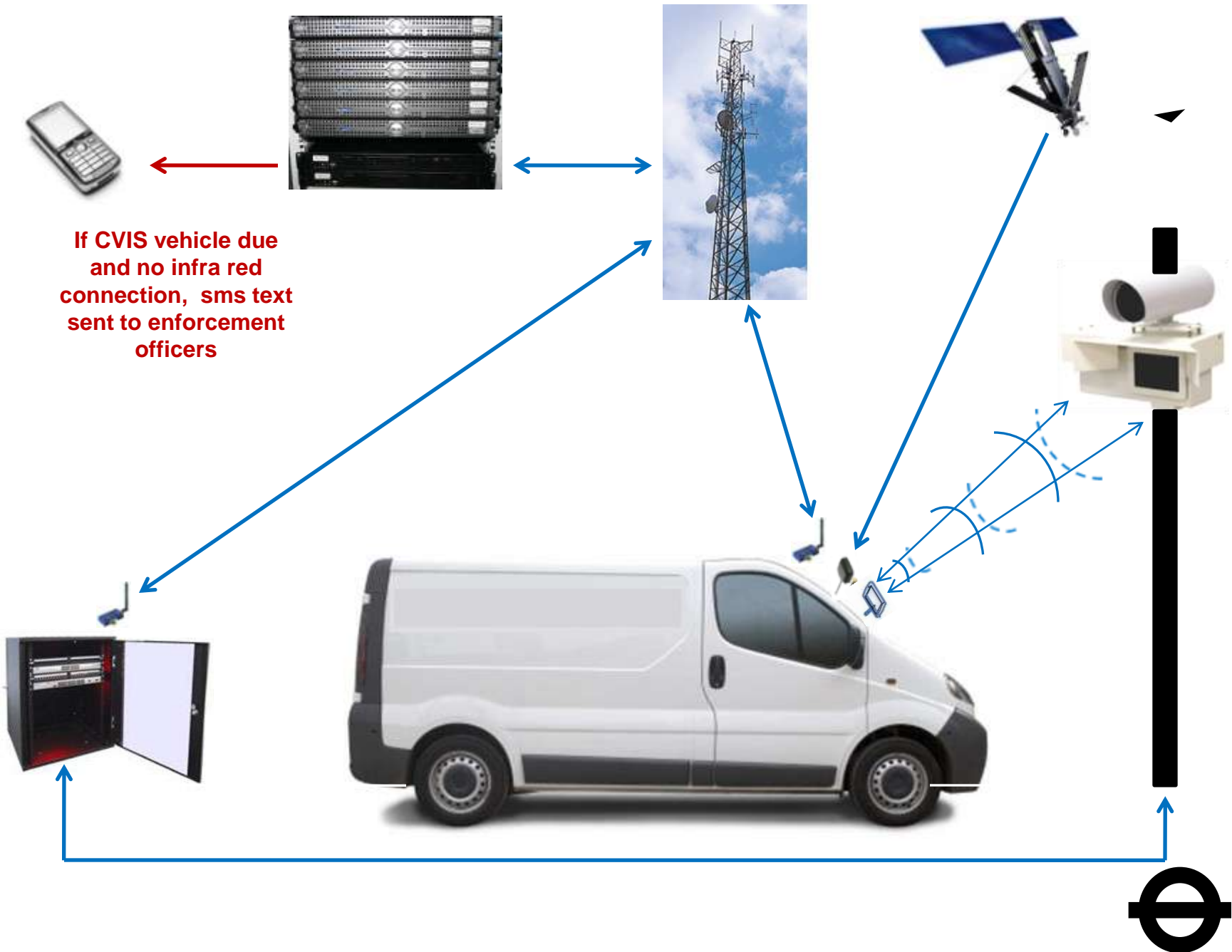
If correct booking and vehicle, information sent back to RSU

