

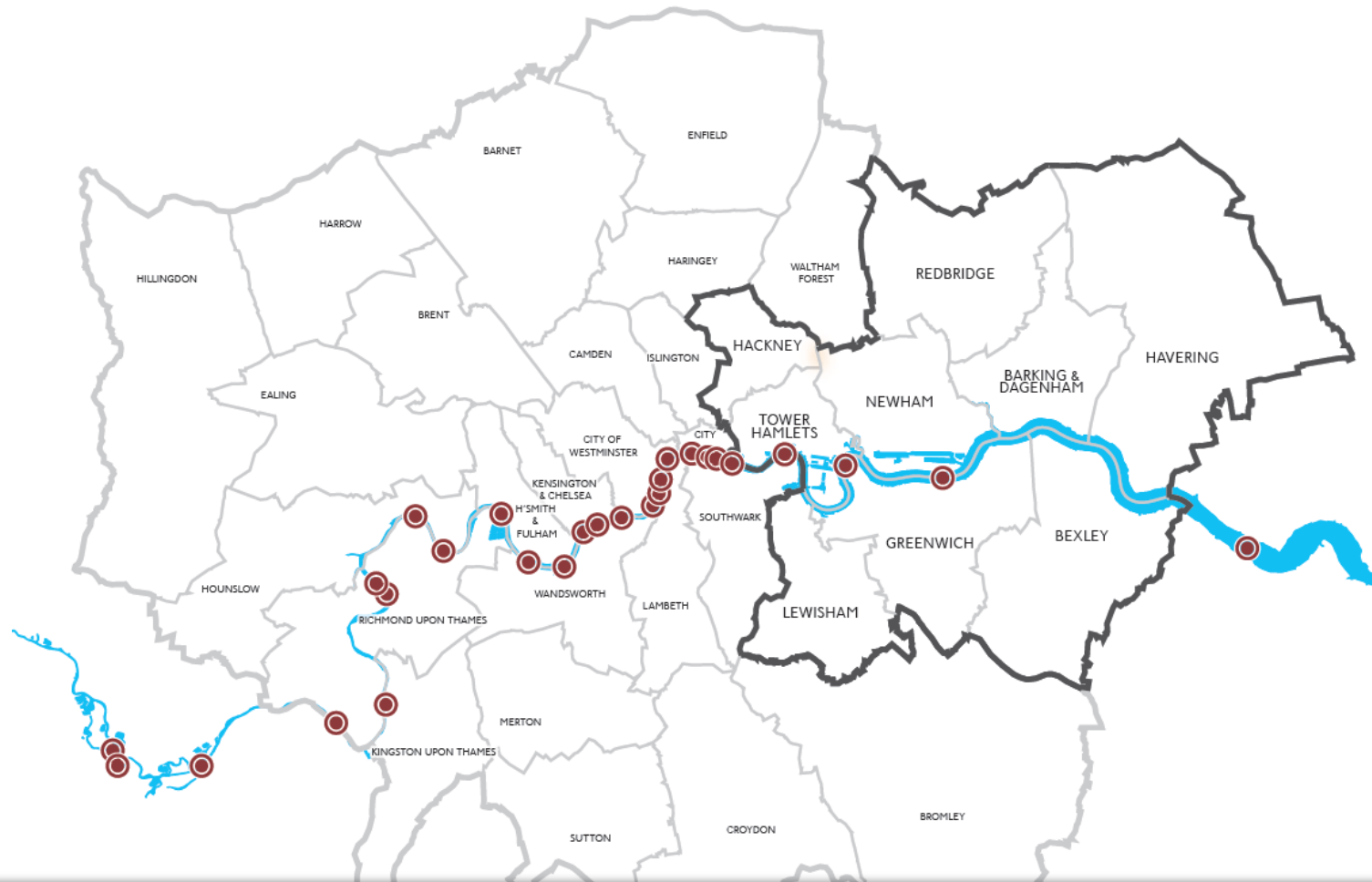


# Silvertown Tunnel

Business Breakfasts, September 2015



# East London has fewer road crossings than west London



Ave. distance  
between  
crossings

2km

West

1km

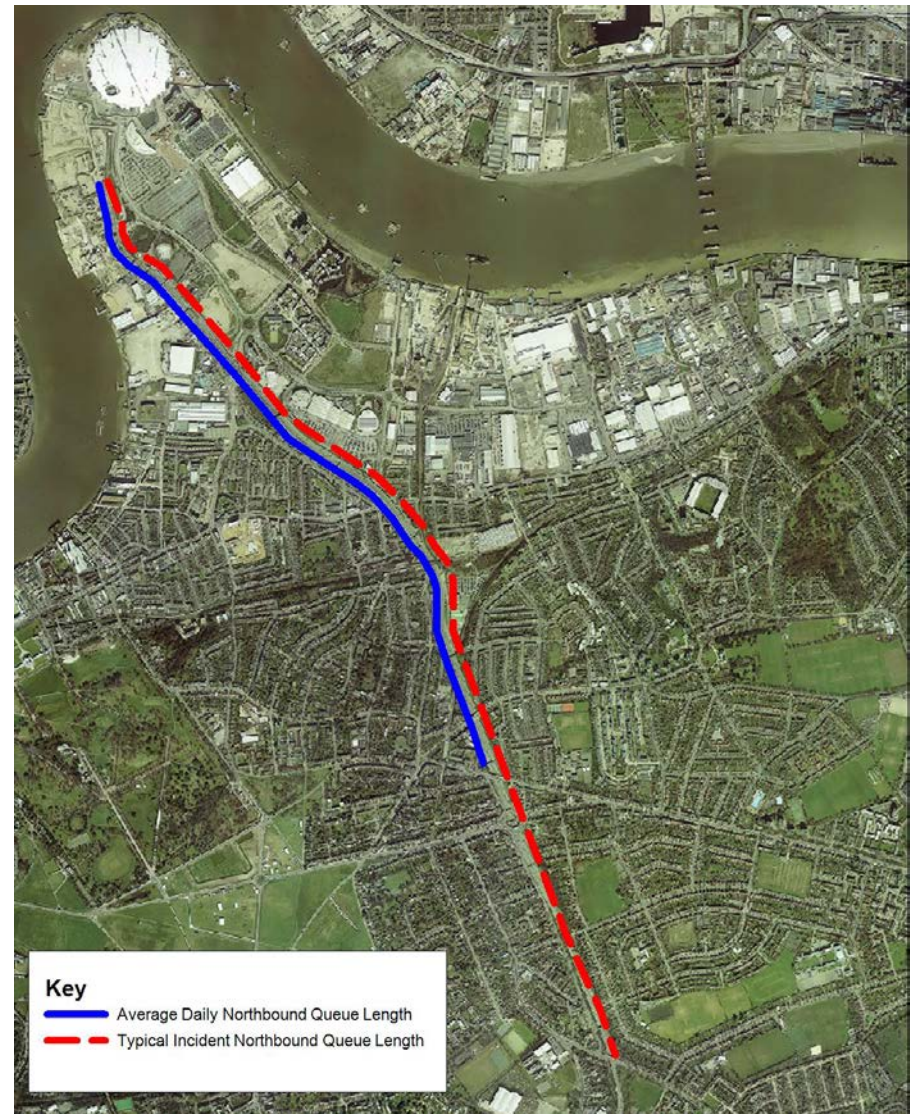
Central

8km

East

# Key facts about the situation at the Blackwall Tunnel

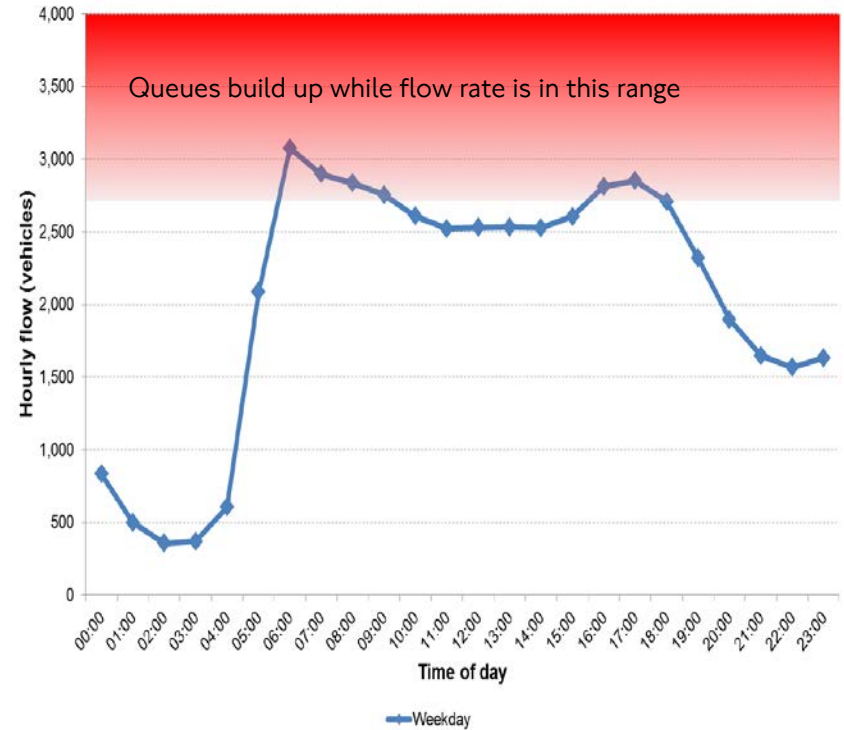
- On a normal day, there can be a **two mile tail-back** to access the tunnel
- Journeys are regularly delayed by around **25 minutes**
- There are almost **1,000 incidents a year**
- A **six minute** closure can lead to a **three mile tail-back**
- Around **1,000,000 hours** are **wasted each year**, costing around **£10m in lost time**



