

Surface Transport Panel

Date: 22 October 2015

Item: Silvertown Tunnel Update

This paper will be considered in public

1 Summary

1.1 The purpose of the attached presentation is to update the Panel on the Silvertown Tunnel project, which is currently out for public consultation.

2 Recommendation

2.1 The Panel is asked to note the presentation.

3 Background

3.1 The presentation will be provided at the meeting and will cover:

- (a) overview of existing road crossings across the Thames;
- (b) current issues at Blackwall Tunnel;
- (c) overview of Silvertown Tunnel scheme;
- (d) designation of the project as a Nationally Significant Infrastructure Scheme;
- (e) update on the work undertaken in preparation for the Development Consent Order application;
- (f) overview of the consultation material including the reference design, indicative road user charges and updated cost estimates; and
- (g) future work programme.

List of appendices to this briefing paper

Appendix 1: Presentation

List of Background Papers:

None

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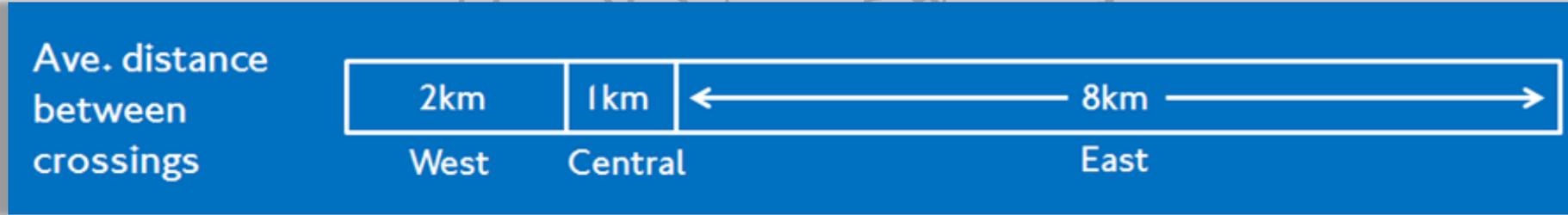
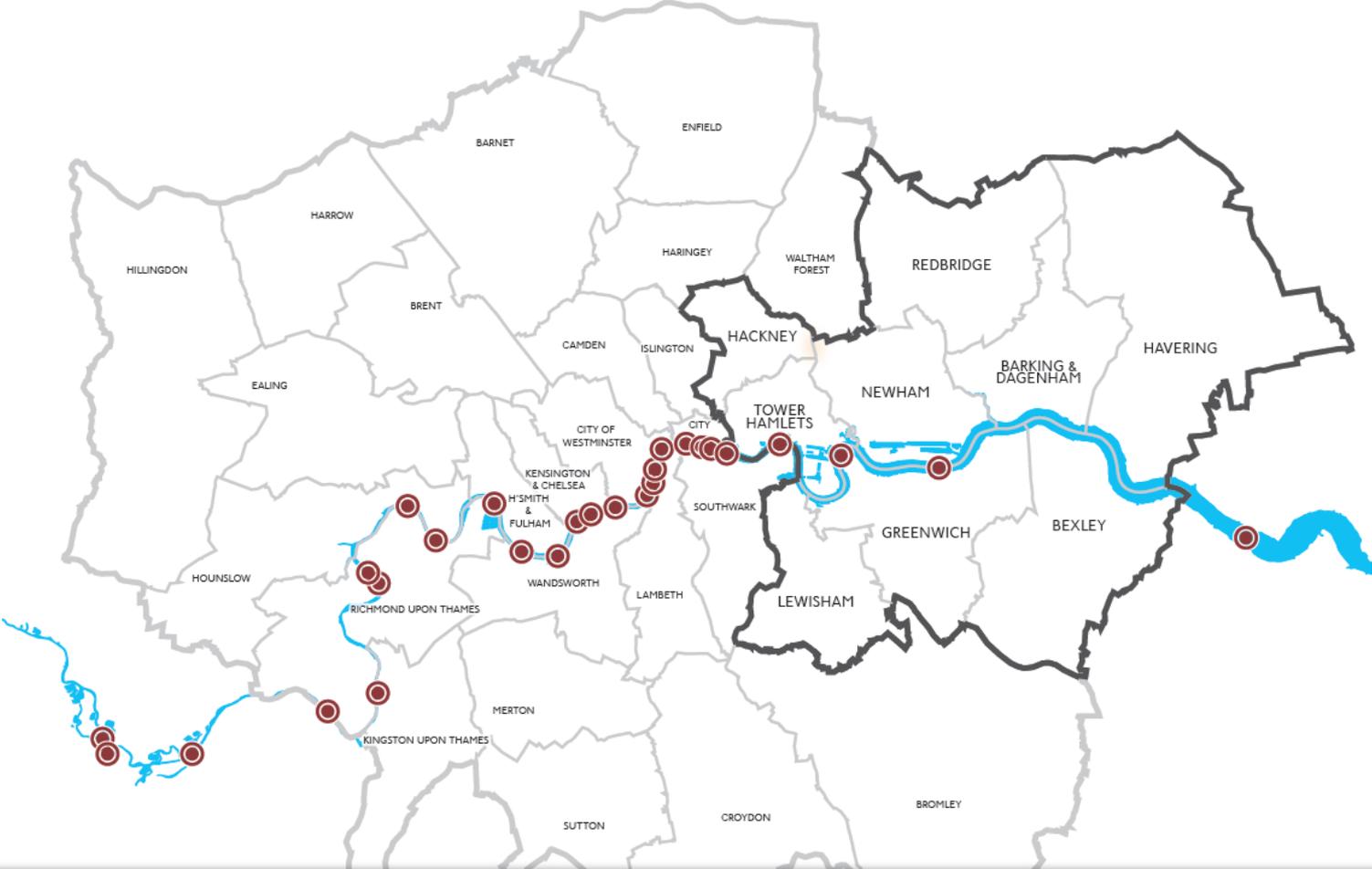
SILVERTOWN TUNNEL

