



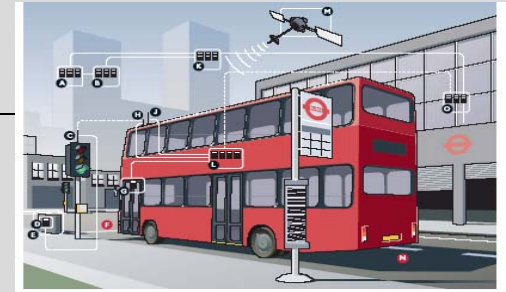
**Transport
for London**

London's Bus Priority

Presentation to NACTO Workshop
Introducing Corridor Bus Priority in
congested urban environments

STEPHEN PALMER

Head of Strategy, Transport for London



6th /7th April 2010

Presentation - Outline

- **Background**
- **The Challenges**
- **London – A decade of Bus Priority**
- **Achievements**
- **Case Studies**
- **Future Developments**
- **Summary**



Tube Map



- Key to lines**
- Baseline** No special arrangements.
 - Central** The service between Woodford - Hainault operates until approximately 2400. There is major escalator work at Bank and Monument stations. Please see information below.
 - Circle** Cannon Street open until 2100 Mondays to Fridays. Open Saturdays 0730 to 1930. Closed Sundays. Bankside Underground station is closed until late 2011.
 - District** Cannon Street open until 2100 Mondays to Fridays. Open Saturdays 0730 to 1930. Closed Sundays. Earl's Court - Kensington (District) 0700 to 2345 Mondays to Saturdays. Turnham Green is also served by Piccadilly line trains early mornings and late evenings. Blackfriars Underground station is closed until late 2011.
 - East London** The East London line is closed. Use replacement buses or alternative Tube, bus and DLR routes via zone 5.
 - Hammersmith & City** No service Whitechapel - Barking early morning or late evening Mondays to Saturdays on all day Sundays. There is step free interchange between Canary Wharf Underground and DLR stations and Hesen Quay DLR station at street level.
 - Jubilee** For Chesham, change at Chalfont & Latimer on most trains.
 - Metropolitan** Except during weekday peak hours, all trains to/from Morden run via Bank - for the Charing Cross branch, change at Kennington. For journeys to and from Mill Hill East at off-peak times, change at Finchley Central. On Sundays between 1300 and 1700, Camden Town is open for interchange and exit only. There is major escalator work at Bank and Monument stations. Please see information below.
 - Northern** No service Uxbridge - Rayners Lane in the early morning.
 - Piccadilly** Heathrow Terminal 4 station open Mondays to Saturdays until 2345 only. Sundays until 2315. Trains via Terminal 4 may stop there for up to 8 minutes before continuing to Terminals 1, 2, 3. Turnham Green is served by Piccadilly line trains early mornings and late evenings. Avoid the crowds at Covent Garden station by taking a short walk there from nearby Holborn (9 minutes), Leicester Square (6 minutes) or Charing Cross (11 minutes walk). Hounslow West is step-free for wheelchair users only.
 - Victoria** No special arrangements.
 - Victoria & City** Mondays - Fridays 0615-2148. Saturdays 0800-1830. Closed Sundays and public holidays.
 - Overground** No special arrangements.
 - DLR** No special arrangements.
- Major escalator work is taking place at Bank and Monument stations. Avoid interchange between lines or use nearby alternative stations wherever possible. Please check before you travel.**

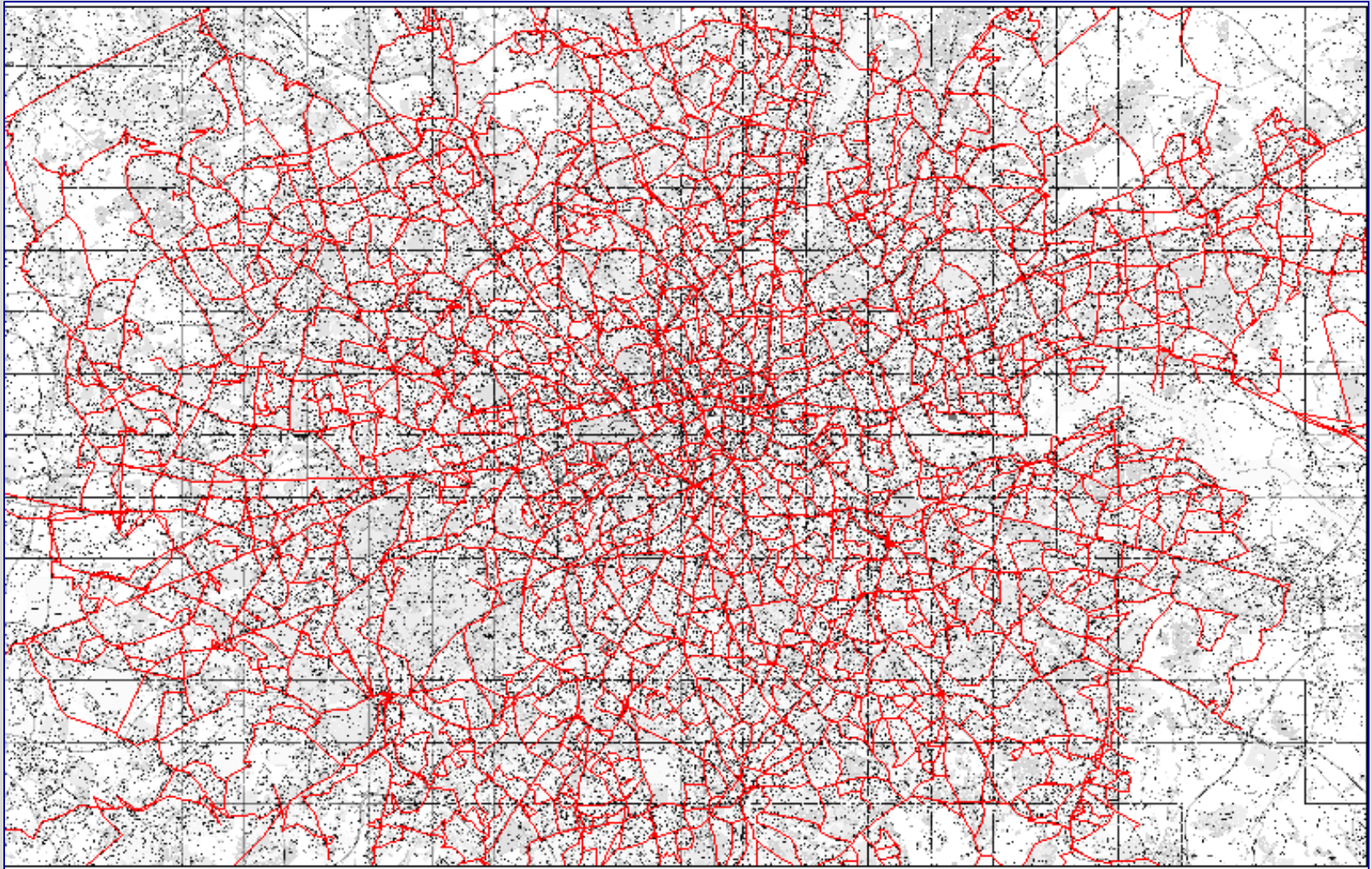
Improvement works may affect your journey, particularly at weekends. Check before you travel; look for publicity at stations, visit tfl.gov.uk/check or call 020 7222 1234

