

GREATER **LONDON** AUTHORITY

[REDACTED]
(By email)

Our Ref: MGLA091019-4394

29 October 2019

Dear [REDACTED]

Thank you for your request for information which the GLA received on 9 October 2019. Your request has been dealt with under the Environmental Information Regulations (EIR) 2004.

You asked for the presentation Heidi Alexander, the Deputy Mayor for Transport, gave to Greenwich Council's Labour group on Monday 7 October. Please find attached the presentation you are seeking.

If you have any further questions relating to this matter, please contact me, quoting the reference at the top of this letter.

Yours sincerely

[REDACTED]
Information Governance Officer

If you are unhappy with the way the GLA has handled your request, you may complain using the GLA's FOI complaints and internal review procedure, available at:

<https://www.london.gov.uk/about-us/governance-and-spending/sharing-our-information/freedom-information>

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Silvertown Tunnel

Heidi Alexander

Deputy Mayor for Transport

7 October 2019



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Context - growth and transport improvements

By 2027 Greenwich will have 288,000 residents, an increase of 53,000, or 22.6% since 2010

1. Silvertown Tunnel
2. Woolwich Ferry
3. Greenwich Town Centre Liveable Neighbourhood
4. Elizabeth Line
5. Cycleway 4
6. Proposed DLR link to Thamesmead
7. Proposed cycle route from Greenwich to Woolwich
8. New 301 bus route
9. New 335 bus route

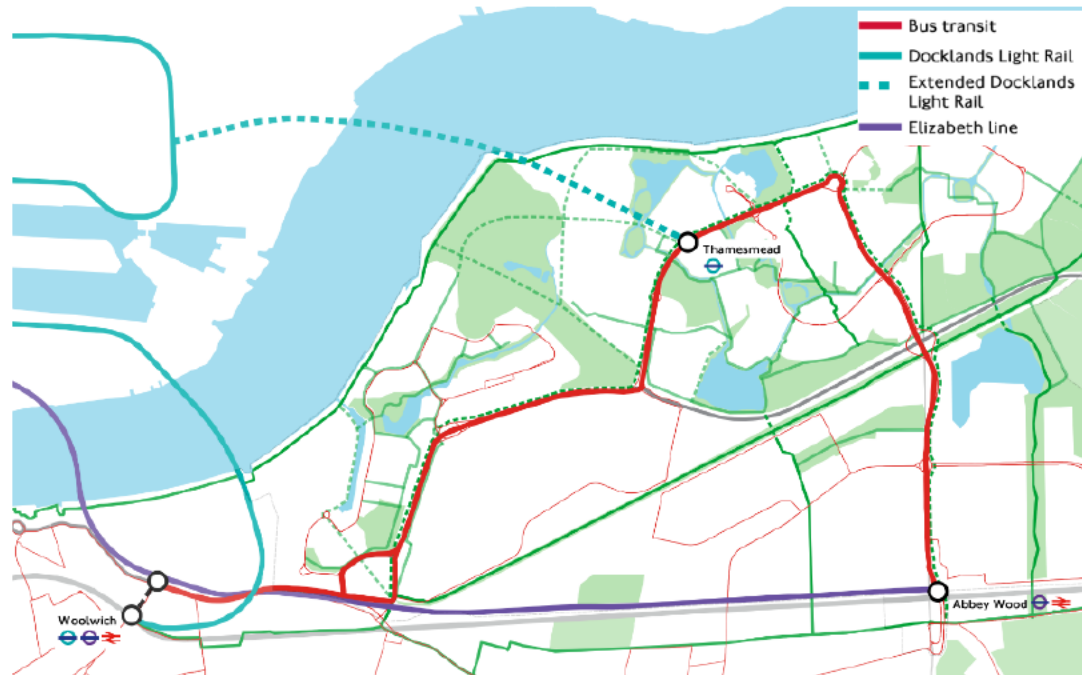
And ... brand new fleet of high capacity DLR trains from 2023



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Thamesmead public transport enhancements

- One of the largest Opportunity Areas in London. Exploring a range of transport schemes against growth they can unlock.
- DLR extension is a crucial part of this work and could deliver highest growth. Together with Bus Rapid Transit, could unlock 20,000 new homes.
- A bus transit scheme alone could support around 3,000 new homes, through connections to Elizabeth Line and national rail.