Appendix 1

**Presentation to Surface
Transport Panel**

22 October 2015

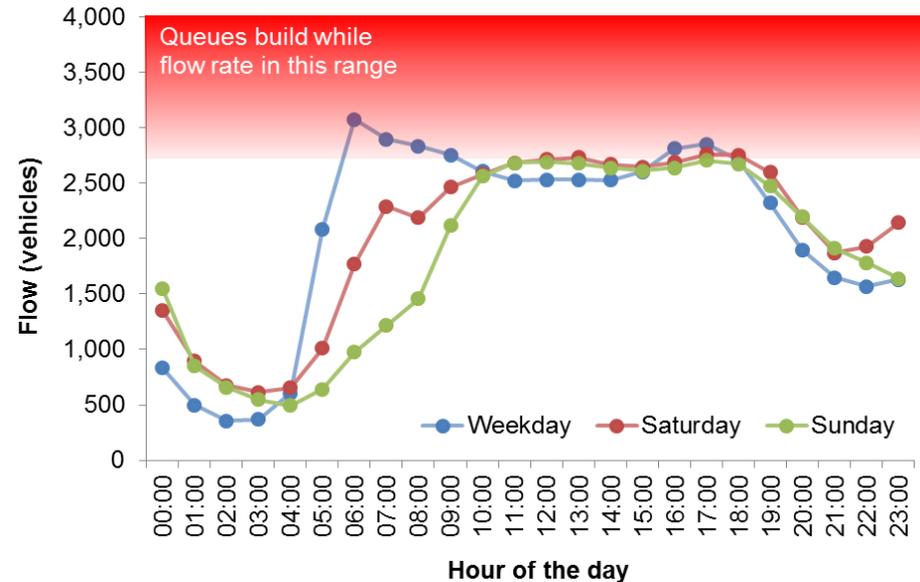
East London has fewer road crossings than west London



Current Issues at Blackwall Tunnel

- 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 any closure at Blackwall (10 days in 2013)
- Future **growth** will lead to greater pressure on the road network

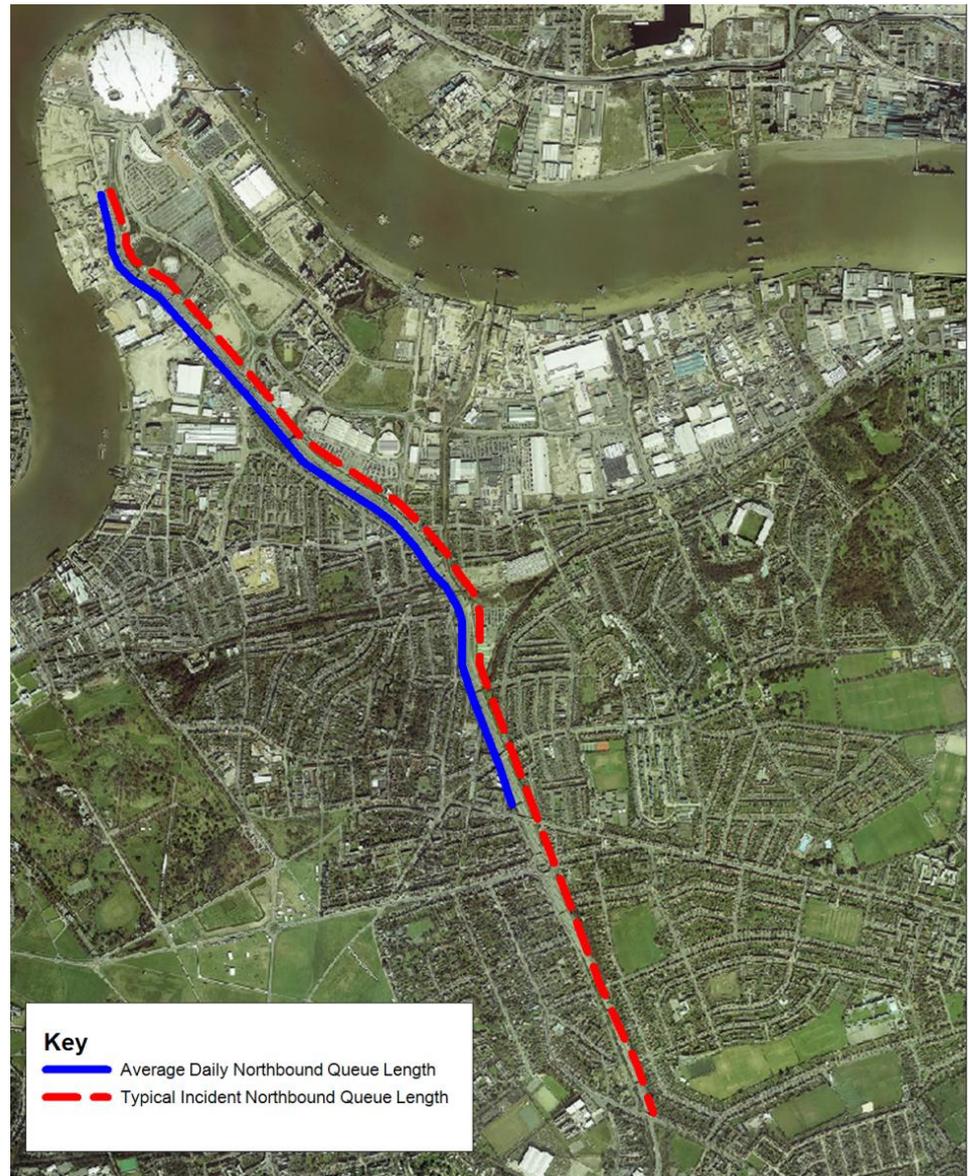
Blackwall Tunnel northbound – average hourly weekday flows