# Routine congestion, frequent closures

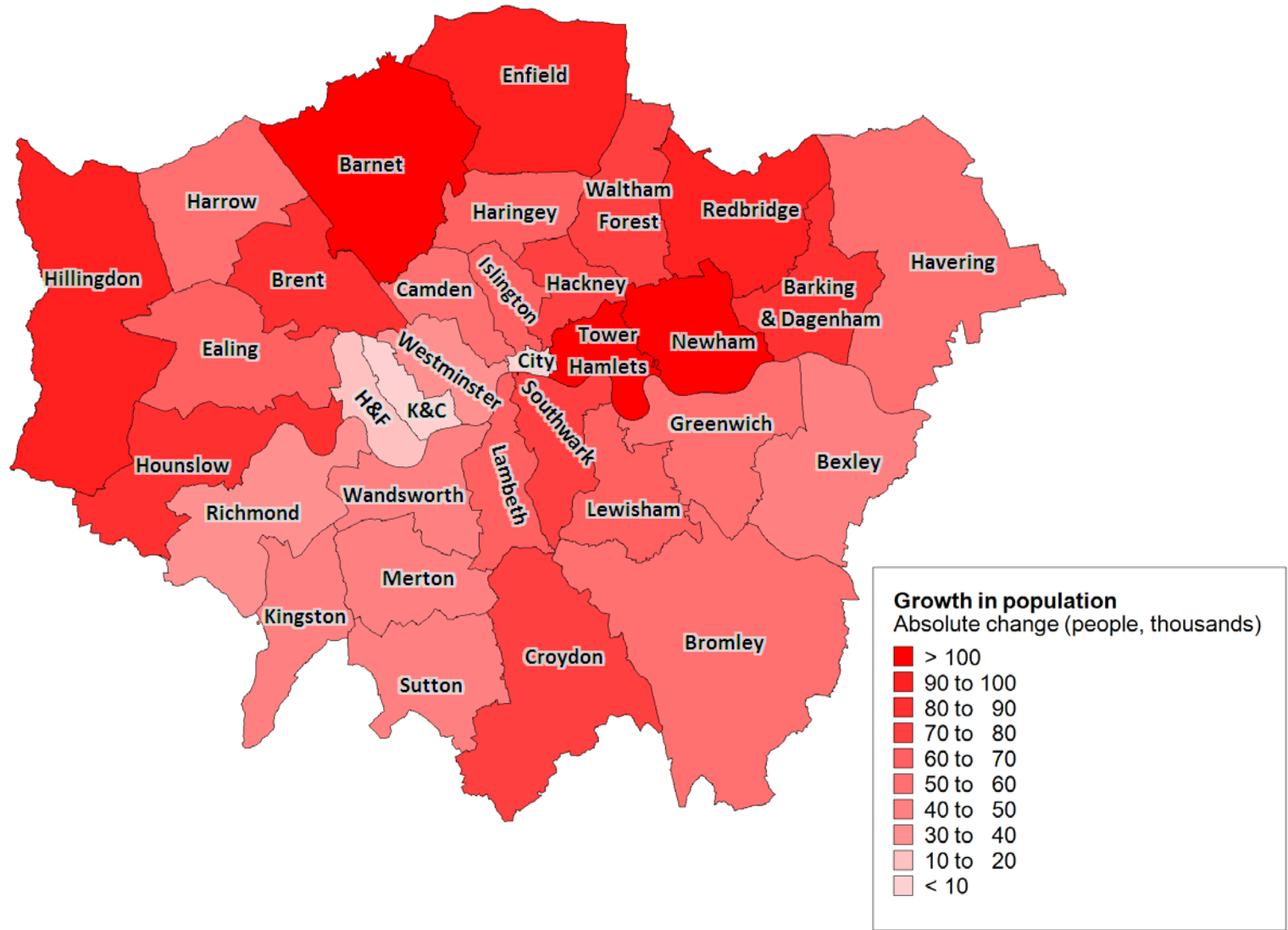
- Daily **congestion** over extended peak periods – extends regularly to Bow/Sun in the Sands
- Impacts across the wider network, including the bus network. Congestion means vehicles travel less efficiently, worsening air quality
- The **resilience** of the tunnel is poor – only 26 days in 2014 when there wasn't an closure at Blackwall (10 days in 2013)
- Future **growth** will lead to greater pressure on the road network

Blackwall Tunnel northbound – average hourly weekday flows



Nature of incident requiring closure	No of incidents in 2014
Overheight vehicle attempting to access the northbound tunnel	412
Vehicle breakdown on the approach to or within the tunnel	376
Other – eg. Debris within the tunnel	169
Road traffic accident	37