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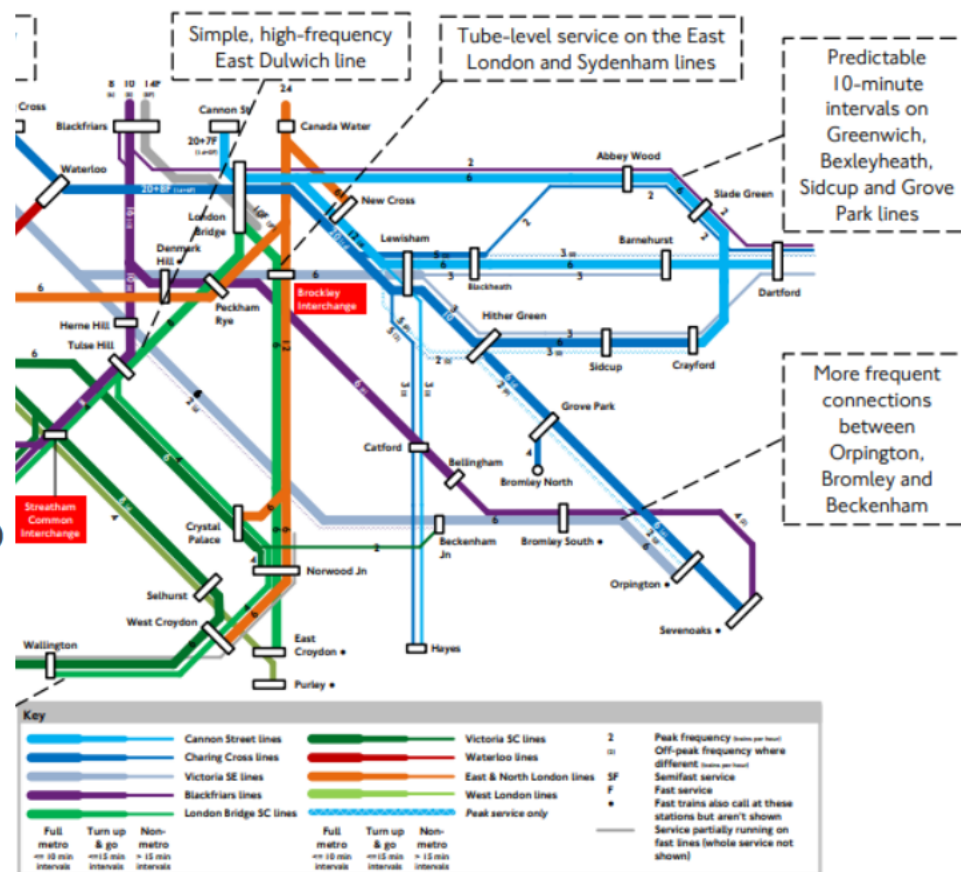
Rail devolution and 'Metroisation'

Rail network not delivering to full potential ...

Short term: TfL takes over South Eastern services

Long term: 'Metroisation':

- Predictable 10-min journeys on Greenwich, Bexleyheath, Sidcup and Grove Park lines
- Major peak and off-peak capacity increases of up to 7 extra trains per hour



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Ultra Low Emission Zone (ULEZ) expansion and air quality improvements

- Central London ULEZ has 75% compliance and 12,500 fewer older, polluting vehicles entering the zone
- Air quality improvement data to be released soon
- From October 2020, Low Emission Zone (LEZ) standards will be higher
- From October 2021, the ULEZ will be expanded, bounded by the South and North Circular roads