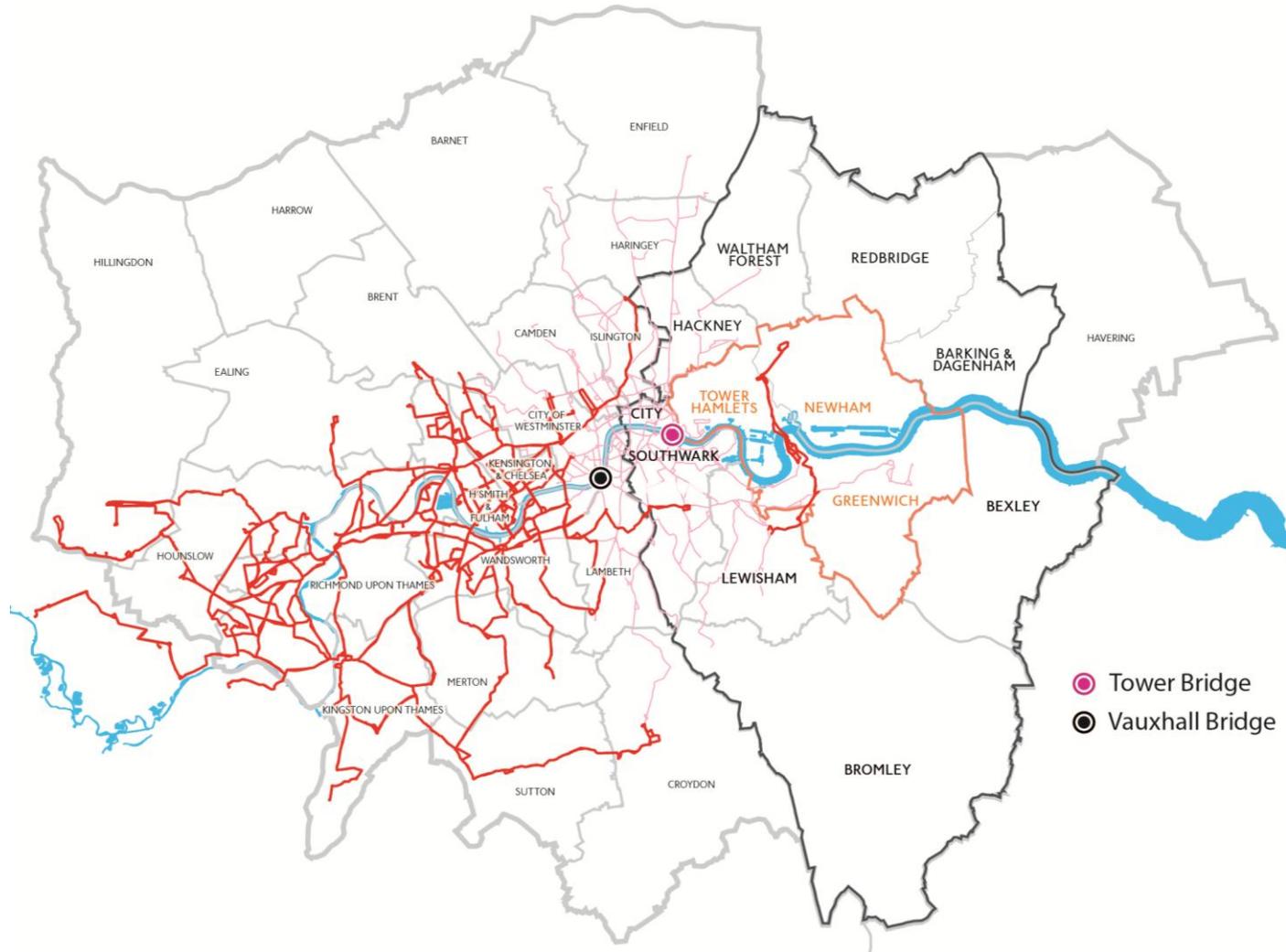
Nature of incident requiring closure	No of incidents in 2014
Overheight vehicle attempting to access the northbound tunnel	412
Vehicle breakdown on the approach to or within the tunnel	376
Other – eg. Debris within the tunnel	169
Road traffic accident	37

