

# T2025: Transport Challenges for a Growing City

Presentation to UITP Study Tour Group

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# Transport for London

Created 3<sup>rd</sup> 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) over £4.5bn per year



# Overview of Transport for London

## Transport for London



### Corporate

- Equality & Inclusion
- Group Services
- General Counsel
- Group Finance & Planning
- Group Communications

### London Underground

- Contract Management of PPP
- Engineering
- Safety
- Stations
- Trains

### London Rail

- Docklands Light Railway
- London Rail Development

### Surface Transport

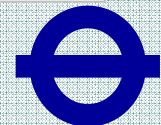
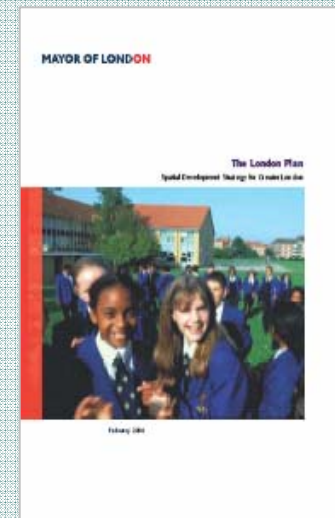
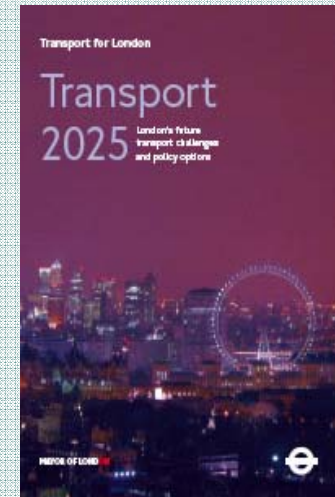
- Surface Public Transport e.g. buses, PCO, London River Services, Dial-a-ride
- Streets
- Congestion Charging
- Transport Policing & Enforcement Directorate





# What is T2025 and why is it important

- T2025 is a TfL policy initiative to define a long-term vision and investment strategy for London's transport system
- London's transport system must have sufficient capacity to support London's growth
- The transport vision is being designed to support the Mayor's overall vision for London
- T2025 is fully integrated with the national transport agenda & will feed into TIF & SR07
- T2025 will also inform a future revision of the Mayor's Transport Strategy.





# Value of London's economy & growth prospects



# Transport & London's economy

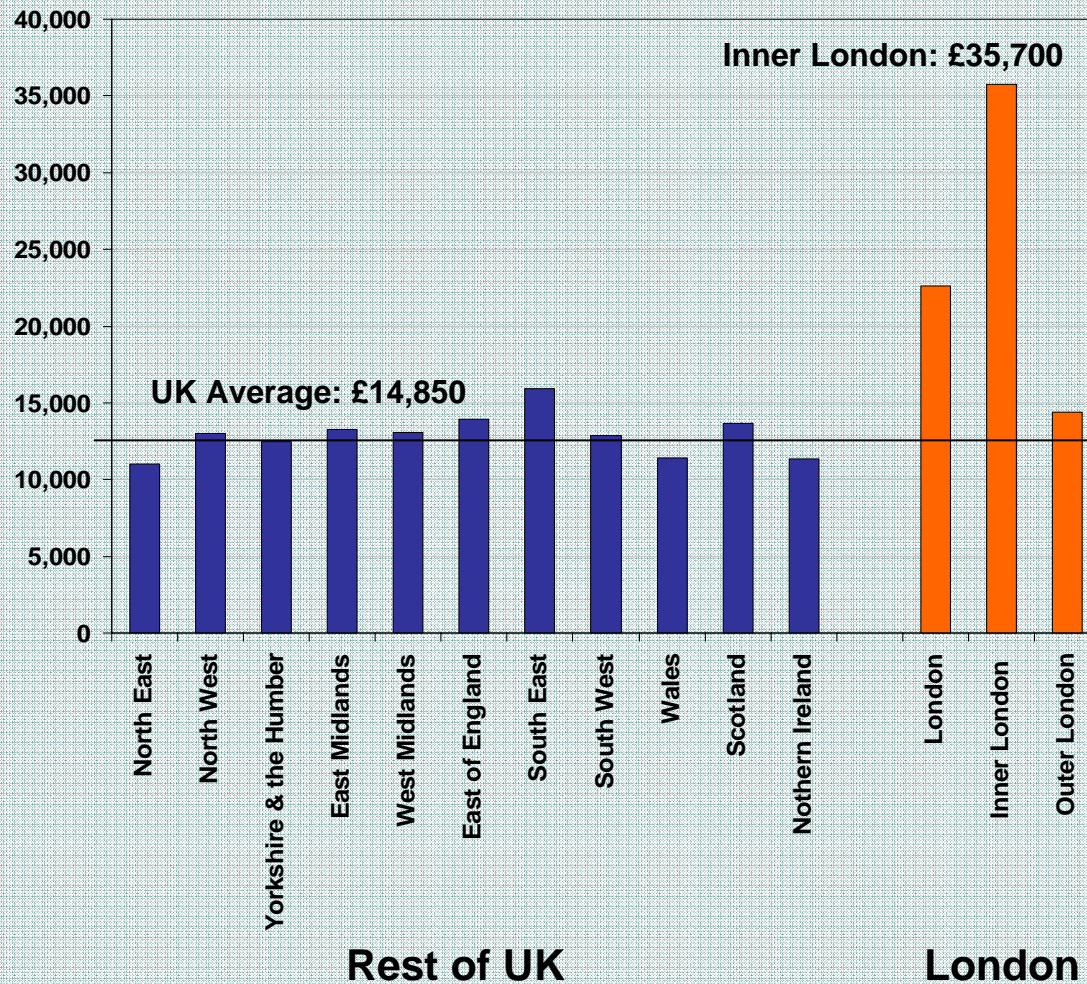
- **London's economy is uniquely productive with a globally distinctive finance and business services industry**
- **The city's economy has developed around its transport network, most recently with the Jubilee Line Extension**
- **The next 20 years present a huge opportunity for London to grow and become even more productive ...**
- **... but the growth opportunity poses equally huge challenges for London's transport network**