MAYOR OF LONDON

Website tfl.gov.uk 24 hour travel information 020 7222 1234

Transport for London UNDERGROUND





- **One of the largest and most comprehensive urban bus systems in the world - 8,200 London buses carry about 6.5 million passengers on over 700 different routes each weekday (2.26 billion passengers / year)**
- **A regulated network administered by TfL**



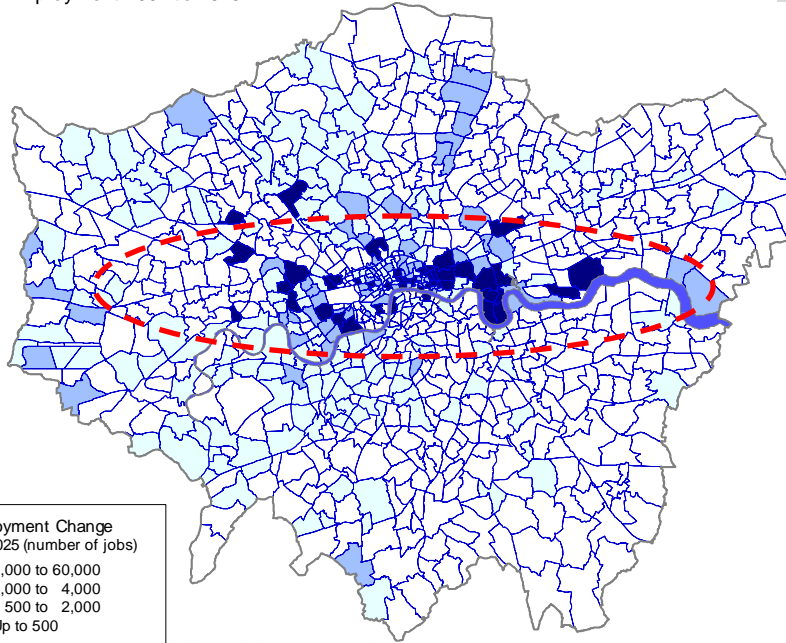
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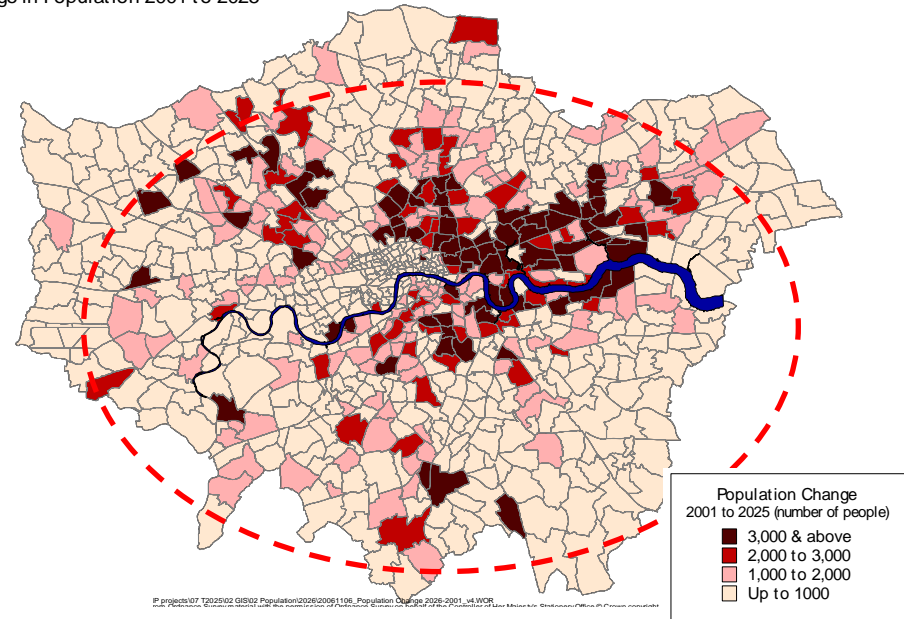


Job and population growth will be in different locations

Change in Employment 2001 to 2025



Change in Population 2001 to 2025



Source: Transport 2025 Nov 2006

**Concentrated job
growth in a central
east-west corridor**

**Population growth across
London**





Travel growth will be significant

The task – Improving public transport

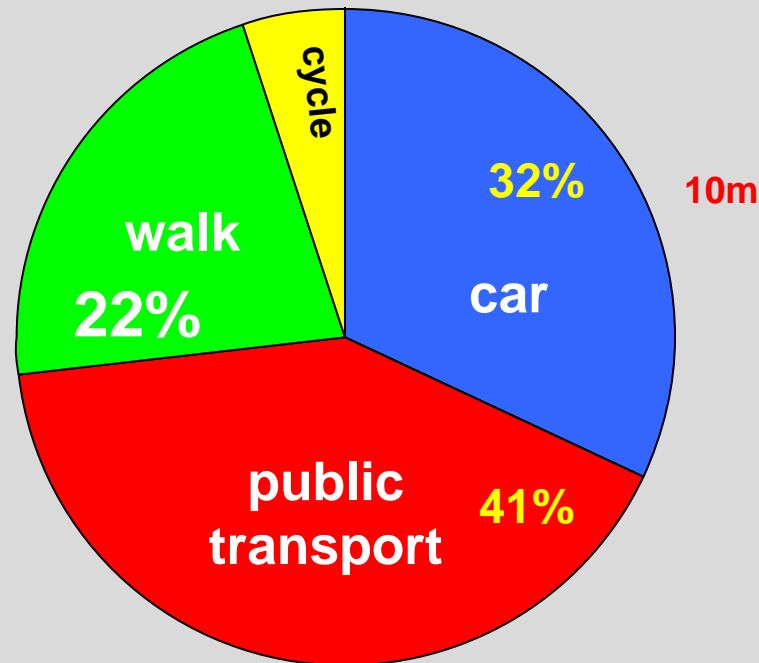
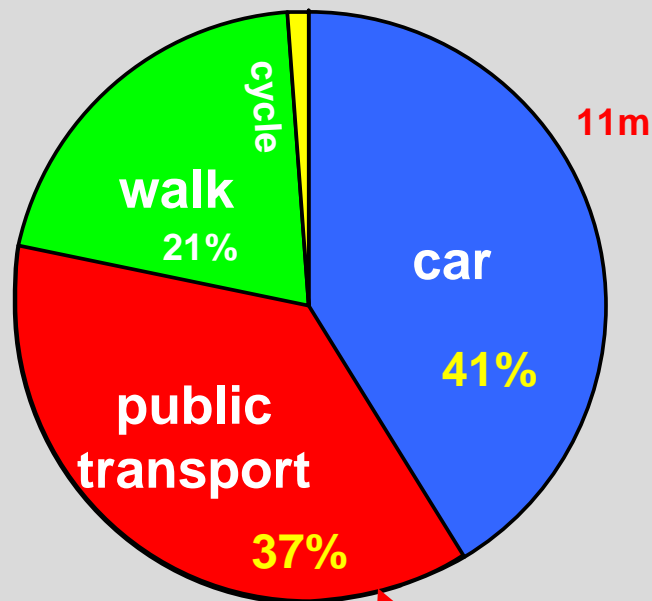
2005