Typical Queues at Blackwall

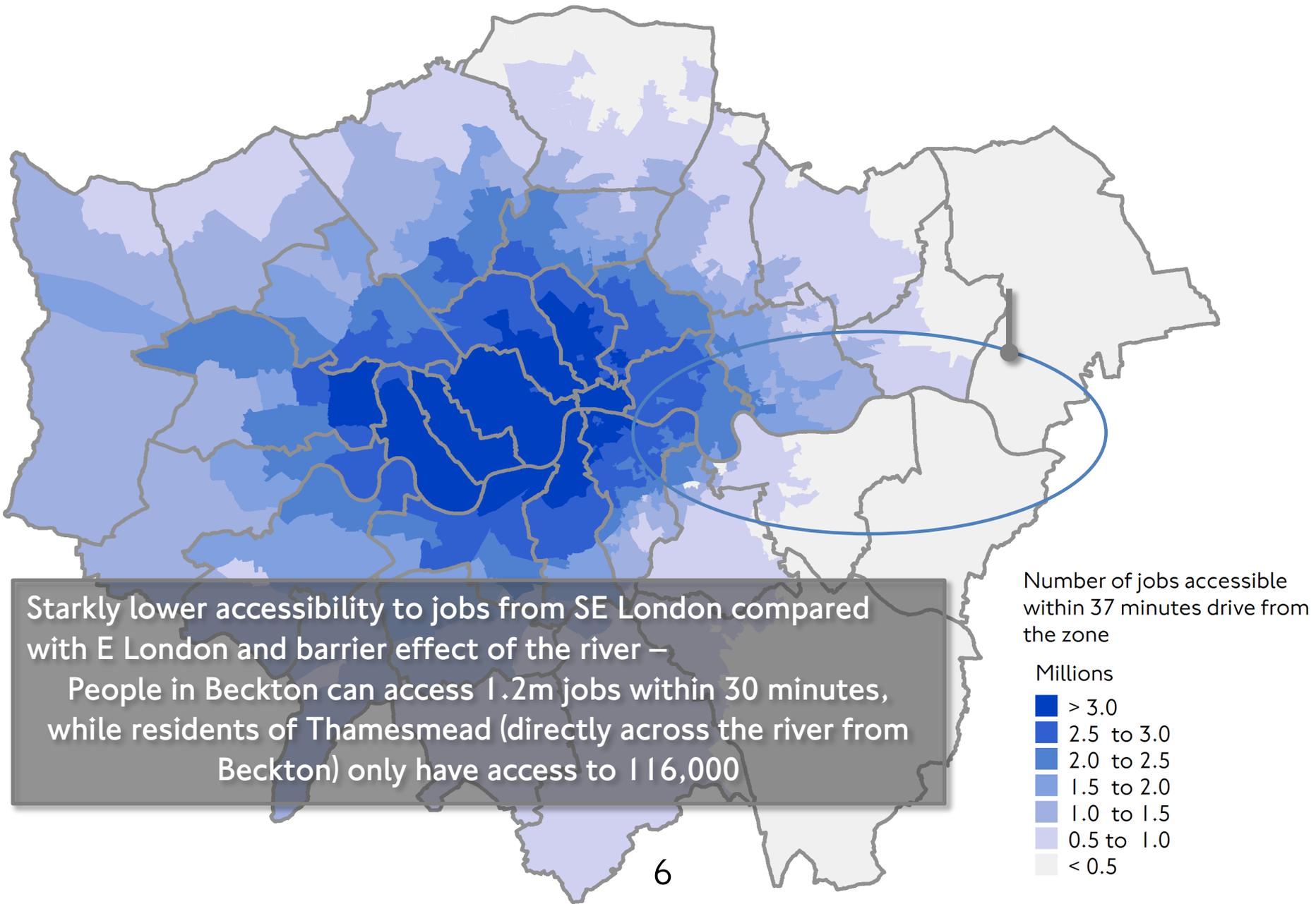
- On a normal day, there can be a **two mile tail-back** to access the tunnel
- Journeys are regularly delayed by around **25 minutes**
- There are almost **1,000 incidents a year**
- A **six minute** closure can lead to a **three mile tail-back**
- Around **1,000,000 hours** are wasted each year, costing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



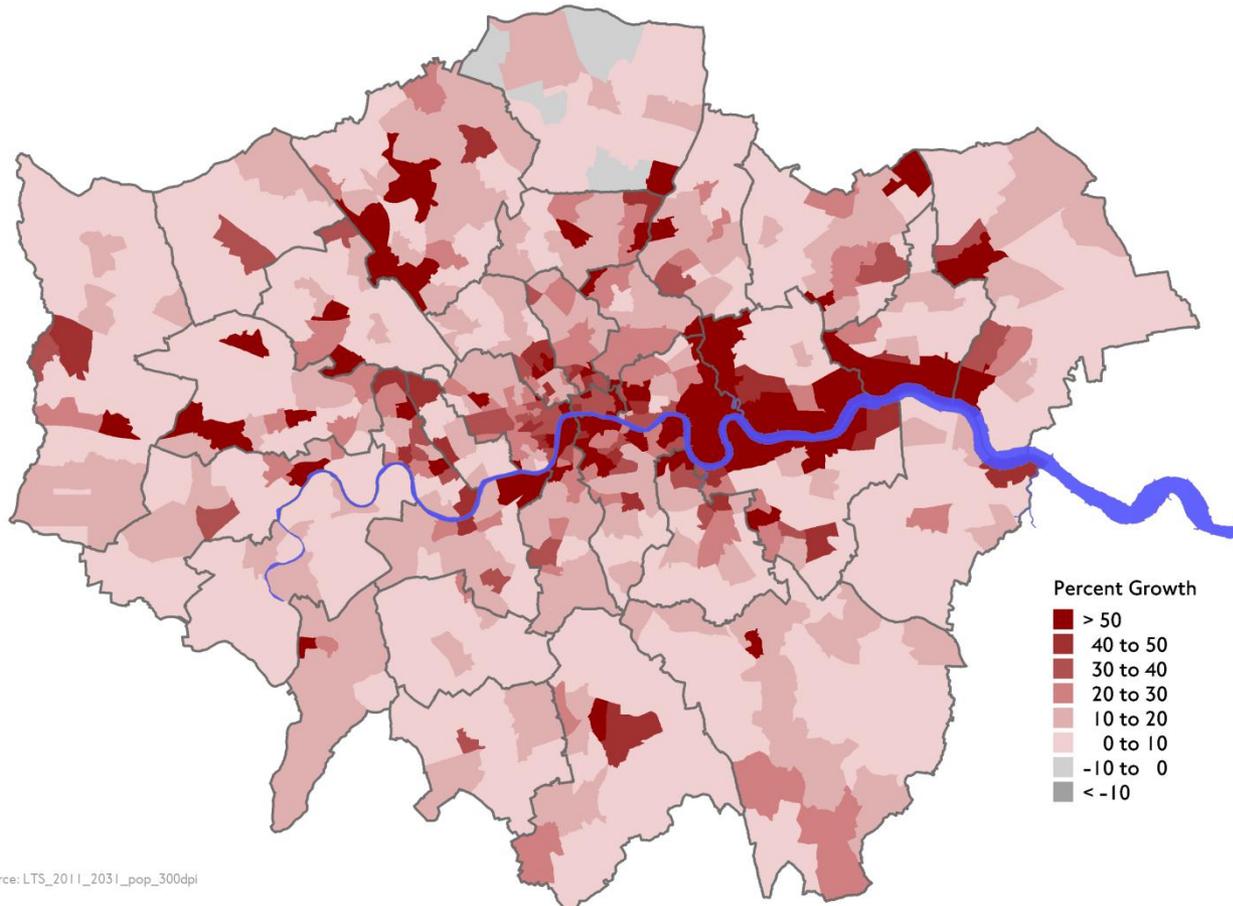
Limitations on the Cross River Bus Network in East London