# Productivity in the London economy

Gross value added per person, £, 2001

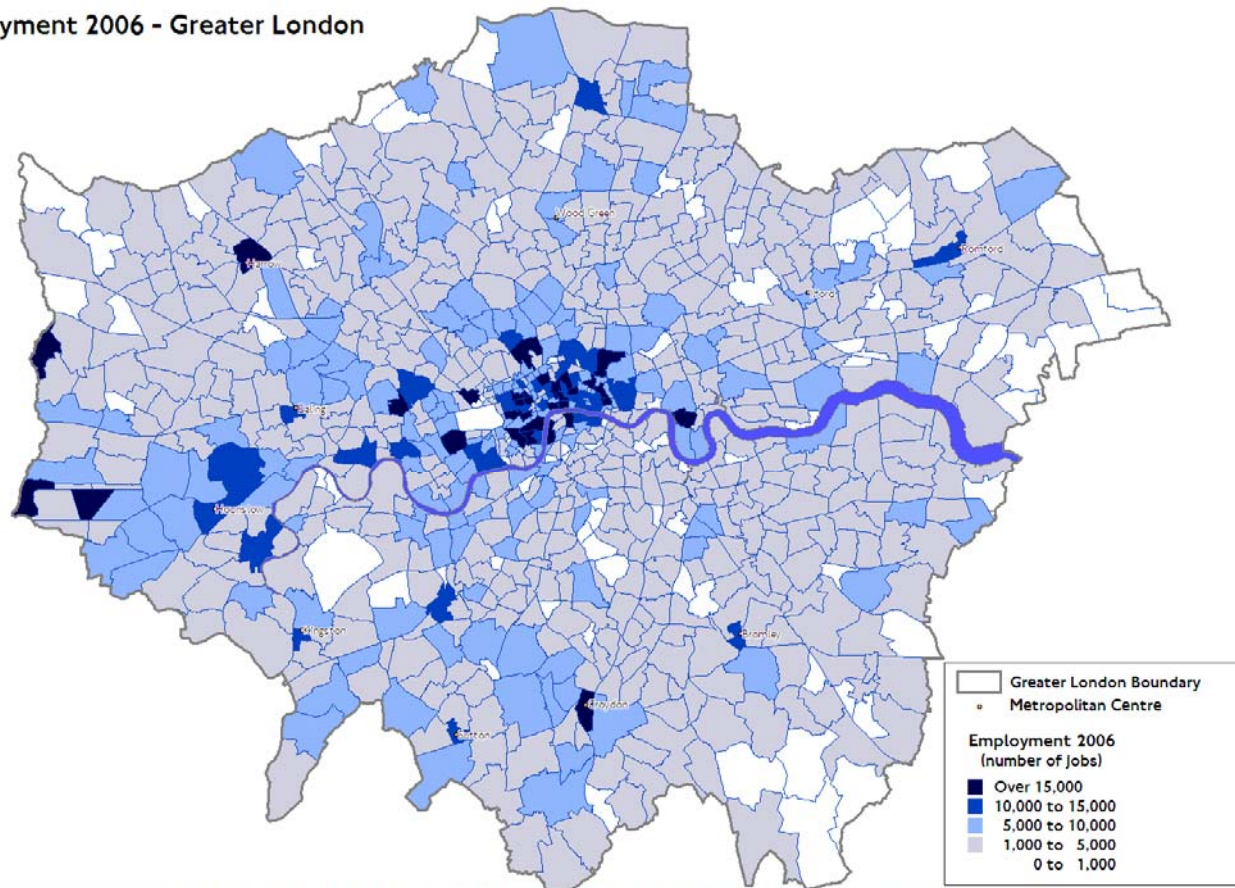


- Inner London's productivity is largely a result of the finance and business services sector
- This sector benefits from clustering of businesses



# Employment is clustered around the central area and in town centres

Employment 2006 - Greater London

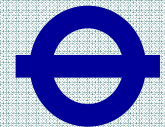


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Data Source: LTS Zones (mznc\_02) 83.20

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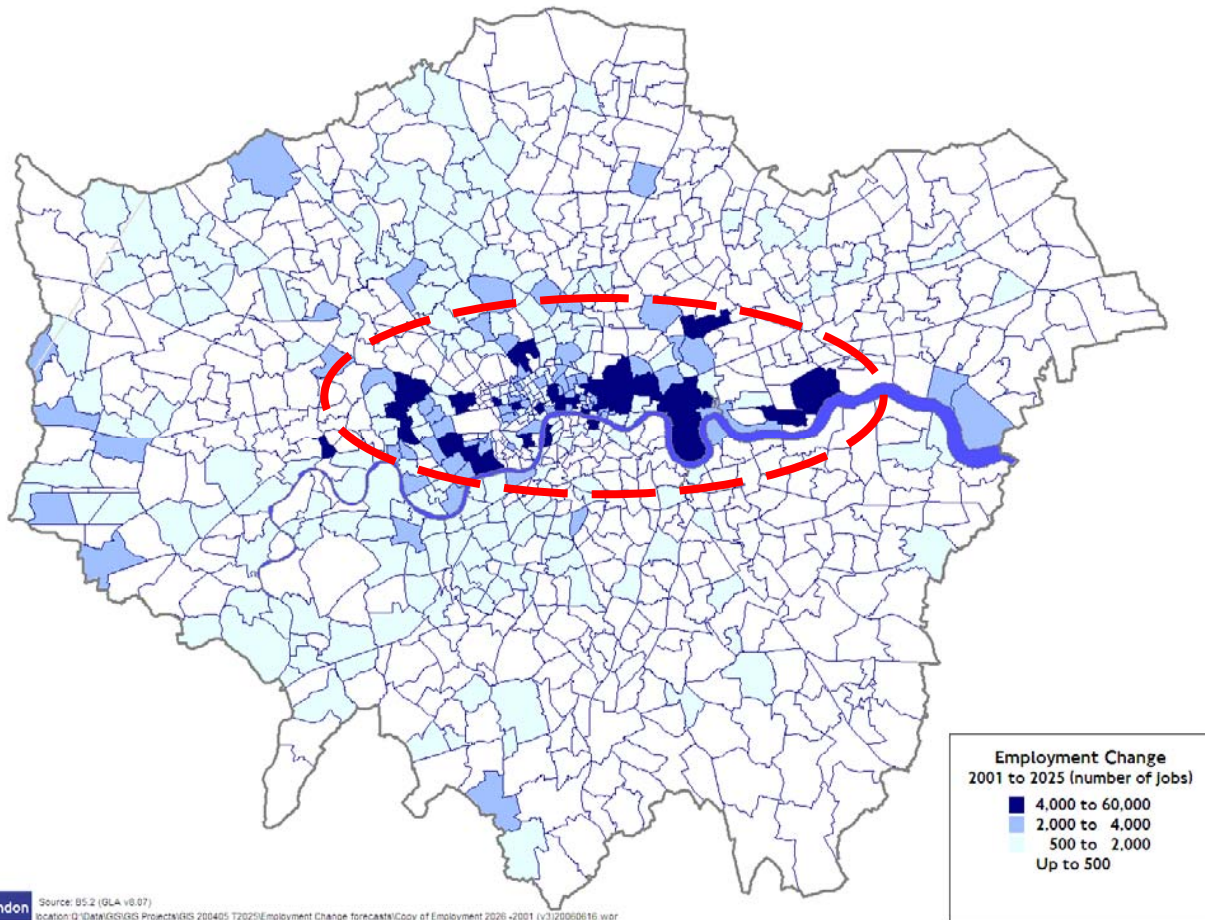
- All 5 UK local authorities with employment density of 5000+ per sq km are in Central London
- The City has 130,000 jobs per sq km
- Employment density is made possible by public transport – 87% of journeys to Central London are by rail and Tube





# Employment growth will be concentrated in a central east-west corridor

Change in Employment 2001 to 2025



- 1 million additional jobs by 2025
- Employment growth in central London improves London's – and the UK's – productivity due to “agglomeration” benefits



# London's distinctive economy is the engine of the UK economy

London is poised to grow and make the UK more productive

But, without effective transport this growth is not likely to happen

The following sections lay out in more detail other key objectives for transport in London:

- Making London a more inclusive place
- Meeting the challenge on the environment, particularly climate change
- Providing adequate capacity to allow London to grow
- Managing congestion so that it does not become a deterrent to growth