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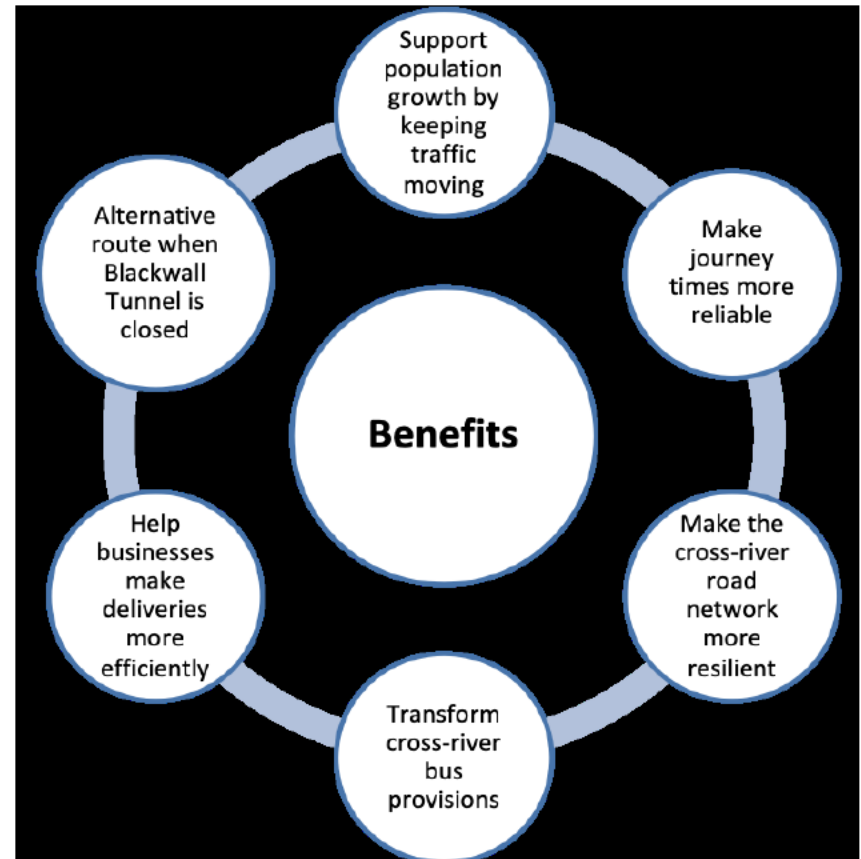
Silvertown Tunnel – Why

- Daily congestion leading to:
 - poor air quality
 - disruption to residents and local businesses
- Lack of alternative crossings during tunnel closures
 - Over 700 incidents in 2017/18 requiring tunnel closure
- Poor bus connectivity
 - Single, unreliable bus route



Silvertown Tunnel – Benefits and improvements

- 2016 review lead to greater focus on public transport and environment
- Eliminate congestion and overall air quality improvement
- Step change in cross river bus services – minimum number of buses
- Long term biodiversity net gain
- Local walking and cycling improvements



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Silvertown Tunnel – Bus enhancements

- Dedicated bus and HGV lane. Allows bus priority and improves safety.
- Buses to be zero emission from launch
- About 37 buses per hour in each direction.
- Services can run 24/7 where there is demand
- Accommodates double-deck buses
- Existing routes can be extended across the river
- £2m fare concessions to local residents to encourage mode shift

Route	Description	Current frequency	New / revised frequency
108	Lewisham Town Centre to Stratford Bus Station	6	7.5
129 Extension	Greenwich Town Centre to City Airport	n/a	10
309 Extension	London Chest Hospital Bethnal Green to North Greenwich	n/a	5
104a	Stratford to Beckton and North Greenwich	n/a	6
Eltham to Beckton	New proposed route	n/a	5
Grove Park to Canary Wharf	New proposed route	n/a	4
Total cross-river		6	37.5

Silvertown Tunnel – Further local benefits

Recruitment targets of at least 25 per cent local workforce



Apprentices and job start opportunities – 1 per £2m works value



Unlocking development sites, as well as providing a net gain in biodiversity

50% 'low-income' user charging discount for local residents in receipt of certain benefits



£1m local business transitional support for travel planning in advance of scheme opening

Local schemes e.g. pocket parks, walking and cycle improvements, noise barriers




School crossing patrols



Silvertown Tunnel – Traffic modelling


- Extensive traffic modelling to understand the traffic impacts of the scheme
- Modelling follows Government guidance (WebTAG), was subject to independent review and scrutinised at the DCO examination
- The modelling demonstrates that – through the user charge and increased capacity – the scheme will significantly reduce congestion and won't increase traffic overall
- TfL is required to update the modelling before opening, based on the latest available information

Daily cross-river trips
made at the
Blackwall/Silvertown
crossing



109,000
daily trips

Without Silvertown scheme








106,000
daily trips

With Silvertown scheme

Silvertown Tunnel – User charges

- Modelling indicates that the user charge provides an effective mechanism for managing demand
- 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 the scheme
- A robust process is in place for setting user charge levels

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

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Case Study: Mersey Gateway Bridge, Halton, UK

Similarities to Silvertown:

- Single vehicle crossing - lack of alternative crossings
- User charge applied to new and existing routes
- Significant traffic forecasting as part of planning process (TWAO)