# Forecast changes in London's population to 2031



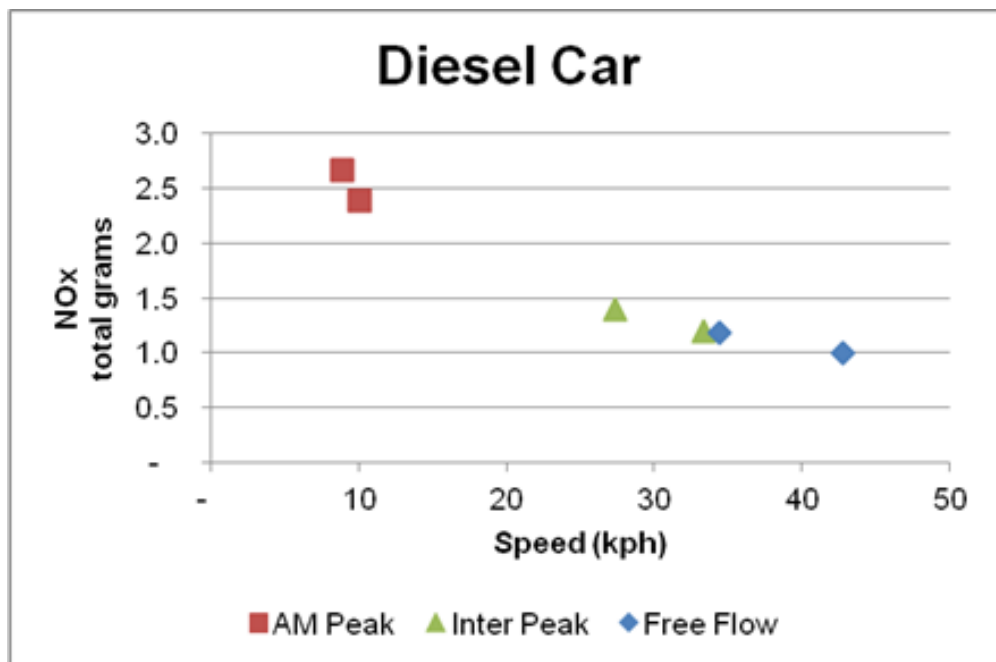
## What have businesses told us?

A survey with 500 businesses in 2015 found:

- Nearly **three quarters** of respondents said that congestion is a constraint or disruption on their business
- Nearly **half** said their customer base was smaller than it could be because of poor cross river connectivity
- **Just under half** of businesses said unpredictable journey times when crossing the river have caused a loss of revenue to their business
- **One third** of all businesses said staff were late at least once a week because of the delays, with this costing each business on average £26,000 a year
- **Almost a fifth** said that they would employ more staff as a result of the Silvertown Tunnel scheme

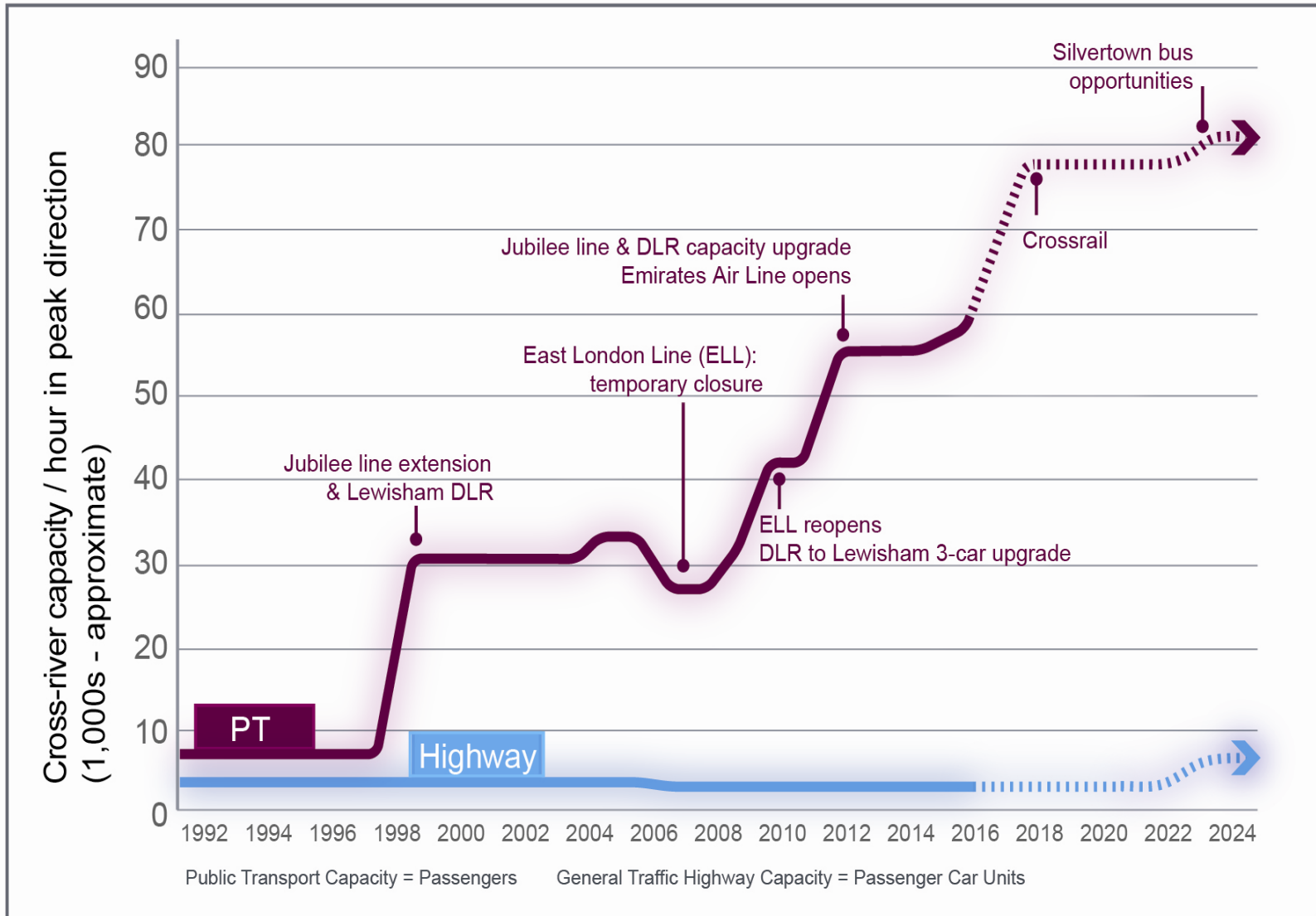
## Air Quality: Vehicle Speeds and Emissions