Poor Connectivity and Limited Opportunities



Forecast changes in London's population to 2031



Business Views on the Blackwall Tunnel

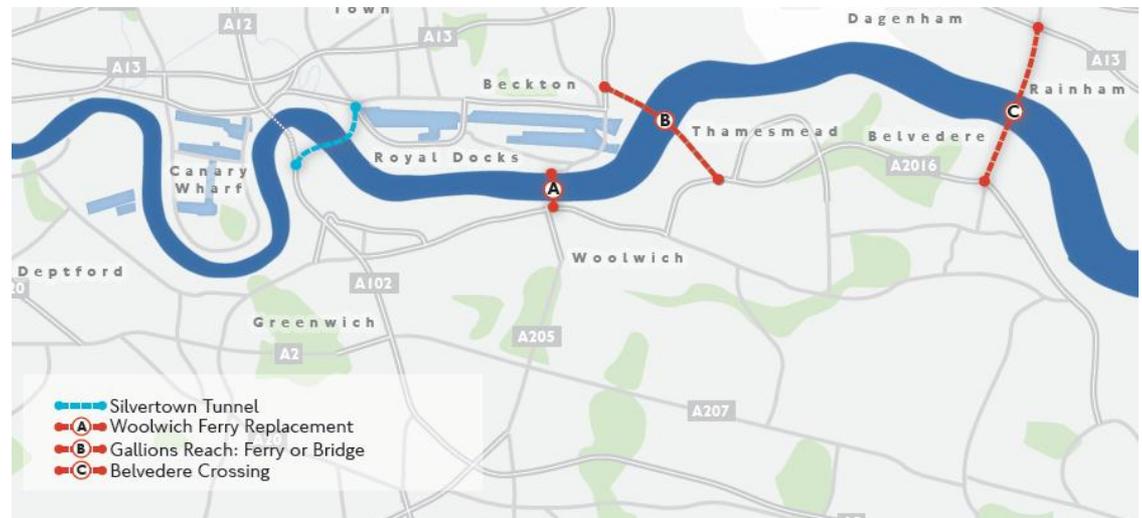
A survey of 500 businesses in 2015 found:

- Nearly **three quarters** 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
- One **third** of businesses said they have missed time critical deliveries because of unpredictable journey times
- Just under **half** of businesses said unpredictable journey times when crossing the river have caused a loss of revenue to their business
- A **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

Silvertown is the First in a Package of New Crossings

A range of potential solutions to the challenges at Blackwall have been considered. The new Silvertown Tunnel (shown in blue) is the first in a package of new crossings that has been developed for east London. The provision of Silvertown Tunnel with user charges and dedicated bus/coach/HGVs lanes provides a number of benefits:

- It would virtually eliminate congestion at the Blackwall Tunnel and provide additional network resilience
- The environmental impact of current traffic congestion on some of London's most polluted roads would be reduced.
- It would support future growth and benefit the local economy by keeping traffic moving and providing opportunities for new cross-river bus services.
- It is integrated with the future plans for the area and supported by local borough policies.