Roadside Unit





Information sent back to the vehicle via
infra red transceiver



Enforcement



Enforcement

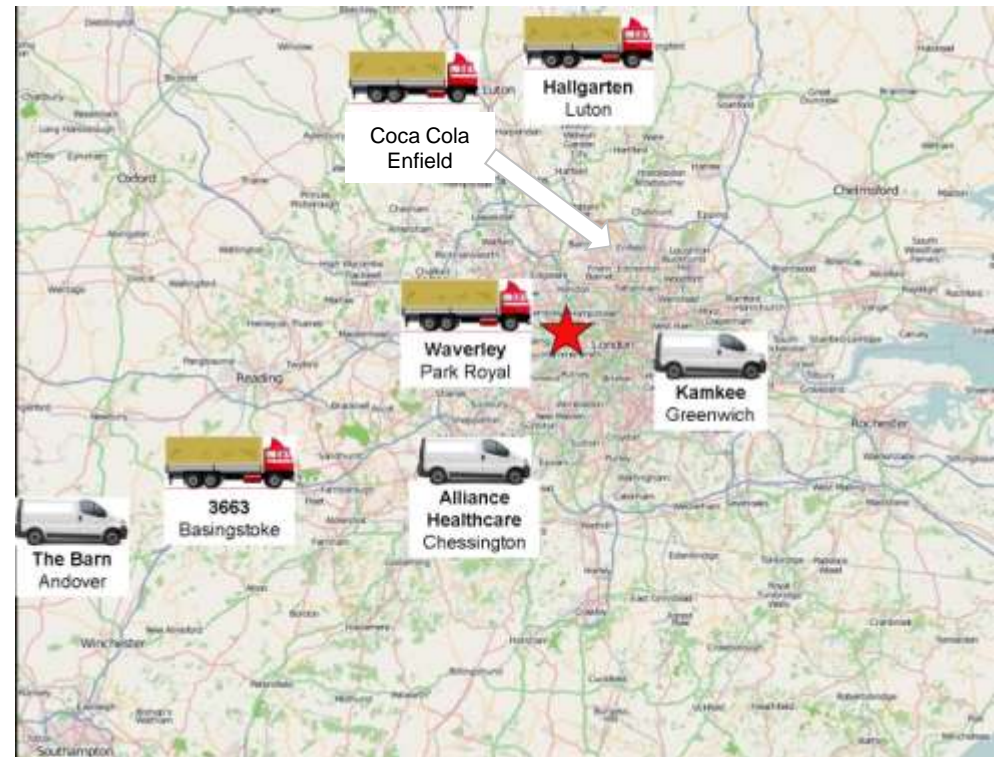




Participants

8 Participants – 10 vehicles.

- Alliance Healthcare
- Coca Cola
- 3663
- Kamkee
- The Barn
- Hallgarten Druitt
- First Quench
- Waverley





Trial Participants



London
Streets



Loading trial

Transport for London (TfL) has begun a three-month trial of a new permit-based loading bay system in Earls Court Road, London with the co-operation of eight different vehicle operators. Vehicles involved in the trial, which aims to streamline freight deliveries, have been fitted with units to communicate with an infrared beacon at the loading bay for access.

Freight Transport Association
Newsletter September 2009





Key Lessons Learnt to date



London
Streets

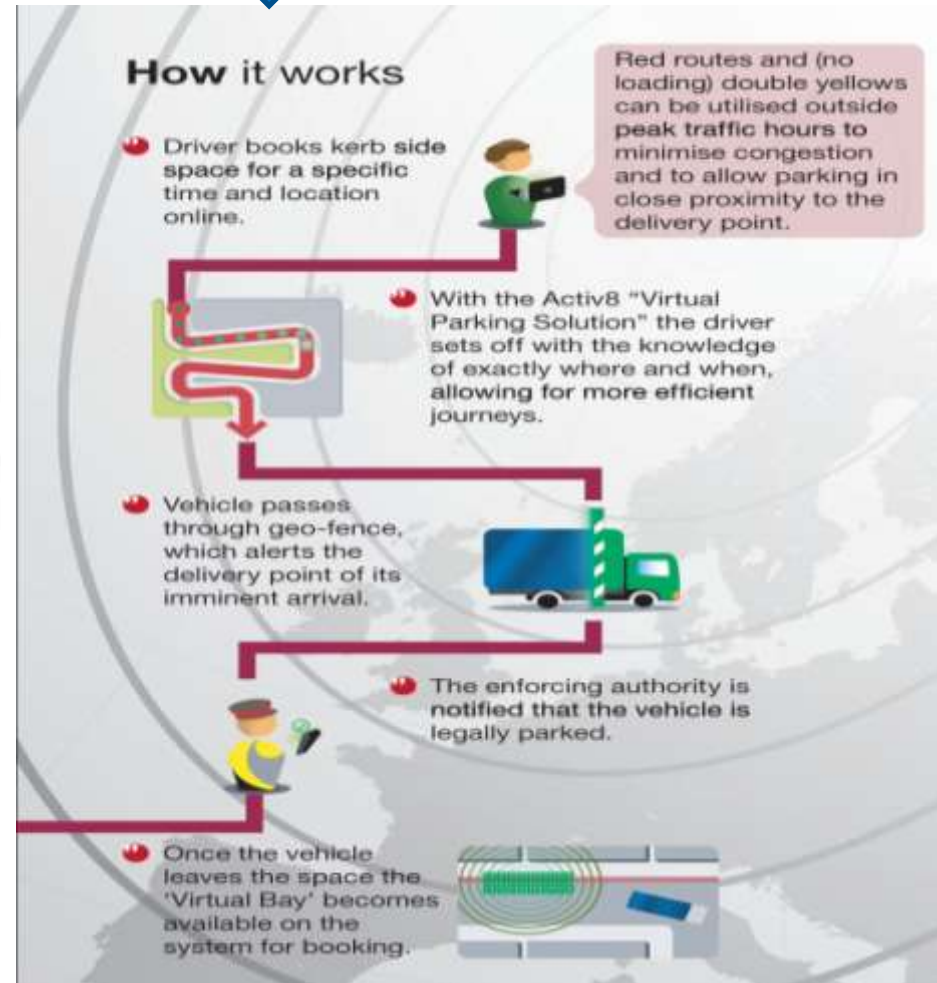
- Hardware size and reliability
 - Power
 - Engineering Screen (fault finding)
 - Application developers to visit site
 - More testing before deployment
- Scalability to a wider area – enforcement?