# Transport objectives & challenges





# T2025 transport objectives

**Objective 1** - Improving social inclusion

**Objective 2** - Tackling climate change and enhancing the environment

**Objective 3** - Supporting sustainable economic development

Improving public transport

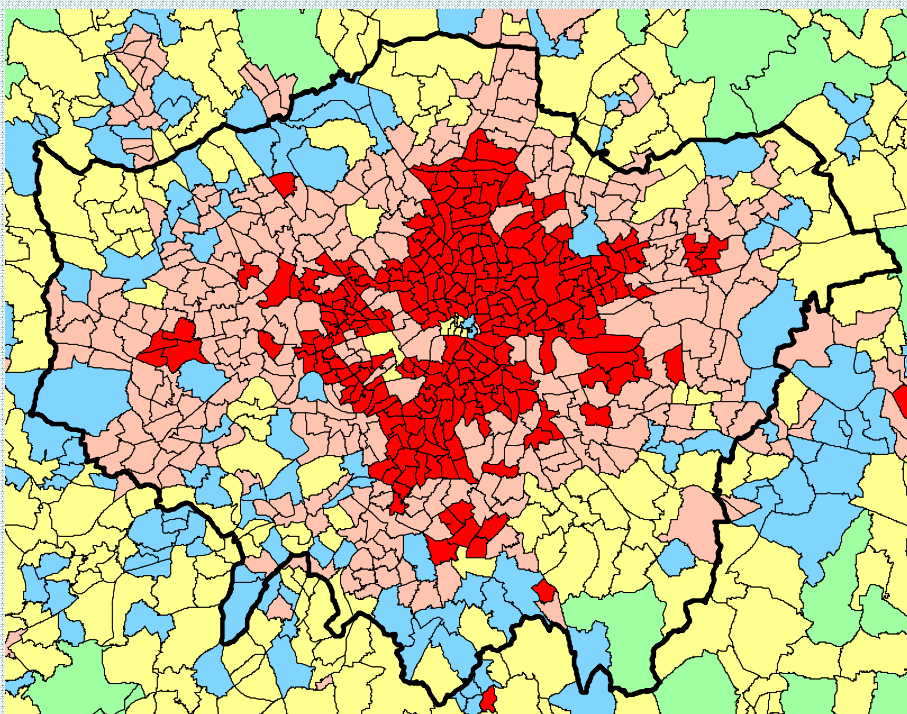
Managing traffic congestion



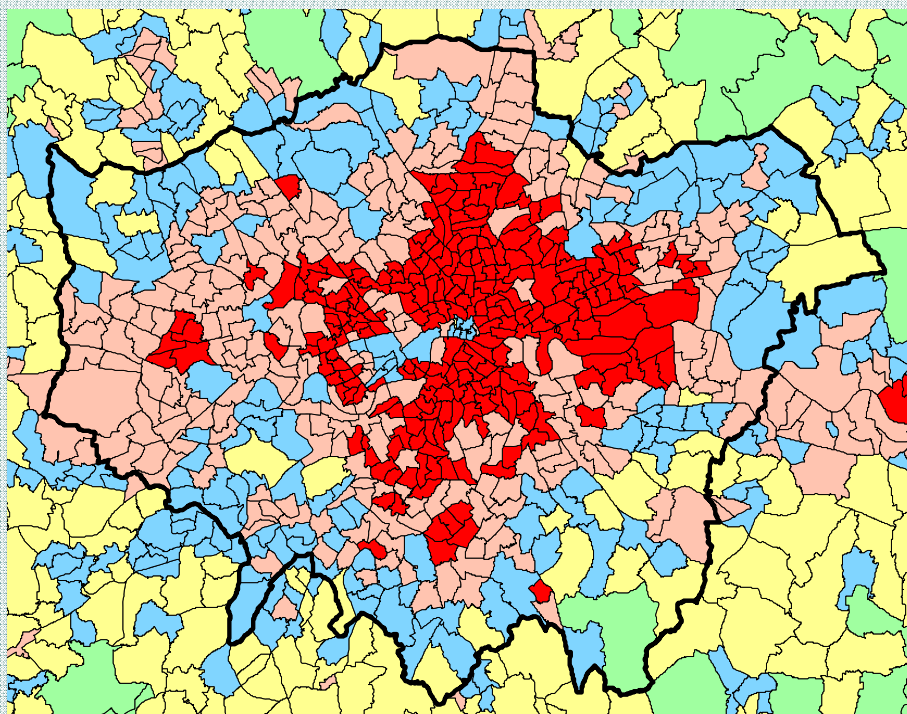
# Economic growth in London has not yet led to reductions in poverty levels

## Concentrations of deprivation

1991



2004



- Dense & Deprived (288)
- Less Dense (627)
- Less Deprived (751)
- Suburban (681)
- Rural (378)



# Overcoming the five primary barriers to access

1. Improving the availability and physical accessibility of transport
2. Reducing the cost of public transport
3. Ensuring essential services and activities are located in accessible locations
4. Improving the safety and security of public transport and the public realm
5. Improving travel horizons





## Objective 2 - Tackling climate change and enhancing the environment

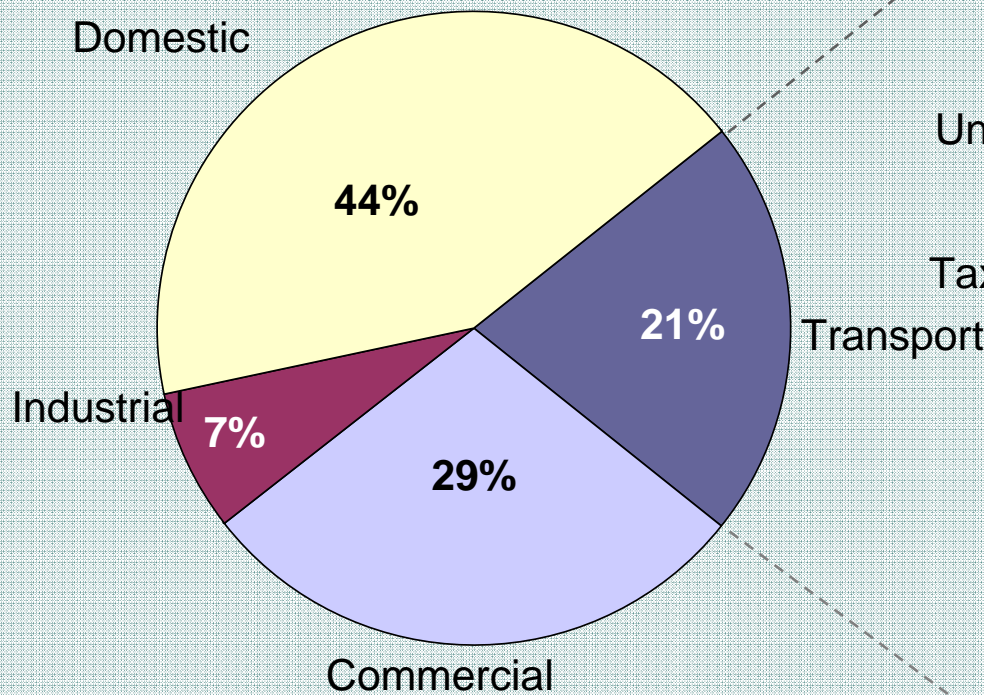
Three primary elements:

- **Dramatically reducing CO<sub>2</sub> emissions in London**
- **Improving air quality and reducing noise**
  - London has the worst air quality in the UK
  - LEZ first serious step towards redressing this
- **Improving the urban environment**
  - High-quality urban environment critical to attracting and retaining businesses and residents
  - Creation of expanded Architecture and Urbanism Unit to move in this direction

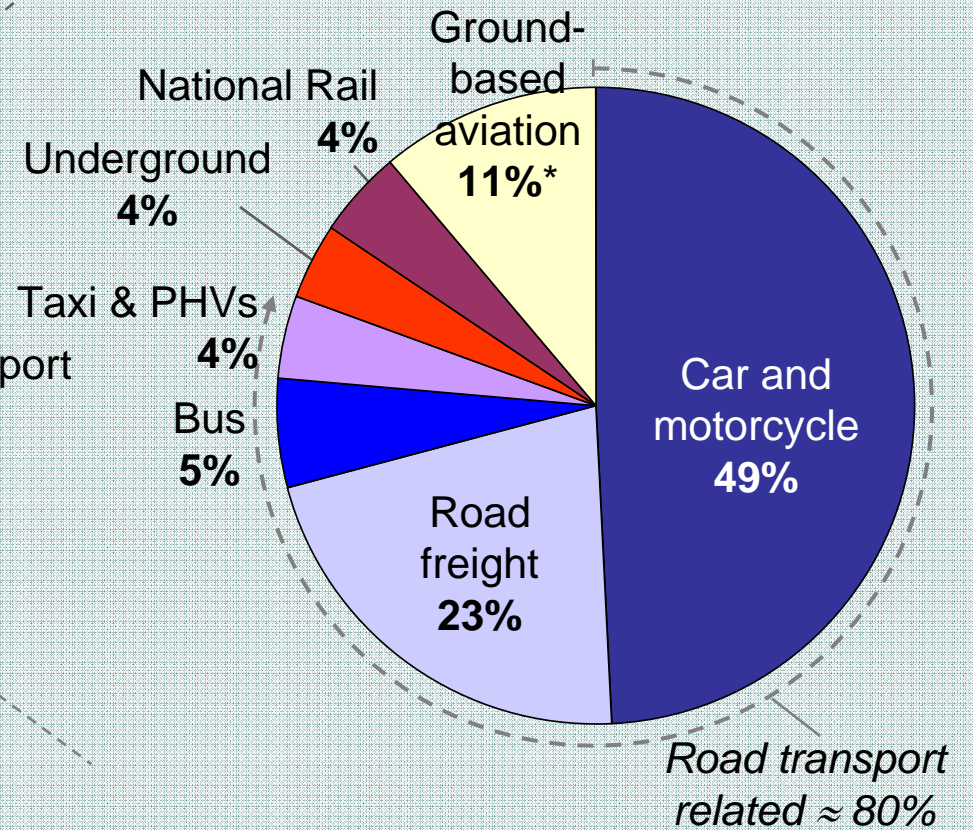


# Transport accounts for roughly 20% of London's CO<sub>2</sub> emissions, mostly from road transport

## Carbon Dioxide Emissions from London



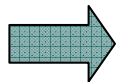
## London Transport Emissions



# T2025 transport objectives

- Improving social inclusion
- Tackling climate change and enhancing the environment