27.2m journeys



2025

31.2m journeys



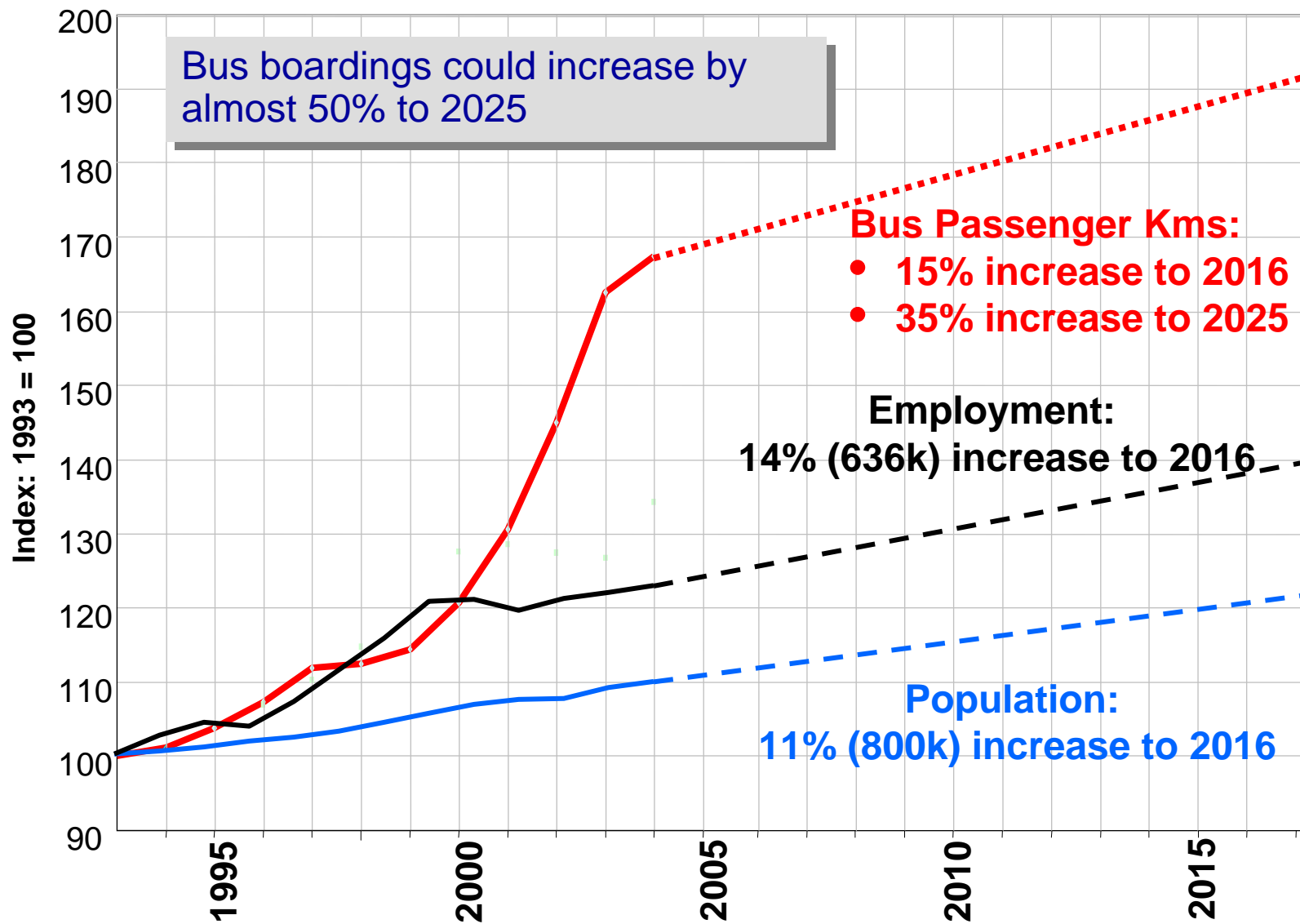
4% shift since 2000



4m extra journeys each day must be supported by public transport, walking & cycling



Our challenge: more population, employment - and bus passengers over the next 10-20 years



Bus – T2025 Vision Nov 2006

- The bus system will play a key role in supporting economic growth, tackling climate change and improving social inclusion
- The multi-purpose nature of bus is the only mode that can serve such diverse needs
- Prior to the delivery of new rail schemes, bus is the only feasible way to support London's growth
- And additional bus capacity will be critical as part of the complementary measures for RUC in the congestion and emissions reduction plan
- **An additional 40% extra bus capacity will be needed by 2025**
- **Effective end-end bus priority measures will be a critical success factor**