CVIS Roadside Signage



What is a virtual loading bay?

The Activ8VPS System allows the user to book kerb space online for loading and unloading at a particular time and place. This pre-booked space becomes a 'Virtual Parking Bay'. This allows drivers to load and unload in close proximity to their delivery point without causing congestion and without the risk of receiving a PCN.



Benefits of Virtual Loading Bays

- **Commercial** – saves time & money
- **Councils** – better management of traffic flow; reduced number of PCNs
- **City Residents** – reduced congestion
- **Environment** - reduction of CO₂ and other pollutants



Driver training

- First Group trial in 1,000 buses in London using in-vehicle monitoring devices
- Real-time feedback on driving style and driving reports to focus training
- Around 5% fuel saving
- Explore possibility of similar applications for other professional drivers



Congestion and frustration caused by traffic seeking parking spaces







VMS Signage



GALIPARK FP7 bid 2009

- GALIPARK project proposed to **develop smart parking management services reducing the distance and time driven in search of a parking space, using GNSS positioning for smart on-the-move real time parking information services (off-street and on-street) complementing other information and additional services offered by parking operators**



GALIPARK bid 2009

- GALIPARK aims at analysing **new on-street parking pricing policies, based on the use of robust positioning to measure vehicle location in urban areas –similarly to cordon pricing- where flexible pricing schemes can be defined making use of positioning and timing information.**