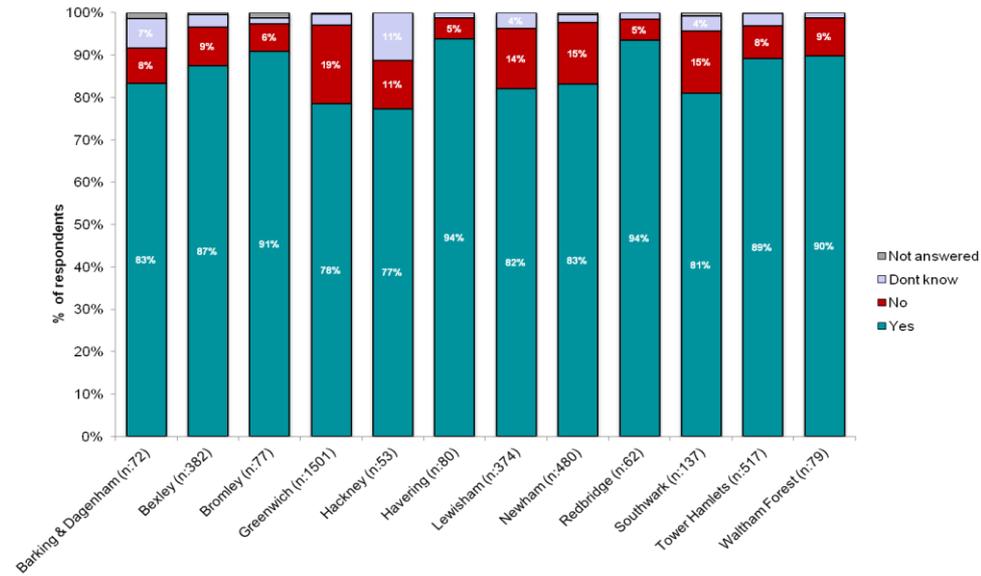


Previous Consultations

- 3 consultations held to date
- Strong support for the scheme – **over 80 per cent** of respondents to TfL's last consultation on the Silvertown Tunnel scheme **agreed that there is a need for a new tunnel**
- Key concerns include traffic, charging and air quality
- Further 'statutory' consultation in line with DCO requirements was launched on 5 October 2015 and will run to 29 November 2015.

Do you agree that a new tunnel is needed ..?

83% - Yes 14% - No 3% - Don't know



Silvertown Tunnel – Overview

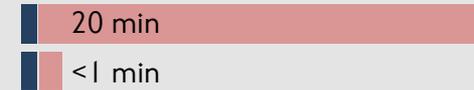


Twin bored tunnel linking A102 Blackwall Tunnel Approach on the Greenwich Peninsula to the Tidal Basin roundabout in the Royal Docks area

- User charging at the Blackwall and Silvertown Tunnels
- Designed for taller HGVs and double decker buses, with a dedicated bus / coach / HGV lane in each direction.
- Indicative construction programme of 4 years opening winter 2022/2023.

Benefits of the Silvertown Tunnel

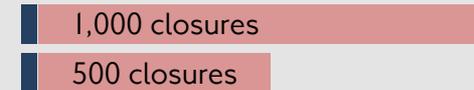
Delay on Blackwall Tunnel approach effectively eliminated



Average speed across host boroughs increases through reduction in traffic queueing

4% to 6% improvement

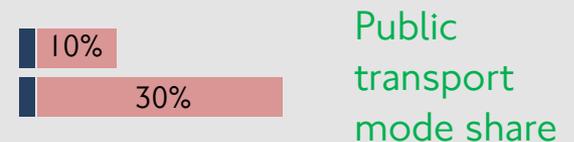
Overheight incidents decrease significantly & impacts of remaining closures greatly reduced



Opportunity for big increase in cross-river bus provision, including new links to Canary Wharf

60 buses per hour (two way)

Less private car trips and increased use of public transport reducing traffic and emissions