Source: Transport 2025 Nov 2006



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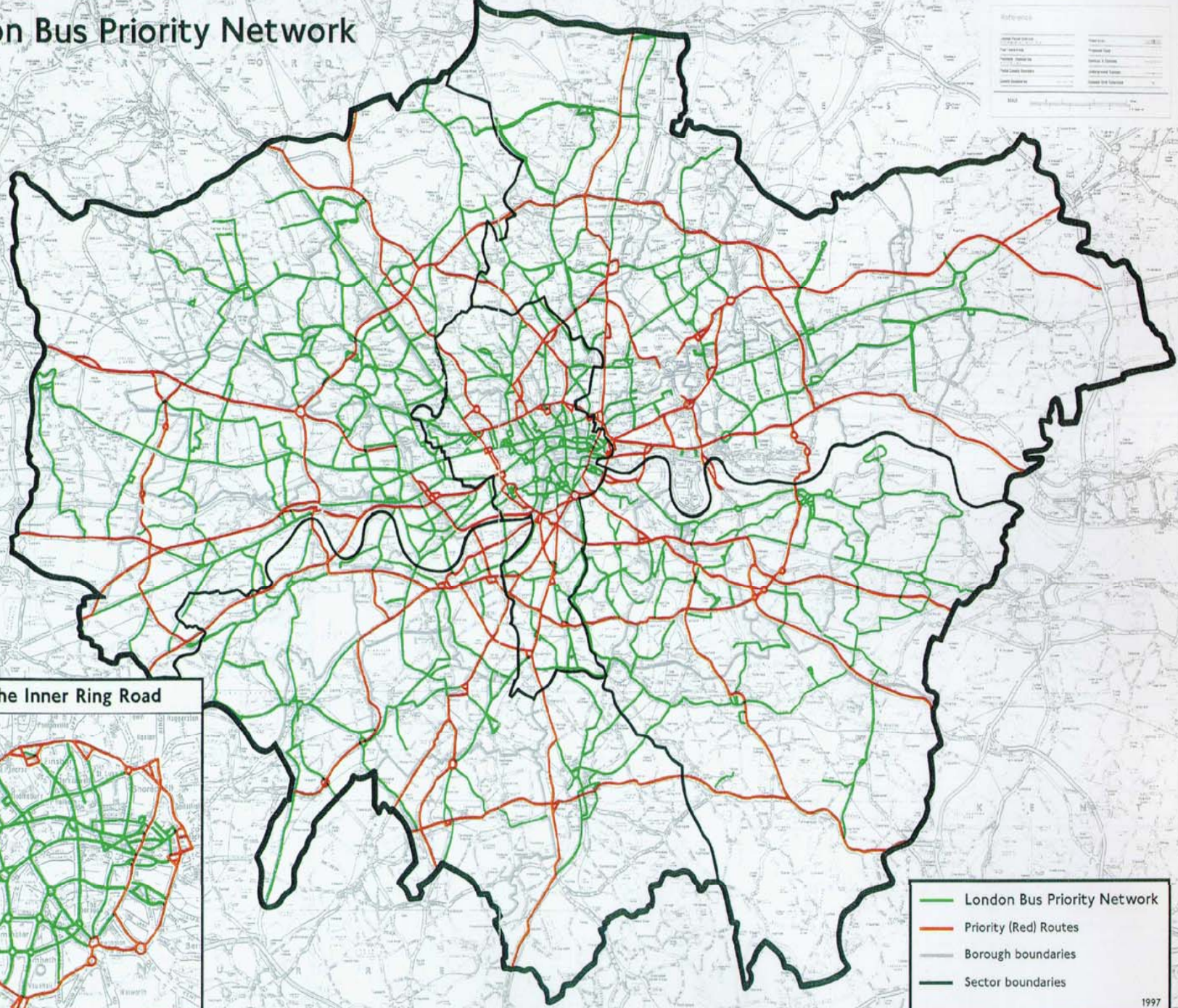


The London Bus Priority Network

1994

References

London Bus Priority Network	London Bus
Priority (Red) Routes	London Bus
Borough boundaries	London Boroughs
Sector boundaries	London Boroughs



Network within the Inner Ring Road

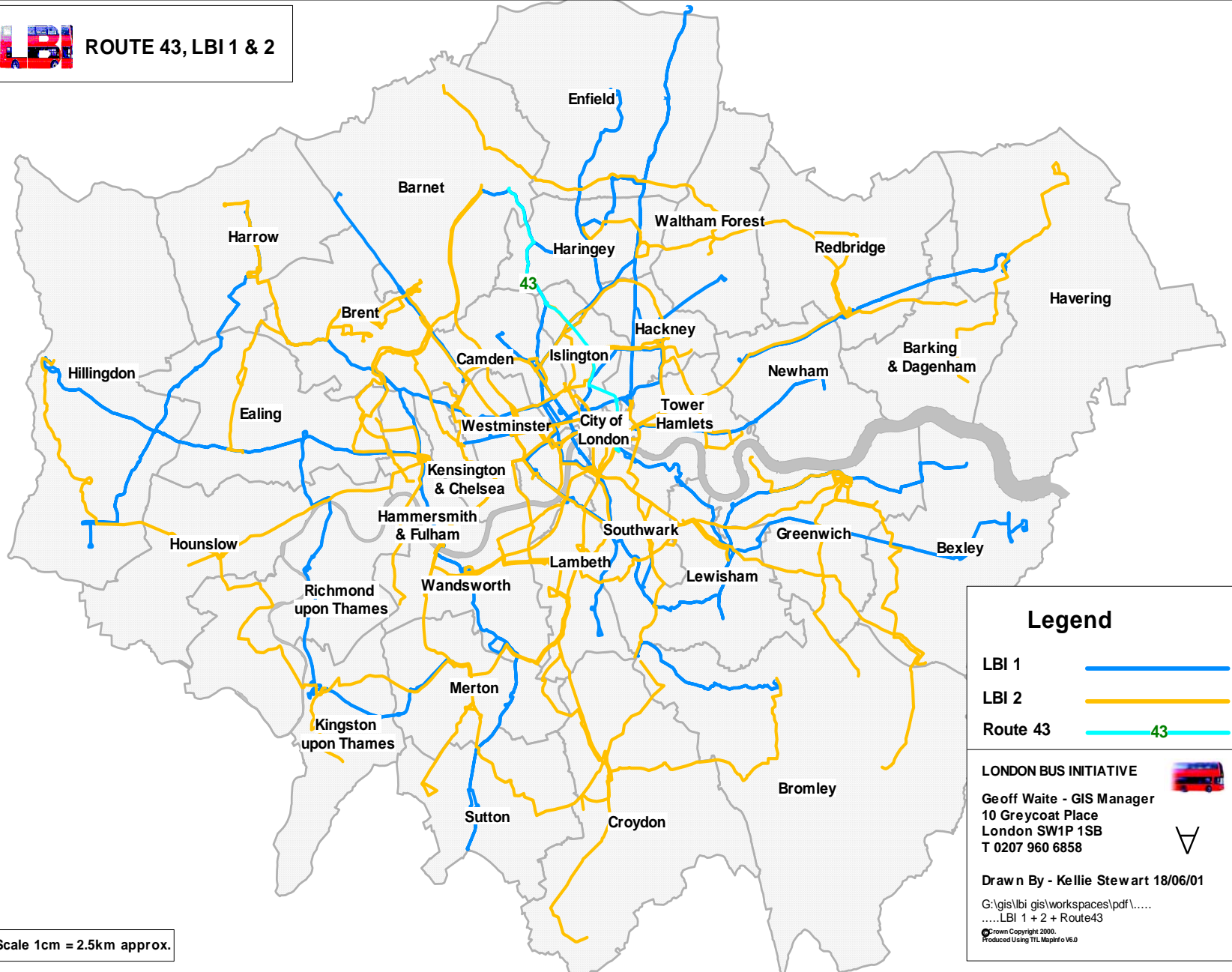


- London Bus Priority Network
- Priority (Red) Routes
- Borough boundaries
- Sector boundaries