- Data is available to show emissions from a modern car driven through the northbound bore of the Blackwall Tunnel at various times of day.
- Travelling at 4am, 7am and 1:30pm the results are as follows:



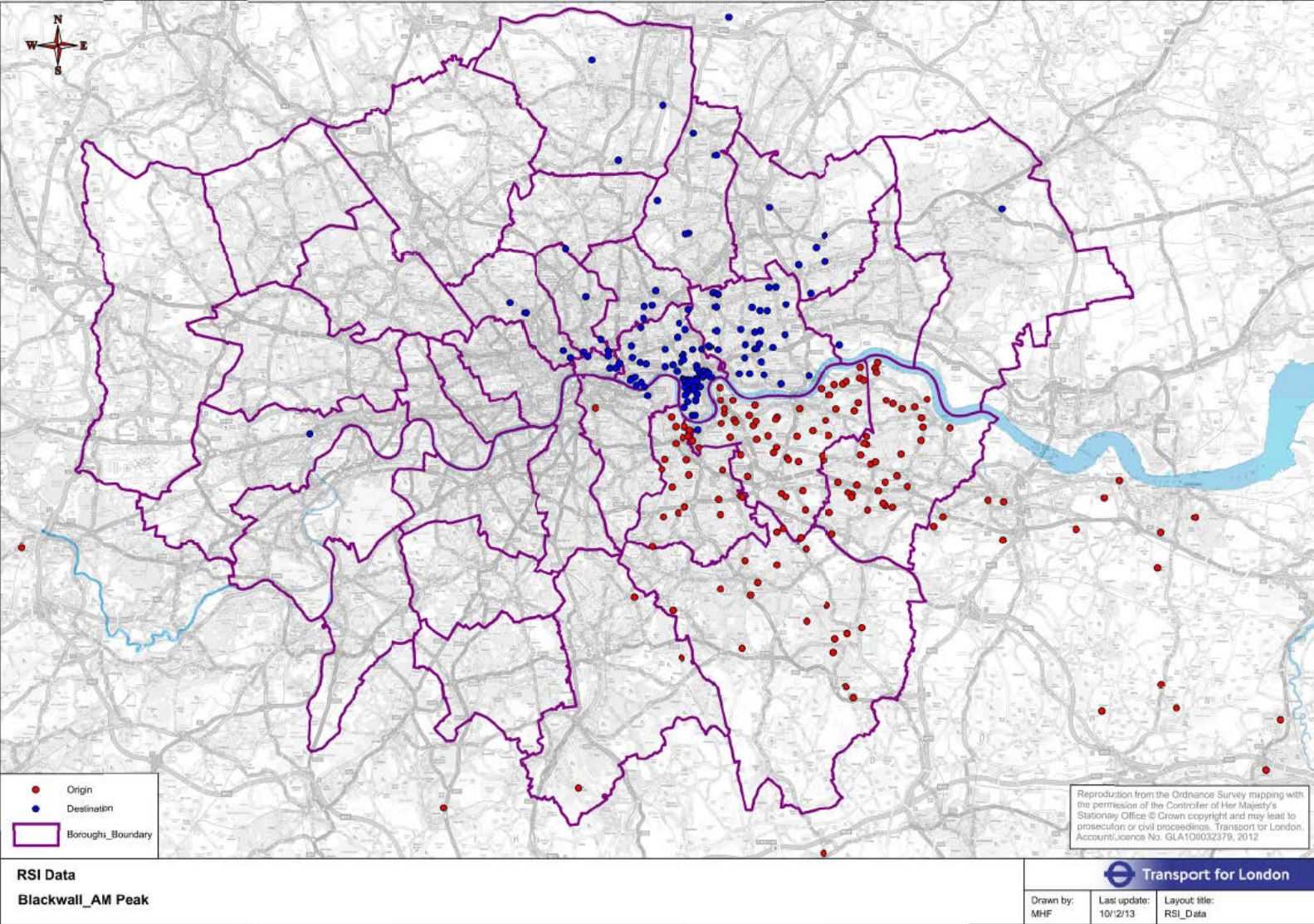
- During the peak where we see the vehicle travelling at the lowest speed, emissions of NOx were highest.
- During the night where the vehicle was travelling at the higher speed the emission of NOx was the lowest.