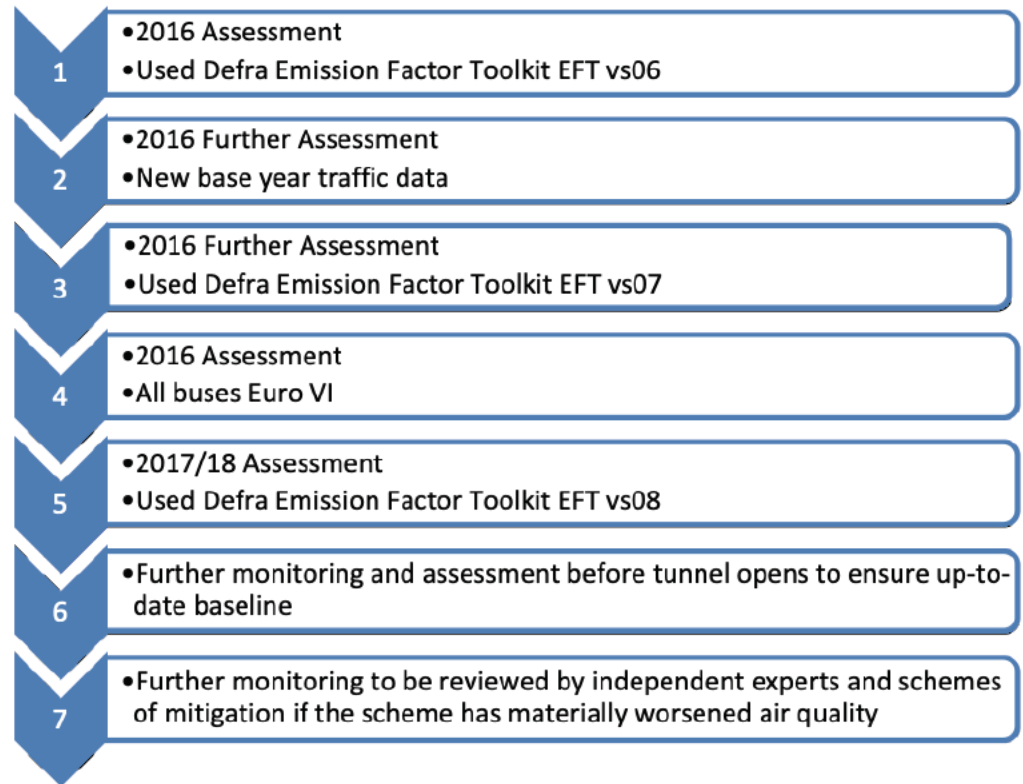
October 2017 opening:

- Management of demand through user charge
- Traffic levels broadly in line with forecasts at planning stage



Silvertown Tunnel – Air quality modelling

- A number of assessments have been carried out to model air quality as the scheme has developed and modelling tools/data have been updated.
- Each of these assessments concluded the Scheme would lead to an overall improvement in air quality.



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Silvertown Tunnel – Air quality modelling

- The table shows the results of our air quality modelling based on the 2018 emissions data produced by DEFRA
- The new crossing, coupled with the user charging and improved cross river bus services, delivers NO₂ improvements at each magnitude of change.

Magnitude of Change in Annual Average NO ₂ or PM ₁₀	Total Number of Receptors at which:	
	Worsening air quality	Improvement in air quality
Large (>4µg/m ³)	0	8
Medium (>2µg/m ³)	0	22
Small (>0.4µg/m ³)	17	70

Silvertown Tunnel – Carbon modelling

- Overall Carbon Dioxide (CO₂) levels from traffic will not increase due to the user charge managing demand for the crossing and ensuring overall traffic volumes do not increase.
- Carbon related to construction of the scheme has been calculated at:
 - Overall construction carbon footprint = 153kT
 - Of this, carbon embodied within materials = 109kT
- Although significant, to put this into perspective, full electrification of the bus fleet, which TfL is working towards will eliminate 500kT of CO₂ production per year
- The scheme has built into its contract, items to limit energy consumption and CO₂ emission in its construction and operation.