The London Bus Initiative - 2000



ROUTE 43, LBI 1 & 2



Legend

- LBI 1
- LBI 2
- Route 43

LONDON BUS INITIATIVE



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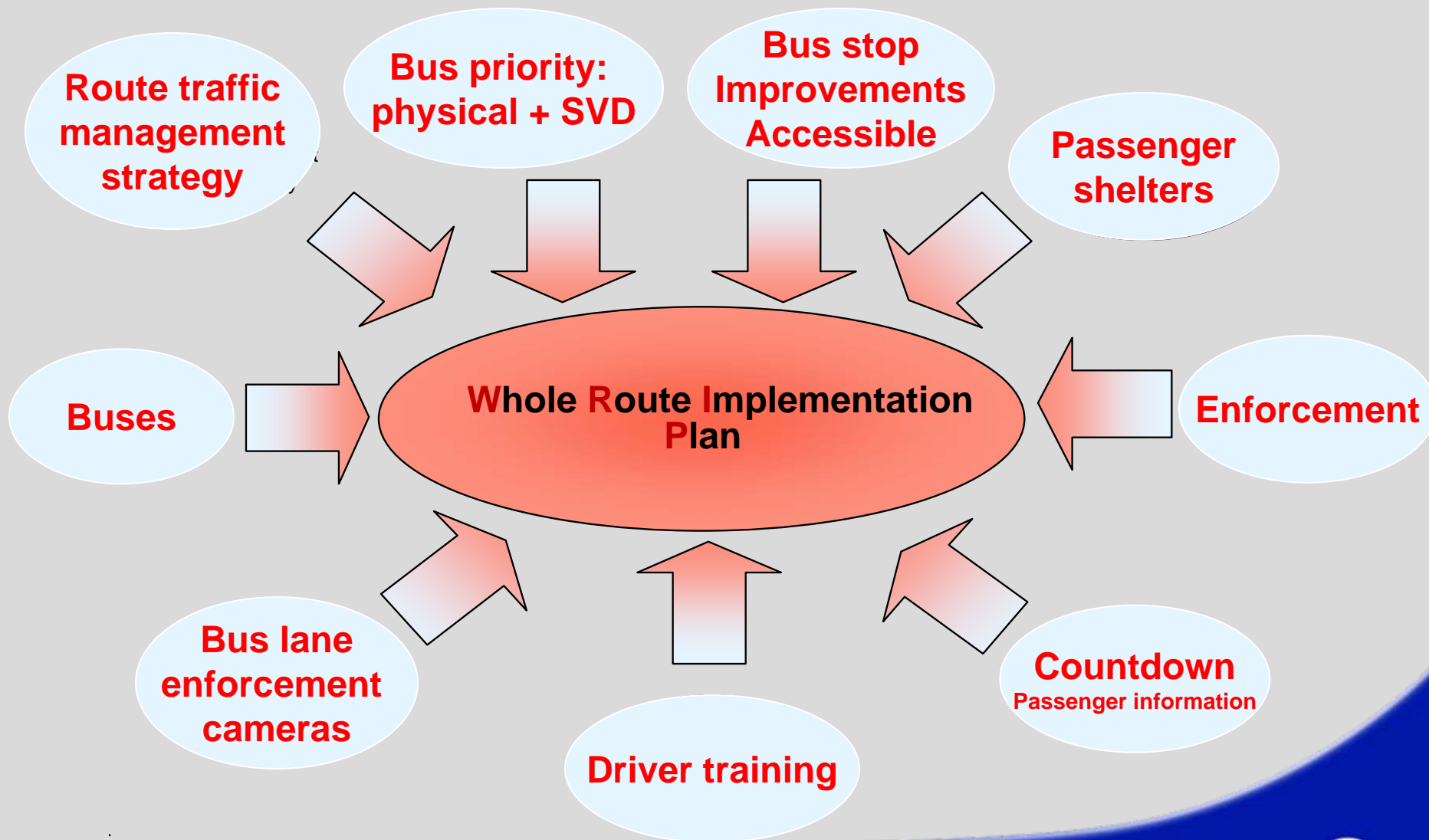
Drawn By - Kellie Stewart 18/06/01

G:\gis\lbi_gis\workspaces\pdf\.....
LBI 1 + 2 + Route43

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 Produced Using TIL MapInfo v6.0

Scale 1cm = 2.5km approx.

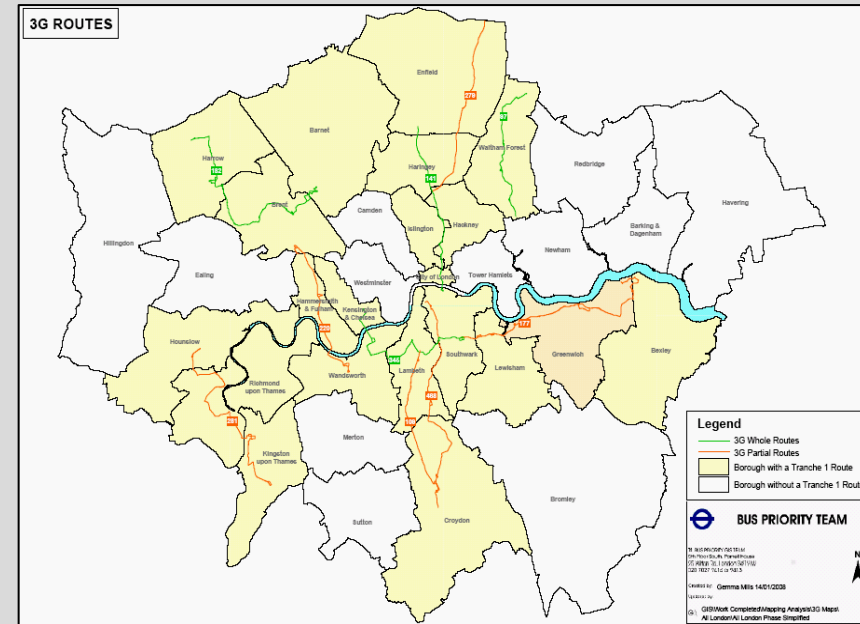
Overview: LBI whole-route approach



Third Generation Bus Priority (3GBP)