- Supporting sustainable economic development



- Improving public transport
- Managing traffic congestion

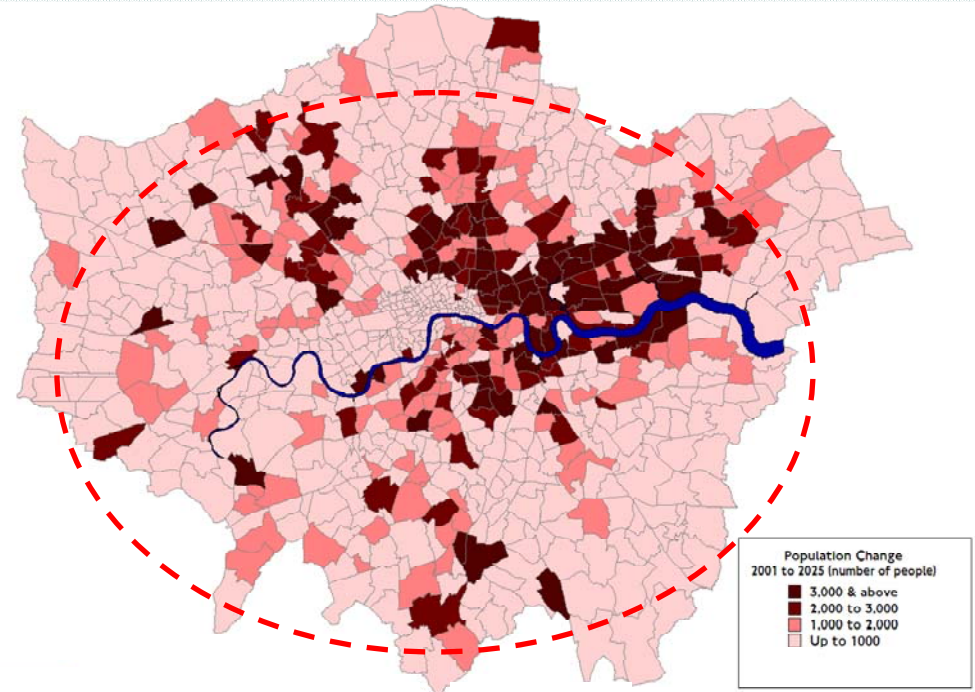
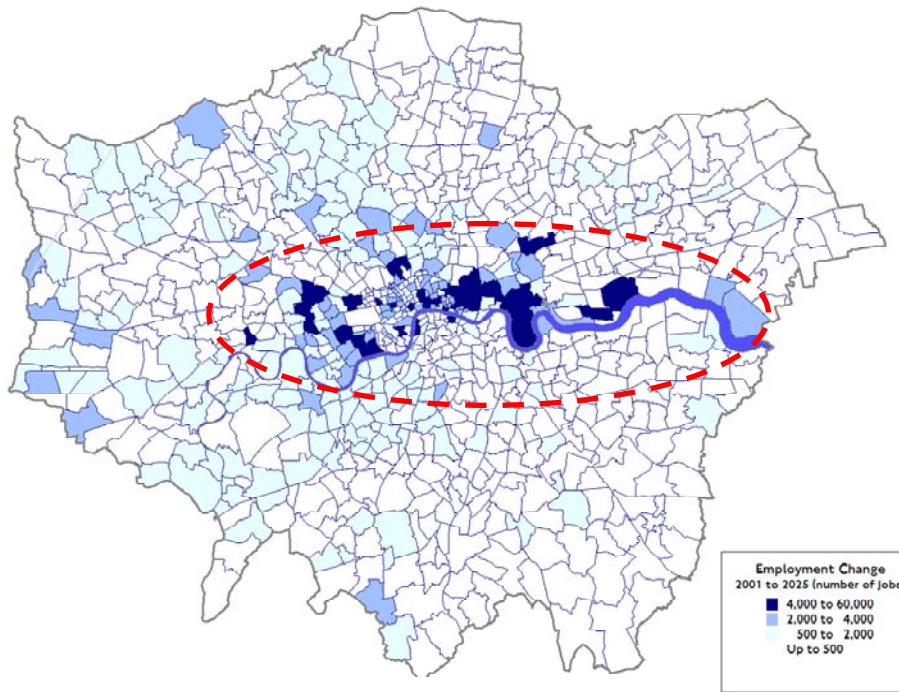




# There will be significant job and population growth - in different locations

**Projected Employment Growth**  
2001 - 2025

**Projected Population Growth**  
2001 - 2025



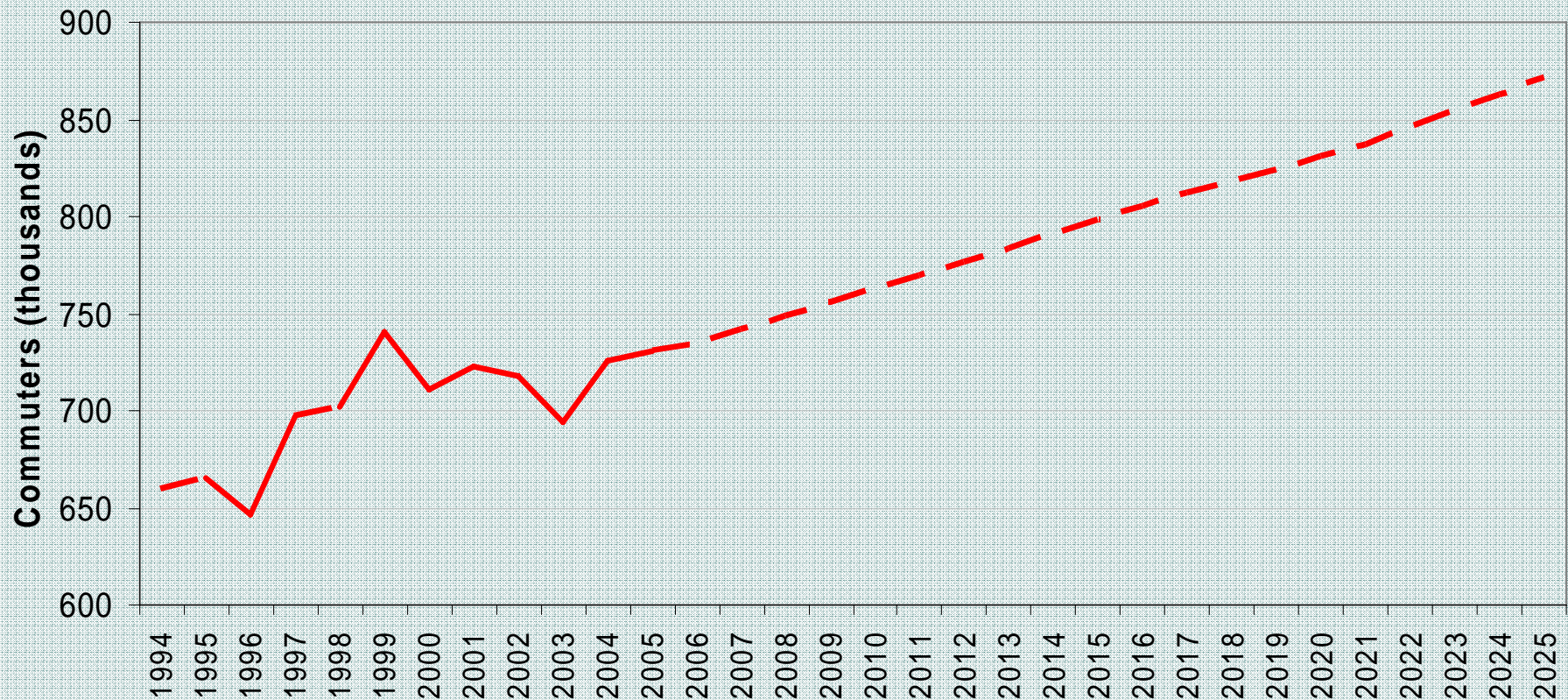
**Concentrated job growth in a central  
east-west corridor  
+ 970,000 jobs**