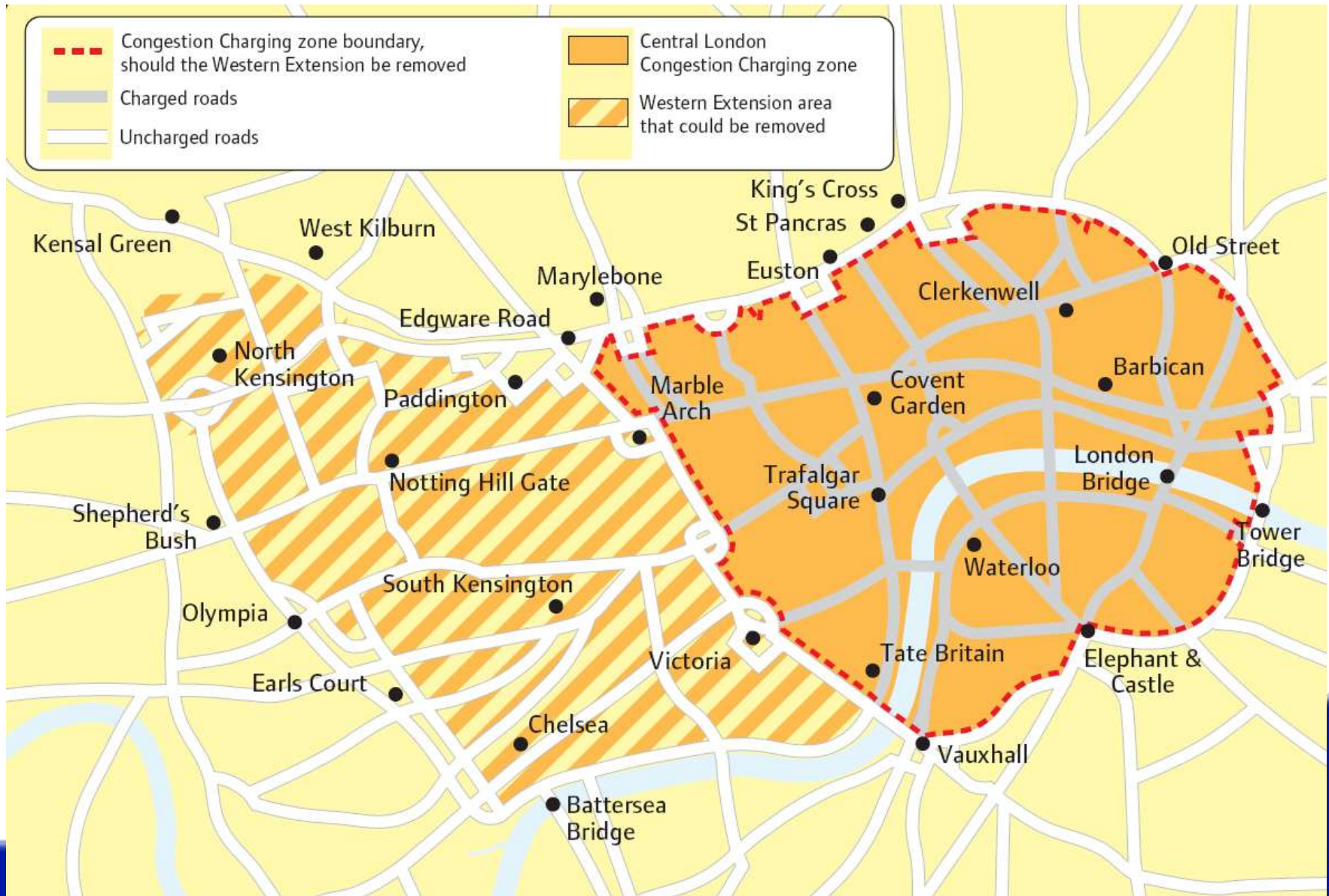


GALIPARK Consortium Members

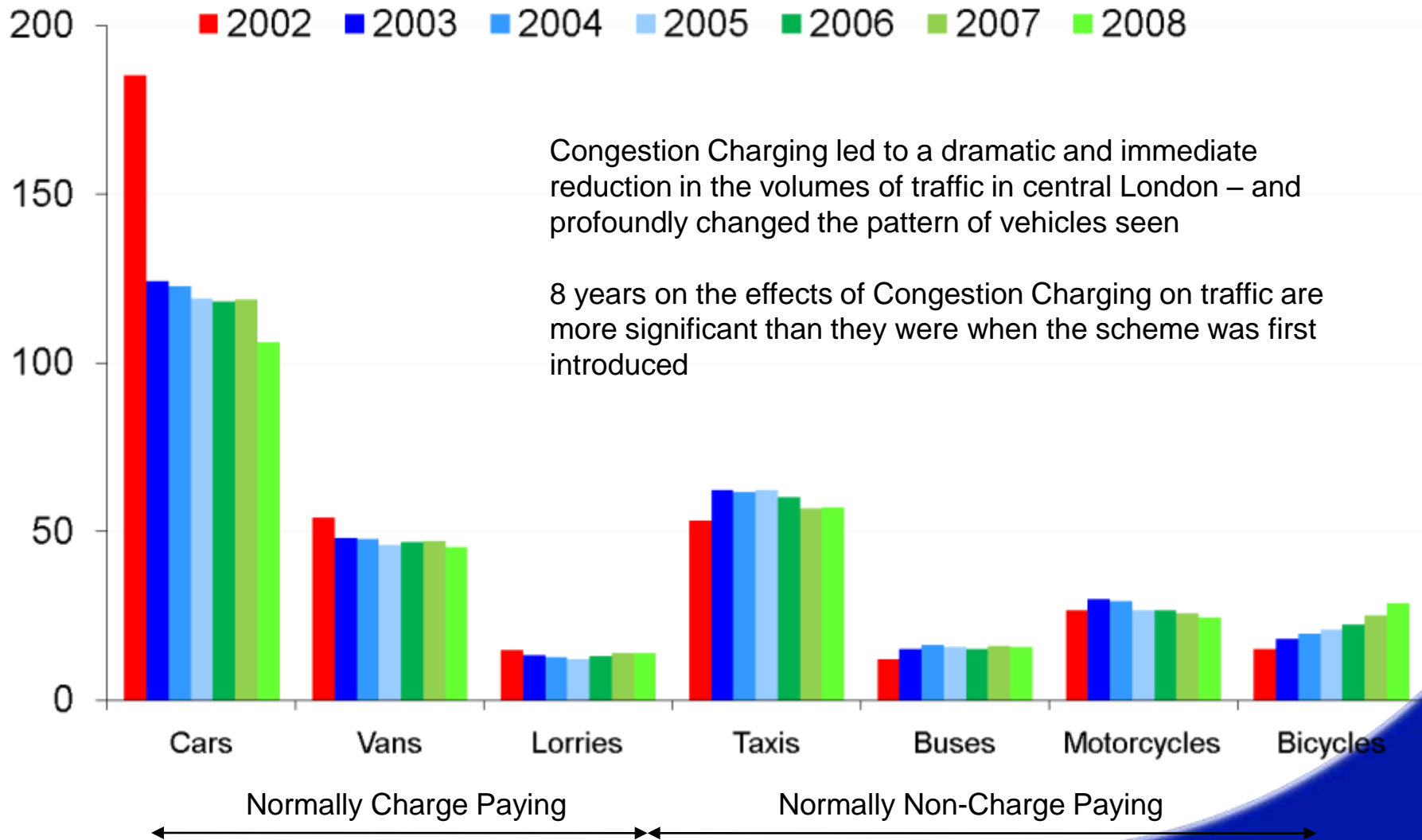
- **Grupo GMV**
- **SICE,**
- **European Union Road**
- **Logos Public Affairs (LOGOS**
- **MRC McLean Hazel (MRC)**
- **POLIS,**
- **Final user segment is well represented in the consortium by private parking operators segment (Q-Park) and public parking operation (Transport for London, Vilnius Transport and their corresponding municipalities) and end-users through the Advisory Board**