# Transformation of cross-river public transport





# Origins and destinations of trips crossing the Blackwall Tunnel – am peak



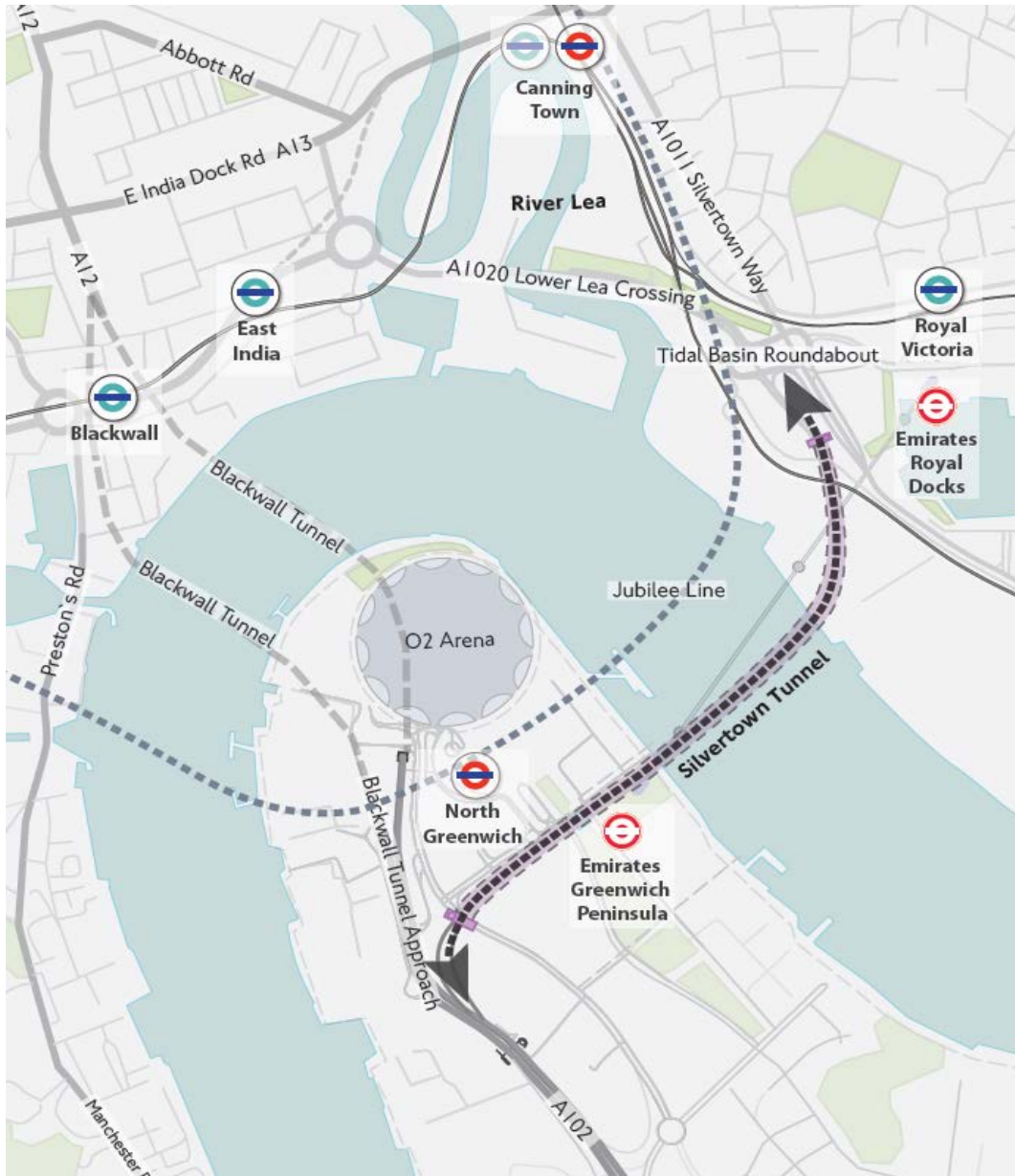
## TfL working on two crossing projects:

- a) Silvertown tunnel (blue)
- b) Crossings east of Silvertown (red)

User charging to fund construction and manage traffic demand



# Silvertown Tunnel – overview



Twin bored tunnel linking A102 Blackwall Tunnel Approach on the Greenwich Peninsula to the Tidal Basin roundabout in the Royal Docks area

- Able to accommodate vehicles up to 5m in height
- Indicative construction programme of 4 years
- User charging at the Blackwall and Silvertown Tunnels