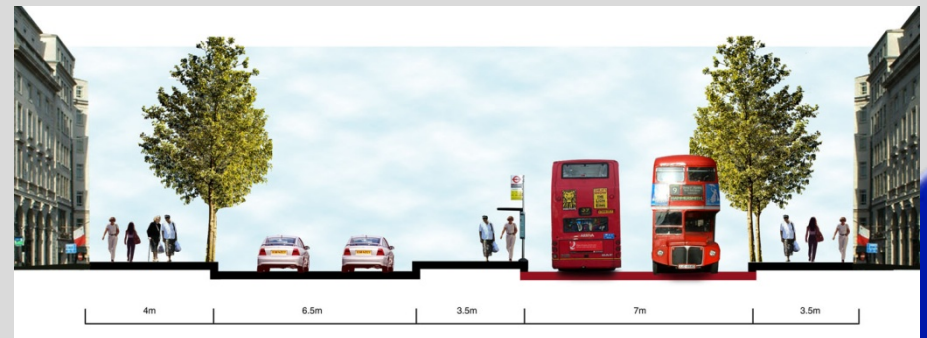
The Concept

- Bus priority “corridor management”
- Partnership approach between TfL and LBPN representing London Boroughs (builds on previous relationships developed through LBI 1 and 2).
- 10 year programme treating up to 36 routes - 10 routes to be taken forward in Tranche 1
- Benefits up to 60 coincident routes



Bus Priority Elements used in 3GBP

- Traffic management delivery plan
- Partnership of Safety, cycling, walking, urban realm along bus route
- Strategic Urban Realm Plan
- Route enforcement plan and operation
- Kerbside control plan with inset parking & loading bays
- Route traffic signal control plan incorporating SVD
- Freight and access plan (incl Servicing & Taxis)
- Bus operations plan – adjusting bus schedules to capture journey time improvements
- ‘Track management’ plan & operation – on-going benefits management



Business Case: “Do Something”

KEY FACTS

- £81m over 5 year period (2008 – 2013)

Benefits of the “do something” plan:

- Net Financial Effect (NFE) is positive at £47.3m over 10 years
- Proxy BCR greatly exceeds TfL min standard of 1.5:1
- 77% of Tranche 1 benefits delivered by 2013
- Benefits of £609.3m over 10 years
- £12m of Safety Benefits in first five years of programme
- Meets social inclusion and accessibility objectives
- Walking & Cycling improvements
- Public Realm



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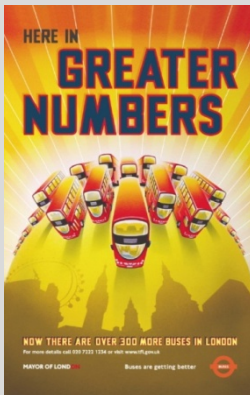
LBI Delivered (1)

- Measures helping passengers - 'in bus'
 - Over 100 new bus lanes
 - Over 100 bus lanes improved in length/time
 - Signal priority (SVD) at over 300 junctions
- Measures helping passengers - 'to bus'
 - 50 signal pedestrian facilities
 - 50 junction 'all greens' for pedestrians
- Measures helping all vehicle users
 - 146 physical signal junction modifications
 - plus over 200 further signal timing changes



LBI Delivered (2)

- Passenger Information
 - 981 bus stops have Countdown
 - Over 300 bus stops have spider maps
- Of the 2,500 bus stops on the 27 LBI routes 40% had shelters installed or renewed for improved passenger comfort. 72% of these stops now have shelters

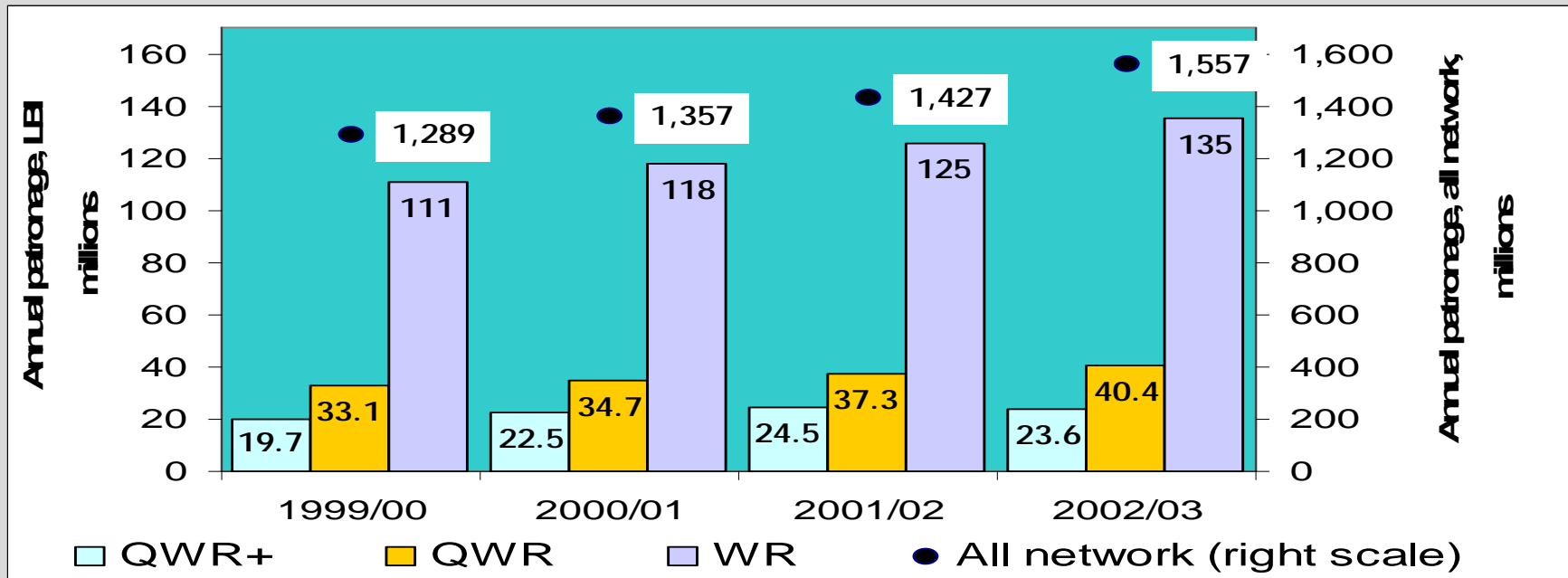


Delivered (3)

- Operational improvements
 - New accessible low floor buses
 - BTEC driver training programme running
 - New Quality Incentive Contracts for bus cleaning
- Enforcement
 - 30 SLA agreements signed with Local Authorities
 - 92 additional attendants
 - Over 200 new borough CCTV cameras
 - 1 in 6 buses have bus lane cameras