Congestion Charging



Average daily traffic entering original charging zone*



* During charging hours (07.00-18.00)



Charge payment

- Daily, weekly, monthly or annual payment for individual vehicle registration number
- Flat charge of £8 per day (was £5 until July 2005) until midnight
- Monday – Friday, 7am – 6pm (was 6.30pm until February 2007)
- Pay Next Day introduced June 2006
- Increase to £10 per day (£9 for automatic accounts) in December 2010



London Boroughs



Westminster City Council Parking Rates



- **Parking On Street**

Average £3 per hour – can be up to £4.40 per hour (Usually max 4 hours)

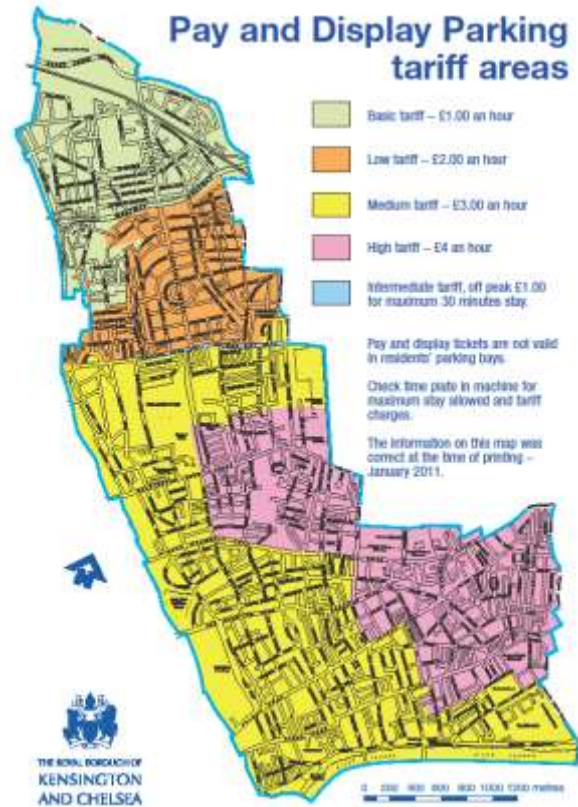


- **Off Street Car Parks**

Up to £5 per hour – generally 24 hour max



Kensington & Chelsea Parking Rates



Professor Shoup





Find Parking

To find parking in SFpark areas select a blockface on the map to view availability and pricing.

Select a Neighborhood



Mayor Lee Launches SFpark

How does it work?



New technologies and approaches make parking easier and faster. This means less circling and double-parking, leading to cleaner air, safer streets and a clearer path for Muni vehicles.

[Play video](#)

Download the parking app



You can now check San Francisco parking availability and pricing information from your iPhone using this FREE downloadable app. Android app coming soon!

[Download app](#)

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Mayor Lee Launches SFpark Project

Posted on 04.21.11 in [Data](#), [Policy](#), [Press Releases](#), [The Project](#)

Mayor Edwin M. Lee today joined the San Francisco Municipal Transportation Agency (SFMTA) to announce the launch of real-time parking data for SFpark. This federally funded pilot project run by the SFMTA uses new smart parking management technologies and pricing policies to make it easier and faster to park in San Francisco.