**Population growth across London  
+ 900,000 people**



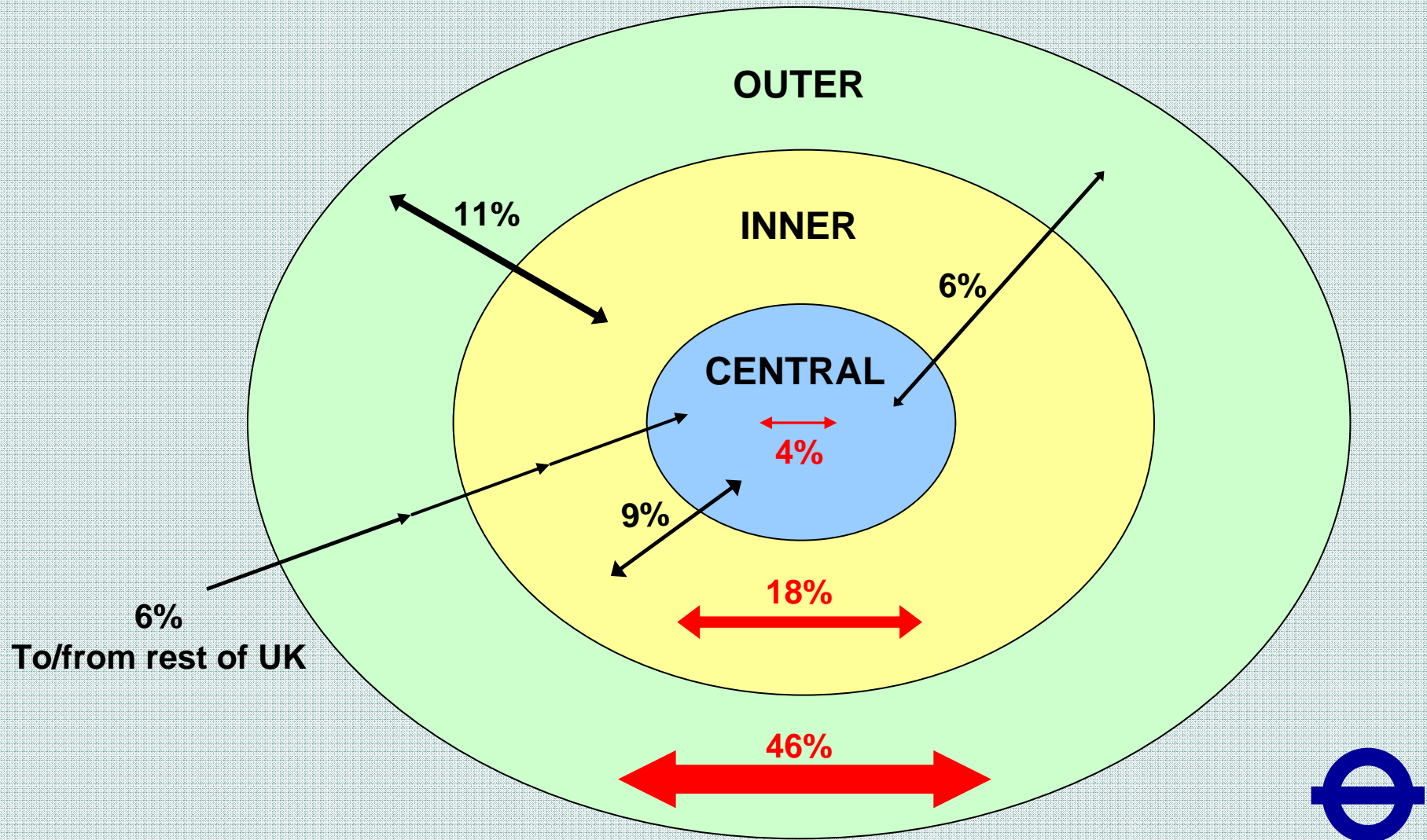
# Over 850,000 people will commute into greater London every day by 2025

Volume of people commuting into Greater London from outside



# Improving public transport is not just about the radial task into central London

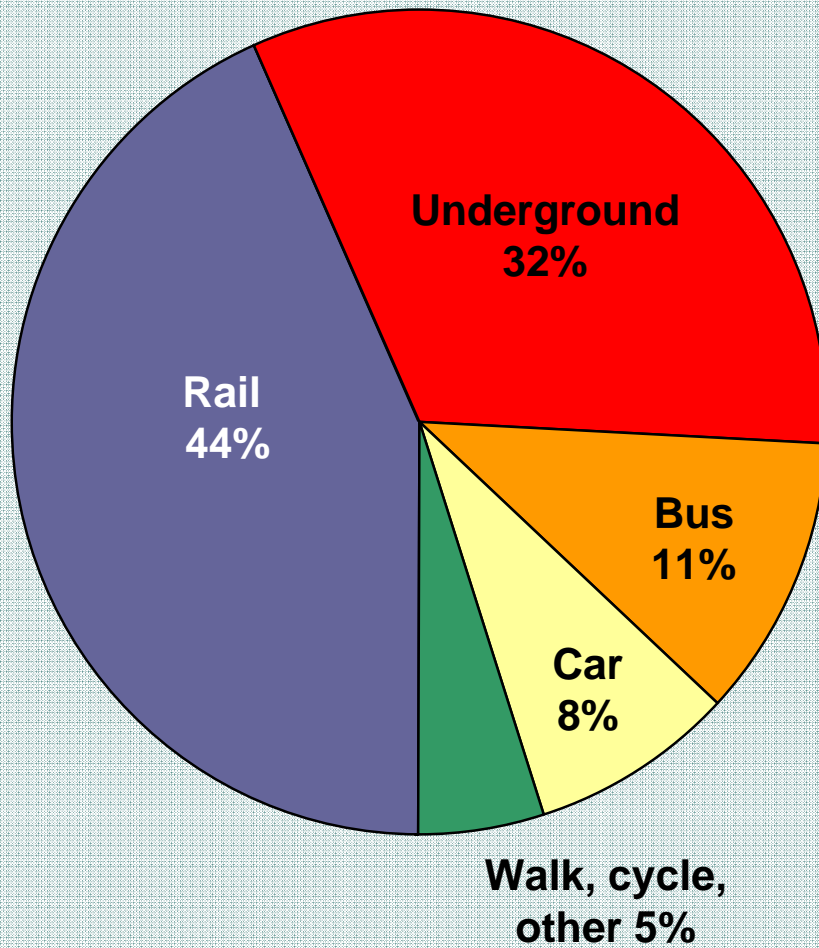
Daily travel patterns in London (all journeys 2005)



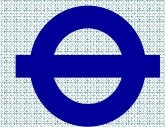
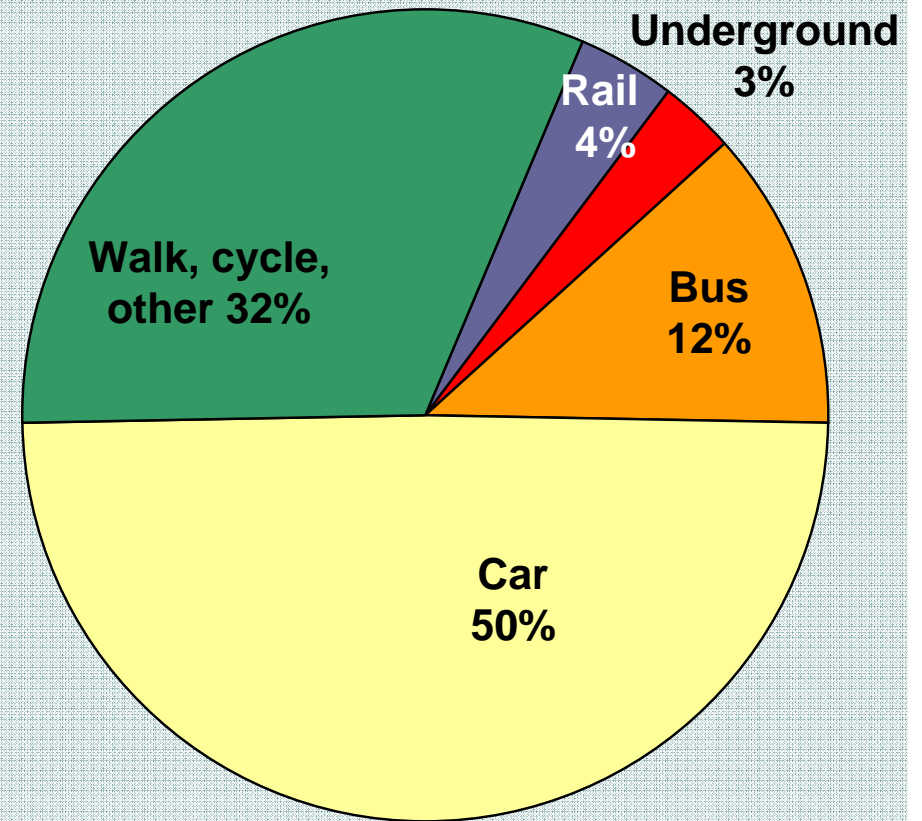