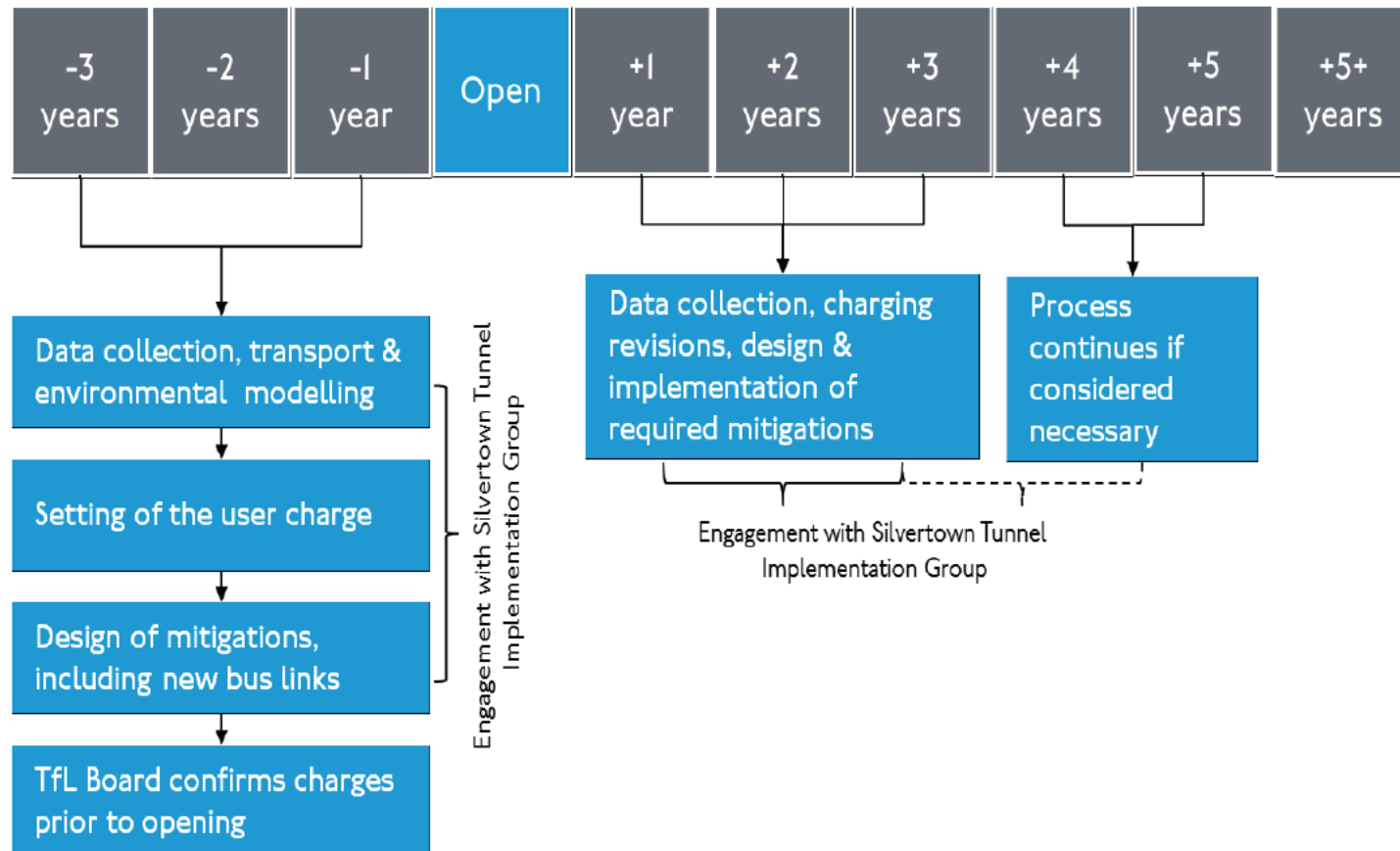
Silvertown Tunnel – Ongoing monitoring

- CO₂ and NO₂ will be monitored
- Any additional air quality monitoring sites will be agreed with the relevant local authority
- If air quality is materially worsened by the scheme TfL will implement mitigation measures



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Silvertown Tunnel – Ongoing monitoring



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Silvertown Tunnel – Other options explored

- Do nothing
- User charging at the Blackwall Tunnel
- Public transport options
- User charging and public transport improvements combined
- Pedestrian and cycling improvements
- Vehicle ferries at Silvertown, Gallions Reach or enhancements at Woolwich
- A third bore at Blackwall Tunnel
- Bridges at Silvertown, Woolwich or Gallions Reach
- Tunnel options at Silvertown, Woolwich or Gallions Reach.



Conclusion

- The Silvertown Tunnel is the only realistic, funded, deliverable option to deal with congestion in this part of London
- It will effectively eliminate queuing traffic, reduce the number of idling cars, improve air quality overall and increase local bus services
- The user charge will help dissuade drivers who could make their journey a different way and new bus routes will create new public transport options which don't currently exist
- If we are to successfully reduce congestion and air pollution, we need a package of measures to reduce car dependency of which this is a part
- But in this location, we can't continue to funnel all traffic through the Blackwall and hope the problem goes away

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QUESTIONS