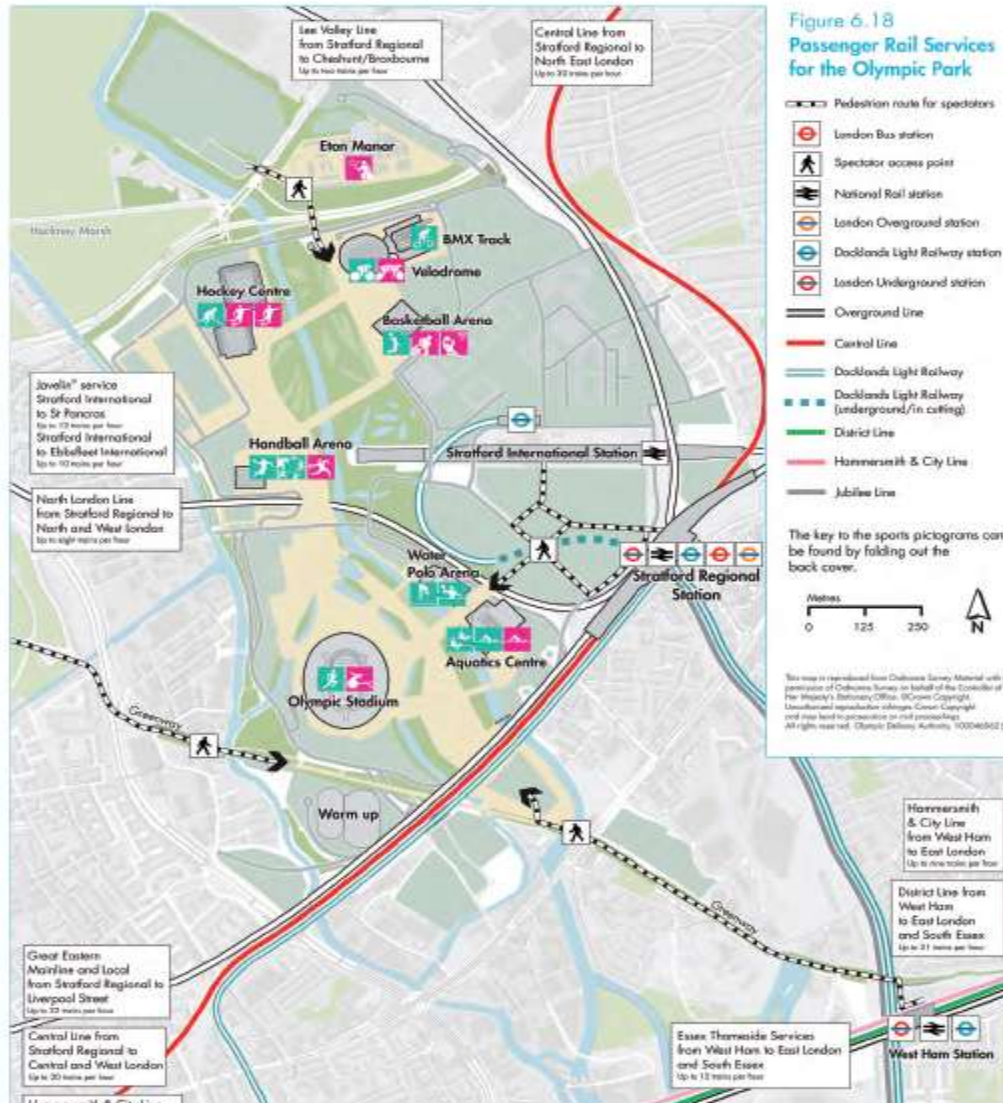
Olympic and Paralympic Transport Strategy

Olympic Delivery Authority
Transport Plan for the London 2012
Olympic and Paralympic Games
Second edition consultation draft

December 2009



Olympic Rail Services



Stratford International Station



Stratford Regional Station

- New lifts and staircases
- Wider, longer and clearer platforms
- A new westbound Central Line platform
- A second upper-level entrance
- A reopened subway



Stratford Regional Station.