Time savings to travellers

£10m/year

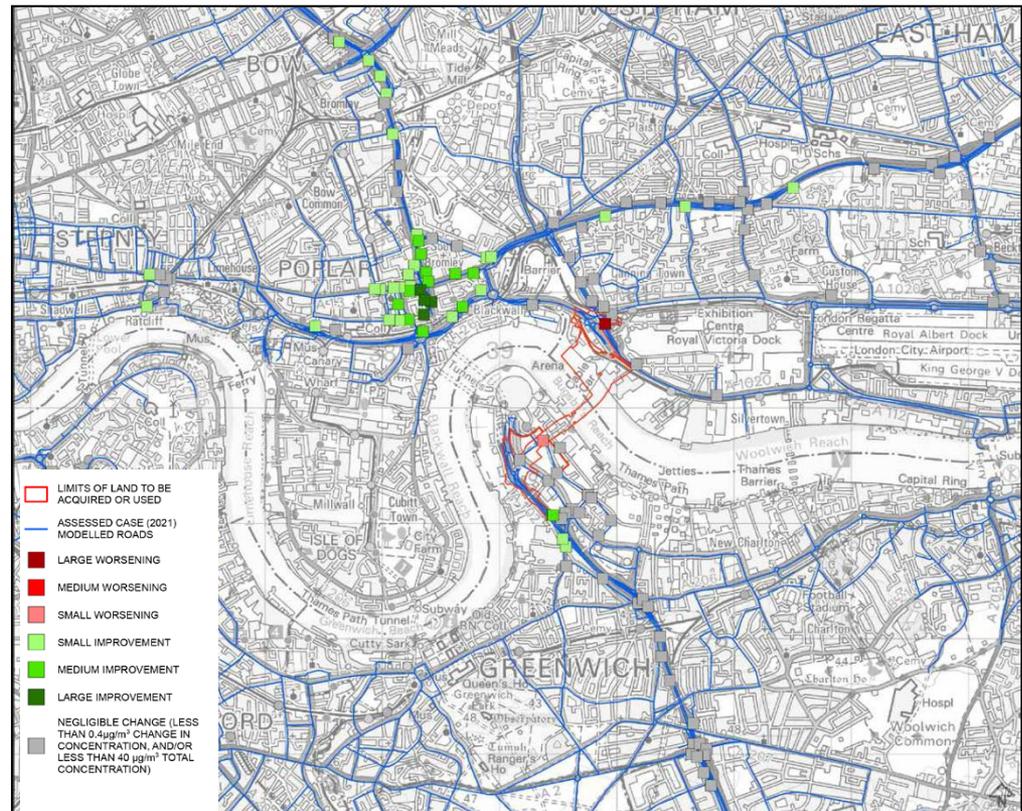
Good value for money

£1.3bn NPV

Silvertown Tunnel – Air Quality

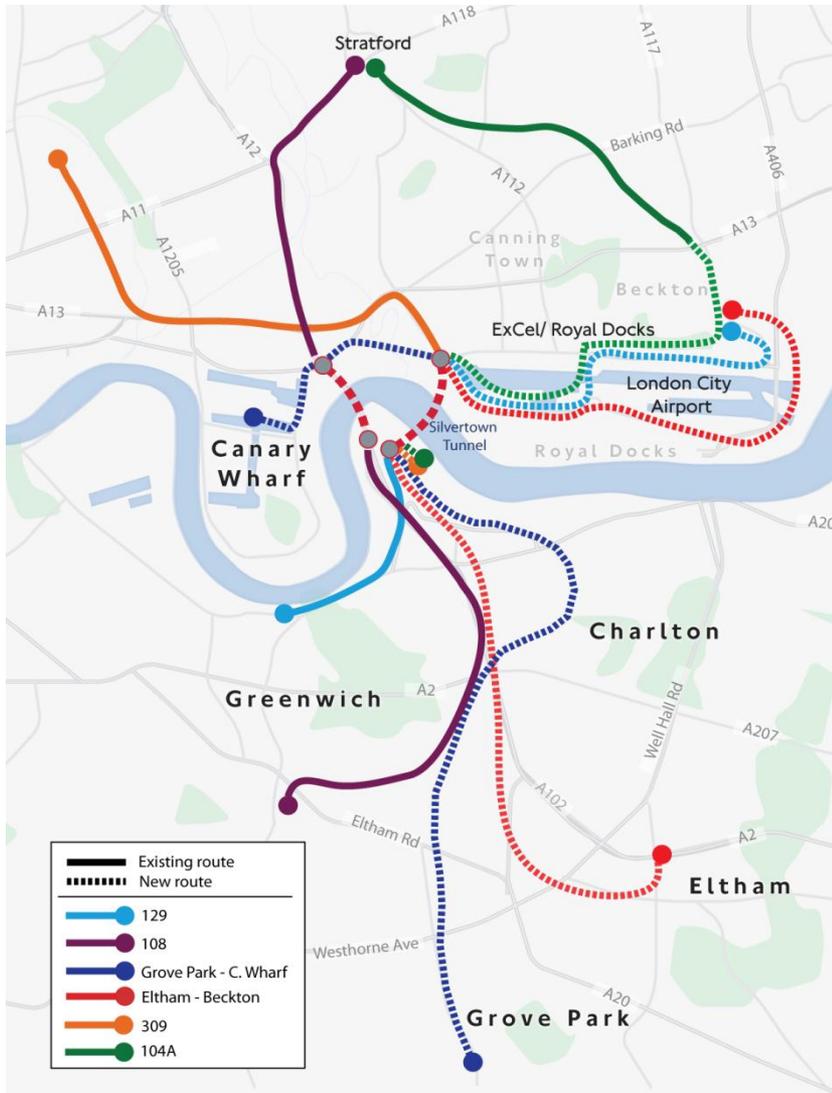
The new tunnel relieves the current bottleneck in the system and the user charge allows us to effectively manage demand:

- We anticipate a slight reduction in highway demand at Blackwall / Silvertown at most times of the day as some drivers re-route, change mode, or potentially change the destination of their travel.
- Queueing and congestion are effectively eliminated
- Traffic flows more efficiently and pollution is reduced.



Air Quality Modelling Output for Silvertown Tunnel

Silvertown – Supporting Improved Public Transport



Area covering northern portal looking south west towards the Greenwich peninsula from the new roundabout

A Nationally Significant Infrastructure Project

“The Secretary of State is of the view that this development [Silvertown Tunnel] by itself is nationally significant, for the reasons set out below:

- **London is an engine for growth nationally** – the proposed development is intended to have a significant impact on reducing both current and forecast congestion in London
- Current infrastructure is likely to be unable to absorb this additional capacity, leading to even greater congestion. Given the position of London as an economic driver nationally **any decrease in the efficiency of London’s transport network may have a consequential detrimental impact nationally.**
- Current congestion at the **Blackwall tunnel is having a direct impact on the strategic road network.**

Extracts from letter to the Mayor 26 June 2012



Preparation for Statutory Consultation



Results of previous consultations and stakeholder engagement used to inform scheme development



Reference design fixed



Illustrative user charges applied to inform the required DCO assessments relating to economic, environmental and social impacts



Consultation documents independently reviewed to ensure compliance with DCO requirements



Scope and details of community consultation agreed with host boroughs



Informal industry sessions held to inform procurement strategy and timings aligned to DCO process

Illustrative User Charges for Consultation

The charges are required to meet the Government's policy test for new roads by managing demand so that overall traffic levels do not increase and air quality does not worsen:

- If the charges are set too high traffic will divert onto other river crossings impacting on safety, congestion and air quality over a wide area.
- If the charges are set too low, it will generate too much additional traffic, eroding the benefits of free-flowing, reliable journeys.
- User charging also provide a relatively steady, long-term revenue stream to pay for the scheme.