# Rationale for charging

## Traffic management

- Additional capacity will relieve a current bottleneck in the system
- Improved journey times will make crossing more attractive and all other things being equal, demand will increase.
- Approach roads (both north and southbound) would quickly reach capacity
- As congestion on the surrounding network increases benefits of the scheme would reduce
- Charging will help keep traffic levels to acceptable level so scheme benefits are maintained

## Financial

- User charging provides a relatively steady, long-term, growing (inflation linked + traffic growth) revenue stream
- Help to pay for the scheme

## Charging regime must also:

- Be publically/politically acceptable, not cause wider detrimental economic impacts, support environmental goals, be efficient and cost effective to operate, be easy to understand.
- Fair, transparent, predictable, free from fraud, promote wider goals of the Transport Strategy

## Charging principles

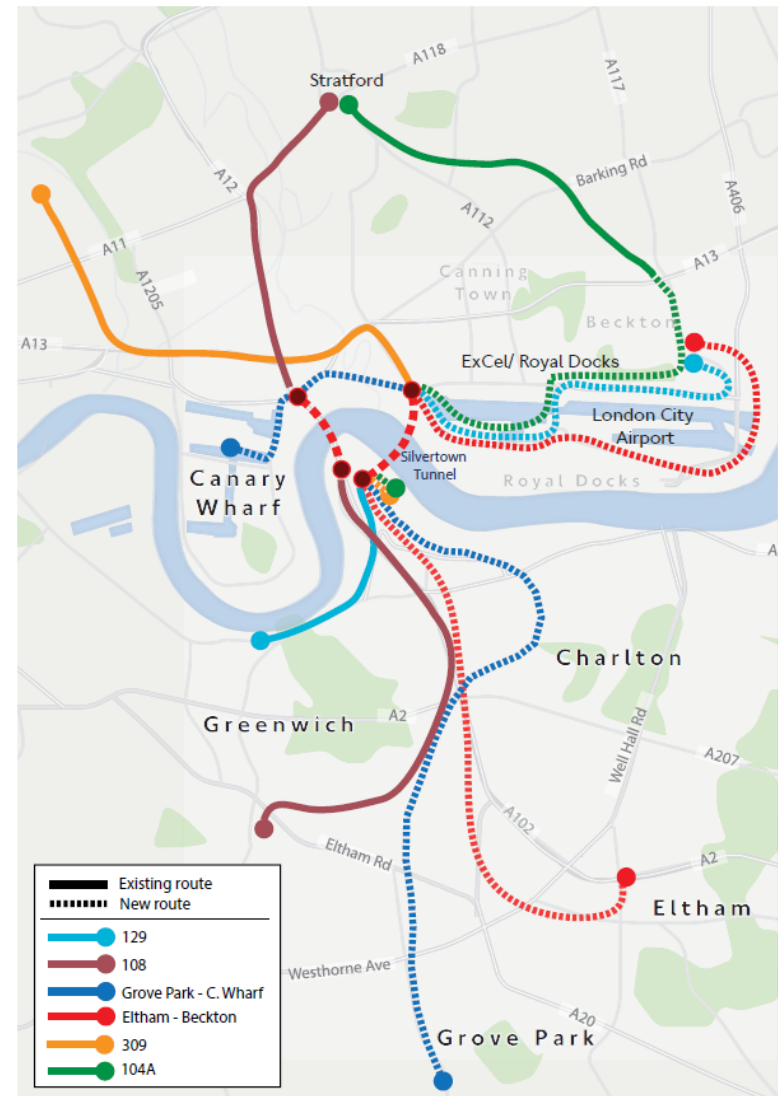
- Charges will be higher in the peak periods in the peak direction i.e.
  - AM peak northbound
  - PM peak southbound
- Different rates for different categories of users, with charges broadly similar to the Dartford crossing (below)

<b>Dartford Crossing - 2014 prices</b>	<b>Day charges (0600-2200)</b>	<b>Night charges (2200-0600)</b>
Motorcycles	Free	Free
Cars	£2.50	Free
Two-axle goods vehicles	£3.00	Free
Multi-axle goods vehicles	£6.00	Free

- Users will be encouraged to sign-up for accounts to benefit from lower rates

# An opportunity to radically improve the east London bus network

- Illustration of what a network using the Silvertown & Blackwall could look like
- To test a set of routes providing 37.5 bph per direction
- Detailed routes are for assessment purposes only

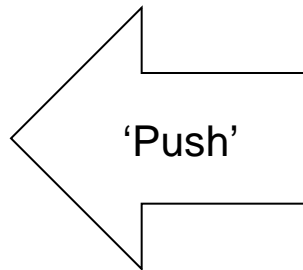


## The benefits of the Silvertown Tunnel scheme

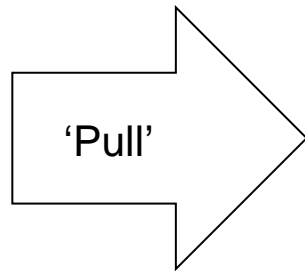
<b>Without the scheme</b>	<b>With the scheme</b>
A peak-time journey through the tunnel could take up to 30 minutes by 2031	Traffic becomes free-flowing – delays significantly reduced
Disruptive incidents go unchecked and potentially increase	Incidents virtually eliminated
Opportunity to improve cross-river bus links lost	There is an extensive network of cross-river bus services
Environmental impacts of congestion grow unchecked	Emissions reduced overall as congestion is reduced
Opportunity to boost London and UK economy lost	Access to markets, suppliers and jobs greatly improved