# Improving public transport, walking and cycling is a major challenge in outer London

Trips to Central London in the morning peak (2005)

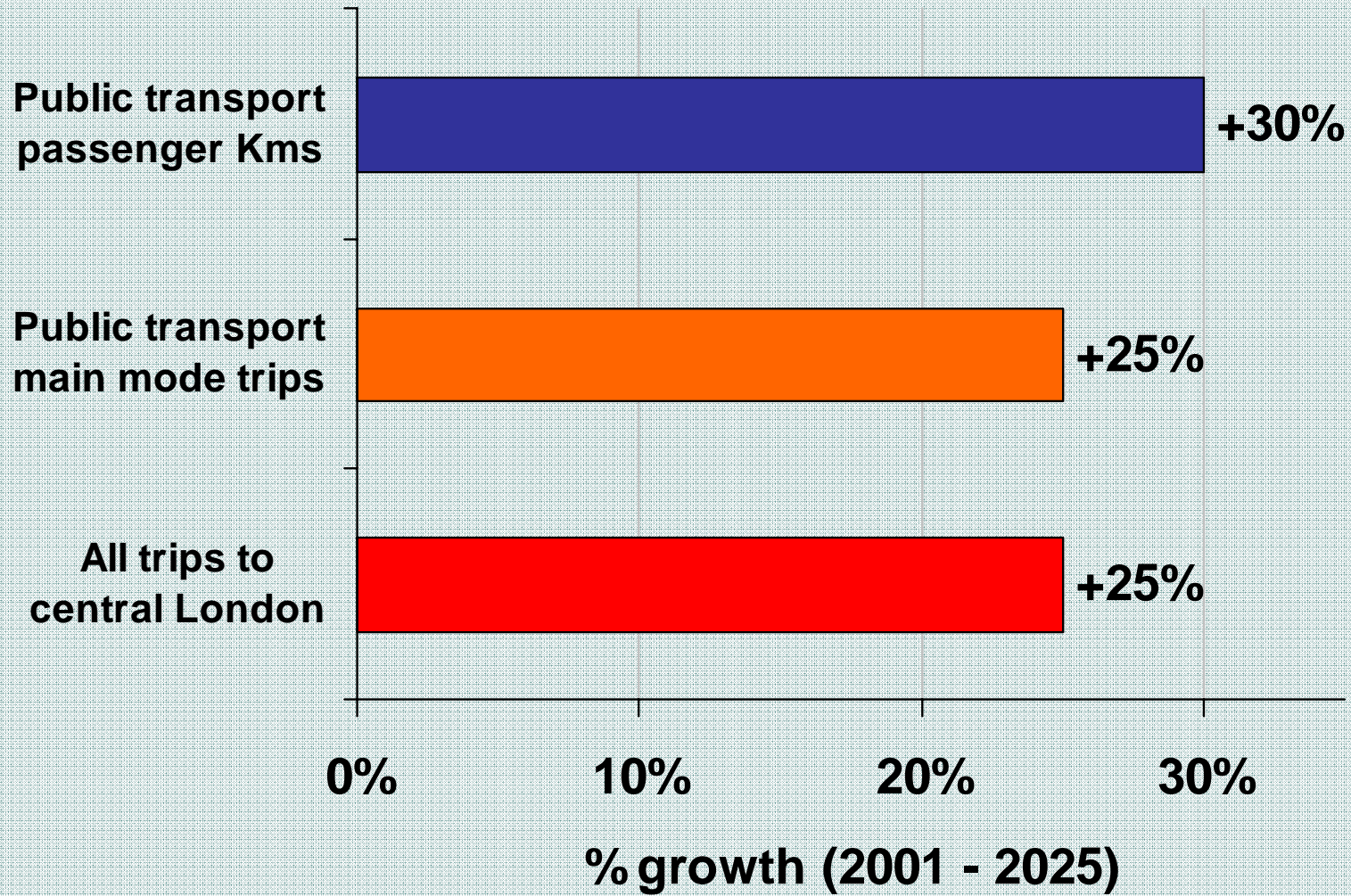


Trips to and within Outer London, all day (2005)



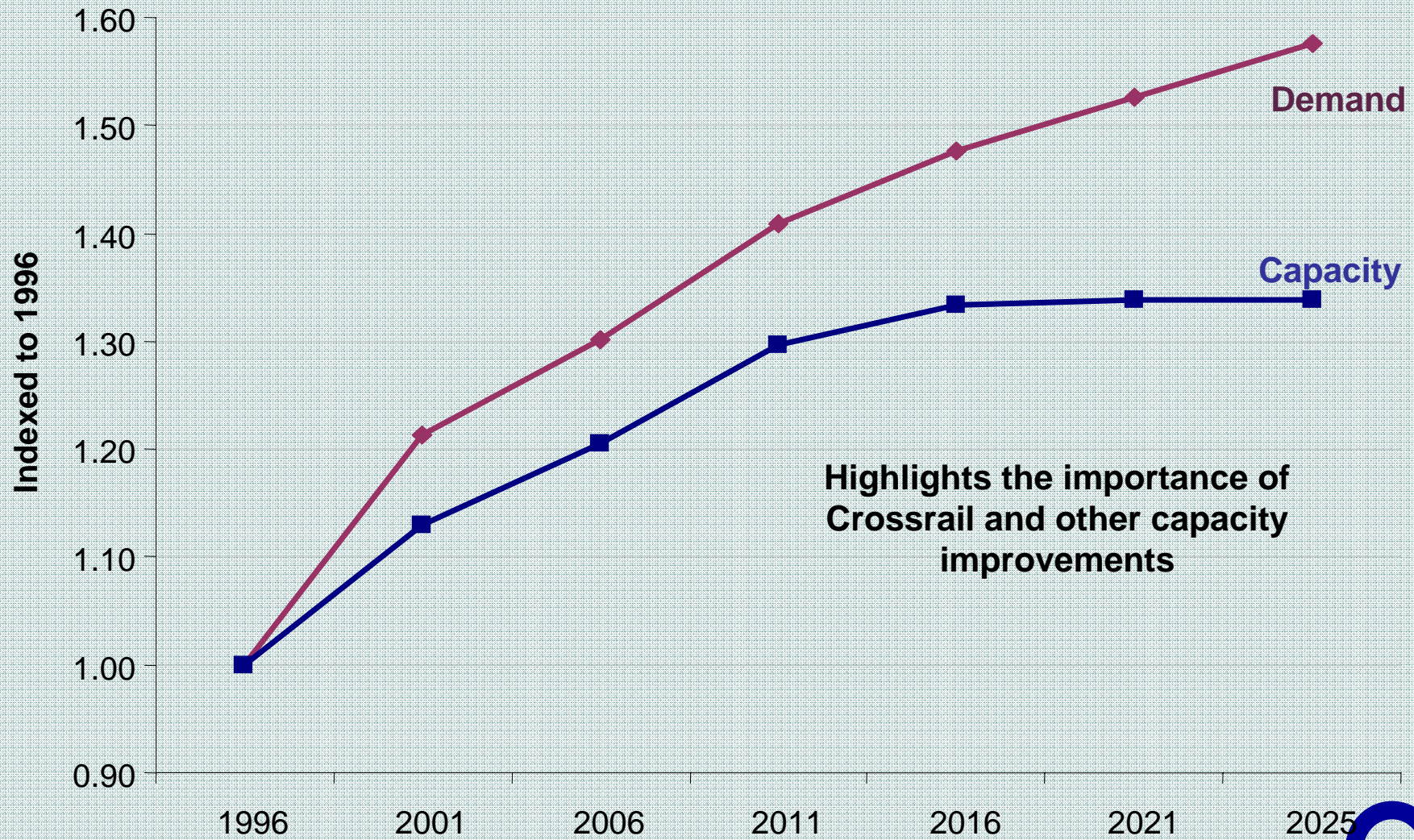
# Overall travel growth will be significant