Docklands Light Railway

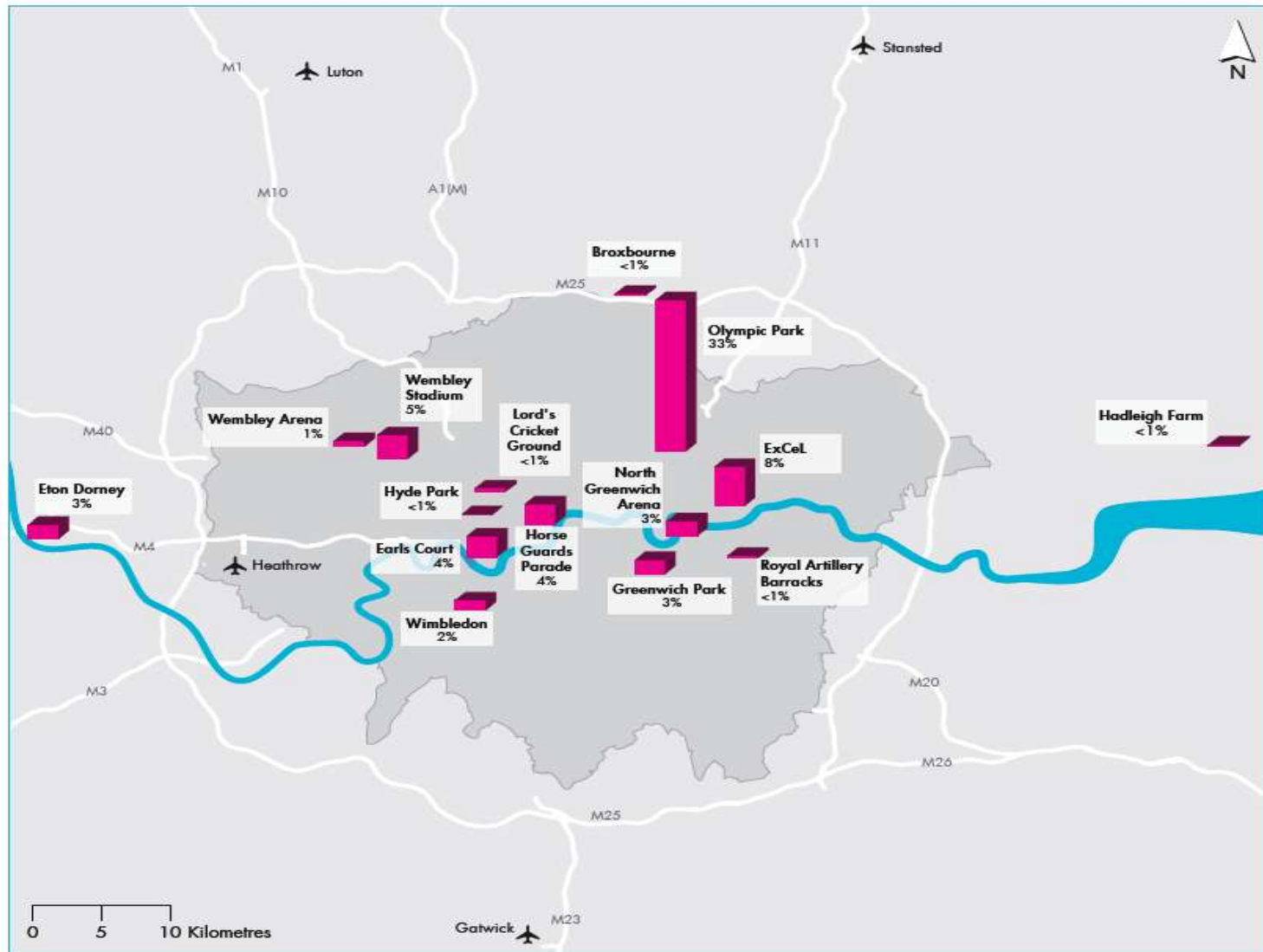


A Docklands Light Railway (DLR) train.

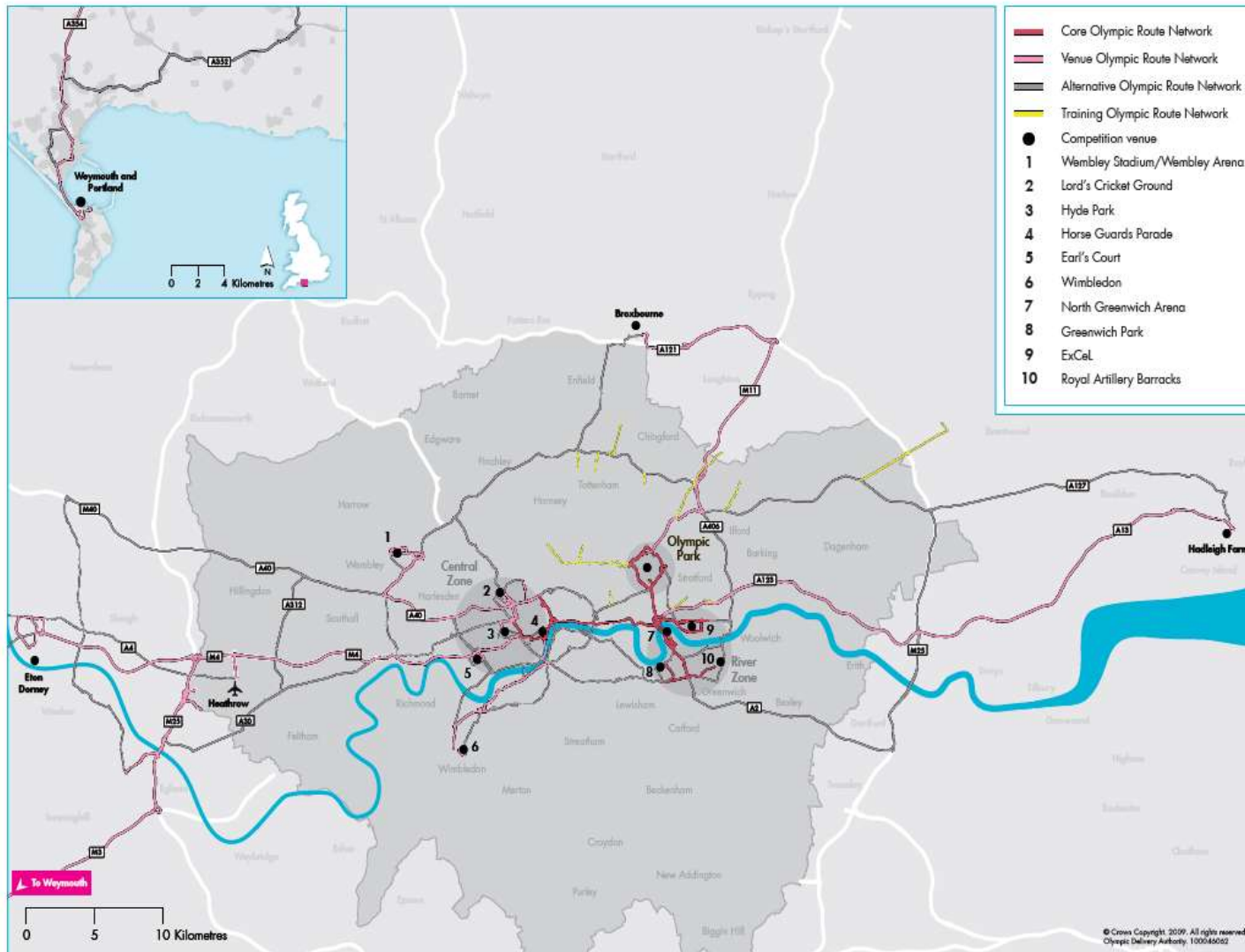
- The first of 22 new railcars co-funded by the ODA are now in service.
- New line extension between King George V and Woolwich Arsenal station – DLR's second crossing under the River Thames – opened in January 2009.
- Second new line extension from Canning Town to Stratford International Station is due to open in mid-2010.
- The DLR has built two new replacement platforms for London Overground to use at Stratford Regional Station.