## Silvertown traffic effects

A combination of two factors:



Traffic seeks other crossings to avoid the charge

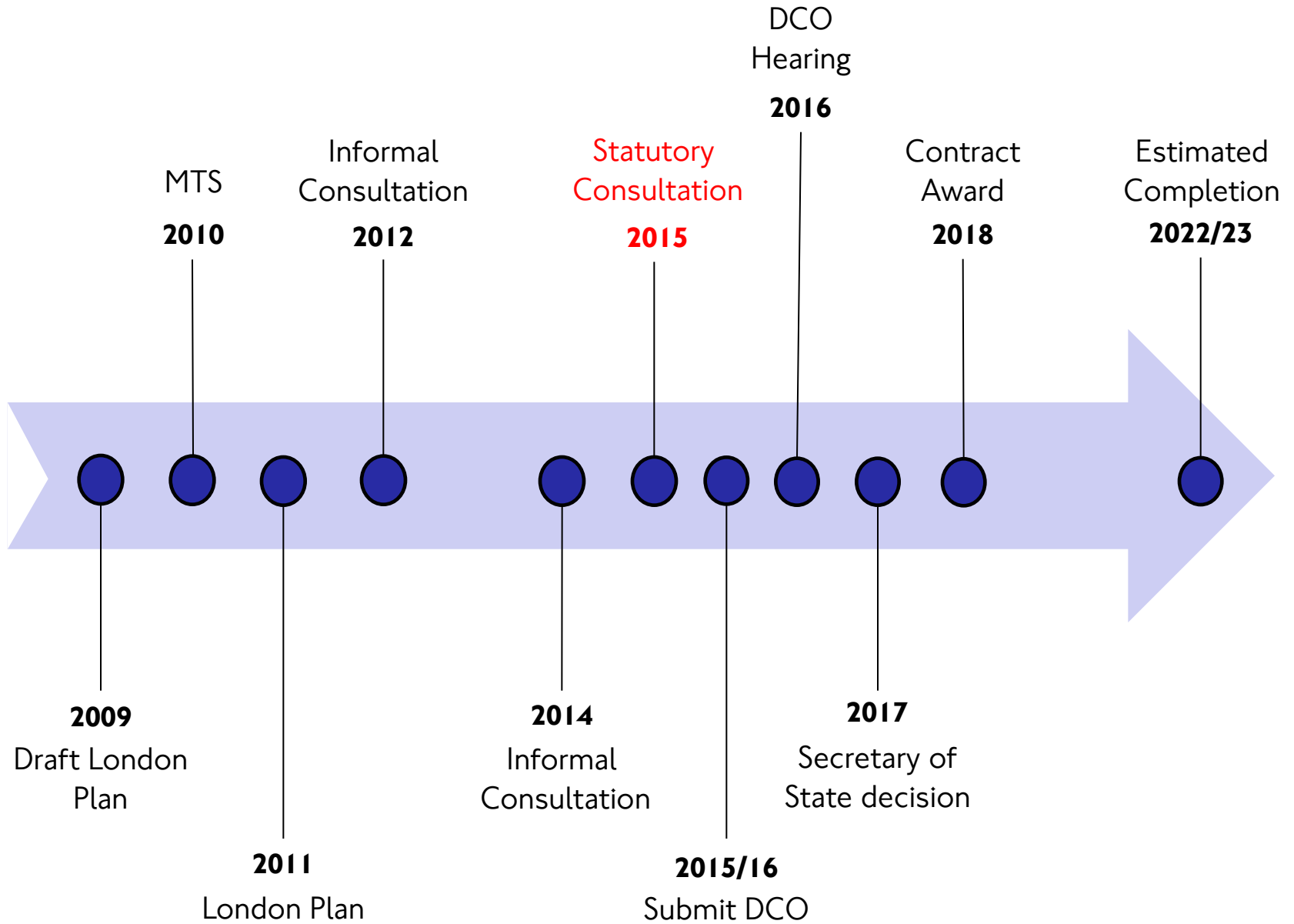


Blackwall/Silvertown becomes more reliable, so a more attractive crossing for existing users

- Delays fall to almost nothing
- Incidents at the Blackwall Tunnel are halved
- Impacts of incidents addressed
- Commitment to ongoing monitoring & mitigation
- Set/vary the user charge to maximise benefits



# Timescales



**5 October – 29 November**

[rivercrossings@tfl.gov.uk](mailto:rivercrossings@tfl.gov.uk)

[www.tfl.gov.uk/silvertown-tunnel](http://www.tfl.gov.uk/silvertown-tunnel)



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