Morning peak travel growth 2001 - 2025



# The gap between demand and capacity growth is widening

The gap between public transport demand and capacity

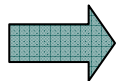




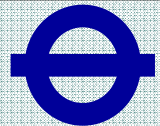
# T2025 transport objectives

- Improving social inclusion
- Tackling climate change and enhancing the environment
- Supporting sustainable economic development

– Improving public transport



– **Managing traffic congestion**



# Freight and servicing accounts for a significant proportion of traffic

- 82% of freight is moved by road, and freight vehicles make up at least 14% of all traffic
- Road freight and servicing traffic is forecast to grow by 15 %
- Freight in London is currently hampered by congestion, lack of loading and delivery space
- Key challenges are to improve freight efficiency and reliability, and reduce emissions and accidents



# Pressures on road capacity



Signals



Bus priority



Roadworks



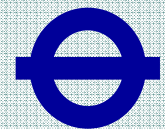
Pedestrians



Cyclists



Public realm

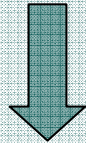




# Impacts of congestion

- **Cost to economy - £1.6 billion**
- **Affects freight efficiency and reliability**

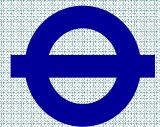
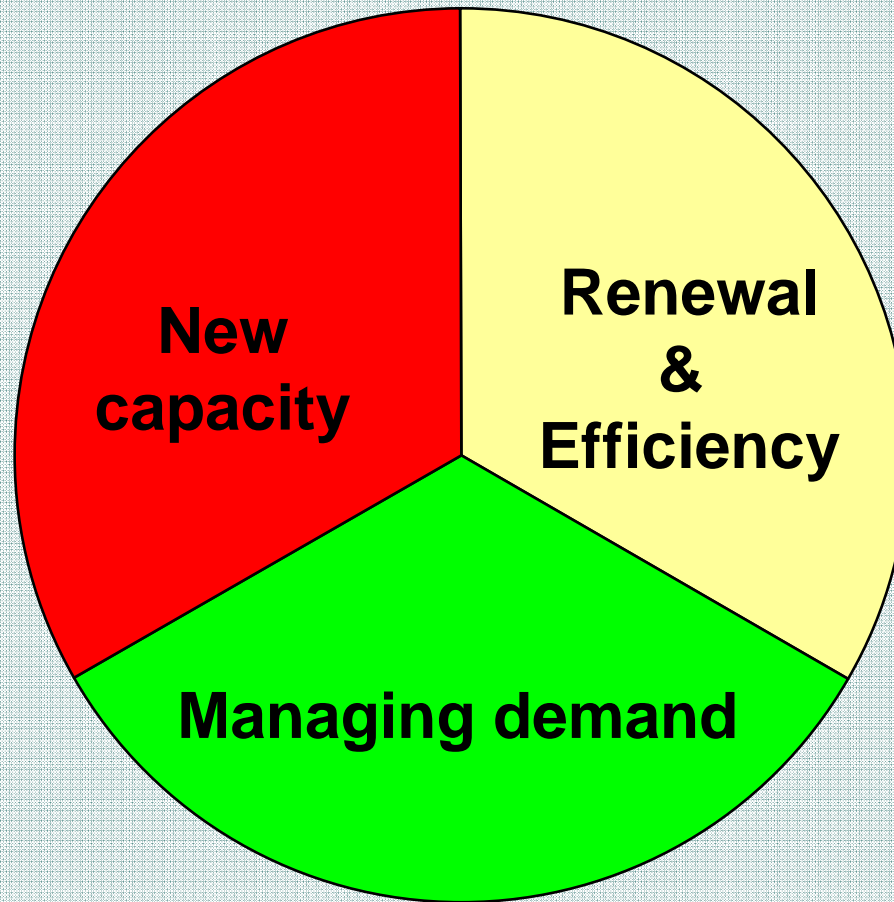
**and without the right policies and investment**



- **Car travel could grow further by 15%**
- **Delays could increase by 20-25%**



# T2025 is trying to find the best policy mix



# More capacity needed to support the radial commute

Policy priorities

- Need to cater to increased radial transport demand
- Crossrail essential for the growth of London

- Oyster provides enabling technology

Upgrading existing infrastructure

- PPP provides stable long term investment into the Tube
- Bus network well supported
- Investment beginning to go into London Rail

New infrastructure

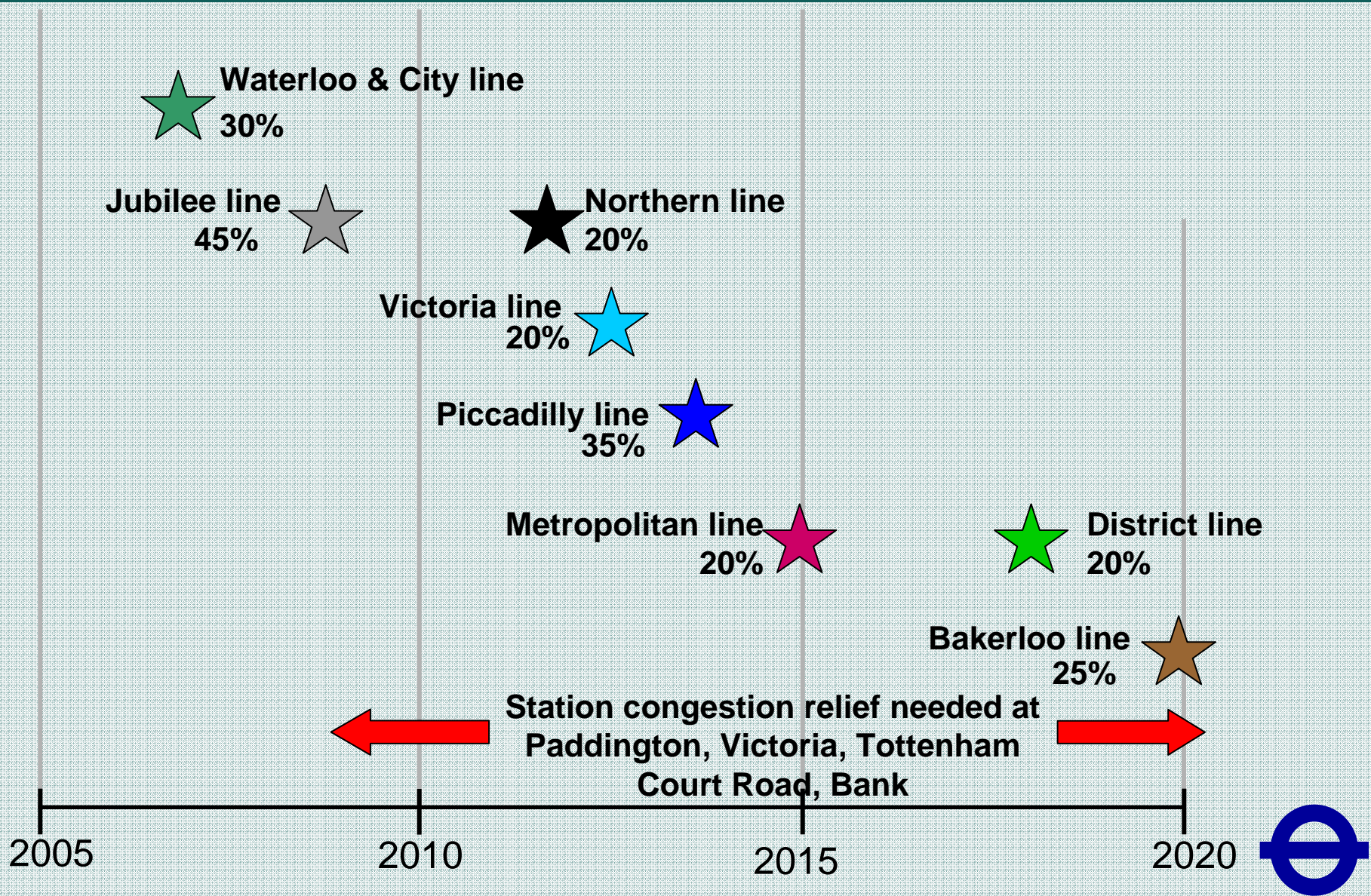
Demand management (fares, marketing, information, etc)