		Indicative off-peak charge for account holders	Indicative peak charge for account holders
	<i>Motorbike</i>	£1	£2
			
	<i>Car & small vans</i>	£1	£3
	<i>Large van (less than 3.5 tonnes)</i>	£1.65	£5
	<i>HGV (more than 3.5 tonnes)</i>	£4	£7.50

All figures are in 2015 prices

Actual charges will be set closer to the time of opening with the objective of balancing traffic and environmental considerations

How the Charges Would Operate

- Charges collected automatically through ANPR cameras (no booths or barriers)
- Accounts to make it easier to pay, with lower charges for account holders
- Charges vary by time of day and direction of travel, with peak periods defined as 6-10am northbound and 4-7pm southbound
- A number of exemptions (e.g. emergency services) and discounts (e.g. taxis and buses) are proposed, in line with the Congestion Charge
- Exact charges will be set nearer the time of opening with the objective of managing traffic levels and environmental impacts and supporting the economy and growth.

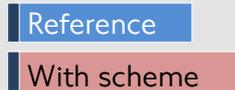


Example of comparable tunnel portal

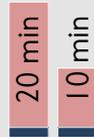
The Benefits of User Charging for Congestion and Emissions

Without charging

15-30% increase in levels of traffic



Up to 10 mins delay remains on Blackwall Tunnel approach



Average speeds in host boroughs remains broadly unchanged

More traffic and continued congestion increases emissions



No ability to influence use of cleaner vehicles



With 'Assessed Case' charges

No notable overall increase in traffic



Blackwall delays effectively eliminated



Average speeds across host boroughs improves by 4-6% (less queueing)

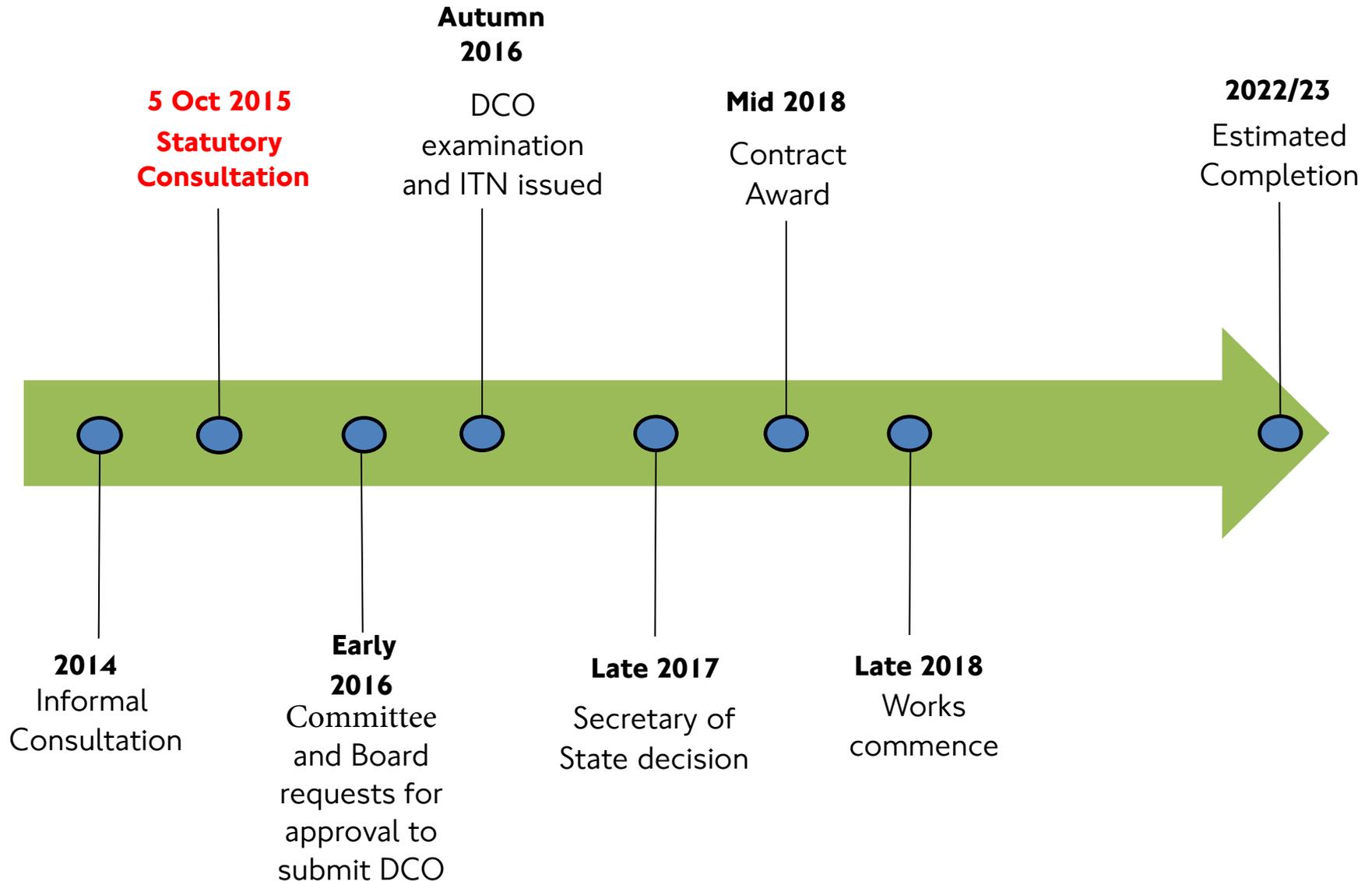
Same traffic moving more efficiently reduces emissions



Potential discounts encourage low emission vehicles



Indicative Work Programme



SILVERTOWN TUNNEL