Bus Priority Outcomes From LBI 1

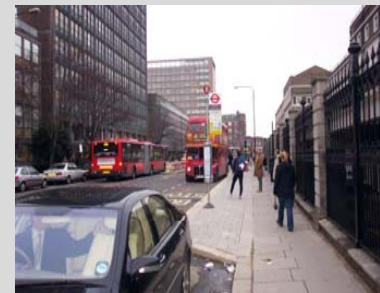


Annual patronage: LBI routes' (left scale) & all network (right scale)

Annual patronage on all 27 LBI routes

- Increased by 22.1% from 163 million pa to 200 million pa (compared with a network-wide increase of 20.8%)

Financially positive benefits: £12.0 million pa plus bus passenger benefits



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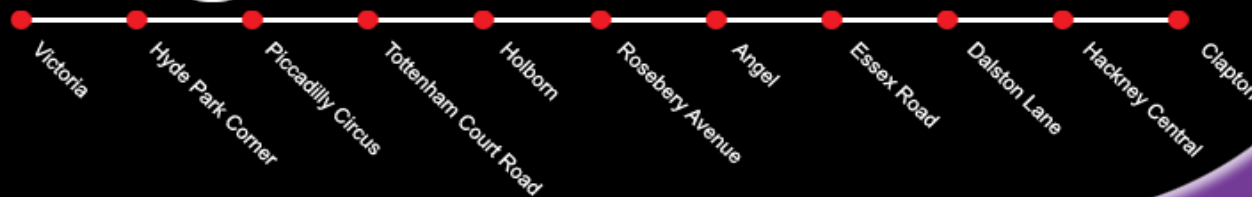
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Route 38 - web site - www.busroute38.co.uk