Time





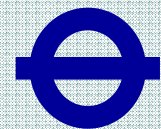
# Renewal on the Tube is critical to delivering capacity increases



# Operational efficiency

Operational efficiency is about improving operations and services

- Improved service quality
- Improved safety and security
- Improved accessibility & social inclusion
- Maximising capacity and reliability
- Traffic and corridor management
- Improved freight efficiency and reliability
- Sustainable energy sources
- Low carbon vehicles



# Demand Management

## Land use policy can reduce the need to travel by car by:

- Increasing the density and mix of land use; or
- Locating development where there is existing or planned public transport capacity



## Soft TDM Measures:

- Workplace/school/freight travel plans
- Car clubs and car sharing
- Tele-working
- Marketing and Promotion



## Road User Charging:

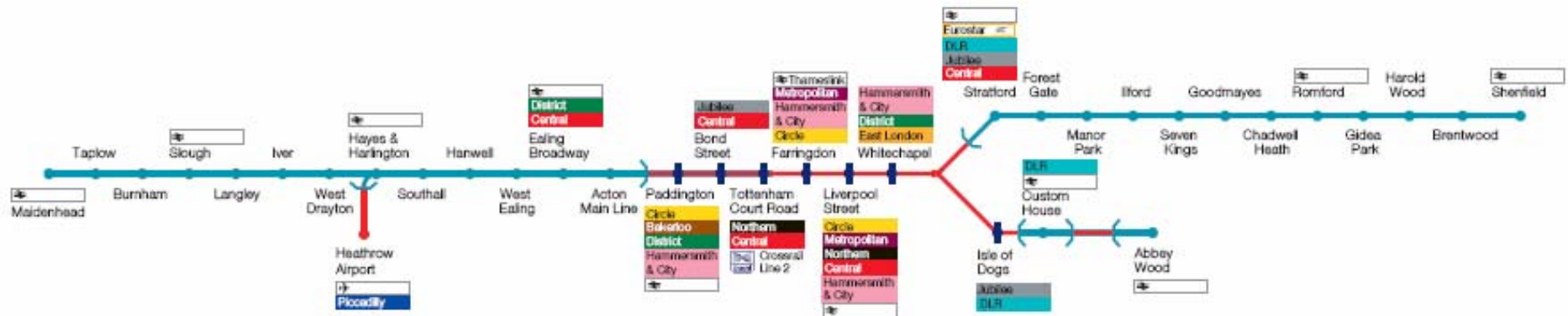
- RUC is the most effective way to allocate scarce road space. It would significantly reduce journey times and congestion
- The Government want to take forward road user charging as part of a national distance-based charging scheme in the next 10 years



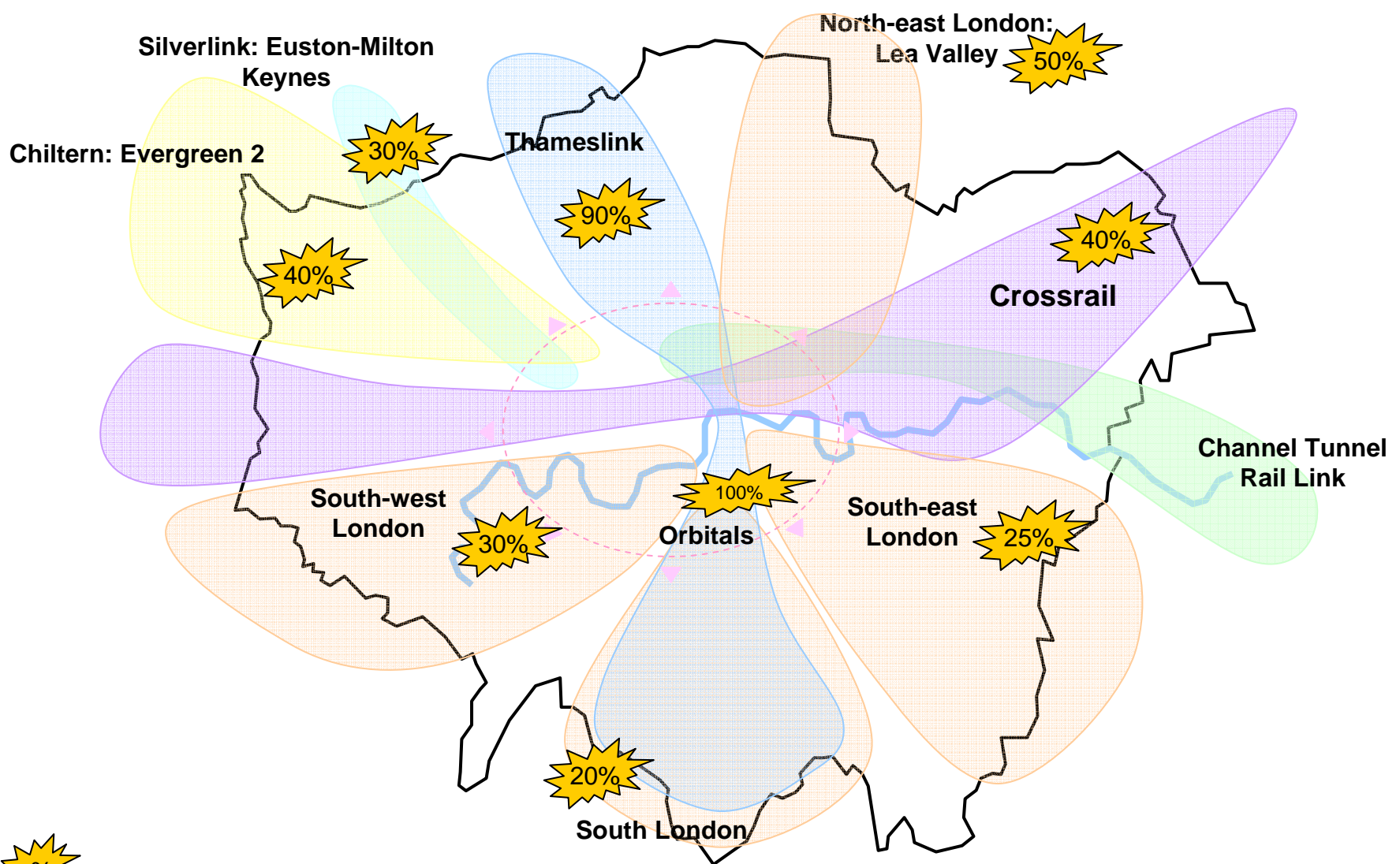



# Crossrail

- Crossrail is the transport spine needed to underpin London's economic growth
- It will deliver a step change in capacity to support job growth in Central London and the Isle of Dogs
- It will support the development of new areas such as the Thames Gateway
- Crossrail will also provide major congestion relief on the Tube



# Rail 2025



 x% = capacity increase 2001 - 2025

# DLR & Light transit

## DLR

- DLR is a critical link between the City and Isle of Dogs
- Extensions are planned to Woolwich and Stratford International
- An extension to Barking Reach is also being progressed

## Light Transit

- Light transit covers a range of options between tram and high level bus priority
- A number of tram proposals are being investigated in London (e.g. WLT, CRT TLE)
- Bus transit schemes are being delivered in east London
- Road space allocation and local support are critical factors for delivery of light transit schemes





# Bus

- Bus has been a success story in London since 1999, achieving a 40% increase in patronage
- The bus system will need to play a key role in supporting economic growth and improving social inclusion
- Bus capacity may need to increase by 20-30% by 2016 (prior to the delivery of new rail schemes)
- Effective bus priority measures will be a critical success factor



# Cycling & walking

To increase cycling use requires continuing programmes to:

- Upgrade and expand the cycle network
- Increase cycle safety, access and priority
- Improve facilities at origin, on route and destination
- Improve education and training
- Promote cycling as part of a healthy lifestyle

To further increase walking requires continuing programmes to remove physical or perceived barriers to walking that:

- Improve the safety and personal security aspects of journeys
- Improve accessibility and mitigate the effects of traffic
- Provide high quality public space
- Secure dense, high quality, mixed use developments through land use planning



## Next steps

- Assess feedback from stakeholders
- More detailed analysis of options and policy packages
- Detailed modelling of options and scenarios
- Financial and economic appraisal of options and scenarios
- Final Vision document produced in November 2006
- Support TfL engagement with DfT on SR07