Olympic Venues in London



Olympic Route Network



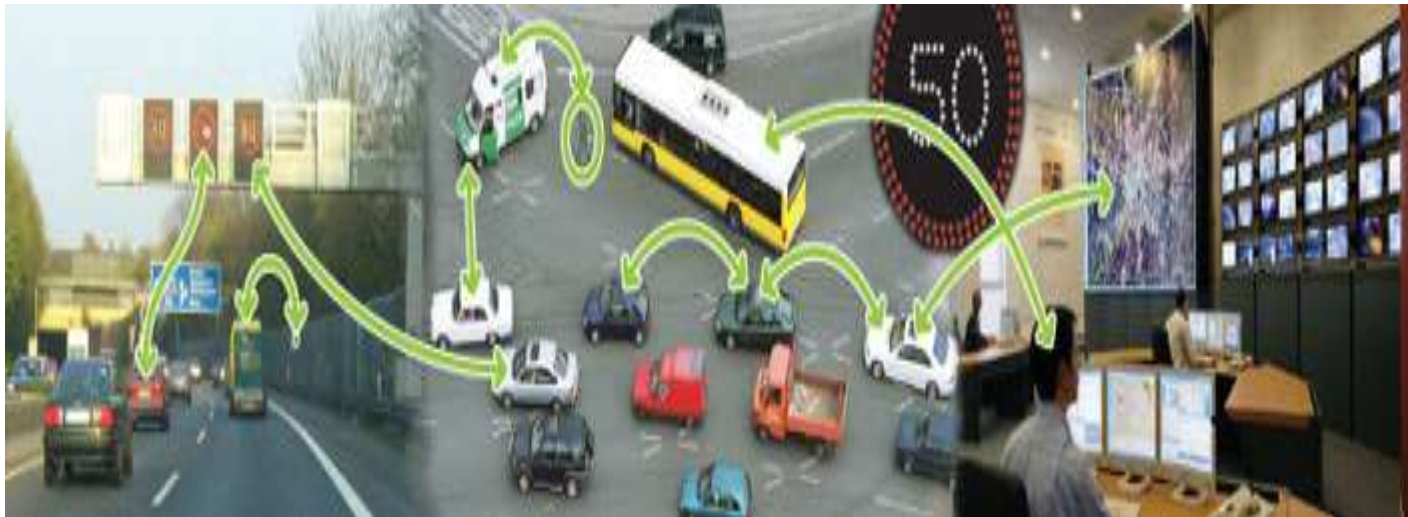
Future development / Issues for Discussion

Traffic Management challenges in London

- Improved traffic management tools for rapid detection and response to disruption – *real time information*
- Improved detection of pedestrians and cyclists
- V2V and I2V communications; - particularly vehicles searching for parking spaces
- Situational Awareness ; leading to a predictive capability



V2V and I2V



Thank you

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Thank you for your attention

Further information at

www.tfl.gov.uk