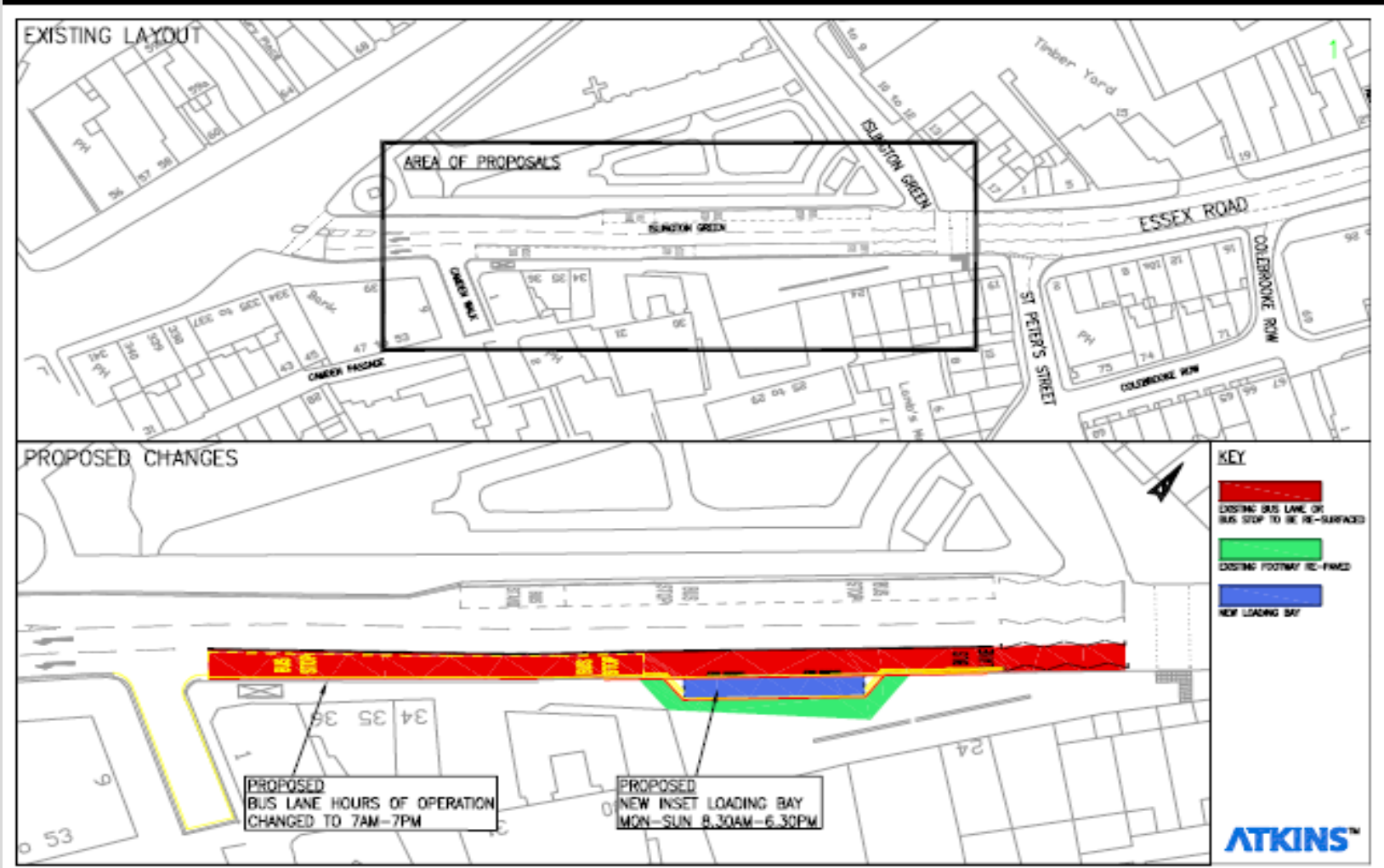
Route **38** Victoria - Clapton



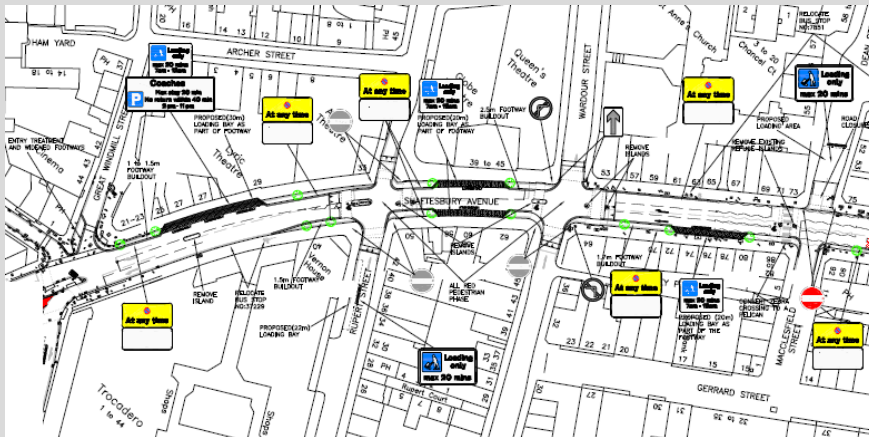
Route 38 - Bloomsbury



Route 38 – Essex Road



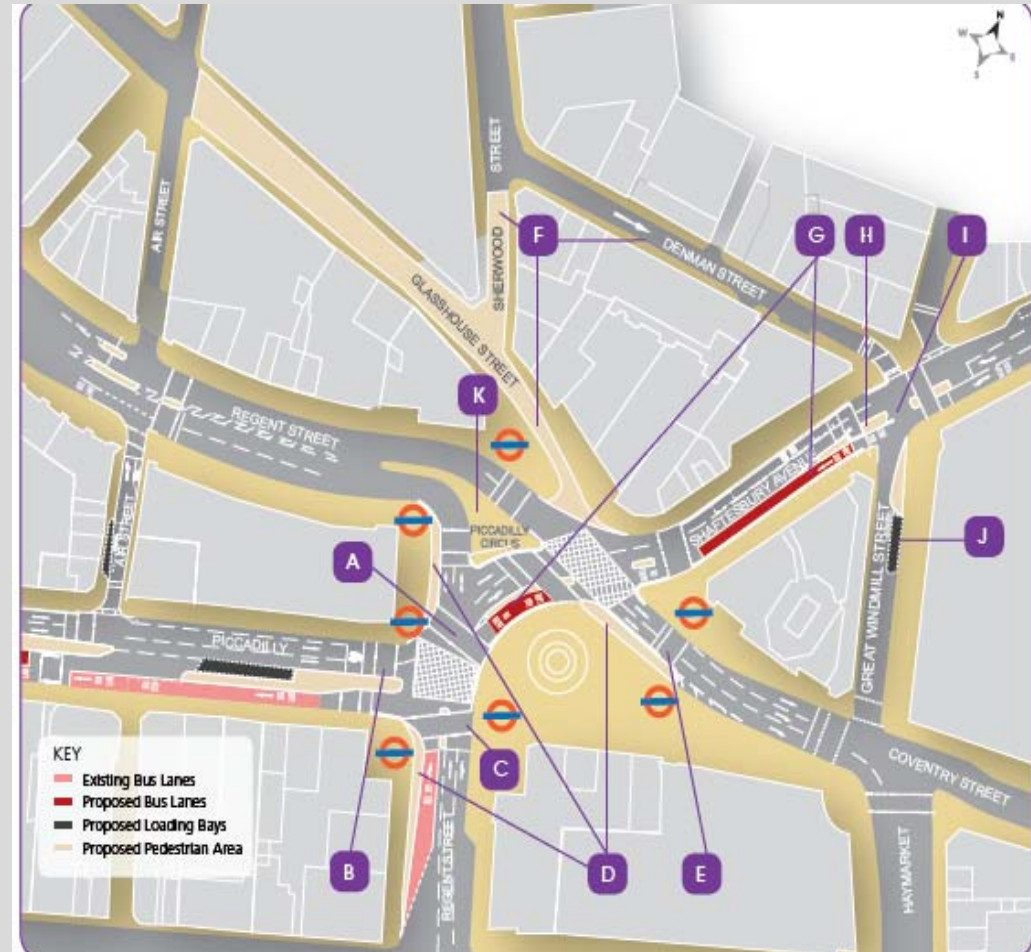
Route 38 – Shaftesbury Ave (Theatre land)



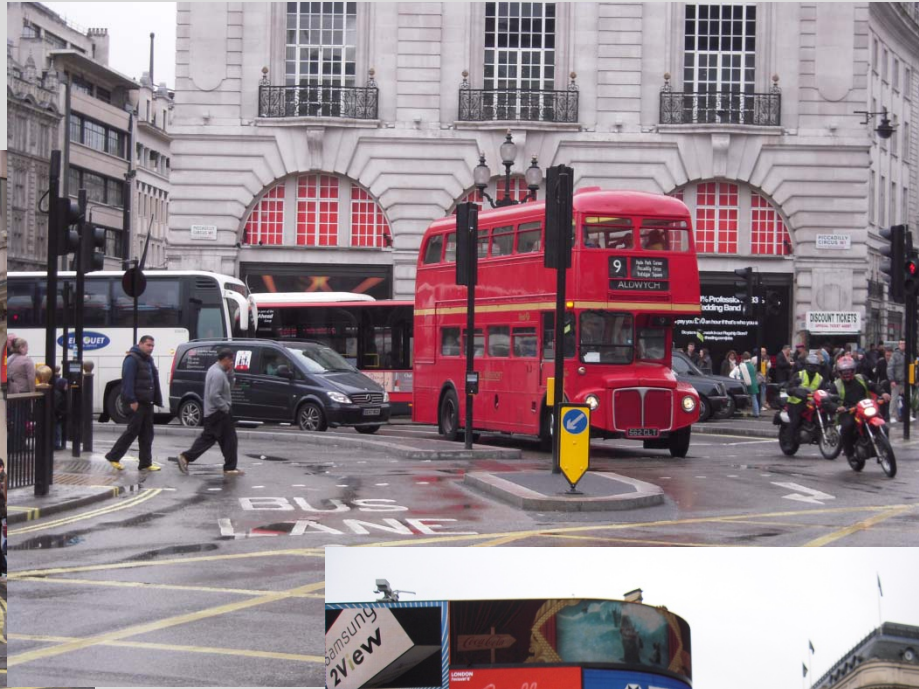
- Footways widened & re-paved
- Inset Loading bays
- Traffic Calming speed Tables
- Pedestrian Crossings
- £1.05M



Route 38 – Piccadilly Circus



Route 38 – Piccadilly Circus



East London Transit – Opened Feb 2010



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Traffic Signal Technology - Differential Priority

- Builds on new iBus GPRS system
- Priority is given according to the individual requirements of buses
- Varying levels of priority given depending upon need (e.g. late bus)
- Could target higher occupancy buses
- Improves punctuality/regularity and reduces passenger waiting times
- Less impact on non-priority traffic (as fewer buses awarded priority)



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Summary

- **1236 Bus Lanes – 300km**
- **Improved JT and Reliability for buses saving £30M per annum (+ £20M pax)**
- **Helped achieve modal and climate change targets – 5% modal shift Car2Bus**
- **80% Londoners (90% Cyclists) support bus priority and bus lanes**
- **Multi modal corridor schemes offer increased benefits through integrated interventions**
- **Effective community engagement key**



Questions

